Pantheon Report

Generated at 2019-10-03 13:58:30 (UTC).
Data path: India on em1 (remote) → AWS India 1 on ens5 (local).
Repeated the test of 24 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
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 @ de42328552b3776a75a932a94dfafdf722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fd45e12e923f9
third_party/genericCC @ d0153f8e6594aa89e93b032143cedbfe58e562f4
third_party/indigo @ 2601c92e4a9d58d38dc4dfe0edbf90077e6d4
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da0955337730c746486ca4966
third_party/muses-dtree @ 387225f7b5f61ddeb92d708a8869fbb84eb3200
third_party/pantheon-tunnel @ f8663f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1af958fa0d86d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f6513e8acd08fab92c4e24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cfd4f
third_party/scream-reproduce @ f099118d1421a3131bf11ff1964974ae1da3db2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
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Run 1: Statistics of TCP BBR

Start at: 2019-10-03 11:12:31
End at: 2019-10-03 11:13:01
Local clock offset: 2.939 ms
Remote clock offset: -0.867 ms

# Below is generated by plot.py at 2019-10-03 13:43:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.01 Mbit/s
  95th percentile per-packet one-way delay: 397.346 ms
  Loss rate: 1.73%
-- Flow 1:
  Average throughput: 55.79 Mbit/s
  95th percentile per-packet one-way delay: 122.208 ms
  Loss rate: 1.25%
-- Flow 2:
  Average throughput: 47.67 Mbit/s
  95th percentile per-packet one-way delay: 248.520 ms
  Loss rate: 1.49%
-- Flow 3:
  Average throughput: 25.60 Mbit/s
  95th percentile per-packet one-way delay: 556.442 ms
  Loss rate: 5.58%
Run 1: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 56.41 Mbit/s) — Flow 1 egress (mean 55.79 Mbit/s)
Flow 2 ingress (mean 48.27 Mbit/s) — Flow 2 egress (mean 47.67 Mbit/s)
Flow 3 ingress (mean 26.97 Mbit/s) — Flow 3 egress (mean 25.60 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 122.21 ms) — Flow 2 (95th percentile 248.52 ms) — Flow 3 (95th percentile 556.44 ms)
Run 2: Statistics of TCP BBR

Start at: 2019-10-03 11:44:21
End at: 2019-10-03 11:44:51
Local clock offset: 3.897 ms
Remote clock offset: -2.747 ms

# Below is generated by plot.py at 2019-10-03 13:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.92 Mbit/s
  95th percentile per-packet one-way delay: 168.410 ms
  Loss rate: 2.63%
-- Flow 1:
  Average throughput: 56.15 Mbit/s
  95th percentile per-packet one-way delay: 166.164 ms
  Loss rate: 2.69%
-- Flow 2:
  Average throughput: 36.12 Mbit/s
  95th percentile per-packet one-way delay: 263.959 ms
  Loss rate: 2.60%
-- Flow 3:
  Average throughput: 47.52 Mbit/s
  95th percentile per-packet one-way delay: 125.393 ms
  Loss rate: 2.47%
Run 2: Report of TCP BBR — Data Link

![Graph showing network performance metrics for different flows and time periods.](image-url)
Run 3: Statistics of TCP BBR

Start at: 2019-10-03 12:17:10
End at: 2019-10-03 12:17:40
Local clock offset: -1.311 ms
Remote clock offset: -3.428 ms

# Below is generated by plot.py at 2019-10-03 13:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.03 Mbit/s
95th percentile per-packet one-way delay: 171.078 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 55.97 Mbit/s
95th percentile per-packet one-way delay: 120.231 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 47.75 Mbit/s
95th percentile per-packet one-way delay: 237.627 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 343.390 ms
Loss rate: 2.96%
Run 3: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay](image)
Run 4: Statistics of TCP BBR

Start at: 2019-10-03 12:49:17
End at: 2019-10-03 12:49:47
Local clock offset: 4.646 ms
Remote clock offset: -3.522 ms

# Below is generated by plot.py at 2019-10-03 13:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.11 Mbit/s
95th percentile per-packet one-way delay: 192.945 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 122.288 ms
Loss rate: 2.05%
-- Flow 2:
Average throughput: 40.04 Mbit/s
95th percentile per-packet one-way delay: 156.471 ms
Loss rate: 4.89%
-- Flow 3:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 438.661 ms
Loss rate: 3.50%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 5: Statistics of TCP BBR

Start at: 2019-10-03 13:21:06
End at: 2019-10-03 13:21:36
Local clock offset: 1.487 ms
Remote clock offset: -2.575 ms

# Below is generated by plot.py at 2019-10-03 13:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 146.641 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 121.269 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 235.682 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 32.47 Mbit/s
95th percentile per-packet one-way delay: 190.617 ms
Loss rate: 2.18%
Run 5: Report of TCP BBR — Data Link

![Throughput vs Time Graph](image1)

![Delay vs Time Graph](image2)
Run 1: Statistics of Copa

Start at: 2019-10-03 11:20:25
End at: 2019-10-03 11:20:55
Local clock offset: -0.143 ms
Remote clock offset: -0.896 ms

# Below is generated by plot.py at 2019-10-03 13:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.18 Mbit/s
95th percentile per-packet one-way delay: 33.060 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 44.04 Mbit/s
95th percentile per-packet one-way delay: 39.989 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.56 Mbit/s
95th percentile per-packet one-way delay: 24.364 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 27.010 ms
Loss rate: 0.41%
Run 1: Report of Copa — Data Link

![Graph 1: Throughput (Mbps/s) vs Time (s)](image1)
Flow 1 ingress (mean 44.01 Mbps/s)
Flow 1 egress (mean 44.04 Mbps/s)
Flow 2 ingress (mean 39.55 Mbps/s)
Flow 2 egress (mean 39.56 Mbps/s)
Flow 3 ingress (mean 32.55 Mbps/s)
Flow 3 egress (mean 32.57 Mbps/s)

![Graph 2: Per-packet one-way delay (ms) vs Time (s)](image2)
Flow 1 (95th percentile 39.99 ms)
Flow 2 (95th percentile 24.36 ms)
Flow 3 (95th percentile 27.01 ms)
Run 2: Statistics of Copa

Start at: 2019-10-03 11:52:45
End at: 2019-10-03 11:53:15
Local clock offset: 2.041 ms
Remote clock offset: -1.569 ms

# Below is generated by plot.py at 2019-10-03 13:43:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.68 Mbit/s
  95th percentile per-packet one-way delay: 31.061 ms
  Loss rate: 0.23%
-- Flow 1:
  Average throughput: 56.24 Mbit/s
  95th percentile per-packet one-way delay: 35.725 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 29.10 Mbit/s
  95th percentile per-packet one-way delay: 29.524 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 30.37 Mbit/s
  95th percentile per-packet one-way delay: 24.249 ms
  Loss rate: 0.96%
Run 2: Report of Copa — Data Link

1. Throughput (Mb/s)

   - Flow 1 ingress (mean 36.20 Mb/s)
   - Flow 1 egress (mean 36.24 Mb/s)
   - Flow 2 ingress (mean 29.10 Mb/s)
   - Flow 2 egress (mean 29.10 Mb/s)
   - Flow 3 ingress (mean 30.50 Mb/s)
   - Flow 3 egress (mean 30.37 Mb/s)

2. Per-packet one-way delay [ms]

   - Flow 1 (95th percentile 35.73 ms)
   - Flow 2 (95th percentile 29.52 ms)
   - Flow 3 (95th percentile 24.25 ms)
Run 3: Statistics of Copa

Start at: 2019-10-03 12:25:09
End at: 2019-10-03 12:25:39
Local clock offset: -2.123 ms
Remote clock offset: -3.799 ms

# Below is generated by plot.py at 2019-10-03 13:43:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.78 Mbit/s
  95th percentile per-packet one-way delay: 32.068 ms
  Loss rate: 0.17%
-- Flow 1:
  Average throughput: 57.89 Mbit/s
  95th percentile per-packet one-way delay: 34.354 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 31.22 Mbit/s
  95th percentile per-packet one-way delay: 31.838 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 24.44 Mbit/s
  95th percentile per-packet one-way delay: 27.912 ms
  Loss rate: 0.58%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2019-10-03 12:57:55
End at: 2019-10-03 12:58:25
Local clock offset: 6.586 ms
Remote clock offset: -3.643 ms

# Below is generated by plot.py at 2019-10-03 13:44:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.03 Mbit/s
95th percentile per-packet one-way delay: 41.454 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 48.07 Mbit/s
95th percentile per-packet one-way delay: 51.197 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 37.79 Mbit/s
95th percentile per-packet one-way delay: 33.113 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 30.418 ms
Loss rate: 0.79%
Run 4: Report of Copa — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 48.07 Mbps)**
- **Flow 1 egress (mean 48.07 Mbps)**
- **Flow 2 ingress (mean 37.80 Mbps)**
- **Flow 2 egress (mean 37.79 Mbps)**
- **Flow 3 ingress (mean 26.55 Mbps)**
- **Flow 3 egress (mean 26.57 Mbps)**

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**Per-packet one-way delay (ms)**

- **Flow 1 (95th percentile 51.20 ms)**
- **Flow 2 (95th percentile 33.11 ms)**
- **Flow 3 (95th percentile 30.42 ms)**

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Run 5: Statistics of Copa

End at: 2019-10-03 13:29:17
Local clock offset: 1.674 ms
Remote clock offset: -3.4 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.81 Mbit/s
95th percentile per-packet one-way delay: 37.957 ms
Loss rate: 0.18%

-- Flow 1:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 48.203 ms
Loss rate: 0.14%

-- Flow 2:
Average throughput: 44.93 Mbit/s
95th percentile per-packet one-way delay: 28.508 ms
Loss rate: 0.22%

-- Flow 3:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 22.608 ms
Loss rate: 0.28%
Run 5: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2019-10-03 11:11:16
End at: 2019-10-03 11:11:46
Local clock offset: 3.226 ms
Remote clock offset: -1.588 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: 28.118 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 56.01 Mbit/s
95th percentile per-packet one-way delay: 28.491 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 27.355 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 28.351 ms
Loss rate: 0.51%
Run 1: Report of TCP Cubic — Data Link

![Graph of Throughput and Per-Packet One-Way Delay](image)

Legend:
- Flow 1 ingress (mean 35.98 Mbit/s)
- Flow 1 egress (mean 56.01 Mbit/s)
- Flow 2 ingress (mean 38.28 Mbit/s)
- Flow 2 egress (mean 38.29 Mbit/s)
- Flow 3 ingress (mean 31.76 Mbit/s)
- Flow 3 egress (mean 31.76 Mbit/s)
Run 2: Statistics of TCP Cubic

Start at: 2019-10-03 11:42:58
End at: 2019-10-03 11:43:28
Local clock offset: 4.622 ms
Remote clock offset: -2.599 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.80 Mbit/s
95th percentile per-packet one-way delay: 24.842 ms
Loss rate: 0.29%

-- Flow 1:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 22.767 ms
Loss rate: 0.24%

-- Flow 2:
Average throughput: 36.36 Mbit/s
95th percentile per-packet one-way delay: 31.472 ms
Loss rate: 0.26%

-- Flow 3:
Average throughput: 33.85 Mbit/s
95th percentile per-packet one-way delay: 24.836 ms
Loss rate: 0.56%
Run 2: Report of TCP Cubic — Data Link

![Graph showing throughput over time for different flows with their respective mean throughputs]

- Flow 1 ingress (mean 40.42 Mbit/s)
- Flow 1 egress (mean 40.39 Mbit/s)
- Flow 2 ingress (mean 36.37 Mbit/s)
- Flow 2 egress (mean 36.36 Mbit/s)
- Flow 3 ingress (mean 33.88 Mbit/s)
- Flow 3 egress (mean 33.83 Mbit/s)

![Graph showing per-packet one-way delay over time for different flows]

- Flow 1 (95th percentile 22.77 ms)
- Flow 2 (95th percentile 31.47 ms)
- Flow 3 (95th percentile 24.84 ms)
Run 3: Statistics of TCP Cubic

Start at: 2019-10-03 12:15:54
End at: 2019-10-03 12:16:24
Local clock offset: 0.068 ms
Remote clock offset: -1.417 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 26.826 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 60.87 Mbit/s
95th percentile per-packet one-way delay: 26.200 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.88 Mbit/s
95th percentile per-packet one-way delay: 32.779 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 27.033 ms
Loss rate: 0.65%
Run 3: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 60.87 Mbps)
- **Flow 1 egress** (mean 60.87 Mbps)
- **Flow 2 ingress** (mean 36.86 Mbps)
- **Flow 2 egress** (mean 36.85 Mbps)
- **Flow 3 ingress** (mean 21.90 Mbps)
- **Flow 3 egress** (mean 21.86 Mbps)

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**Per-packet one-way delay (ms)**

- **Flow 1** (95th percentile 26.20 ms)
- **Flow 2** (95th percentile 32.78 ms)
- **Flow 3** (95th percentile 27.03 ms)
Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 12:47:52
End at: 2019-10-03 12:48:22
Local clock offset: 1.286 ms
Remote clock offset: -13.212 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.25 Mbit/s
95th percentile per-packet one-way delay: 32.555 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 53.55 Mbit/s
95th percentile per-packet one-way delay: 34.413 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 38.96 Mbit/s
95th percentile per-packet one-way delay: 31.536 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 33.866 ms
Loss rate: 0.51%
Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 13:19:51
End at: 2019-10-03 13:20:21
Local clock offset: 3.189 ms
Remote clock offset: -5.019 ms

# Below is generated by plot.py at 2019-10-03 13:44:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.42 Mbit/s
  95th percentile per-packet one-way delay: 28.471 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 51.39 Mbit/s
  95th percentile per-packet one-way delay: 27.934 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 34.73 Mbit/s
  95th percentile per-packet one-way delay: 29.368 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 48.02 Mbit/s
  95th percentile per-packet one-way delay: 28.665 ms
  Loss rate: 0.53%
Run 5: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 51.36 Mbps)
Flow 1 egress (mean 51.39 Mbps)
Flow 2 ingress (mean 34.71 Mbps)
Flow 2 egress (mean 34.73 Mbps)
Flow 3 ingress (mean 48.04 Mbps)
Flow 3 egress (mean 48.02 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 27.93 ms)
Flow 2 (95th percentile 29.37 ms)
Flow 3 (95th percentile 28.66 ms)
Run 1: Statistics of FillP

Start at: 2019-10-03 11:02:34
End at: 2019-10-03 11:03:04
Local clock offset: 3.171 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2019-10-03 13:45:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 81.668 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 61.27 Mbit/s
95th percentile per-packet one-way delay: 50.553 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 95.102 ms
Loss rate: 3.23%
-- Flow 3:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 89.362 ms
Loss rate: 4.93%
Run 1: Report of FillP — Data Link

![Graph of throughput and packet delivery delay over time for different flows.]
Run 2: Statistics of FillP

Start at: 2019-10-03 11:33:38
End at: 2019-10-03 11:34:08
Local clock offset: -4.707 ms
Remote clock offset: -9.692 ms

# Below is generated by plot.py at 2019-10-03 13:45:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 84.118 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 62.06 Mbit/s
95th percentile per-packet one-way delay: 49.022 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 37.37 Mbit/s
95th percentile per-packet one-way delay: 90.288 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 95.631 ms
Loss rate: 5.69%
Run 2: Report of FillP — Data Link

![Graph showing network performance metrics]

Throughput (Mbps): [Graph showing throughput over time]

Time (s):
0 5 10 15 20 25 30

Flow 1 ingress (mean 62.11 Mbps)  Flow 1 egress (mean 62.06 Mbps)
Flow 2 ingress (mean 38.03 Mbps)  Flow 2 egress (mean 37.37 Mbps)
Flow 3 ingress (mean 25.71 Mbps)  Flow 3 egress (mean 24.37 Mbps)

Per-packet round trip delay (ms): [Graph showing per-packet round trip delay over time]

Time (s):
0 5 10 15 20 25 30

Flow 1 (95th percentile 49.02 ms)  Flow 2 (95th percentile 90.29 ms)  Flow 3 (95th percentile 95.63 ms)
Run 3: Statistics of FillP

Start at: 2019-10-03 12:06:13  
End at: 2019-10-03 12:06:43  
Local clock offset: 1.293 ms  
Remote clock offset: -1.746 ms

# Below is generated by plot.py at 2019-10-03 13:45:30  
# Datalink statistics
-- Total of 3 flows:  
  Average throughput: 94.89 Mbit/s  
  95th percentile per-packet one-way delay: 86.535 ms  
  Loss rate: 1.19%  
-- Flow 1:  
  Average throughput: 54.00 Mbit/s  
  95th percentile per-packet one-way delay: 79.233 ms  
  Loss rate: 0.22%  
-- Flow 2:  
  Average throughput: 49.44 Mbit/s  
  95th percentile per-packet one-way delay: 84.360 ms  
  Loss rate: 1.95%  
-- Flow 3:  
  Average throughput: 24.14 Mbit/s  
  95th percentile per-packet one-way delay: 96.634 ms  
  Loss rate: 4.43%
Run 3: Report of FillP — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]

- Flow 1 ingress (mean 54.05 Mbit/s)
- Flow 1 egress (mean 54.00 Mbit/s)
- Flow 2 ingress (mean 55.34 Mbit/s)
- Flow 2 egress (mean 49.44 Mbit/s)
- Flow 3 ingress (mean 25.13 Mbit/s)
- Flow 3 egress (mean 24.14 Mbit/s)
Run 4: Statistics of FILLP

Start at: 2019-10-03 12:38:26
End at: 2019-10-03 12:38:56
Local clock offset: 5.54 ms
Remote clock offset: -4.67 ms

# Below is generated by plot.py at 2019-10-03 13:45:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 86.265 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 60.96 Mbit/s
95th percentile per-packet one-way delay: 48.465 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 38.78 Mbit/s
95th percentile per-packet one-way delay: 105.902 ms
Loss rate: 4.54%
-- Flow 3:
Average throughput: 24.15 Mbit/s
95th percentile per-packet one-way delay: 84.629 ms
Loss rate: 3.00%
Run 4: Report of FillP — Data Link

![Data Link Graph](image1)

![Data Link Graph](image2)

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Run 5: Statistics of FillP

Start at: 2019-10-03 13:10:39
End at: 2019-10-03 13:11:09
Local clock offset: 4.196 ms
Remote clock offset: -3.12 ms

# Below is generated by plot.py at 2019-10-03 13:46:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.78 Mbit/s
  95th percentile per-packet one-way delay: 84.750 ms
  Loss rate: 2.02%
-- Flow 1:
  Average throughput: 61.37 Mbit/s
  95th percentile per-packet one-way delay: 45.523 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 38.12 Mbit/s
  95th percentile per-packet one-way delay: 100.235 ms
  Loss rate: 4.87%
-- Flow 3:
  Average throughput: 24.23 Mbit/s
  95th percentile per-packet one-way delay: 91.354 ms
  Loss rate: 6.62%
Run 5: Report of FillP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2019-10-03 11:06:11
End at: 2019-10-03 11:06:41
Local clock offset: 3.324 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-10-03 13:46:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 70.357 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 55.10 Mbit/s
95th percentile per-packet one-way delay: 64.750 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 41.70 Mbit/s
95th percentile per-packet one-way delay: 91.557 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 33.62 Mbit/s
95th percentile per-packet one-way delay: 64.698 ms
Loss rate: 1.45%
Run 1: Report of FillP-Sheep — Data Link
Run 2: Statistics of FillP-Sheep

Start at: 2019-10-03 11:37:30
End at: 2019-10-03 11:38:00
Local clock offset: 1.028 ms
Remote clock offset: -1.146 ms

# Below is generated by plot.py at 2019-10-03 13:46:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.84 Mbit/s
95th percentile per-packet one-way delay: 62.718 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 55.83 Mbit/s
95th percentile per-packet one-way delay: 61.727 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 74.102 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 32.55 Mbit/s
95th percentile per-packet one-way delay: 51.019 ms
Loss rate: 0.80%
Run 2: Report of FillP-Sheep — Data Link

![Graph showing throughput and delay over time for different flows.]

**Throughput** (Mbps):
- Flow 1 ingress (mean 55.81 Mbps)
- Flow 1 egress (mean 55.83 Mbps)
- Flow 2 ingress (mean 40.88 Mbps)
- Flow 2 egress (mean 40.92 Mbps)
- Flow 3 ingress (mean 32.66 Mbps)
- Flow 3 egress (mean 32.55 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 61.73 ms)
- Flow 2 (95th percentile 74.10 ms)
- Flow 3 (95th percentile 51.02 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2019-10-03 12:10:28
End at: 2019-10-03 12:10:58
Local clock offset: 0.68 ms
Remote clock offset: -1.901 ms

# Below is generated by plot.py at 2019-10-03 13:46:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 72.115 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 63.718 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 42.52 Mbit/s
95th percentile per-packet one-way delay: 86.772 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 83.484 ms
Loss rate: 0.84%
Run 3: Report of FillP-Sheep — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time. The graphs display multiple lines, each representing a different flow with varying throughput and delay values.](Image)

- Flow 1 ingress (mean 54.88 Mbit/s)
- Flow 1 egress (mean 54.87 Mbit/s)
- Flow 2 ingress (mean 42.58 Mbit/s)
- Flow 2 egress (mean 42.52 Mbit/s)
- Flow 3 ingress (mean 32.76 Mbit/s)
- Flow 3 egress (mean 32.63 Mbit/s)

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Per-packet one-way delay (ms):

- Flow 1 (95th percentile 63.72 ms)
- Flow 2 (95th percentile 66.77 ms)
- Flow 3 (95th percentile 83.48 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 12:42:19
End at: 2019-10-03 12:42:49
Local clock offset: 4.079 ms
Remote clock offset: -4.91 ms

# Below is generated by plot.py at 2019-10-03 13:46:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 73.892 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 68.254 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 43.02 Mbit/s
95th percentile per-packet one-way delay: 85.368 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 52.188 ms
Loss rate: 0.54%
Run 4: Report of FillP-Sheep — Data Link

![Graph showing data link performance](image-url)

- Flow 1 ingress (mean 55.52 Mbit/s)
- Flow 1 egress (mean 55.50 Mbit/s)
- Flow 2 ingress (mean 43.15 Mbit/s)
- Flow 2 egress (mean 43.02 Mbit/s)
- Flow 3 ingress (mean 29.94 Mbit/s)
- Flow 3 egress (mean 29.89 Mbit/s)

![Graph showing packet delay](image-url)

- Flow 1 (95th percentile 68.25 ms)
- Flow 2 (95th percentile 85.37 ms)
- Flow 3 (95th percentile 52.19 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 13:14:33
End at: 2019-10-03 13:15:03
Local clock offset: 1.48 ms
Remote clock offset: -3.941 ms

# Below is generated by plot.py at 2019-10-03 13:46:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 67.924 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 55.55 Mbit/s
95th percentile per-packet one-way delay: 61.096 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 42.80 Mbit/s
95th percentile per-packet one-way delay: 105.979 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 49.221 ms
Loss rate: 0.78%
Run 5: Report of FillP-Sheep — Data Link

![Graph showing throughput and per-packet one-way delay over time]

Legend:
- Flow 1 ingress (mean 55.59 Mbit/s)
- Flow 1 egress (mean 55.55 Mbit/s)
- Flow 2 ingress (mean 42.84 Mbit/s)
- Flow 2 egress (mean 42.80 Mbit/s)
- Flow 3 ingress (mean 30.40 Mbit/s)
- Flow 3 egress (mean 30.29 Mbit/s)

![Graph showing per-packet one-way delay over time]

Legend:
- Flow 1 (95th percentile 61.10 ms)
- Flow 2 (95th percentile 105.98 ms)
- Flow 3 (95th percentile 49.22 ms)
Run 1: Statistics of Indigo

Start at: 2019-10-03 11:21:44
End at: 2019-10-03 11:22:15
Local clock offset: 0.817 ms
Remote clock offset: -1.613 ms

# Below is generated by plot.py at 2019-10-03 13:46:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.38 Mbit/s
  95th percentile per-packet one-way delay: 26.502 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 64.31 Mbit/s
  95th percentile per-packet one-way delay: 26.615 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 37.25 Mbit/s
  95th percentile per-packet one-way delay: 26.759 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 22.37 Mbit/s
  95th percentile per-packet one-way delay: 24.463 ms
  Loss rate: 0.62%
Run 1: Report of Indigo — Data Link

[Graphs showing network performance metrics, including throughput and per-packet one-way delay for different flows.]

Flow 1 ingress (mean 64.32 Mbit/s) - Flow 1 egress (mean 64.31 Mbit/s)
Flow 2 ingress (mean 37.23 Mbit/s) - Flow 2 egress (mean 37.25 Mbit/s)
Flow 3 ingress (mean 22.39 Mbit/s) - Flow 3 egress (mean 22.37 Mbit/s)

Flow 1 (95th percentile 26.61 ms) - Flow 2 (95th percentile 26.76 ms) - Flow 3 (95th percentile 24.46 ms)
Run 2: Statistics of Indigo

Start at: 2019-10-03 11:54:11
End at: 2019-10-03 11:54:41
Local clock offset: 2.902 ms
Remote clock offset: -1.396 ms

# Below is generated by plot.py at 2019-10-03 13:46:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 25.781 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 26.743 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 45.26 Mbit/s
95th percentile per-packet one-way delay: 22.171 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 25.15 Mbit/s
95th percentile per-packet one-way delay: 23.254 ms
Loss rate: 0.58%
Run 2: Report of Indigo — Data Link

![Graph showing throughput and per-packet one-way delay for different flows.]

- **Flow 1 ingress** (mean 56.44 Mbit/s)
- **Flow 1 egress** (mean 56.48 Mbit/s)
- **Flow 2 ingress** (mean 45.25 Mbit/s)
- **Flow 2 egress** (mean 45.26 Mbit/s)
- **Flow 3 ingress** (mean 26.17 Mbit/s)
- **Flow 3 egress** (mean 25.15 Mbit/s)

![Graph showing per-packet one-way delay for different flows.]

- **Flow 1 (95th percentile 26.74 ms)**
- **Flow 2 (95th percentile 22.17 ms)**
- **Flow 3 (95th percentile 23.25 ms)**
Run 3: Statistics of Indigo

Start at: 2019-10-03 12:26:33
End at: 2019-10-03 12:27:03
Local clock offset: 1.649 ms
Remote clock offset: -2.538 ms

# Below is generated by plot.py at 2019-10-03 13:47:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.47 Mbit/s
  95th percentile per-packet one-way delay: 25.300 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 59.73 Mbit/s
  95th percentile per-packet one-way delay: 26.318 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 44.07 Mbit/s
  95th percentile per-packet one-way delay: 22.169 ms
  Loss rate: 0.24%
-- Flow 3:
  Average throughput: 19.75 Mbit/s
  95th percentile per-packet one-way delay: 25.119 ms
  Loss rate: 0.61%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2019-10-03 12:59:16
End at: 2019-10-03 12:59:46
Local clock offset: 4.973 ms
Remote clock offset: -5.506 ms

# Below is generated by plot.py at 2019-10-03 13:47:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.33 Mbit/s
  95th percentile per-packet one-way delay: 30.629 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 57.34 Mbit/s
  95th percentile per-packet one-way delay: 33.638 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 47.36 Mbit/s
  95th percentile per-packet one-way delay: 26.283 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 23.16 Mbit/s
  95th percentile per-packet one-way delay: 25.637 ms
  Loss rate: 0.57%
Run 4: Report of Indigo — Data Link

![Graph of throughput and per-packet one-way delay over time for different flows.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 57.35 Mbps)
  - Flow 1 egress (mean 57.34 Mbps)
  - Flow 2 ingress (mean 47.37 Mbps)
  - Flow 2 egress (mean 47.36 Mbps)
  - Flow 3 ingress (mean 23.18 Mbps)
  - Flow 3 egress (mean 23.16 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 33.64 ms)
  - Flow 2 (95th percentile 26.28 ms)
  - Flow 3 (95th percentile 25.64 ms)
Run 5: Statistics of Indigo

Start at: 2019-10-03 13:30:05
End at: 2019-10-03 13:30:35
Local clock offset: 5.206 ms
Remote clock offset: -2.967 ms

# Below is generated by plot.py at 2019-10-03 13:47:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.20 Mbit/s
  95th percentile per-packet one-way delay: 30.861 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 57.11 Mbit/s
  95th percentile per-packet one-way delay: 31.559 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 35.84 Mbit/s
  95th percentile per-packet one-way delay: 31.998 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 46.86 Mbit/s
  95th percentile per-packet one-way delay: 26.912 ms
  Loss rate: 0.53%
Run 5: Report of Indigo — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image)

Legend:
- Flow 1 ingress (mean 57.10 Mbit/s)
- Flow 1 egress (mean 57.11 Mbit/s)
- Flow 2 ingress (mean 35.85 Mbit/s)
- Flow 2 egress (mean 35.84 Mbit/s)
- Flow 3 ingress (mean 46.88 Mbit/s)
- Flow 3 egress (mean 46.86 Mbit/s)
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-03 11:30:58
End at: 2019-10-03 11:31:28
Local clock offset: 3.495 ms
Remote clock offset: -2.465 ms

# Below is generated by plot.py at 2019-10-03 13:47:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 29.257 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 57.97 Mbit/s
95th percentile per-packet one-way delay: 31.291 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 35.24 Mbit/s
95th percentile per-packet one-way delay: 27.598 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 26.69 Mbit/s
95th percentile per-packet one-way delay: 28.498 ms
Loss rate: 0.75%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-03 12:03:23
End at: 2019-10-03 12:03:53
Local clock offset: -0.862 ms
Remote clock offset: -2.957 ms

# Below is generated by plot.py at 2019-10-03 13:47:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 25.451 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: 25.632 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 25.301 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 26.24 Mbit/s
95th percentile per-packet one-way delay: 24.946 ms
Loss rate: 0.76%
Run 2: Report of Indigo-MusesC3 — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]

Throughput (Mbps):
- Flow 1 ingress (mean 56.01 Mbps)
- Flow 1 egress (mean 56.03 Mbps)
- Flow 2 ingress (mean 31.72 Mbps)
- Flow 2 egress (mean 31.80 Mbps)
- Flow 3 ingress (mean 26.28 Mbps)
- Flow 3 egress (mean 26.24 Mbps)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 25.63 ms)
- Flow 2 (95th percentile 25.30 ms)
- Flow 3 (95th percentile 24.95 ms)
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-03 12:35:51
End at: 2019-10-03 12:36:21
Local clock offset: 4.513 ms
Remote clock offset: -4.533 ms

# Below is generated by plot.py at 2019-10-03 13:47:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.60 Mbit/s
  95th percentile per-packet one-way delay: 28.602 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 57.37 Mbit/s
  95th percentile per-packet one-way delay: 28.253 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 33.79 Mbit/s
  95th percentile per-packet one-way delay: 29.326 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 18.31 Mbit/s
  95th percentile per-packet one-way delay: 27.797 ms
  Loss rate: 1.22%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 13:08:09
End at: 2019-10-03 13:08:39
Local clock offset: 3.864 ms
Remote clock offset: -5.219 ms

# Below is generated by plot.py at 2019-10-03 13:47:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.55 Mbit/s
95th percentile per-packet one-way delay: 29.399 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 30.082 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 28.341 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 24.62 Mbit/s
95th percentile per-packet one-way delay: 33.587 ms
Loss rate: 0.75%
Run 4: Report of Indigo-MusesC3 — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image)

- **Flow 1 ingress (mean 57.15 Mbit/s)**
- **Flow 1 egress (mean 57.20 Mbit/s)**
- **Flow 2 ingress (mean 34.53 Mbit/s)**
- **Flow 2 egress (mean 34.57 Mbit/s)**
- **Flow 3 ingress (mean 24.61 Mbit/s)**
- **Flow 3 egress (mean 24.62 Mbit/s)**

![Graph showing per-packet one-way delay over time for different flows.](image)

- **Flow 1 (95th percentile 30.08 ms)**
- **Flow 2 (95th percentile 28.34 ms)**
- **Flow 3 (95th percentile 33.59 ms)**
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 13:38:49
End at: 2019-10-03 13:39:19
Local clock offset: 2.646 ms
Remote clock offset: -3.077 ms

# Below is generated by plot.py at 2019-10-03 13:47:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 25.807 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 56.58 Mbit/s
95th percentile per-packet one-way delay: 25.861 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 24.756 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 29.22 Mbit/s
95th percentile per-packet one-way delay: 28.621 ms
Loss rate: 0.81%
Run 5: Report of Indigo-MusesC3 — Data Link

![Throughput and Delay Graphs]
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-03 11:03:45
End at: 2019-10-03 11:04:15
Local clock offset: -0.807 ms
Remote clock offset: -1.836 ms

# Below is generated by plot.py at 2019-10-03 13:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 98.544 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 63.37 Mbit/s
95th percentile per-packet one-way delay: 70.737 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 133.808 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 26.48 Mbit/s
95th percentile per-packet one-way delay: 136.580 ms
Loss rate: 5.06%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-03 11:34:54
End at: 2019-10-03 11:35:24
Local clock offset: 1.724 ms
Remote clock offset: -0.524 ms

# Below is generated by plot.py at 2019-10-03 13:48:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.08 Mbit/s
  95th percentile per-packet one-way delay: 65.600 ms
  Loss rate: 0.95%
-- Flow 1:
  Average throughput: 52.95 Mbit/s
  95th percentile per-packet one-way delay: 56.088 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 45.69 Mbit/s
  95th percentile per-packet one-way delay: 94.538 ms
  Loss rate: 1.34%
-- Flow 3:
  Average throughput: 44.04 Mbit/s
  95th percentile per-packet one-way delay: 65.877 ms
  Loss rate: 2.04%
Run 2: Report of Indigo-MusesC5 — Data Link

![Graph showing throughput and packet loss over time for different flows.]

Legend:
- Flow 1 ingress (mean 53.10 Mb/s)
- Flow 1 egress (mean 52.95 Mb/s)
- Flow 2 ingress (mean 46.20 Mb/s)
- Flow 2 egress (mean 45.69 Mb/s)
- Flow 3 ingress (mean 44.71 Mb/s)
- Flow 3 egress (mean 44.04 Mb/s)

![Graph showing packet loss over time for different flows.]

Legend:
- Flow 1 (95th percentile 56.09 ms)
- Flow 2 (95th percentile 94.54 ms)
- Flow 3 (95th percentile 65.88 ms)
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 12:07:43
End at: 2019-10-03 12:08:13
Local clock offset: 0.103 ms
Remote clock offset: -2.376 ms

# Below is generated by plot.py at 2019-10-03 13:48:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.37 Mbit/s
95th percentile per-packet one-way delay: 130.872 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 56.84 Mbit/s
95th percentile per-packet one-way delay: 64.518 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 36.51 Mbit/s
95th percentile per-packet one-way delay: 158.583 ms
Loss rate: 4.39%
-- Flow 3:
Average throughput: 46.14 Mbit/s
95th percentile per-packet one-way delay: 69.900 ms
Loss rate: 3.08%
Run 3: Report of Indigo-MusesC5 — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 12:39:40
End at: 2019-10-03 12:40:10
Local clock offset: 5.951 ms
Remote clock offset: -5.728 ms

# Below is generated by plot.py at 2019-10-03 13:48:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.64 Mbit/s
95th percentile per-packet one-way delay: 64.444 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 50.92 Mbit/s
95th percentile per-packet one-way delay: 60.873 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 46.95 Mbit/s
95th percentile per-packet one-way delay: 64.865 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 43.23 Mbit/s
95th percentile per-packet one-way delay: 69.399 ms
Loss rate: 4.07%
Run 4: Report of Indigo-MusesC5 — Data Link

![Graph 1: Throughput (Mbps) vs. Time (s)]

- Flow 1 ingress (mean 51.20 Mbps)
- Flow 1 egress (mean 50.92 Mbps)
- Flow 2 ingress (mean 47.94 Mbps)
- Flow 2 egress (mean 46.95 Mbps)
- Flow 3 ingress (mean 44.79 Mbps)
- Flow 3 egress (mean 43.23 Mbps)

![Graph 2: Per-packet one-way delay (ms) vs. Time (s)]

- Flow 1 (95th percentile 60.87 ms)
- Flow 2 (95th percentile 64.86 ms)
- Flow 3 (95th percentile 69.40 ms)
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 13:11:57
End at: 2019-10-03 13:12:27
Local clock offset: 3.089 ms
Remote clock offset: -2.831 ms

# Below is generated by plot.py at 2019-10-03 13:48:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.79 Mbit/s
  95th percentile per-packet one-way delay: 100.625 ms
  Loss rate: 2.06%
-- Flow 1:
  Average throughput: 59.21 Mbit/s
  95th percentile per-packet one-way delay: 68.806 ms
  Loss rate: 1.08%
-- Flow 2:
  Average throughput: 39.69 Mbit/s
  95th percentile per-packet one-way delay: 146.088 ms
  Loss rate: 3.75%
-- Flow 3:
  Average throughput: 38.20 Mbit/s
  95th percentile per-packet one-way delay: 67.153 ms
  Loss rate: 3.40%
Run 5: Report of Indigo-MusesC5 — Data Link
Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-03 11:13:48
End at: 2019-10-03 11:14:18
Local clock offset: 1.13 ms
Remote clock offset: -0.939 ms

# Below is generated by plot.py at 2019-10-03 13:48:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.01 Mbit/s
  95th percentile per-packet one-way delay: 105.964 ms
  Loss rate: 3.41%
-- Flow 1:
  Average throughput: 71.66 Mbit/s
  95th percentile per-packet one-way delay: 107.519 ms
  Loss rate: 4.34%
-- Flow 2:
  Average throughput: 26.96 Mbit/s
  95th percentile per-packet one-way delay: 27.566 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 22.96 Mbit/s
  95th percentile per-packet one-way delay: 33.479 ms
  Loss rate: 0.80%
Run 1: Report of Indigo-MusesD — Data Link

![Throughput Graph]

- **Flow 1 ingress** (mean 74.78 Mbit/s)
- **Flow 1 egress** (mean 71.66 Mbit/s)
- **Flow 2 ingress** (mean 26.98 Mbit/s)
- **Flow 2 egress** (mean 26.96 Mbit/s)
- **Flow 3 ingress** (mean 23.02 Mbit/s)
- **Flow 3 egress** (mean 22.96 Mbit/s)

![Per-Packet Delay Graph]

- **Flow 1** (95th percentile 107.52 ms)
- **Flow 2** (95th percentile 27.57 ms)
- **Flow 3** (95th percentile 33.48 ms)
Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-03 11:45:57
End at: 2019-10-03 11:46:27
Local clock offset: 3.643 ms
Remote clock offset: -2.567 ms

# Below is generated by plot.py at 2019-10-03 13:48:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.02 Mbit/s
  95th percentile per-packet one-way delay: 119.449 ms
  Loss rate: 6.89%
-- Flow 1:
  Average throughput: 59.54 Mbit/s
  95th percentile per-packet one-way delay: 124.919 ms
  Loss rate: 5.37%
-- Flow 2:
  Average throughput: 47.19 Mbit/s
  95th percentile per-packet one-way delay: 112.022 ms
  Loss rate: 10.05%
-- Flow 3:
  Average throughput: 20.66 Mbit/s
  95th percentile per-packet one-way delay: 57.420 ms
  Loss rate: 5.18%
Run 2: Report of Indigo-MusesD — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]

**Throughput (Mbps):**
- **Flow 1 ingo (mean 62.83 Mbps)**
- **Flow 1 egress (mean 59.54 Mbps)**
- **Flow 2 ingo (mean 52.33 Mbps)**
- **Flow 2 egress (mean 47.19 Mbps)**
- **Flow 3 ingo (mean 21.65 Mbps)**
- **Flow 3 egress (mean 20.66 Mbps)**

**Per-packet one-way delay (ms):**
- **Flow 1 (95th percentile 124.92 ms)**
- **Flow 2 (95th percentile 112.02 ms)**
- **Flow 3 (95th percentile 57.42 ms)**
Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 12:18:28
End at: 2019-10-03 12:18:58
Local clock offset: -0.183 ms
Remote clock offset: -2.569 ms

# Below is generated by plot.py at 2019-10-03 13:48:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.23 Mbit/s
  95th percentile per-packet one-way delay: 25.788 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 50.43 Mbit/s
  95th percentile per-packet one-way delay: 25.229 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 41.25 Mbit/s
  95th percentile per-packet one-way delay: 26.292 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 24.51 Mbit/s
  95th percentile per-packet one-way delay: 27.079 ms
  Loss rate: 1.37%
Run 3: Report of Indigo-MusesD — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time.]

Legend:
- Blue dashed line: Flow 1 ingress (mean 50.38 Mbit/s)
- Blue solid line: Flow 1 egress (mean 50.43 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 41.22 Mbit/s)
- Green solid line: Flow 2 egress (mean 41.25 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 24.64 Mbit/s)
- Red solid line: Flow 3 egress (mean 24.51 Mbit/s)
Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 12:51:29
End at: 2019-10-03 12:51:59
Local clock offset: 6.608 ms
Remote clock offset: -6.218 ms

# Below is generated by plot.py at 2019-10-03 13:49:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.52 Mbit/s
  95th percentile per-packet one-way delay: 29.252 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 50.46 Mbit/s
  95th percentile per-packet one-way delay: 28.595 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 39.80 Mbit/s
  95th percentile per-packet one-way delay: 28.707 ms
  Loss rate: 0.17%
-- Flow 3:
  Average throughput: 25.50 Mbit/s
  95th percentile per-packet one-way delay: 33.962 ms
  Loss rate: 1.01%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Local clock offset: 3.378 ms
Remote clock offset: -3.74 ms

# Below is generated by plot.py at 2019-10-03 13:49:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 75.166 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 51.70 Mbit/s
95th percentile per-packet one-way delay: 25.844 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 104.597 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 38.039 ms
Loss rate: 0.95%
Run 5: Report of Indigo-MusesD — Data Link

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Throughput (Mbps)

- Flow 1 ingress (mean 51.70 Mbps)
- Flow 1 egress (mean 51.70 Mbps)
- Flow 2 ingress (mean 52.62 Mbps)
- Flow 2 egress (mean 52.06 Mbps)
- Flow 3 ingress (mean 20.32 Mbps)
- Flow 3 egress (mean 20.24 Mbps)

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Per-packet one-way delay (ms)

- Flow 1 (95th percentile 25.84 ms)
- Flow 2 (95th percentile 104.60 ms)
- Flow 3 (95th percentile 38.04 ms)

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Run 1: Statistics of Indigo-MusesT

Start at: 2019-10-03 11:28:23
End at: 2019-10-03 11:28:53
Local clock offset: 2.773 ms
Remote clock offset: -1.699 ms

# Below is generated by plot.py at 2019-10-03 13:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.44 Mbit/s
95th percentile per-packet one-way delay: 50.063 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 62.16 Mbit/s
95th percentile per-packet one-way delay: 42.432 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 45.36 Mbit/s
95th percentile per-packet one-way delay: 52.330 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 17.16 Mbit/s
95th percentile per-packet one-way delay: 52.068 ms
Loss rate: 1.65%
Run 1: Report of Indigo-MusesT — Data Link
Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-03 12:00:49
End at: 2019-10-03 12:01:19
Local clock offset: -0.299 ms
Remote clock offset: -3.255 ms

# Below is generated by plot.py at 2019-10-03 13:49:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.81 Mbit/s
  95th percentile per-packet one-way delay: 54.298 ms
  Loss rate: 0.94%
-- Flow 1:
  Average throughput: 63.18 Mbit/s
  95th percentile per-packet one-way delay: 54.757 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 43.66 Mbit/s
  95th percentile per-packet one-way delay: 65.667 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 18.52 Mbit/s
  95th percentile per-packet one-way delay: 31.891 ms
  Loss rate: 1.31%
Run 2: Report of Indigo-MusesT — Data Link

![Graph showing throughput and packet delay over time for different flows.]

- **Flow 1 ingress (mean 63.61 Mbit/s)**
- **Flow 1 egress (mean 63.18 Mbit/s)**
- **Flow 2 ingress (mean 44.24 Mbit/s)**
- **Flow 2 egress (mean 43.66 Mbit/s)**
- **Flow 3 ingress (mean 18.65 Mbit/s)**
- **Flow 3 egress (mean 18.52 Mbit/s)**

![Graph showing packet delay over time for different flows.]

- **Flow 1 (95th percentile 54.76 ms)**
- **Flow 2 (95th percentile 65.67 ms)**
- **Flow 3 (95th percentile 31.89 ms)**
Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-03 12:33:24
End at: 2019-10-03 12:33:54
Local clock offset: 2.008 ms
Remote clock offset: -4.62 ms

# Below is generated by plot.py at 2019-10-03 13:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.83 Mbit/s
  95th percentile per-packet one-way delay: 108.487 ms
  Loss rate: 1.52%
  -- Flow 1:
  Average throughput: 60.05 Mbit/s
  95th percentile per-packet one-way delay: 103.630 ms
  Loss rate: 1.18%
  -- Flow 2:
  Average throughput: 38.94 Mbit/s
  95th percentile per-packet one-way delay: 147.499 ms
  Loss rate: 2.55%
  -- Flow 3:
  Average throughput: 41.24 Mbit/s
  95th percentile per-packet one-way delay: 37.452 ms
  Loss rate: 1.01%
Run 3: Report of Indigo-MusesT — Data Link

![Graph 1: Throughput (Mbps)](image1)

Flow 1 ingress (mean 60.65 Mbps)  
Flow 1 egress (mean 60.05 Mbps)  
Flow 2 ingress (mean 39.89 Mbps)  
Flow 2 egress (mean 38.94 Mbps)  
Flow 3 ingress (mean 41.39 Mbps)  
Flow 3 egress (mean 41.24 Mbps)

![Graph 2: Per-packet one-way delay (ms)](image2)

- Flow 1 (95th percentile 101.63 ms)  
- Flow 2 (95th percentile 147.50 ms)  
- Flow 3 (95th percentile 37.45 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 13:05:42
End at: 2019-10-03 13:06:12
Local clock offset: 2.343 ms
Remote clock offset: -4.142 ms

# Below is generated by plot.py at 2019-10-03 13:49:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 106.259 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 80.708 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 41.39 Mbit/s
95th percentile per-packet one-way delay: 156.939 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 27.23 Mbit/s
95th percentile per-packet one-way delay: 49.660 ms
Loss rate: 1.08%
Run 4: Report of Indigo-MusesT — Data Link

![Graph showing throughput and per-packet one-way delay for different flows.]

Legend:
- Flow 1 ingress (mean 62.73 Mbit/s)
- Flow 1 egress (mean 62.04 Mbit/s)
- Flow 2 ingress (mean 41.89 Mbit/s)
- Flow 2 egress (mean 41.39 Mbit/s)
- Flow 3 ingress (mean 27.37 Mbit/s)
- Flow 3 egress (mean 27.23 Mbit/s)
Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 13:36:25
End at: 2019-10-03 13:36:55
Local clock offset: 1.98 ms
Remote clock offset: -2.903 ms

# Below is generated by plot.py at 2019-10-03 13:49:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.37 Mbit/s
  95th percentile per-packet one-way delay: 120.025 ms
  Loss rate: 1.48%
-- Flow 1:
  Average throughput: 59.28 Mbit/s
  95th percentile per-packet one-way delay: 116.894 ms
  Loss rate: 1.10%
-- Flow 2:
  Average throughput: 37.70 Mbit/s
  95th percentile per-packet one-way delay: 143.060 ms
  Loss rate: 2.48%
-- Flow 3:
  Average throughput: 28.39 Mbit/s
  95th percentile per-packet one-way delay: 46.500 ms
  Loss rate: 1.17%
Run 5: Report of Indigo-MusesT — Data Link
Run 1: Statistics of LEDBAT

Start at: 2019-10-03 11:23:01
End at: 2019-10-03 11:23:31
Local clock offset: -1.493 ms
Remote clock offset: -0.517 ms

# Below is generated by plot.py at 2019-10-03 13:49:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.39 Mbit/s
95th percentile per-packet one-way delay: 22.436 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 44.83 Mbit/s
95th percentile per-packet one-way delay: 23.085 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 31.38 Mbit/s
95th percentile per-packet one-way delay: 22.240 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 32.14 Mbit/s
95th percentile per-packet one-way delay: 21.428 ms
Loss rate: 0.50%
Run 1: Report of LEDBAT — Data Link

![Graph showing throughput and per-packet end-to-end delay](image)

- **Throughput**:
  - Flow 1 ingress (mean 44.80 Mbit/s)
  - Flow 1 egress (mean 44.83 Mbit/s)
  - Flow 2 ingress (mean 31.40 Mbit/s)
  - Flow 2 egress (mean 31.38 Mbit/s)
  - Flow 3 ingress (mean 32.14 Mbit/s)
  - Flow 3 egress (mean 32.14 Mbit/s)

- **Per-packet end-to-end delay**: 15 ms to 45 ms

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Run 2: Statistics of LEDBAT

Start at: 2019-10-03 11:55:37
End at: 2019-10-03 11:56:07
Local clock offset: 3.945 ms
Remote clock offset: -1.695 ms

# Below is generated by plot.py at 2019-10-03 13:50:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.39 Mbit/s
95th percentile per-packet one-way delay: 28.954 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 37.50 Mbit/s
95th percentile per-packet one-way delay: 27.641 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 34.03 Mbit/s
95th percentile per-packet one-way delay: 29.780 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 28.780 ms
Loss rate: 0.56%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput and packet round-trip delays over time for different flows.]

**Throughput (Mbps):**
- Flow 1 ingress (mean 37.51 Mbps)
- Flow 1 egress (mean 37.50 Mbps)
- Flow 2 ingress (mean 34.06 Mbps)
- Flow 2 egress (mean 34.03 Mbps)
- Flow 3 ingress (mean 24.87 Mbps)
- Flow 3 egress (mean 24.85 Mbps)

**Per-packet round-trip delay (ms):**
- Flow 1 (95th percentile 27.64 ms)
- Flow 2 (95th percentile 29.78 ms)
- Flow 3 (95th percentile 28.78 ms)
Run 3: Statistics of LEDBAT

Start at: 2019-10-03 12:27:58
End at: 2019-10-03 12:28:28
Local clock offset: -0.886 ms
Remote clock offset: -2.741 ms

# Below is generated by plot.py at 2019-10-03 13:50:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.25 Mbit/s
  95th percentile per-packet one-way delay: 26.156 ms
  Loss rate: 0.23%
-- Flow 1:
  Average throughput: 47.31 Mbit/s
  95th percentile per-packet one-way delay: 26.234 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 32.53 Mbit/s
  95th percentile per-packet one-way delay: 26.501 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 25.01 Mbit/s
  95th percentile per-packet one-way delay: 25.434 ms
  Loss rate: 0.52%
Run 3: Report of LEDBAT — Data Link

![Graph showing throughput and packet round-trip delay over time for different flows.]

Legend:
- Flow 1 ingress (mean 47.31 Mbit/s)
- Flow 1 egress (mean 47.31 Mbit/s)
- Flow 2 ingress (mean 32.54 Mbit/s)
- Flow 2 egress (mean 32.53 Mbit/s)
- Flow 3 ingress (mean 25.02 Mbit/s)
- Flow 3 egress (mean 25.01 Mbit/s)
Run 4: Statistics of LEDBAT

Start at: 2019-10-03 13:00:40
End at: 2019-10-03 13:01:10
Local clock offset: 4.071 ms
Remote clock offset: -3.613 ms

# Below is generated by plot.py at 2019-10-03 13:50:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.05 Mbit/s
  95th percentile per-packet one-way delay: 26.428 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 43.44 Mbit/s
  95th percentile per-packet one-way delay: 25.828 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 32.18 Mbit/s
  95th percentile per-packet one-way delay: 27.273 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 33.81 Mbit/s
  95th percentile per-packet one-way delay: 26.455 ms
  Loss rate: 0.48%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

End at: 2019-10-03 13:31:53
Local clock offset: 4.586 ms
Remote clock offset: -2.98 ms

# Below is generated by plot.py at 2019-10-03 13:50:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.65 Mbit/s
95th percentile per-packet one-way delay: 27.471 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 46.27 Mbit/s
95th percentile per-packet one-way delay: 26.842 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: 29.818 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 25.572 ms
Loss rate: 0.87%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 11:07:23
End at: 2019-10-03 11:07:53
Local clock offset: 2.723 ms
Remote clock offset: 0.398 ms

# Below is generated by plot.py at 2019-10-03 13:50:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.47 Mbit/s
95th percentile per-packet one-way delay: 24.070 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 48.21 Mbit/s
95th percentile per-packet one-way delay: 21.384 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 24.771 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 58.080 ms
Loss rate: 0.20%
Run 1: Report of Muses Decision Tree — Data Link
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 11:38:46  
End at: 2019-10-03 11:39:16  
Local clock offset: 4.605 ms  
Remote clock offset: -2.743 ms  

# Below is generated by plot.py at 2019-10-03 13:50:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.40 Mbit/s
  95th percentile per-packet one-way delay: 27.916 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 53.93 Mbit/s
  95th percentile per-packet one-way delay: 26.846 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 22.94 Mbit/s
  95th percentile per-packet one-way delay: 27.825 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 19.87 Mbit/s
  95th percentile per-packet one-way delay: 43.336 ms
  Loss rate: 0.29%
Run 2: Report of Muses_DecisionTree — Data Link
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 12:11:47
End at: 2019-10-03 12:12:17
Local clock offset: -2.916 ms
Remote clock offset: -3.394 ms

# Below is generated by plot.py at 2019-10-03 13:50:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.49 Mbit/s
  95th percentile per-packet one-way delay: 22.892 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 48.71 Mbit/s
  95th percentile per-packet one-way delay: 20.961 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 26.96 Mbit/s
  95th percentile per-packet one-way delay: 22.518 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 18.75 Mbit/s
  95th percentile per-packet one-way delay: 43.886 ms
  Loss rate: 0.26%
Run 3: Report of Muses_DecisionTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 12:43:40
End at: 2019-10-03 12:44:10
Local clock offset: 6.448 ms
Remote clock offset: -3.553 ms

# Below is generated by plot.py at 2019-10-03 13:50:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.15 Mbit/s
  95th percentile per-packet one-way delay: 27.777 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 47.12 Mbit/s
  95th percentile per-packet one-way delay: 24.114 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 34.07 Mbit/s
  95th percentile per-packet one-way delay: 54.373 ms
  Loss rate: 0.12%
-- Flow 3:
  Average throughput: 14.35 Mbit/s
  95th percentile per-packet one-way delay: 24.407 ms
  Loss rate: 0.23%
Run 4: Report of Muses.DecisionTree — Data Link
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 13:16:01
End at: 2019-10-03 13:16:31
Local clock offset: 3.931 ms
Remote clock offset: -3.976 ms

# Below is generated by plot.py at 2019-10-03 13:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.10 Mbit/s
95th percentile per-packet one-way delay: 25.799 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 43.26 Mbit/s
95th percentile per-packet one-way delay: 24.354 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 34.20 Mbit/s
95th percentile per-packet one-way delay: 27.841 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 25.75 Mbit/s
95th percentile per-packet one-way delay: 28.180 ms
Loss rate: 0.22%
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 11:08:37
End at: 2019-10-03 11:09:07
Local clock offset: 3.29 ms
Remote clock offset: -1.693 ms

# Below is generated by plot.py at 2019-10-03 13:51:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.46 Mbit/s
  95th percentile per-packet one-way delay: 51.505 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 52.76 Mbit/s
  95th percentile per-packet one-way delay: 57.791 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 28.05 Mbit/s
  95th percentile per-packet one-way delay: 48.506 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 16.07 Mbit/s
  95th percentile per-packet one-way delay: 23.260 ms
  Loss rate: 0.49%
Run 1: Report of Muses Decision Tree H0 — Data Link

![Graph showing throughput over time for different flows.]

![Graph showing per-packet one-way delay over time for different flows.]

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Run 2: Statistics of Muses\_DecisionTreeHO

Start at: 2019-10-03 11:40:04
End at: 2019-10-03 11:40:34
Local clock offset: 4.12 ms
Remote clock offset: -1.163 ms

# Below is generated by plot.py at 2019-10-03 13:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.93 Mbit/s
95th percentile per-packet one-way delay: 46.989 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 49.51 Mbit/s
95th percentile per-packet one-way delay: 51.043 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 47.165 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 21.39 Mbit/s
95th percentile per-packet one-way delay: 27.442 ms
Loss rate: 0.55%
Run 2: Report of Muses|DecisionTreeH0 — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 49.52 Mbps)**
- **Flow 1 egress (mean 49.51 Mbps)**
- **Flow 2 ingress (mean 40.23 Mbps)**
- **Flow 2 egress (mean 40.25 Mbps)**
- **Flow 3 ingress (mean 21.40 Mbps)**
- **Flow 3 egress (mean 21.39 Mbps)**

**Per-packet one way delay (ms)**

- **Flow 1 (95th percentile 51.04 ms)**
- **Flow 2 (95th percentile 47.16 ms)**
- **Flow 3 (95th percentile 27.44 ms)**
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 12:13:08  
End at: 2019-10-03 12:13:38  
Local clock offset: -2.973 ms  
Remote clock offset: -2.123 ms

# Below is generated by plot.py at 2019-10-03 13:51:37  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 79.78 Mbit/s
95th percentile per-packet one-way delay: 48.522 ms
Loss rate: 0.27%

-- Flow 1:
Average throughput: 51.95 Mbit/s
95th percentile per-packet one-way delay: 50.472 ms
Loss rate: 0.30%

-- Flow 2:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 50.603 ms
Loss rate: 0.15%

-- Flow 3:
Average throughput: 27.09 Mbit/s
95th percentile per-packet one-way delay: 27.544 ms
Loss rate: 0.35%
Run 3: Report of Muses DecisionTreeH0 — Data Link

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### Throughput (Mbit/s)
- Flow 1 ingress (mean 52.02 Mbit/s)
- Flow 1 egress (mean 51.95 Mbit/s)
- Flow 2 ingress (mean 28.95 Mbit/s)
- Flow 2 egress (mean 29.00 Mbit/s)
- Flow 3 ingress (mean 27.06 Mbit/s)
- Flow 3 egress (mean 27.09 Mbit/s)

### Per-packet one-way delay (ms)
- Flow 1 (95th percentile 50.47 ms)
- Flow 2 (95th percentile 50.60 ms)
- Flow 3 (95th percentile 27.54 ms)
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 12:45:03
End at: 2019-10-03 12:45:33
Local clock offset: 5.359 ms
Remote clock offset: -5.555 ms

# Below is generated by plot.py at 2019-10-03 13:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 57.197 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 48.88 Mbit/s
95th percentile per-packet one-way delay: 63.820 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 50.921 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 32.47 Mbit/s
95th percentile per-packet one-way delay: 48.027 ms
Loss rate: 0.21%
Run 4: Report of Muses_DecisionTreeH0 — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 48.81 Mbps)
- Flow 1 egress (mean 48.88 Mbps)
- Flow 2 ingress (mean 30.23 Mbps)
- Flow 2 egress (mean 30.26 Mbps)
- Flow 3 ingress (mean 32.36 Mbps)
- Flow 3 egress (mean 32.47 Mbps)

**Per-packet one-way delay (ms)**

- Flow 1 (95th percentile 63.82 ms)
- Flow 2 (95th percentile 50.92 ms)
- Flow 3 (95th percentile 48.03 ms)
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 13:17:15
End at: 2019-10-03 13:17:45
Local clock offset: 3.977 ms
Remote clock offset: -4.596 ms

# Below is generated by plot.py at 2019-10-03 13:51:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 58.394 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 50.49 Mbit/s
95th percentile per-packet one-way delay: 60.741 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 28.70 Mbit/s
95th percentile per-packet one-way delay: 58.069 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 24.51 Mbit/s
95th percentile per-packet one-way delay: 50.061 ms
Loss rate: 0.28%
Run 5: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing throughput and per-packet round-trip delay over time for different flows.]

- Flow 1 ingress (mean 50.44 Mbit/s)
- Flow 1 egress (mean 50.49 Mbit/s)
- Flow 2 ingress (mean 28.73 Mbit/s)
- Flow 2 egress (mean 28.70 Mbit/s)
- Flow 3 ingress (mean 24.46 Mbit/s)
- Flow 3 egress (mean 24.51 Mbit/s)

![Graph showing per-packet round-trip delay over time for different flows.]

- Flow 1 (95th percentile 60.74 ms)
- Flow 2 (95th percentile 58.07 ms)
- Flow 3 (95th percentile 50.06 ms)
Run 1: Statistics of Muses\_DecisionTreeRO

Start at: 2019-10-03 11:16:35
End at: 2019-10-03 11:17:05
Local clock offset: 2.377 ms
Remote clock offset: -1.55 ms

# Below is generated by plot.py at 2019-10-03 13:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.65 Mbit/s
95th percentile per-packet one-way delay: 25.543 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 24.638 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 29.31 Mbit/s
95th percentile per-packet one-way delay: 26.275 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 35.648 ms
Loss rate: 0.20%
Run 1: Report of Muses Decision Tree R0 — Data Link

![Graph showing throughput and per-packet one way delay over time for three flows, with respective mean throughputs indicating varying levels of performance.](image)

- Flow 1 ingress (mean 51.91 Mbit/s)
- Flow 1 egress (mean 51.97 Mbit/s)
- Flow 2 ingress (mean 29.29 Mbit/s)
- Flow 2 egress (mean 29.31 Mbit/s)
- Flow 3 ingress (mean 22.81 Mbit/s)
- Flow 3 egress (mean 22.88 Mbit/s)
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 11:48:44  
End at: 2019-10-03 11:49:14  
Local clock offset: 3.262 ms  
Remote clock offset: -1.559 ms

# Below is generated by plot.py at 2019-10-03 13:51:48  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.00 Mbit/s
95th percentile per-packet one-way delay: 23.912 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 52.24 Mbit/s
95th percentile per-packet one-way delay: 23.514 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 24.71 Mbit/s
95th percentile per-packet one-way delay: 21.657 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 17.03 Mbit/s
95th percentile per-packet one-way delay: 50.432 ms
Loss rate: 0.14%
Run 2: Report of Muses_DecisionTreeR0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 12:21:05
End at: 2019-10-03 12:21:35
Local clock offset: -0.17 ms
Remote clock offset: -3.288 ms

# Below is generated by plot.py at 2019-10-03 13:51:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 26.898 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 25.948 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 5.44 Mbit/s
95th percentile per-packet one-way delay: 39.376 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 20.338 ms
Loss rate: 0.90%
Run 3: Report of Muses DecisionTreeR0 — Data Link
Run 4: Statistics of Muses\_DecisionTreeRO

Start at: 2019-10-03 12:54:16
End at: 2019-10-03 12:54:46
Local clock offset: 5.376 ms
Remote clock offset: -4.649 ms

# Below is generated by plot.py at 2019-10-03 13:52:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 23.694 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 53.41 Mbit/s
95th percentile per-packet one-way delay: 23.576 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 20.42 Mbit/s
95th percentile per-packet one-way delay: 21.239 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 22.29 Mbit/s
95th percentile per-packet one-way delay: 35.181 ms
Loss rate: 0.40%
Run 4: Report of Muses_DecisionTreeR0 — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time]

Legend:
- Flow 1 ingress (mean 53.35 Mbit/s)
- Flow 1 egress (mean 53.41 Mbit/s)
- Flow 2 ingress (mean 20.40 Mbit/s)
- Flow 2 egress (mean 20.42 Mbit/s)
- Flow 3 ingress (mean 22.26 Mbit/s)
- Flow 3 egress (mean 22.29 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 23.58 ms)
- Flow 2 (95th percentile 21.24 ms)
- Flow 3 (95th percentile 35.18 ms)
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 13:25:09
End at: 2019-10-03 13:25:39
Local clock offset: 4.165 ms
Remote clock offset: -4.65 ms

# Below is generated by plot.py at 2019-10-03 13:52:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.65 Mbit/s
95th percentile per-packet one-way delay: 25.997 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 48.87 Mbit/s
95th percentile per-packet one-way delay: 24.818 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 27.90 Mbit/s
95th percentile per-packet one-way delay: 25.365 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 46.424 ms
Loss rate: 0.12%
Run 5: Report of Muses_DecisionTreeR0 — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2019-10-03 11:04:58
End at: 2019-10-03 11:05:28
Local clock offset: 2.878 ms
Remote clock offset: -0.634 ms

# Below is generated by plot.py at 2019-10-03 13:52:44
# Datalink statistics

-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 1654.702 ms
Loss rate: 10.43%

-- Flow 1:
Average throughput: 63.12 Mbit/s
95th percentile per-packet one-way delay: 1626.399 ms
Loss rate: 9.69%

-- Flow 2:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 2952.467 ms
Loss rate: 14.77%

-- Flow 3:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 62.461 ms
Loss rate: 0.97%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-10-03 11:36:13
End at: 2019-10-03 11:36:43
Local clock offset: 2.505 ms
Remote clock offset: -1.611 ms

# Below is generated by plot.py at 2019-10-03 13:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.42 Mbit/s
95th percentile per-packet one-way delay: 2105.696 ms
Loss rate: 10.89%
-- Flow 1:
Average throughput: 59.42 Mbit/s
95th percentile per-packet one-way delay: 2148.309 ms
Loss rate: 10.17%
-- Flow 2:
Average throughput: 34.37 Mbit/s
95th percentile per-packet one-way delay: 1670.697 ms
Loss rate: 13.27%
-- Flow 3:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 615.178 ms
Loss rate: 9.50%
Run 2: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 66.04 Mbit/s)  Flow 1 egress (mean 59.42 Mbit/s)
Flow 2 ingress (mean 39.54 Mbit/s)  Flow 2 egress (mean 34.37 Mbit/s)
Flow 3 ingress (mean 34.00 Mbit/s)  Flow 3 egress (mean 30.91 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 2148.31 ms)  Flow 2 (95th percentile 1678.70 ms)  Flow 3 (95th percentile 615.18 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2019-10-03 12:09:08  
End at: 2019-10-03 12:09:38  
Local clock offset: -1.535 ms  
Remote clock offset: -1.766 ms  

# Below is generated by plot.py at 2019-10-03 13:52:54  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.98 Mbit/s  
95th percentile per-packet one-way delay: 1471.545 ms  
Loss rate: 21.62%  
-- Flow 1:  
Average throughput: 57.85 Mbit/s  
95th percentile per-packet one-way delay: 1554.334 ms  
Loss rate: 25.99%  
-- Flow 2:  
Average throughput: 32.45 Mbit/s  
95th percentile per-packet one-way delay: 1415.377 ms  
Loss rate: 19.61%  
-- Flow 3:  
Average throughput: 41.30 Mbit/s  
95th percentile per-packet one-way delay: 69.359 ms  
Loss rate: 0.55%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 12:40:56
End at: 2019-10-03 12:41:26
Local clock offset: 4.429 ms
Remote clock offset: -4.193 ms

# Below is generated by plot.py at 2019-10-03 13:52:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.03 Mbit/s
  95th percentile per-packet one-way delay: 1809.283 ms
  Loss rate: 9.39%
-- Flow 1:
  Average throughput: 60.71 Mbit/s
  95th percentile per-packet one-way delay: 1823.603 ms
  Loss rate: 10.10%
-- Flow 2:
  Average throughput: 40.34 Mbit/s
  95th percentile per-packet one-way delay: 1020.568 ms
  Loss rate: 9.42%
-- Flow 3:
  Average throughput: 16.80 Mbit/s
  95th percentile per-packet one-way delay: 21.168 ms
  Loss rate: 0.52%
Run 4: Report of PCC-Allegro — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 67.42 Mbps)
- Flow 1 egress (mean 60.71 Mbps)
- Flow 2 ingress (mean 44.42 Mbps)
- Flow 2 egress (mean 40.34 Mbps)
- Flow 3 ingress (mean 16.80 Mbps)
- Flow 3 egress (mean 16.80 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 1823.60 ms)
- Flow 2 (95th percentile 1020.57 ms)
- Flow 3 (95th percentile 21.17 ms)
Run 5: Statistics of PCC-Allegro

End at: 2019-10-03 13:13:44
Local clock offset: 4.0 ms
Remote clock offset: -3.727 ms

# Below is generated by plot.py at 2019-10-03 13:52:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.01 Mbit/s
95th percentile per-packet one-way delay: 1542.279 ms
Loss rate: 21.56%
-- Flow 1:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: 1575.934 ms
Loss rate: 25.61%
-- Flow 2:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 1356.074 ms
Loss rate: 20.07%
-- Flow 3:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 82.573 ms
Loss rate: 0.64%
Run 5: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2019-10-03 11:15:11
End at: 2019-10-03 11:15:41
Local clock offset: 1.421 ms
Remote clock offset: -1.082 ms

# Below is generated by plot.py at 2019-10-03 13:53:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.95 Mbit/s
95th percentile per-packet one-way delay: 1157.424 ms
Loss rate: 24.55%
-- Flow 1:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 1050.853 ms
Loss rate: 24.74%
-- Flow 2:
Average throughput: 33.51 Mbit/s
95th percentile per-packet one-way delay: 1184.437 ms
Loss rate: 28.54%
-- Flow 3:
Average throughput: 29.14 Mbit/s
95th percentile per-packet one-way delay: 599.298 ms
Loss rate: 11.67%
Run 1: Report of PCC-Expr — Data Link

![Throughput and Delay Graphs]

- Flow 1 ingress (mean 82.36 Mbit/s)
- Flow 1 egress (mean 62.08 Mbit/s)
- Flow 2 ingress (mean 46.78 Mbit/s)
- Flow 2 egress (mean 33.51 Mbit/s)
- Flow 3 ingress (mean 32.82 Mbit/s)
- Flow 3 egress (mean 29.14 Mbit/s)

- Flow 1 (95th percentile 1050.85 ms)
- Flow 2 (95th percentile 1184.44 ms)
- Flow 3 (95th percentile 599.30 ms)
Run 2: Statistics of PCC-Expr

Start at: 2019-10-03 11:47:18
End at: 2019-10-03 11:47:48
Local clock offset: 1.251 ms
Remote clock offset: -3.162 ms

# Below is generated by plot.py at 2019-10-03 13:54:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.74 Mbit/s
95th percentile per-packet one-way delay: 1187.240 ms
Loss rate: 20.08%
-- Flow 1:
Average throughput: 63.70 Mbit/s
95th percentile per-packet one-way delay: 901.701 ms
Loss rate: 19.97%
-- Flow 2:
Average throughput: 30.80 Mbit/s
95th percentile per-packet one-way delay: 1548.834 ms
Loss rate: 22.39%
-- Flow 3:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 695.245 ms
Loss rate: 14.07%
Run 3: Statistics of PCC-Expr

Start at: 2019-10-03 12:19:48
End at: 2019-10-03 12:20:18
Local clock offset: -0.544 ms
Remote clock offset: -2.422 ms

# Below is generated by plot.py at 2019-10-03 13:54:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.26 Mbit/s
95th percentile per-packet one-way delay: 838.002 ms
Loss rate: 34.57%
-- Flow 1:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 923.460 ms
Loss rate: 24.04%
-- Flow 2:
Average throughput: 39.20 Mbit/s
95th percentile per-packet one-way delay: 362.901 ms
Loss rate: 53.57%
-- Flow 3:
Average throughput: 26.21 Mbit/s
95th percentile per-packet one-way delay: 49.041 ms
Loss rate: 0.49%
Run 3: Report of PCC-Expr — Data Link

![Graph showing throughput and delay over time for different flows.]

- Flow 1 ingress (mean 73.04 Mbit/s)
- Flow 1 egress (mean 55.57 Mbit/s)
- Flow 2 ingress (mean 84.19 Mbit/s)
- Flow 2 egress (mean 39.20 Mbit/s)
- Flow 3 ingress (mean 26.20 Mbit/s)
- Flow 3 egress (mean 26.21 Mbit/s)

![Graph showing per-packet one-way delay for different flows.]

- Flow 1 (95th percentile 923.46 ms)
- Flow 2 (95th percentile 362.90 ms)
- Flow 3 (95th percentile 49.04 ms)
Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 12:52:46  
End at: 2019-10-03 12:53:16  
Local clock offset: 7.371 ms  
Remote clock offset: -3.866 ms

# Below is generated by plot.py at 2019-10-03 13:55:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 92.35 Mbit/s  
95th percentile per-packet one-way delay: 905.359 ms  
Loss rate: 58.59%  
-- Flow 1:  
Average throughput: 57.36 Mbit/s  
95th percentile per-packet one-way delay: 376.975 ms  
Loss rate: 66.14%  
-- Flow 2:  
Average throughput: 38.96 Mbit/s  
95th percentile per-packet one-way delay: 909.904 ms  
Loss rate: 41.79%  
-- Flow 3:  
Average throughput: 27.69 Mbit/s  
95th percentile per-packet one-way delay: 49.015 ms  
Loss rate: 0.60%
Run 4: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay over time for different flows, with annotations for mean values and 95th percentile delays.]

Flow 1 ingress (mean 169.07 Mbit/s) | Flow 1 egress (mean 57.36 Mbit/s)
Flow 2 ingress (mean 66.77 Mbit/s) | Flow 2 egress (mean 36.96 Mbit/s)
Flow 3 ingress (mean 27.72 Mbit/s) | Flow 3 egress (mean 27.69 Mbit/s)

Flow 1 (95th percentile 376.98 ms) | Flow 2 (95th percentile 909.90 ms) | Flow 3 (95th percentile 49.02 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 13:23:45
End at: 2019-10-03 13:24:15
Local clock offset: 3.045 ms
Remote clock offset: -4.84 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.78 Mbit/s
  95th percentile per-packet one-way delay: 1076.845 ms
  Loss rate: 41.70%
-- Flow 1:
  Average throughput: 58.51 Mbit/s
  95th percentile per-packet one-way delay: 593.260 ms
  Loss rate: 48.70%
-- Flow 2:
  Average throughput: 40.05 Mbit/s
  95th percentile per-packet one-way delay: 1083.985 ms
  Loss rate: 30.12%
-- Flow 3:
  Average throughput: 26.30 Mbit/s
  95th percentile per-packet one-way delay: 81.815 ms
  Loss rate: 0.75%
Run 5: Report of PCC-Expr — Data Link

The diagrams show the throughput and per-packet end-to-end delay for different flows over time. 

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 113.81 Mbps) and eggress (mean 58.51 Mbps)
  - Flow 2 ingress (mean 57.17 Mbps) and eggress (mean 40.05 Mbps)
  - Flow 3 ingress (mean 26.37 Mbps) and eggress (mean 26.30 Mbps)

- **Per-packet end-to-end delay (ms):**
  - Flow 1 (95th percentile 593.26 ms)
  - Flow 2 (95th percentile 1083.98 ms)
  - Flow 3 (95th percentile 81.81 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2019-10-03 11:25:33  
End at: 2019-10-03 11:26:03  
Local clock offset: 1.134 ms  
Remote clock offset: -1.373 ms

# Below is generated by plot.py at 2019-10-03 13:55:33  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 77.82 Mbit/s  
  95th percentile per-packet one-way delay: 43.612 ms  
  Loss rate: 0.23%  
-- Flow 1:  
  Average throughput: 50.83 Mbit/s  
  95th percentile per-packet one-way delay: 40.666 ms  
  Loss rate: 0.21%  
-- Flow 2:  
  Average throughput: 29.17 Mbit/s  
  95th percentile per-packet one-way delay: 49.849 ms  
  Loss rate: 0.08%  
-- Flow 3:  
  Average throughput: 23.19 Mbit/s  
  95th percentile per-packet one-way delay: 70.196 ms  
  Loss rate: 0.77%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-10-03 11:58:10
End at: 2019-10-03 11:58:41
Local clock offset: 1.022 ms
Remote clock offset: -1.976 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.25 Mbit/s
95th percentile per-packet one-way delay: 44.239 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 51.59 Mbit/s
95th percentile per-packet one-way delay: 39.748 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 42.910 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 29.92 Mbit/s
95th percentile per-packet one-way delay: 106.668 ms
Loss rate: 0.75%
Run 2: Report of QUIC Cubic — Data Link

![Graph 1: Throughput vs Time](#)

![Graph 2: Per-packet one-way delay vs Time](#)

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Run 3: Statistics of QUIC Cubic

Start at: 2019-10-03 12:30:27
End at: 2019-10-03 12:30:57
Local clock offset: 2.894 ms
Remote clock offset: -3.171 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 45.051 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 51.17 Mbit/s
95th percentile per-packet one-way delay: 40.276 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 38.87 Mbit/s
95th percentile per-packet one-way delay: 43.252 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 30.11 Mbit/s
95th percentile per-packet one-way delay: 107.715 ms
Loss rate: 0.80%
Run 3: Report of QUIC Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 51.15 Mbit/s)  Flow 1 egress (mean 51.17 Mbit/s)
Flow 2 ingress (mean 38.86 Mbit/s)  Flow 2 egress (mean 38.87 Mbit/s)
Flow 3 ingress (mean 30.18 Mbit/s)  Flow 3 egress (mean 30.11 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 40.28 ms)  Flow 2 (95th percentile 43.25 ms)  Flow 3 (95th percentile 107.72 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 13:03:08
End at: 2019-10-03 13:03:38
Local clock offset: 2.339 ms
Remote clock offset: -3.759 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.72 Mbit/s
95th percentile per-packet one-way delay: 45.315 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 51.00 Mbit/s
95th percentile per-packet one-way delay: 43.015 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 38.79 Mbit/s
95th percentile per-packet one-way delay: 42.215 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 105.728 ms
Loss rate: 0.75%
Run 4: Report of QUIC Cubic — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 50.99 Mbps)
- Flow 1 egress (mean 51.00 Mbps)
- Flow 2 ingress (mean 38.79 Mbps)
- Flow 2 egress (mean 38.79 Mbps)
- Flow 3 ingress (mean 30.23 Mbps)
- Flow 3 egress (mean 30.15 Mbps)

Delay (ms) vs Time (s)

- Flow 1 (95th percentile 43.02 ms)
- Flow 2 (95th percentile 42.22 ms)
- Flow 3 (95th percentile 105.73 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 13:33:50
End at: 2019-10-03 13:34:20
Local clock offset: 4.676 ms
Remote clock offset: -2.784 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.09 Mbit/s
  95th percentile per-packet one-way delay: 47.667 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 50.34 Mbit/s
  95th percentile per-packet one-way delay: 43.576 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 38.83 Mbit/s
  95th percentile per-packet one-way delay: 44.084 ms
  Loss rate: 0.30%
-- Flow 3:
  Average throughput: 30.18 Mbit/s
  95th percentile per-packet one-way delay: 106.617 ms
  Loss rate: 0.82%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2019-10-03 11:17:57
End at: 2019-10-03 11:18:27
Local clock offset: 1.45 ms
Remote clock offset: -0.517 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 16.743 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.700 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.729 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.757 ms
  Loss rate: 0.70%
Run 1: Report of SCReAM — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.]

- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.22 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

Throughput (Mbps)

Time (s)

Per-packet one-way delay (ms)

Time (s)
Run 2: Statistics of SCReAM

Start at: 2019-10-03 11:50:09
End at: 2019-10-03 11:50:39
Local clock offset: 3.529 ms
Remote clock offset: -2.22 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 18.637 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.589 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.680 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.556 ms
Loss rate: 0.71%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2019-10-03 12:22:18
End at: 2019-10-03 12:22:48
Local clock offset: -0.83 ms
Remote clock offset: -2.498 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 18.908 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.106 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.945 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 18.381 ms
Loss rate: 0.35%
Run 3: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for different flows.]

Throughput (Mbps)

Flow 1 ingress (mean 0.22 Mbps)
Flow 1 egress (mean 0.22 Mbps)
Flow 2 ingress (mean 0.22 Mbps)
Flow 2 egress (mean 0.22 Mbps)
Flow 3 ingress (mean 0.22 Mbps)
Flow 3 egress (mean 0.22 Mbps)

![Graph showing packet delay over time for different flows.]

Per packet one way delay (ms)

Flow 1 (95th percentile 19.11 ms)
Flow 2 (95th percentile 18.95 ms)
Flow 3 (95th percentile 18.38 ms)
Run 4: Statistics of SCReAM

Start at: 2019-10-03 12:55:30
End at: 2019-10-03 12:56:00
Local clock offset: 4.401 ms
Remote clock offset: -3.981 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 16.687 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.632 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.478 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 16.725 ms
  Loss rate: 0.71%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2019-10-03 13:26:24
End at: 2019-10-03 13:26:54
Local clock offset: 2.727 ms
Remote clock offset: -4.769 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 19.259 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.111 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.280 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.071 ms
Loss rate: 0.70%
Run 5: Report of SCReAM — Data Link

![Graph showing data link throughput and packet delay](image-url)

**Throughput (Mbps)**
- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.22 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

**Packet Delay (ms)**
- Flow 1 (95th percentile 19.11 ms)
- Flow 2 (95th percentile 19.28 ms)
- Flow 3 (95th percentile 19.07 ms)
Run 1: Statistics of Sprout

Start at: 2019-10-03 11:24:20
End at: 2019-10-03 11:24:50
Local clock offset: 3.394 ms
Remote clock offset: -0.673 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 24.651 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 24.598 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 15.91 Mbit/s
95th percentile per-packet one-way delay: 24.376 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 15.55 Mbit/s
95th percentile per-packet one-way delay: 25.469 ms
Loss rate: 0.36%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2019-10-03 11:57:01
End at: 2019-10-03 11:57:31
Local clock offset: 1.51 ms
Remote clock offset: -1.586 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.55 Mbit/s
95th percentile per-packet one-way delay: 21.387 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 16.03 Mbit/s
95th percentile per-packet one-way delay: 21.258 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 15.74 Mbit/s
95th percentile per-packet one-way delay: 21.323 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 15.33 Mbit/s
95th percentile per-packet one-way delay: 21.859 ms
Loss rate: 0.52%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2019-10-03 12:29:17
End at: 2019-10-03 12:29:47
Local clock offset: 1.644 ms
Remote clock offset: -2.592 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.53 Mbit/s
95th percentile per-packet one-way delay: 23.325 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 16.05 Mbit/s
95th percentile per-packet one-way delay: 22.585 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 15.79 Mbit/s
95th percentile per-packet one-way delay: 22.826 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 15.15 Mbit/s
95th percentile per-packet one-way delay: 25.150 ms
Loss rate: 0.65%
Run 3: Report of Sprout — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 16.05 Mbps)**
- **Flow 1 egress (mean 16.05 Mbps)**
- **Flow 2 ingress (mean 15.80 Mbps)**
- **Flow 2 egress (mean 15.79 Mbps)**
- **Flow 3 ingress (mean 15.17 Mbps)**
- **Flow 3 egress (mean 15.15 Mbps)**

**Per packet one way delay (ms)**

- **Flow 1 (95th percentile 22.59 ms)**
- **Flow 2 (95th percentile 22.83 ms)**
- **Flow 3 (95th percentile 23.15 ms)**

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Run 4: Statistics of Sprout

Start at: 2019-10-03 13:01:58
End at: 2019-10-03 13:02:28
Local clock offset: 4.655 ms
Remote clock offset: -3.788 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 31.67 Mbit/s
  95th percentile per-packet one-way delay: 23.933 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 16.00 Mbit/s
  95th percentile per-packet one-way delay: 24.181 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 15.84 Mbit/s
  95th percentile per-packet one-way delay: 23.473 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 15.64 Mbit/s
  95th percentile per-packet one-way delay: 23.638 ms
  Loss rate: 0.63%
Run 4: Report of Sprout — Data Link

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![Graph showing throughput and per-packet mean delay for different flows over time.]

- Flow 1 ingress (mean 16.01 Mbps)
- Flow 1 egress (mean 16.00 Mbps)
- Flow 2 ingress (mean 15.84 Mbps)
- Flow 2 egress (mean 15.84 Mbps)
- Flow 3 ingress (mean 15.63 Mbps)
- Flow 3 egress (mean 15.64 Mbps)

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Run 5: Statistics of Sprout

Start at: 2019-10-03 13:32:40
End at: 2019-10-03 13:33:10
Local clock offset: 3.742 ms
Remote clock offset: -3.521 ms

# Below is generated by plot.py at 2019-10-03 13:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 23.015 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 22.965 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 15.85 Mbit/s
95th percentile per-packet one-way delay: 23.262 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 15.64 Mbit/s
95th percentile per-packet one-way delay: 22.333 ms
Loss rate: 0.60%
Run 5: Report of Sprout — Data Link

![Graph of throughput and per-packet one-way delay](image_url)
Run 1: Statistics of TaoVA-100x

Start at: 2019-10-03 11:09:51
End at: 2019-10-03 11:10:21
Local clock offset: 3.76 ms
Remote clock offset: 0.477 ms

# Below is generated by plot.py at 2019-10-03 13:56:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.14 Mbit/s
  95th percentile per-packet one-way delay: 78.260 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 47.75 Mbit/s
  95th percentile per-packet one-way delay: 69.607 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 26.68 Mbit/s
  95th percentile per-packet one-way delay: 112.953 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 79.11 Mbit/s
  95th percentile per-packet one-way delay: 49.341 ms
  Loss rate: 0.62%
Run 1: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs Time](image1)

- **Flow 1 ingress (mean 47.76 Mbit/s)**
- **Flow 1 egress (mean 47.75 Mbit/s)**
- **Flow 2 ingress (mean 26.69 Mbit/s)**
- **Flow 2 egress (mean 26.68 Mbit/s)**
- **Flow 3 ingress (mean 79.20 Mbit/s)**
- **Flow 3 egress (mean 79.11 Mbit/s)**

![Graph 2: Delay vs Time](image2)

- **Flow 1 (95th percentile 69.61 ms)**
- **Flow 2 (95th percentile 112.95 ms)**
- **Flow 3 (95th percentile 49.34 ms)**
Run 2: Statistics of TaoVA-100x

Start at: 2019-10-03 11:41:22
End at: 2019-10-03 11:41:52
Local clock offset: 2.584 ms
Remote clock offset: -2.263 ms

# Below is generated by plot.py at 2019-10-03 13:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.87 Mbit/s
95th percentile per-packet one-way delay: 91.529 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 74.726 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 124.351 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 77.45 Mbit/s
95th percentile per-packet one-way delay: 99.874 ms
Loss rate: 0.76%
Run 2: Report of TaoVA-100x — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 3: Statistics of TaoVA-100x

Start at: 2019-10-03 12:14:32
End at: 2019-10-03 12:15:02
Local clock offset: -0.475 ms
Remote clock offset: -1.776 ms

# Below is generated by plot.py at 2019-10-03 13:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.16 Mbit/s
95th percentile per-packet one-way delay: 75.309 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 51.02 Mbit/s
95th percentile per-packet one-way delay: 75.437 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 62.45 Mbit/s
95th percentile per-packet one-way delay: 71.488 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 172.571 ms
Loss rate: 2.44%
Run 3: Report of TaoVA-100x — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)

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Run 4: Statistics of TaoVA-100x

Start at: 2019-10-03 12:46:28
End at: 2019-10-03 12:46:58
Local clock offset: 6.651 ms
Remote clock offset: -3.937 ms

# Below is generated by plot.py at 2019-10-03 13:56:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.78 Mbit/s
  95th percentile per-packet one-way delay: 77.700 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 48.04 Mbit/s
  95th percentile per-packet one-way delay: 72.846 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 46.77 Mbit/s
  95th percentile per-packet one-way delay: 76.446 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 43.99 Mbit/s
  95th percentile per-packet one-way delay: 164.322 ms
  Loss rate: 1.08%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs. Time (Mbps/s)]
- Flow 1 ingress (mean 48.06 Mbps/s)
- Flow 1 egress (mean 48.04 Mbps/s)
- Flow 2 ingress (mean 46.90 Mbps/s)
- Flow 2 egress (mean 46.77 Mbps/s)
- Flow 3 ingress (mean 44.23 Mbps/s)
- Flow 3 egress (mean 43.99 Mbps/s)

![Graph 2: Per-packet one-way delay (ms)]
- Flow 1 (95th percentile 72.85 ms)
- Flow 2 (95th percentile 76.45 ms)
- Flow 3 (95th percentile 164.32 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-10-03 13:18:30
End at: 2019-10-03 13:19:00
Local clock offset: 3.6 ms
Remote clock offset: -3.433 ms

# Below is generated by plot.py at 2019-10-03 13:56:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.53 Mbit/s
  95th percentile per-packet one-way delay: 93.253 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 47.93 Mbit/s
  95th percentile per-packet one-way delay: 76.841 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 26.74 Mbit/s
  95th percentile per-packet one-way delay: 124.345 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 76.76 Mbit/s
  95th percentile per-packet one-way delay: 100.588 ms
  Loss rate: 0.62%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2019-10-03 11:01:22
End at: 2019-10-03 11:01:52
Local clock offset: 3.14 ms
Remote clock offset: -0.203 ms

# Below is generated by plot.py at 2019-10-03 13:56:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.51 Mbit/s
95th percentile per-packet one-way delay: 19.815 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 51.11 Mbit/s
95th percentile per-packet one-way delay: 19.379 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.45 Mbit/s
95th percentile per-packet one-way delay: 19.966 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 25.61 Mbit/s
95th percentile per-packet one-way delay: 19.869 ms
Loss rate: 0.55%
Run 1: Report of TCP Vegas — Data Link

Graph 1: Throughput vs. Time

- Flow 1 ingress (mean 51.10 Mbit/s)
- Flow 1 egress (mean 51.11 Mbit/s)
- Flow 2 ingress (mean 37.42 Mbit/s)
- Flow 2 egress (mean 37.45 Mbit/s)
- Flow 3 ingress (mean 25.62 Mbit/s)
- Flow 3 egress (mean 25.61 Mbit/s)

Graph 2: Per-packet one-way delay vs. Time

- Flow 1 (95th percentile 19.38 ms)
- Flow 2 (95th percentile 19.97 ms)
- Flow 3 (95th percentile 19.87 ms)
Run 2: Statistics of TCP Vegas

Start at: 2019-10-03 11:32:18
End at: 2019-10-03 11:32:48
Local clock offset: 3.793 ms
Remote clock offset: -0.921 ms

# Below is generated by plot.py at 2019-10-03 13:56:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.08 Mbit/s
95th percentile per-packet one-way delay: 20.455 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 50.40 Mbit/s
95th percentile per-packet one-way delay: 21.037 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 37.89 Mbit/s
95th percentile per-packet one-way delay: 19.978 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 59.779 ms
Loss rate: 0.59%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2019-10-03 12:04:42
End at: 2019-10-03 12:05:12
Local clock offset: 1.294 ms
Remote clock offset: -1.894 ms

# Below is generated by plot.py at 2019-10-03 13:56:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.41 Mbit/s
95th percentile per-packet one-way delay: 22.675 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 56.78 Mbit/s
95th percentile per-packet one-way delay: 22.348 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 33.70 Mbit/s
95th percentile per-packet one-way delay: 21.912 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 25.181 ms
Loss rate: 0.54%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 12:37:10
End at: 2019-10-03 12:37:40
Local clock offset: 4.851 ms
Remote clock offset: -3.084 ms

# Below is generated by plot.py at 2019-10-03 13:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.81 Mbit/s
95th percentile per-packet one-way delay: 21.002 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 50.85 Mbit/s
95th percentile per-packet one-way delay: 21.654 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 20.914 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 19.959 ms
Loss rate: 0.68%
Run 4: Report of TCP Vegas — Data Link

![Graph of TCP Vegas data link performance](image)

- **Throughput (Mbit/s)**
  - Flow 1 ingress (mean 50.81 Mbit/s)
  - Flow 1 egress (mean 50.85 Mbit/s)
  - Flow 2 ingress (mean 49.88 Mbit/s)
  - Flow 2 egress (mean 49.88 Mbit/s)
  - Flow 3 ingress (mean 23.50 Mbit/s)
  - Flow 3 egress (mean 23.46 Mbit/s)

- **Per-packet one way delay (ms)**
  - Flow 1 (95th percentile 21.65 ms)
  - Flow 2 (95th percentile 20.91 ms)
  - Flow 3 (95th percentile 19.96 ms)
Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 13:09:23
End at: 2019-10-03 13:09:53
Local clock offset: 4.259 ms
Remote clock offset: -4.699 ms

# Below is generated by plot.py at 2019-10-03 13:57:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.64 Mbit/s
95th percentile per-packet one-way delay: 22.874 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 54.26 Mbit/s
95th percentile per-packet one-way delay: 23.234 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 35.55 Mbit/s
95th percentile per-packet one-way delay: 22.554 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 41.44 Mbit/s
95th percentile per-packet one-way delay: 22.840 ms
Loss rate: 0.49%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2019-10-03 11:19:05
End at: 2019-10-03 11:19:35
Local clock offset: 2.7 ms
Remote clock offset: -1.33 ms

# Below is generated by plot.py at 2019-10-03 13:57:45
# Datalink statistics

-- Total of 3 flows:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 117.030 ms
Loss rate: 0.49%

-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 114.912 ms
Loss rate: 0.43%

-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 106.633 ms
Loss rate: 0.44%

-- Flow 3:
Average throughput: 30.39 Mbit/s
95th percentile per-packet one-way delay: 222.416 ms
Loss rate: 0.97%
Run 1: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 53.60 Mbps)  Flow 1 egress (mean 53.29 Mbps)
Flow 2 ingress (mean 40.72 Mbps)  Flow 2 egress (mean 40.63 Mbps)
Flow 3 ingress (mean 30.54 Mbps)  Flow 3 egress (mean 30.39 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 114.91 ms)  Flow 2 (95th percentile 106.63 ms)  Flow 3 (95th percentile 222.42 ms)
Run 2: Statistics of Verus

Start at: 2019-10-03 11:51:16
End at: 2019-10-03 11:51:46
Local clock offset: 1.17 ms
Remote clock offset: -3.338 ms

# Below is generated by plot.py at 2019-10-03 13:57:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.44 Mbit/s
95th percentile per-packet one-way delay: 99.052 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 60.35 Mbit/s
95th percentile per-packet one-way delay: 101.354 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 85.391 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 24.53 Mbit/s
95th percentile per-packet one-way delay: 195.190 ms
Loss rate: 1.00%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2019-10-03 12:23:32
End at: 2019-10-03 12:24:02
Local clock offset: -0.098 ms
Remote clock offset: -2.784 ms

# Below is generated by plot.py at 2019-10-03 13:57:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.14 Mbit/s
  95th percentile per-packet one-way delay: 95.219 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 59.37 Mbit/s
  95th percentile per-packet one-way delay: 86.699 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 20.28 Mbit/s
  95th percentile per-packet one-way delay: 150.304 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 28.14 Mbit/s
  95th percentile per-packet one-way delay: 242.598 ms
  Loss rate: 1.00%
Run 3: Report of Verus — Data Link

![Graph showing throughput and packet delay over time for different flows.](Image)

- **Flow 1**:
  - Ingress: Mean 59.49 Mbit/s
  - Egress: Mean 59.37 Mbit/s

- **Flow 2**:
  - Ingress: Mean 20.33 Mbit/s
  - Egress: Mean 20.28 Mbit/s

- **Flow 3**:
  - Ingress: Mean 28.29 Mbit/s
  - Egress: Mean 20.14 Mbit/s

![Graph showing packet delay over time for different flows.](Image)

- **Flow 1**: 95th percentile 86.70 ms
- **Flow 2**: 95th percentile 150.30 ms
- **Flow 3**: 95th percentile 242.60 ms
Run 4: Statistics of Verus

Start at: 2019-10-03 12:56:38
End at: 2019-10-03 12:57:08
Local clock offset: 6.265 ms
Remote clock offset: -4.079 ms

# Below is generated by plot.py at 2019-10-03 13:57:56
# Datalink statistics

-- Total of 3 flows:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 121.083 ms
Loss rate: 0.36%

-- Flow 1:
Average throughput: 53.37 Mbit/s
95th percentile per-packet one-way delay: 121.646 ms
Loss rate: 0.16%

-- Flow 2:
Average throughput: 39.02 Mbit/s
95th percentile per-packet one-way delay: 98.368 ms
Loss rate: 0.52%

-- Flow 3:
Average throughput: 32.46 Mbit/s
95th percentile per-packet one-way delay: 317.564 ms
Loss rate: 0.92%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2019-10-03 13:27:31
End at: 2019-10-03 13:28:01
Local clock offset: 1.725 ms
Remote clock offset: -4.356 ms

# Below is generated by plot.py at 2019-10-03 13:58:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.54 Mbit/s
95th percentile per-packet one-way delay: 85.819 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 53.53 Mbit/s
95th percentile per-packet one-way delay: 85.397 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 73.391 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 30.42 Mbit/s
95th percentile per-packet one-way delay: 205.774 ms
Loss rate: 0.92%
Run 5: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2019-10-03 11:26:57
End at: 2019-10-03 11:27:27
Local clock offset: 0.626 ms
Remote clock offset: -0.674 ms

# Below is generated by plot.py at 2019-10-03 13:58:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.69 Mbit/s
  95th percentile per-packet one-way delay: 133.107 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 52.72 Mbit/s
  95th percentile per-packet one-way delay: 35.223 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 37.49 Mbit/s
  95th percentile per-packet one-way delay: 183.309 ms
  Loss rate: 1.30%
-- Flow 3:
  Average throughput: 27.52 Mbit/s
  95th percentile per-packet one-way delay: 33.189 ms
  Loss rate: 0.63%
Run 1: Report of PCC-Vivace — Data Link

![Graph 1: Throughput (Mbps/s) vs Time (s)]

- Flow 1 ingress (mean 52.84 Mbps/s)
- Flow 1 egress (mean 52.72 Mbps/s)
- Flow 2 ingress (mean 37.89 Mbps/s)
- Flow 2 egress (mean 37.49 Mbps/s)
- Flow 3 ingress (mean 27.56 Mbps/s)
- Flow 3 egress (mean 27.52 Mbps/s)

![Graph 2: Per-packet end-to-end delay (ms) vs Time (s)]

- Flow 1 (95th percentile 35.22 ms)
- Flow 2 (95th percentile 183.31 ms)
- Flow 3 (95th percentile 33.19 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2019-10-03 11:59:29
End at: 2019-10-03 11:59:59
Local clock offset: 1.793 ms
Remote clock offset: -1.03 ms

# Below is generated by plot.py at 2019-10-03 13:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.08 Mbit/s
95th percentile per-packet one-way delay: 964.981 ms
Loss rate: 4.27%
-- Flow 1:
Average throughput: 56.50 Mbit/s
95th percentile per-packet one-way delay: 1224.089 ms
Loss rate: 6.19%
-- Flow 2:
Average throughput: 34.91 Mbit/s
95th percentile per-packet one-way delay: 49.659 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 25.46 Mbit/s
95th percentile per-packet one-way delay: 36.318 ms
Loss rate: 1.43%
Run 2: Report of PCC-Vivace — Data Link

![Graph 1: Throughput (Mbps)](image1)

- Flow 1 ingress (mean 60.13 Mbps)
- Flow 1 egress (mean 56.50 Mbps)
- Flow 2 ingress (mean 34.94 Mbps)
- Flow 2 egress (mean 34.91 Mbps)
- Flow 3 ingress (mean 25.70 Mbps)
- Flow 3 egress (mean 25.46 Mbps)

![Graph 2: Per-packet one-way delay (ms)](image2)

- Flow 1 (95th percentile 1224.09 ms)
- Flow 2 (95th percentile 49.66 ms)
- Flow 3 (95th percentile 36.32 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 12:31:44
End at: 2019-10-03 12:32:14
Local clock offset: 3.662 ms
Remote clock offset: -3.342 ms

# Below is generated by plot.py at 2019-10-03 13:58:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.84 Mbit/s
95th percentile per-packet one-way delay: 681.094 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 49.80 Mbit/s
95th percentile per-packet one-way delay: 963.358 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 618.385 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 38.162 ms
Loss rate: 0.72%
Run 3: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 50.34 Mbps)
Flow 1 egress (mean 49.80 Mbps)
Flow 2 ingress (mean 34.26 Mbps)
Flow 2 egress (mean 33.67 Mbps)
Flow 3 ingress (mean 35.46 Mbps)
Flow 3 egress (mean 35.40 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 963.36 ms)
Flow 2 (95th percentile 618.38 ms)
Flow 3 (95th percentile 38.16 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 13:04:23
End at: 2019-10-03 13:04:53
Local clock offset: 4.558 ms
Remote clock offset: -5.194 ms

# Below is generated by plot.py at 2019-10-03 13:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.70 Mbit/s
95th percentile per-packet one-way delay: 161.189 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 180.827 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 35.72 Mbit/s
95th percentile per-packet one-way delay: 143.988 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 23.993 ms
Loss rate: 1.16%
Run 4: Report of PCC-Vivace — Data Link

[Graph 1: Throughput (Mbps) vs Time (s)]
- Flow 1 ingress (mean 59.76 Mbps)
- Flow 1 egress (mean 59.71 Mbps)
- Flow 2 ingress (mean 35.80 Mbps)
- Flow 2 egress (mean 35.72 Mbps)
- Flow 3 ingress (mean 12.97 Mbps)
- Flow 3 egress (mean 12.68 Mbps)

[Graph 2: Per packet one-way delay (ms) vs Time (s)]
- Flow 1 (95th percentile 180.83 ms)
- Flow 2 (95th percentile 143.99 ms)
- Flow 3 (95th percentile 23.99 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2019-10-03 13:35:06
End at: 2019-10-03 13:35:36
Local clock offset: 5.577 ms
Remote clock offset: -2.786 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.27 Mbit/s
  95th percentile per-packet one-way delay: 150.668 ms
  Loss rate: 0.35%
  -- Flow 1:
  Average throughput: 54.29 Mbit/s
  95th percentile per-packet one-way delay: 152.282 ms
  Loss rate: 0.26%
  -- Flow 2:
  Average throughput: 40.07 Mbit/s
  95th percentile per-packet one-way delay: 164.434 ms
  Loss rate: 0.40%
  -- Flow 3:
  Average throughput: 13.12 Mbit/s
  95th percentile per-packet one-way delay: 40.169 ms
  Loss rate: 1.21%
Run 5: Report of PCC-Vivace — Data Link
Run 1: Statistics of WebRTC media

Start at: 2019-10-03 11:29:49
End at: 2019-10-03 11:30:19
Local clock offset: 1.199 ms
Remote clock offset: -1.044 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.96 Mbit/s
95th percentile per-packet one-way delay: 16.858 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 16.889 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 16.716 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 16.929 ms
Loss rate: 0.80%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2019-10-03 12:02:15
End at: 2019-10-03 12:02:45
Local clock offset: 1.349 ms
Remote clock offset: -2.418 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.86 Mbit/s
  95th percentile per-packet one-way delay: 19.325 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 1.69 Mbit/s
  95th percentile per-packet one-way delay: 19.148 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 0.96 Mbit/s
  95th percentile per-packet one-way delay: 19.455 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 18.969 ms
  Loss rate: 0.51%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput and per-packet one way delay over time for different flows.]

- Flow 1 ingress (mean 1.69 Mbit/s)
- Flow 1 egress (mean 1.69 Mbit/s)
- Flow 2 ingress (mean 0.96 Mbit/s)
- Flow 2 egress (mean 0.96 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)
Run 3: Statistics of WebRTC media

Start at: 2019-10-03 12:34:43
End at: 2019-10-03 12:35:13
Local clock offset: 4.374 ms
Remote clock offset: -4.693 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 20.703 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 20.530 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 20.661 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 21.086 ms
Loss rate: 0.75%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2019-10-03 13:07:01
End at: 2019-10-03 13:07:31
Local clock offset: 2.99 ms
Remote clock offset: -4.039 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.85 Mbit/s
  95th percentile per-packet one-way delay: 18.861 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 1.58 Mbit/s
  95th percentile per-packet one-way delay: 18.800 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.94 Mbit/s
  95th percentile per-packet one-way delay: 18.938 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 0.34 Mbit/s
  95th percentile per-packet one-way delay: 18.511 ms
  Loss rate: 0.01%
Run 4: Report of WebRTC media — Data Link

![Graph of WebRTC media data link throughput and delay over time.]

- Throughput in Mbit/s
  - Flow 1 ingress (mean 1.58 Mbit/s)
  - Flow 1 egress (mean 1.58 Mbit/s)
  - Flow 2 ingress (mean 0.94 Mbit/s)
  - Flow 2 egress (mean 0.94 Mbit/s)
  - Flow 3 ingress (mean 0.34 Mbit/s)
  - Flow 3 egress (mean 0.34 Mbit/s)

- Per-packet one-way delay in ms
  - Flow 1 (95th percentile 18.80 ms)
  - Flow 2 (95th percentile 18.94 ms)
  - Flow 3 (95th percentile 18.51 ms)
Run 5: Statistics of WebRTC media

Start at: 2019-10-03 13:37:40
End at: 2019-10-03 13:38:10
Local clock offset: 4.523 ms
Remote clock offset: -3.306 ms

# Below is generated by plot.py at 2019-10-03 13:58:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 18.928 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 18.994 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.93 Mbit/s
95th percentile per-packet one-way delay: 18.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 18.772 ms
Loss rate: 0.65%
Run 5: Report of WebRTC media — Data Link