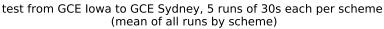
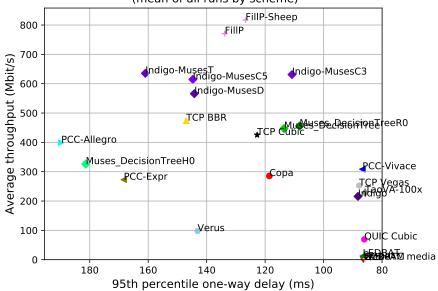
Pantheon Report

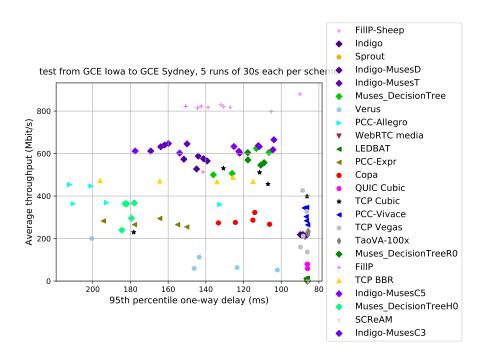
Generated at 2019-11-24 03:03:22 (UTC).

```
Data path: GCE Iowa on ens4 (remote) \rightarrow GCE Sydney on ens4 (local).
   Repeated the test of 24 congestion control schemes 5 times.
   Each test lasted for 30 seconds running 1 flow.
   NTP offsets were measured against time.google.com and have been applied
to correct the timestamps in logs.
System info:
Linux 4.15.0-1044-gcp
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 @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
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-quic @ 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
```

 $\label{third_party/vivace 0} \mbox{ 2baf86211435ae071a32f96b7d8c504587f5d7f4} \\ \mbox{third_party/webrtc 0} \mbox{ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851}$







		mean avg tput (Mbit/s)	mean 95th-%ile delay (ms)	mean loss rate (%)
scheme	# runs	flow 1	flow 1	flow 1
TCP BBR	5	473.84	147.00	0.77
Copa	5	285.34	118.56	0.65
TCP Cubic	5	425.31	122.73	0.75
FillP	5	770.72	133.81	1.75
FillP-Sheep	5	816.71	126.72	0.97
Indigo	5	215.84	88.23	0.63
Indigo-MusesC3	5	631.17	110.81	0.66
Indigo-MusesC5	4	614.62	144.74	0.84
Indigo-MusesD	5	565.97	144.21	0.76
Indigo-MusesT	5	635.39	160.98	0.99
LEDBAT	5	12.52	86.61	1.15
$Muses_DecisionTree$	5	447.29	113.54	0.70
Muses_DecisionTreeH0	5	325.99	181.37	6.03
Muses_DecisionTreeR0	5	455.58	108.24	0.61
PCC-Allegro	5	398.89	189.76	2.70
PCC-Expr	5	272.75	168.36	1.20
QUIC Cubic	4	69.23	86.08	0.47
SCReAM	5	0.22	85.83	0.56
Sprout	5	4.56	86.46	0.69
TaoVA-100x	5	228.47	85.81	0.61
TCP Vegas	5	252.58	87.86	0.49
Verus	5	97.57	143.13	0.63
PCC-Vivace	5	308.47	86.72	0.69
WebRTC media	2	0.05	86.38	0.00

Run 1: Statistics of TCP BBR

Start at: 2019-11-23 22:15:05 End at: 2019-11-23 22:15:35 Local clock offset: 4.344 ms Remote clock offset: 4.437 ms

Below is generated by plot.py at 2019-11-24 01:26:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 469.37 Mbit/s

95th percentile per-packet one-way delay: 114.914 ms

Loss rate: 0.65%

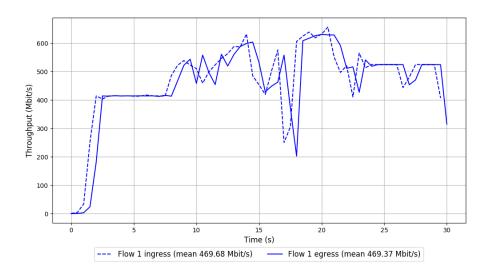
-- Flow 1:

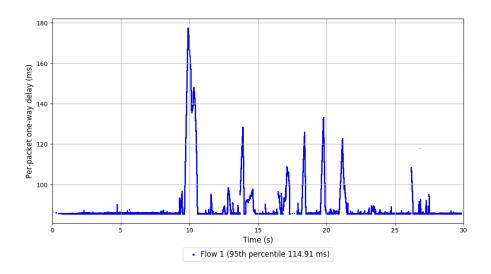
Average throughput: 469.37 Mbit/s

95th percentile per-packet one-way delay: 114.914 ms

Loss rate: 0.65%

Run 1: Report of TCP BBR — Data Link





Run 2: Statistics of TCP BBR

Start at: 2019-11-23 22:50:09 End at: 2019-11-23 22:50:39 Local clock offset: 14.723 ms Remote clock offset: 14.899 ms

Below is generated by plot.py at 2019-11-24 01:26:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 488.49 Mbit/s

95th percentile per-packet one-way delay: 125.555 ms

Loss rate: 0.83%

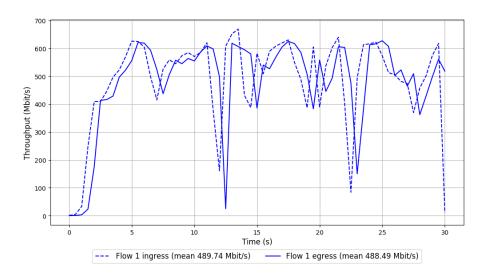
-- Flow 1:

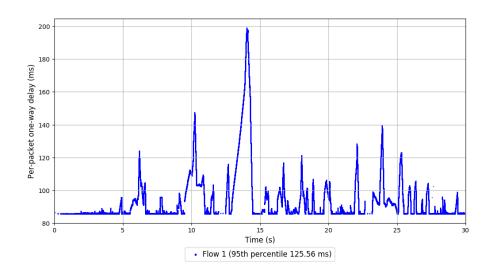
Average throughput: 488.49 Mbit/s

95th percentile per-packet one-way delay: 125.555 ms

Loss rate: 0.83%

Run 2: Report of TCP BBR — Data Link





Run 3: Statistics of TCP BBR

Start at: 2019-11-23 23:25:16 End at: 2019-11-23 23:25:46 Local clock offset: 15.136 ms Remote clock offset: 15.49 ms

Below is generated by plot.py at 2019-11-24 01:26:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 467.71 Mbit/s

95th percentile per-packet one-way delay: $134.051~\mathrm{ms}$

Loss rate: 0.54%

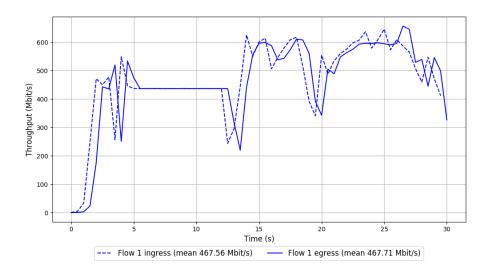
-- Flow 1:

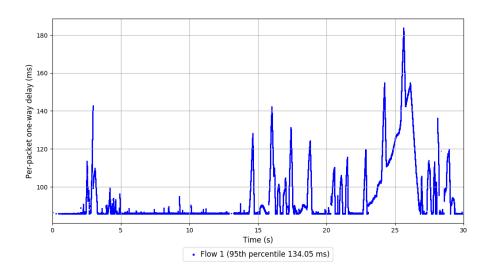
Average throughput: 467.71 Mbit/s

95th percentile per-packet one-way delay: 134.051 ms

Loss rate: 0.54%

Run 3: Report of TCP BBR — Data Link





Run 4: Statistics of TCP BBR

Start at: 2019-11-24 00:00:09 End at: 2019-11-24 00:00:39 Local clock offset: 7.167 ms Remote clock offset: 7.25 ms

Below is generated by plot.py at 2019-11-24 01:26:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 472.80 Mbit/s

95th percentile per-packet one-way delay: 196.050 ms

Loss rate: 0.97%

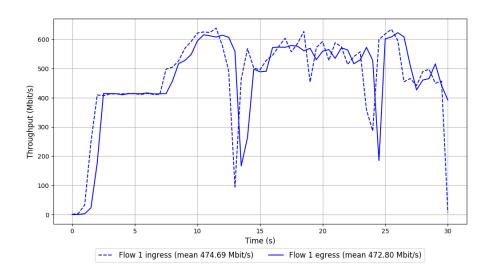
-- Flow 1:

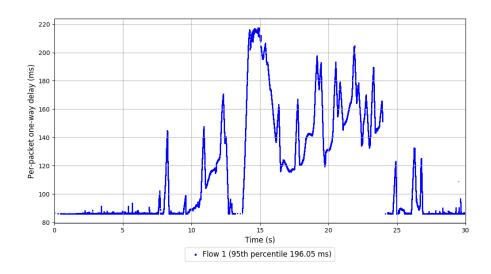
Average throughput: 472.80 Mbit/s

95th percentile per-packet one-way delay: 196.050 ms

Loss rate: 0.97%

Run 4: Report of TCP BBR — Data Link





Run 5: Statistics of TCP BBR

Start at: 2019-11-24 00:35:11 End at: 2019-11-24 00:35:41 Local clock offset: 2.705 ms Remote clock offset: 2.745 ms

Below is generated by plot.py at 2019-11-24 01:26:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 470.81 Mbit/s

95th percentile per-packet one-way delay: 164.438 ms

Loss rate: 0.86%

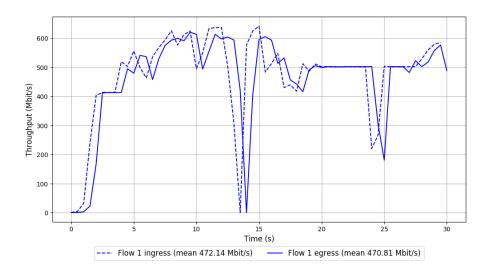
-- Flow 1:

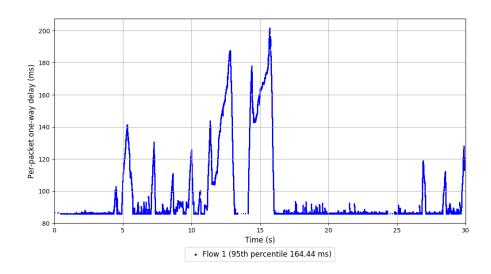
Average throughput: 470.81 Mbit/s

95th percentile per-packet one-way delay: 164.438 ms

Loss rate: 0.86%

Run 5: Report of TCP BBR — Data Link





Run 1: Statistics of Copa

Start at: 2019-11-23 22:10:59 End at: 2019-11-23 22:11:29 Local clock offset: 2.009 ms Remote clock offset: 3.115 ms

Below is generated by plot.py at 2019-11-24 01:27:55

Datalink statistics
-- Total of 1 flow:

Average throughput: 322.92 Mbit/s

95th percentile per-packet one-way delay: 114.032 ms

Loss rate: 0.65%

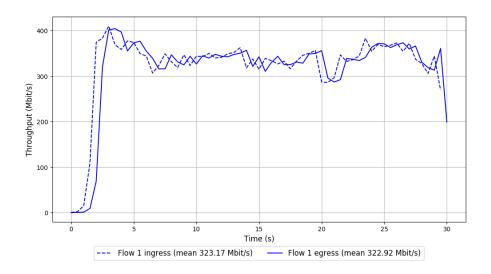
-- Flow 1:

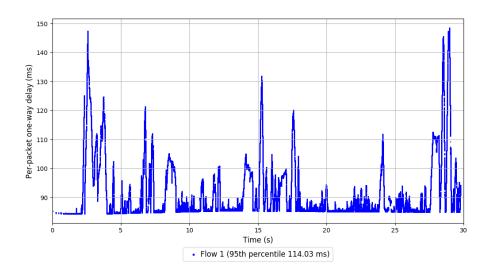
Average throughput: 322.92 Mbit/s

95th percentile per-packet one-way delay: 114.032 ms

Loss rate: 0.65%

Run 1: Report of Copa — Data Link





Run 2: Statistics of Copa

Start at: 2019-11-23 22:46:02 End at: 2019-11-23 22:46:32 Local clock offset: 17.307 ms Remote clock offset: 16.859 ms

Below is generated by plot.py at 2019-11-24 01:27:55

Datalink statistics
-- Total of 1 flow:

Average throughput: 273.72 Mbit/s

95th percentile per-packet one-way delay: 133.280 ms

Loss rate: 0.70%

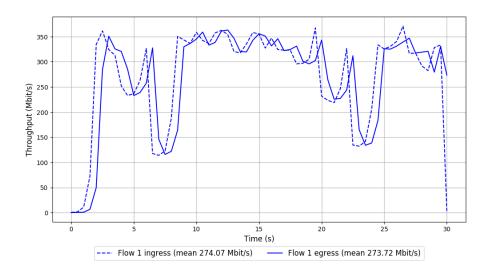
-- Flow 1:

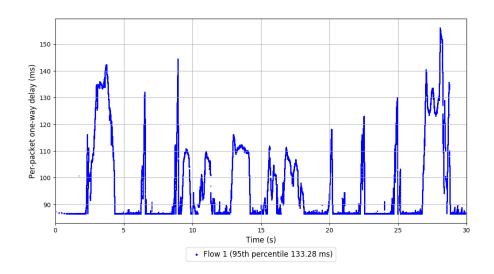
Average throughput: 273.72 Mbit/s

95th percentile per-packet one-way delay: 133.280 ms

Loss rate: 0.70%

Run 2: Report of Copa — Data Link





Run 3: Statistics of Copa

Start at: 2019-11-23 23:21:17 End at: 2019-11-23 23:21:47 Local clock offset: 20.573 ms Remote clock offset: 20.82 ms

Below is generated by plot.py at 2019-11-24 01:27:55

Datalink statistics
-- Total of 1 flow:

Average throughput: 286.68 Mbit/s

95th percentile per-packet one-way delay: 115.015 ms

Loss rate: 0.69%

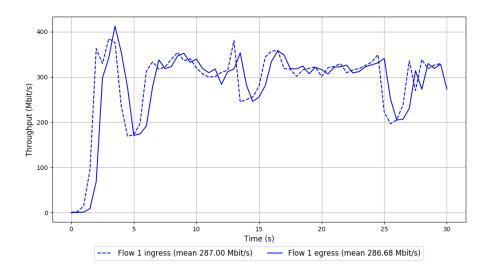
-- Flow 1:

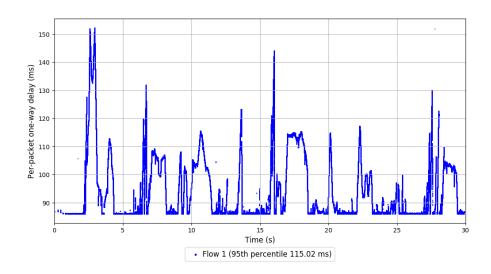
Average throughput: 286.68 Mbit/s

95th percentile per-packet one-way delay: 115.015 ms

Loss rate: 0.69%

Run 3: Report of Copa — Data Link





Run 4: Statistics of Copa

Start at: 2019-11-23 23:56:12 End at: 2019-11-23 23:56:42 Local clock offset: 9.61 ms Remote clock offset: 9.772 ms

Below is generated by plot.py at 2019-11-24 01:34:16

Datalink statistics
-- Total of 1 flow:

Average throughput: 267.29 Mbit/s

95th percentile per-packet one-way delay: 106.174 ms

Loss rate: 0.59%

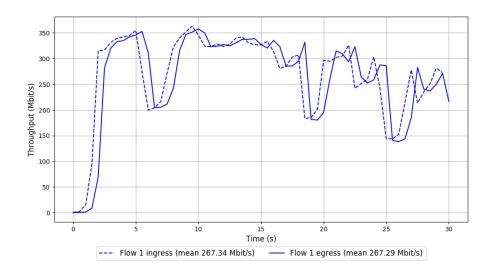
-- Flow 1:

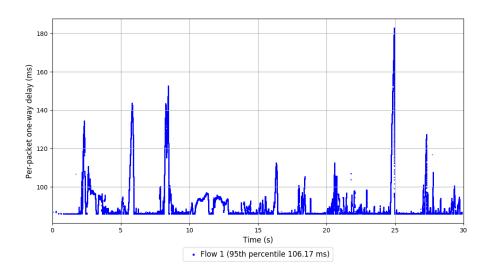
Average throughput: 267.29 Mbit/s

95th percentile per-packet one-way delay: 106.174 ms

Loss rate: 0.59%

Run 4: Report of Copa — Data Link





Run 5: Statistics of Copa

Start at: 2019-11-24 00:31:08 End at: 2019-11-24 00:31:39 Local clock offset: 4.021 ms Remote clock offset: 4.036 ms

Below is generated by plot.py at 2019-11-24 01:34:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 276.09 Mbit/s

95th percentile per-packet one-way delay: 124.323 ms

Loss rate: 0.60%

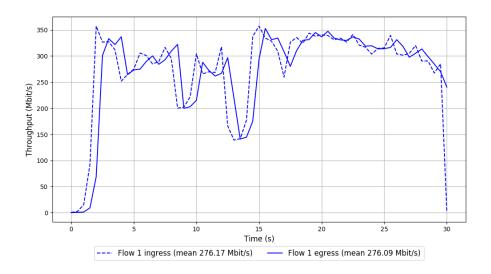
-- Flow 1:

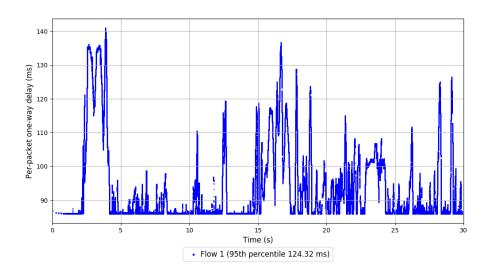
Average throughput: 276.09 Mbit/s

95th percentile per-packet one-way delay: 124.323 ms

Loss rate: 0.60%

Run 5: Report of Copa — Data Link





Run 1: Statistics of TCP Cubic

Start at: 2019-11-23 22:29:43 End at: 2019-11-23 22:30:13 Local clock offset: 9.863 ms Remote clock offset: 9.852 ms

Below is generated by plot.py at 2019-11-24 01:34:53

Datalink statistics
-- Total of 1 flow:

Average throughput: 530.59 Mbit/s

95th percentile per-packet one-way delay: 130.672 ms

Loss rate: 0.72%

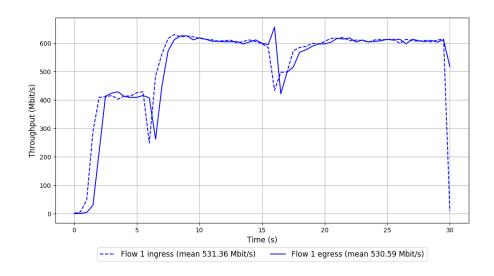
-- Flow 1:

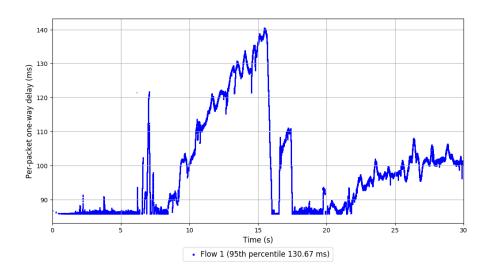
Average throughput: 530.59 Mbit/s

95th percentile per-packet one-way delay: 130.672 ms

Loss rate: 0.72%

Run 1: Report of TCP Cubic — Data Link





Run 2: Statistics of TCP Cubic

Start at: 2019-11-23 23:05:25 End at: 2019-11-23 23:05:55 Local clock offset: 20.273 ms Remote clock offset: 20.545 ms

Below is generated by plot.py at 2019-11-24 01:34:53

Datalink statistics
-- Total of 1 flow:

Average throughput: 398.49 Mbit/s

95th percentile per-packet one-way delay: 86.287 ms

Loss rate: 0.64%

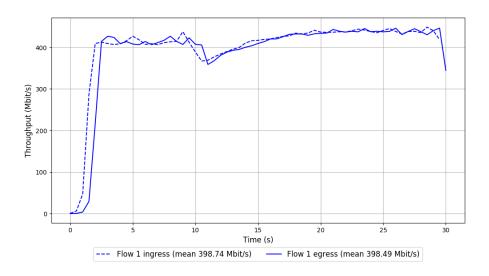
-- Flow 1:

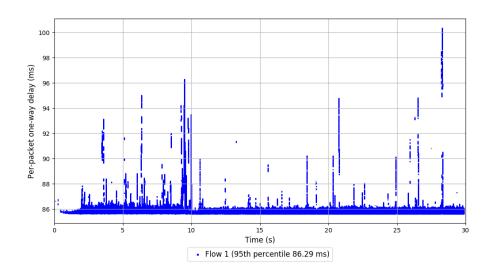
Average throughput: 398.49 Mbit/s

95th percentile per-packet one-way delay: 86.287 ms

Loss rate: 0.64%

Run 2: Report of TCP Cubic — Data Link





Run 3: Statistics of TCP Cubic

Start at: 2019-11-23 23:39:55 End at: 2019-11-23 23:40:25 Local clock offset: 11.457 ms Remote clock offset: 11.681 ms

Below is generated by plot.py at 2019-11-24 01:34:53

Datalink statistics
-- Total of 1 flow:

Average throughput: 229.58 Mbit/s

95th percentile per-packet one-way delay: 178.260 ms

Loss rate: 1.17%

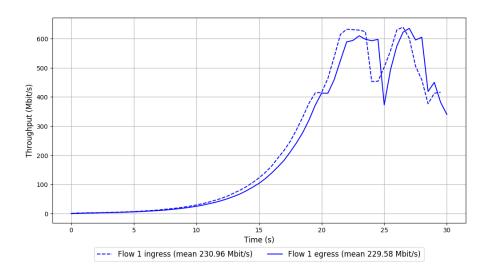
-- Flow 1:

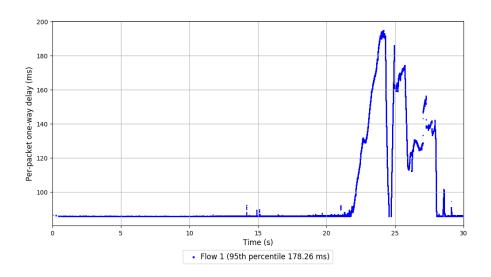
Average throughput: 229.58 Mbit/s

95th percentile per-packet one-way delay: 178.260 ms

Loss rate: 1.17%

Run 3: Report of TCP Cubic — Data Link





Run 4: Statistics of TCP Cubic

Start at: 2019-11-24 00:15:17 End at: 2019-11-24 00:15:47 Local clock offset: 5.555 ms Remote clock offset: 5.801 ms

Below is generated by plot.py at 2019-11-24 01:35:02

Datalink statistics
-- Total of 1 flow:

Average throughput: 511.49 Mbit/s

95th percentile per-packet one-way delay: 111.466 ms

Loss rate: 0.62%

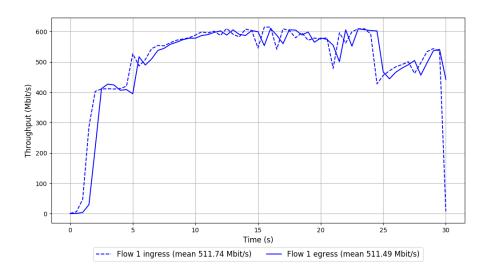
-- Flow 1:

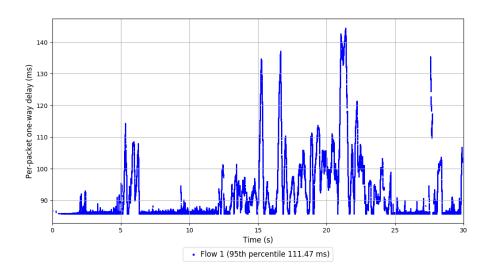
Average throughput: 511.49 Mbit/s

95th percentile per-packet one-way delay: 111.466 ms

Loss rate: 0.62%

Run 4: Report of TCP Cubic — Data Link





Run 5: Statistics of TCP Cubic

Start at: 2019-11-24 00:50:25 End at: 2019-11-24 00:50:55 Local clock offset: 1.469 ms Remote clock offset: 1.337 ms

Below is generated by plot.py at 2019-11-24 01:35:02

Datalink statistics
-- Total of 1 flow:

Average throughput: 456.41 Mbit/s

95th percentile per-packet one-way delay: 106.982 ms

Loss rate: 0.60%

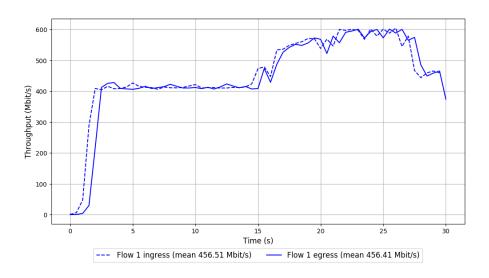
-- Flow 1:

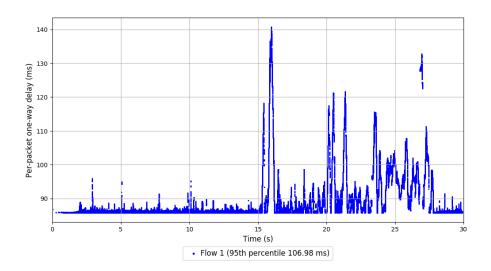
Average throughput: 456.41 Mbit/s

95th percentile per-packet one-way delay: 106.982 ms

Loss rate: 0.60%

Run 5: Report of TCP Cubic — Data Link





Run 1: Statistics of FillP

Start at: 2019-11-23 22:41:41 End at: 2019-11-23 22:42:11 Local clock offset: 17.582 ms Remote clock offset: 18.135 ms

Below is generated by plot.py at 2019-11-24 01:45:13

Datalink statistics
-- Total of 1 flow:

Average throughput: 880.19 Mbit/s

95th percentile per-packet one-way delay: 89.999 ms

Loss rate: 0.61%

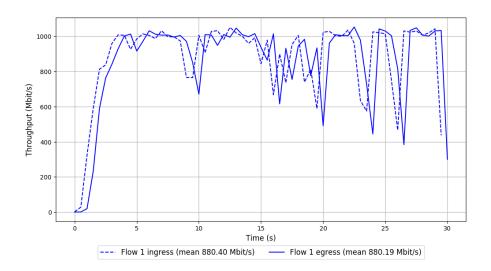
-- Flow 1:

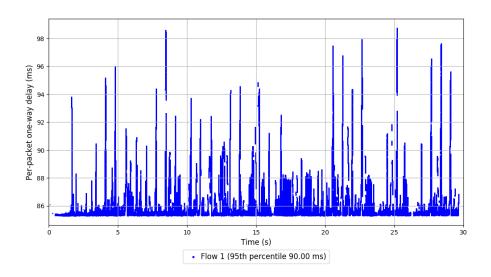
Average throughput: 880.19 Mbit/s

95th percentile per-packet one-way delay: 89.999 ms

Loss rate: 0.61%

Run 1: Report of FillP — Data Link





Run 2: Statistics of FillP

Start at: 2019-11-23 23:17:05 End at: 2019-11-23 23:17:35 Local clock offset: 29.092 ms Remote clock offset: 29.462 ms

Below is generated by plot.py at 2019-11-24 01:45:13

Datalink statistics
-- Total of 1 flow:

Average throughput: 513.87 Mbit/s

95th percentile per-packet one-way delay: 141.549 ms

Loss rate: 2.02%

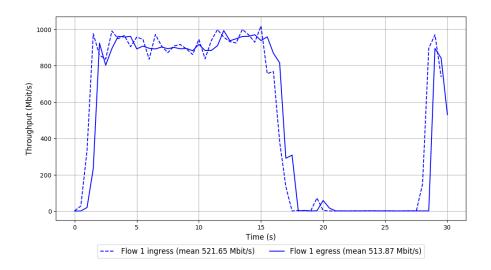
-- Flow 1:

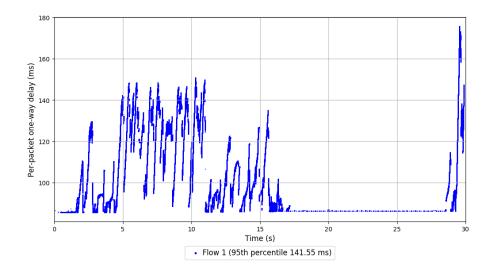
Average throughput: 513.87 Mbit/s

95th percentile per-packet one-way delay: 141.549 ms

Loss rate: 2.02%

Run 2: Report of FillP — Data Link





Run 3: Statistics of FillP

Start at: 2019-11-23 23:51:46 End at: 2019-11-23 23:52:16 Local clock offset: 14.758 ms Remote clock offset: 14.885 ms

Below is generated by plot.py at 2019-11-24 01:49:37

Datalink statistics
-- Total of 1 flow:

Average throughput: 814.98 Mbit/s

95th percentile per-packet one-way delay: 144.404 ms

Loss rate: 1.22%

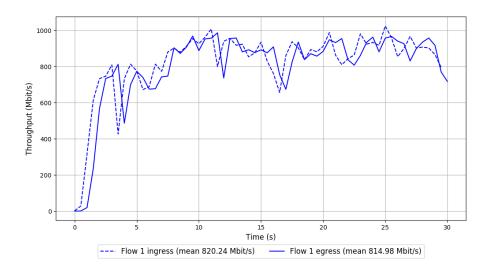
-- Flow 1:

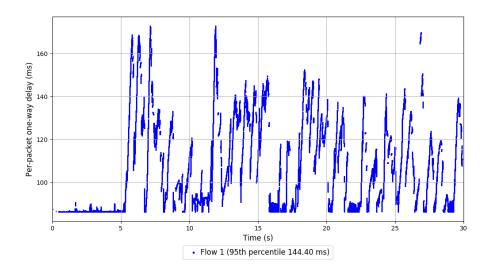
Average throughput: 814.98 Mbit/s

95th percentile per-packet one-way delay: 144.404 ms

Loss rate: 1.22%

Run 3: Report of FillP — Data Link





Run 4: Statistics of FillP

Start at: 2019-11-24 00:26:43 End at: 2019-11-24 00:27:13 Local clock offset: 6.407 ms Remote clock offset: 6.536 ms

Below is generated by plot.py at 2019-11-24 01:51:00

Datalink statistics
-- Total of 1 flow:

Average throughput: 822.22 Mbit/s

95th percentile per-packet one-way delay: 150.667 $\ensuremath{\mathsf{ms}}$

Loss rate: 3.35%

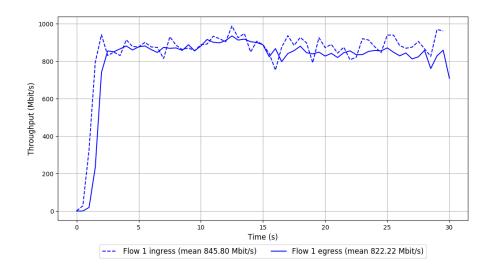
-- Flow 1:

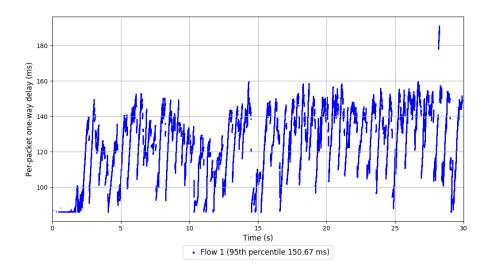
Average throughput: 822.22 Mbit/s

95th percentile per-packet one-way delay: 150.667 ms

Loss rate: 3.35%

Run 4: Report of FillP — Data Link





Run 5: Statistics of FillP

Start at: 2019-11-24 01:02:19 End at: 2019-11-24 01:02:49 Local clock offset: 1.316 ms Remote clock offset: 1.17 ms

Below is generated by plot.py at 2019-11-24 01:51:13

Datalink statistics
-- Total of 1 flow:

Average throughput: 822.35 Mbit/s

95th percentile per-packet one-way delay: 142.454 ms

Loss rate: 1.55%

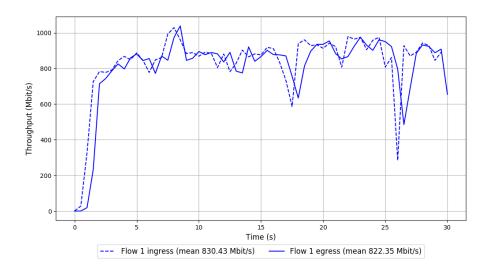
-- Flow 1:

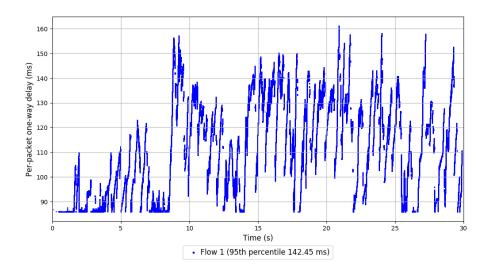
Average throughput: 822.35 Mbit/s

95th percentile per-packet one-way delay: 142.454 ms

Loss rate: 1.55%

Run 5: Report of FillP — Data Link





Run 1: Statistics of FillP-Sheep

Start at: 2019-11-23 22:20:29 End at: 2019-11-23 22:20:59 Local clock offset: 6.567 ms Remote clock offset: 6.592 ms

Below is generated by plot.py at 2019-11-24 01:51:13

Datalink statistics
-- Total of 1 flow:

Average throughput: 797.89 Mbit/s

95th percentile per-packet one-way delay: 105.302 ms

Loss rate: 0.68%

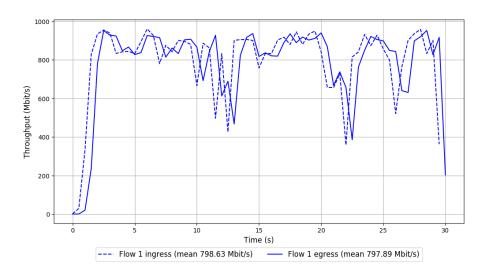
-- Flow 1:

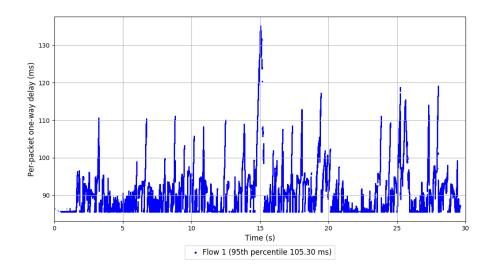
Average throughput: 797.89 Mbit/s

95th percentile per-packet one-way delay: 105.302 ms

Loss rate: 0.68%

Run 1: Report of FillP-Sheep — Data Link





Run 2: Statistics of FillP-Sheep

Start at: 2019-11-23 22:56:07 End at: 2019-11-23 22:56:38 Local clock offset: 15.247 ms Remote clock offset: 15.501 ms

Below is generated by plot.py at 2019-11-24 01:51:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 817.44 Mbit/s

95th percentile per-packet one-way delay: 127.026 ms

Loss rate: 1.01%

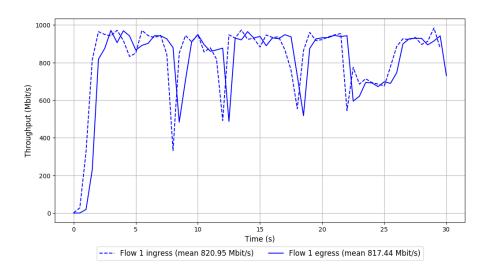
-- Flow 1:

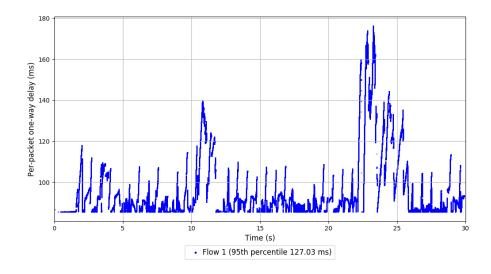
Average throughput: 817.44 Mbit/s

95th percentile per-packet one-way delay: 127.026 ms

Loss rate: 1.01%

Run 2: Report of FillP-Sheep — Data Link





Run 3: Statistics of FillP-Sheep

Start at: 2019-11-23 23:31:08 End at: 2019-11-23 23:31:38 Local clock offset: 11.628 ms Remote clock offset: 11.84 ms

Below is generated by plot.py at 2019-11-24 01:51:35

Datalink statistics
-- Total of 1 flow:

Average throughput: 820.51 Mbit/s

95th percentile per-packet one-way delay: 130.537 ms

Loss rate: 1.20%

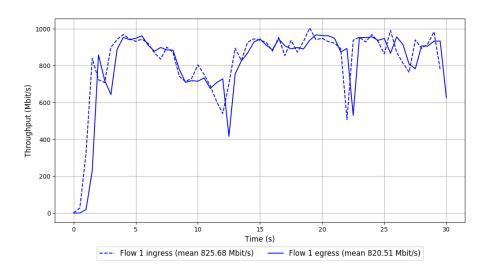
-- Flow 1:

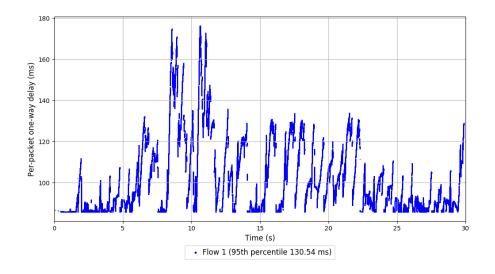
Average throughput: 820.51 Mbit/s

95th percentile per-packet one-way delay: 130.537 ms

Loss rate: 1.20%

Run 3: Report of FillP-Sheep — Data Link





Run 4: Statistics of FillP-Sheep

Start at: 2019-11-24 00:05:59 End at: 2019-11-24 00:06:29 Local clock offset: 5.537 ms Remote clock offset: 5.718 ms

Below is generated by plot.py at 2019-11-24 01:58:09

Datalink statistics
-- Total of 1 flow:

Average throughput: 830.09 Mbit/s

95th percentile per-packet one-way delay: 131.953 ms

Loss rate: 0.93%

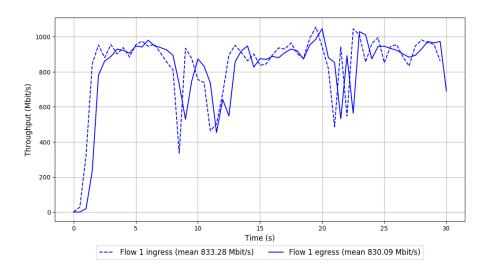
-- Flow 1:

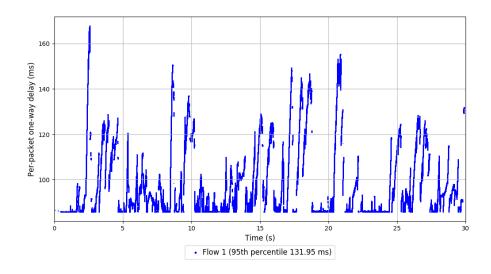
Average throughput: 830.09 Mbit/s

95th percentile per-packet one-way delay: 131.953 ms

Loss rate: 0.93%

Run 4: Report of FillP-Sheep — Data Link





Run 5: Statistics of FillP-Sheep

Start at: 2019-11-24 00:41:07 End at: 2019-11-24 00:41:37 Local clock offset: 1.803 ms Remote clock offset: 1.766 ms

Below is generated by plot.py at 2019-11-24 02:02:30

Datalink statistics
-- Total of 1 flow:

Average throughput: 817.62 Mbit/s

95th percentile per-packet one-way delay: 138.783 ms

Loss rate: 1.01%

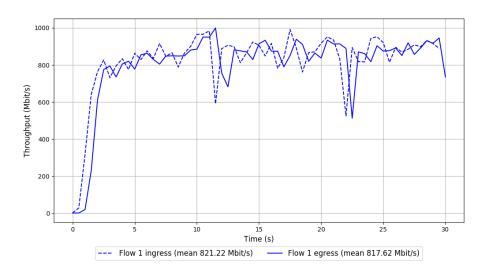
-- Flow 1:

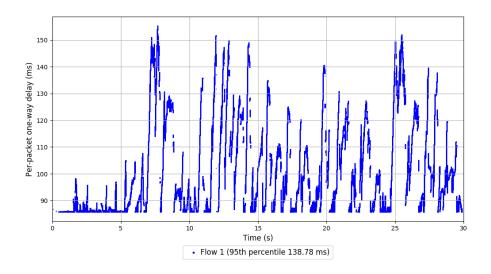
Average throughput: 817.62 Mbit/s

95th percentile per-packet one-way delay: 138.783 ms

Loss rate: 1.01%

Run 5: Report of FillP-Sheep — Data Link





Run 1: Statistics of Indigo

Start at: 2019-11-23 22:44:34 End at: 2019-11-23 22:45:04 Local clock offset: 18.178 ms Remote clock offset: 18.574 ms

Below is generated by plot.py at 2019-11-24 02:02:30

Datalink statistics
-- Total of 1 flow:

Average throughput: 215.64 Mbit/s

95th percentile per-packet one-way delay: $86.663~\mathrm{ms}$

Loss rate: 0.64%

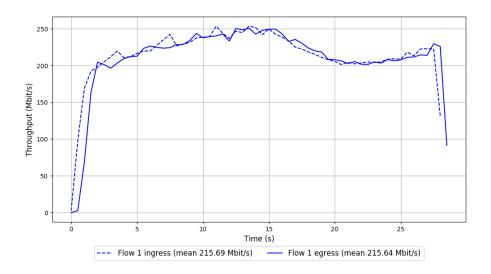
-- Flow 1:

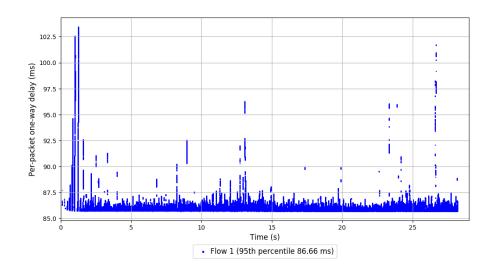
Average throughput: 215.64 Mbit/s

95th percentile per-packet one-way delay: 86.663 ms

Loss rate: 0.64%

Run 1: Report of Indigo — Data Link





Run 2: Statistics of Indigo

Start at: 2019-11-23 23:19:48 End at: 2019-11-23 23:20:18 Local clock offset: 23.953 ms Remote clock offset: 23.581 ms

Below is generated by plot.py at 2019-11-24 02:02:30

Datalink statistics
-- Total of 1 flow:

Average throughput: 211.01 Mbit/s

95th percentile per-packet one-way delay: $87.367~\mathrm{ms}$

Loss rate: 0.57%

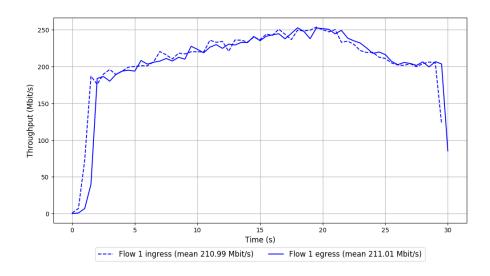
-- Flow 1:

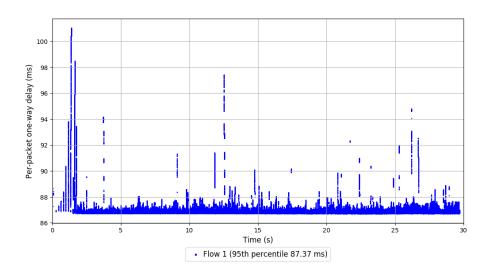
Average throughput: 211.01 Mbit/s

95th percentile per-packet one-way delay: 87.367 ms

Loss rate: 0.57%

Run 2: Report of Indigo — Data Link





Run 3: Statistics of Indigo

Start at: 2019-11-23 23:54:42 End at: 2019-11-23 23:55:12 Local clock offset: 11.281 ms Remote clock offset: 11.087 ms

Below is generated by plot.py at 2019-11-24 02:02:31

Datalink statistics
-- Total of 1 flow:

Average throughput: 218.56 Mbit/s

95th percentile per-packet one-way delay: $88.425~\mathrm{ms}$

Loss rate: 0.58%

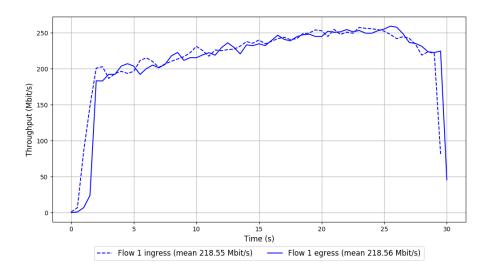
-- Flow 1:

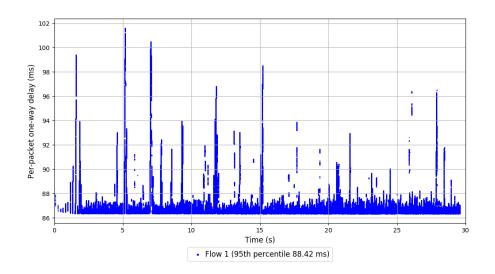
Average throughput: 218.56 Mbit/s

95th percentile per-packet one-way delay: 88.425 ms

Loss rate: 0.58%

Run 3: Report of Indigo — Data Link





Run 4: Statistics of Indigo

Start at: 2019-11-24 00:29:39 End at: 2019-11-24 00:30:09 Local clock offset: 4.659 ms Remote clock offset: 4.774 ms

Below is generated by plot.py at 2019-11-24 02:02:31

Datalink statistics
-- Total of 1 flow:

Average throughput: 215.36 Mbit/s

95th percentile per-packet one-way delay: $88.891~\mathrm{ms}$

Loss rate: 0.68%

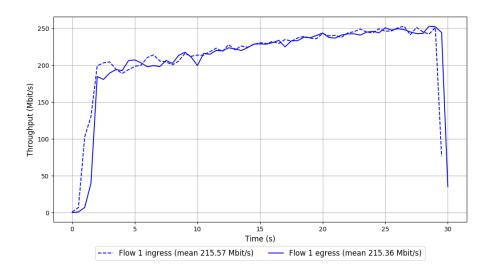
-- Flow 1:

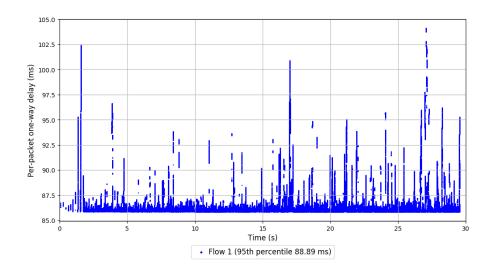
Average throughput: 215.36 Mbit/s

95th percentile per-packet one-way delay: 88.891 ms

Loss rate: 0.68%

Run 4: Report of Indigo — Data Link





Run 5: Statistics of Indigo

Start at: 2019-11-24 01:05:17 End at: 2019-11-24 01:05:47 Local clock offset: 1.395 ms Remote clock offset: 0.872 ms

Below is generated by plot.py at 2019-11-24 02:02:31

Datalink statistics
-- Total of 1 flow:

Average throughput: 218.64 Mbit/s

95th percentile per-packet one-way delay: 89.809 ms

Loss rate: 0.66%

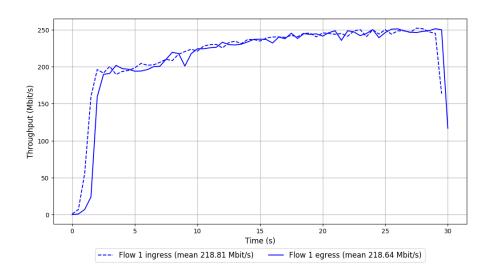
-- Flow 1:

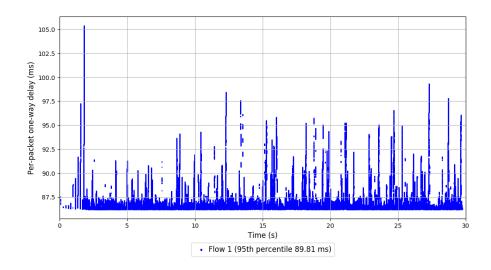
Average throughput: 218.64 Mbit/s

95th percentile per-packet one-way delay: 89.809 ms

Loss rate: 0.66%

Run 5: Report of Indigo — Data Link





Run 1: Statistics of Indigo-MusesC3

Start at: 2019-11-23 22:31:19 End at: 2019-11-23 22:31:49 Local clock offset: 9.728 ms Remote clock offset: 9.866 ms

Below is generated by plot.py at 2019-11-24 02:02:31

Datalink statistics
-- Total of 1 flow:

Average throughput: 637.38 Mbit/s

95th percentile per-packet one-way delay: 112.152 ms

Loss rate: 0.69%

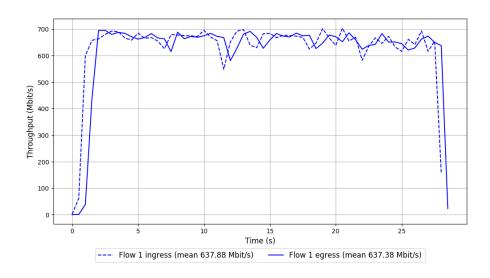
-- Flow 1:

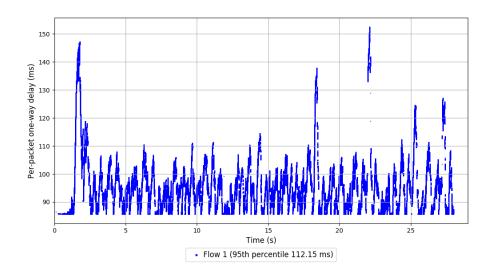
Average throughput: 637.38 Mbit/s

95th percentile per-packet one-way delay: 112.152 ms

Loss rate: 0.69%

Run 1: Report of Indigo-MusesC3 — Data Link





Run 2: Statistics of Indigo-MusesC3

Start at: 2019-11-23 23:06:54 End at: 2019-11-23 23:07:24 Local clock offset: 21.293 ms Remote clock offset: 21.508 ms

Below is generated by plot.py at 2019-11-24 02:06:58

Datalink statistics
-- Total of 1 flow:

Average throughput: 632.96 Mbit/s

95th percentile per-packet one-way delay: 111.631 $\ensuremath{\mathsf{ms}}$

Loss rate: 0.65%

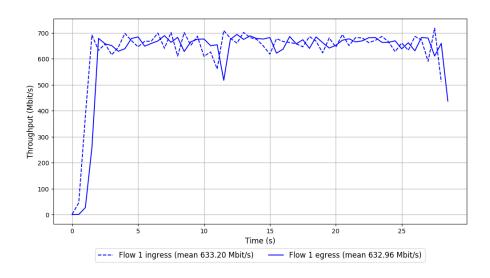
-- Flow 1:

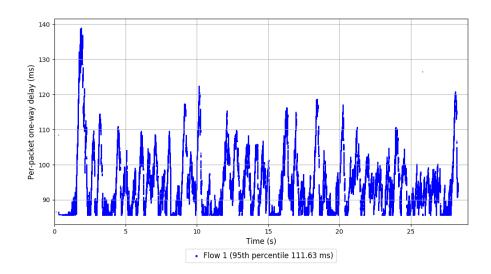
Average throughput: 632.96 Mbit/s

95th percentile per-packet one-way delay: 111.631 ms

Loss rate: 0.65%

Run 2: Report of Indigo-MusesC3 — Data Link





Run 3: Statistics of Indigo-MusesC3

Start at: 2019-11-23 23:41:16 End at: 2019-11-23 23:41:46 Local clock offset: 11.713 ms Remote clock offset: 11.941 ms

Below is generated by plot.py at 2019-11-24 02:07:42

Datalink statistics
-- Total of 1 flow:

Average throughput: 618.32 Mbit/s

95th percentile per-packet one-way delay: 104.339 ms

Loss rate: 0.62%

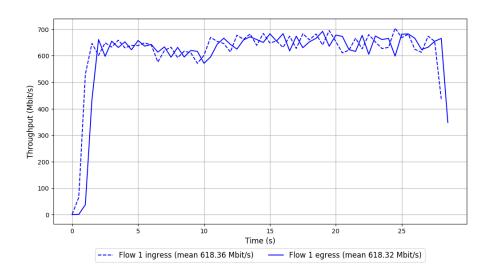
-- Flow 1:

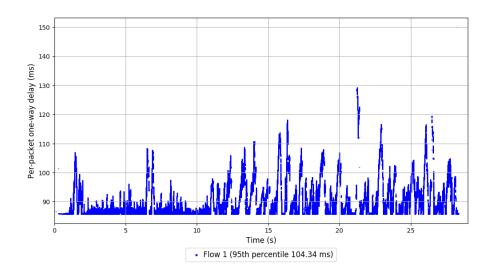
Average throughput: 618.32 Mbit/s

95th percentile per-packet one-way delay: 104.339 ms

Loss rate: 0.62%

Run 3: Report of Indigo-MusesC3 — Data Link





Run 4: Statistics of Indigo-MusesC3

Start at: 2019-11-24 00:16:53 End at: 2019-11-24 00:17:23 Local clock offset: 5.646 ms Remote clock offset: 5.967 ms

Below is generated by plot.py at 2019-11-24 02:07:57

Datalink statistics
-- Total of 1 flow:

Average throughput: 602.12 Mbit/s

95th percentile per-packet one-way delay: 122.065 ms

Loss rate: 0.69%

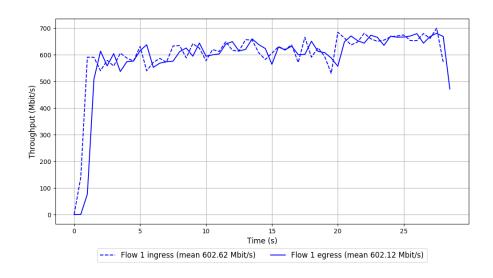
-- Flow 1:

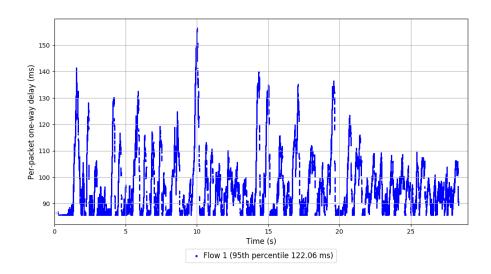
Average throughput: 602.12 Mbit/s

95th percentile per-packet one-way delay: 122.065 ms

Loss rate: 0.69%

Run 4: Report of Indigo-MusesC3 — Data Link





Run 5: Statistics of Indigo-MusesC3

Start at: 2019-11-24 00:51:57 End at: 2019-11-24 00:52:27 Local clock offset: 1.444 ms Remote clock offset: 1.361 ms

Below is generated by plot.py at 2019-11-24 02:09:06

Datalink statistics
-- Total of 1 flow:

Average throughput: 665.05 Mbit/s

95th percentile per-packet one-way delay: 103.877 $\ensuremath{\mathsf{ms}}$

Loss rate: 0.66%

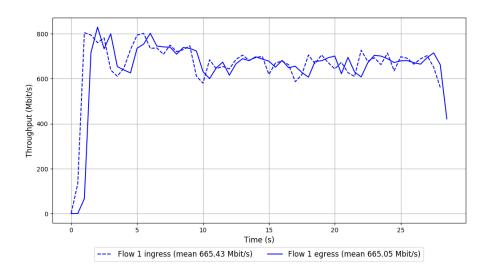
-- Flow 1:

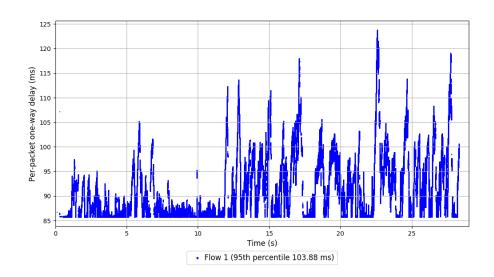
Average throughput: 665.05 Mbit/s

95th percentile per-packet one-way delay: 103.877 ms

Loss rate: 0.66%

Run 5: Report of Indigo-MusesC3 — Data Link

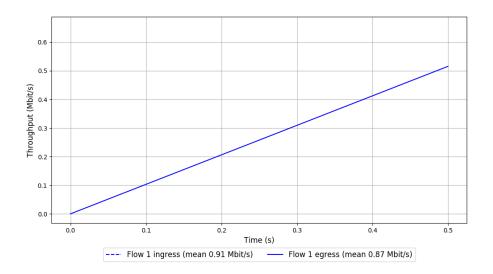


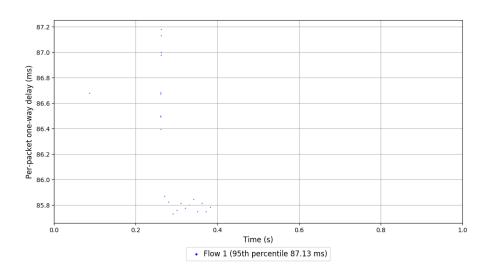


Run 1: Statistics of Indigo-MusesC5

Start at: 2019-11-23 22:17:50 End at: 2019-11-23 22:18:20 Local clock offset: 8.515 ms Remote clock offset: 8.872 ms

Run 1: Report of Indigo-MusesC5 — Data Link





Run 2: Statistics of Indigo-MusesC5

Start at: 2019-11-23 22:52:56 End at: 2019-11-23 22:53:26 Local clock offset: 14.631 ms Remote clock offset: 14.721 ms

Below is generated by plot.py at 2019-11-24 02:09:06

Datalink statistics
-- Total of 1 flow:

Average throughput: 610.79 Mbit/s

95th percentile per-packet one-way delay: 122.490 ms

Loss rate: 0.72%

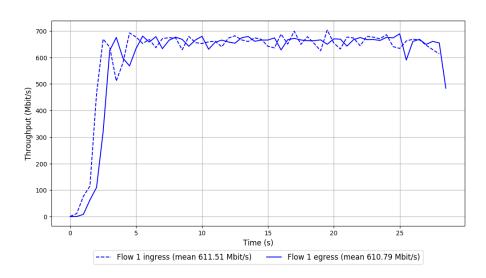
-- Flow 1:

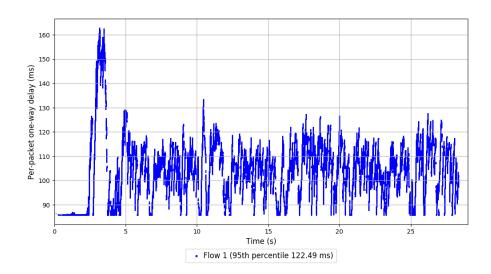
Average throughput: 610.79 Mbit/s

95th percentile per-packet one-way delay: 122.490 ms

Loss rate: 0.72%

Run 2: Report of Indigo-MusesC5 — Data Link





Run 3: Statistics of Indigo-MusesC5

Start at: 2019-11-23 23:28:01 End at: 2019-11-23 23:28:31 Local clock offset: 13.082 ms Remote clock offset: 13.255 ms

Below is generated by plot.py at 2019-11-24 02:09:06

Datalink statistics
-- Total of 1 flow:

Average throughput: 633.25 Mbit/s

95th percentile per-packet one-way delay: 125.058 ms

Loss rate: 0.70%

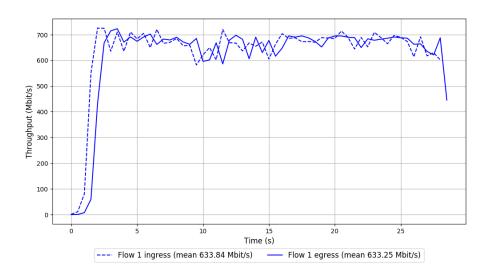
-- Flow 1:

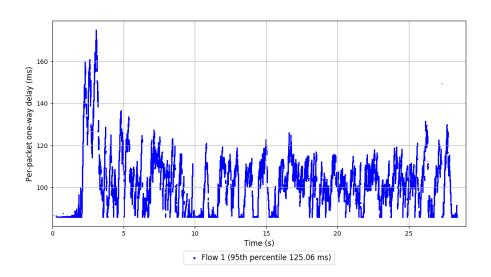
Average throughput: 633.25 Mbit/s

95th percentile per-packet one-way delay: 125.058 ms

Loss rate: 0.70%

Run 3: Report of Indigo-MusesC5 — Data Link





Run 4: Statistics of Indigo-MusesC5

Start at: 2019-11-24 00:02:54 End at: 2019-11-24 00:03:24 Local clock offset: 6.129 ms Remote clock offset: 6.367 ms

Below is generated by plot.py at 2019-11-24 02:12:13

Datalink statistics
-- Total of 1 flow:

Average throughput: 612.10 Mbit/s

95th percentile per-packet one-way delay: 177.504 ms

Loss rate: 1.18%

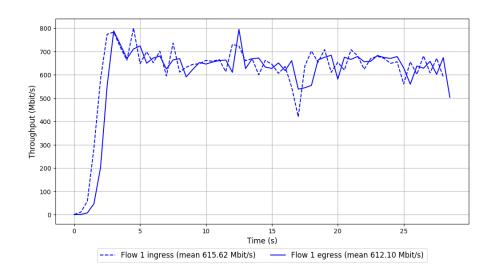
-- Flow 1:

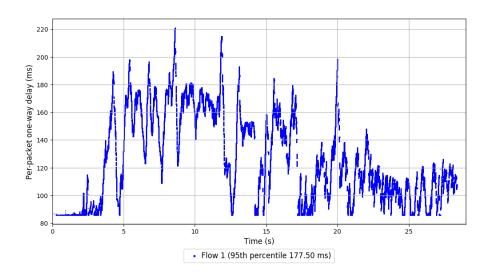
Average throughput: 612.10 Mbit/s

95th percentile per-packet one-way delay: 177.504 ms

Loss rate: 1.18%

Run 4: Report of Indigo-MusesC5 — Data Link





Run 5: Statistics of Indigo-MusesC5

Start at: 2019-11-24 00:37:56 End at: 2019-11-24 00:38:26 Local clock offset: 2.253 ms Remote clock offset: 2.174 ms

Below is generated by plot.py at 2019-11-24 02:12:47

Datalink statistics
-- Total of 1 flow:

Average throughput: 602.33 Mbit/s

95th percentile per-packet one-way delay: 153.895 ms

Loss rate: 0.77%

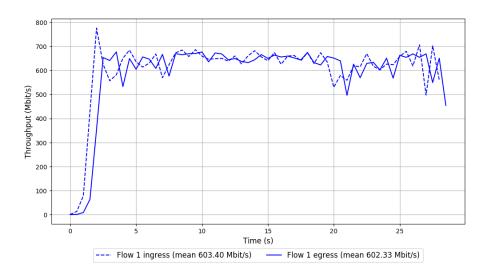
-- Flow 1:

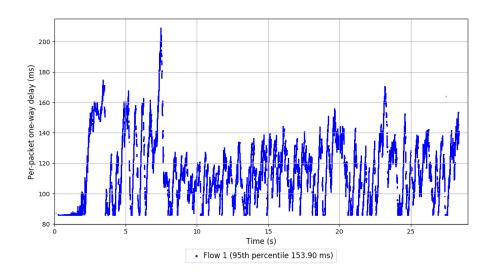
Average throughput: 602.33 Mbit/s

95th percentile per-packet one-way delay: 153.895 ms

Loss rate: 0.77%

Run 5: Report of Indigo-MusesC5 — Data Link





Run 1: Statistics of Indigo-MusesD

Start at: 2019-11-23 22:38:54 End at: 2019-11-23 22:39:24 Local clock offset: 14.874 ms Remote clock offset: 15.164 ms

Below is generated by plot.py at 2019-11-24 02:16:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 587.93 Mbit/s

95th percentile per-packet one-way delay: 144.044 ms

Loss rate: 0.94%

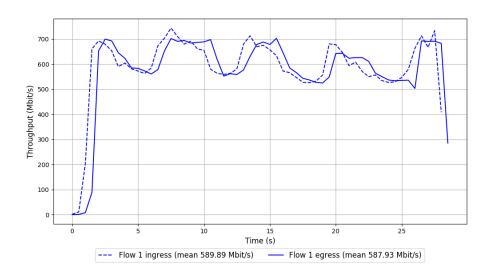
-- Flow 1:

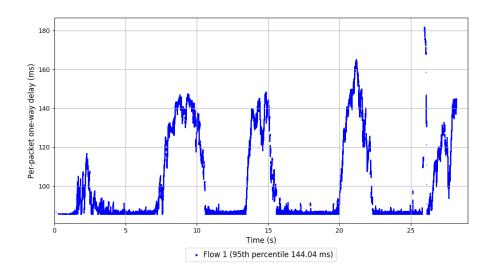
Average throughput: 587.93 Mbit/s

95th percentile per-packet one-way delay: 144.044 ms

Loss rate: 0.94%

Run 1: Report of Indigo-MusesD — Data Link





Run 2: Statistics of Indigo-MusesD

Start at: 2019-11-23 23:14:18 End at: 2019-11-23 23:14:49 Local clock offset: 26.713 ms Remote clock offset: 27.252 ms

Below is generated by plot.py at 2019-11-24 02:17:19

Datalink statistics
-- Total of 1 flow:

Average throughput: 575.74 Mbit/s

95th percentile per-packet one-way delay: 141.170 ms

Loss rate: 0.75%

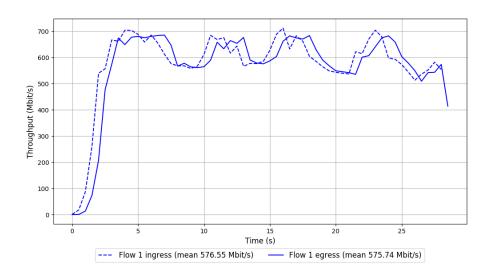
-- Flow 1:

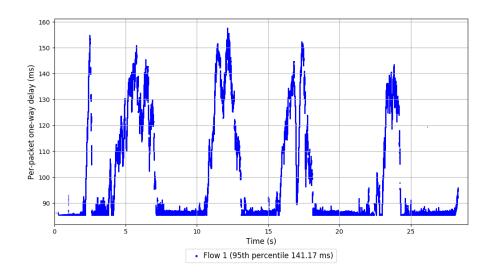
Average throughput: 575.74 Mbit/s

95th percentile per-packet one-way delay: 141.170 ms

Loss rate: 0.75%

Run 2: Report of Indigo-MusesD — Data Link





Run 3: Statistics of Indigo-MusesD

Start at: 2019-11-23 23:49:01 End at: 2019-11-23 23:49:31 Local clock offset: 13.84 ms Remote clock offset: 14.1 ms

Below is generated by plot.py at 2019-11-24 02:17:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 565.19 Mbit/s

95th percentile per-packet one-way delay: 139.270 ms

Loss rate: 0.69%

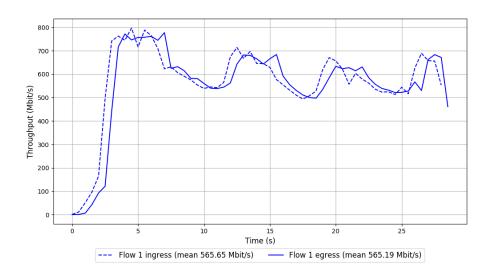
-- Flow 1:

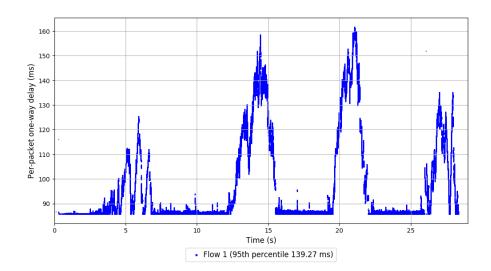
Average throughput: 565.19 Mbit/s

95th percentile per-packet one-way delay: 139.270 ms

Loss rate: 0.69%

Run 3: Report of Indigo-MusesD — Data Link





Run 4: Statistics of Indigo-MusesD

Start at: 2019-11-24 00:23:56 End at: 2019-11-24 00:24:26 Local clock offset: 6.988 ms Remote clock offset: 6.958 ms

Below is generated by plot.py at 2019-11-24 02:18:09

Datalink statistics
-- Total of 1 flow:

Average throughput: 573.50 Mbit/s

95th percentile per-packet one-way delay: 151.662 ms

Loss rate: 0.66%

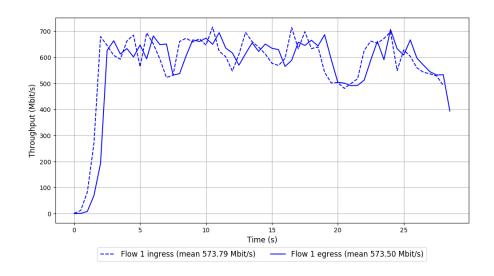
-- Flow 1:

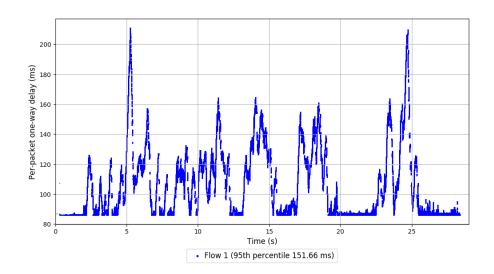
Average throughput: 573.50 Mbit/s

95th percentile per-packet one-way delay: 151.662 ms

Loss rate: 0.66%

Run 4: Report of Indigo-MusesD — Data Link





Run 5: Statistics of Indigo-MusesD

Start at: 2019-11-24 00:59:35 End at: 2019-11-24 01:00:05 Local clock offset: 1.612 ms Remote clock offset: 1.47 ms

Below is generated by plot.py at 2019-11-24 02:18:09

Datalink statistics
-- Total of 1 flow:

Average throughput: 527.47 Mbit/s

95th percentile per-packet one-way delay: 144.922 ms

Loss rate: 0.77%

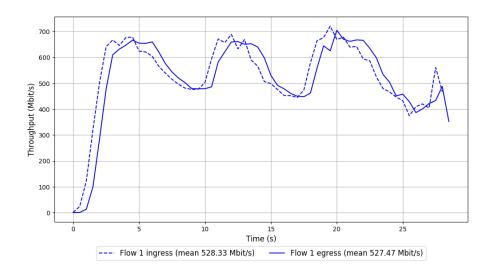
-- Flow 1:

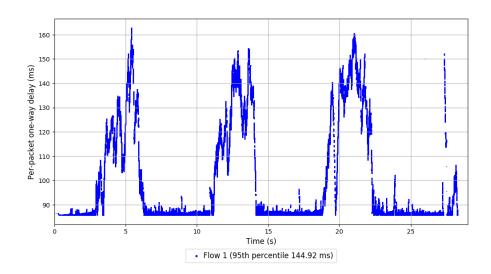
Average throughput: 527.47 Mbit/s

95th percentile per-packet one-way delay: 144.922 ms

Loss rate: 0.77%

Run 5: Report of Indigo-MusesD — Data Link





Run 1: Statistics of Indigo-MusesT

Start at: 2019-11-23 22:23:44 End at: 2019-11-23 22:24:14 Local clock offset: 9.685 ms Remote clock offset: 9.423 ms

Below is generated by plot.py at 2019-11-24 02:19:36

Datalink statistics
-- Total of 1 flow:

Average throughput: 640.31 Mbit/s

95th percentile per-packet one-way delay: 161.921 ms

Loss rate: 0.85%

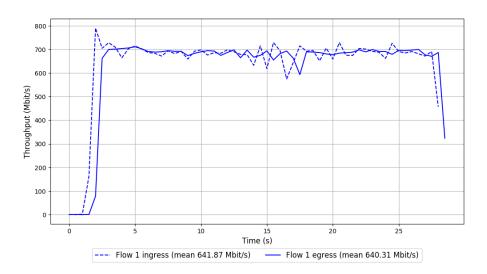
-- Flow 1:

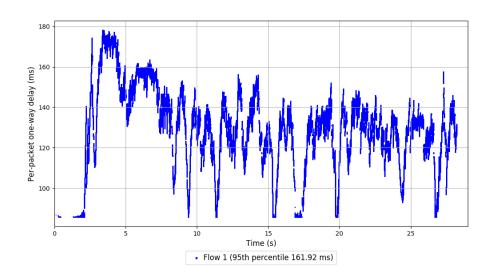
Average throughput: 640.31 Mbit/s

95th percentile per-packet one-way delay: 161.921 ms

Loss rate: 0.85%

Run 1: Report of Indigo-MusesT — Data Link





Run 2: Statistics of Indigo-MusesT

Start at: 2019-11-23 22:59:23 End at: 2019-11-23 22:59:53 Local clock offset: 16.551 ms Remote clock offset: 16.785 ms

Below is generated by plot.py at 2019-11-24 02:23:21

Datalink statistics
-- Total of 1 flow:

Average throughput: 645.64 Mbit/s

95th percentile per-packet one-way delay: 149.968 ms

Loss rate: 0.93%

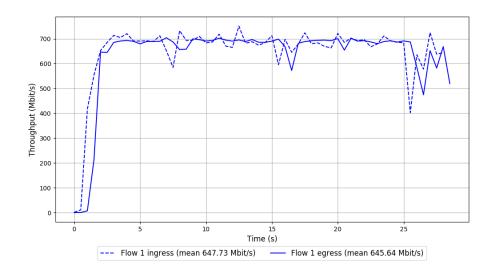
-- Flow 1:

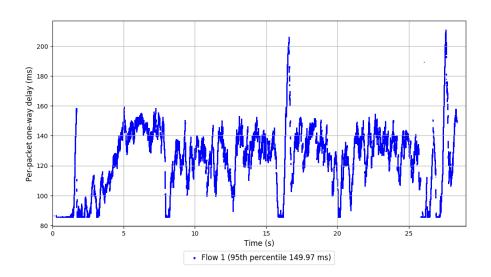
Average throughput: 645.64 Mbit/s

95th percentile per-packet one-way delay: 149.968 ms

Loss rate: 0.93%

Run 2: Report of Indigo-MusesT — Data Link





Run 3: Statistics of Indigo-MusesT

Start at: 2019-11-23 23:34:25 End at: 2019-11-23 23:34:55 Local clock offset: 11.08 ms Remote clock offset: 11.191 ms

Below is generated by plot.py at 2019-11-24 02:23:45

Datalink statistics
-- Total of 1 flow:

Average throughput: 646.93 Mbit/s

95th percentile per-packet one-way delay: 159.842 $\ensuremath{\mathtt{ms}}$

Loss rate: 1.06%

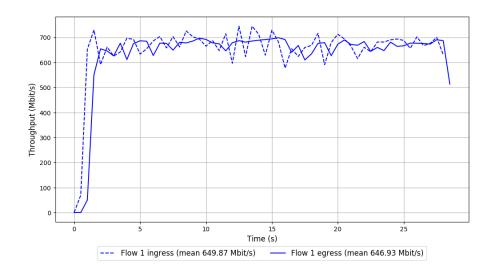
-- Flow 1:

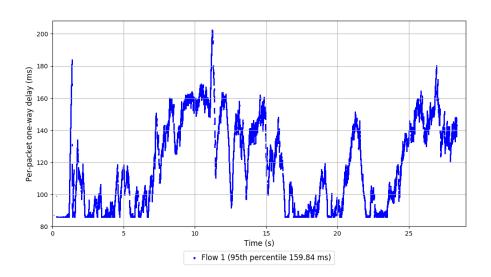
Average throughput: 646.93 Mbit/s

95th percentile per-packet one-way delay: 159.842 ms

Loss rate: 1.06%

Run 3: Report of Indigo-MusesT — Data Link





Run 4: Statistics of Indigo-MusesT

Start at: 2019-11-24 00:09:15 End at: 2019-11-24 00:09:45 Local clock offset: 5.297 ms Remote clock offset: 5.512 ms

Below is generated by plot.py at 2019-11-24 02:27:08

Datalink statistics
-- Total of 1 flow:

Average throughput: 632.10 Mbit/s

95th percentile per-packet one-way delay: 163.937 ms

Loss rate: 1.13%

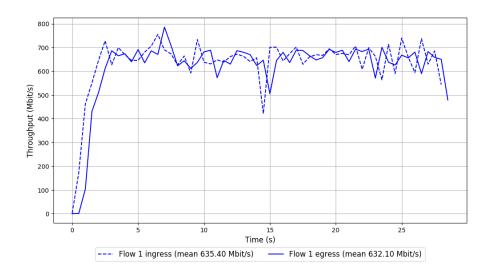
-- Flow 1:

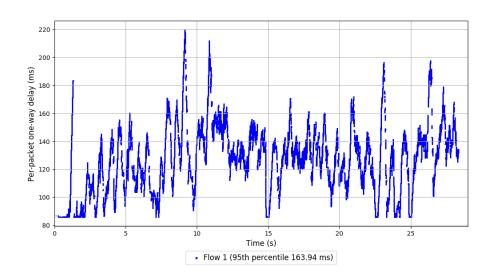
Average throughput: 632.10 Mbit/s

95th percentile per-packet one-way delay: 163.937 ms

Loss rate: 1.13%

Run 4: Report of Indigo-MusesT — Data Link





Run 5: Statistics of Indigo-MusesT

Start at: 2019-11-24 00:44:23 End at: 2019-11-24 00:44:53 Local clock offset: 1.564 ms Remote clock offset: 1.49 ms

Below is generated by plot.py at 2019-11-24 02:27:40

Datalink statistics
-- Total of 1 flow:

Average throughput: 611.96 Mbit/s

95th percentile per-packet one-way delay: 169.222 ms

Loss rate: 0.98%

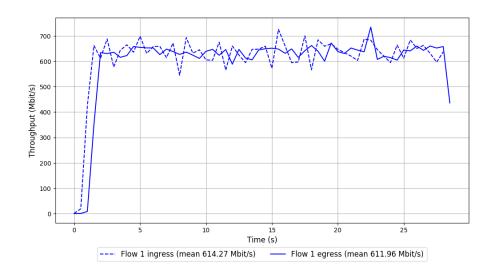
-- Flow 1:

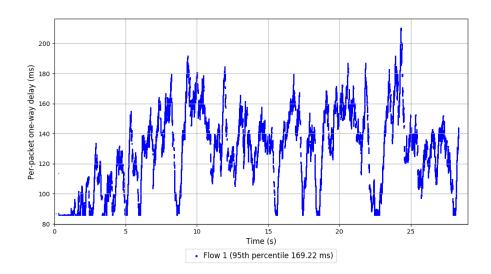
Average throughput: 611.96 Mbit/s

95th percentile per-packet one-way delay: 169.222 ms

Loss rate: 0.98%

Run 5: Report of Indigo-MusesT — Data Link





Run 1: Statistics of LEDBAT

Start at: 2019-11-23 22:16:39 End at: 2019-11-23 22:17:09 Local clock offset: 6.336 ms Remote clock offset: 6.808 ms

Below is generated by plot.py at 2019-11-24 02:27:41

Datalink statistics
-- Total of 1 flow:

Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 86.038 ms

Loss rate: 1.15%

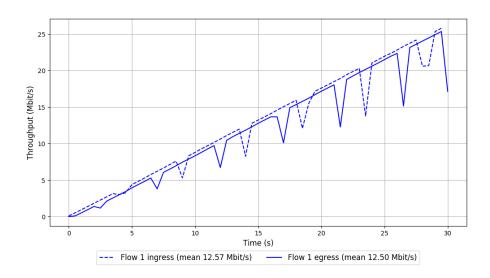
-- Flow 1:

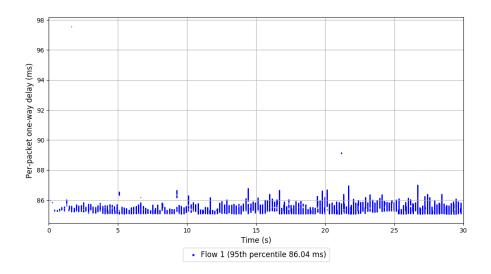
Average throughput: 12.50 Mbit/s

95th percentile per-packet one-way delay: 86.038 ms

Loss rate: 1.15%

Run 1: Report of LEDBAT — Data Link





Run 2: Statistics of LEDBAT

Start at: 2019-11-23 22:51:46 End at: 2019-11-23 22:52:16 Local clock offset: 14.574 ms Remote clock offset: 14.697 ms

Below is generated by plot.py at 2019-11-24 02:27:41

Datalink statistics
-- Total of 1 flow:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 86.806 ms

Loss rate: 1.15%

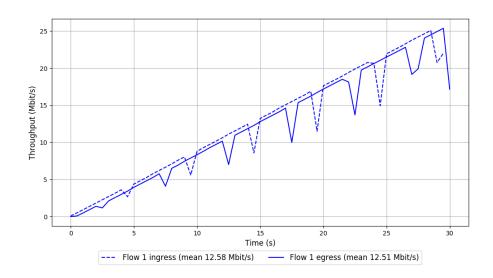
-- Flow 1:

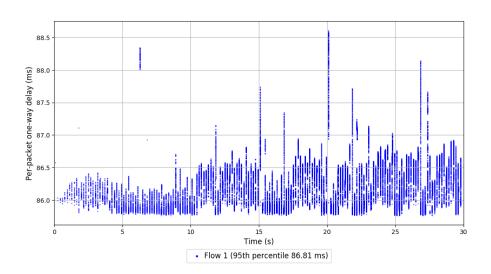
Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 86.806 ms

Loss rate: 1.15%

Run 2: Report of LEDBAT — Data Link





Run 3: Statistics of LEDBAT

Start at: 2019-11-23 23:26:50 End at: 2019-11-23 23:27:20 Local clock offset: 13.892 ms Remote clock offset: 14.091 ms

Below is generated by plot.py at 2019-11-24 02:27:41

Datalink statistics
-- Total of 1 flow:

Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 86.854 ms

Loss rate: 1.15%

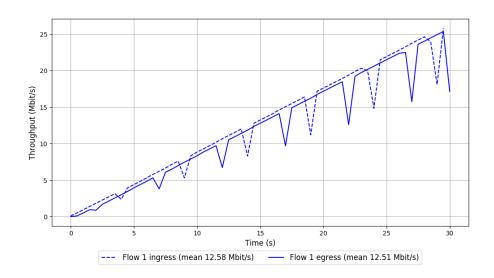
-- Flow 1:

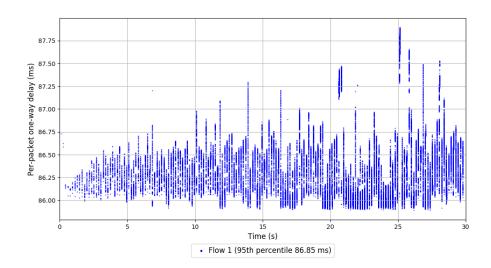
Average throughput: 12.51 Mbit/s

95th percentile per-packet one-way delay: 86.854 ms

Loss rate: 1.15%

Run 3: Report of LEDBAT — Data Link





Run 4: Statistics of LEDBAT

Start at: 2019-11-24 00:01:43 End at: 2019-11-24 00:02:13 Local clock offset: 6.52 ms Remote clock offset: 6.748 ms

Below is generated by plot.py at 2019-11-24 02:27:41

Datalink statistics
-- Total of 1 flow:

Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 1.14%

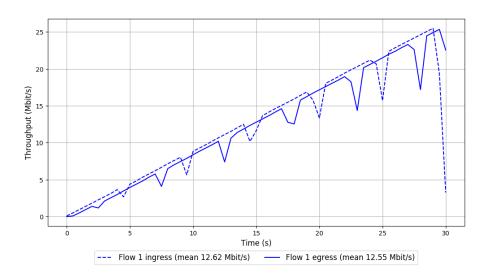
-- Flow 1:

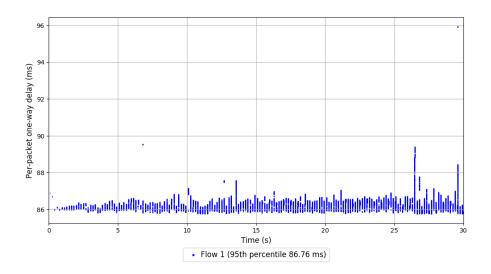
Average throughput: 12.55 Mbit/s

95th percentile per-packet one-way delay: 86.756 ms

Loss rate: 1.14%

Run 4: Report of LEDBAT — Data Link





Run 5: Statistics of LEDBAT

Start at: 2019-11-24 00:36:46 End at: 2019-11-24 00:37:16 Local clock offset: 2.432 ms Remote clock offset: 2.374 ms

Below is generated by plot.py at 2019-11-24 02:27:41

Datalink statistics
-- Total of 1 flow:

Average throughput: 12.52 Mbit/s

95th percentile per-packet one-way delay: 86.620 ms

Loss rate: 1.15%

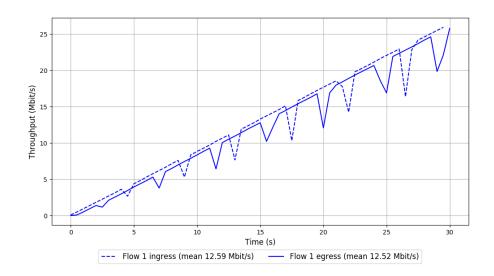
-- Flow 1:

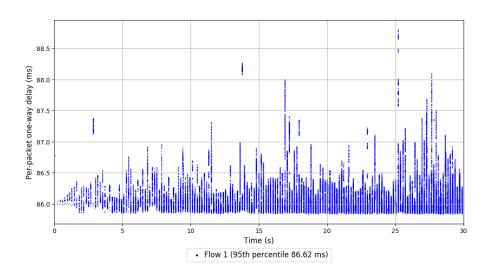
Average throughput: 12.52 Mbit/s

95th percentile per-packet one-way delay: 86.620 ms

Loss rate: 1.15%

Run 5: Report of LEDBAT — Data Link





Run 1: Statistics of Muses_DecisionTree

Start at: 2019-11-23 22:28:05 End at: 2019-11-23 22:28:36 Local clock offset: 10.933 ms Remote clock offset: 10.851 ms

Below is generated by plot.py at 2019-11-24 02:28:45

Datalink statistics
-- Total of 1 flow:

Average throughput: 605.51 Mbit/s

95th percentile per-packet one-way delay: 106.494 ms

Loss rate: 0.66%

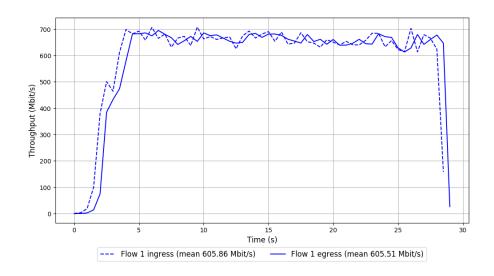
-- Flow 1:

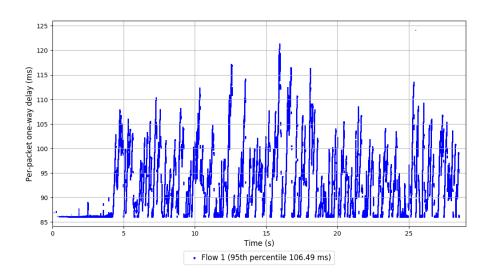
Average throughput: 605.51 Mbit/s

95th percentile per-packet one-way delay: 106.494 ms

Loss rate: 0.66%

Run 1: Report of Muses_DecisionTree — Data Link





Run 2: Statistics of Muses_DecisionTree

Start at: 2019-11-23 23:03:45 End at: 2019-11-23 23:04:15 Local clock offset: 19.548 ms Remote clock offset: 19.476 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 624.22 Mbit/s

95th percentile per-packet one-way delay: 113.149 ms

Loss rate: 0.63%

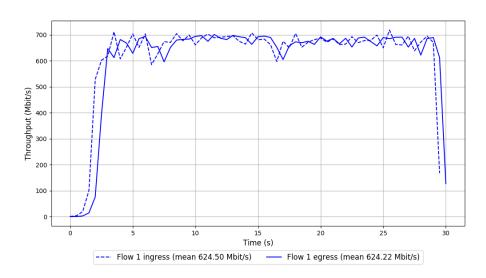
-- Flow 1:

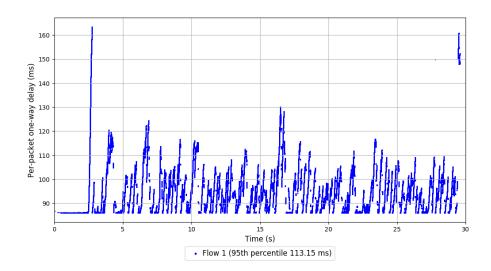
Average throughput: 624.22 Mbit/s

95th percentile per-packet one-way delay: 113.149 ms

Loss rate: 0.63%

Run 2: Report of Muses_DecisionTree — Data Link





Run 3: Statistics of Muses_DecisionTree

Start at: 2019-11-23 23:38:46 End at: 2019-11-23 23:39:16 Local clock offset: 11.229 ms Remote clock offset: 11.514 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 86.013 ms

Loss rate: 0.63%

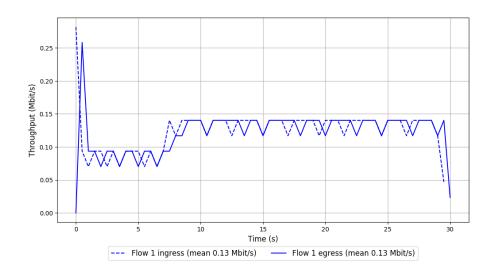
-- Flow 1:

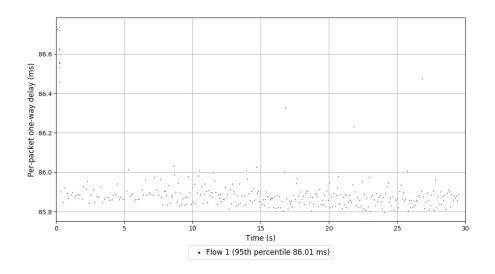
Average throughput: 0.13 Mbit/s

95th percentile per-packet one-way delay: 86.013 ms

Loss rate: 0.63%

Run 3: Report of Muses_DecisionTree — Data Link





Run 4: Statistics of Muses_DecisionTree

Start at: 2019-11-24 00:13:43 End at: 2019-11-24 00:14:13 Local clock offset: 5.397 ms Remote clock offset: 5.625 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 500.08 Mbit/s

95th percentile per-packet one-way delay: 136.008 ms

Loss rate: 0.82%

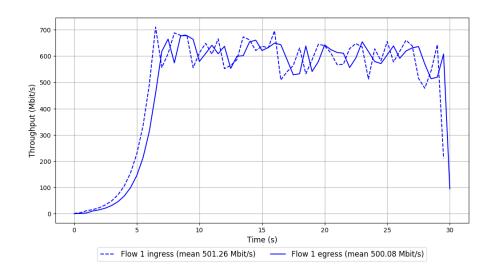
-- Flow 1:

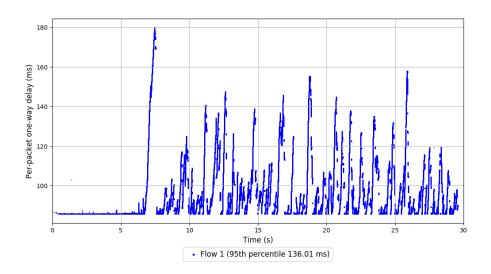
Average throughput: 500.08 Mbit/s

95th percentile per-packet one-way delay: 136.008 ms

Loss rate: 0.82%

Run 4: Report of Muses_DecisionTree — Data Link





Run 5: Statistics of Muses_DecisionTree

Start at: 2019-11-24 00:48:50 End at: 2019-11-24 00:49:20 Local clock offset: 1.504 ms Remote clock offset: 1.356 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 506.50 Mbit/s

95th percentile per-packet one-way delay: 126.026 ms

Loss rate: 0.76%

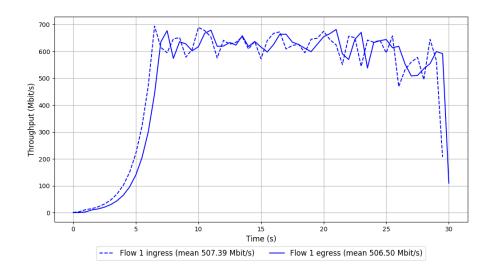
-- Flow 1:

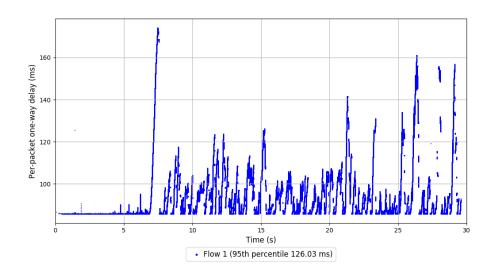
Average throughput: 506.50 Mbit/s

95th percentile per-packet one-way delay: 126.026 ms

Loss rate: 0.76%

Run 5: Report of Muses_DecisionTree — Data Link





Run 1: Statistics of Muses_DecisionTreeHO

Start at: 2019-11-23 22:37:30 End at: 2019-11-23 22:38:00 Local clock offset: 13.459 ms Remote clock offset: 13.72 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 295.74 Mbit/s

95th percentile per-packet one-way delay: 179.471 ms

Loss rate: 4.11%

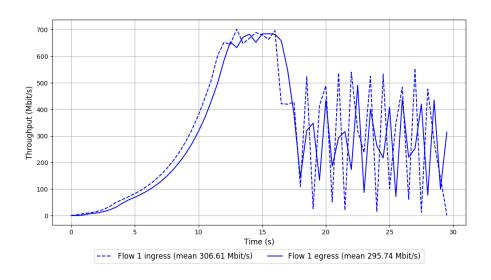
-- Flow 1:

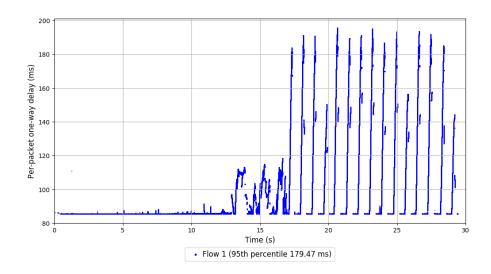
Average throughput: 295.74 Mbit/s

95th percentile per-packet one-way delay: 179.471 ms

Loss rate: 4.11%

Run 1: Report of Muses_DecisionTreeH0 — Data Link





Run 2: Statistics of Muses_DecisionTreeHO

Start at: 2019-11-23 23:12:57 End at: 2019-11-23 23:13:27 Local clock offset: 25.724 ms Remote clock offset: 26.172 ms

Below is generated by plot.py at 2019-11-24 02:29:27

Datalink statistics
-- Total of 1 flow:

Average throughput: 239.53 Mbit/s

95th percentile per-packet one-way delay: 184.560 ms

Loss rate: 9.53%

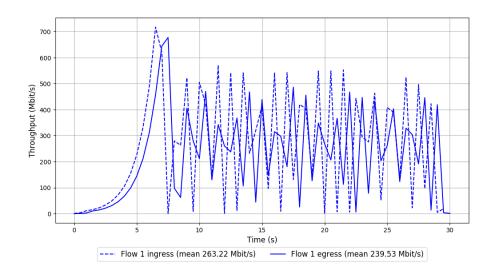
-- Flow 1:

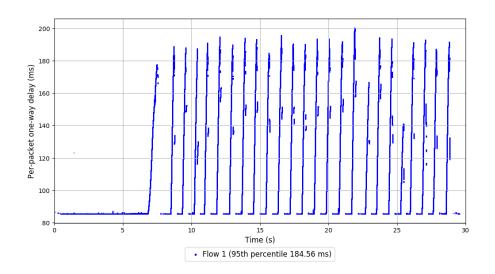
Average throughput: 239.53 Mbit/s

95th percentile per-packet one-way delay: 184.560 ms

Loss rate: 9.53%

Run 2: Report of Muses_DecisionTreeH0 — Data Link





Run 3: Statistics of Muses_DecisionTreeHO

Start at: 2019-11-23 23:47:33 End at: 2019-11-23 23:48:03 Local clock offset: 13.337 ms Remote clock offset: 13.701 ms

Below is generated by plot.py at 2019-11-24 02:32:50

Datalink statistics
-- Total of 1 flow:

Average throughput: 367.32 Mbit/s

95th percentile per-packet one-way delay: 177.923 ms

Loss rate: 4.78%

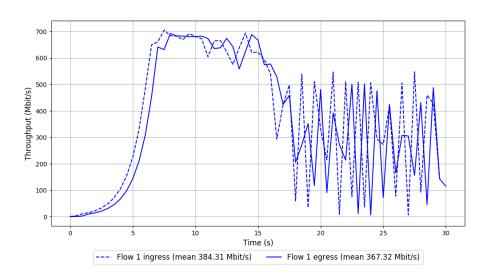
-- Flow 1:

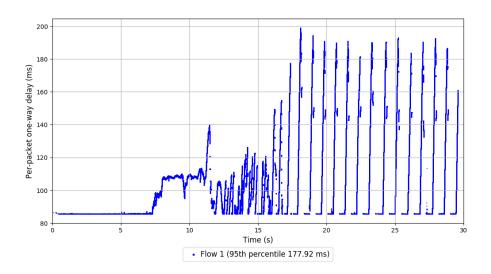
Average throughput: 367.32 Mbit/s

95th percentile per-packet one-way delay: 177.923 ms

Loss rate: 4.78%

Run 3: Report of Muses_DecisionTreeH0 — Data Link





Run 4: Statistics of Muses_DecisionTreeHO

Start at: 2019-11-24 00:22:28 End at: 2019-11-24 00:22:58 Local clock offset: 6.444 ms Remote clock offset: 6.696 ms

Below is generated by plot.py at 2019-11-24 02:33:15

Datalink statistics
-- Total of 1 flow:

Average throughput: 362.98 Mbit/s

95th percentile per-packet one-way delay: 182.001 ms

Loss rate: 6.78%

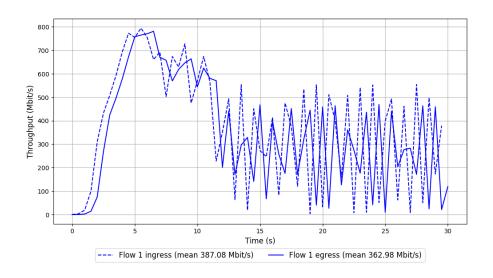
-- Flow 1:

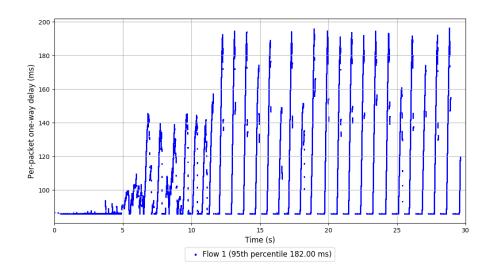
Average throughput: 362.98 Mbit/s

95th percentile per-packet one-way delay: 182.001 ms

Loss rate: 6.78%

Run 4: Report of Muses_DecisionTreeH0 — Data Link





Run 5: Statistics of Muses_DecisionTreeHO

Start at: 2019-11-24 00:58:07 End at: 2019-11-24 00:58:37 Local clock offset: 1.579 ms Remote clock offset: 1.425 ms

Below is generated by plot.py at 2019-11-24 02:33:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 364.38 Mbit/s

95th percentile per-packet one-way delay: 182.882 ms

Loss rate: 4.97%

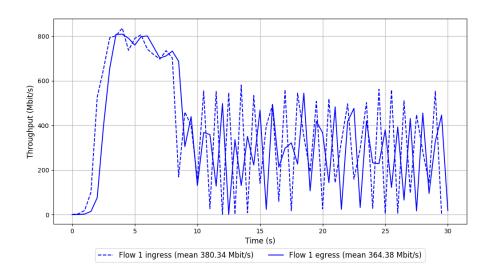
-- Flow 1:

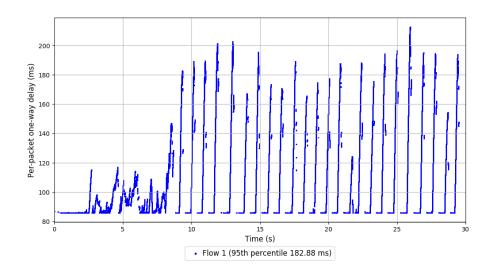
Average throughput: 364.38 Mbit/s

95th percentile per-packet one-way delay: 182.882 ms

Loss rate: 4.97%

Run 5: Report of Muses_DecisionTreeH0 — Data Link





Run 1: Statistics of Muses_DecisionTreeR0

Start at: 2019-11-23 22:35:55 End at: 2019-11-23 22:36:25 Local clock offset: 12.098 ms Remote clock offset: 12.327 ms

Below is generated by plot.py at 2019-11-24 02:37:39

Datalink statistics
-- Total of 1 flow:

Average throughput: 545.62 Mbit/s

95th percentile per-packet one-way delay: 110.819 ms

Loss rate: 0.78%

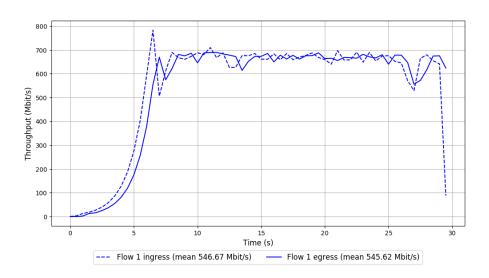
-- Flow 1:

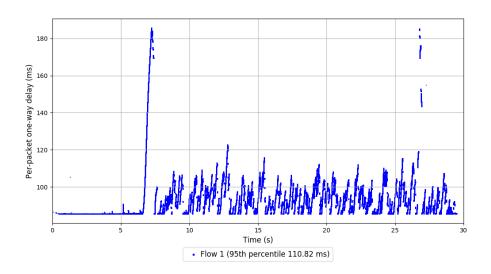
Average throughput: 545.62 Mbit/s

95th percentile per-packet one-way delay: 110.819 ms

Loss rate: 0.78%

Run 1: Report of Muses_DecisionTreeR0 — Data Link





Run 2: Statistics of Muses_DecisionTreeR0

Start at: 2019-11-23 23:11:20 End at: 2019-11-23 23:11:50 Local clock offset: 24.493 ms Remote clock offset: 24.85 ms

Below is generated by plot.py at 2019-11-24 02:38:15

Datalink statistics
-- Total of 1 flow:

Average throughput: 557.22 Mbit/s

95th percentile per-packet one-way delay: 109.055 ms

Loss rate: 0.71%

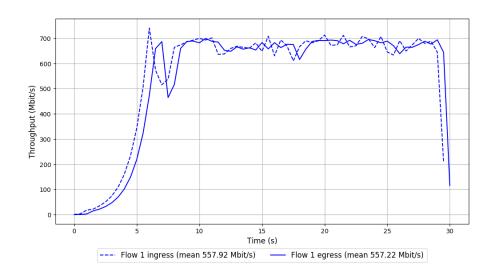
-- Flow 1:

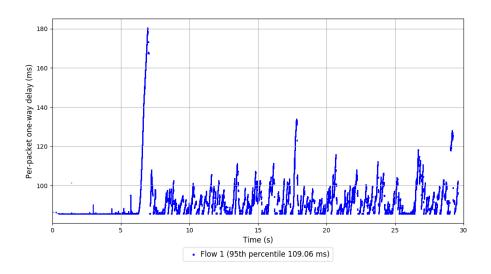
Average throughput: 557.22 Mbit/s

95th percentile per-packet one-way delay: 109.055 ms

Loss rate: 0.71%

Run 2: Report of Muses_DecisionTreeR0 — Data Link





Run 3: Statistics of Muses_DecisionTreeR0

Start at: 2019-11-23 23:45:54 End at: 2019-11-23 23:46:24 Local clock offset: 12.821 ms Remote clock offset: 13.117 ms

Below is generated by plot.py at 2019-11-24 02:39:08

Datalink statistics
-- Total of 1 flow:

Average throughput: 604.30 Mbit/s

95th percentile per-packet one-way delay: 117.730 ms

Loss rate: 0.27%

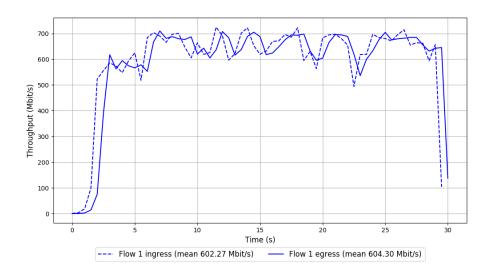
-- Flow 1:

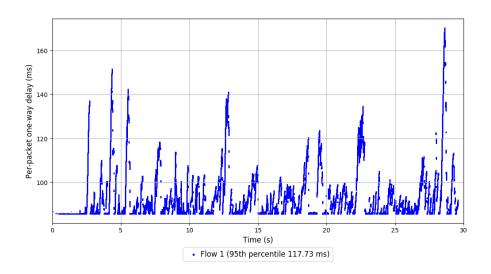
Average throughput: 604.30 Mbit/s

95th percentile per-packet one-way delay: 117.730 ms

Loss rate: 0.27%

Run 3: Report of Muses_DecisionTreeR0 — Data Link





Run 4: Statistics of Muses_DecisionTreeRO

Start at: 2019-11-24 00:21:19 End at: 2019-11-24 00:21:49 Local clock offset: 6.277 ms Remote clock offset: 6.523 ms

Below is generated by plot.py at 2019-11-24 02:39:08

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 85.944 ms

Loss rate: 0.62%

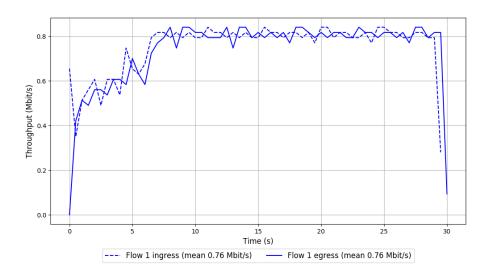
-- Flow 1:

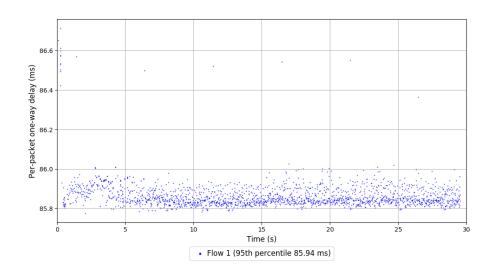
Average throughput: 0.76 Mbit/s

95th percentile per-packet one-way delay: 85.944 ms

Loss rate: 0.62%

Run 4: Report of Muses_DecisionTreeR0 — Data Link





Run 5: Statistics of Muses_DecisionTreeR0

Start at: 2019-11-24 00:56:29 End at: 2019-11-24 00:56:59 Local clock offset: 1.534 ms Remote clock offset: 1.409 ms

Below is generated by plot.py at 2019-11-24 02:39:08

Datalink statistics
-- Total of 1 flow:

Average throughput: 569.99 Mbit/s

95th percentile per-packet one-way delay: 117.661 ms

Loss rate: 0.65%

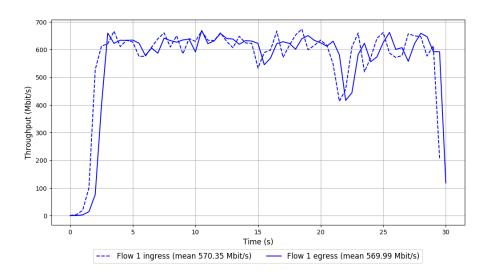
-- Flow 1:

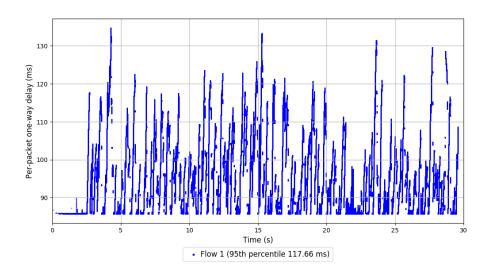
Average throughput: 569.99 Mbit/s

95th percentile per-packet one-way delay: 117.661 ms

Loss rate: 0.65%

Run 5: Report of Muses_DecisionTreeR0 — Data Link





Run 1: Statistics of PCC-Allegro

Start at: 2019-11-23 22:26:32 End at: 2019-11-23 22:27:02 Local clock offset: 13.203 ms Remote clock offset: 12.707 ms

Below is generated by plot.py at 2019-11-24 02:41:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 369.15 Mbit/s

95th percentile per-packet one-way delay: 192.661 ms

Loss rate: 1.67%

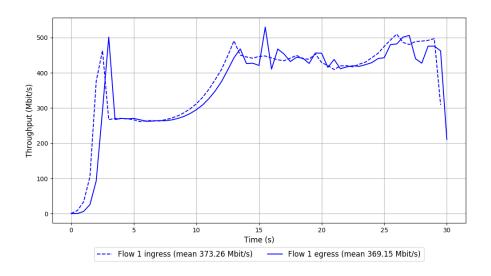
-- Flow 1:

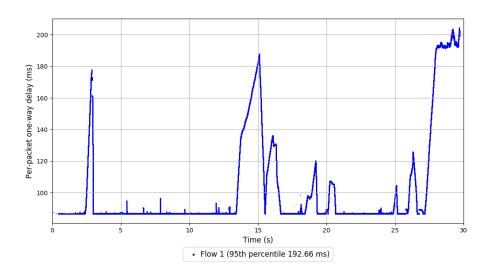
Average throughput: 369.15 Mbit/s

95th percentile per-packet one-way delay: 192.661 ms

Loss rate: 1.67%

Run 1: Report of PCC-Allegro — Data Link





Run 2: Statistics of PCC-Allegro

Start at: 2019-11-23 23:02:12 End at: 2019-11-23 23:02:42 Local clock offset: 18.086 ms Remote clock offset: 18.306 ms

Below is generated by plot.py at 2019-11-24 02:45:29

Datalink statistics
-- Total of 1 flow:

Average throughput: 364.05 Mbit/s

95th percentile per-packet one-way delay: 210.315 ms

Loss rate: 4.61%

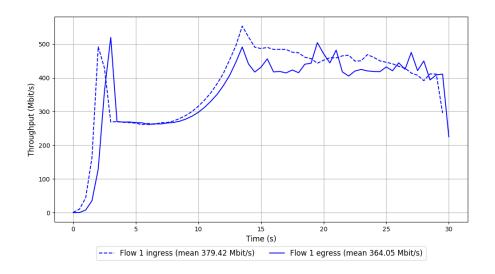
-- Flow 1:

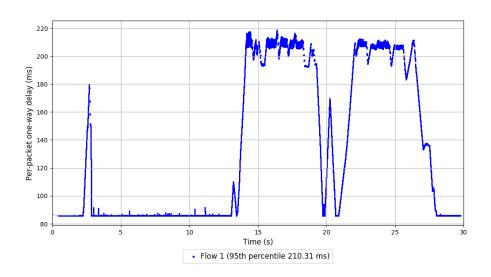
Average throughput: 364.05 Mbit/s

95th percentile per-packet one-way delay: 210.315 ms

Loss rate: 4.61%

Run 2: Report of PCC-Allegro — Data Link





Run 3: Statistics of PCC-Allegro

Start at: 2019-11-23 23:37:13 End at: 2019-11-23 23:37:43 Local clock offset: 11.064 ms Remote clock offset: 11.352 ms

Below is generated by plot.py at 2019-11-24 02:45:43

Datalink statistics
-- Total of 1 flow:

Average throughput: 360.19 Mbit/s

95th percentile per-packet one-way delay: 132.593 ms

Loss rate: 0.76%

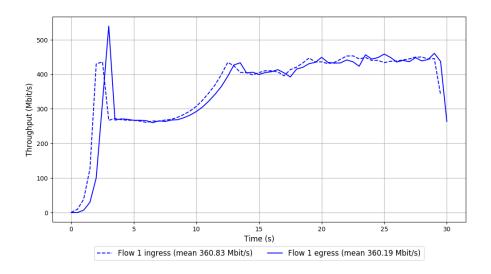
-- Flow 1:

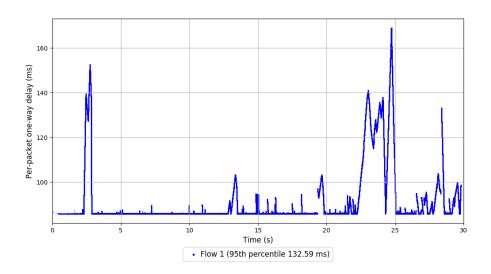
Average throughput: 360.19 Mbit/s

95th percentile per-packet one-way delay: 132.593 ms

Loss rate: 0.76%

Run 3: Report of PCC-Allegro — Data Link





Run 4: Statistics of PCC-Allegro

Start at: 2019-11-24 00:12:03 End at: 2019-11-24 00:12:33 Local clock offset: 5.299 ms Remote clock offset: 5.545 ms

Below is generated by plot.py at 2019-11-24 02:49:39

Datalink statistics
-- Total of 1 flow:

Average throughput: 453.77 Mbit/s

95th percentile per-packet one-way delay: 212.252 ms

Loss rate: 4.21%

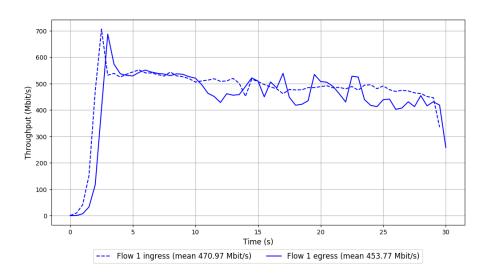
-- Flow 1:

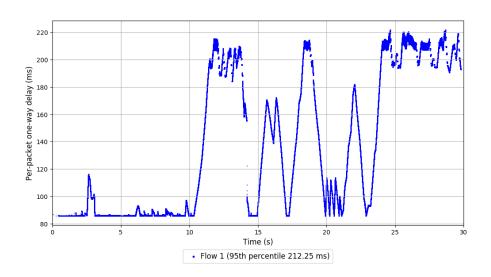
Average throughput: 453.77 Mbit/s

95th percentile per-packet one-way delay: 212.252 ms

Loss rate: 4.21%

Run 4: Report of PCC-Allegro — Data Link





Run 5: Statistics of PCC-Allegro

Start at: 2019-11-24 00:47:11 End at: 2019-11-24 00:47:41 Local clock offset: 1.471 ms Remote clock offset: 1.38 ms

Below is generated by plot.py at 2019-11-24 02:52:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 447.29 Mbit/s

95th percentile per-packet one-way delay: 200.966 ms

Loss rate: 2.27%

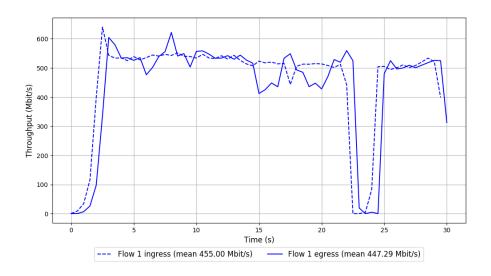
-- Flow 1:

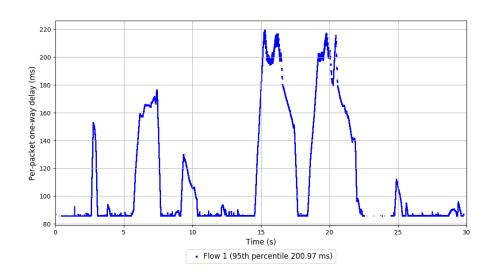
Average throughput: 447.29 Mbit/s

95th percentile per-packet one-way delay: 200.966 ms

Loss rate: 2.27%

Run 5: Report of PCC-Allegro — Data Link





Run 1: Statistics of PCC-Expr

Start at: 2019-11-23 22:22:10 End at: 2019-11-23 22:22:40 Local clock offset: 7.953 ms Remote clock offset: 7.738 ms

Below is generated by plot.py at 2019-11-24 02:52:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 282.94 Mbit/s

95th percentile per-packet one-way delay: 194.384 ms

Loss rate: 1.81%

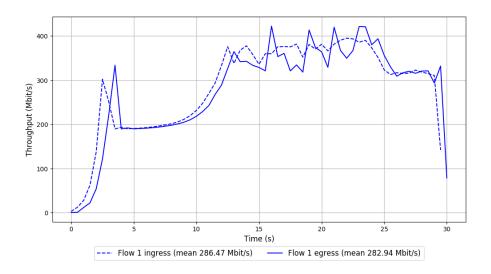
-- Flow 1:

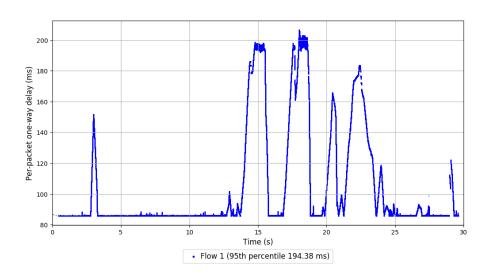
Average throughput: 282.94 Mbit/s

95th percentile per-packet one-way delay: 194.384 ms

Loss rate: 1.81%

Run 1: Report of PCC-Expr — Data Link





Run 2: Statistics of PCC-Expr

Start at: 2019-11-23 22:57:50 End at: 2019-11-23 22:58:20 Local clock offset: 15.917 ms Remote clock offset: 16.166 ms

Below is generated by plot.py at 2019-11-24 02:52:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 265.66 Mbit/s

95th percentile per-packet one-way delay: 177.858 ms

Loss rate: 1.02%

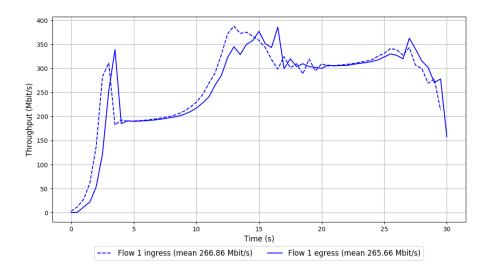
-- Flow 1:

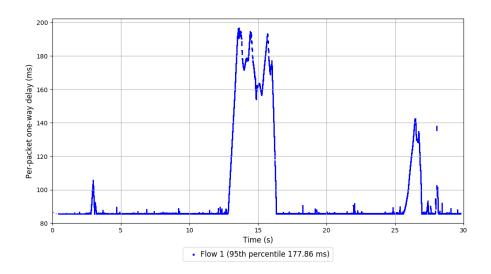
Average throughput: 265.66 Mbit/s

95th percentile per-packet one-way delay: 177.858 ms

Loss rate: 1.02%

Run 2: Report of PCC-Expr — Data Link





Run 3: Statistics of PCC-Expr

Start at: 2019-11-23 23:32:50 End at: 2019-11-23 23:33:20 Local clock offset: 11.3 ms Remote clock offset: 11.485 ms

Below is generated by plot.py at 2019-11-24 02:52:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 294.83 Mbit/s

95th percentile per-packet one-way delay: 164.477 ms

Loss rate: 1.80%

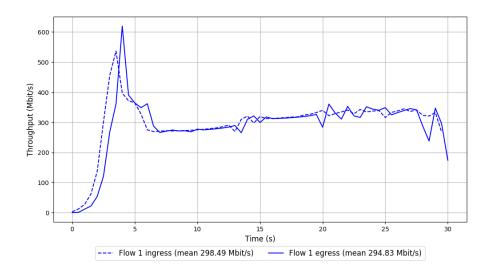
-- Flow 1:

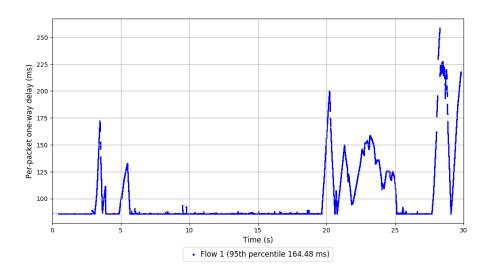
Average throughput: 294.83 Mbit/s

95th percentile per-packet one-way delay: 164.477 ms

Loss rate: 1.80%

Run 3: Report of PCC-Expr — Data Link





Run 4: Statistics of PCC-Expr

Start at: 2019-11-24 00:07:43 End at: 2019-11-24 00:08:13 Local clock offset: 5.364 ms Remote clock offset: 5.561 ms

Below is generated by plot.py at 2019-11-24 02:52:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 254.62 Mbit/s

95th percentile per-packet one-way delay: 150.126 ms

Loss rate: 0.68%

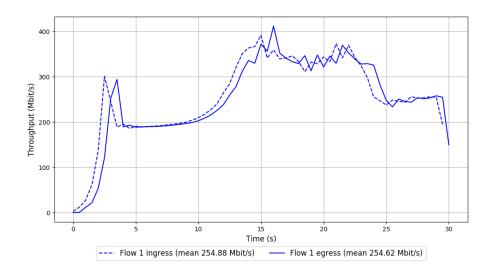
-- Flow 1:

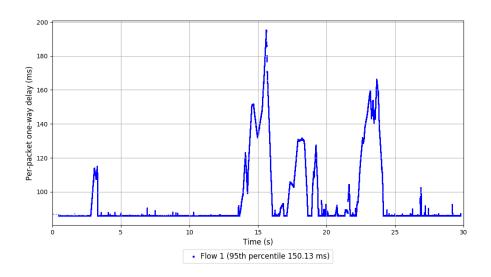
Average throughput: 254.62 Mbit/s

95th percentile per-packet one-way delay: 150.126 ms

Loss rate: 0.68%

Run 4: Report of PCC-Expr — Data Link





Run 5: Statistics of PCC-Expr

Start at: 2019-11-24 00:42:50 End at: 2019-11-24 00:43:20 Local clock offset: 1.688 ms Remote clock offset: 1.617 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 265.71 Mbit/s

95th percentile per-packet one-way delay: 154.969 ms

Loss rate: 0.67%

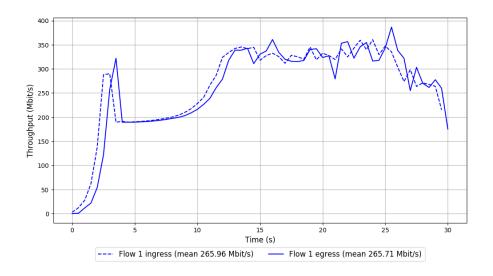
-- Flow 1:

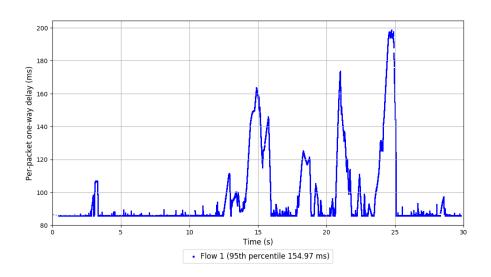
Average throughput: 265.71 Mbit/s

95th percentile per-packet one-way delay: 154.969 ms

Loss rate: 0.67%

Run 5: Report of PCC-Expr — Data Link

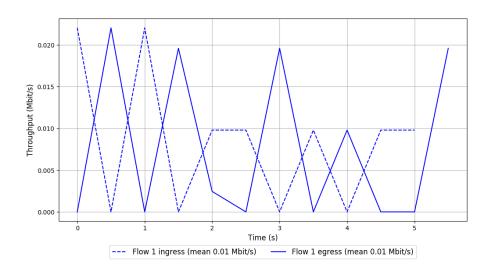


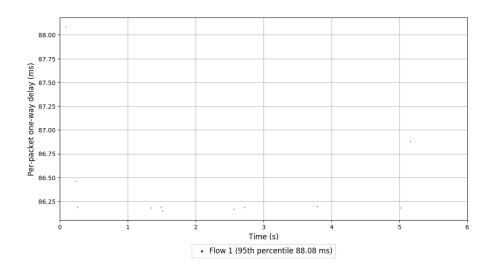


Run 1: Statistics of QUIC Cubic

Start at: 2019-11-23 22:43:25 End at: 2019-11-23 22:43:55 Local clock offset: 19.57 ms Remote clock offset: 19.762 ms

Run 1: Report of QUIC Cubic — Data Link





Run 2: Statistics of QUIC Cubic

Start at: 2019-11-23 23:18:35 End at: 2019-11-23 23:19:05 Local clock offset: 26.807 ms Remote clock offset: 27.021 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 79.29 Mbit/s

95th percentile per-packet one-way delay: 86.316 ms

Loss rate: 0.00%

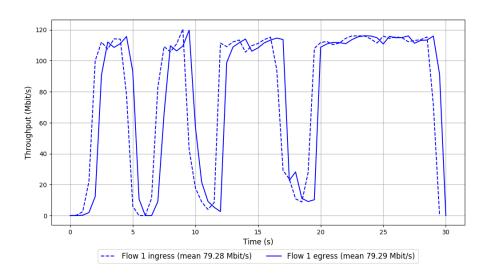
-- Flow 1:

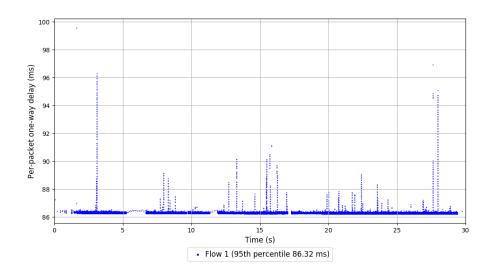
Average throughput: 79.29 Mbit/s

95th percentile per-packet one-way delay: 86.316 ms

Loss rate: 0.00%

Run 2: Report of QUIC Cubic — Data Link





Run 3: Statistics of QUIC Cubic

Start at: 2019-11-23 23:53:30 End at: 2019-11-23 23:54:00 Local clock offset: 12.267 ms Remote clock offset: 12.529 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 86.041 ms

Loss rate: 0.91%

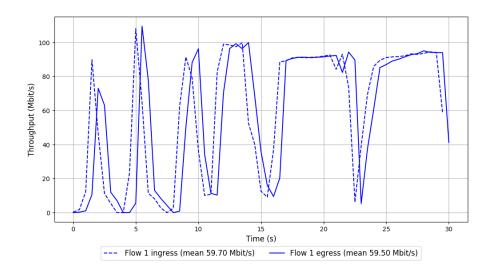
-- Flow 1:

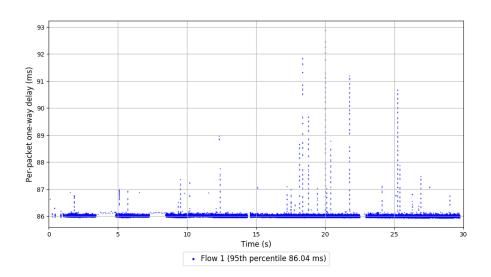
Average throughput: 59.50 Mbit/s

95th percentile per-packet one-way delay: 86.041 ms

Loss rate: 0.91%

Run 3: Report of QUIC Cubic — Data Link





Run 4: Statistics of QUIC Cubic

Start at: 2019-11-24 00:28:27 End at: 2019-11-24 00:28:57 Local clock offset: 5.28 ms Remote clock offset: 5.383 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 58.60 Mbit/s

95th percentile per-packet one-way delay: 86.032 ms

Loss rate: 0.96%

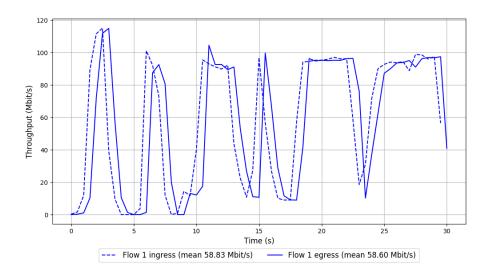
-- Flow 1:

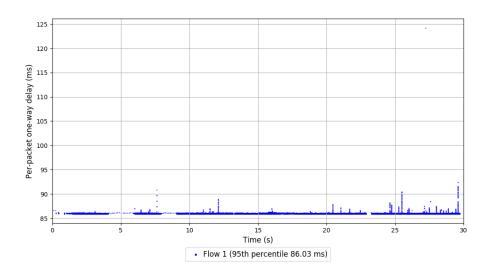
Average throughput: 58.60 Mbit/s

95th percentile per-packet one-way delay: 86.032 ms

Loss rate: 0.96%

Run 4: Report of QUIC Cubic — Data Link





Run 5: Statistics of QUIC Cubic

Start at: 2019-11-24 01:04:04 End at: 2019-11-24 01:04:34 Local clock offset: 1.106 ms Remote clock offset: 0.979 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 79.53 Mbit/s

95th percentile per-packet one-way delay: 85.934 ms

Loss rate: 0.00%

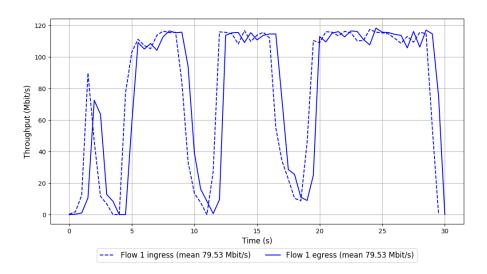
-- Flow 1:

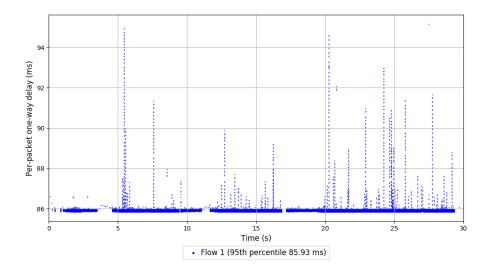
Average throughput: 79.53 Mbit/s

95th percentile per-packet one-way delay: 85.934 ms

Loss rate: 0.00%

Run 5: Report of QUIC Cubic — Data Link





Run 1: Statistics of SCReAM

Start at: 2019-11-23 22:25:23 End at: 2019-11-23 22:25:53 Local clock offset: 11.674 ms Remote clock offset: 12.016 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.539 ms

Loss rate: 0.52%

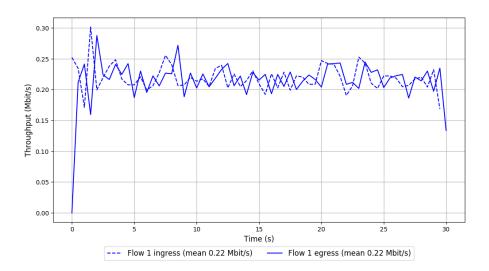
-- Flow 1:

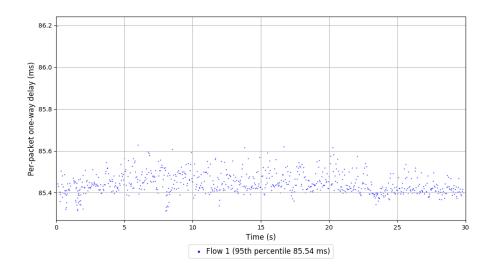
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.539 ms

Loss rate: 0.52%

Run 1: Report of SCReAM — Data Link





Run 2: Statistics of SCReAM

Start at: 2019-11-23 23:01:03 End at: 2019-11-23 23:01:33 Local clock offset: 17.404 ms Remote clock offset: 17.788 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.691 ms

Loss rate: 0.51%

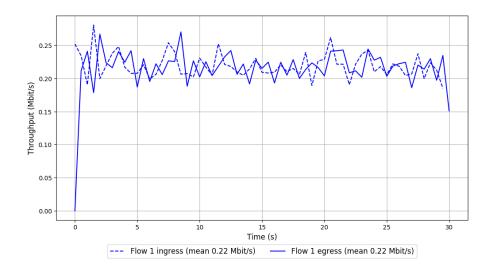
-- Flow 1:

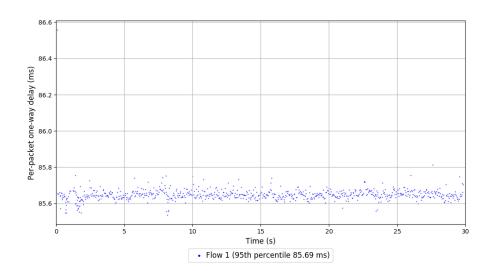
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.691 ms

Loss rate: 0.51%

Run 2: Report of SCReAM — Data Link





Run 3: Statistics of SCReAM

Start at: 2019-11-23 23:36:05 End at: 2019-11-23 23:36:35 Local clock offset: 11.055 ms Remote clock offset: 11.259 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.954 ms

Loss rate: 0.64%

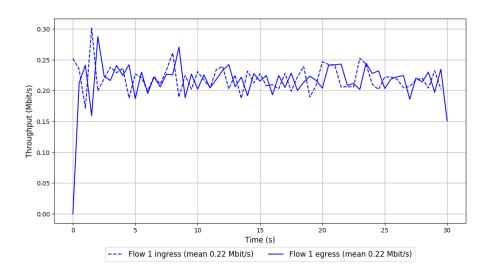
-- Flow 1:

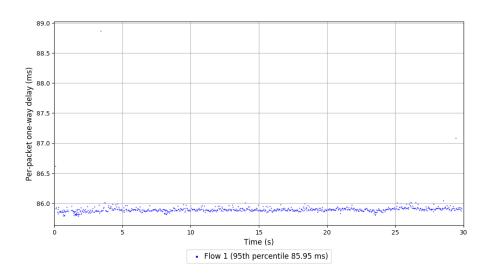
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.954 ms

Loss rate: 0.64%

Run 3: Report of SCReAM — Data Link





Run 4: Statistics of SCReAM

Start at: 2019-11-24 00:10:54 End at: 2019-11-24 00:11:24 Local clock offset: 5.278 ms Remote clock offset: 5.49 ms

Below is generated by plot.py at 2019-11-24 02:54:23

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.992 ms

Loss rate: 0.64%

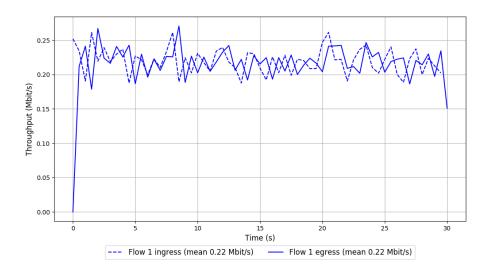
-- Flow 1:

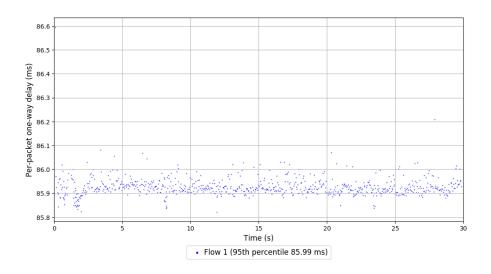
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.992 ms

Loss rate: 0.64%

Run 4: Report of SCReAM — Data Link





Run 5: Statistics of SCReAM

Start at: 2019-11-24 00:46:02 End at: 2019-11-24 00:46:32 Local clock offset: 1.544 ms Remote clock offset: 1.442 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.984 ms

Loss rate: 0.51%

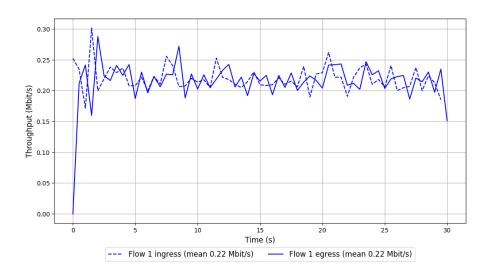
-- Flow 1:

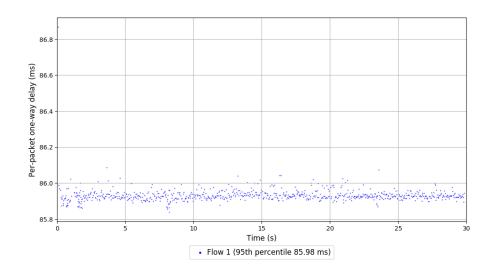
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 85.984 ms

Loss rate: 0.51%

Run 5: Report of SCReAM — Data Link





Run 1: Statistics of Sprout

Start at: 2019-11-23 22:40:31 End at: 2019-11-23 22:41:01 Local clock offset: 16.732 ms Remote clock offset: 16.816 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 86.378 ms

Loss rate: 0.76%

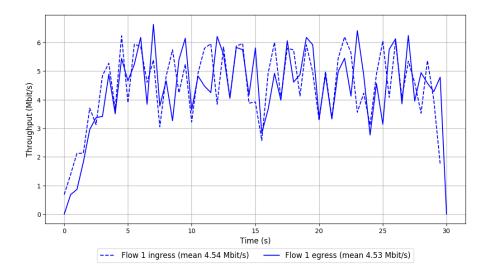
-- Flow 1:

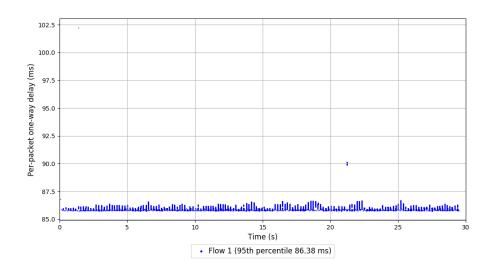
Average throughput: 4.53 Mbit/s

95th percentile per-packet one-way delay: 86.378 ms

Loss rate: 0.76%

Run 1: Report of Sprout — Data Link





Run 2: Statistics of Sprout

Start at: 2019-11-23 23:15:55 End at: 2019-11-23 23:16:25 Local clock offset: 28.21 ms Remote clock offset: 28.504 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.314 ms

Loss rate: 0.82%

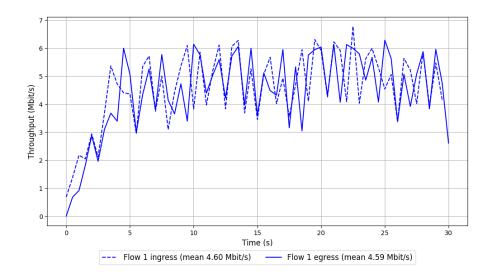
-- Flow 1:

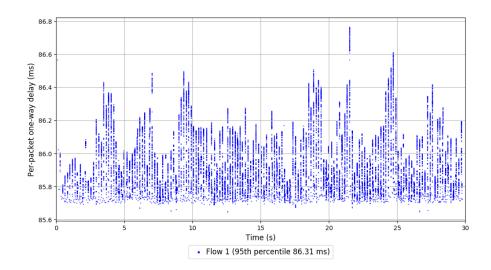
Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.314 ms

Loss rate: 0.82%

Run 2: Report of Sprout — Data Link





Run 3: Statistics of Sprout

Start at: 2019-11-23 23:50:37 End at: 2019-11-23 23:51:07 Local clock offset: 14.367 ms Remote clock offset: 14.763 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 86.332 ms

Loss rate: 0.76%

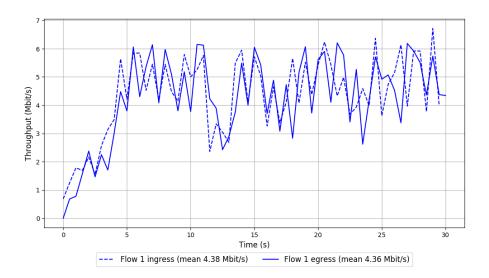
-- Flow 1:

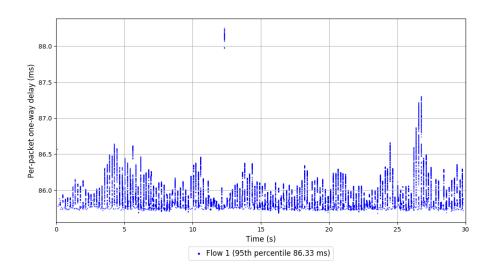
Average throughput: 4.36 Mbit/s

95th percentile per-packet one-way delay: 86.332 ms

Loss rate: 0.76%

Run 3: Report of Sprout — Data Link





Run 4: Statistics of Sprout

Start at: 2019-11-24 00:25:33 End at: 2019-11-24 00:26:03 Local clock offset: 6.957 ms Remote clock offset: 7.195 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.714 ms

Loss rate: 0.58%

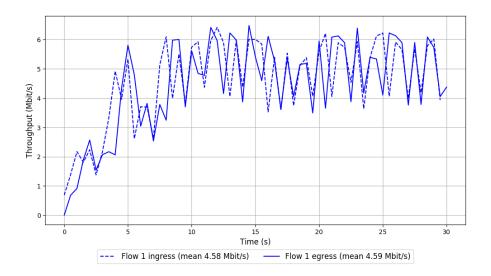
-- Flow 1:

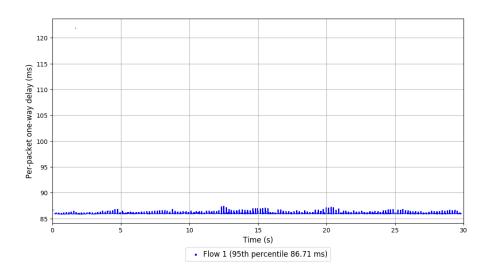
Average throughput: 4.59 Mbit/s

95th percentile per-packet one-way delay: 86.714 ms

Loss rate: 0.58%

Run 4: Report of Sprout — Data Link





Run 5: Statistics of Sprout

Start at: 2019-11-24 01:01:09 End at: 2019-11-24 01:01:39 Local clock offset: 1.454 ms Remote clock offset: 1.295 ms

Below is generated by plot.py at 2019-11-24 02:54:24

Datalink statistics
-- Total of 1 flow:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: $86.574~\mathrm{ms}$

Loss rate: 0.55%

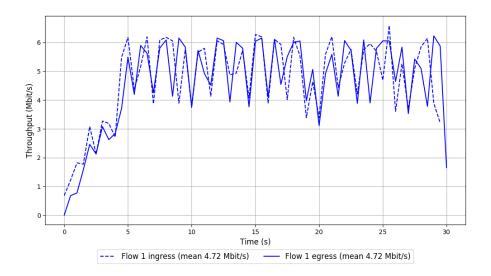
-- Flow 1:

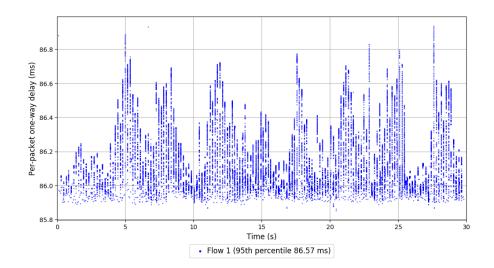
Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 86.574 ms

Loss rate: 0.55%

Run 5: Report of Sprout — Data Link





Run 1: Statistics of TaoVA-100x

Start at: 2019-11-23 22:32:58 End at: 2019-11-23 22:33:28 Local clock offset: 10.334 ms Remote clock offset: 10.452 ms

Below is generated by plot.py at 2019-11-24 02:56:45

Datalink statistics
-- Total of 1 flow:

Average throughput: 233.22 Mbit/s

95th percentile per-packet one-way delay: 85.831 ms

Loss rate: 0.60%

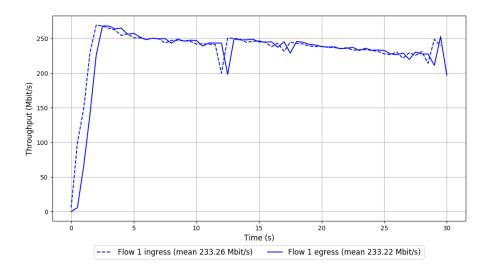
-- Flow 1:

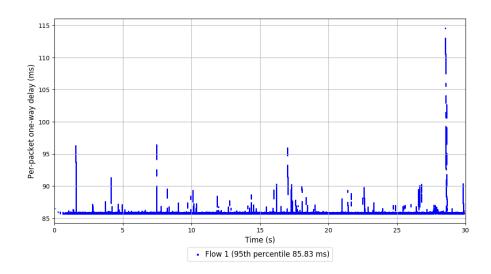
Average throughput: 233.22 Mbit/s

95th percentile per-packet one-way delay: 85.831 ms

Loss rate: 0.60%

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





Run 2: Statistics of TaoVA-100x

Start at: 2019-11-23 23:08:33 End at: 2019-11-23 23:09:03 Local clock offset: 22.316 ms Remote clock offset: 22.846 ms

Below is generated by plot.py at 2019-11-24 02:56:51

Datalink statistics
-- Total of 1 flow:

Average throughput: 232.59 Mbit/s

95th percentile per-packet one-way delay: 85.498 ms

Loss rate: 0.58%

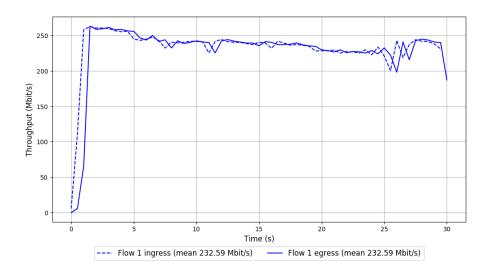
-- Flow 1:

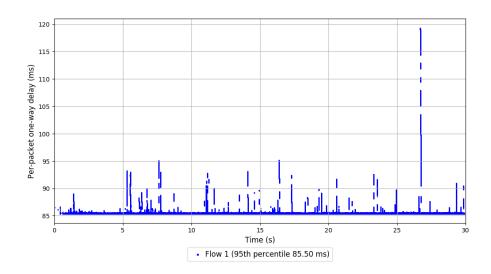
Average throughput: 232.59 Mbit/s

95th percentile per-packet one-way delay: 85.498 ms

Loss rate: 0.58%

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





Run 3: Statistics of TaoVA-100x

Start at: 2019-11-23 23:42:54 End at: 2019-11-23 23:43:24 Local clock offset: 11.992 ms Remote clock offset: 12.383 ms

Below is generated by plot.py at 2019-11-24 02:56:51

Datalink statistics
-- Total of 1 flow:

Average throughput: 222.48 Mbit/s

95th percentile per-packet one-way delay: 85.791 ms

Loss rate: 0.63%

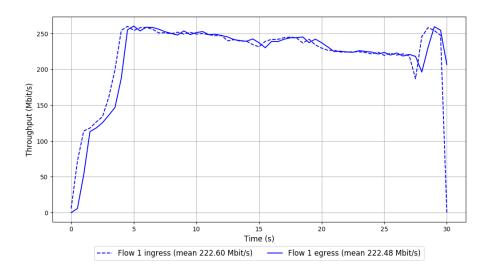
-- Flow 1:

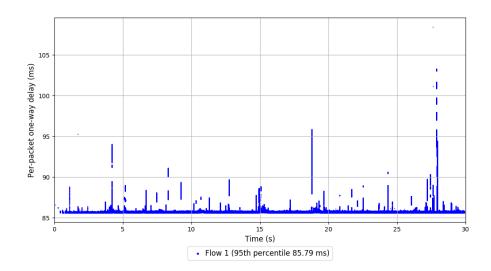
Average throughput: 222.48 Mbit/s

95th percentile per-packet one-way delay: 85.791 $\ensuremath{\mathsf{ms}}$

Loss rate: 0.63%

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





Run 4: Statistics of TaoVA-100x

Start at: 2019-11-24 00:18:31 End at: 2019-11-24 00:19:01 Local clock offset: 5.886 ms Remote clock offset: 6.117 ms

Below is generated by plot.py at 2019-11-24 02:56:52

Datalink statistics
-- Total of 1 flow:

Average throughput: 227.01 Mbit/s

95th percentile per-packet one-way delay: 85.924 ms

Loss rate: 0.64%

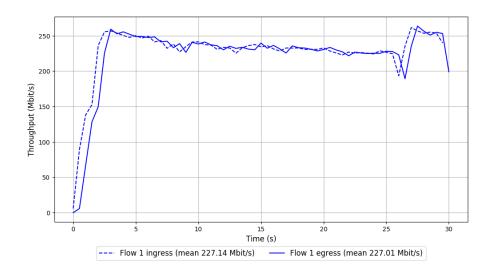
-- Flow 1:

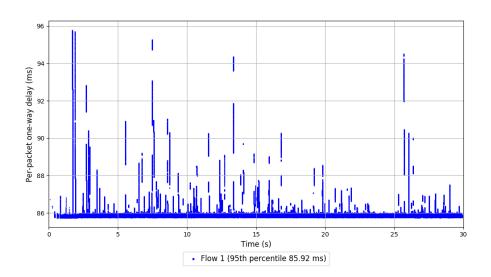
Average throughput: 227.01 Mbit/s

95th percentile per-packet one-way delay: 85.924 ms

Loss rate: 0.64%

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





Run 5: Statistics of TaoVA-100x

Start at: 2019-11-24 00:53:39 End at: 2019-11-24 00:54:09 Local clock offset: 1.522 ms Remote clock offset: 1.358 ms

Below is generated by plot.py at 2019-11-24 02:56:52

Datalink statistics
-- Total of 1 flow:

Average throughput: 227.07 Mbit/s

95th percentile per-packet one-way delay: 86.030 ms

Loss rate: 0.60%

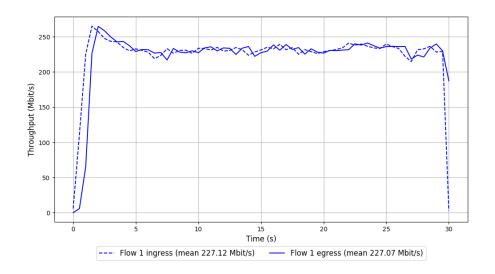
-- Flow 1:

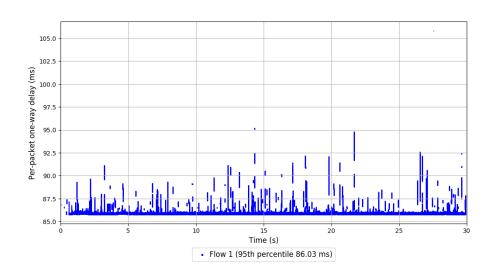
Average throughput: 227.07 Mbit/s

95th percentile per-packet one-way delay: 86.030 ms

Loss rate: 0.60%

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





Run 1: Statistics of TCP Vegas

Start at: 2019-11-23 22:34:29 End at: 2019-11-23 22:34:59 Local clock offset: 11.122 ms Remote clock offset: 11.286 ms

Below is generated by plot.py at 2019-11-24 02:56:52

Datalink statistics
-- Total of 1 flow:

Average throughput: 327.89 Mbit/s

95th percentile per-packet one-way delay: 86.383 ms

Loss rate: 0.59%

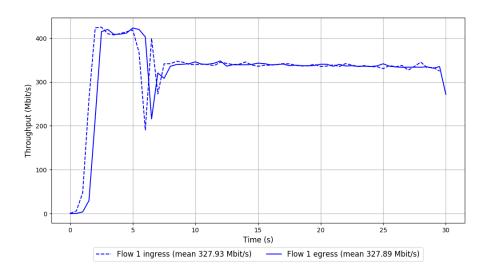
-- Flow 1:

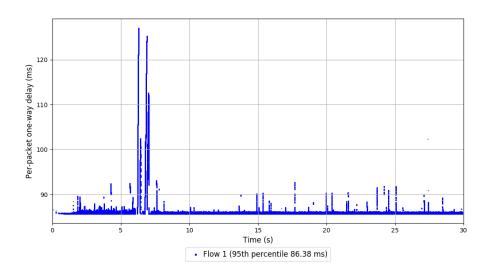
Average throughput: 327.89 Mbit/s

95th percentile per-packet one-way delay: 86.383 ms

Loss rate: 0.59%

Run 1: Report of TCP Vegas — Data Link





Run 2: Statistics of TCP Vegas

Start at: 2019-11-23 23:10:04 End at: 2019-11-23 23:10:34 Local clock offset: 23.68 ms Remote clock offset: 23.876 ms

Below is generated by plot.py at 2019-11-24 02:56:52

Datalink statistics
-- Total of 1 flow:

Average throughput: 136.70 Mbit/s

95th percentile per-packet one-way delay: 86.116 ms

Loss rate: 0.34%

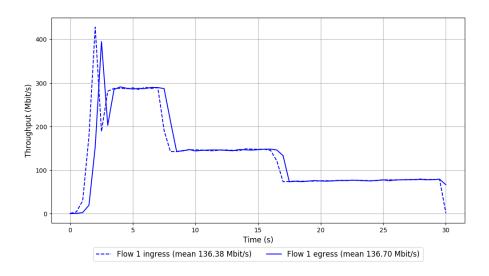
-- Flow 1:

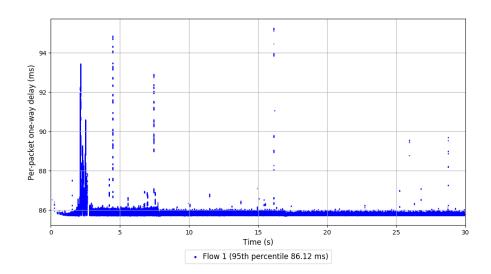
Average throughput: 136.70 Mbit/s

95th percentile per-packet one-way delay: 86.116 ms

Loss rate: 0.34%

Run 2: Report of TCP Vegas — Data Link





Run 3: Statistics of TCP Vegas

Start at: 2019-11-23 23:44:24 End at: 2019-11-23 23:44:54 Local clock offset: 12.423 ms Remote clock offset: 12.734 ms

Below is generated by plot.py at 2019-11-24 03:01:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 426.59 Mbit/s

95th percentile per-packet one-way delay: 88.667 ms

Loss rate: 0.61%

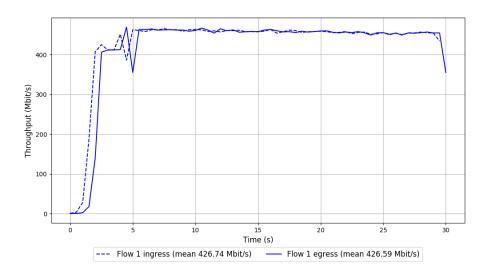
-- Flow 1:

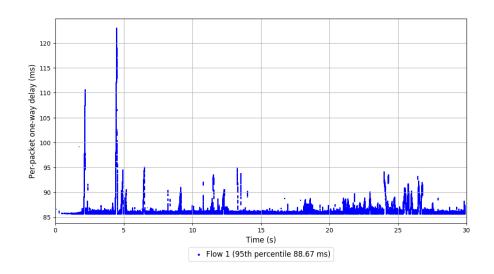
Average throughput: 426.59 Mbit/s

95th percentile per-packet one-way delay: 88.667 ms

Loss rate: 0.61%

Run 3: Report of TCP Vegas — Data Link





Run 4: Statistics of TCP Vegas

Start at: 2019-11-24 00:20:01 End at: 2019-11-24 00:20:31 Local clock offset: 6.431 ms Remote clock offset: 6.382 ms

Below is generated by plot.py at 2019-11-24 03:01:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 160.05 Mbit/s

95th percentile per-packet one-way delay: 89.816 ms

Loss rate: 0.49%

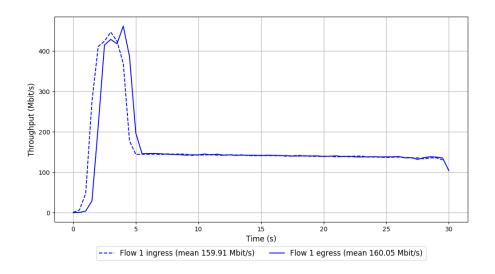
-- Flow 1:

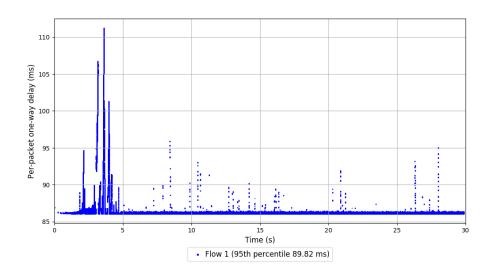
Average throughput: 160.05 Mbit/s

95th percentile per-packet one-way delay: 89.816 ms

Loss rate: 0.49%

Run 4: Report of TCP Vegas — Data Link





Run 5: Statistics of TCP Vegas

Start at: 2019-11-24 00:55:09 End at: 2019-11-24 00:55:39 Local clock offset: 1.534 ms Remote clock offset: 1.381 ms

Below is generated by plot.py at 2019-11-24 03:01:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 211.67 Mbit/s

95th percentile per-packet one-way delay: 88.314 ms

Loss rate: 0.44%

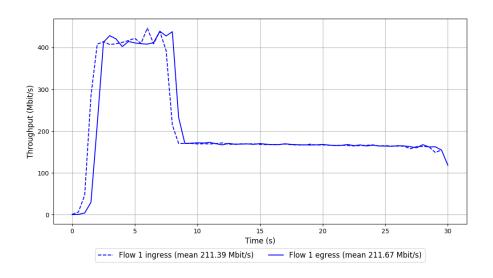
-- Flow 1:

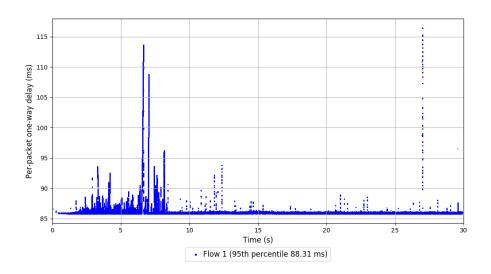
Average throughput: 211.67 Mbit/s

95th percentile per-packet one-way delay: 88.314 ms

Loss rate: 0.44%

Run 5: Report of TCP Vegas — Data Link





Run 1: Statistics of Verus

Start at: 2019-11-23 22:12:42 End at: 2019-11-23 22:13:12 Local clock offset: 3.541 ms Remote clock offset: 3.952 ms

Below is generated by plot.py at 2019-11-24 03:01:38

Datalink statistics
-- Total of 1 flow:

Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 146.175 ms

Loss rate: 0.02%

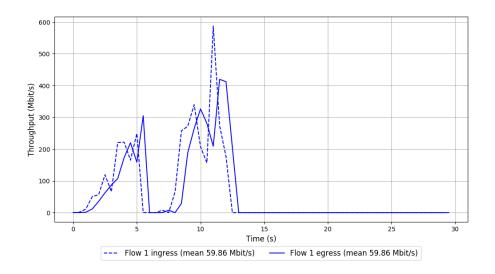
-- Flow 1:

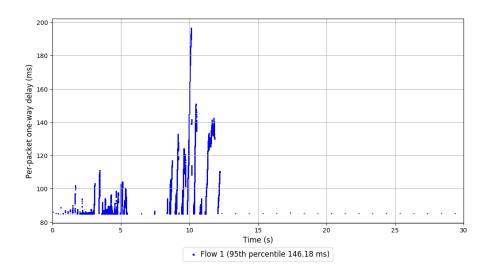
Average throughput: 59.86 Mbit/s

95th percentile per-packet one-way delay: 146.175 ms

Loss rate: 0.02%

Run 1: Report of Verus — Data Link





Run 2: Statistics of Verus

Start at: 2019-11-23 22:47:36 End at: 2019-11-23 22:48:06 Local clock offset: 15.775 ms Remote clock offset: 15.908 ms

Below is generated by plot.py at 2019-11-24 03:02:54

Datalink statistics
-- Total of 1 flow:

Average throughput: 200.00 Mbit/s

95th percentile per-packet one-way delay: 200.543 ms

Loss rate: 3.15%

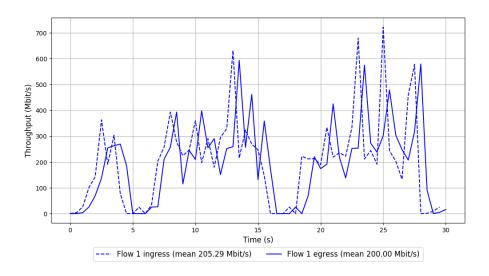
-- Flow 1:

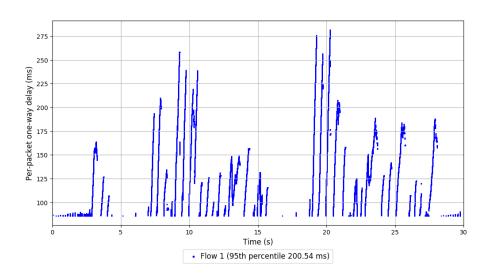
Average throughput: 200.00 Mbit/s

95th percentile per-packet one-way delay: 200.543 ms

Loss rate: 3.15%

Run 2: Report of Verus — Data Link





Run 3: Statistics of Verus

Start at: 2019-11-23 23:22:53 End at: 2019-11-23 23:23:23 Local clock offset: 17.969 ms Remote clock offset: 18.07 ms

Below is generated by plot.py at 2019-11-24 03:02:54

Datalink statistics
-- Total of 1 flow:

Average throughput: 63.49 Mbit/s

95th percentile per-packet one-way delay: 123.407 ms

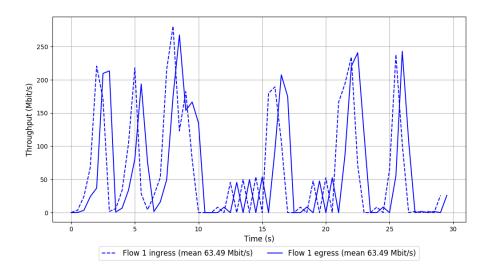
Loss rate: 0.00%

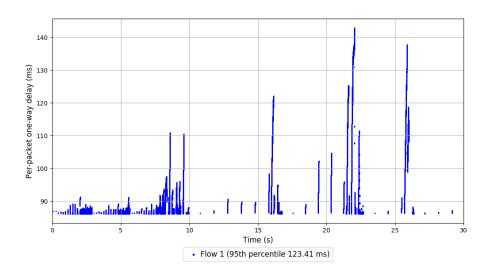
-- Flow 1:

Average throughput: 63.49 Mbit/s

95th percentile per-packet one-way delay: 123.407 ms

Run 3: Report of Verus — Data Link





Run 4: Statistics of Verus

Start at: 2019-11-23 23:57:46 End at: 2019-11-23 23:58:16 Local clock offset: 8.793 ms Remote clock offset: 8.594 ms

Below is generated by plot.py at 2019-11-24 03:02:54

Datalink statistics
-- Total of 1 flow:

Average throughput: 52.02 Mbit/s

95th percentile per-packet one-way delay: 102.021 ms

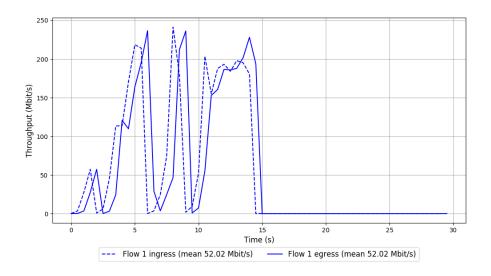
Loss rate: 0.00%

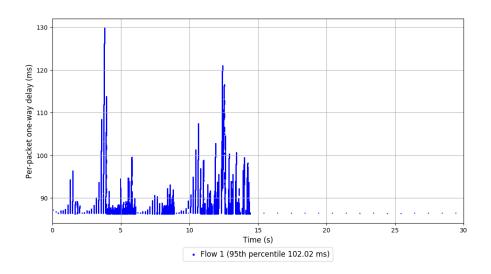
-- Flow 1:

Average throughput: 52.02 Mbit/s

95th percentile per-packet one-way delay: 102.021 ms

Run 4: Report of Verus — Data Link





Run 5: Statistics of Verus

Start at: 2019-11-24 00:32:44 End at: 2019-11-24 00:33:14 Local clock offset: 3.469 ms Remote clock offset: 3.414 ms

Below is generated by plot.py at 2019-11-24 03:02:54

Datalink statistics
-- Total of 1 flow:

Average throughput: 112.47 Mbit/s

95th percentile per-packet one-way delay: 143.497 ms

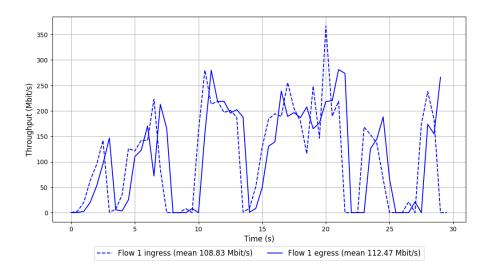
Loss rate: 0.00%

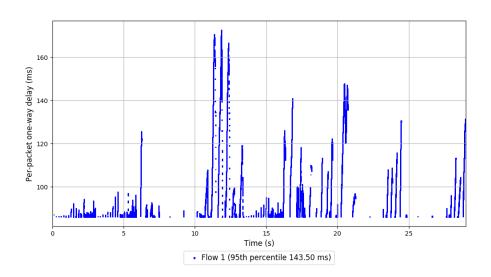
-- Flow 1:

Average throughput: 112.47 Mbit/s

95th percentile per-packet one-way delay: 143.497 ms

Run 5: Report of Verus — Data Link





Run 1: Statistics of PCC-Vivace

Start at: 2019-11-23 22:18:59 End at: 2019-11-23 22:19:29 Local clock offset: 7.015 ms Remote clock offset: 6.734 ms

Below is generated by plot.py at 2019-11-24 03:03:01

Datalink statistics
-- Total of 1 flow:

Average throughput: 303.16 Mbit/s

95th percentile per-packet one-way delay: 86.750 ms

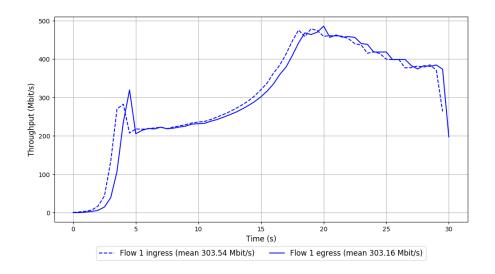
Loss rate: 0.70%

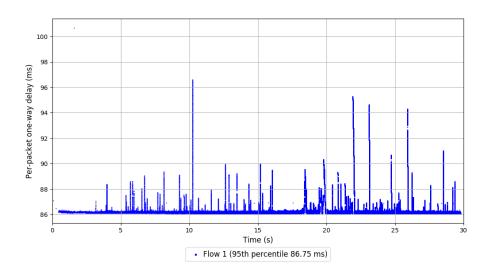
-- Flow 1:

Average throughput: 303.16 Mbit/s

95th percentile per-packet one-way delay: 86.750 ms

Run 1: Report of PCC-Vivace — Data Link





Run 2: Statistics of PCC-Vivace

Start at: 2019-11-23 22:54:34 End at: 2019-11-23 22:55:04 Local clock offset: 14.851 ms Remote clock offset: 15.007 ms

Below is generated by plot.py at 2019-11-24 03:03:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 346.66 Mbit/s

95th percentile per-packet one-way delay: 86.474 ms

Loss rate: 0.63%

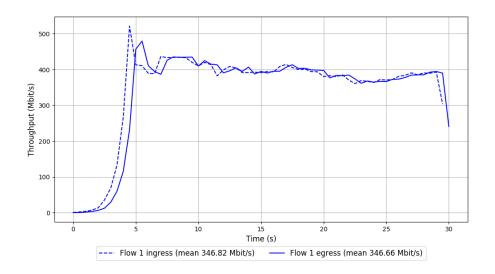
-- Flow 1:

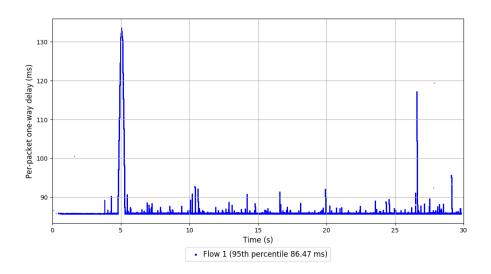
Average throughput: 346.66 Mbit/s

95th percentile per-packet one-way delay: 86.474 ms

Loss rate: 0.63%

Run 2: Report of PCC-Vivace — Data Link





Run 3: Statistics of PCC-Vivace

Start at: 2019-11-23 23:29:40 End at: 2019-11-23 23:30:10 Local clock offset: 12.189 ms Remote clock offset: 12.354 ms

Below is generated by plot.py at 2019-11-24 03:03:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 283.90 Mbit/s

95th percentile per-packet one-way delay: 86.581 ms

Loss rate: 0.63%

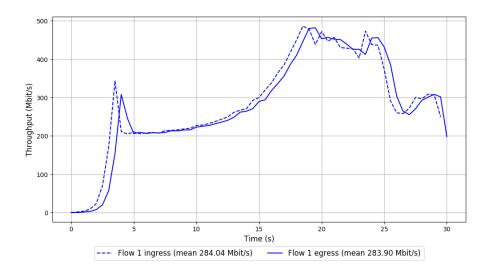
-- Flow 1:

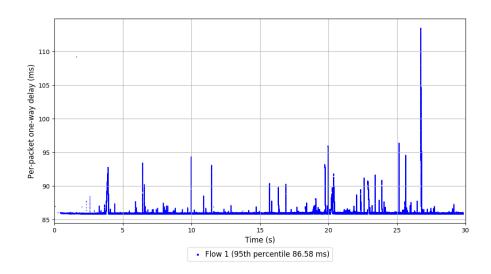
Average throughput: 283.90 Mbit/s

95th percentile per-packet one-way delay: 86.581 ms

Loss rate: 0.63%

Run 3: Report of PCC-Vivace — Data Link





Run 4: Statistics of PCC-Vivace

Start at: 2019-11-24 00:04:32 End at: 2019-11-24 00:05:02 Local clock offset: 5.804 ms Remote clock offset: 5.986 ms

Below is generated by plot.py at 2019-11-24 03:03:17

Datalink statistics
-- Total of 1 flow:

Average throughput: 264.52 Mbit/s

95th percentile per-packet one-way delay: 85.939 ms

Loss rate: 0.81%

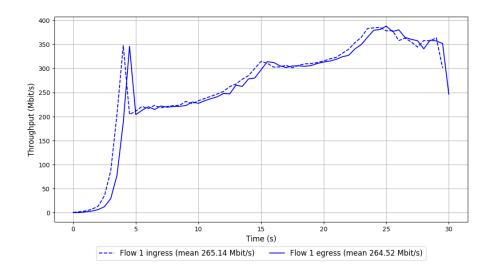
-- Flow 1:

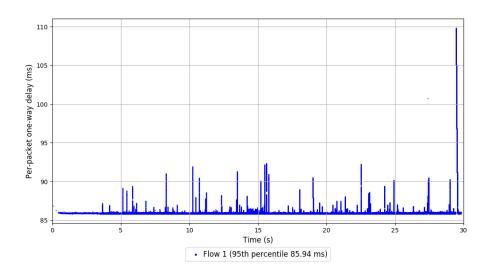
Average throughput: 264.52 Mbit/s

95th percentile per-packet one-way delay: 85.939 ms

Loss rate: 0.81%

Run 4: Report of PCC-Vivace — Data Link





Run 5: Statistics of PCC-Vivace

Start at: 2019-11-24 00:39:34 End at: 2019-11-24 00:40:04 Local clock offset: 2.076 ms Remote clock offset: 1.928 ms

Below is generated by plot.py at 2019-11-24 03:03:19

Datalink statistics
-- Total of 1 flow:

Average throughput: 344.12 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.66%

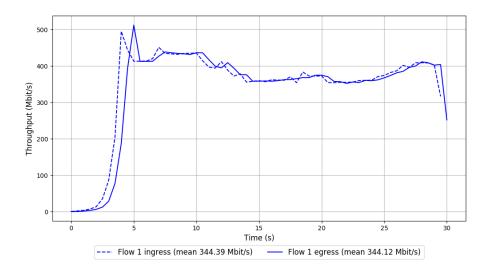
-- Flow 1:

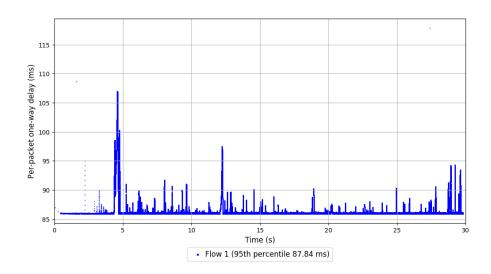
Average throughput: 344.12 Mbit/s

95th percentile per-packet one-way delay: 87.844 ms

Loss rate: 0.66%

Run 5: Report of PCC-Vivace — Data Link

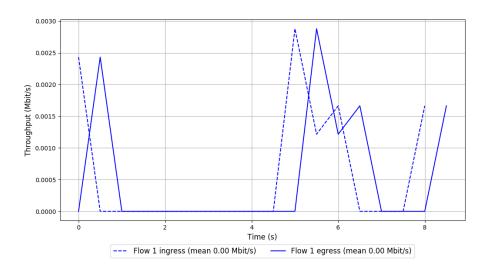


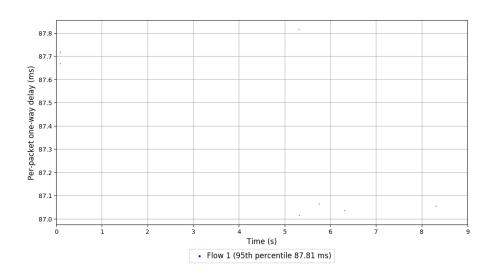


Run 1: Statistics of WebRTC media

Start at: 2019-11-23 22:13:56 End at: 2019-11-23 22:14:26 Local clock offset: 5.74 ms Remote clock offset: 4.791 ms

Run 1: Report of WebRTC media — Data Link





Run 2: Statistics of WebRTC media

Start at: 2019-11-23 22:49:01 End at: 2019-11-23 22:49:31 Local clock offset: 15.117 ms Remote clock offset: 15.207 ms

Below is generated by plot.py at 2019-11-24 03:03:19

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.174 ms

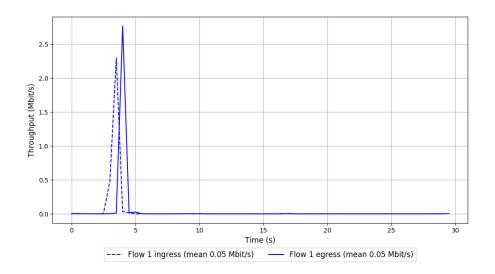
Loss rate: 0.00%

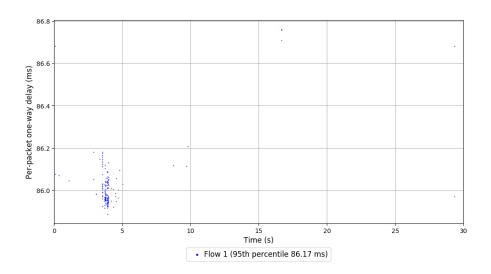
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.174 ms

Run 2: Report of WebRTC media — Data Link





Run 3: Statistics of WebRTC media

Start at: 2019-11-23 23:24:07 End at: 2019-11-23 23:24:37 Local clock offset: 16.542 ms Remote clock offset: 16.42 ms

Below is generated by plot.py at 2019-11-24 03:03:19

Datalink statistics
-- Total of 1 flow:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.589 ms

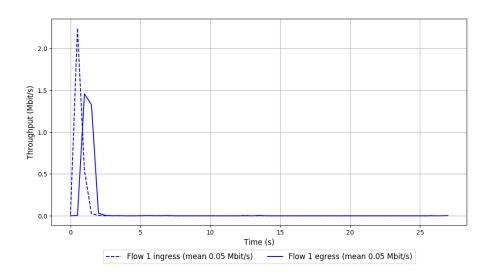
Loss rate: 0.00%

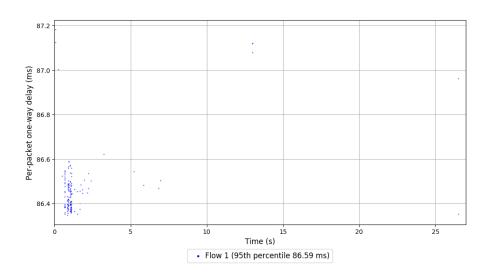
-- Flow 1:

Average throughput: 0.05 Mbit/s

95th percentile per-packet one-way delay: 86.589 ms

Run 3: Report of WebRTC media — Data Link

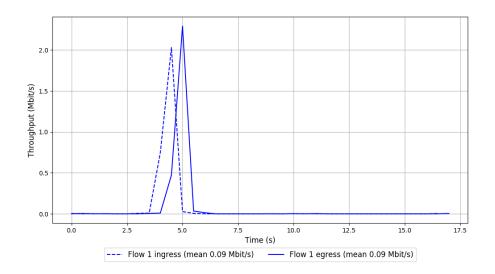


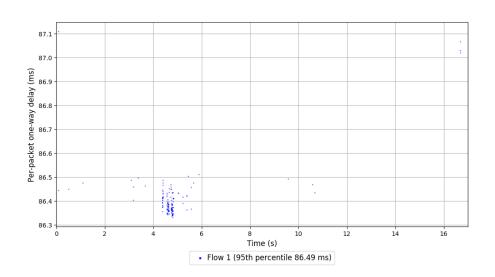


Run 4: Statistics of WebRTC media

Start at: 2019-11-23 23:59:00 End at: 2019-11-23 23:59:30 Local clock offset: 8.044 ms Remote clock offset: 7.837 ms

Run 4: Report of WebRTC media — Data Link





Run 5: Statistics of WebRTC media

Start at: 2019-11-24 00:34:02 End at: 2019-11-24 00:34:32 Local clock offset: 3.106 ms Remote clock offset: 2.973 ms

Run 5: Report of WebRTC media — Data Link

