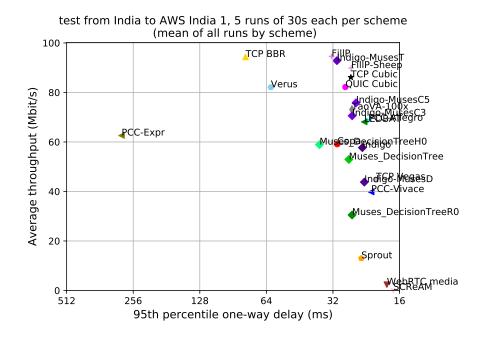
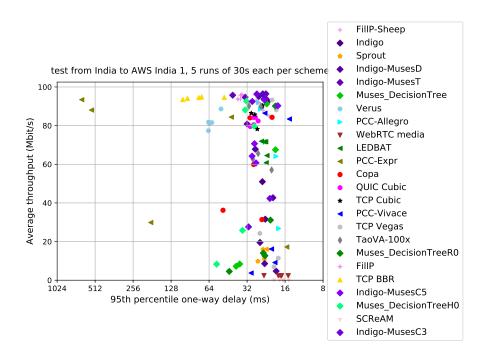
# Pantheon Report

Generated at 2019-10-03 09:48:18 (UTC).

```
Data path: India on em1 (remote) \rightarrow AWS India 1 on ems5 (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 nets.org.sg and have been applied to
correct the timestamps in logs.
System info:
Linux 4.15.0-1050-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
Git summary:
branch: muses @ 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	94.33	79.50	2.27
Copa	5	59.16	30.60	0.21
TCP Cubic	5	86.12	26.54	0.22
FillP	5	94.57	32.46	0.27
FillP-Sheep	5	89.88	26.50	0.22
Indigo	5	57.70	23.55	0.11
Indigo-MusesC3	5	70.58	26.20	0.16
Indigo-MusesC5	5	75.82	25.16	0.23
Indigo-MusesD	5	43.78	23.08	0.12
Indigo-MusesT	5	92.84	30.69	0.34
LEDBAT	5	68.10	23.11	0.21
$Muses\_DecisionTree$	5	52.92	27.11	0.12
$Muses\_DecisionTreeH0$	5	58.93	36.81	0.22
$Muses\_DecisionTreeR0$	5	30.50	26.22	0.18
PCC-Allegro	5	68.57	22.15	0.21
PCC-Expr	5	62.59	289.08	2.31
QUIC Cubic	5	82.18	28.11	0.25
SCReAM	5	0.22	17.07	0.20
$\operatorname{Sprout}$	5	13.01	23.81	0.23
TaoVA-100x	5	73.09	26.24	0.16
TCP Vegas	5	44.81	20.42	0.13
Verus	5	82.08	61.08	0.34
PCC-Vivace	5	39.77	21.48	0.26
WebRTC media	5	2.35	18.25	0.22

### Run 1: Statistics of TCP BBR

Start at: 2019-10-03 07:03:37 End at: 2019-10-03 07:04:07 Local clock offset: 2.227 ms Remote clock offset: -1.726 ms

# Below is generated by plot.py at 2019-10-03 09:36:33

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay:  $103.470~\mathrm{ms}$ 

Loss rate: 2.75%

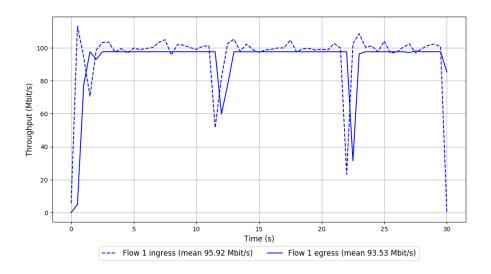
-- Flow 1:

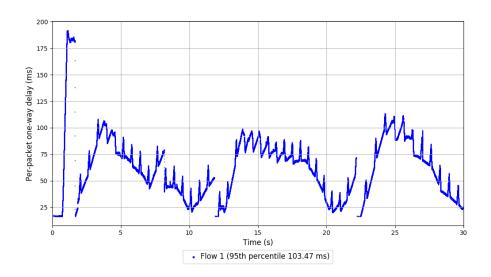
Average throughput: 93.53 Mbit/s

95th percentile per-packet one-way delay: 103.470 ms

Loss rate: 2.75%

Run 1: Report of TCP BBR — Data Link





### Run 2: Statistics of TCP BBR

Start at: 2019-10-03 07:37:39 End at: 2019-10-03 07:38:09 Local clock offset: 7.949 ms Remote clock offset: -1.618 ms

# Below is generated by plot.py at 2019-10-03 09:36:34

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.85 Mbit/s

95th percentile per-packet one-way delay:  $73.377~\mathrm{ms}$ 

Loss rate: 1.49%

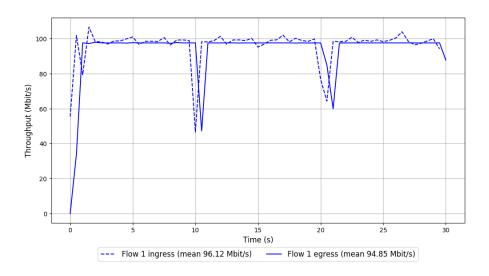
-- Flow 1:

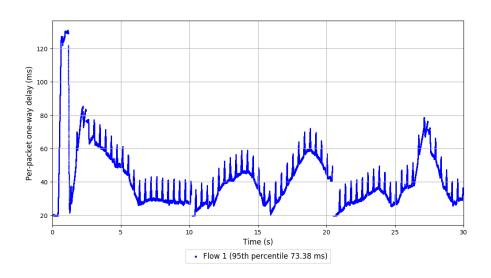
Average throughput: 94.85 Mbit/s

95th percentile per-packet one-way delay: 73.377 ms

Loss rate: 1.49%

Run 2: Report of TCP BBR — Data Link





### Run 3: Statistics of TCP BBR

Start at: 2019-10-03 08:11:28 End at: 2019-10-03 08:11:58 Local clock offset: 1.334 ms Remote clock offset: 0.182 ms

# Below is generated by plot.py at 2019-10-03 09:36:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay:  $77.103~\mathrm{ms}$ 

Loss rate: 2.55%

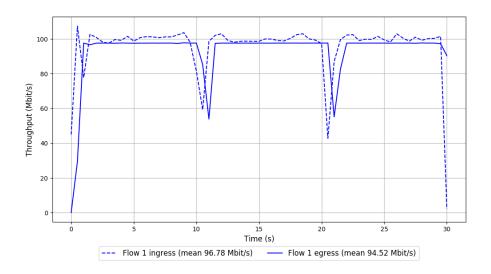
-- Flow 1:

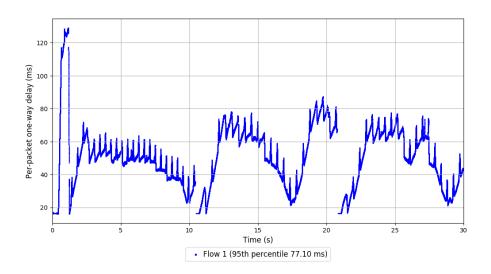
Average throughput: 94.52 Mbit/s

95th percentile per-packet one-way delay: 77.103 ms

Loss rate: 2.55%

Run 3: Report of TCP BBR — Data Link





### Run 4: Statistics of TCP BBR

Start at: 2019-10-03 08:41:48 End at: 2019-10-03 08:42:18 Local clock offset: -2.985 ms Remote clock offset: 0.85 ms

# Below is generated by plot.py at 2019-10-03 09:36:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.14 Mbit/s

95th percentile per-packet one-way delay: 94.967  ${\tt ms}$ 

Loss rate: 3.62%

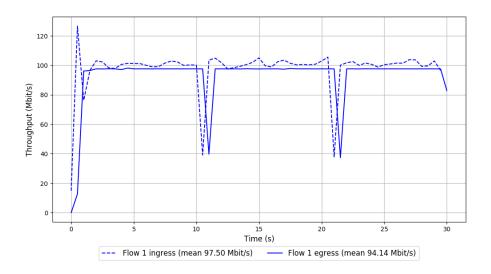
-- Flow 1:

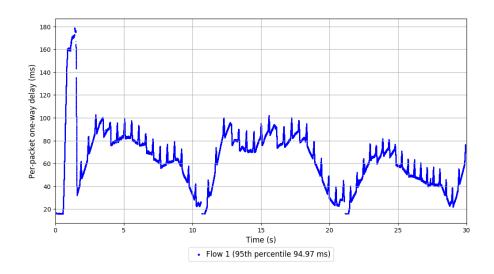
Average throughput: 94.14 Mbit/s

95th percentile per-packet one-way delay: 94.967 ms

Loss rate: 3.62%

Run 4: Report of TCP BBR — Data Link





### Run 5: Statistics of TCP BBR

Start at: 2019-10-03 09:11:10 End at: 2019-10-03 09:11:40 Local clock offset: 7.11 ms Remote clock offset: -0.553 ms

# Below is generated by plot.py at 2019-10-03 09:36:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.61 Mbit/s

95th percentile per-packet one-way delay:  $48.565~\mathrm{ms}$ 

Loss rate: 0.94%

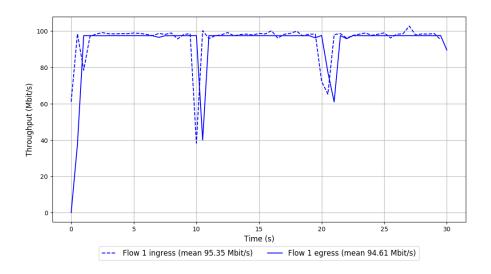
-- Flow 1:

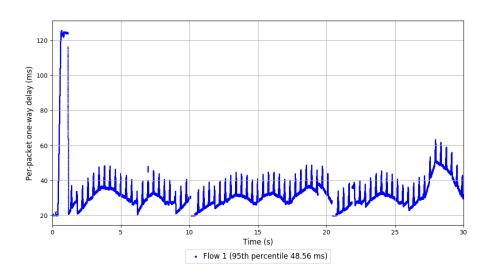
Average throughput: 94.61 Mbit/s

95th percentile per-packet one-way delay: 48.565 ms

Loss rate: 0.94%

Run 5: Report of TCP BBR — Data Link





## Run 1: Statistics of Copa

Start at: 2019-10-03 07:15:55 End at: 2019-10-03 07:16:25 Local clock offset: 3.8 ms Remote clock offset: -2.663 ms

# Below is generated by plot.py at 2019-10-03 09:36:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay:  $49.645~\mathrm{ms}$ 

Loss rate: 0.09%

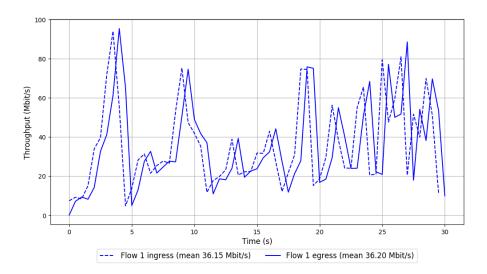
-- Flow 1:

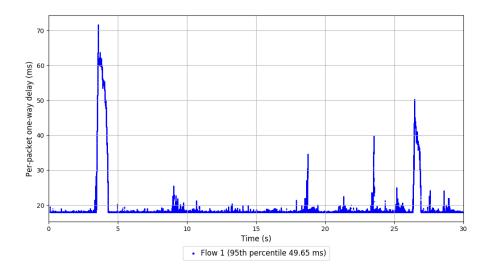
Average throughput: 36.20 Mbit/s

95th percentile per-packet one-way delay: 49.645 ms

Loss rate: 0.09%

Run 1: Report of Copa — Data Link





## Run 2: Statistics of Copa

Start at: 2019-10-03 07:50:31 End at: 2019-10-03 07:51:01 Local clock offset: 4.184 ms Remote clock offset: -3.088 ms

# Below is generated by plot.py at 2019-10-03 09:37:24

# Datalink statistics
-- Total of 1 flow:

Average throughput: 84.30 Mbit/s

95th percentile per-packet one-way delay: 20.281  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.18%

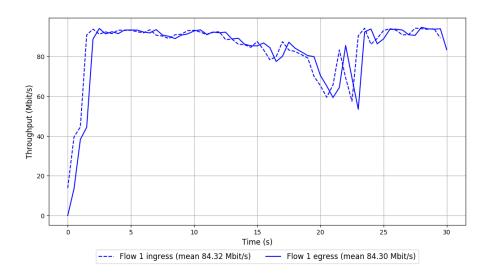
-- Flow 1:

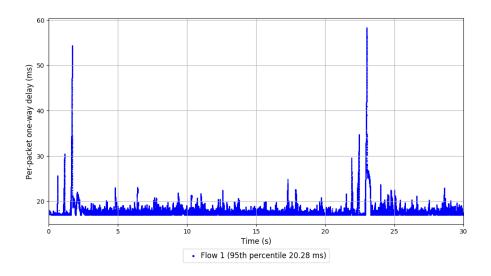
Average throughput: 84.30 Mbit/s

95th percentile per-packet one-way delay: 20.281 ms

Loss rate: 0.18%

Run 2: Report of Copa — Data Link





## Run 3: Statistics of Copa

Start at: 2019-10-03 08:22:33 End at: 2019-10-03 08:23:03 Local clock offset: 4.716 ms Remote clock offset: 1.002 ms

# Below is generated by plot.py at 2019-10-03 09:37:24

# Datalink statistics
-- Total of 1 flow:

Average throughput: 59.89 Mbit/s

95th percentile per-packet one-way delay: 28.383 ms

Loss rate: 0.25%

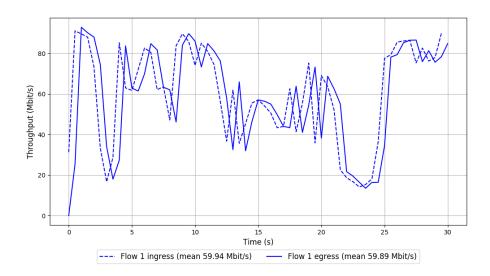
-- Flow 1:

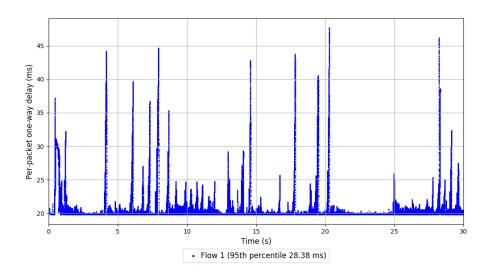
Average throughput: 59.89 Mbit/s

95th percentile per-packet one-way delay: 28.383 ms

Loss rate: 0.25%

Run 3: Report of Copa — Data Link





## Run 4: Statistics of Copa

Start at: 2019-10-03 08:52:46 End at: 2019-10-03 08:53:16 Local clock offset: 0.137 ms Remote clock offset: -0.941 ms

# Below is generated by plot.py at 2019-10-03 09:37:24

# Datalink statistics
-- Total of 1 flow:

Average throughput: 31.38 Mbit/s

95th percentile per-packet one-way delay:  $24.406~\mathrm{ms}$ 

Loss rate: 0.35%

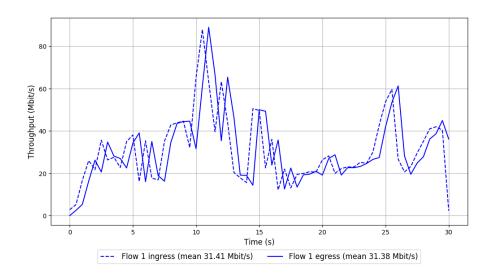
-- Flow 1:

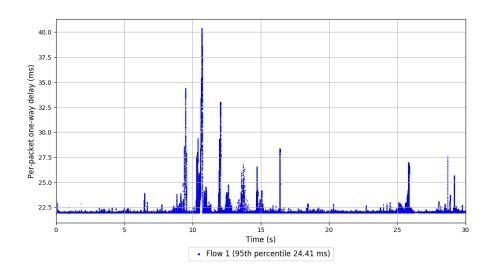
Average throughput: 31.38 Mbit/s

95th percentile per-packet one-way delay: 24.406 ms

Loss rate: 0.35%

Run 4: Report of Copa — Data Link





## Run 5: Statistics of Copa

Start at: 2019-10-03 09:22:03 End at: 2019-10-03 09:22:33 Local clock offset: 6.171 ms Remote clock offset: 1.043 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 84.03 Mbit/s

95th percentile per-packet one-way delay:  $30.294~\mathrm{ms}$ 

Loss rate: 0.19%

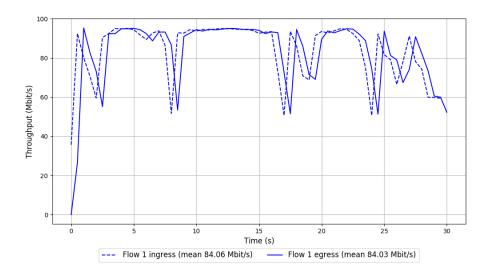
-- Flow 1:

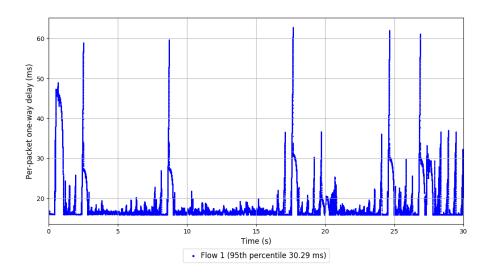
Average throughput: 84.03 Mbit/s

95th percentile per-packet one-way delay: 30.294 ms

Loss rate: 0.19%

Run 5: Report of Copa — Data Link





### Run 1: Statistics of TCP Cubic

Start at: 2019-10-03 07:09:10 End at: 2019-10-03 07:09:40 Local clock offset: 7.424 ms Remote clock offset: -1.863 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 27.790 ms

Loss rate: 0.29%

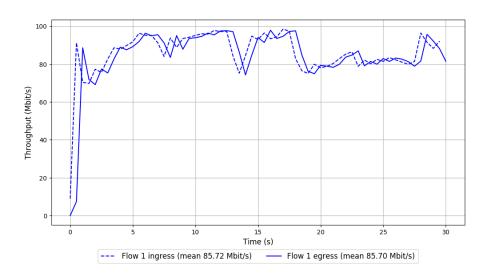
-- Flow 1:

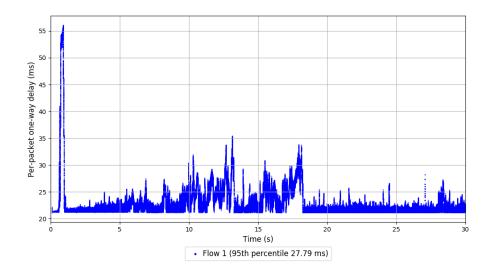
Average throughput: 85.70 Mbit/s

95th percentile per-packet one-way delay: 27.790 ms

Loss rate: 0.29%

Run 1: Report of TCP Cubic — Data Link





### Run 2: Statistics of TCP Cubic

Start at: 2019-10-03 07:43:27 End at: 2019-10-03 07:43:57 Local clock offset: 7.173 ms Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.44 Mbit/s

95th percentile per-packet one-way delay: 24.286 ms

Loss rate: 0.18%

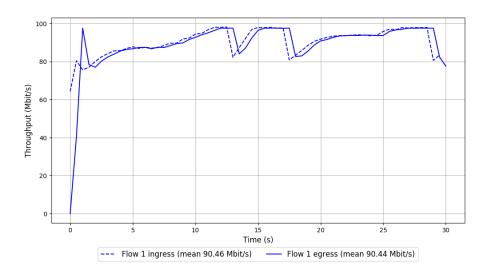
-- Flow 1:

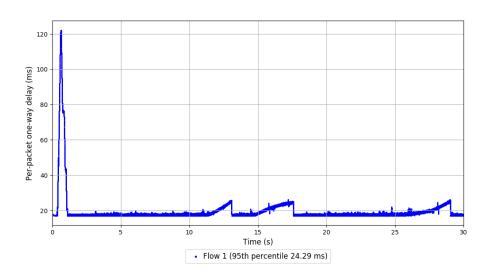
Average throughput: 90.44 Mbit/s

95th percentile per-packet one-way delay: 24.286 ms

Loss rate: 0.18%

Run 2: Report of TCP Cubic — Data Link





### Run 3: Statistics of TCP Cubic

Start at: 2019-10-03 08:16:25 End at: 2019-10-03 08:16:55 Local clock offset: 5.291 ms Remote clock offset: -1.174 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 29.652 ms

Loss rate: 0.19%

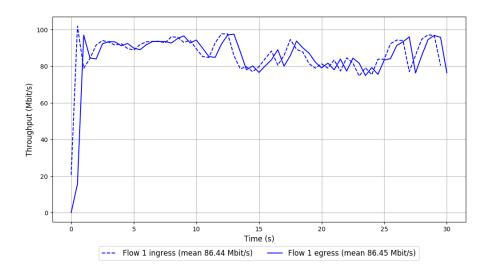
-- Flow 1:

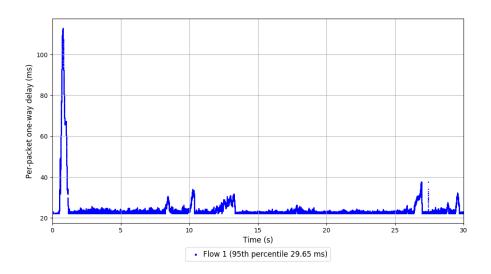
Average throughput: 86.45 Mbit/s

95th percentile per-packet one-way delay: 29.652 ms

Loss rate: 0.19%

Run 3: Report of TCP Cubic — Data Link





### Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 08:46:45 End at: 2019-10-03 08:47:15 Local clock offset: 0.809 ms Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 78.23 Mbit/s

95th percentile per-packet one-way delay: 26.573 ms

Loss rate: 0.24%

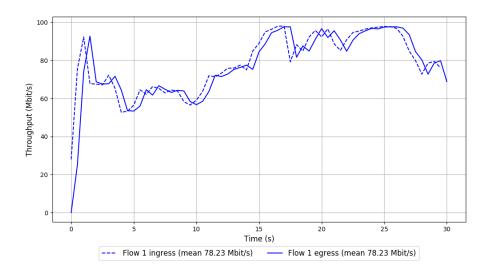
-- Flow 1:

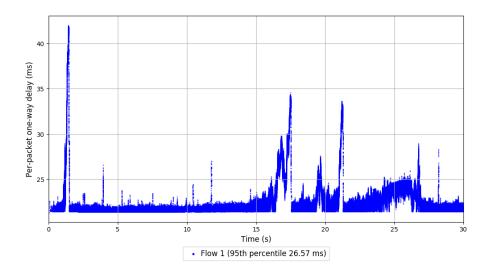
Average throughput: 78.23 Mbit/s

95th percentile per-packet one-way delay: 26.573 ms

Loss rate: 0.24%

Run 4: Report of TCP Cubic — Data Link





### Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 09:15:57 End at: 2019-10-03 09:16:27 Local clock offset: 5.746 ms Remote clock offset: -0.387 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 89.80 Mbit/s

95th percentile per-packet one-way delay:  $24.420~\mathrm{ms}$ 

Loss rate: 0.18%

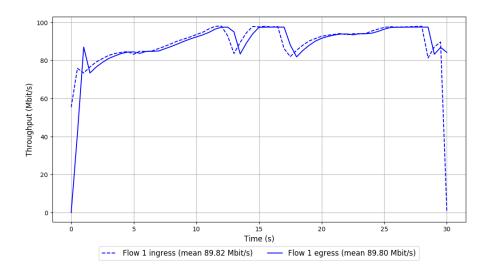
-- Flow 1:

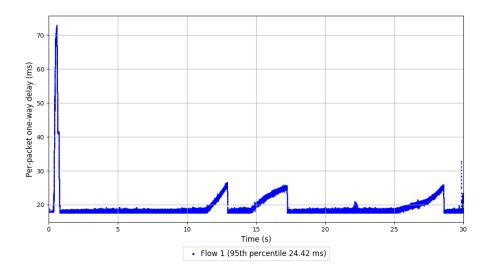
Average throughput: 89.80 Mbit/s

95th percentile per-packet one-way delay: 24.420 ms

Loss rate: 0.18%

Run 5: Report of TCP Cubic — Data Link





### Run 1: Statistics of FillP

Start at: 2019-10-03 07:21:22 End at: 2019-10-03 07:21:52 Local clock offset: 6.232 ms Remote clock offset: -0.876 ms

# Below is generated by plot.py at 2019-10-03 09:38:21

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay:  $37.856~\mathrm{ms}$ 

Loss rate: 0.32%

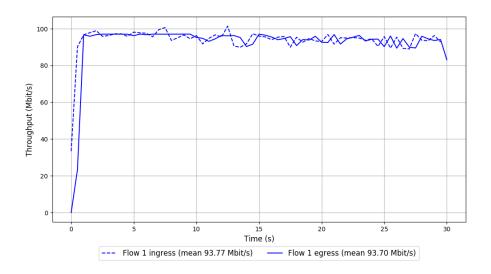
-- Flow 1:

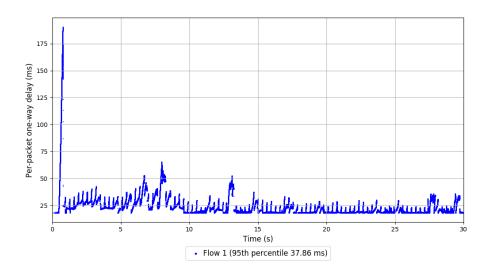
Average throughput: 93.70 Mbit/s

95th percentile per-packet one-way delay: 37.856 ms

Loss rate: 0.32%

Run 1: Report of FillP — Data Link





#### Run 2: Statistics of FillP

Start at: 2019-10-03 07:57:09 End at: 2019-10-03 07:57:39 Local clock offset: 5.556 ms Remote clock offset: 1.588 ms

# Below is generated by plot.py at 2019-10-03 09:38:45

# Datalink statistics
-- Total of 1 flow:

Average throughput: 95.96 Mbit/s

95th percentile per-packet one-way delay: 35.055 ms

Loss rate: 0.31%

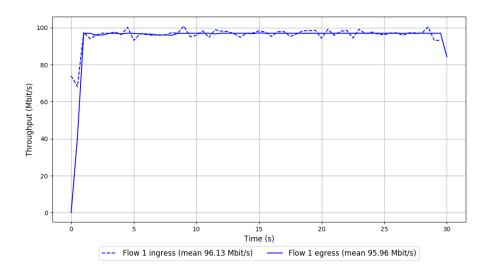
-- Flow 1:

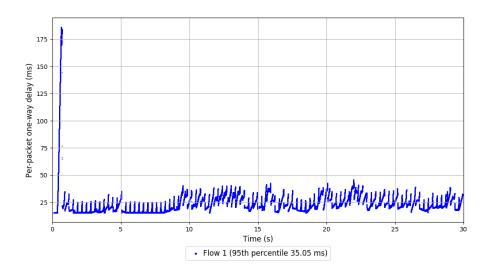
Average throughput: 95.96 Mbit/s

95th percentile per-packet one-way delay: 35.055 ms

Loss rate: 0.31%

Run 2: Report of FillP — Data Link





#### Run 3: Statistics of FillP

Start at: 2019-10-03 08:27:45 End at: 2019-10-03 08:28:15 Local clock offset: 1.603 ms Remote clock offset: 0.565 ms

# Below is generated by plot.py at 2019-10-03 09:38:48

# Datalink statistics
-- Total of 1 flow:

Average throughput: 95.70 Mbit/s

95th percentile per-packet one-way delay:  $27.283~\mathrm{ms}$ 

Loss rate: 0.18%

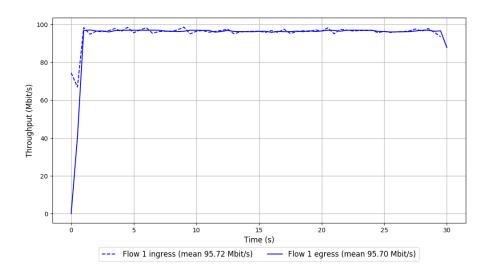
-- Flow 1:

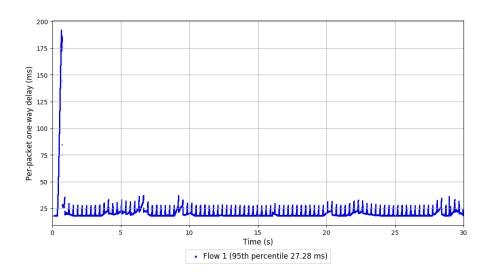
Average throughput: 95.70 Mbit/s

95th percentile per-packet one-way delay: 27.283 ms

Loss rate: 0.18%

Run 3: Report of FillP — Data Link





#### Run 4: Statistics of FillP

Start at: 2019-10-03 08:57:40 End at: 2019-10-03 08:58:10 Local clock offset: -1.493 ms Remote clock offset: -1.413 ms

# Below is generated by plot.py at 2019-10-03 09:38:50

# Datalink statistics
-- Total of 1 flow:

Average throughput: 91.75 Mbit/s

95th percentile per-packet one-way delay: 26.191 ms

Loss rate: 0.27%

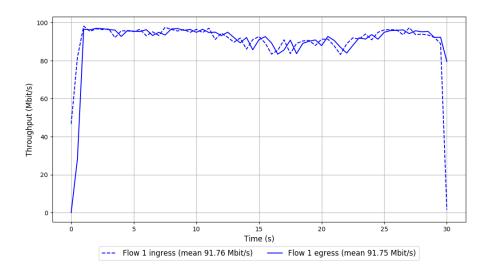
-- Flow 1:

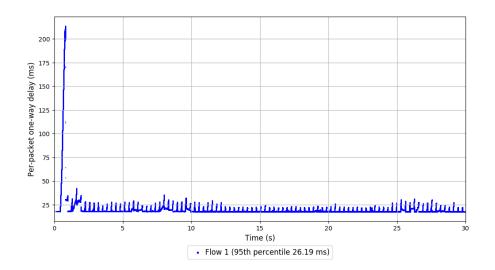
Average throughput: 91.75 Mbit/s

95th percentile per-packet one-way delay: 26.191 ms

Loss rate: 0.27%

Run 4: Report of FillP — Data Link





#### Run 5: Statistics of FillP

Start at: 2019-10-03 09:27:09 End at: 2019-10-03 09:27:39 Local clock offset: 5.647 ms Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2019-10-03 09:38:56

# Datalink statistics
-- Total of 1 flow:

Average throughput: 95.75 Mbit/s

95th percentile per-packet one-way delay: 35.921 ms

Loss rate: 0.26%

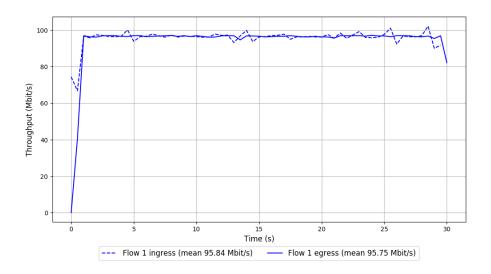
-- Flow 1:

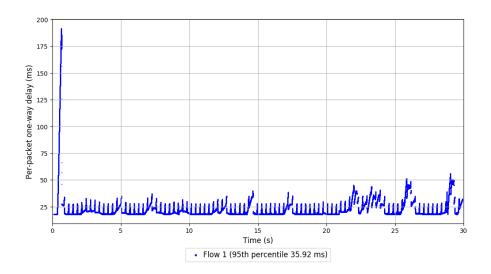
Average throughput: 95.75 Mbit/s

95th percentile per-packet one-way delay: 35.921 ms

Loss rate: 0.26%

Run 5: Report of FillP — Data Link





## Run 1: Statistics of FillP-Sheep

Start at: 2019-10-03 07:07:41 End at: 2019-10-03 07:08:11 Local clock offset: 3.693 ms Remote clock offset: -2.379 ms

# Below is generated by plot.py at 2019-10-03 09:38:56

# Datalink statistics
-- Total of 1 flow:

Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 23.941 ms

Loss rate: 0.29%

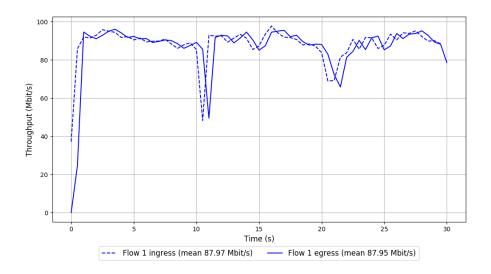
-- Flow 1:

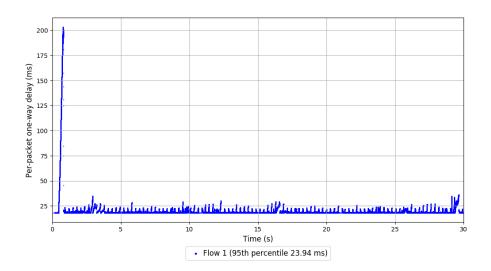
Average throughput: 87.95 Mbit/s

95th percentile per-packet one-way delay: 23.941 ms

Loss rate: 0.29%

Run 1: Report of FillP-Sheep — Data Link





## Run 2: Statistics of FillP-Sheep

Start at: 2019-10-03 07:41:59 End at: 2019-10-03 07:42:29 Local clock offset: 11.111 ms Remote clock offset: -2.261 ms

# Below is generated by plot.py at 2019-10-03 09:39:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.79 Mbit/s

95th percentile per-packet one-way delay:  $36.094~\mathrm{ms}$ 

Loss rate: 0.19%

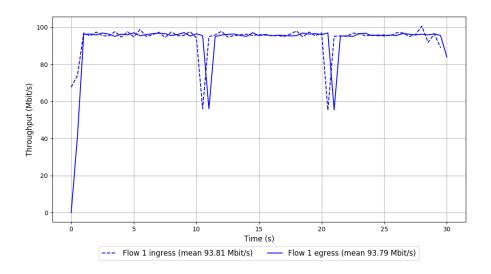
-- Flow 1:

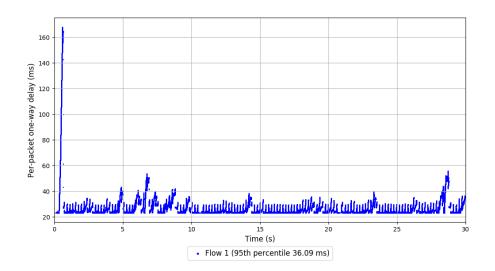
Average throughput: 93.79 Mbit/s

95th percentile per-packet one-way delay: 36.094 ms

Loss rate: 0.19%

Run 2: Report of FillP-Sheep — Data Link





## Run 3: Statistics of FillP-Sheep

Start at: 2019-10-03 08:15:07 End at: 2019-10-03 08:15:37 Local clock offset: 5.707 ms Remote clock offset: 1.499 ms

# Below is generated by plot.py at 2019-10-03 09:39:41

# Datalink statistics
-- Total of 1 flow:

Average throughput: 89.41 Mbit/s

95th percentile per-packet one-way delay:  $24.271~\mathrm{ms}$ 

Loss rate: 0.21%

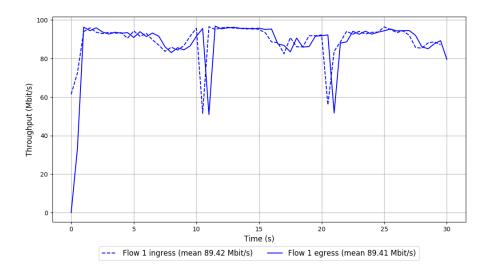
-- Flow 1:

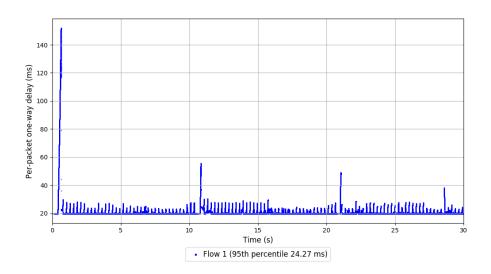
Average throughput: 89.41 Mbit/s

95th percentile per-packet one-way delay: 24.271 ms

Loss rate: 0.21%

Run 3: Report of FillP-Sheep — Data Link





## Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 08:45:30 End at: 2019-10-03 08:46:00 Local clock offset: -3.011 ms Remote clock offset: 0.51 ms

# Below is generated by plot.py at 2019-10-03 09:39:41

# Datalink statistics
-- Total of 1 flow:

Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 21.401  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.22%

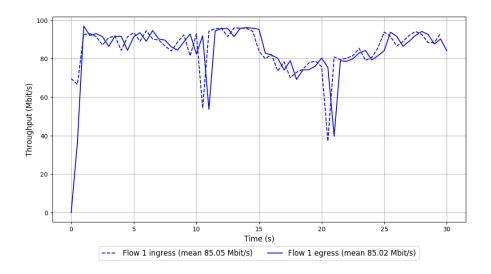
-- Flow 1:

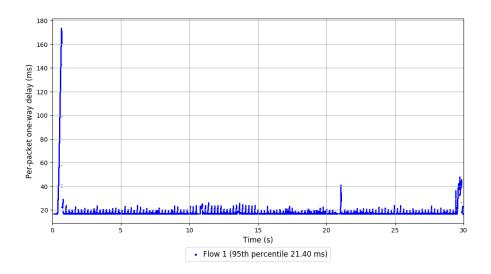
Average throughput: 85.02 Mbit/s

95th percentile per-packet one-way delay: 21.401 ms

Loss rate: 0.22%

Run 4: Report of FillP-Sheep — Data Link





## Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 09:14:45 End at: 2019-10-03 09:15:15 Local clock offset: 10.044 ms Remote clock offset: -0.594 ms

# Below is generated by plot.py at 2019-10-03 09:40:09

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.21 Mbit/s

95th percentile per-packet one-way delay: 26.799 ms

Loss rate: 0.17%

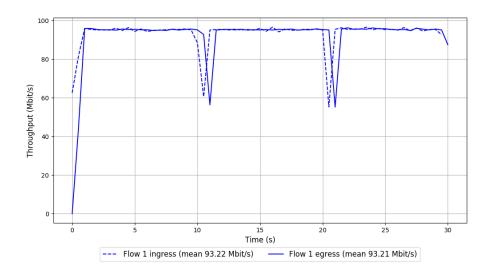
-- Flow 1:

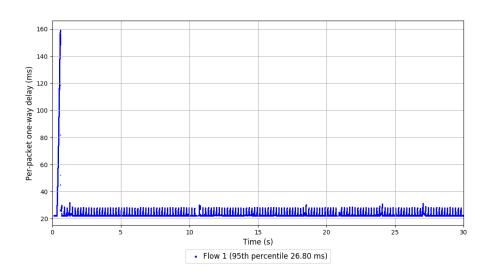
Average throughput: 93.21 Mbit/s

95th percentile per-packet one-way delay: 26.799 ms

Loss rate: 0.17%

Run 5: Report of FillP-Sheep — Data Link





## Run 1: Statistics of Indigo

Start at: 2019-10-03 07:00:15 End at: 2019-10-03 07:00:45 Local clock offset: 4.317 ms Remote clock offset: -2.384 ms

# Below is generated by plot.py at 2019-10-03 09:40:09

# Datalink statistics
-- Total of 1 flow:

Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 22.953  $\ensuremath{\mathtt{ms}}$ 

Loss rate: 0.08%

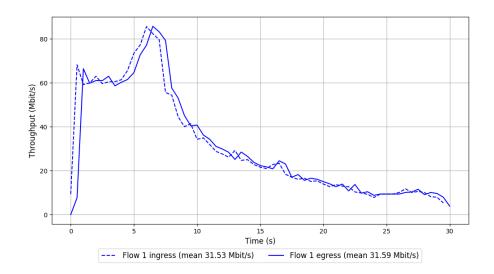
-- Flow 1:

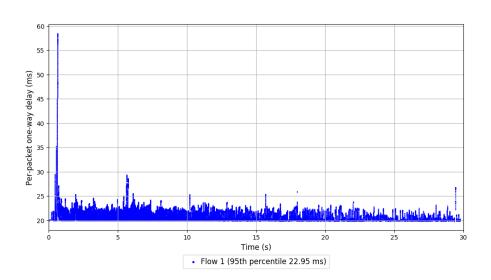
Average throughput: 31.59 Mbit/s

95th percentile per-packet one-way delay: 22.953 ms

Loss rate: 0.08%

Run 1: Report of Indigo — Data Link





## Run 2: Statistics of Indigo

Start at: 2019-10-03 07:34:17 End at: 2019-10-03 07:34:47 Local clock offset: 7.704 ms Remote clock offset: 1.053 ms

# Below is generated by plot.py at 2019-10-03 09:40:09

# Datalink statistics
-- Total of 1 flow:

Average throughput: 92.71 Mbit/s

95th percentile per-packet one-way delay: 21.846  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.16%

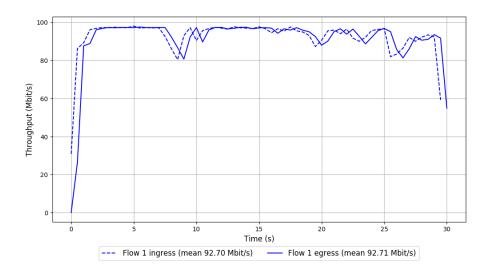
-- Flow 1:

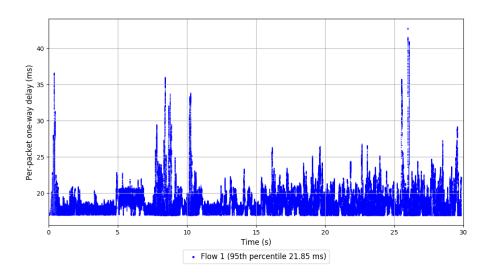
Average throughput: 92.71 Mbit/s

95th percentile per-packet one-way delay: 21.846 ms

Loss rate: 0.16%

Run 2: Report of Indigo — Data Link





## Run 3: Statistics of Indigo

Start at: 2019-10-03 08:08:56 End at: 2019-10-03 08:09:26 Local clock offset: 6.461 ms Remote clock offset: -1.573 ms

# Below is generated by plot.py at 2019-10-03 09:40:09

# Datalink statistics
-- Total of 1 flow:

Average throughput: 19.54 Mbit/s

95th percentile per-packet one-way delay: 25.277  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.06%

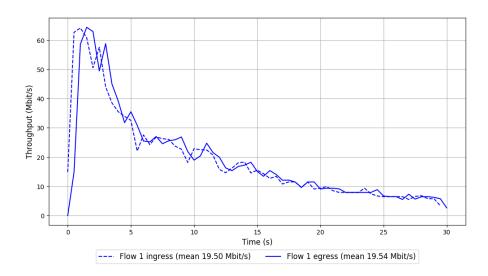
-- Flow 1:

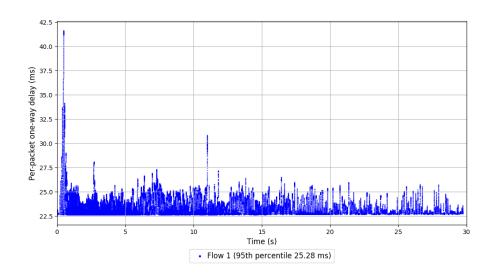
Average throughput: 19.54 Mbit/s

95th percentile per-packet one-way delay: 25.277 ms

Loss rate: 0.06%

Run 3: Report of Indigo — Data Link





## Run 4: Statistics of Indigo

Start at: 2019-10-03 08:39:09 End at: 2019-10-03 08:39:39 Local clock offset: -3.29 ms Remote clock offset: -1.103 ms

# Below is generated by plot.py at 2019-10-03 09:40:09

# Datalink statistics
-- Total of 1 flow:

Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay:  $24.193~\mathrm{ms}$ 

Loss rate: 0.08%

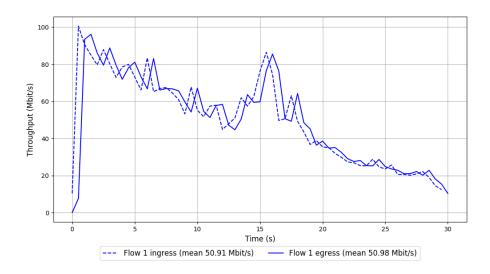
-- Flow 1:

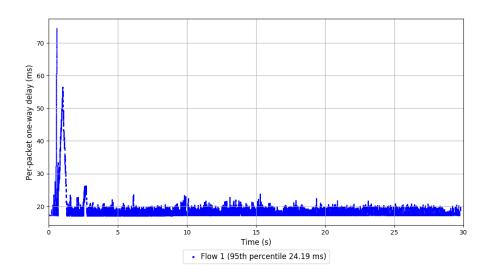
Average throughput: 50.98 Mbit/s

95th percentile per-packet one-way delay: 24.193 ms

Loss rate: 0.08%

Run 4: Report of Indigo — Data Link





## Run 5: Statistics of Indigo

Start at: 2019-10-03 09:08:30 End at: 2019-10-03 09:09:00 Local clock offset: 8.785 ms Remote clock offset: 0.358 ms

# Below is generated by plot.py at 2019-10-03 09:40:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 23.494 ms

Loss rate: 0.18%

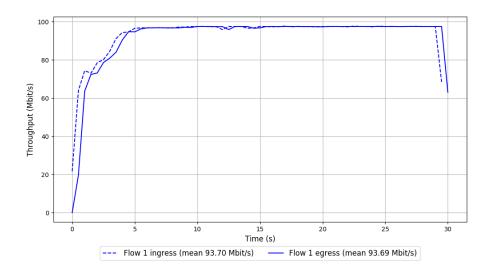
-- Flow 1:

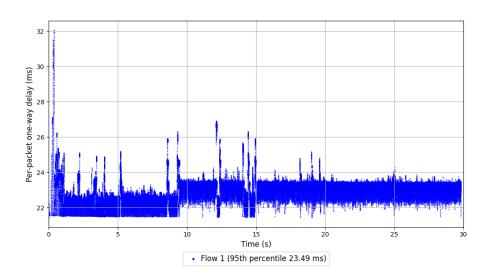
Average throughput: 93.69 Mbit/s

95th percentile per-packet one-way delay: 23.494 ms

Loss rate: 0.18%

Run 5: Report of Indigo — Data Link





## Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-03 07:23:01 End at: 2019-10-03 07:23:31 Local clock offset: 4.066 ms Remote clock offset: -1.874 ms

# Below is generated by plot.py at 2019-10-03 09:40:11

# Datalink statistics
-- Total of 1 flow:

Average throughput: 27.60 Mbit/s

95th percentile per-packet one-way delay:  $31.165~\mathrm{ms}$ 

Loss rate: 0.08%

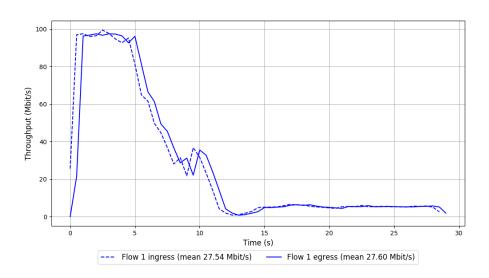
-- Flow 1:

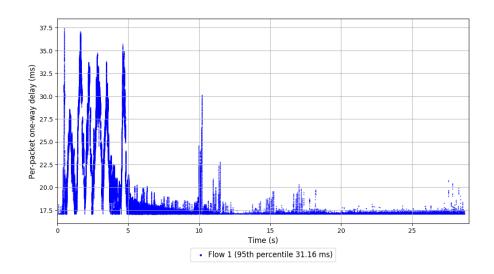
Average throughput: 27.60 Mbit/s

95th percentile per-packet one-way delay: 31.165 ms

Loss rate: 0.08%

Run 1: Report of Indigo-MusesC3 — Data Link





# Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-03 07:58:45 End at: 2019-10-03 07:59:15 Local clock offset: 10.017 ms Remote clock offset: -1.453 ms

# Below is generated by plot.py at 2019-10-03 09:40:23

# Datalink statistics
-- Total of 1 flow:

Average throughput: 92.49 Mbit/s

95th percentile per-packet one-way delay: 29.116  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.19%

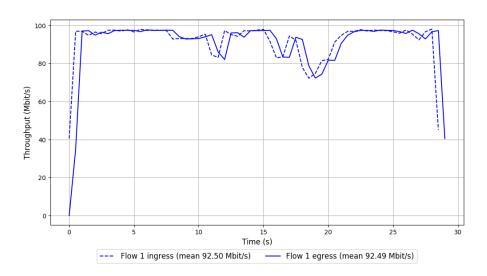
-- Flow 1:

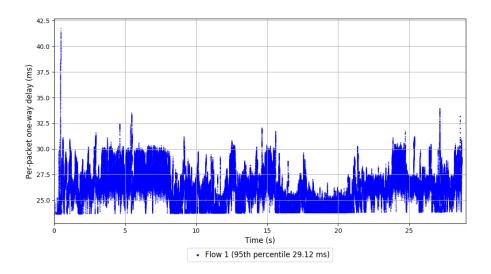
Average throughput: 92.49 Mbit/s

95th percentile per-packet one-way delay: 29.116 ms

Loss rate: 0.19%

Run 2: Report of Indigo-MusesC3 — Data Link





## Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-03 08:29:05 End at: 2019-10-03 08:29:35 Local clock offset: 1.411 ms Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2019-10-03 09:40:39

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.11 Mbit/s

95th percentile per-packet one-way delay: 22.833 ms

Loss rate: 0.18%

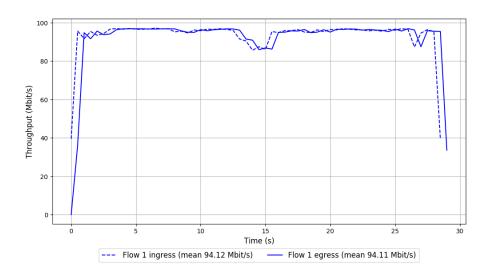
-- Flow 1:

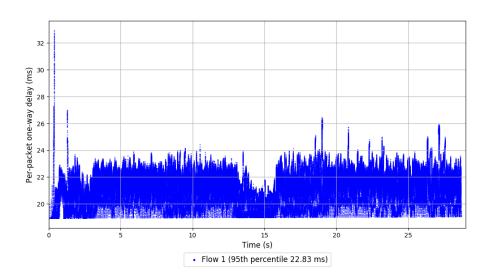
Average throughput: 94.11 Mbit/s

95th percentile per-packet one-way delay: 22.833 ms

Loss rate: 0.18%

Run 3: Report of Indigo-MusesC3 — Data Link





## Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 08:58:57 End at: 2019-10-03 08:59:27 Local clock offset: 2.204 ms Remote clock offset: 1.33 ms

# Below is generated by plot.py at 2019-10-03 09:40:39

# Datalink statistics
-- Total of 1 flow:

Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 21.101  $\ensuremath{\mathsf{ms}}$ 

Loss rate: 0.16%

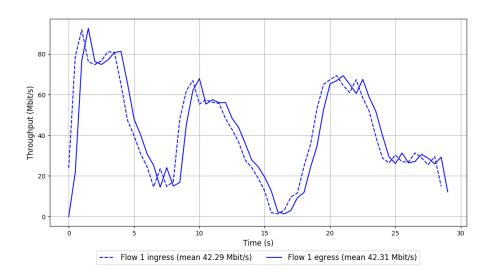
-- Flow 1:

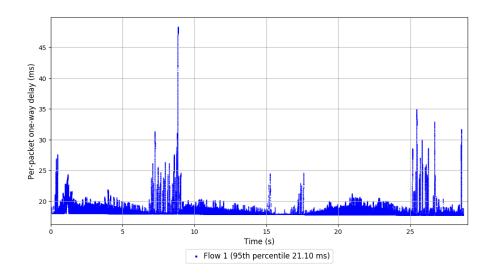
Average throughput: 42.31 Mbit/s

95th percentile per-packet one-way delay: 21.101 ms

Loss rate: 0.16%

Run 4: Report of Indigo-MusesC3 — Data Link





# Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 09:28:25 End at: 2019-10-03 09:28:56 Local clock offset: 9.799 ms Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-10-03 09:40:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 96.39 Mbit/s

95th percentile per-packet one-way delay:  $26.760~\mathrm{ms}$ 

Loss rate: 0.19%

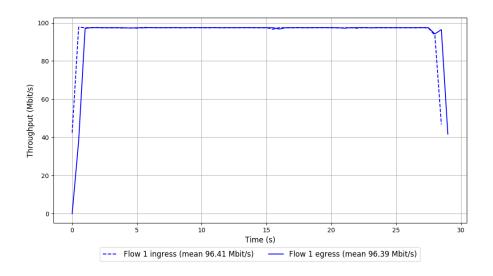
-- Flow 1:

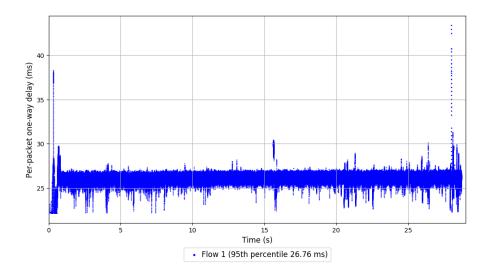
Average throughput: 96.39 Mbit/s

95th percentile per-packet one-way delay: 26.760 ms

Loss rate: 0.19%

Run 5: Report of Indigo-MusesC3 — Data Link





# Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-03 07:13:06 End at: 2019-10-03 07:13:36 Local clock offset: 3.093 ms Remote clock offset: -2.462 ms

# Below is generated by plot.py at 2019-10-03 09:40:53

# Datalink statistics
-- Total of 1 flow:

Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 27.185 ms

Loss rate: 0.33%

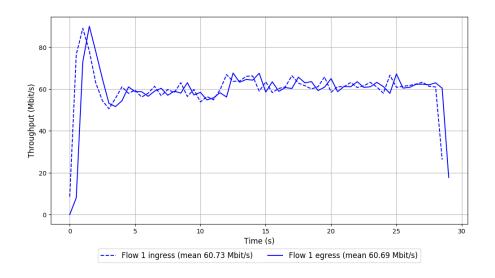
-- Flow 1:

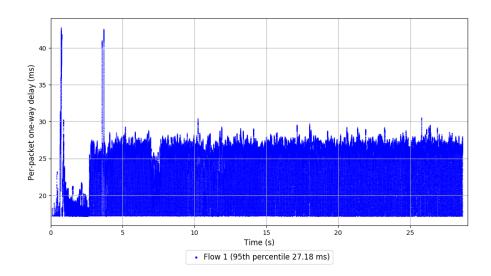
Average throughput: 60.69 Mbit/s

95th percentile per-packet one-way delay: 27.185 ms

Loss rate: 0.33%

Run 1: Report of Indigo-MusesC5 — Data Link





# Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-03 07:47:34 End at: 2019-10-03 07:48:04 Local clock offset: 5.822 ms Remote clock offset: -0.584 ms

# Below is generated by plot.py at 2019-10-03 09:41:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.28 Mbit/s

95th percentile per-packet one-way delay: 18.239 ms

Loss rate: 0.17%

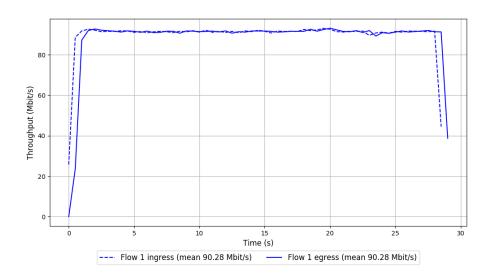
-- Flow 1:

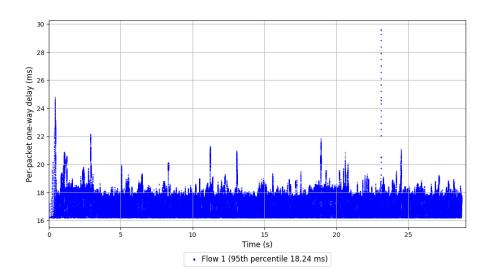
Average throughput: 90.28 Mbit/s

95th percentile per-packet one-way delay: 18.239 ms

Loss rate: 0.17%

Run 2: Report of Indigo-MusesC5 — Data Link





## Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 08:20:04 End at: 2019-10-03 08:20:34 Local clock offset: 2.929 ms Remote clock offset: 1.058 ms

# Below is generated by plot.py at 2019-10-03 09:41:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay:  $27.953~\mathrm{ms}$ 

Loss rate: 0.25%

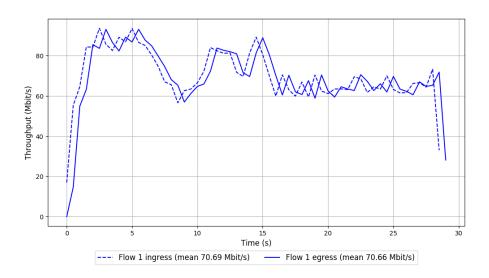
-- Flow 1:

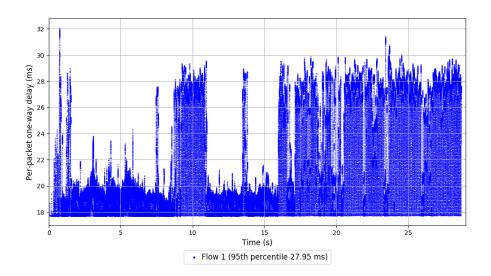
Average throughput: 70.66 Mbit/s

95th percentile per-packet one-way delay: 27.953 ms

Loss rate: 0.25%

Run 3: Report of Indigo-MusesC5 — Data Link





## Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 08:50:22 End at: 2019-10-03 08:50:52 Local clock offset: -1.405 ms Remote clock offset: 0.82 ms

# Below is generated by plot.py at 2019-10-03 09:41:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 64.22 Mbit/s

95th percentile per-packet one-way delay: 29.192 ms

Loss rate: 0.21%

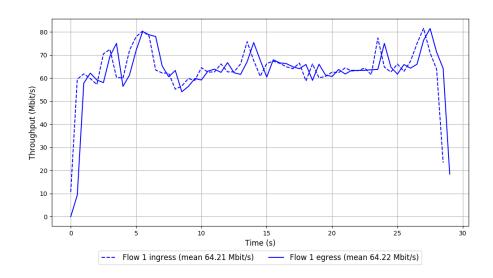
-- Flow 1:

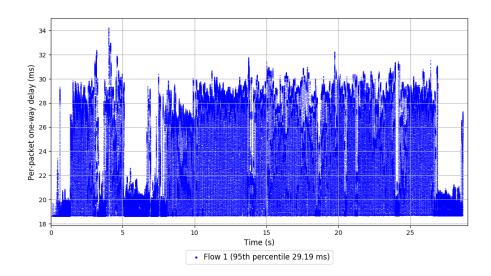
Average throughput: 64.22 Mbit/s

95th percentile per-packet one-way delay: 29.192 ms

Loss rate: 0.21%

Run 4: Report of Indigo-MusesC5 — Data Link





## Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 09:19:29 End at: 2019-10-03 09:19:59 Local clock offset: 10.53 ms Remote clock offset: 1.34 ms

# Below is generated by plot.py at 2019-10-03 09:41:19

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.25 Mbit/s

95th percentile per-packet one-way delay: 23.242  $\ensuremath{\mathrm{ms}}$ 

Loss rate: 0.18%

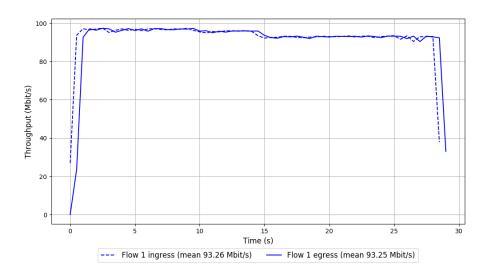
-- Flow 1:

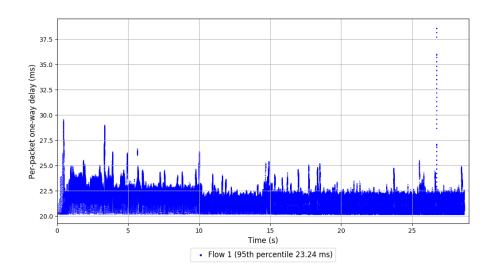
Average throughput: 93.25 Mbit/s

95th percentile per-packet one-way delay: 23.242 ms

Loss rate: 0.18%

Run 5: Report of Indigo-MusesC5 — Data Link





## Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-03 07:24:20 End at: 2019-10-03 07:24:50 Local clock offset: 5.962 ms Remote clock offset: -0.602 ms

# Below is generated by plot.py at 2019-10-03 09:41:19

# Datalink statistics
-- Total of 1 flow:

Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 18.824 ms

Loss rate: 0.07%

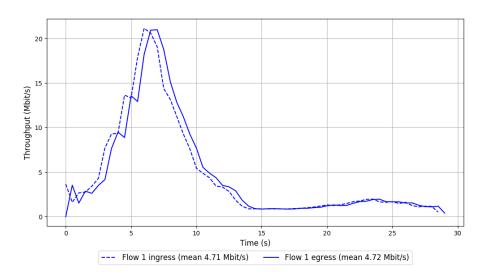
-- Flow 1:

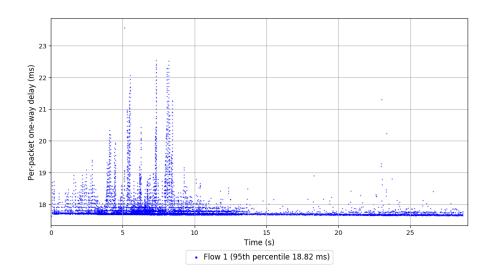
Average throughput: 4.72 Mbit/s

95th percentile per-packet one-way delay: 18.824 ms

Loss rate: 0.07%

Run 1: Report of Indigo-MusesD — Data Link





## Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-03 08:00:18 End at: 2019-10-03 08:00:48 Local clock offset: 4.374 ms Remote clock offset: -0.327 ms

# Below is generated by plot.py at 2019-10-03 09:41:19

# Datalink statistics
-- Total of 1 flow:

Average throughput: 42.69 Mbit/s

95th percentile per-packet one-way delay:  $19.965~\mathrm{ms}$ 

Loss rate: 0.05%

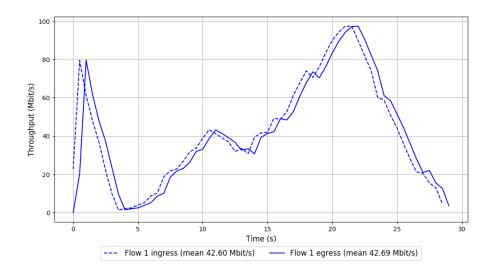
-- Flow 1:

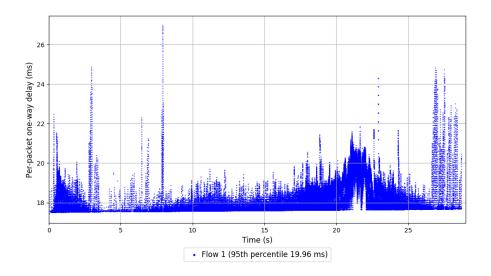
Average throughput: 42.69 Mbit/s

95th percentile per-packet one-way delay: 19.965 ms

Loss rate: 0.05%

Run 2: Report of Indigo-MusesD — Data Link





## Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 08:30:20 End at: 2019-10-03 08:30:50 Local clock offset: 3.918 ms Remote clock offset: -1.567 ms

# Below is generated by plot.py at 2019-10-03 09:41:19

# Datalink statistics
-- Total of 1 flow:

Average throughput: 67.79 Mbit/s

95th percentile per-packet one-way delay: 27.537 ms

Loss rate: 0.27%

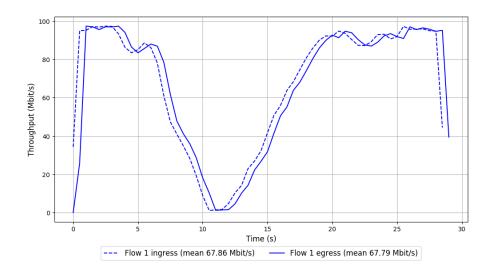
-- Flow 1:

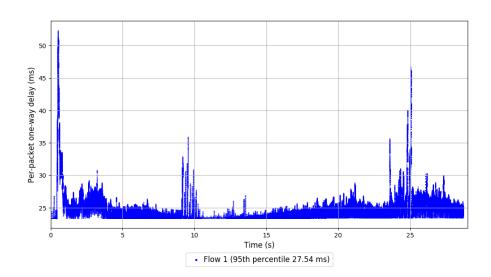
Average throughput: 67.79 Mbit/s

95th percentile per-packet one-way delay: 27.537 ms

Loss rate: 0.27%

Run 3: Report of Indigo-MusesD — Data Link





## Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 09:00:07 End at: 2019-10-03 09:00:37 Local clock offset: 0.808 ms Remote clock offset: -1.514 ms

# Below is generated by plot.py at 2019-10-03 09:41:19

# Datalink statistics
-- Total of 1 flow:

Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 23.201  $\ensuremath{\mathtt{ms}}$ 

Loss rate: 0.02%

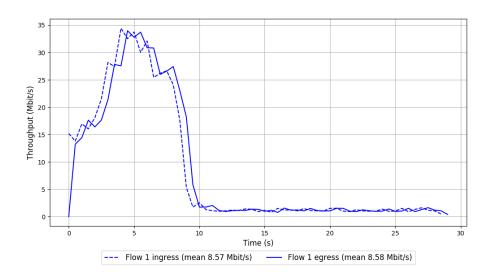
-- Flow 1:

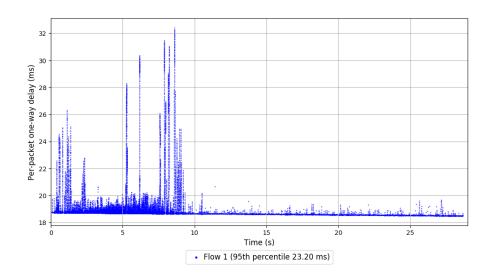
Average throughput: 8.58 Mbit/s

95th percentile per-packet one-way delay: 23.201 ms

Loss rate: 0.02%

Run 4: Report of Indigo-MusesD — Data Link





## Run 5: Statistics of Indigo-MusesD

Start at: 2019-10-03 09:29:42 End at: 2019-10-03 09:30:12 Local clock offset: 9.035 ms Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-10-03 09:41:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 95.12 Mbit/s

95th percentile per-packet one-way delay: 25.851  $\ensuremath{\mathtt{ms}}$ 

Loss rate: 0.20%

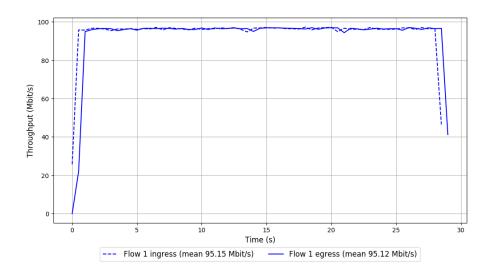
-- Flow 1:

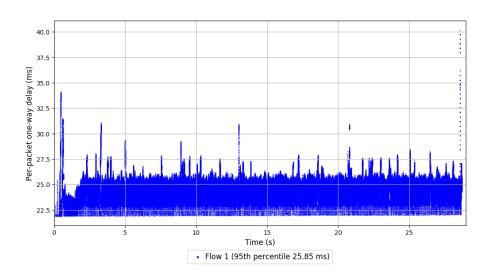
Average throughput: 95.12 Mbit/s

95th percentile per-packet one-way delay: 25.851 ms

Loss rate: 0.20%

Run 5: Report of Indigo-MusesD — Data Link





## Run 1: Statistics of Indigo-MusesT

Start at: 2019-10-03 06:57:09 End at: 2019-10-03 06:57:39 Local clock offset: 2.755 ms Remote clock offset: -3.068 ms

# Below is generated by plot.py at 2019-10-03 09:42:01

# Datalink statistics
-- Total of 1 flow:

Average throughput: 95.74 Mbit/s

95th percentile per-packet one-way delay:  $41.592~\mathrm{ms}$ 

Loss rate: 0.62%

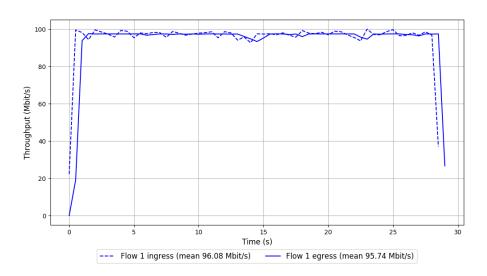
-- Flow 1:

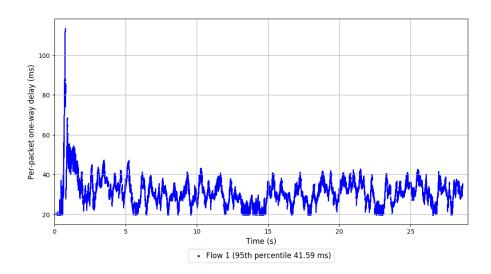
Average throughput: 95.74 Mbit/s

95th percentile per-packet one-way delay: 41.592 ms

Loss rate: 0.62%

Run 1: Report of Indigo-MusesT — Data Link





## Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-03 07:31:14 End at: 2019-10-03 07:31:45 Local clock offset: 6.621 ms Remote clock offset: -2.692 ms

# Below is generated by plot.py at 2019-10-03 09:42:04

# Datalink statistics
-- Total of 1 flow:

Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay:  $24.015~\mathrm{ms}$ 

Loss rate: 0.19%

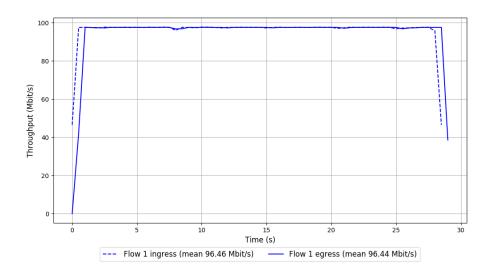
-- Flow 1:

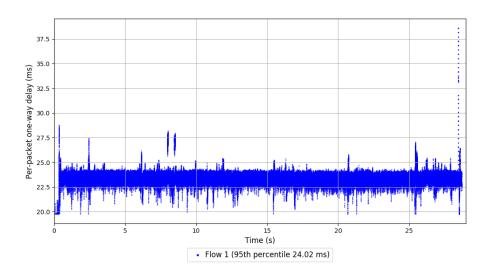
Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 24.015 ms

Loss rate: 0.19%

Run 2: Report of Indigo-MusesT — Data Link





## Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-03 08:06:21 End at: 2019-10-03 08:06:51 Local clock offset: 2.778 ms Remote clock offset: -1.392 ms

# Below is generated by plot.py at 2019-10-03 09:42:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 94.72 Mbit/s

95th percentile per-packet one-way delay: 33.144 ms

Loss rate: 0.37%

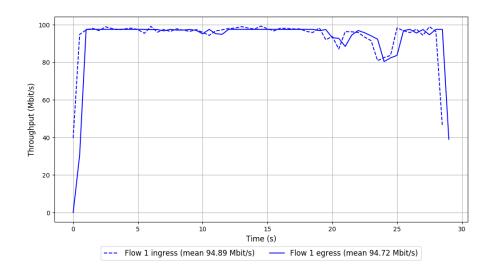
-- Flow 1:

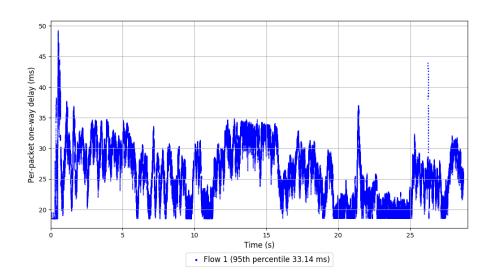
Average throughput: 94.72 Mbit/s

95th percentile per-packet one-way delay: 33.144 ms

Loss rate: 0.37%

Run 3: Report of Indigo-MusesT — Data Link





## Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 08:36:23 End at: 2019-10-03 08:36:53 Local clock offset: 2.806 ms Remote clock offset: -1.739 ms

# Below is generated by plot.py at 2019-10-03 09:42:05

# Datalink statistics
-- Total of 1 flow:

Average throughput: 80.87 Mbit/s

95th percentile per-packet one-way delay: 31.991 ms

Loss rate: 0.30%

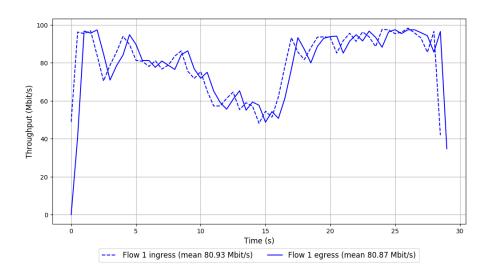
-- Flow 1:

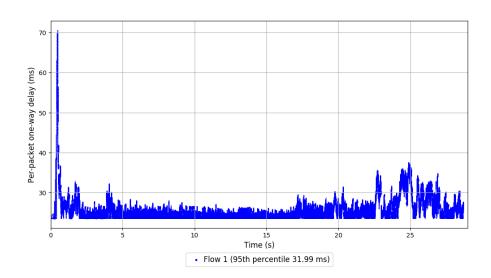
Average throughput: 80.87 Mbit/s

95th percentile per-packet one-way delay: 31.991 ms

Loss rate: 0.30%

Run 4: Report of Indigo-MusesT — Data Link





## Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 09:05:59 End at: 2019-10-03 09:06:29 Local clock offset: 2.973 ms Remote clock offset: 1.218 ms

# Below is generated by plot.py at 2019-10-03 09:42:14

# Datalink statistics
-- Total of 1 flow:

Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 22.698 ms

Loss rate: 0.20%

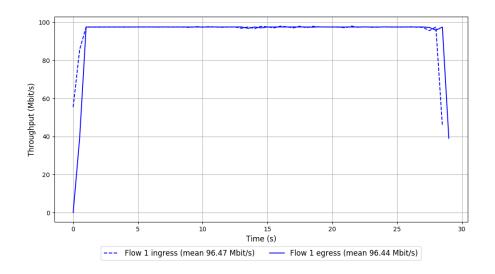
-- Flow 1:

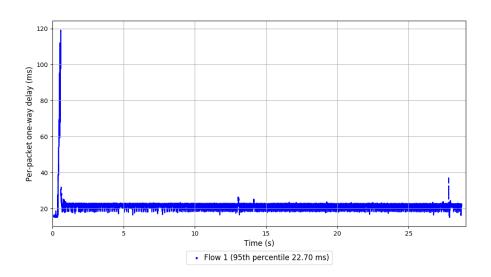
Average throughput: 96.44 Mbit/s

95th percentile per-packet one-way delay: 22.698 ms

Loss rate: 0.20%

Run 5: Report of Indigo-MusesT — Data Link





### Run 1: Statistics of LEDBAT

Start at: 2019-10-03 07:19:55 End at: 2019-10-03 07:20:25 Local clock offset: 3.742 ms Remote clock offset: -2.138 ms

# Below is generated by plot.py at 2019-10-03 09:42:14

# Datalink statistics
-- Total of 1 flow:

Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 22.267 ms

Loss rate: 0.34%

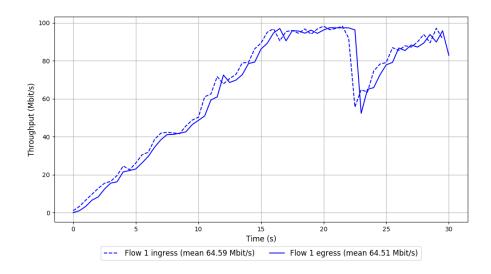
-- Flow 1:

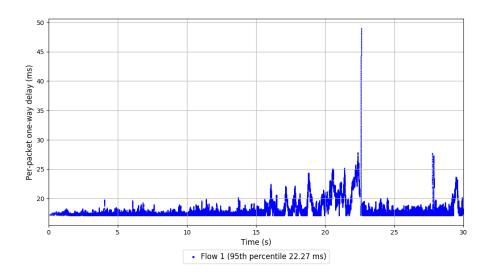
Average throughput: 64.51 Mbit/s

95th percentile per-packet one-way delay: 22.267 ms

Loss rate: 0.34%

Run 1: Report of LEDBAT — Data Link





### Run 2: Statistics of LEDBAT

Start at: 2019-10-03 07:55:35 End at: 2019-10-03 07:56:05 Local clock offset: 6.287 ms Remote clock offset: 0.572 ms

# Below is generated by plot.py at 2019-10-03 09:42:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 71.65 Mbit/s

95th percentile per-packet one-way delay: 22.786 ms

Loss rate: 0.25%

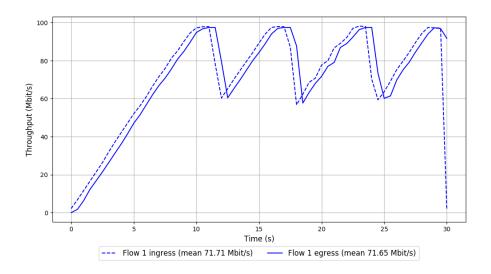
-- Flow 1:

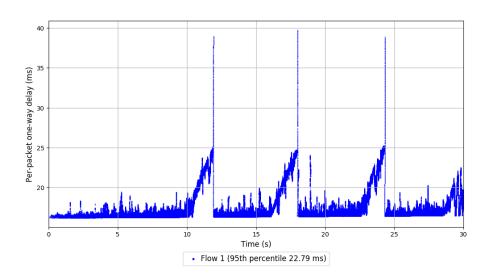
Average throughput: 71.65 Mbit/s

95th percentile per-packet one-way delay: 22.786 ms

Loss rate: 0.25%

Run 2: Report of LEDBAT — Data Link





# Run 3: Statistics of LEDBAT

Start at: 2019-10-03 08:26:29 End at: 2019-10-03 08:26:59 Local clock offset: 1.768 ms Remote clock offset: 1.009 ms

# Below is generated by plot.py at 2019-10-03 09:42:48

# Datalink statistics
-- Total of 1 flow:

Average throughput: 71.92 Mbit/s

95th percentile per-packet one-way delay: 24.595 ms

Loss rate: 0.13%

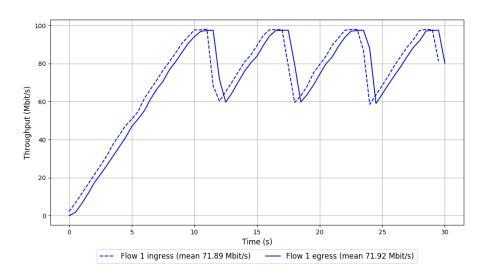
-- Flow 1:

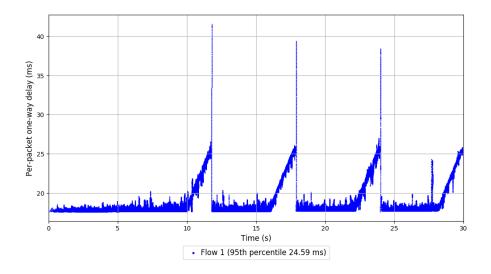
Average throughput: 71.92 Mbit/s

95th percentile per-packet one-way delay: 24.595 ms

Loss rate: 0.13%

Run 3: Report of LEDBAT — Data Link





# Run 4: Statistics of LEDBAT

Start at: 2019-10-03 08:56:25 End at: 2019-10-03 08:56:55 Local clock offset: -0.34 ms Remote clock offset: -0.903 ms

# Below is generated by plot.py at 2019-10-03 09:42:48

# Datalink statistics
-- Total of 1 flow:

Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 22.576 ms

Loss rate: 0.20%

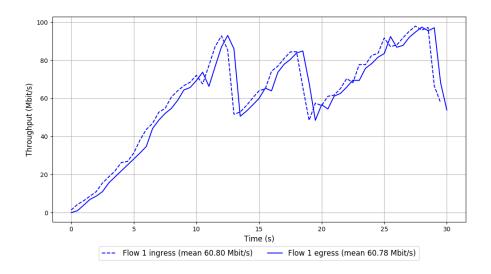
-- Flow 1:

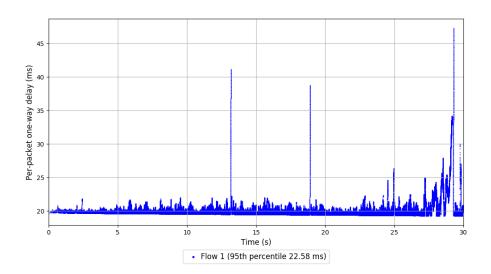
Average throughput: 60.78 Mbit/s

95th percentile per-packet one-way delay: 22.576 ms

Loss rate: 0.20%

Run 4: Report of LEDBAT — Data Link





# Run 5: Statistics of LEDBAT

Start at: 2019-10-03 09:25:55 End at: 2019-10-03 09:26:25 Local clock offset: 5.773 ms Remote clock offset: 0.809 ms

# Below is generated by plot.py at 2019-10-03 09:42:54

# Datalink statistics
-- Total of 1 flow:

Average throughput: 71.64 Mbit/s

95th percentile per-packet one-way delay: 23.323 ms

Loss rate: 0.14%

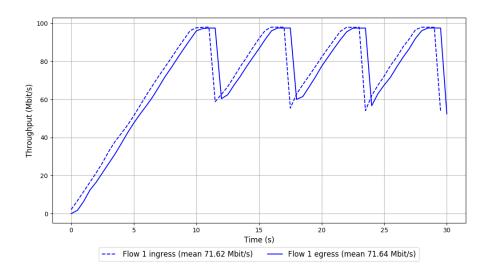
-- Flow 1:

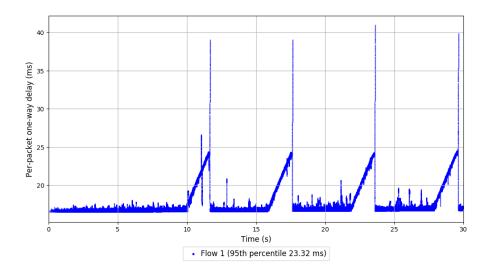
Average throughput: 71.64 Mbit/s

95th percentile per-packet one-way delay: 23.323 ms

Loss rate: 0.14%

Run 5: Report of LEDBAT — Data Link





# Run 1: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 07:14:43 End at: 2019-10-03 07:15:13 Local clock offset: 8.934 ms Remote clock offset: -2.279 ms

# Below is generated by plot.py at 2019-10-03 09:42:54

# Datalink statistics
-- Total of 1 flow:

Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 36.603 ms

Loss rate: 0.01%

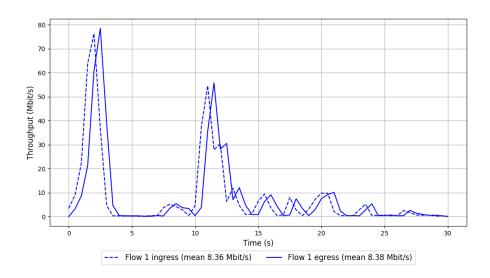
-- Flow 1:

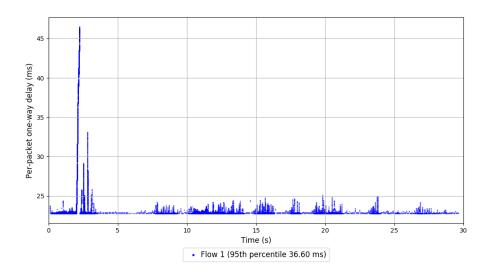
Average throughput: 8.38 Mbit/s

95th percentile per-packet one-way delay: 36.603 ms

Loss rate: 0.01%

Run 1: Report of Muses\_DecisionTree — Data Link





# Run 2: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 07:49:04 End at: 2019-10-03 07:49:34 Local clock offset: 4.263 ms Remote clock offset: -1.691 ms

# Below is generated by plot.py at 2019-10-03 09:43:12

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 18.464 ms

Loss rate: 0.17%

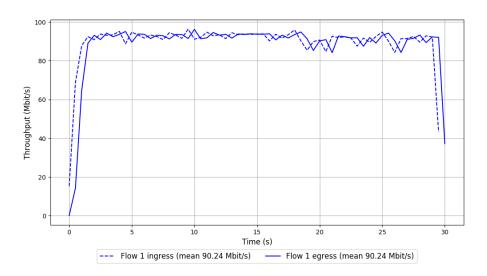
-- Flow 1:

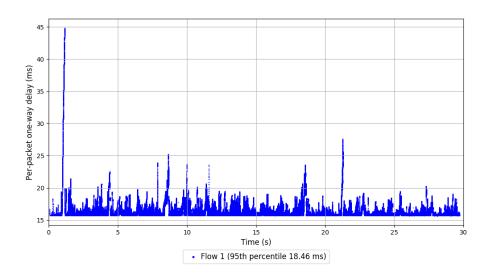
Average throughput: 90.24 Mbit/s

95th percentile per-packet one-way delay: 18.464 ms

Loss rate: 0.17%

Run 2: Report of Muses\_DecisionTree — Data Link





# Run 3: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 08:21:18 End at: 2019-10-03 08:21:48 Local clock offset: 1.538 ms Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2019-10-03 09:43:12

# Datalink statistics
-- Total of 1 flow:

Average throughput: 67.51 Mbit/s

95th percentile per-packet one-way delay: 19.059 ms

Loss rate: 0.21%

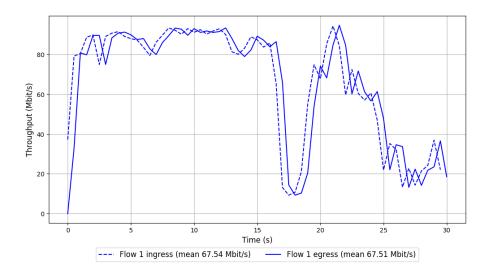
-- Flow 1:

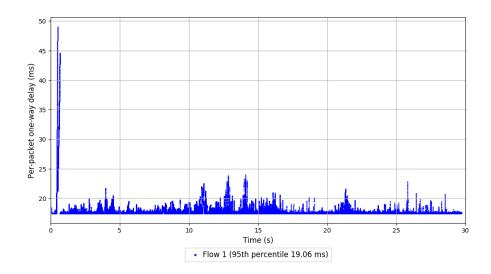
Average throughput: 67.51 Mbit/s

95th percentile per-packet one-way delay: 19.059 ms

Loss rate: 0.21%

Run 3: Report of Muses\_DecisionTree — Data Link





# Run 4: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 08:51:38 End at: 2019-10-03 08:52:08 Local clock offset: -4.117 ms Remote clock offset: -0.467 ms

# Below is generated by plot.py at 2019-10-03 09:43:12

# Datalink statistics
-- Total of 1 flow:

Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 39.064 ms

Loss rate: 0.01%

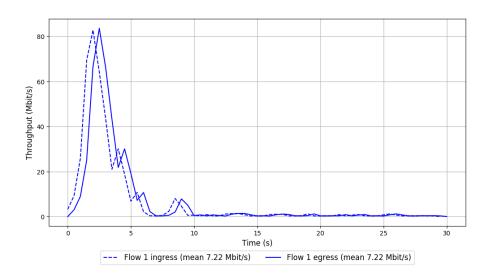
-- Flow 1:

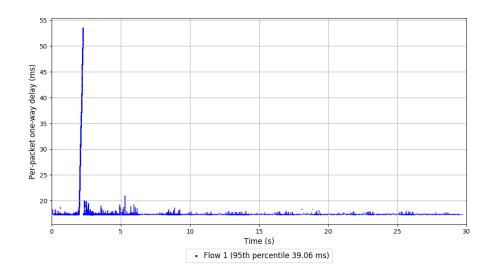
Average throughput: 7.22 Mbit/s

95th percentile per-packet one-way delay: 39.064 ms

Loss rate: 0.01%

Run 4: Report of Muses\_DecisionTree — Data Link





# Run 5: Statistics of Muses\\_DecisionTree

Start at: 2019-10-03 09:20:48 End at: 2019-10-03 09:21:18 Local clock offset: 7.199 ms Remote clock offset: -1.416 ms

# Below is generated by plot.py at 2019-10-03 09:43:25

# Datalink statistics
-- Total of 1 flow:

Average throughput: 91.26 Mbit/s

95th percentile per-packet one-way delay: 22.337 ms

Loss rate: 0.20%

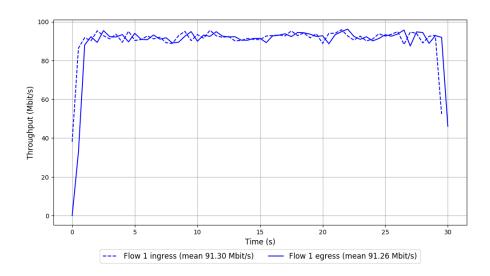
-- Flow 1:

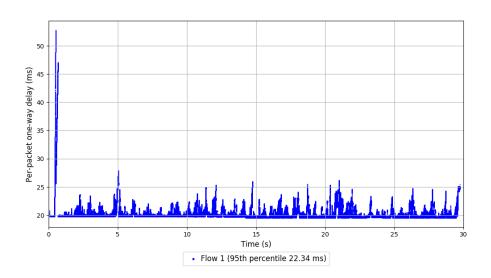
Average throughput: 91.26 Mbit/s

95th percentile per-packet one-way delay: 22.337 ms

Loss rate: 0.20%

Run 5: Report of Muses\_DecisionTree — Data Link





# Run 1: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 07:17:20 End at: 2019-10-03 07:17:50 Local clock offset: 7.915 ms Remote clock offset: -2.756 ms

# Below is generated by plot.py at 2019-10-03 09:43:25

# Datalink statistics
-- Total of 1 flow:

Average throughput: 25.79 Mbit/s

95th percentile per-packet one-way delay: 34.772 ms

Loss rate: 0.02%

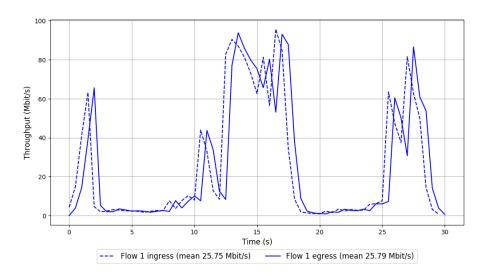
-- Flow 1:

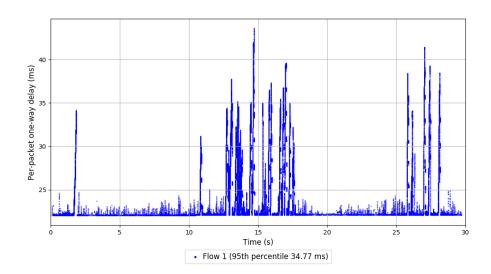
Average throughput: 25.79 Mbit/s

95th percentile per-packet one-way delay:  $34.772~\mathrm{ms}$ 

Loss rate: 0.02%

Run 1: Report of Muses\_DecisionTreeH0 — Data Link





# Run 2: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 07:52:07 End at: 2019-10-03 07:52:37 Local clock offset: 6.729 ms Remote clock offset: -1.5 ms

# Below is generated by plot.py at 2019-10-03 09:43:25

# Datalink statistics
-- Total of 1 flow:

Average throughput: 79.77 Mbit/s

95th percentile per-packet one-way delay: 28.101 ms

Loss rate: 0.27%

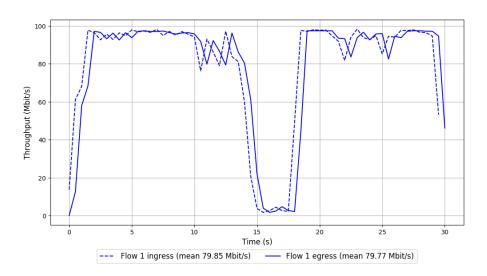
-- Flow 1:

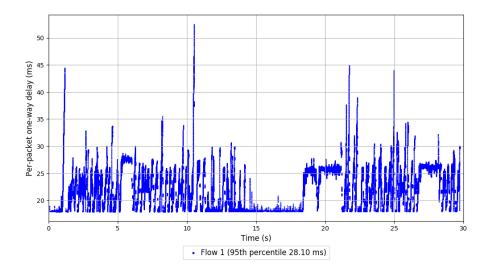
Average throughput: 79.77 Mbit/s

95th percentile per-packet one-way delay: 28.101 ms

Loss rate: 0.27%

Run 2: Report of Muses\_DecisionTreeH0 — Data Link





# Run 3: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 08:23:51 End at: 2019-10-03 08:24:21 Local clock offset: 5.367 ms Remote clock offset: -0.62 ms

# Below is generated by plot.py at 2019-10-03 09:43:44

# Datalink statistics
-- Total of 1 flow:

Average throughput: 88.12 Mbit/s

95th percentile per-packet one-way delay: 33.075 ms

Loss rate: 0.22%

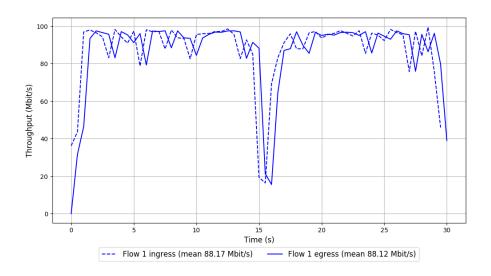
-- Flow 1:

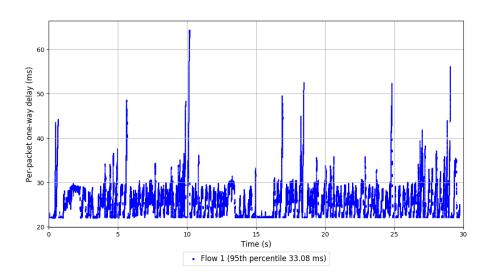
Average throughput: 88.12 Mbit/s

95th percentile per-packet one-way delay:  $33.075~\mathrm{ms}$ 

Loss rate: 0.22%

Run 3: Report of Muses\_DecisionTreeH0 — Data Link





# Run 4: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 08:54:05 End at: 2019-10-03 08:54:35 Local clock offset: 0.963 ms Remote clock offset: -0.93 ms

# Below is generated by plot.py at 2019-10-03 09:43:44

# Datalink statistics
-- Total of 1 flow:

Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 55.786 ms

Loss rate: 0.39%

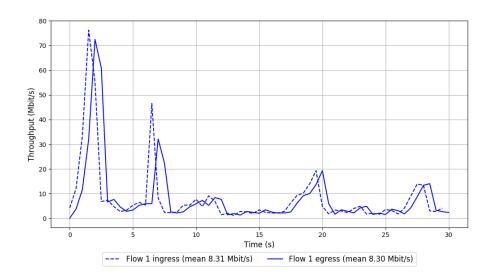
-- Flow 1:

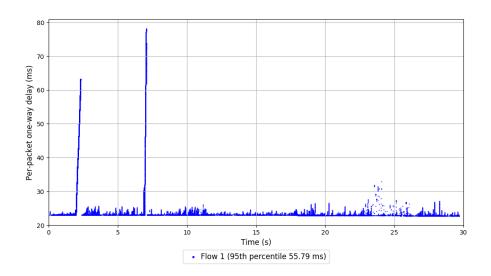
Average throughput: 8.30 Mbit/s

95th percentile per-packet one-way delay: 55.786 ms

Loss rate: 0.39%

Run 4: Report of Muses\_DecisionTreeH0 — Data Link





# Run 5: Statistics of Muses\\_DecisionTreeHO

Start at: 2019-10-03 09:23:22 End at: 2019-10-03 09:23:52 Local clock offset: 10.742 ms Remote clock offset: -0.556 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 92.68 Mbit/s

95th percentile per-packet one-way delay: 32.303 ms

Loss rate: 0.22%

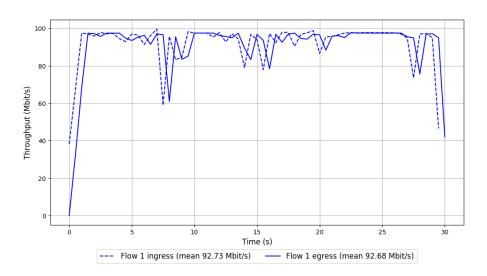
-- Flow 1:

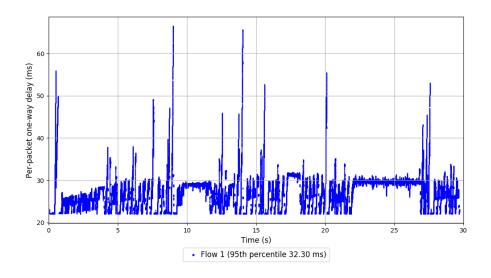
Average throughput: 92.68 Mbit/s

95th percentile per-packet one-way delay: 32.303 ms

Loss rate: 0.22%

Run 5: Report of Muses\_DecisionTreeH0 — Data Link





# Run 1: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 07:28:02 End at: 2019-10-03 07:28:32 Local clock offset: 4.829 ms Remote clock offset: -1.685 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.12 Mbit/s

95th percentile per-packet one-way delay: 19.079 ms

Loss rate: 0.20%

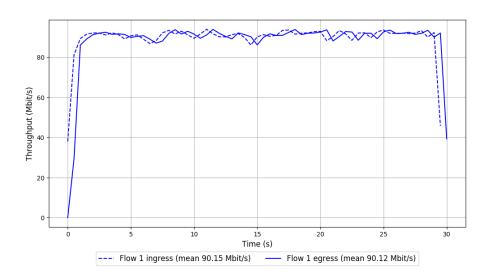
-- Flow 1:

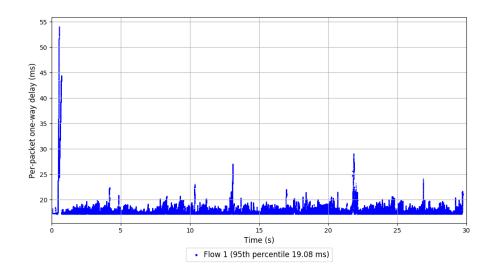
Average throughput: 90.12 Mbit/s

95th percentile per-packet one-way delay: 19.079 ms

Loss rate: 0.20%

Run 1: Report of Muses\_DecisionTreeR0 — Data Link





# Run 2: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 08:04:07 End at: 2019-10-03 08:04:37 Local clock offset: 3.397 ms Remote clock offset: 1.066 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 23.101 ms

Loss rate: 0.02%

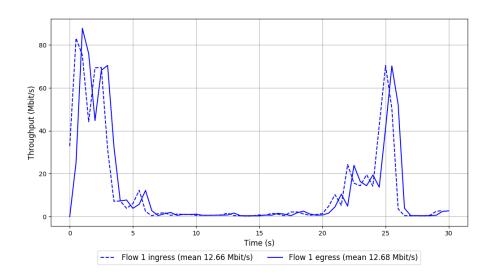
-- Flow 1:

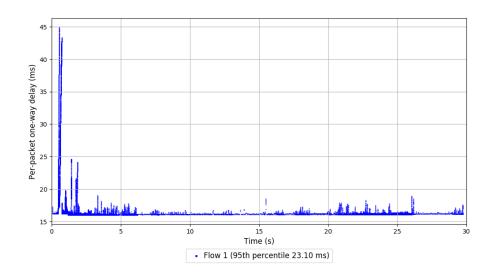
Average throughput: 12.68 Mbit/s

95th percentile per-packet one-way delay: 23.101 ms

Loss rate: 0.02%

Run 2: Report of Muses\_DecisionTreeR0 — Data Link





# Run 3: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 08:34:06 End at: 2019-10-03 08:34:36 Local clock offset: 2.724 ms Remote clock offset: 0.489 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 23.791 ms

Loss rate: 0.05%

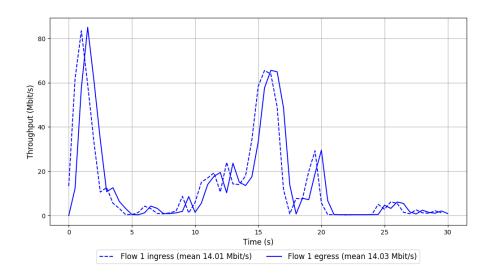
-- Flow 1:

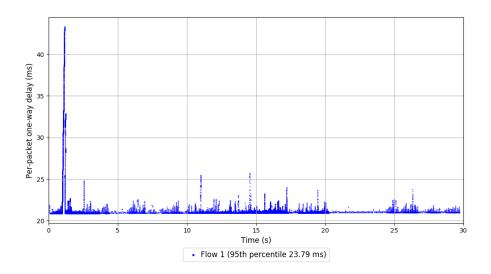
Average throughput: 14.03 Mbit/s

95th percentile per-packet one-way delay: 23.791 ms

Loss rate: 0.05%

Run 3: Report of Muses\_DecisionTreeR0 — Data Link





# Run 4: Statistics of Muses\\_DecisionTreeRO

Start at: 2019-10-03 09:03:36 End at: 2019-10-03 09:04:06 Local clock offset: 2.177 ms Remote clock offset: -0.641 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 20.881 ms

Loss rate: 0.55%

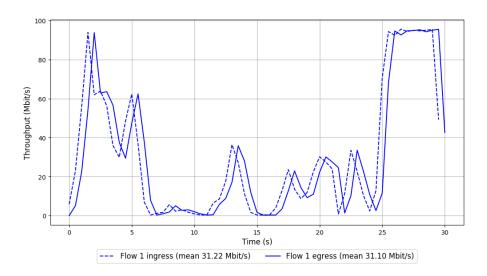
-- Flow 1:

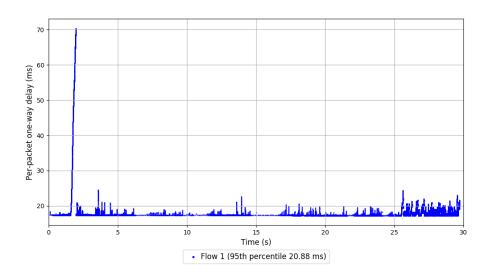
Average throughput: 31.10 Mbit/s

95th percentile per-packet one-way delay: 20.881 ms

Loss rate: 0.55%

Run 4: Report of Muses\_DecisionTreeR0 — Data Link





# Run 5: Statistics of Muses\\_DecisionTreeR0

Start at: 2019-10-03 09:33:09 End at: 2019-10-03 09:33:39 Local clock offset: 5.707 ms Remote clock offset: -0.416 ms

# Below is generated by plot.py at 2019-10-03 09:43:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 44.266 ms

Loss rate: 0.08%

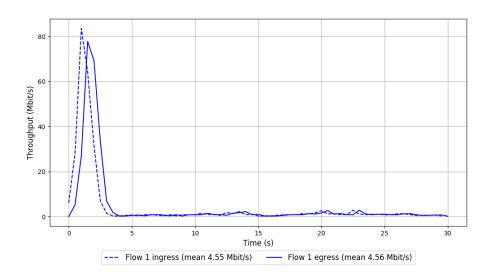
-- Flow 1:

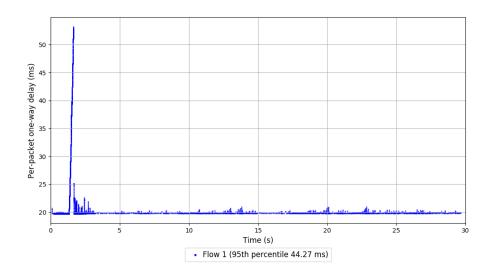
Average throughput: 4.56 Mbit/s

95th percentile per-packet one-way delay: 44.266 ms

Loss rate: 0.08%

Run 5: Report of Muses\_DecisionTreeR0 — Data Link





# Run 1: Statistics of PCC-Allegro

Start at: 2019-10-03 07:06:22 End at: 2019-10-03 07:06:52 Local clock offset: 7.76 ms Remote clock offset: -1.911 ms

# Below is generated by plot.py at 2019-10-03 09:44:07

# Datalink statistics
-- Total of 1 flow:

Average throughput: 71.39 Mbit/s

95th percentile per-packet one-way delay: 22.913 ms

Loss rate: 0.26%

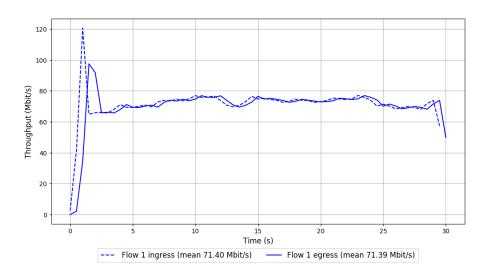
-- Flow 1:

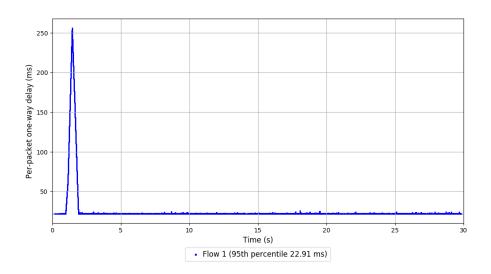
Average throughput: 71.39 Mbit/s

95th percentile per-packet one-way delay: 22.913 ms

Loss rate: 0.26%

Run 1: Report of PCC-Allegro — Data Link





# Run 2: Statistics of PCC-Allegro

Start at: 2019-10-03 07:40:30 End at: 2019-10-03 07:41:00 Local clock offset: 11.056 ms Remote clock offset: -0.667 ms

# Below is generated by plot.py at 2019-10-03 09:44:22

# Datalink statistics
-- Total of 1 flow:

Average throughput: 88.56 Mbit/s

95th percentile per-packet one-way delay: 25.043 ms

Loss rate: 0.18%

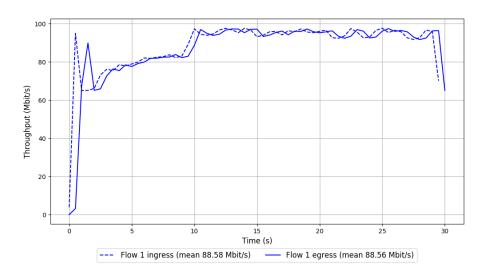
-- Flow 1:

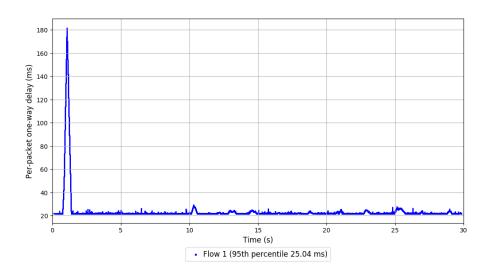
Average throughput: 88.56 Mbit/s

95th percentile per-packet one-way delay: 25.043 ms

Loss rate: 0.18%

Run 2: Report of PCC-Allegro — Data Link





# Run 3: Statistics of PCC-Allegro

Start at: 2019-10-03 08:13:59 End at: 2019-10-03 08:14:29 Local clock offset: 1.507 ms Remote clock offset: -0.964 ms

# Below is generated by plot.py at 2019-10-03 09:44:23

# Datalink statistics
-- Total of 1 flow:

Average throughput: 26.77 Mbit/s

95th percentile per-packet one-way delay: 17.962 ms

Loss rate: 0.17%

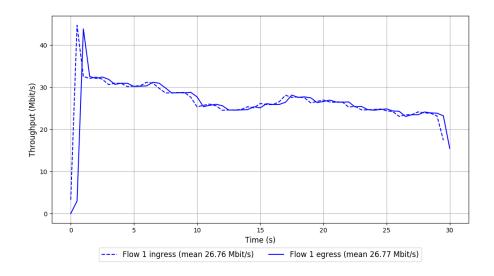
-- Flow 1:

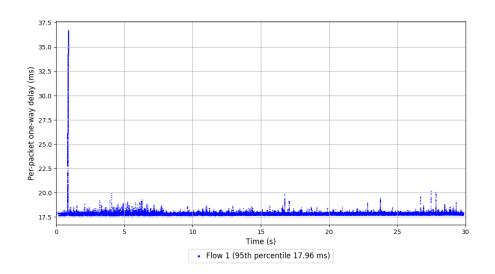
Average throughput: 26.77 Mbit/s

95th percentile per-packet one-way delay: 17.962 ms

Loss rate: 0.17%

Run 3: Report of PCC-Allegro — Data Link





# Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 08:44:15 End at: 2019-10-03 08:44:45 Local clock offset: -2.258 ms Remote clock offset: -0.622 ms

# Below is generated by plot.py at 2019-10-03 09:44:23

# Datalink statistics
-- Total of 1 flow:

Average throughput: 64.12 Mbit/s

95th percentile per-packet one-way delay: 18.859 ms

Loss rate: 0.24%

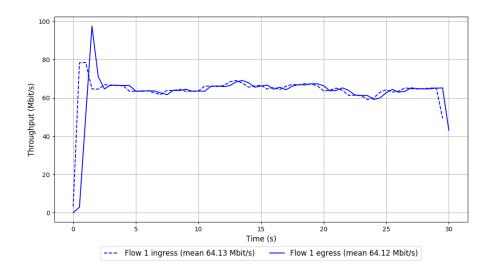
-- Flow 1:

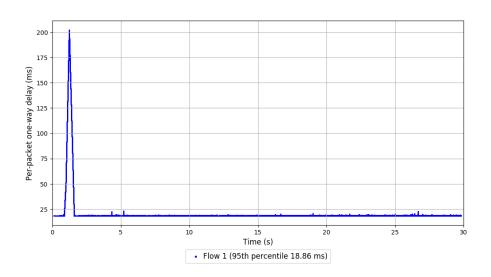
Average throughput: 64.12 Mbit/s

95th percentile per-packet one-way delay: 18.859 ms

Loss rate: 0.24%

Run 4: Report of PCC-Allegro — Data Link





# Run 5: Statistics of PCC-Allegro

Start at: 2019-10-03 09:13:34 End at: 2019-10-03 09:14:04 Local clock offset: 4.97 ms Remote clock offset: 1.281 ms

# Below is generated by plot.py at 2019-10-03 09:44:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 25.982 ms

Loss rate: 0.22%

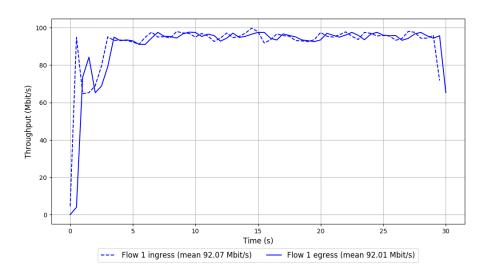
-- Flow 1:

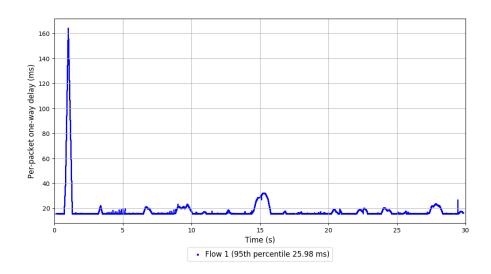
Average throughput: 92.01 Mbit/s

95th percentile per-packet one-way delay: 25.982 ms

Loss rate: 0.22%

Run 5: Report of PCC-Allegro — Data Link





# Run 1: Statistics of PCC-Expr

Start at: 2019-10-03 07:18:35 End at: 2019-10-03 07:19:05 Local clock offset: 4.699 ms Remote clock offset: -0.63 ms

# Below is generated by plot.py at 2019-10-03 09:44:35

# Datalink statistics
-- Total of 1 flow:

Average throughput: 29.86 Mbit/s

95th percentile per-packet one-way delay: 185.546 ms

Loss rate: 4.10%

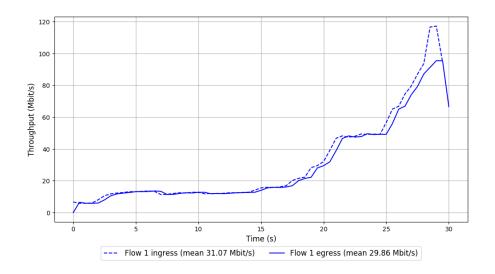
-- Flow 1:

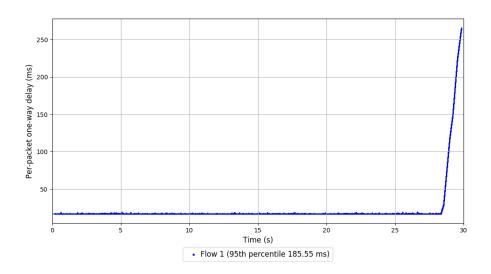
Average throughput: 29.86 Mbit/s

95th percentile per-packet one-way delay: 185.546 ms

Loss rate: 4.10%

Run 1: Report of PCC-Expr — Data Link





# Run 2: Statistics of PCC-Expr

Start at: 2019-10-03 07:53:36 End at: 2019-10-03 07:54:06 Local clock offset: 8.664 ms Remote clock offset: -1.134 ms

# Below is generated by plot.py at 2019-10-03 09:45:49

# Datalink statistics
-- Total of 1 flow:

Average throughput: 88.05 Mbit/s

95th percentile per-packet one-way delay: 547.584 ms

Loss rate: 0.92%

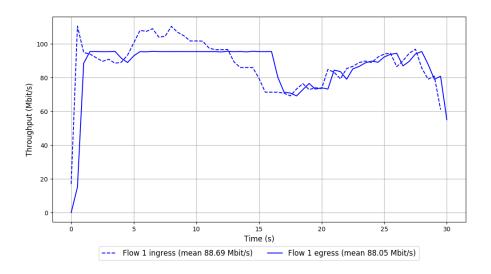
-- Flow 1:

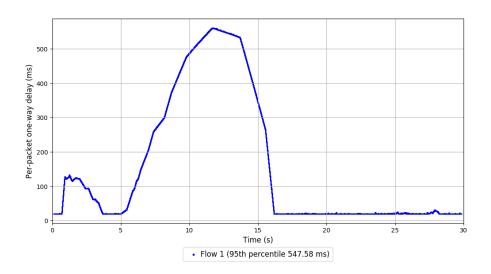
Average throughput: 88.05 Mbit/s

95th percentile per-packet one-way delay: 547.584 ms

Loss rate: 0.92%

Run 2: Report of PCC-Expr — Data Link





# Run 3: Statistics of PCC-Expr

Start at: 2019-10-03 08:25:07 End at: 2019-10-03 08:25:37 Local clock offset: 0.267 ms Remote clock offset: 1.196 ms

# Below is generated by plot.py at 2019-10-03 09:45:59

# Datalink statistics
-- Total of 1 flow:

Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 42.652 ms

Loss rate: 0.14%

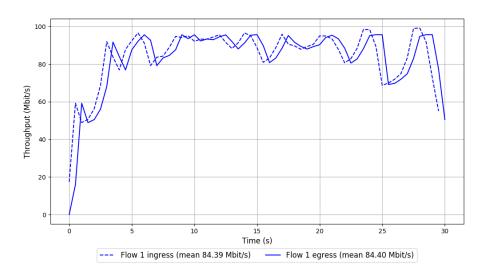
-- Flow 1:

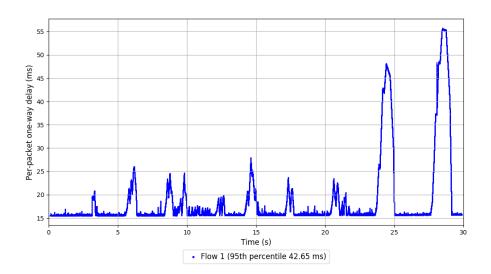
Average throughput: 84.40 Mbit/s

95th percentile per-packet one-way delay: 42.652 ms

Loss rate: 0.14%

Run 3: Report of PCC-Expr — Data Link





# Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 08:55:12 End at: 2019-10-03 08:55:42 Local clock offset: -3.322 ms Remote clock offset: 1.327 ms

# Below is generated by plot.py at 2019-10-03 09:45:59

# Datalink statistics
-- Total of 1 flow:

Average throughput: 17.20 Mbit/s

95th percentile per-packet one-way delay: 15.529 ms

Loss rate: 0.31%

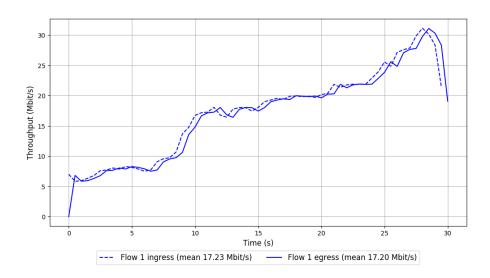
-- Flow 1:

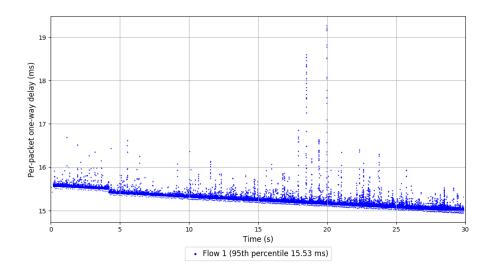
Average throughput: 17.20 Mbit/s

95th percentile per-packet one-way delay: 15.529 ms

Loss rate: 0.31%

Run 4: Report of PCC-Expr — Data Link





# Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 09:24:37 End at: 2019-10-03 09:25:07 Local clock offset: 6.452 ms Remote clock offset: 0.651 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.42 Mbit/s

95th percentile per-packet one-way delay: 654.065 ms

Loss rate: 6.07%

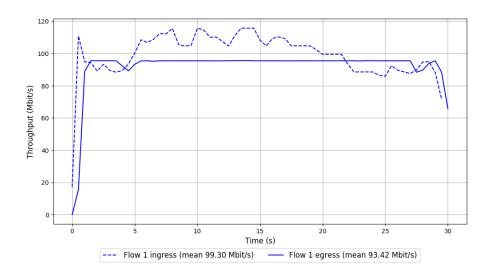
-- Flow 1:

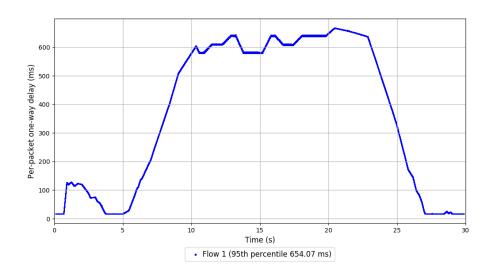
Average throughput: 93.42 Mbit/s

95th percentile per-packet one-way delay: 654.065 ms

Loss rate: 6.07%

Run 5: Report of PCC-Expr — Data Link





# Run 1: Statistics of QUIC Cubic

Start at: 2019-10-03 07:26:35 End at: 2019-10-03 07:27:05 Local clock offset: 6.756 ms Remote clock offset: -2.896 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 84.24 Mbit/s

95th percentile per-packet one-way delay: 28.420 ms

Loss rate: 0.21%

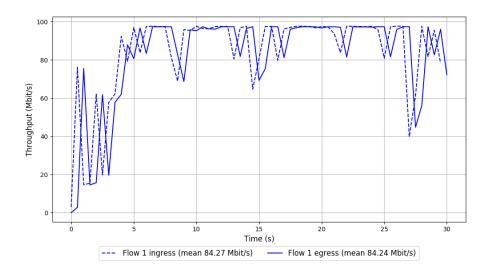
-- Flow 1:

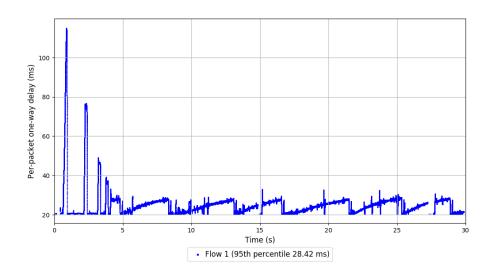
Average throughput: 84.24 Mbit/s

95th percentile per-packet one-way delay: 28.420 ms

Loss rate: 0.21%

Run 1: Report of QUIC Cubic — Data Link





# Run 2: Statistics of QUIC Cubic

Start at: 2019-10-03 08:02:39 End at: 2019-10-03 08:03:09 Local clock offset: 6.06 ms Remote clock offset: -1.195 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 84.24 Mbit/s

95th percentile per-packet one-way delay: 27.513 ms

Loss rate: 0.28%

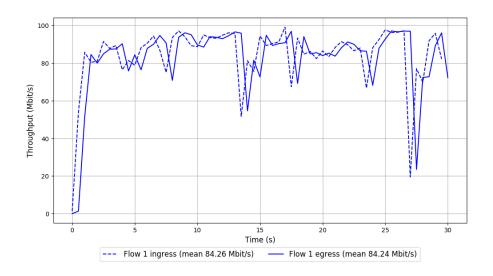
-- Flow 1:

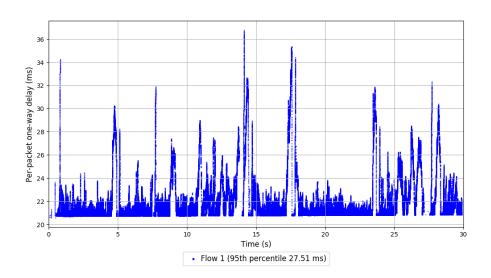
Average throughput: 84.24 Mbit/s

95th percentile per-packet one-way delay: 27.513 ms

Loss rate: 0.28%

Run 2: Report of QUIC Cubic — Data Link





# Run 3: Statistics of QUIC Cubic

Start at: 2019-10-03 08:32:49 End at: 2019-10-03 08:33:19 Local clock offset: 0.881 ms Remote clock offset: -0.514 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 28.292 ms

Loss rate: 0.21%

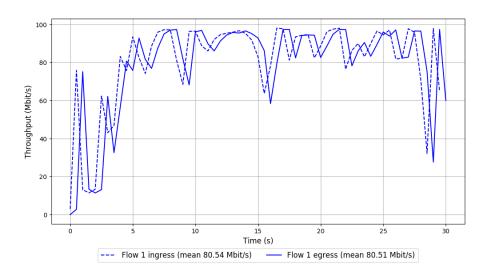
-- Flow 1:

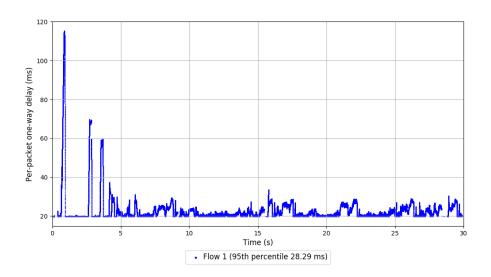
Average throughput: 80.51 Mbit/s

95th percentile per-packet one-way delay: 28.292 ms

Loss rate: 0.21%

Run 3: Report of QUIC Cubic — Data Link





# Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 09:02:21 End at: 2019-10-03 09:02:51 Local clock offset: 6.387 ms Remote clock offset: 0.519 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 30.203 ms

Loss rate: 0.30%

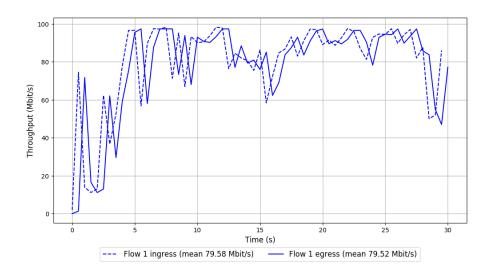
-- Flow 1:

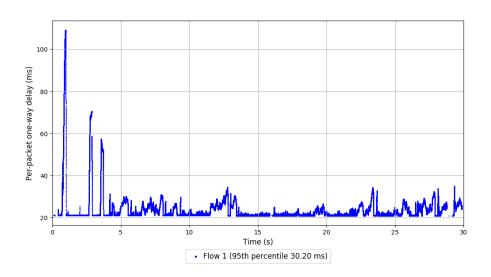
Average throughput: 79.52 Mbit/s

95th percentile per-packet one-way delay: 30.203 ms

Loss rate: 0.30%

Run 4: Report of QUIC Cubic — Data Link





# Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 09:31:59 End at: 2019-10-03 09:32:29 Local clock offset: 6.504 ms Remote clock offset: 1.542 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 26.136 ms

Loss rate: 0.26%

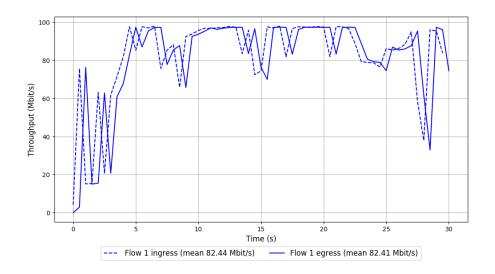
-- Flow 1:

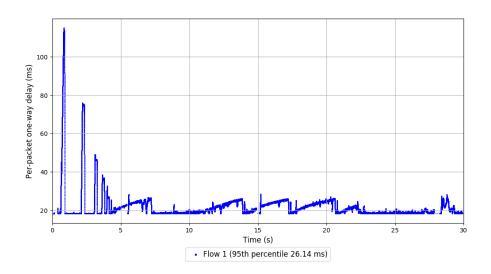
Average throughput: 82.41 Mbit/s

95th percentile per-packet one-way delay: 26.136 ms

Loss rate: 0.26%

Run 5: Report of QUIC Cubic — Data Link





### Run 1: Statistics of SCReAM

Start at: 2019-10-03 07:10:48 End at: 2019-10-03 07:11:18 Local clock offset: 5.806 ms Remote clock offset: -1.694 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.506 ms

Loss rate: 0.25%

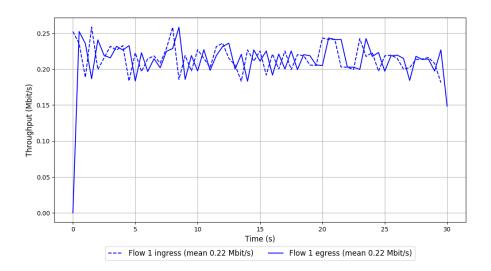
-- Flow 1:

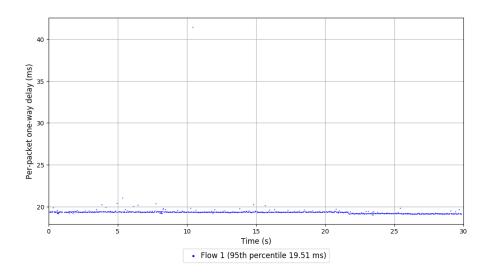
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 19.506 ms

Loss rate: 0.25%

Run 1: Report of SCReAM — Data Link





### Run 2: Statistics of SCReAM

Start at: 2019-10-03 07:44:53 End at: 2019-10-03 07:45:23 Local clock offset: 4.411 ms Remote clock offset: -0.433 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay:  $14.930~\mathrm{ms}$ 

Loss rate: 0.26%

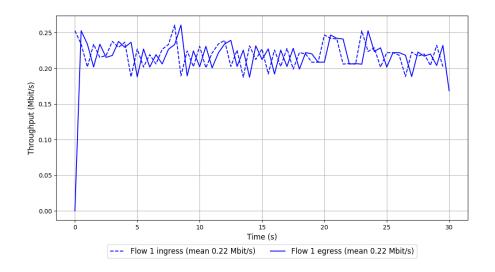
-- Flow 1:

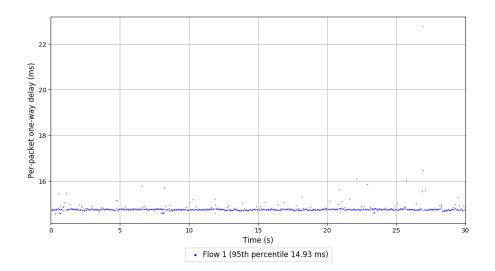
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 14.930 ms

Loss rate: 0.26%

Run 2: Report of SCReAM — Data Link





### Run 3: Statistics of SCReAM

Start at: 2019-10-03 08:17:47 End at: 2019-10-03 08:18:17 Local clock offset: 2.334 ms Remote clock offset: 1.348 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 16.728 ms

Loss rate: 0.13%

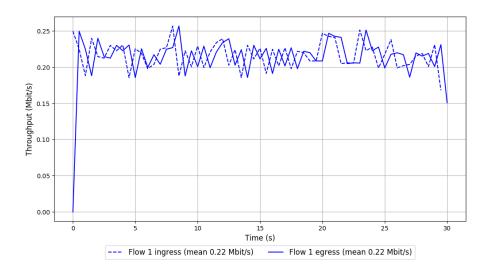
-- Flow 1:

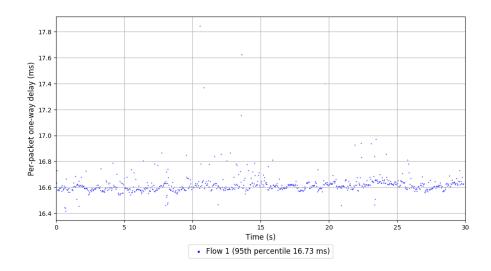
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 16.728 ms

Loss rate: 0.13%

Run 3: Report of SCReAM — Data Link





### Run 4: Statistics of SCReAM

Start at: 2019-10-03 08:48:05 End at: 2019-10-03 08:48:35 Local clock offset: -1.926 ms Remote clock offset: 1.206 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.676 ms

Loss rate: 0.26%

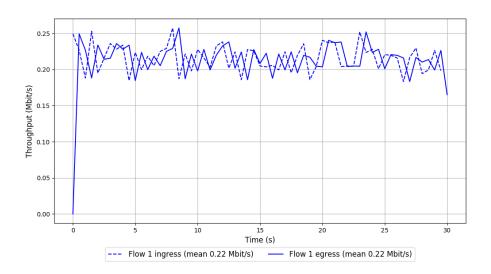
-- Flow 1:

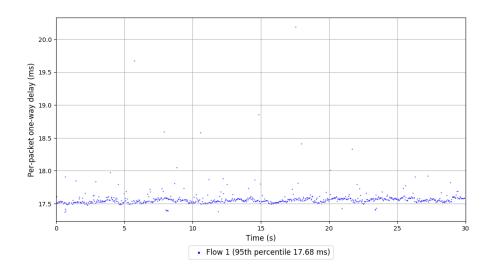
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 17.676 ms

Loss rate: 0.26%

Run 4: Report of SCReAM — Data Link





### Run 5: Statistics of SCReAM

Start at: 2019-10-03 09:17:08 End at: 2019-10-03 09:17:38 Local clock offset: 5.192 ms Remote clock offset: 0.284 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 16.530 ms

Loss rate: 0.12%

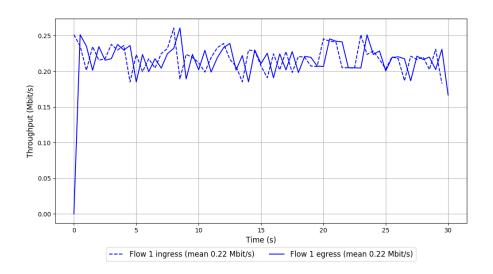
-- Flow 1:

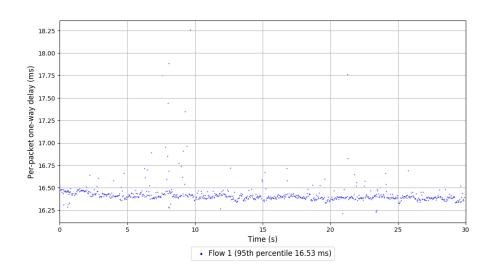
Average throughput: 0.22 Mbit/s

95th percentile per-packet one-way delay: 16.530 ms

Loss rate: 0.12%

Run 5: Report of SCReAM — Data Link





# Run 1: Statistics of Sprout

Start at: 2019-10-03 07:05:13 End at: 2019-10-03 07:05:43 Local clock offset: 5.394 ms Remote clock offset: -1.839 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 26.273 ms

Loss rate: 0.34%

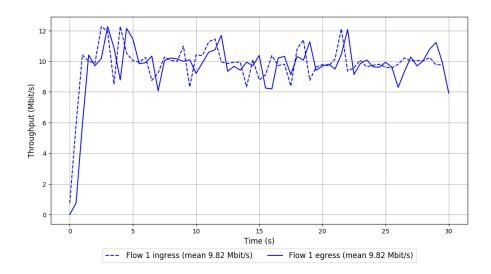
-- Flow 1:

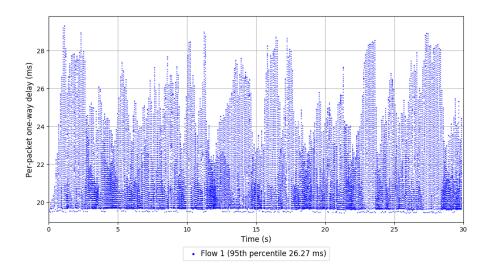
Average throughput: 9.82 Mbit/s

95th percentile per-packet one-way delay: 26.273 ms

Loss rate: 0.34%

Run 1: Report of Sprout — Data Link





# Run 2: Statistics of Sprout

Start at: 2019-10-03 07:39:22 End at: 2019-10-03 07:39:52 Local clock offset: 8.911 ms Remote clock offset: -1.373 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 23.904 ms

Loss rate: 0.17%

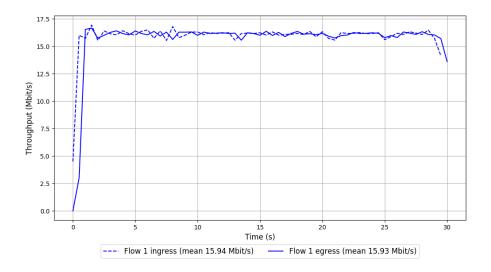
-- Flow 1:

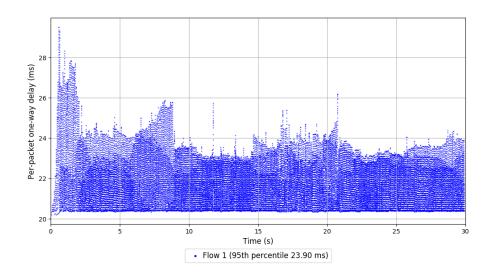
Average throughput: 15.93 Mbit/s

95th percentile per-packet one-way delay: 23.904 ms

Loss rate: 0.17%

Run 2: Report of Sprout — Data Link





# Run 3: Statistics of Sprout

Start at: 2019-10-03 08:12:53 End at: 2019-10-03 08:13:23 Local clock offset: 1.438 ms Remote clock offset: -0.983 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 23.360 ms

Loss rate: 0.25%

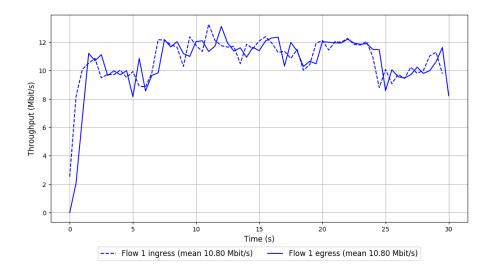
-- Flow 1:

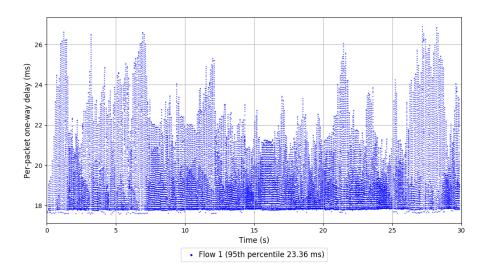
Average throughput: 10.80 Mbit/s

95th percentile per-packet one-way delay: 23.360 ms

Loss rate: 0.25%

Run 3: Report of Sprout — Data Link





# Run 4: Statistics of Sprout

Start at: 2019-10-03 08:43:08 End at: 2019-10-03 08:43:38 Local clock offset: -3.448 ms Remote clock offset: -0.627 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 12.49 Mbit/s

95th percentile per-packet one-way delay: 23.365 ms

Loss rate: 0.26%

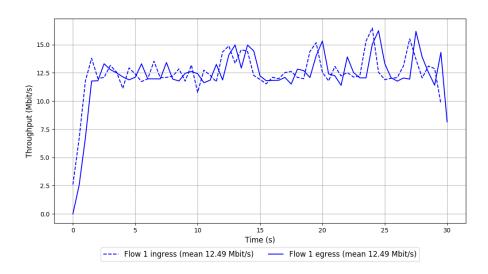
-- Flow 1:

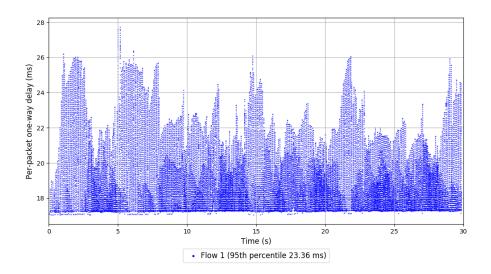
Average throughput: 12.49 Mbit/s

95th percentile per-packet one-way delay: 23.365 ms

Loss rate: 0.26%

Run 4: Report of Sprout — Data Link





# Run 5: Statistics of Sprout

Start at: 2019-10-03 09:12:28 End at: 2019-10-03 09:12:58 Local clock offset: 6.033 ms Remote clock offset: 0.924 ms

# Below is generated by plot.py at 2019-10-03 09:46:17

# Datalink statistics
-- Total of 1 flow:

Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 22.127 ms

Loss rate: 0.13%

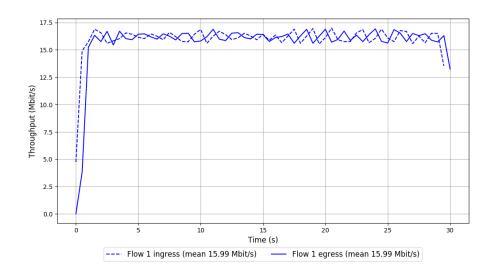
-- Flow 1:

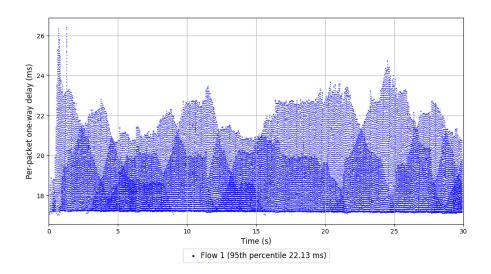
Average throughput: 15.99 Mbit/s

95th percentile per-packet one-way delay: 22.127 ms

Loss rate: 0.13%

Run 5: Report of Sprout — Data Link





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

Start at: 2019-10-03 06:58:43 End at: 2019-10-03 06:59:13 Local clock offset: 5.932 ms Remote clock offset: -0.733 ms

# Below is generated by plot.py at 2019-10-03 09:47:03

# Datalink statistics
-- Total of 1 flow:

Average throughput: 65.57 Mbit/s

95th percentile per-packet one-way delay: 26.161 ms

Loss rate: 0.13%

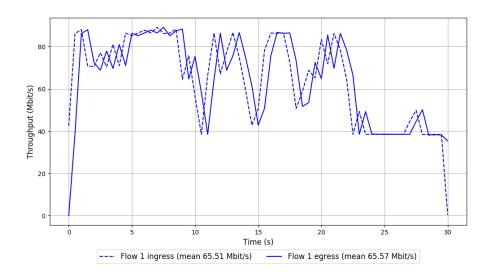
-- Flow 1:

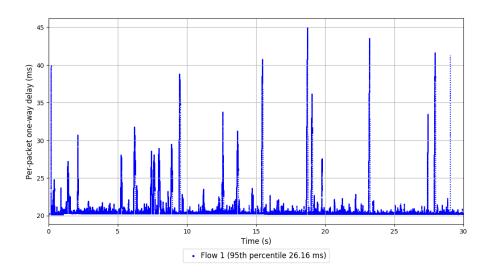
Average throughput: 65.57 Mbit/s

95th percentile per-packet one-way delay: 26.161 ms

Loss rate: 0.13%

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





## Run 2: Statistics of TaoVA-100x

Start at: 2019-10-03 07:32:33 End at: 2019-10-03 07:33:03 Local clock offset: 10.398 ms Remote clock offset: -1.643 ms

# Below is generated by plot.py at 2019-10-03 09:47:42

# Datalink statistics
-- Total of 1 flow:

Average throughput: 90.14 Mbit/s

95th percentile per-packet one-way delay: 30.887 ms

Loss rate: 0.21%

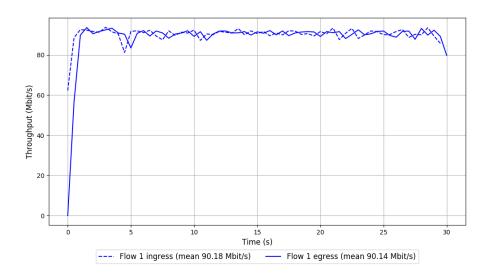
-- Flow 1:

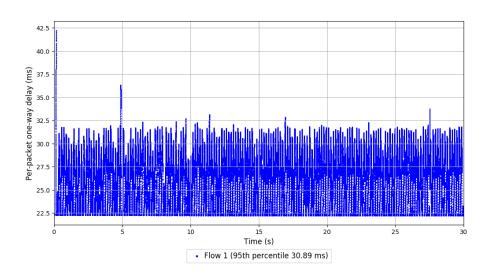
Average throughput: 90.14 Mbit/s

95th percentile per-packet one-way delay: 30.887 ms

Loss rate: 0.21%

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





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

Start at: 2019-10-03 08:07:40 End at: 2019-10-03 08:08:10 Local clock offset: 7.465 ms Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-10-03 09:47:42

# Datalink statistics
-- Total of 1 flow:

Average throughput: 62.73 Mbit/s

95th percentile per-packet one-way delay: 28.815 ms

Loss rate: 0.14%

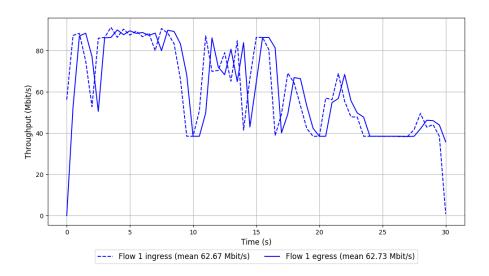
-- Flow 1:

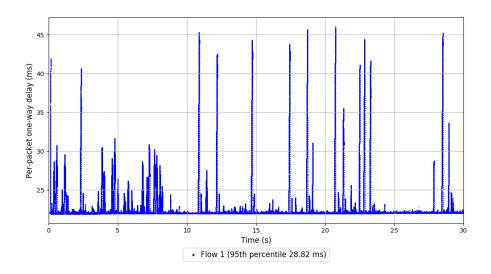
Average throughput: 62.73 Mbit/s

95th percentile per-packet one-way delay: 28.815 ms

Loss rate: 0.14%

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





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

Start at: 2019-10-03 08:37:37 End at: 2019-10-03 08:38:07 Local clock offset: -2.524 ms Remote clock offset: 0.959 ms

# Below is generated by plot.py at 2019-10-03 09:47:42

# Datalink statistics
-- Total of 1 flow:

Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 20.448 ms

Loss rate: 0.17%

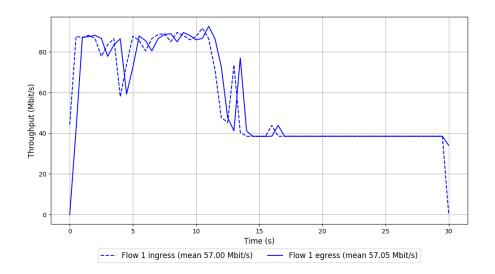
-- Flow 1:

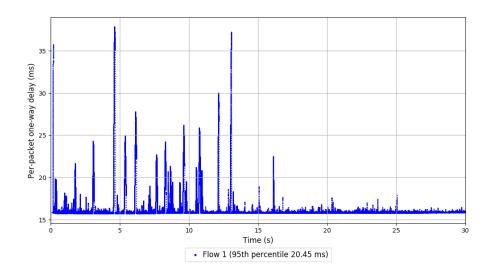
Average throughput: 57.05 Mbit/s

95th percentile per-packet one-way delay: 20.448 ms

Loss rate: 0.17%

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





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

Start at: 2019-10-03 09:07:12 End at: 2019-10-03 09:07:42 Local clock offset: 3.64 ms Remote clock offset: 0.505 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 89.95 Mbit/s

95th percentile per-packet one-way delay: 24.897 ms

Loss rate: 0.15%

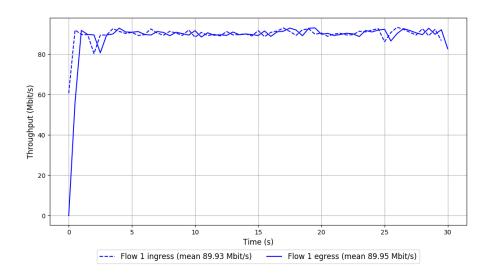
-- Flow 1:

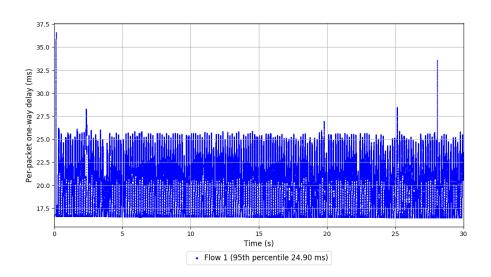
Average throughput: 89.95 Mbit/s

95th percentile per-packet one-way delay: 24.897 ms

Loss rate: 0.15%

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





# Run 1: Statistics of TCP Vegas

Start at: 2019-10-03 06:56:02 End at: 2019-10-03 06:56:32 Local clock offset: 2.404 ms Remote clock offset: -2.483 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 19.576 ms

Loss rate: 0.10%

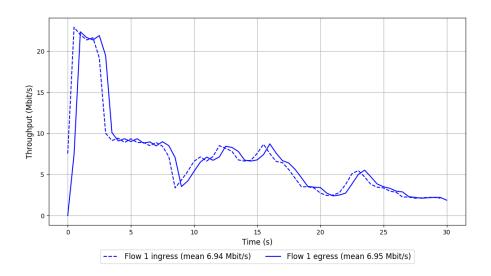
-- Flow 1:

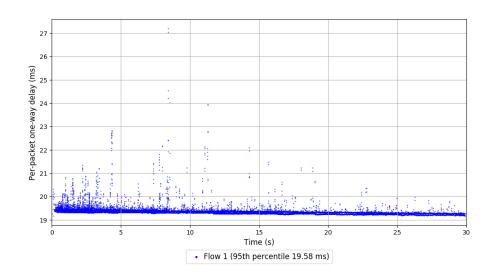
Average throughput: 6.95 Mbit/s

95th percentile per-packet one-way delay: 19.576 ms

Loss rate: 0.10%

Run 1: Report of TCP Vegas — Data Link





# Run 2: Statistics of TCP Vegas

Start at: 2019-10-03 07:29:34 End at: 2019-10-03 07:30:04 Local clock offset: 7.756 ms Remote clock offset: 0.228 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 20.283 ms

Loss rate: 0.18%

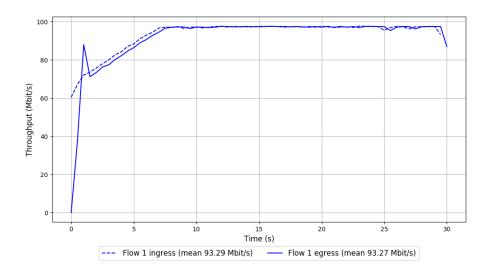
-- Flow 1:

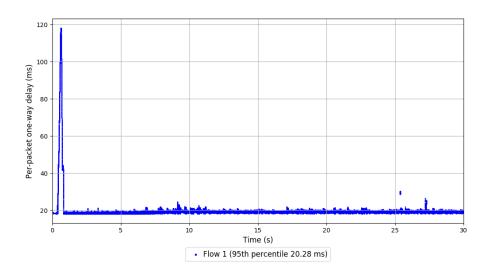
Average throughput: 93.27 Mbit/s

95th percentile per-packet one-way delay: 20.283 ms

Loss rate: 0.18%

Run 2: Report of TCP Vegas — Data Link





# Run 3: Statistics of TCP Vegas

Start at: 2019-10-03 08:05:14 End at: 2019-10-03 08:05:44 Local clock offset: 2.572 ms Remote clock offset: -1.118 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 11.40 Mbit/s

95th percentile per-packet one-way delay: 18.105 ms

Loss rate: 0.14%

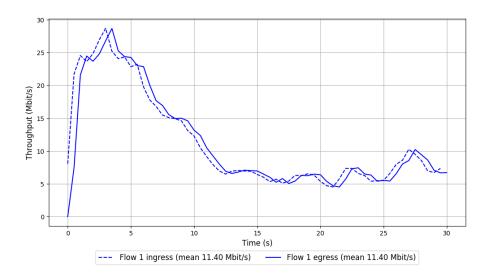
-- Flow 1:

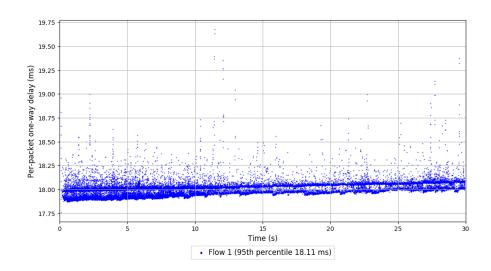
Average throughput: 11.40 Mbit/s

95th percentile per-packet one-way delay: 18.105 ms

Loss rate: 0.14%

Run 3: Report of TCP Vegas — Data Link





# Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 08:35:14 End at: 2019-10-03 08:35:44 Local clock offset: 0.337 ms Remote clock offset: -1.139 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 25.365 ms

Loss rate: 0.02%

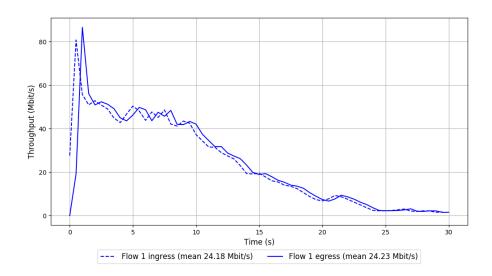
-- Flow 1:

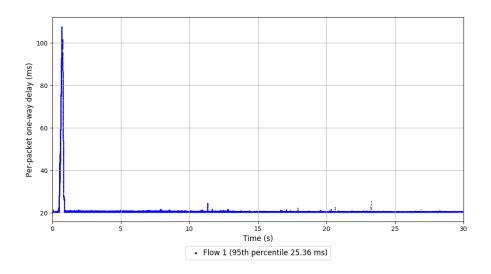
Average throughput: 24.23 Mbit/s

95th percentile per-packet one-way delay: 25.365 ms

Loss rate: 0.02%

Run 4: Report of TCP Vegas — Data Link





# Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 09:04:44 End at: 2019-10-03 09:05:14 Local clock offset: 0.161 ms Remote clock offset: -3.053 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 88.18 Mbit/s

95th percentile per-packet one-way delay: 18.780 ms

Loss rate: 0.19%

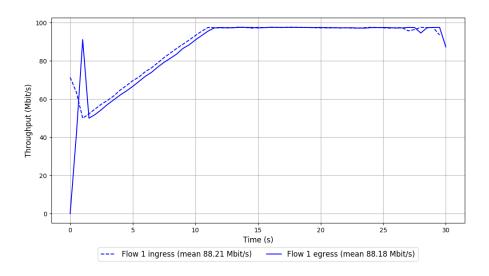
-- Flow 1:

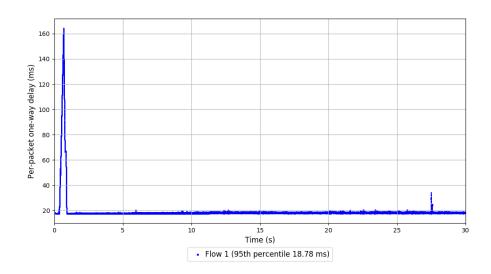
Average throughput: 88.18 Mbit/s

95th percentile per-packet one-way delay: 18.780 ms

Loss rate: 0.19%

Run 5: Report of TCP Vegas — Data Link





### Run 1: Statistics of Verus

Start at: 2019-10-03 07:01:40 End at: 2019-10-03 07:02:10 Local clock offset: 2.231 ms Remote clock offset: -1.714 ms

# Below is generated by plot.py at 2019-10-03 09:47:57

# Datalink statistics
-- Total of 1 flow:

Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 64.780 ms

Loss rate: 0.48%

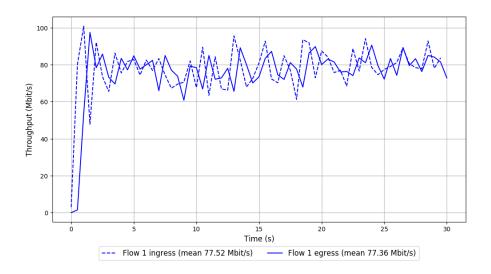
-- Flow 1:

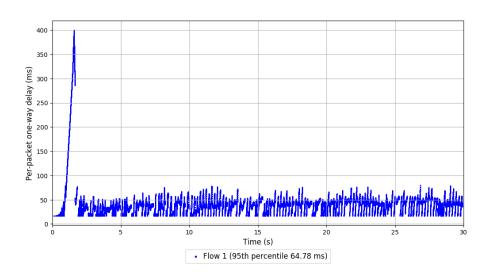
Average throughput: 77.36 Mbit/s

95th percentile per-packet one-way delay: 64.780 ms

Loss rate: 0.48%

Run 1: Report of Verus — Data Link





## Run 2: Statistics of Verus

Start at: 2019-10-03 07:35:58 End at: 2019-10-03 07:36:28 Local clock offset: 5.793 ms Remote clock offset: -0.343 ms

# Below is generated by plot.py at 2019-10-03 09:48:07

# Datalink statistics
-- Total of 1 flow:

Average throughput: 88.62 Mbit/s

95th percentile per-packet one-way delay: 51.503 ms

Loss rate: 0.29%

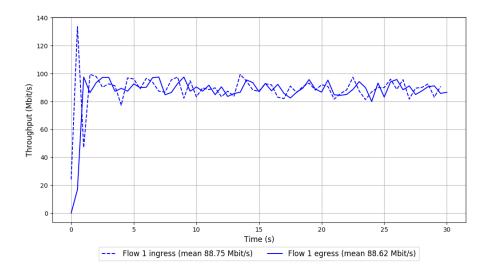
-- Flow 1:

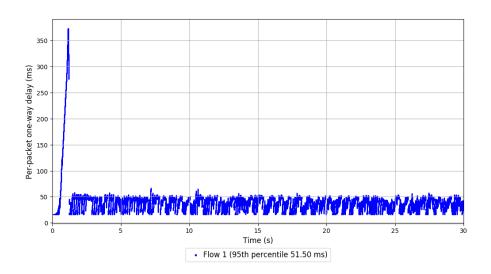
Average throughput: 88.62 Mbit/s

95th percentile per-packet one-way delay: 51.503 ms

Loss rate: 0.29%

Run 2: Report of Verus — Data Link





## Run 3: Statistics of Verus

Start at: 2019-10-03 08:10:07 End at: 2019-10-03 08:10:37 Local clock offset: 1.251 ms Remote clock offset: -0.709 ms

# Below is generated by plot.py at 2019-10-03 09:48:07

# Datalink statistics
-- Total of 1 flow:

Average throughput: 81.03 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.34%

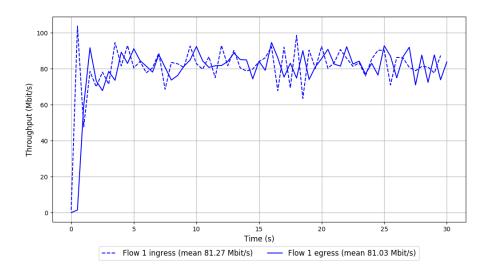
-- Flow 1:

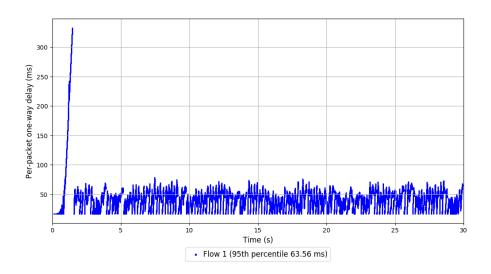
Average throughput: 81.03 Mbit/s

95th percentile per-packet one-way delay: 63.561 ms

Loss rate: 0.34%

Run 3: Report of Verus — Data Link





## Run 4: Statistics of Verus

Start at: 2019-10-03 08:40:28 End at: 2019-10-03 08:40:58 Local clock offset: -2.359 ms Remote clock offset: 0.316 ms

# Below is generated by plot.py at 2019-10-03 09:48:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 81.60 Mbit/s

95th percentile per-packet one-way delay: 60.867 ms

Loss rate: 0.30%

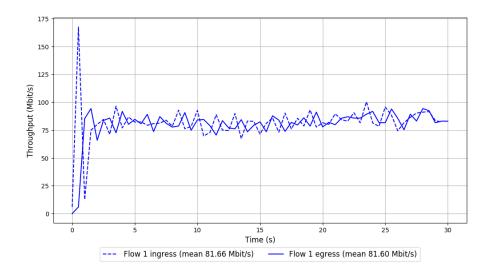
-- Flow 1:

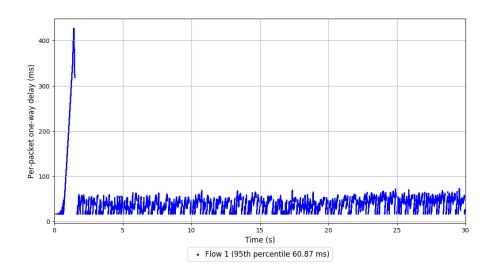
Average throughput: 81.60 Mbit/s

95th percentile per-packet one-way delay: 60.867 ms

Loss rate: 0.30%

Run 4: Report of Verus — Data Link





## Run 5: Statistics of Verus

Start at: 2019-10-03 09:09:50 End at: 2019-10-03 09:10:20 Local clock offset: 8.092 ms Remote clock offset: -0.859 ms

# Below is generated by plot.py at 2019-10-03 09:48:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 81.80 Mbit/s

95th percentile per-packet one-way delay: 64.678 ms

Loss rate: 0.27%

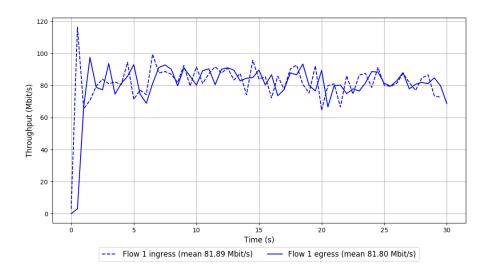
-- Flow 1:

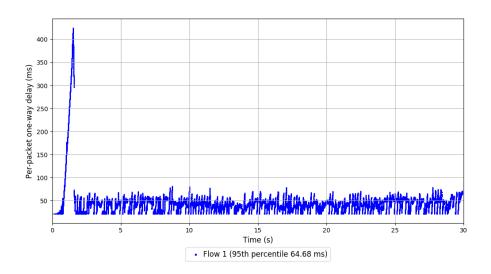
Average throughput: 81.80 Mbit/s

95th percentile per-packet one-way delay: 64.678 ms

Loss rate: 0.27%

Run 5: Report of Verus — Data Link





## Run 1: Statistics of PCC-Vivace

Start at: 2019-10-03 07:11:54 End at: 2019-10-03 07:12:24 Local clock offset: 5.158 ms Remote clock offset: -2.19 ms

# Below is generated by plot.py at 2019-10-03 09:48:08

# Datalink statistics
-- Total of 1 flow:

Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 19.253 ms

Loss rate: 0.27%

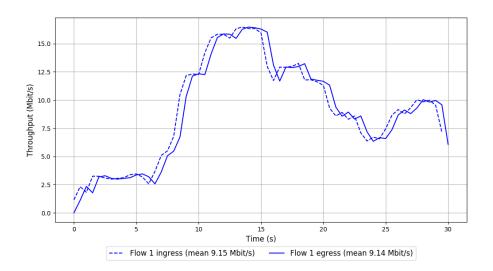
-- Flow 1:

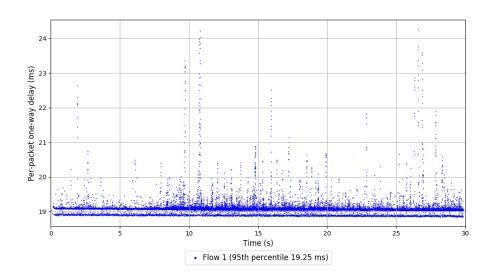
Average throughput: 9.14 Mbit/s

95th percentile per-packet one-way delay: 19.253 ms

Loss rate: 0.27%

Run 1: Report of PCC-Vivace — Data Link





# Run 2: Statistics of PCC-Vivace

Start at: 2019-10-03 07:45:58 End at: 2019-10-03 07:46:28 Local clock offset: 3.795 ms Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2019-10-03 09:48:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 83.41 Mbit/s

95th percentile per-packet one-way delay: 14.791 ms

Loss rate: 0.17%

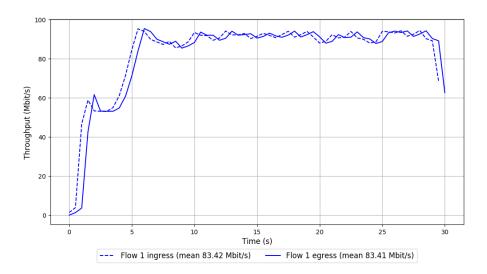
-- Flow 1:

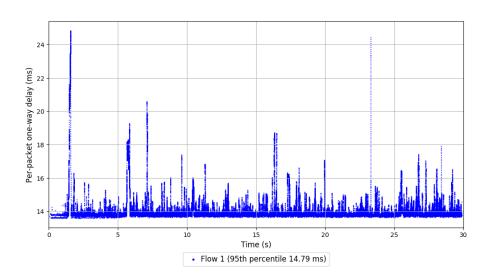
Average throughput: 83.41 Mbit/s

95th percentile per-packet one-way delay: 14.791 ms

Loss rate: 0.17%

Run 2: Report of PCC-Vivace — Data Link





## Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 08:18:53 End at: 2019-10-03 08:19:23 Local clock offset: 3.379 ms Remote clock offset: -1.252 ms

# Below is generated by plot.py at 2019-10-03 09:48:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 16.14 Mbit/s

95th percentile per-packet one-way delay: 20.503 ms

Loss rate: 0.34%

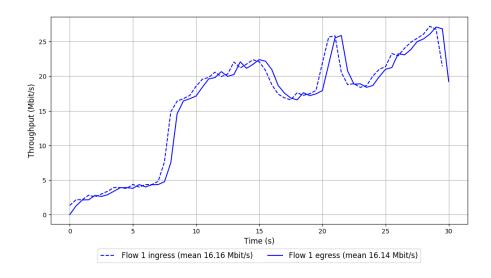
-- Flow 1:

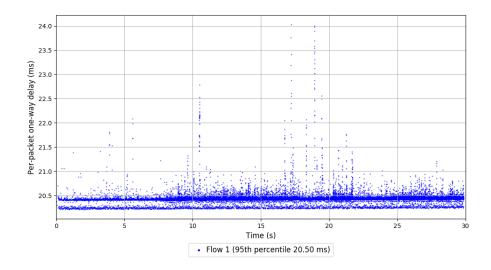
Average throughput: 16.14 Mbit/s

95th percentile per-packet one-way delay: 20.503 ms

Loss rate: 0.34%

Run 3: Report of PCC-Vivace — Data Link





## Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 08:49:11 End at: 2019-10-03 08:49:41 Local clock offset: 1.703 ms Remote clock offset: 0.346 ms

# Below is generated by plot.py at 2019-10-03 09:48:13

# Datalink statistics
-- Total of 1 flow:

Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 29.739 ms

Loss rate: 0.32%

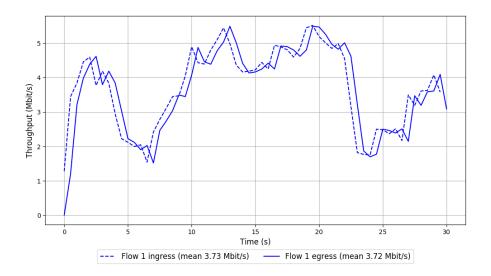
-- Flow 1:

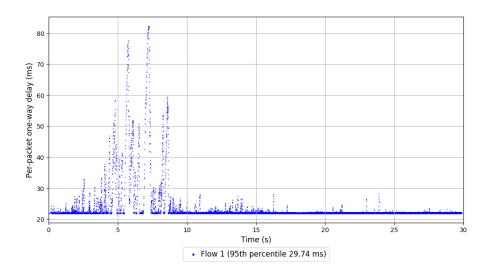
Average throughput: 3.72 Mbit/s

95th percentile per-packet one-way delay: 29.739 ms

Loss rate: 0.32%

Run 4: Report of PCC-Vivace — Data Link





## Run 5: Statistics of PCC-Vivace

Start at: 2019-10-03 09:18:13 End at: 2019-10-03 09:18:44 Local clock offset: 10.582 ms Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 23.131 ms

Loss rate: 0.18%

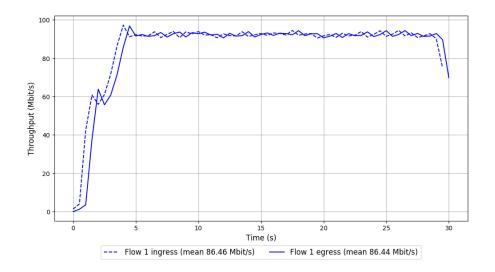
-- Flow 1:

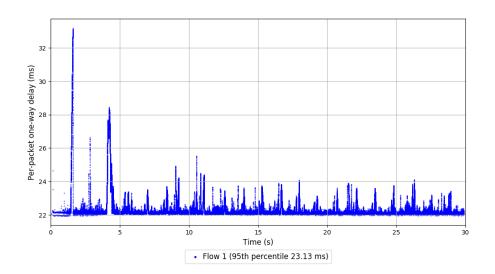
Average throughput: 86.44 Mbit/s

95th percentile per-packet one-way delay: 23.131 ms

Loss rate: 0.18%

Run 5: Report of PCC-Vivace — Data Link





## Run 1: Statistics of WebRTC media

Start at: 2019-10-03 07:25:28 End at: 2019-10-03 07:25:58 Local clock offset: 4.959 ms Remote clock offset: -0.536 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 17.049 ms

Loss rate: 0.19%

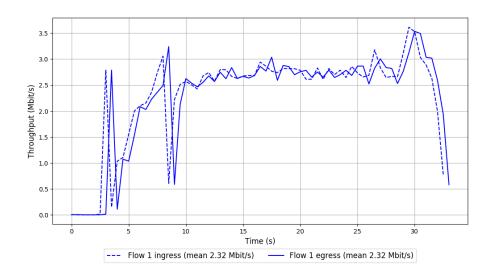
-- Flow 1:

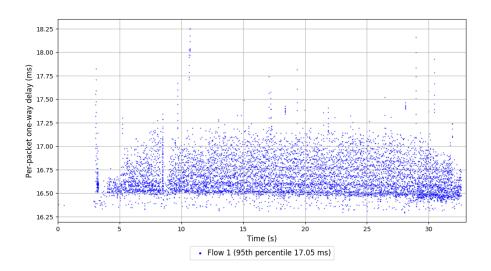
Average throughput: 2.32 Mbit/s

95th percentile per-packet one-way delay: 17.049 ms

Loss rate: 0.19%

Run 1: Report of WebRTC media — Data Link





## Run 2: Statistics of WebRTC media

Start at: 2019-10-03 08:01:32 End at: 2019-10-03 08:02:02 Local clock offset: 3.708 ms Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 17.498 ms

Loss rate: 0.24%

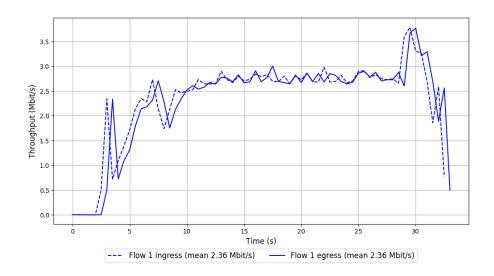
-- Flow 1:

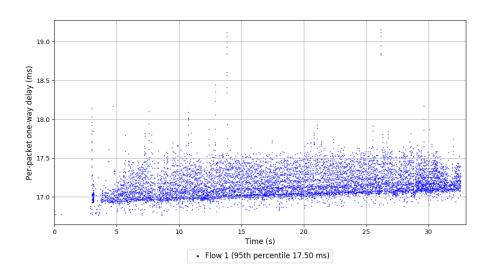
Average throughput: 2.36 Mbit/s

95th percentile per-packet one-way delay: 17.498 ms

Loss rate: 0.24%

Run 2: Report of WebRTC media — Data Link





## Run 3: Statistics of WebRTC media

Start at: 2019-10-03 08:31:42 End at: 2019-10-03 08:32:12 Local clock offset: 3.041 ms Remote clock offset: -1.718 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 23.501 ms

Loss rate: 0.19%

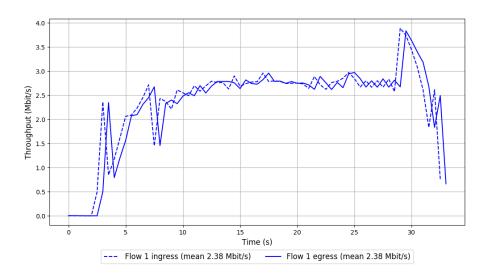
-- Flow 1:

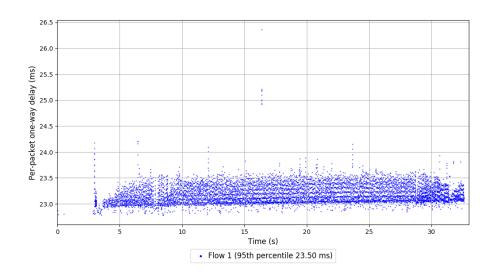
Average throughput: 2.38 Mbit/s

95th percentile per-packet one-way delay: 23.501 ms

Loss rate: 0.19%

Run 3: Report of WebRTC media — Data Link





## Run 4: Statistics of WebRTC media

Start at: 2019-10-03 09:01:14 End at: 2019-10-03 09:01:44 Local clock offset: 0.971 ms Remote clock offset: 1.889 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 15.101 ms

Loss rate: 0.37%

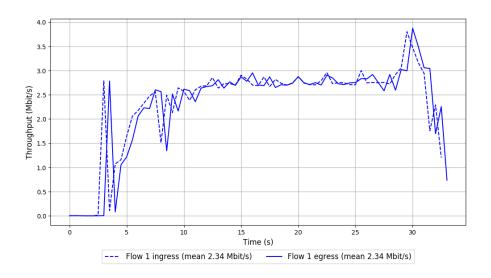
-- Flow 1:

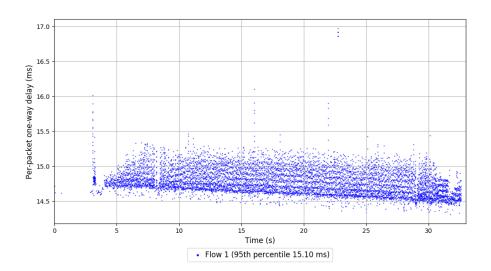
Average throughput: 2.34 Mbit/s

95th percentile per-packet one-way delay: 15.101 ms

Loss rate: 0.37%

Run 4: Report of WebRTC media — Data Link





## Run 5: Statistics of WebRTC media

Start at: 2019-10-03 09:30:53 End at: 2019-10-03 09:31:23 Local clock offset: 4.171 ms Remote clock offset: -0.47 ms

# Below is generated by plot.py at 2019-10-03 09:48:16

# Datalink statistics
-- Total of 1 flow:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 18.115 ms

Loss rate: 0.13%

-- Flow 1:

Average throughput: 2.37 Mbit/s

95th percentile per-packet one-way delay: 18.115 ms

Loss rate: 0.13%

Run 5: Report of WebRTC media — Data Link

