Pantheon Report

Data path: Saudi Arabia on enp2s0 (remote) → AWS India 2 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 4.15.0-1041-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 @ d6da1459332fcee56963885d7e8a176a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e032143cedbdf658e562f4
third_party/indigo @ 2601c92e4aa9d838dc4df0edbf90c077e64d
third_party/libutp @ b3465b942e8286f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187d823da20955337730c764686ca4966
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
third_party/pantheon-tunnel @ f866d3f58d27af9d942717625ee3a354cc2e082bd
third_party/pcc @ lafc958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f613e8acd08fab92c4eb2df974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cfff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
test from Saudi Arabia to AWS India 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
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<th>mean avg tput (Mbit/s) flow 1</th>
<th>mean avg tput (Mbit/s) flow 2</th>
<th>mean avg tput (Mbit/s) flow 3</th>
<th>mean 95th-%ile delay (ms) flow 1</th>
<th>mean 95th-%ile delay (ms) flow 2</th>
<th>mean 95th-%ile delay (ms) flow 3</th>
<th>mean loss rate (%) flow 1</th>
<th>mean loss rate (%) flow 2</th>
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Run 1: Statistics of TCP BBR

End at: 2019-11-24 16:09:52
Local clock offset: -0.388 ms
Remote clock offset: -40.539 ms
Run 1: Report of TCP BBR — Data Link

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Run 2: Statistics of TCP BBR

End at: 2019-11-24 16:44:22
Local clock offset: -1.441 ms
Remote clock offset: -42.065 ms
Run 2: Report of TCP BBR — Data Link

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Run 3: Statistics of TCP BBR

Start at: 2019-11-24 17:18:31
End at: 2019-11-24 17:19:01
Local clock offset: -3.18 ms
Remote clock offset: -41.601 ms
Run 3: Report of TCP BBR — Data Link

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Figure is missing
Run 4: Statistics of TCP BBR

Start at: 2019-11-24 17:52:54
End at: 2019-11-24 17:53:24
Local clock offset: -2.1 ms
Remote clock offset: -43.975 ms
Run 4: Report of TCP BBR — Data Link

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Run 5: Statistics of TCP BBR

Local clock offset: -2.911 ms
Remote clock offset: -41.039 ms
Run 5: Report of TCP BBR — Data Link

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Figure is missing
Run 1: Statistics of Copa

Local clock offset: 0.487 ms
Remote clock offset: -43.26 ms

# Below is generated by plot.py at 2019-11-24 18:46:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.15 Mbit/s
95th percentile per-packet one-way delay: 141.665 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 132.34 Mbit/s
95th percentile per-packet one-way delay: 141.688 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 28.09 Mbit/s
95th percentile per-packet one-way delay: 141.335 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 19.67 Mbit/s
95th percentile per-packet one-way delay: 142.038 ms
Loss rate: 2.91%
Run 1: Report of Copa — Data Link

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

**Throughput (Mbps)**

**Delay (ms)**

Legend:
- Flow 1 ingress (mean 132.26 Mbps)
- Flow 1 egress (mean 132.34 Mbps)
- Flow 2 ingress (mean 28.05 Mbps)
- Flow 2 egress (mean 28.09 Mbps)
- Flow 3 ingress (mean 19.85 Mbps)
- Flow 3 egress (mean 19.67 Mbps)
Run 2: Statistics of Copa

Start at: 2019-11-24 16:47:54
Local clock offset: 0.412 ms
Remote clock offset: -39.761 ms

# Below is generated by plot.py at 2019-11-24 18:46:31
# Datalink statistics
 -- Total of 3 flows:
 Average throughput: 153.75 Mbit/s
 95th percentile per-packet one-way delay: 140.065 ms
 Loss rate: 0.70%
 -- Flow 1:
 Average throughput: 115.64 Mbit/s
 95th percentile per-packet one-way delay: 139.162 ms
 Loss rate: 0.24%
 -- Flow 2:
 Average throughput: 46.18 Mbit/s
 95th percentile per-packet one-way delay: 142.973 ms
 Loss rate: 1.95%
 -- Flow 3:
 Average throughput: 22.79 Mbit/s
 95th percentile per-packet one-way delay: 140.296 ms
 Loss rate: 2.69%
Run 2: Report of Copa — Data Link

![Graphs showing throughput and per-packet one-way delay](image-url)
Run 3: Statistics of Copa

End at: 2019-11-24 17:23:07
Local clock offset: -0.427 ms
Remote clock offset: -46.482 ms

# Below is generated by plot.py at 2019-11-24 18:46:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.40 Mbit/s
95th percentile per-packet one-way delay: 146.123 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 146.993 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 83.96 Mbit/s
95th percentile per-packet one-way delay: 144.977 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 20.53 Mbit/s
95th percentile per-packet one-way delay: 144.733 ms
Loss rate: 2.24%
Run 3: Report of Copa — Data Link

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

Legend:
- Flow 1 ingress (mean 85.77 Mbit/s)
- Flow 1 egress (mean 85.89 Mbit/s)
- Flow 2 ingress (mean 84.02 Mbit/s)
- Flow 2 egress (mean 83.96 Mbit/s)
- Flow 3 ingress (mean 20.61 Mbit/s)
- Flow 3 egress (mean 20.53 Mbit/s)
Run 4: Statistics of Copa

Start at: 2019-11-24 17:56:58
End at: 2019-11-24 17:57:28
Local clock offset: 0.271 ms
Remote clock offset: -40.285 ms

# Below is generated by plot.py at 2019-11-24 18:46:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 140.84 Mbit/s
  95th percentile per-packet one-way delay: 140.862 ms
  Loss rate: 0.78%
-- Flow 1:
  Average throughput: 80.67 Mbit/s
  95th percentile per-packet one-way delay: 141.782 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 76.85 Mbit/s
  95th percentile per-packet one-way delay: 139.873 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 27.97 Mbit/s
  95th percentile per-packet one-way delay: 140.203 ms
  Loss rate: 2.63%
Run 4: Report of Copa — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 80.49 Mbit/s)
- Flow 1 egress (mean 80.67 Mbit/s)
- Flow 2 ingress (mean 76.88 Mbit/s)
- Flow 2 egress (mean 76.85 Mbit/s)
- Flow 3 ingress (mean 26.16 Mbit/s)
- Flow 3 egress (mean 27.97 Mbit/s)

![Delay Graph](image)

- Flow 1 (95th percentile 141.78 ms)
- Flow 2 (95th percentile 139.87 ms)
- Flow 3 (95th percentile 140.20 ms)
Run 5: Statistics of Copa

Local clock offset: 0.29 ms
Remote clock offset: -39.582 ms

# Below is generated by plot.py at 2019-11-24 18:46:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.37 Mbit/s
95th percentile per-packet one-way delay: 138.982 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 134.01 Mbit/s
95th percentile per-packet one-way delay: 138.995 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 27.99 Mbit/s
95th percentile per-packet one-way delay: 138.815 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 20.61 Mbit/s
95th percentile per-packet one-way delay: 139.127 ms
Loss rate: 1.21%
Run 5: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2019-11-24 16:01:44
End at: 2019-11-24 16:02:14
Local clock offset: -1.016 ms
Remote clock offset: -41.849 ms

# Below is generated by plot.py at 2019-11-24 18:46:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.53 Mbit/s
95th percentile per-packet one-way delay: 152.558 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 178.74 Mbit/s
95th percentile per-packet one-way delay: 144.946 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 139.56 Mbit/s
95th percentile per-packet one-way delay: 155.193 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 131.52 Mbit/s
95th percentile per-packet one-way delay: 171.264 ms
Loss rate: 2.72%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2019-11-24 16:36:16
End at: 2019-11-24 16:36:46
Local clock offset: -0.429 ms
Remote clock offset: -45.013 ms

# Below is generated by plot.py at 2019-11-24 18:46:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.54 Mbit/s
95th percentile per-packet one-way delay: 160.285 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 190.19 Mbit/s
95th percentile per-packet one-way delay: 154.079 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 134.46 Mbit/s
95th percentile per-packet one-way delay: 187.429 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 106.91 Mbit/s
95th percentile per-packet one-way delay: 200.745 ms
Loss rate: 1.76%
Run 2: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- Flow 1 ingress (mean 189.50 Mbps)
- Flow 1 egress (mean 190.19 Mbps)
- Flow 2 ingress (mean 134.17 Mbps)
- Flow 2 egress (mean 134.46 Mbps)
- Flow 3 ingress (mean 106.72 Mbps)
- Flow 3 egress (mean 106.91 Mbps)

![Graph 2: Mean packet one-way delay (ms) vs Time (s)]
- Flow 1 (95th percentile 154.08 ms)
- Flow 2 (95th percentile 187.43 ms)
- Flow 3 (95th percentile 200.75 ms)
Run 3: Statistics of TCP Cubic

Start at: 2019-11-24 17:10:47
End at: 2019-11-24 17:11:17
Local clock offset: -3.027 ms
Remote clock offset: -43.76 ms

# Below is generated by plot.py at 2019-11-24 18:46:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.80 Mbit/s
95th percentile per-packet one-way delay: 156.284 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 220.09 Mbit/s
95th percentile per-packet one-way delay: 151.179 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 123.85 Mbit/s
95th percentile per-packet one-way delay: 158.739 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 114.71 Mbit/s
95th percentile per-packet one-way delay: 179.191 ms
Loss rate: 2.32%
Run 3: Report of TCP Cubic — Data Link

Graph 1: Throughput (Mbit/s) vs. Time (s)
- Flow 1 ingress (mean 219.45 Mbit/s)
- Flow 1 egress (mean 220.09 Mbit/s)
- Flow 2 ingress (mean 123.62 Mbit/s)
- Flow 2 egress (mean 123.85 Mbit/s)
- Flow 3 ingress (mean 115.16 Mbit/s)
- Flow 3 egress (mean 114.71 Mbit/s)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 151.18 ms)
- Flow 2 (95th percentile 158.74 ms)
- Flow 3 (95th percentile 179.19 ms)
Run 4: Statistics of TCP Cubic

Start at: 2019-11-24 17:45:16
End at: 2019-11-24 17:45:46
Local clock offset: -1.787 ms
Remote clock offset: -42.891 ms

# Below is generated by plot.py at 2019-11-24 18:49:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 328.07 Mbit/s
  95th percentile per-packet one-way delay: 157.644 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 183.58 Mbit/s
  95th percentile per-packet one-way delay: 152.184 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 144.34 Mbit/s
  95th percentile per-packet one-way delay: 180.818 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 148.28 Mbit/s
  95th percentile per-packet one-way delay: 186.949 ms
  Loss rate: 1.69%
Run 4: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress**: mean 183.04 Mbps
- **Flow 1 egress**: mean 183.58 Mbps
- **Flow 2 ingress**: mean 144.18 Mbps
- **Flow 2 egress**: mean 144.34 Mbps
- **Flow 3 ingress**: mean 147.85 Mbps
- **Flow 3 egress**: mean 148.28 Mbps

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

- **Flow 1** (95th percentile): 152.18 ms
- **Flow 2** (95th percentile): 180.82 ms
- **Flow 3** (95th percentile): 186.95 ms
Run 5: Statistics of TCP Cubic

End at: 2019-11-24 18:20:02
Local clock offset: -2.617 ms
Remote clock offset: -40.274 ms

# Below is generated by plot.py at 2019-11-24 18:49:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 310.91 Mbit/s
  95th percentile per-packet one-way delay: 151.381 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 190.57 Mbit/s
  95th percentile per-packet one-way delay: 148.172 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 124.96 Mbit/s
  95th percentile per-packet one-way delay: 166.606 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 113.77 Mbit/s
  95th percentile per-packet one-way delay: 214.085 ms
  Loss rate: 2.32%
Run 5: Report of TCP Cubic — Data Link

![Graph showing throughput and packet error rate over time.](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 190.13 Mbps)
  - Flow 1 egress (mean 190.57 Mbps)
  - Flow 2 ingress (mean 122.18 Mbps)
  - Flow 2 egress (mean 124.96 Mbps)
  - Flow 3 ingress (mean 109.54 Mbps)
  - Flow 3 egress (mean 113.77 Mbps)

- **Per-packet error rate (ms):**
  - Flow 1 (95th percentile 148.17 ms)
  - Flow 2 (95th percentile 166.61 ms)
  - Flow 3 (95th percentile 214.09 ms)
Run 1: Statistics of FillP

Start at: 2019-11-24 16:07:47
End at: 2019-11-24 16:08:17
Local clock offset: 0.233 ms
Remote clock offset: -40.757 ms

# Below is generated by plot.py at 2019-11-24 18:51:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.27 Mbit/s
95th percentile per-packet one-way delay: 391.495 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 264.23 Mbit/s
95th percentile per-packet one-way delay: 419.170 ms
Loss rate: 3.20%
-- Flow 2:
Average throughput: 182.91 Mbit/s
95th percentile per-packet one-way delay: 334.622 ms
Loss rate: 3.70%
-- Flow 3:
Average throughput: 117.35 Mbit/s
95th percentile per-packet one-way delay: 252.098 ms
Loss rate: 3.42%
Run 1: Report of FillP — Data Link

![Throughput graph]

- **Flow 1 ingress** (mean 271.19 Mbit/s)
- **Flow 1 egress** (mean 264.23 Mbit/s)
- **Flow 2 ingress** (mean 188.14 Mbit/s)
- **Flow 2 egress** (mean 182.91 Mbit/s)
- **Flow 3 ingress** (mean 119.33 Mbit/s)
- **Flow 3 egress** (mean 117.35 Mbit/s)

![Delay graph]

- **Flow 1 (95th percentile 419.17 ms)**
- **Flow 2 (95th percentile 334.62 ms)**
- **Flow 3 (95th percentile 252.10 ms)**
Run 2: Statistics of FillP

Local clock offset: 0.168 ms
Remote clock offset: -39.653 ms

# Below is generated by plot.py at 2019-11-24 18:52:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 409.91 Mbit/s
  95th percentile per-packet one-way delay: 393.475 ms
  Loss rate: 8.36%
-- Flow 1:
  Average throughput: 313.46 Mbit/s
  95th percentile per-packet one-way delay: 389.530 ms
  Loss rate: 4.97%
-- Flow 2:
  Average throughput: 137.84 Mbit/s
  95th percentile per-packet one-way delay: 471.452 ms
  Loss rate: 17.67%
-- Flow 3:
  Average throughput: 109.85 Mbit/s
  95th percentile per-packet one-way delay: 344.846 ms
  Loss rate: 18.30%
Run 2: Report of FillP — Data Link

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

![Graph 2: Per-Packet One-Way Delay vs. Time](image2.png)
Run 3: Statistics of FillP

Start at: 2019-11-24 17:16:47
End at: 2019-11-24 17:17:17
Local clock offset: 0.47 ms
Remote clock offset: -38.998 ms

# Below is generated by plot.py at 2019-11-24 18:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.64 Mbit/s
95th percentile per-packet one-way delay: 376.834 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 249.08 Mbit/s
95th percentile per-packet one-way delay: 399.224 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 172.65 Mbit/s
95th percentile per-packet one-way delay: 326.712 ms
Loss rate: 5.17%
-- Flow 3:
Average throughput: 113.65 Mbit/s
95th percentile per-packet one-way delay: 287.497 ms
Loss rate: 12.96%
Run 3: Report of FillP — Data Link

![Graph of Throughput and Delay](image-url)
Run 4: Statistics of FillP

End at: 2019-11-24 17:51:50
Local clock offset: -0.268 ms
Remote clock offset: -41.877 ms

# Below is generated by plot.py at 2019-11-24 18:52:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.00 Mbit/s
95th percentile per-packet one-way delay: 376.600 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 265.28 Mbit/s
95th percentile per-packet one-way delay: 404.496 ms
Loss rate: 1.69%
-- Flow 2:
Average throughput: 153.08 Mbit/s
95th percentile per-packet one-way delay: 313.991 ms
Loss rate: 2.78%
-- Flow 3:
Average throughput: 107.68 Mbit/s
95th percentile per-packet one-way delay: 265.802 ms
Loss rate: 6.27%
Run 5: Statistics of FillP

End at: 2019-11-24 18:26:05
Local clock offset: -0.292 ms
Remote clock offset: -46.384 ms
Run 5: Report of FillP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2019-11-24 15:54:42
Local clock offset: 0.285 ms
Remote clock offset: -44.245 ms

# Below is generated by plot.py at 2019-11-24 18:52:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 350.70 Mbit/s
  95th percentile per-packet one-way delay: 302.139 ms
  Loss rate: 4.09%
-- Flow 1:
  Average throughput: 264.96 Mbit/s
  95th percentile per-packet one-way delay: 315.652 ms
  Loss rate: 2.51%
-- Flow 2:
  Average throughput: 30.96 Mbit/s
  95th percentile per-packet one-way delay: 356.807 ms
  Loss rate: 23.57%
-- Flow 3:
  Average throughput: 199.79 Mbit/s
  95th percentile per-packet one-way delay: 227.211 ms
  Loss rate: 2.76%
Run 1: Report of FillP-Sheep — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per-packet delivery delay (ms)

Legend:
- Flow 1 ingress (mean 270.38 Mbps)
- Flow 1 egress (mean 264.96 Mbps)
- Flow 2 ingress (mean 40.50 Mbps)
- Flow 2 egress (mean 30.96 Mbps)
- Flow 3 ingress (mean 201.95 Mbps)
- Flow 3 egress (mean 199.79 Mbps)

Flow 1 (95th percentile 315.65 ms)
Flow 2 (95th percentile 356.81 ms)
Flow 3 (95th percentile 227.21 ms)
Run 2: Statistics of FillP-Sheep

End at: 2019-11-24 16:29:29
Local clock offset: 0.66 ms
Remote clock offset: -42.245 ms

# Below is generated by plot.py at 2019-11-24 18:55:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 420.01 Mbit/s
  95th percentile per-packet one-way delay: 406.424 ms
  Loss rate: 5.44%
-- Flow 1:
  Average throughput: 265.83 Mbit/s
  95th percentile per-packet one-way delay: 382.707 ms
  Loss rate: 3.30%
-- Flow 2:
  Average throughput: 173.25 Mbit/s
  95th percentile per-packet one-way delay: 471.417 ms
  Loss rate: 9.74%
-- Flow 3:
  Average throughput: 120.55 Mbit/s
  95th percentile per-packet one-way delay: 288.954 ms
  Loss rate: 6.40%
Run 2: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 265.88 Mbit/s)  Flow 1 egress (mean 265.83 Mbit/s)
Flow 2 ingress (mean 182.66 Mbit/s)  Flow 2 egress (mean 173.25 Mbit/s)
Flow 3 ingress (mean 125.71 Mbit/s)  Flow 3 egress (mean 120.55 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 382.71 ms)  Flow 2 (95th percentile 471.42 ms)  Flow 3 (95th percentile 288.95 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2019-11-24 17:03:29
End at: 2019-11-24 17:03:59
Local clock offset: -1.018 ms
Remote clock offset: -39.551 ms

# Below is generated by plot.py at 2019-11-24 18:55:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.98 Mbit/s
95th percentile per-packet one-way delay: 369.903 ms
Loss rate: 4.21%
-- Flow 1:
Average throughput: 271.70 Mbit/s
95th percentile per-packet one-way delay: 350.364 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 186.42 Mbit/s
95th percentile per-packet one-way delay: 420.080 ms
Loss rate: 6.09%
-- Flow 3:
Average throughput: 125.13 Mbit/s
95th percentile per-packet one-way delay: 326.203 ms
Loss rate: 16.56%
Run 3: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 273.60 Mbit/s)  Flow 1 egress (mean 271.70 Mbit/s)
Flow 2 ingress (mean 190.77 Mbit/s)  Flow 2 egress (mean 186.42 Mbit/s)
Flow 3 ingress (mean 136.21 Mbit/s)  Flow 3 egress (mean 125.33 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 350.36 ms)  Flow 2 (95th percentile 420.08 ms)  Flow 3 (95th percentile 326.20 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2019-11-24 17:38:12
End at: 2019-11-24 17:38:42
Local clock offset: -0.296 ms
Remote clock offset: -38.581 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.55 Mbit/s
95th percentile per-packet one-way delay: 350.967 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 257.12 Mbit/s
95th percentile per-packet one-way delay: 323.248 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 190.41 Mbit/s
95th percentile per-packet one-way delay: 346.404 ms
Loss rate: 3.92%
-- Flow 3:
Average throughput: 116.47 Mbit/s
95th percentile per-packet one-way delay: 425.630 ms
Loss rate: 11.04%
Run 4: Report of FillP-Sheep — Data Link

![Graph of throughput over time for different flows.](image1)

![Graph of packet delivery delay over time for different flows.](image2)
Run 5: Statistics of FillP-Sheep

Start at: 2019-11-24 18:12:33
End at: 2019-11-24 18:13:03
Local clock offset: 0.192 ms
Remote clock offset: -41.874 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 408.30 Mbit/s
95th percentile per-packet one-way delay: 342.535 ms
 Loss rate: 2.61%
-- Flow 1:
 Average throughput: 251.68 Mbit/s
95th percentile per-packet one-way delay: 355.770 ms
 Loss rate: 1.29%
-- Flow 2:
 Average throughput: 173.11 Mbit/s
95th percentile per-packet one-way delay: 324.672 ms
 Loss rate: 4.41%
-- Flow 3:
 Average throughput: 127.55 Mbit/s
95th percentile per-packet one-way delay: 245.473 ms
 Loss rate: 5.34%
Run 5: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 253.33 Mbit/s)
- Flow 1 egress (mean 251.68 Mbit/s)
- Flow 2 ingress (mean 179.68 Mbit/s)
- Flow 2 egress (mean 173.11 Mbit/s)
- Flow 3 ingress (mean 132.62 Mbit/s)
- Flow 3 egress (mean 127.55 Mbit/s)

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

- Flow 1 (95th percentile 355.77 ms)
- Flow 2 (95th percentile 324.67 ms)
- Flow 3 (95th percentile 245.47 ms)
Run 1: Statistics of Indigo

Start at: 2019-11-24 16:10:38
End at: 2019-11-24 16:11:08
Local clock offset: 0.227 ms
Remote clock offset: -42.354 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.98 Mbit/s
95th percentile per-packet one-way delay: 141.049 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 68.32 Mbit/s
95th percentile per-packet one-way delay: 140.188 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 140.716 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 125.08 Mbit/s
95th percentile per-packet one-way delay: 142.960 ms
Loss rate: 2.39%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2019-11-24 16:45:08
End at: 2019-11-24 16:45:38
Local clock offset: -0.649 ms
Remote clock offset: -42.267 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.29 Mbit/s
95th percentile per-packet one-way delay: 147.472 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 127.55 Mbit/s
95th percentile per-packet one-way delay: 146.633 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 77.32 Mbit/s
95th percentile per-packet one-way delay: 144.262 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 112.44 Mbit/s
95th percentile per-packet one-way delay: 163.367 ms
Loss rate: 1.96%
Run 2: Report of Indigo — Data Link

The graphs show the throughput and per-packet one-way delay for three different flows over time. The throughput graphs represent the average data transfer rate, while the delay graphs indicate the variability and latency of data delivery. Each flow has a distinct ingress and egress rate, with mean values provided for each data point.
Run 3: Statistics of Indigo

Start at: 2019-11-24 17:19:46
End at: 2019-11-24 17:20:16
Local clock offset: 0.415 ms
Remote clock offset: -38.714 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.82 Mbit/s
95th percentile per-packet one-way delay: 166.502 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 163.15 Mbit/s
95th percentile per-packet one-way delay: 158.613 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 136.38 Mbit/s
95th percentile per-packet one-way delay: 178.600 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 91.11 Mbit/s
95th percentile per-packet one-way delay: 165.998 ms
Loss rate: 1.68%
Run 3: Report of Indigo — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 163.06 Mbps)
  - Flow 1 egress (mean 163.15 Mbps)
  - Flow 2 ingress (mean 136.18 Mbps)
  - Flow 2 egress (mean 136.38 Mbps)
  - Flow 3 ingress (mean 90.78 Mbps)
  - Flow 3 egress (mean 91.11 Mbps)

- **Packet Delay:**
  - Flow 1 (95th percentile 158.61 ms)
  - Flow 2 (95th percentile 178.60 ms)
  - Flow 3 (95th percentile 166.00 ms)
Run 4: Statistics of Indigo

Start at: 2019-11-24 17:54:10
End at: 2019-11-24 17:54:40
Local clock offset: -3.222 ms
Remote clock offset: -41.685 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.94 Mbit/s
95th percentile per-packet one-way delay: 156.066 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 157.18 Mbit/s
95th percentile per-packet one-way delay: 154.627 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 120.98 Mbit/s
95th percentile per-packet one-way delay: 158.041 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 73.35 Mbit/s
95th percentile per-packet one-way delay: 155.484 ms
Loss rate: 2.47%
Run 4: Report of Indigo — Data Link

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

Legend:
- Flow 1 ingress (mean 157.17 Mbit/s)
- Flow 1 egress (mean 157.18 Mbit/s)
- Flow 2 ingress (mean 121.04 Mbit/s)
- Flow 2 egress (mean 120.98 Mbit/s)
- Flow 3 ingress (mean 73.65 Mbit/s)
- Flow 3 egress (mean 73.35 Mbit/s)
Run 5: Statistics of Indigo

Local clock offset: -3.037 ms
Remote clock offset: -38.672 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 110.49 Mbit/s
  95th percentile per-packet one-way delay: 136.503 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 68.19 Mbit/s
  95th percentile per-packet one-way delay: 136.133 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 41.40 Mbit/s
  95th percentile per-packet one-way delay: 136.293 ms
  Loss rate: 0.93%
-- Flow 3:
  Average throughput: 45.80 Mbit/s
  95th percentile per-packet one-way delay: 137.738 ms
  Loss rate: 1.38%
Run 5: Report of Indigo — Data Link

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

Legend:
- Flow 1 ingress (mean 68.02 Mbit/s)
- Flow 1 egress (mean 68.19 Mbit/s)
- Flow 2 ingress (mean 41.38 Mbit/s)
- Flow 2 egress (mean 41.40 Mbit/s)
- Flow 3 ingress (mean 45.51 Mbit/s)
- Flow 3 egress (mean 45.80 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 136.13 ms)
- Flow 2 (95th percentile 136.29 ms)
- Flow 3 (95th percentile 137.74 ms)
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-11-24 16:04:47
End at: 2019-11-24 16:05:17
Local clock offset: -0.042 ms
Remote clock offset: -40.806 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 245.63 Mbit/s
  95th percentile per-packet one-way delay: 139.151 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 172.65 Mbit/s
  95th percentile per-packet one-way delay: 139.094 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 100.33 Mbit/s
  95th percentile per-packet one-way delay: 139.549 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 47.45 Mbit/s
  95th percentile per-packet one-way delay: 137.066 ms
  Loss rate: 6.40%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

End at: 2019-11-24 16:39:49
Local clock offset: -3.292 ms
Remote clock offset: -41.851 ms

# Below is generated by plot.py at 2019-11-24 18:57:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 249.65 Mbit/s
  95th percentile per-packet one-way delay: 137.358 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 171.19 Mbit/s
  95th percentile per-packet one-way delay: 137.328 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 114.42 Mbit/s
  95th percentile per-packet one-way delay: 137.719 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 37.07 Mbit/s
  95th percentile per-packet one-way delay: 134.789 ms
  Loss rate: 5.60%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

End at: 2019-11-24 17:14:19
Local clock offset: -2.522 ms
Remote clock offset: -41.97 ms

# Below is generated by plot.py at 2019-11-24 18:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.96 Mbit/s
95th percentile per-packet one-way delay: 138.772 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 168.91 Mbit/s
95th percentile per-packet one-way delay: 138.658 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 111.41 Mbit/s
95th percentile per-packet one-way delay: 139.506 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 22.54 Mbit/s
95th percentile per-packet one-way delay: 136.009 ms
Loss rate: 8.17%
Run 3: Report of Indigo-MusesC3 — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 4: Statistics of Indigo-MusesC3

Local clock offset: -0.237 ms  
Remote clock offset: -39.149 ms

# Below is generated by plot.py at 2019-11-24 18:57:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.99 Mbit/s  
95th percentile per-packet one-way delay: 138.902 ms  
Loss rate: 0.66%  
-- Flow 1:
Average throughput: 168.19 Mbit/s  
95th percentile per-packet one-way delay: 138.831 ms  
Loss rate: 0.13%  
-- Flow 2:
Average throughput: 106.03 Mbit/s  
95th percentile per-packet one-way delay: 139.392 ms  
Loss rate: 0.89%  
-- Flow 3:
Average throughput: 52.38 Mbit/s  
95th percentile per-packet one-way delay: 137.160 ms  
Loss rate: 5.93%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

End at: 2019-11-24 18:23:05
Local clock offset: -0.54 ms
Remote clock offset: -39.132 ms

# Below is generated by plot.py at 2019-11-24 18:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 264.22 Mbit/s
95th percentile per-packet one-way delay: 138.823 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 171.46 Mbit/s
95th percentile per-packet one-way delay: 138.948 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 137.86 Mbit/s
95th percentile per-packet one-way delay: 138.492 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 36.64 Mbit/s
95th percentile per-packet one-way delay: 135.308 ms
Loss rate: 7.22%
Run 5: Report of Indigo-MusesC3 — Data Link

The first diagram shows the throughput (Mbps) over time (s) for different flows:
- Flow 1 ingress (mean 170.46 Mbps)
- Flow 1 egress (mean 171.46 Mbps)
- Flow 2 ingress (mean 137.25 Mbps)
- Flow 2 egress (mean 137.86 Mbps)
- Flow 3 ingress (mean 38.30 Mbps)
- Flow 3 egress (mean 36.64 Mbps)

The second diagram shows the per-packet one-way delay (ms) over time (s) for different flows:
- Flow 1 (95th percentile 138.95 ms)
- Flow 2 (95th percentile 138.49 ms)
- Flow 3 (95th percentile 115.31 ms)
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-11-24 16:03:18
End at: 2019-11-24 16:03:48
Local clock offset: -0.007 ms
Remote clock offset: -42.509 ms

# Below is generated by plot.py at 2019-11-24 18:58:20
# Datalink statistics

-- Total of 3 flows:
Average throughput: 240.47 Mbit/s
95th percentile per-packet one-way delay: 141.520 ms
Loss rate: 0.63%

-- Flow 1:
Average throughput: 172.97 Mbit/s
95th percentile per-packet one-way delay: 142.125 ms
Loss rate: 0.27%

-- Flow 2:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 138.580 ms
Loss rate: 1.01%

-- Flow 3:
Average throughput: 54.28 Mbit/s
95th percentile per-packet one-way delay: 140.545 ms
Loss rate: 3.69%
Run 1: Report of Indigo-MusesC5 — Data Link

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**Throughput (Mbps)**

[Graph showing throughput over time with multiple flows.
Legend:
- Flow 1 ingress (mean 172.34 Mbps)
- Flow 1 egress (mean 172.97 Mbps)
- Flow 2 ingress (mean 89.54 Mbps)
- Flow 2 egress (mean 89.66 Mbps)
- Flow 3 ingress (mean 54.78 Mbps)
- Flow 3 egress (mean 54.28 Mbps)
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-11-24 16:37:49
End at: 2019-11-24 16:38:19
Local clock offset: -1.069 ms
Remote clock offset: -39.146 ms

# Below is generated by plot.py at 2019-11-24 18:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.70 Mbit/s
95th percentile per-packet one-way delay: 139.678 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 212.20 Mbit/s
95th percentile per-packet one-way delay: 140.274 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 56.26 Mbit/s
95th percentile per-packet one-way delay: 135.438 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 59.97 Mbit/s
95th percentile per-packet one-way delay: 134.617 ms
Loss rate: 2.75%
Run 2: Report of Indigo-MusesC5 — Data Link
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-11-24 17:12:20
End at: 2019-11-24 17:12:50
Local clock offset: -3.284 ms
Remote clock offset: -41.989 ms

# Below is generated by plot.py at 2019-11-24 18:59:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 251.10 Mbit/s
  95th percentile per-packet one-way delay: 139.387 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 191.51 Mbit/s
  95th percentile per-packet one-way delay: 139.939 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 74.84 Mbit/s
  95th percentile per-packet one-way delay: 136.041 ms
  Loss rate: 1.27%
-- Flow 3:
  Average throughput: 57.21 Mbit/s
  95th percentile per-packet one-way delay: 135.756 ms
  Loss rate: 3.74%
Run 3: Report of Indigo-MusesC5 — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 190.77 Mbit/s)
- Flow 1 egress (mean 191.51 Mbit/s)
- Flow 2 ingress (mean 74.93 Mbit/s)
- Flow 2 egress (mean 74.84 Mbit/s)
- Flow 3 ingress (mean 57.89 Mbit/s)
- Flow 3 egress (mean 57.22 Mbit/s)

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

- Flow 1 (95th percentile 139.94 ms)
- Flow 2 (95th percentile 136.04 ms)
- Flow 3 (95th percentile 135.76 ms)
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-11-24 17:46:49
End at: 2019-11-24 17:47:19
Local clock offset: -0.178 ms
Remote clock offset: -40.249 ms

# Below is generated by plot.py at 2019-11-24 19:00:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 268.70 Mbit/s
  95th percentile per-packet one-way delay: 141.238 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 219.78 Mbit/s
  95th percentile per-packet one-way delay: 141.568 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 59.39 Mbit/s
  95th percentile per-packet one-way delay: 138.092 ms
  Loss rate: 1.40%
-- Flow 3:
  Average throughput: 51.48 Mbit/s
  95th percentile per-packet one-way delay: 138.725 ms
  Loss rate: 4.61%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Local clock offset: -0.578 ms
Remote clock offset: -38.268 ms

# Below is generated by plot.py at 2019-11-24 19:00:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.87 Mbit/s
95th percentile per-packet one-way delay: 139.692 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 208.51 Mbit/s
95th percentile per-packet one-way delay: 140.321 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 48.79 Mbit/s
95th percentile per-packet one-way delay: 136.432 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 55.98 Mbit/s
95th percentile per-packet one-way delay: 136.660 ms
Loss rate: 4.51%
Run 5: Report of Indigo-MusesC5 — Data Link

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

- Flow 1 ingress (mean 207.70 Mbit/s)
- Flow 1 egress (mean 208.51 Mbit/s)
- Flow 2 ingress (mean 49.10 Mbit/s)
- Flow 2 egress (mean 48.79 Mbit/s)
- Flow 3 ingress (mean 57.00 Mbit/s)
- Flow 3 egress (mean 55.98 Mbit/s)

![Graph 2: Per-packet delay vs. Time](image)

- Flow 1 (95th percentile 140.32 ms)
- Flow 2 (95th percentile 136.43 ms)
- Flow 3 (95th percentile 136.66 ms)
Run 1: Statistics of Indigo-MusesD

Start at: 2019-11-24 16:17:40
End at: 2019-11-24 16:18:10
Local clock offset: 0.98 ms
Remote clock offset: -40.158 ms

# Below is generated by plot.py at 2019-11-24 19:00:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.00 Mbit/s
95th percentile per-packet one-way delay: 139.354 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 173.72 Mbit/s
95th percentile per-packet one-way delay: 139.518 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 69.04 Mbit/s
95th percentile per-packet one-way delay: 137.334 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 28.42 Mbit/s
95th percentile per-packet one-way delay: 136.422 ms
Loss rate: 4.95%
Run 1: Report of Indigo-MusesD — Data Link

![Data Link Graph]

![Packet Delay Graph]
Run 2: Statistics of Indigo-MusesD

Start at: 2019-11-24 16:52:12
End at: 2019-11-24 16:52:42
Local clock offset: -2.427 ms
Remote clock offset: -39.978 ms

# Below is generated by plot.py at 2019-11-24 19:00:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.50 Mbit/s
95th percentile per-packet one-way delay: 136.421 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 136.654 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 64.58 Mbit/s
95th percentile per-packet one-way delay: 133.417 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 35.03 Mbit/s
95th percentile per-packet one-way delay: 133.511 ms
Loss rate: 4.54%
Run 2: Report of Indigo-MusesD — Data Link
Run 3: Statistics of Indigo-MusesD

Start at: 2019-11-24 17:26:55
Local clock offset: -2.711 ms
Remote clock offset: -41.093 ms

# Below is generated by plot.py at 2019-11-24 19:00:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.74 Mbit/s
95th percentile per-packet one-way delay: 137.989 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 186.03 Mbit/s
95th percentile per-packet one-way delay: 138.121 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 60.34 Mbit/s
95th percentile per-packet one-way delay: 137.187 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 134.906 ms
Loss rate: 5.27%
Run 3: Report of Indigo-MusesD — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 185.34 Mbit/s)
Flow 1 egress (mean 186.03 Mbit/s)
Flow 2 ingress (mean 59.90 Mbit/s)
Flow 2 egress (mean 60.34 Mbit/s)
Flow 3 ingress (mean 27.05 Mbit/s)
Flow 3 egress (mean 26.34 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 138.12 ms)
Flow 2 (95th percentile 137.19 ms)
Flow 3 (95th percentile 134.91 ms)
Run 4: Statistics of Indigo-MusesD

Start at: 2019-11-24 18:01:17
End at: 2019-11-24 18:01:47
Local clock offset: -2.925 ms
Remote clock offset: -38.63 ms

# Below is generated by plot.py at 2019-11-24 19:00:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 232.29 Mbit/s
  95th percentile per-packet one-way delay: 135.712 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 190.29 Mbit/s
  95th percentile per-packet one-way delay: 135.832 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 57.34 Mbit/s
  95th percentile per-packet one-way delay: 134.770 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 26.96 Mbit/s
  95th percentile per-packet one-way delay: 132.332 ms
  Loss rate: 5.34%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Start at: 2019-11-24 18:35:26
End at: 2019-11-24 18:35:56
Local clock offset: -2.306 ms
Remote clock offset: -41.339 ms

# Below is generated by plot.py at 2019-11-24 19:02:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 226.78 Mbit/s
95th percentile per-packet one-way delay: 138.739 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 182.15 Mbit/s
95th percentile per-packet one-way delay: 138.850 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 137.611 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 136.089 ms
Loss rate: 6.21%
Run 5: Report of Indigo-MusesD — Data Link

![Graph of throughput and packet delay](image-url)

- Flow 1 (ingress: 181.51 Mbit/s, egress: 182.15 Mbit/s)
- Flow 2 (ingress: 64.00 Mbit/s, egress: 64.35 Mbit/s)
- Flow 3 (ingress: 27.91 Mbit/s, egress: 26.66 Mbit/s)

- Flow 1 (95th percentile: 138.85 ms)
- Flow 2 (95th percentile: 137.61 ms)
- Flow 3 (95th percentile: 136.09 ms)
Run 1: Statistics of Indigo-MusesT

Start at: 2019-11-24 16:06:17
End at: 2019-11-24 16:06:47
Local clock offset: -2.391 ms
Remote clock offset: -45.84 ms

# Below is generated by plot.py at 2019-11-24 19:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.38 Mbit/s
95th percentile per-packet one-way delay: 140.924 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 216.67 Mbit/s
95th percentile per-packet one-way delay: 140.927 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 97.63 Mbit/s
95th percentile per-packet one-way delay: 140.882 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 12.94 Mbit/s
95th percentile per-packet one-way delay: 141.288 ms
Loss rate: 3.97%
Run 1: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 215.91 Mbit/s)
- Flow 1 egress (mean 216.67 Mbit/s)
- Flow 2 ingress (mean 97.77 Mbit/s)
- Flow 2 egress (mean 97.63 Mbit/s)
- Flow 3 ingress (mean 13.16 Mbit/s)
- Flow 3 egress (mean 12.94 Mbit/s)

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

- Flow 1 (95th percentile 140.93 ms)
- Flow 2 (95th percentile 140.88 ms)
- Flow 3 (95th percentile 141.29 ms)
Run 2: Statistics of Indigo-MusesT

End at: 2019-11-24 16:41:18
Local clock offset: -0.009 ms
Remote clock offset: -40.063 ms

# Below is generated by plot.py at 2019-11-24 19:02:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 251.15 Mbit/s
  95th percentile per-packet one-way delay: 140.098 ms
  Loss rate: 0.75%
-- Flow 1:
  Average throughput: 178.46 Mbit/s
  95th percentile per-packet one-way delay: 140.158 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 96.95 Mbit/s
  95th percentile per-packet one-way delay: 140.012 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 55.29 Mbit/s
  95th percentile per-packet one-way delay: 140.021 ms
  Loss rate: 4.86%
Run 2: Report of Indigo-MusesT — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 177.84 Mbps)
- Flow 1 egress (mean 178.46 Mbps)
- Flow 2 ingress (mean 96.69 Mbps)
- Flow 2 egress (mean 96.95 Mbps)
- Flow 3 ingress (mean 56.49 Mbps)
- Flow 3 egress (mean 55.29 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 140.16 ms)
- Flow 2 (95th percentile 140.01 ms)
- Flow 3 (95th percentile 140.02 ms)
Run 3: Statistics of Indigo-MusesT

Start at: 2019-11-24 17:15:17
End at: 2019-11-24 17:15:47
Local clock offset: 0.664 ms
Remote clock offset: -42.808 ms

# Below is generated by plot.py at 2019-11-24 19:02:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 248.00 Mbit/s
  95th percentile per-packet one-way delay: 143.505 ms
  Loss rate: 0.75%
-- Flow 1:
  Average throughput: 175.55 Mbit/s
  95th percentile per-packet one-way delay: 143.606 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 91.97 Mbit/s
  95th percentile per-packet one-way delay: 143.431 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 62.64 Mbit/s
  95th percentile per-packet one-way delay: 143.157 ms
  Loss rate: 3.78%
Run 3: Report of Indigo-MusesT — Data Link

![Graphs showing throughput and packet delay over time for different flows.](image-url)
Run 4: Statistics of Indigo-MusesT

End at: 2019-11-24 17:50:20
Local clock offset: -2.78 ms
Remote clock offset: -40.356 ms

# Below is generated by plot.py at 2019-11-24 19:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.81 Mbit/s
95th percentile per-packet one-way delay: 138.110 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 186.28 Mbit/s
95th percentile per-packet one-way delay: 138.128 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 138.132 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 59.87 Mbit/s
95th percentile per-packet one-way delay: 137.872 ms
Loss rate: 5.28%
Run 4: Report of Indigo-MusesT — Data Link

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

- **Flow 1 ingress (mean 185.75 Mbit/s)**
- **Flow 1 egress (mean 186.28 Mbit/s)**
- **Flow 2 ingress (mean 94.64 Mbit/s)**
- **Flow 2 egress (mean 94.67 Mbit/s)**
- **Flow 3 ingress (mean 61.26 Mbit/s)**
- **Flow 3 egress (mean 59.87 Mbit/s)**
Run 5: Statistics of Indigo-MusesT

Start at: 2019-11-24 18:24:05
Local clock offset: -2.957 ms
Remote clock offset: -41.198 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 274.90 Mbit/s
  95th percentile per-packet one-way delay: 138.050 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 199.45 Mbit/s
  95th percentile per-packet one-way delay: 137.985 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 96.73 Mbit/s
  95th percentile per-packet one-way delay: 138.079 ms
  Loss rate: 1.12%
-- Flow 3:
  Average throughput: 63.73 Mbit/s
  95th percentile per-packet one-way delay: 138.959 ms
  Loss rate: 4.24%
Run 5: Report of Indigo-MusesT — Data Link

![Graph 1: Throughput (Mbps)](chart1)

- **Flow 1 ingress (mean 198.67 Mbps)**
- **Flow 1 egress (mean 199.45 Mbps)**
- **Flow 2 ingress (mean 96.75 Mbps)**
- **Flow 2 egress (mean 96.73 Mbps)**
- **Flow 3 ingress (mean 64.79 Mbps)**
- **Flow 3 egress (mean 63.73 Mbps)**

![Graph 2: Per-packet one-way delay (ms)](chart2)

- **Flow 1 (95th percentile 137.99 ms)**
- **Flow 2 (95th percentile 138.08 ms)**
- **Flow 3 (95th percentile 138.96 ms)**
Run 1: Statistics of LEDBAT

End at: 2019-11-24 15:56:44
Local clock offset: -0.952 ms
Remote clock offset: -40.55 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.77 Mbit/s
95th percentile per-packet one-way delay: 132.531 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 132.517 ms
Loss rate: 1.29%
-- Flow 2:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 132.547 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 132.547 ms
Loss rate: 3.96%
Run 1: Report of LEDBAT — Data Link

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

- **Flow 1**: Ingress (mean 9.73 Mbit/s) and Egress (mean 9.66 Mbit/s)
- **Flow 2**: Ingress (mean 6.31 Mbit/s) and Egress (mean 6.24 Mbit/s)
- **Flow 3**: Ingress (mean 3.10 Mbit/s) and Egress (mean 3.04 Mbit/s)
Run 2: Statistics of LEDBAT

Start at: 2019-11-24 16:30:43
Local clock offset: -2.444 ms
Remote clock offset: -40.112 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.59 Mbit/s
95th percentile per-packet one-way delay: 131.666 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 9.39 Mbit/s
95th percentile per-packet one-way delay: 131.657 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 6.39 Mbit/s
95th percentile per-packet one-way delay: 131.679 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 131.552 ms
Loss rate: 3.94%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput and delay over time for different flows.](image)
Run 3: Statistics of LEDBAT

Start at: 2019-11-24 17:05:13
End at: 2019-11-24 17:05:43
Local clock offset: 0.146 ms
Remote clock offset: -39.598 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 134.408 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 134.321 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 6.33 Mbit/s
95th percentile per-packet one-way delay: 134.355 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 134.526 ms
Loss rate: 4.03%
Run 3: Report of LEDBAT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 9.72 Mbps)  Flow 1 egress (mean 9.66 Mbps)
Flow 2 ingress (mean 6.39 Mbps)  Flow 2 egress (mean 6.33 Mbps)
Flow 3 ingress (mean 3.80 Mbps)  Flow 3 egress (mean 2.94 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 134.32 ms)  Flow 2 (95th percentile 134.35 ms)  Flow 3 (95th percentile 134.53 ms)
Run 4: Statistics of LEDBAT

Start at: 2019-11-24 17:39:46
End at: 2019-11-24 17:40:16
Local clock offset: -2.656 ms
Remote clock offset: -39.228 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 14.81 Mbit/s
  95th percentile per-packet one-way delay: 131.786 ms
  Loss rate: 1.66%
-- Flow 1:
  Average throughput: 9.65 Mbit/s
  95th percentile per-packet one-way delay: 131.645 ms
  Loss rate: 1.28%
-- Flow 2:
  Average throughput: 6.30 Mbit/s
  95th percentile per-packet one-way delay: 131.820 ms
  Loss rate: 1.95%
-- Flow 3:
  Average throughput: 3.05 Mbit/s
  95th percentile per-packet one-way delay: 131.828 ms
  Loss rate: 3.94%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1**: Ingress (mean 9.71 Mbit/s), Egress (mean 9.65 Mbit/s)
- **Flow 2**: Ingress (mean 6.36 Mbit/s), Egress (mean 6.30 Mbit/s)
- **Flow 3**: Ingress (mean 3.11 Mbit/s), Egress (mean 3.05 Mbit/s)

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

- **Flow 1** (95th percentile 131.65 ms)
- **Flow 2** (95th percentile 131.82 ms)
- **Flow 3** (95th percentile 131.83 ms)
Run 5: Statistics of LEDBAT

Start at: 2019-11-24 18:14:07
End at: 2019-11-24 18:14:37
Local clock offset: -1.586 ms
Remote clock offset: -42.922 ms

# Below is generated by plot.py at 2019-11-24 19:03:19
# Datalink statistics
--- Total of 3 flows:
 Average throughput: 14.78 Mbit/s
 95th percentile per-packet one-way delay: 136.742 ms
 Loss rate: 1.66%
--- Flow 1:
 Average throughput: 9.63 Mbit/s
 95th percentile per-packet one-way delay: 136.729 ms
 Loss rate: 1.29%
--- Flow 2:
 Average throughput: 6.33 Mbit/s
 95th percentile per-packet one-way delay: 136.762 ms
 Loss rate: 1.95%
--- Flow 3:
 Average throughput: 2.98 Mbit/s
 95th percentile per-packet one-way delay: 136.662 ms
 Loss rate: 4.01%
Run 5: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 1: Statistics of Muses\_DecisionTree

End at: 2019-11-24 15:58:03
Local clock offset: -3.329 ms
Remote clock offset: -45.781 ms

# Below is generated by plot.py at 2019-11-24 19:04:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 254.18 Mbit/s
95th percentile per-packet one-way delay: 146.767 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 182.07 Mbit/s
95th percentile per-packet one-way delay: 147.441 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 107.11 Mbit/s
95th percentile per-packet one-way delay: 145.342 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 140.491 ms
Loss rate: 2.55%
Run 1: Report of Muses-DecisionTree — Data Link

![Graph showing throughput and packet loss](image-url)
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-11-24 16:32:02
End at: 2019-11-24 16:32:32
Local clock offset: -2.284 ms
Remote clock offset: -42.457 ms

# Below is generated by plot.py at 2019-11-24 19:04:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.10 Mbit/s
95th percentile per-packet one-way delay: 150.207 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 196.11 Mbit/s
95th percentile per-packet one-way delay: 153.105 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 87.71 Mbit/s
95th percentile per-packet one-way delay: 143.552 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 14.72 Mbit/s
95th percentile per-packet one-way delay: 139.376 ms
Loss rate: 2.62%
Run 2: Report of Muses_DecisionTree — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 192.79 Mbps)
  - Flow 1 egress (mean 196.11 Mbps)
  - Flow 2 ingress (mean 87.69 Mbps)
  - Flow 2 egress (mean 87.71 Mbps)
  - Flow 3 ingress (mean 14.03 Mbps)
  - Flow 3 egress (mean 14.72 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 153.10 ms)
  - Flow 2 (95th percentile 143.55 ms)
  - Flow 3 (95th percentile 139.38 ms)
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-11-24 17:06:33
End at: 2019-11-24 17:07:03
Local clock offset: -2.089 ms
Remote clock offset: -42.76 ms

# Below is generated by plot.py at 2019-11-24 19:05:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.96 Mbit/s
95th percentile per-packet one-way delay: 145.645 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 193.55 Mbit/s
95th percentile per-packet one-way delay: 147.360 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 143.071 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 28.28 Mbit/s
95th percentile per-packet one-way delay: 140.688 ms
Loss rate: 2.46%
Run 3: Report of Muses_DecisionTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-11-24 17:41:05
End at: 2019-11-24 17:41:35
Local clock offset: -0.397 ms
Remote clock offset: -41.16 ms

# Below is generated by plot.py at 2019-11-24 19:05:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.41 Mbit/s
95th percentile per-packet one-way delay: 140.146 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 203.71 Mbit/s
95th percentile per-packet one-way delay: 140.345 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: 139.050 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 22.75 Mbit/s
95th percentile per-packet one-way delay: 139.041 ms
Loss rate: 2.59%
Run 4: Report of Muses_DocumentTree — Data Link
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-11-24 18:15:26  
End at: 2019-11-24 18:15:56  
Local clock offset: -5.25 ms  
Remote clock offset: -38.649 ms  

# Below is generated by plot.py at 2019-11-24 19:05:33  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 258.55 Mbit/s  
  95th percentile per-packet one-way delay: 140.672 ms  
  Loss rate: 0.61%  
-- Flow 1:  
  Average throughput: 194.64 Mbit/s  
  95th percentile per-packet one-way delay: 142.495 ms  
  Loss rate: 0.41%  
-- Flow 2:  
  Average throughput: 96.24 Mbit/s  
  95th percentile per-packet one-way delay: 136.482 ms  
  Loss rate: 1.16%  
-- Flow 3:  
  Average throughput: 3.95 Mbit/s  
  95th percentile per-packet one-way delay: 133.765 ms  
  Loss rate: 2.54%
Run 5: Report of Muses.DecisionTree — Data Link
Run 1: Statistics of Muses\_DecisionTreeH0

Local clock offset: -0.848 ms
Remote clock offset: -45.18 ms
Run 1: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 2: Statistics of Muses\_DecisionTreeH0

Local clock offset: -2.604 ms
Remote clock offset: -41.666 ms
Run 2: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-11-24 17:29:56
End at: 2019-11-24 17:30:26
Local clock offset: -3.251 ms
Remote clock offset: -39.553 ms
Run 3: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-11-24 18:04:17
End at: 2019-11-24 18:04:47
Local clock offset: -0.893 ms
Remote clock offset: -42.08 ms
Run 4: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-11-24 18:38:26
End at: 2019-11-24 18:38:56
Local clock offset: -1.846 ms
Remote clock offset: -44.049 ms
Run 5: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 1: Statistics of Muses\_DecisionTreeR0

Local clock offset: -1.869 ms
Remote clock offset: -40.925 ms
Run 1: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 2: Statistics of Muses\_DecisionTreeR0

Local clock offset: 0.954 ms
Remote clock offset: -40.843 ms
Run 2: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-11-24 16:58:00
End at: 2019-11-24 16:58:30
Local clock offset: -0.983 ms
Remote clock offset: -41.871 ms
Run 3: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-11-24 17:32:44
End at: 2019-11-24 17:33:14
Local clock offset: -2.709 ms
Remote clock offset: -42.128 ms
Run 4: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-11-24 18:07:04
End at: 2019-11-24 18:07:34
Local clock offset: -1.499 ms
Remote clock offset: -43.034 ms
Run 5: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 1: Statistics of PCC-Allegro

End at: 2019-11-24 15:53:45
Local clock offset: -2.88 ms
Remote clock offset: -41.015 ms

# Below is generated by plot.py at 2019-11-24 19:05:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.58 Mbit/s
95th percentile per-packet one-way delay: 134.945 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 210.62 Mbit/s
95th percentile per-packet one-way delay: 134.923 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 134.997 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 134.797 ms
Loss rate: 1.96%
Run 1: Report of PCC-Allegro — Data Link

![Graph of throughput and per-packet one-way delay](image)

- **Flow 1 ingress** (mean 211.02 Mbit/s)
- **Flow 1 egress** (mean 210.62 Mbit/s)
- **Flow 2 ingress** (mean 84.87 Mbit/s)
- **Flow 2 egress** (mean 84.80 Mbit/s)
- **Flow 3 ingress** (mean 8.59 Mbit/s)
- **Flow 3 egress** (mean 8.59 Mbit/s)
Run 2: Statistics of PCC-Allegro

End at: 2019-11-24 16:28:00
Local clock offset: -0.159 ms
Remote clock offset: -39.705 ms

# Below is generated by plot.py at 2019-11-24 19:06:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 308.41 Mbit/s
  95th percentile per-packet one-way delay: 137.795 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 284.20 Mbit/s
  95th percentile per-packet one-way delay: 137.820 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 32.31 Mbit/s
  95th percentile per-packet one-way delay: 137.617 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 8.72 Mbit/s
  95th percentile per-packet one-way delay: 137.526 ms
  Loss rate: 2.03%
Run 2: Report of PCC-Allegro — Data Link

Throughput (kbit/s)

Flow 1 ingress (mean 284.69 Mbit/s)  
Flow 1 egress (mean 284.20 Mbit/s)
Flow 2 ingress (mean 32.31 Mbit/s)  
Flow 2 egress (mean 32.31 Mbit/s)
Flow 3 ingress (mean 8.73 Mbit/s)  
Flow 3 egress (mean 8.72 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 137.82 ms)  
Flow 2 (95th percentile 137.62 ms)  
Flow 3 (95th percentile 137.53 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2019-11-24 17:01:58
End at: 2019-11-24 17:02:28
Local clock offset: -0.485 ms
Remote clock offset: -47.067 ms

# Below is generated by plot.py at 2019-11-24 19:07:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 373.58 Mbit/s
95th percentile per-packet one-way delay: 145.768 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 350.94 Mbit/s
95th percentile per-packet one-way delay: 145.930 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 18.75 Mbit/s
95th percentile per-packet one-way delay: 145.173 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 31.51 Mbit/s
95th percentile per-packet one-way delay: 145.522 ms
Loss rate: 1.96%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2019-11-24 17:36:43
End at: 2019-11-24 17:37:13
Local clock offset: -2.337 ms
Remote clock offset: -41.694 ms

# Below is generated by plot.py at 2019-11-24 19:07:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.91 Mbit/s
95th percentile per-packet one-way delay: 138.941 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 233.69 Mbit/s
95th percentile per-packet one-way delay: 138.838 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 67.98 Mbit/s
95th percentile per-packet one-way delay: 139.405 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 16.06 Mbit/s
95th percentile per-packet one-way delay: 138.564 ms
Loss rate: 1.88%
Run 4: Report of PCC-Allegro — Data Link

![Graph showing throughput and delay over time for different flows.](image-url)
Run 5: Statistics of PCC-Allegro

Start at: 2019-11-24 18:11:05
End at: 2019-11-24 18:11:35
Local clock offset: -0.246 ms
Remote clock offset: -43.042 ms

# Below is generated by plot.py at 2019-11-24 19:07:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.94 Mbit/s
95th percentile per-packet one-way delay: 142.453 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 236.84 Mbit/s
95th percentile per-packet one-way delay: 142.378 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 75.11 Mbit/s
95th percentile per-packet one-way delay: 142.797 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 4.12 Mbit/s
95th percentile per-packet one-way delay: 141.990 ms
Loss rate: 1.85%
Run 5: Report of PCC-Allegro — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)

- Flow 1 ingress (mean 236.98 Mbit/s)
- Flow 1 egress (mean 236.84 Mbit/s)
- Flow 2 ingress (mean 75.14 Mbit/s)
- Flow 2 egress (mean 75.11 Mbit/s)
- Flow 3 ingress (mean 4.12 Mbit/s)
- Flow 3 egress (mean 4.12 Mbit/s)

- Flow 1 (95th percentile 142.38 ms)
- Flow 2 (95th percentile 142.80 ms)
- Flow 3 (95th percentile 141.99 ms)
Run 1: Statistics of PCC-Expr

Start at: 2019-11-24 16:16:08
End at: 2019-11-24 16:16:38
Local clock offset: -2.425 ms
Remote clock offset: -40.041 ms

# Below is generated by plot.py at 2019-11-24 19:08:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.75 Mbit/s
95th percentile per-packet one-way delay: 134.922 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 122.88 Mbit/s
95th percentile per-packet one-way delay: 134.912 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 134.993 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 12.51 Mbit/s
95th percentile per-packet one-way delay: 134.811 ms
Loss rate: 2.12%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 123.03 Mbit/s)
- Flow 1 egress (mean 122.88 Mbit/s)
- Flow 2 ingress (mean 35.93 Mbit/s)
- Flow 2 egress (mean 35.85 Mbit/s)
- Flow 3 ingress (mean 12.53 Mbit/s)
- Flow 3 egress (mean 12.51 Mbit/s)

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

- Flow 1 (95th percentile 134.91 ms)
- Flow 2 (95th percentile 134.99 ms)
- Flow 3 (95th percentile 134.01 ms)
Run 2: Statistics of PCC-Expr

Start at: 2019-11-24 16:50:42
End at: 2019-11-24 16:51:12
Local clock offset: -0.908 ms
Remote clock offset: -39.584 ms

# Below is generated by plot.py at 2019-11-24 19:08:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.54 Mbit/s
95th percentile per-packet one-way delay: 137.293 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 124.24 Mbit/s
95th percentile per-packet one-way delay: 137.302 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 29.92 Mbit/s
95th percentile per-packet one-way delay: 137.221 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 137.291 ms
Loss rate: 2.80%
Run 2: Report of PCC-Expr — Data Link

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

Flow 1 ingress (mean 124.38 Mbit/s) vs. egress (mean 124.24 Mbit/s)
Flow 2 ingress (mean 29.98 Mbit/s) vs. egress (mean 29.92 Mbit/s)
Flow 3 ingress (mean 7.61 Mbit/s) vs. egress (mean 7.55 Mbit/s)
Run 3: Statistics of PCC-Expr

End at: 2019-11-24 17:25:54
Local clock offset: -2.785 ms
Remote clock offset: -42.567 ms

# Below is generated by plot.py at 2019-11-24 19:08:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.78 Mbit/s
95th percentile per-packet one-way delay: 139.219 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 124.03 Mbit/s
95th percentile per-packet one-way delay: 139.221 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 26.25 Mbit/s
95th percentile per-packet one-way delay: 139.281 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 13.38 Mbit/s
95th percentile per-packet one-way delay: 138.863 ms
Loss rate: 3.90%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2019-11-24 17:59:45
End at: 2019-11-24 18:00:15
Local clock offset: -0.36 ms
Remote clock offset: -43.516 ms

# Below is generated by plot.py at 2019-11-24 19:09:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 152.68 Mbit/s
  95th percentile per-packet one-way delay: 142.583 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 127.78 Mbit/s
  95th percentile per-packet one-way delay: 142.603 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 34.37 Mbit/s
  95th percentile per-packet one-way delay: 142.455 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 6.53 Mbit/s
  95th percentile per-packet one-way delay: 142.482 ms
  Loss rate: 3.17%
Run 5: Statistics of PCC-Expr

Start at: 2019-11-24 18:33:56
End at: 2019-11-24 18:34:26
Local clock offset: -0.534 ms
Remote clock offset: -41.987 ms

# Below is generated by plot.py at 2019-11-24 19:09:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 143.36 Mbit/s
  95th percentile per-packet one-way delay: 141.020 ms
  Loss rate: 0.85%
-- Flow 1:
  Average throughput: 125.10 Mbit/s
  95th percentile per-packet one-way delay: 141.012 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 21.60 Mbit/s
  95th percentile per-packet one-way delay: 140.974 ms
  Loss rate: 1.34%
-- Flow 3:
  Average throughput: 12.05 Mbit/s
  95th percentile per-packet one-way delay: 141.419 ms
  Loss rate: 2.49%
Run 1: Statistics of QUIC Cubic

Start at: 2019-11-24 15:59:03
End at: 2019-11-24 15:59:33
Local clock offset: -1.04 ms
Remote clock offset: -43.826 ms

# Below is generated by plot.py at 2019-11-24 19:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.36 Mbit/s
95th percentile per-packet one-way delay: 136.068 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 63.99 Mbit/s
95th percentile per-packet one-way delay: 135.914 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 57.92 Mbit/s
95th percentile per-packet one-way delay: 136.122 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 51.77 Mbit/s
95th percentile per-packet one-way delay: 136.349 ms
Loss rate: 2.50%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-11-24 16:33:34
End at: 2019-11-24 16:34:04
Local clock offset: 0.57 ms
Remote clock offset: -42.594 ms

# Below is generated by plot.py at 2019-11-24 19:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.44 Mbit/s
95th percentile per-packet one-way delay: 137.677 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 62.11 Mbit/s
95th percentile per-packet one-way delay: 137.501 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 137.549 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 54.41 Mbit/s
95th percentile per-packet one-way delay: 138.086 ms
Loss rate: 2.01%
Run 2: Report of QUIC Cubic — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per-packet one-way delay (ms)

Legend:
- Flow 1 ingress (mean 62.13 Mbit/s)
- Flow 1 egress (mean 62.11 Mbit/s)
- Flow 2 ingress (mean 58.19 Mbit/s)
- Flow 2 egress (mean 58.14 Mbit/s)
- Flow 3 ingress (mean 54.43 Mbit/s)
- Flow 3 egress (mean 54.41 Mbit/s)
Run 3: Statistics of QUIC Cubic

Start at: 2019-11-24 17:08:04
End at: 2019-11-24 17:08:34
Local clock offset: 0.045 ms
Remote clock offset: -39.093 ms

# Below is generated by plot.py at 2019-11-24 19:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.53 Mbit/s
95th percentile per-packet one-way delay: 134.117 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 133.914 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: 134.029 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 56.24 Mbit/s
95th percentile per-packet one-way delay: 134.565 ms
Loss rate: 2.10%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

End at: 2019-11-24 17:43:05
Local clock offset: -2.318 ms
Remote clock offset: -41.26 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 119.62 Mbit/s
  95th percentile per-packet one-way delay: 134.248 ms
  Loss rate: 0.99%
-- Flow 1:
  Average throughput: 65.16 Mbit/s
  95th percentile per-packet one-way delay: 134.227 ms
  Loss rate: 0.65%
-- Flow 2:
  Average throughput: 56.25 Mbit/s
  95th percentile per-packet one-way delay: 134.099 ms
  Loss rate: 1.10%
-- Flow 3:
  Average throughput: 52.52 Mbit/s
  95th percentile per-packet one-way delay: 134.774 ms
  Loss rate: 2.02%
Run 4: Report of QUIC Cubic — Data Link

[Graphs showing throughput and packet delay over time for different flows.]
Run 5: Statistics of QUIC Cubic

Start at: 2019-11-24 18:16:56
End at: 2019-11-24 18:17:26
Local clock offset: -1.62 ms
Remote clock offset: -41.679 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.86 Mbit/s
95th percentile per-packet one-way delay: 135.428 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 135.429 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 135.309 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 3.81 Mbit/s
95th percentile per-packet one-way delay: 135.466 ms
Loss rate: 4.61%
Run 5: Report of QUIC Cubic — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 11.64 Mbps)
- Flow 1 egress (mean 11.59 Mbps)
- Flow 2 ingress (mean 7.64 Mbps)
- Flow 2 egress (mean 7.58 Mbps)
- Flow 3 ingress (mean 3.31 Mbps)
- Flow 3 egress (mean 3.81 Mbps)

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

- Flow 1 (95th percentile 135.43 ms)
- Flow 2 (95th percentile 135.31 ms)
- Flow 3 (95th percentile 135.47 ms)
Run 1: Statistics of SCReAM

End at: 2019-11-24 15:51:02
Local clock offset: 0.361 ms
Remote clock offset: -43.01 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.361 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.287 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.356 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.488 ms
Loss rate: 1.86%
Run 1: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.29 ms)
Flow 2 (95th percentile 136.36 ms)
Flow 3 (95th percentile 136.49 ms)
Run 2: Statistics of SCReAM

Start at: 2019-11-24 16:24:45
End at: 2019-11-24 16:25:15
Local clock offset: -1.944 ms
Remote clock offset: -42.172 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 134.118 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 134.016 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 134.131 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 134.090 ms
  Loss rate: 1.83%
Run 2: Report of SCReAM — Data Link

![Graph showing network performance metrics](image1)

![Graph showing packet delivery times](image2)
Run 3: Statistics of SCReAM

End at: 2019-11-24 16:59:45
Local clock offset: 1.084 ms
Remote clock offset: -43.83 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 139.612 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 139.611 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 139.587 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 139.794 ms
  Loss rate: 1.86%
Run 4: Statistics of SCReAM

End at: 2019-11-24 17:34:29
Local clock offset: -0.784 ms
Remote clock offset: -44.062 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 138.498 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.495 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.504 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.453 ms
  Loss rate: 1.84%
Run 4: Report of SCReAM — Data Link

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

- 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 2: Per-packet one-way delay (ms) vs Time (s)]

- Flow 1 (95th percentile 138.50 ms)
- Flow 2 (95th percentile 138.50 ms)
- Flow 3 (95th percentile 138.45 ms)
Run 5: Statistics of SCReAM

Start at: 2019-11-24 18:08:20
End at: 2019-11-24 18:08:50
Local clock offset: -3.443 ms
Remote clock offset: -43.199 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 135.054 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.048 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.064 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.222 ms
  Loss rate: 1.84%
Run 5: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2019-11-24 16:00:27
End at: 2019-11-24 16:00:57
Local clock offset: -0.623 ms
Remote clock offset: -44.321 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.06 Mbit/s
  95th percentile per-packet one-way delay: 136.867 ms
  Loss rate: 1.40%
-- Flow 1:
  Average throughput: 3.32 Mbit/s
  95th percentile per-packet one-way delay: 136.872 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 3.31 Mbit/s
  95th percentile per-packet one-way delay: 136.869 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 1.68 Mbit/s
  95th percentile per-packet one-way delay: 136.753 ms
  Loss rate: 3.65%
Run 1: Report of Sprout — Data Link

![Throughput Graph]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 3.34 Mbps) — Blue
Flow 1 egress (mean 3.32 Mbps) — Light Blue
Flow 2 ingress (mean 3.32 Mbps) — Black
Flow 2 egress (mean 3.11 Mbps) — Dark Blue
Flow 3 ingress (mean 1.71 Mbps) — Red
Flow 3 egress (mean 1.68 Mbps) — Light Red

![Packet Delay Graph]

Packet Delay (ms)

Time (s)

Flow 1 (95th percentile 136.87 ms) — Blue
Flow 2 (95th percentile 136.87 ms) — Light Blue
Flow 3 (95th percentile 136.75 ms) — Red
Run 2: Statistics of Sprout

Start at: 2019-11-24 16:34:58
End at: 2019-11-24 16:35:28
Local clock offset: 0.39 ms
Remote clock offset: -42.146 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.75 Mbit/s
  95th percentile per-packet one-way delay: 136.704 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 3.08 Mbit/s
  95th percentile per-packet one-way delay: 136.714 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 1.78 Mbit/s
  95th percentile per-packet one-way delay: 136.691 ms
  Loss rate: 2.72%
-- Flow 3:
  Average throughput: 1.52 Mbit/s
  95th percentile per-packet one-way delay: 136.690 ms
  Loss rate: 3.59%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2019-11-24 17:09:29
End at: 2019-11-24 17:09:59
Local clock offset: -3.228 ms
Remote clock offset: -41.631 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.68 Mbit/s
  95th percentile per-packet one-way delay: 133.159 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 2.82 Mbit/s
  95th percentile per-packet one-way delay: 133.176 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 3.03 Mbit/s
  95th percentile per-packet one-way delay: 133.055 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 2.63 Mbit/s
  95th percentile per-packet one-way delay: 133.166 ms
  Loss rate: 1.86%
Run 3: Report of Sprout — Data Link

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

![Graph 2: Per-packet one-way delay (ms) vs Time (s)]
Run 4: Statistics of Sprout

End at: 2019-11-24 17:44:29
Local clock offset: -0.481 ms
Remote clock offset: -40.939 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.22 Mbit/s
  95th percentile per-packet one-way delay: 135.718 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 3.70 Mbit/s
  95th percentile per-packet one-way delay: 135.738 ms
  Loss rate: 0.56%
-- Flow 2:
  Average throughput: 2.85 Mbit/s
  95th percentile per-packet one-way delay: 135.630 ms
  Loss rate: 1.56%
-- Flow 3:
  Average throughput: 1.94 Mbit/s
  95th percentile per-packet one-way delay: 135.694 ms
  Loss rate: 3.18%
Run 4: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 3.70 Mbps)
  - Flow 1 egress (mean 3.70 Mbps)
  - Flow 2 ingress (mean 2.87 Mbps)
  - Flow 2 egress (mean 2.85 Mbps)
  - Flow 3 ingress (mean 1.97 Mbps)
  - Flow 3 egress (mean 1.94 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 135.74 ms)
  - Flow 2 (95th percentile 135.63 ms)
  - Flow 3 (95th percentile 135.69 ms)
Run 5: Statistics of Sprout

Start at: 2019-11-24 18:18:15
End at: 2019-11-24 18:18:45
Local clock offset: -0.134 ms
Remote clock offset: -39.994 ms

# Below is generated by plot.py at 2019-11-24 19:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.66 Mbit/s
  95th percentile per-packet one-way delay: 135.272 ms
  Loss rate: 1.04%
-- Flow 1:
  Average throughput: 3.31 Mbit/s
  95th percentile per-packet one-way delay: 135.279 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 3.17 Mbit/s
  95th percentile per-packet one-way delay: 135.263 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 0.77 Mbit/s
  95th percentile per-packet one-way delay: 135.274 ms
  Loss rate: 3.43%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Local clock offset: -0.994 ms  
Remote clock offset: -40.39 ms

# Below is generated by plot.py at 2019-11-24 19:12:25  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 166.08 Mbit/s  
95th percentile per-packet one-way delay: 137.410 ms  
Loss rate: 0.81%  
-- Flow 1:  
Average throughput: 94.05 Mbit/s  
95th percentile per-packet one-way delay: 136.526 ms  
Loss rate: 0.32%  
-- Flow 2:  
Average throughput: 75.27 Mbit/s  
95th percentile per-packet one-way delay: 138.040 ms  
Loss rate: 0.89%  
-- Flow 3:  
Average throughput: 67.50 Mbit/s  
95th percentile per-packet one-way delay: 139.488 ms  
Loss rate: 2.63%
Run 1: Report of TaoVA-100x — Data Link

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

- **Throughput Graph**
  - X-axis: Time (s)
  - Y-axis: Throughput (Mbps)
  - Legend:
    - Flow 1 ingress (mean 93.75 Mbps)
    - Flow 1 egress (mean 94.05 Mbps)
    - Flow 2 ingress (mean 75.22 Mbps)
    - Flow 2 egress (mean 75.27 Mbps)
    - Flow 3 ingress (mean 68.18 Mbps)
    - Flow 3 egress (mean 67.50 Mbps)

- **Packet Delay Graph**
  - X-axis: Time (s)
  - Y-axis: Per-packet one-way delay (ms)
  - Legend:
    - Flow 1 (95th percentile 136.53 ms)
    - Flow 2 (95th percentile 138.04 ms)
    - Flow 3 (95th percentile 139.49 ms)
Run 2: Statistics of TaoVA-100x

Local clock offset: -0.866 ms
Remote clock offset: -39.648 ms

# Below is generated by plot.py at 2019-11-24 19:12:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.32 Mbit/s
95th percentile per-packet one-way delay: 137.874 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 97.63 Mbit/s
95th percentile per-packet one-way delay: 137.076 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 66.89 Mbit/s
95th percentile per-packet one-way delay: 138.335 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 40.78 Mbit/s
95th percentile per-packet one-way delay: 141.059 ms
Loss rate: 2.92%
Run 3: Statistics of TaoVA-100x

Start at: 2019-11-24 16:56:27
End at: 2019-11-24 16:56:57
Local clock offset: -0.043 ms
Remote clock offset: -39.021 ms

# Below is generated by plot.py at 2019-11-24 19:12:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.65 Mbit/s
95th percentile per-packet one-way delay: 139.133 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 103.68 Mbit/s
95th percentile per-packet one-way delay: 138.786 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 139.438 ms
Loss rate: 3.51%
-- Flow 3:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 139.672 ms
Loss rate: 2.61%
Run 3: Report of TaoVA-100x — Data Link

![Graph of Throughput vs Time with different data flows and their mean throughputs.]

![Graph of Per-packet one-way delay vs Time with different data flows and their 95th percentile delays.]

200
Run 4: Statistics of TaoVA-100x

Start at: 2019-11-24 17:31:12
End at: 2019-11-24 17:31:42
Local clock offset: -0.247 ms
Remote clock offset: -40.182 ms

# Below is generated by plot.py at 2019-11-24 19:12:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 155.61 Mbit/s
95th percentile per-packet one-way delay: 140.254 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 139.273 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 140.702 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 61.60 Mbit/s
95th percentile per-packet one-way delay: 142.383 ms
Loss rate: 3.44%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2019-11-24 18:05:32
End at: 2019-11-24 18:06:02
Local clock offset: -0.22 ms
Remote clock offset: -38.608 ms

# Below is generated by plot.py at 2019-11-24 19:12:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 158.70 Mbit/s
95th percentile per-packet one-way delay: 139.930 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 92.70 Mbit/s
95th percentile per-packet one-way delay: 139.173 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 74.41 Mbit/s
95th percentile per-packet one-way delay: 140.153 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 141.941 ms
Loss rate: 5.55%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2019-11-24 16:12:04
End at: 2019-11-24 16:12:34
Local clock offset: -1.196 ms
Remote clock offset: -41.158 ms
Run 1: Report of TCP Vegas — Data Link

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Figure is missing
Run 2: Statistics of TCP Vegas

End at: 2019-11-24 16:47:09
Local clock offset: -1.534 ms
Remote clock offset: -39.748 ms
Run 2: Report of TCP Vegas — Data Link

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Run 3: Statistics of TCP Vegas

End at: 2019-11-24 17:21:51
Local clock offset: 0.165 ms
Remote clock offset: -40.45 ms
Run 3: Report of TCP Vegas — Data Link

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Run 4: Statistics of TCP Vegas

End at: 2019-11-24 17:56:13
Local clock offset: -0.313 ms
Remote clock offset: -40.413 ms
Run 4: Report of TCP Vegas — Data Link

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Run 5: Statistics of TCP Vegas

Start at: 2019-11-24 18:29:52
End at: 2019-11-24 18:30:22
Local clock offset: ~2.451 ms
Remote clock offset: -38.457 ms
Run 5: Report of TCP Vegas — Data Link

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Run 1: Statistics of Verus

Start at: 2019-11-24 15:51:49
End at: 2019-11-24 15:52:19
Local clock offset: 0.513 ms
Remote clock offset: -43.091 ms

# Below is generated by plot.py at 2019-11-24 19:12:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 143.52 Mbit/s
  95th percentile per-packet one-way delay: 195.590 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 65.45 Mbit/s
  95th percentile per-packet one-way delay: 146.046 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 101.99 Mbit/s
  95th percentile per-packet one-way delay: 232.282 ms
  Loss rate: 0.99%
-- Flow 3:
  Average throughput: 35.32 Mbit/s
  95th percentile per-packet one-way delay: 174.223 ms
  Loss rate: 1.46%
Run 1: Report of Verus — Data Link

[Graphs showing throughput and packet delay over time for different flows]
Run 2: Statistics of Verus

Start at: 2019-11-24 16:26:01
End at: 2019-11-24 16:26:31
Local clock offset: 0.712 ms
Remote clock offset: -43.443 ms

# Below is generated by plot.py at 2019-11-24 19:12:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.40 Mbit/s
95th percentile per-packet one-way delay: 185.335 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 145.28 Mbit/s
95th percentile per-packet one-way delay: 192.311 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 30.07 Mbit/s
95th percentile per-packet one-way delay: 159.042 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 172.103 ms
Loss rate: 0.01%
Run 2: Report of Verus — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 144.87 Mbit/s)
- Flow 1 egress (mean 145.28 Mbit/s)
- Flow 2 ingress (mean 30.27 Mbit/s)
- Flow 2 egress (mean 30.07 Mbit/s)
- Flow 3 ingress (mean 38.62 Mbit/s)
- Flow 3 egress (mean 38.62 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 192.31 ms)
- Flow 2 (95th percentile 159.04 ms)
- Flow 3 (95th percentile 172.10 ms)
Run 3: Statistics of Verus

Start at: 2019-11-24 17:00:31
End at: 2019-11-24 17:01:01
Local clock offset: -0.14 ms
Remote clock offset: -43.655 ms

# Below is generated by plot.py at 2019-11-24 19:12:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.07 Mbit/s
95th percentile per-packet one-way delay: 289.055 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 54.01 Mbit/s
95th percentile per-packet one-way delay: 364.818 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 80.88 Mbit/s
95th percentile per-packet one-way delay: 184.479 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 102.37 Mbit/s
95th percentile per-packet one-way delay: 304.486 ms
Loss rate: 2.13%
Run 3: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 54.07 Mbps)
Flow 1 egress (mean 54.01 Mbps)
Flow 2 ingress (mean 80.27 Mbps)
Flow 2 egress (mean 80.88 Mbps)
Flow 3 ingress (mean 101.96 Mbps)
Flow 3 egress (mean 102.37 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 364.82 ms)
Flow 2 (95th percentile 184.48 ms)
Flow 3 (95th percentile 304.49 ms)
Run 4: Statistics of Verus

Start at: 2019-11-24 17:35:15
End at: 2019-11-24 17:35:45
Local clock offset: -0.153 ms
Remote clock offset: -43.508 ms

# Below is generated by plot.py at 2019-11-24 19:12:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 161.02 Mbit/s
95th percentile per-packet one-way delay: 364.765 ms
Loss rate: 2.72%

-- Flow 1:
Average throughput: 87.02 Mbit/s
95th percentile per-packet one-way delay: 370.642 ms
Loss rate: 0.41%

-- Flow 2:
Average throughput: 88.14 Mbit/s
95th percentile per-packet one-way delay: 327.723 ms
Loss rate: 6.59%

-- Flow 3:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 226.508 ms
Loss rate: 0.01%
Run 4: Report of Verus — Data Link

![Data Link Throughput Graph]

- Flow 1 ingress (mean 87.45 Mbit/s)
- Flow 1 egress (mean 87.02 Mbit/s)
- Flow 2 ingress (mean 93.43 Mbit/s)
- Flow 2 egress (mean 88.14 Mbit/s)
- Flow 3 ingress (mean 48.67 Mbit/s)
- Flow 3 egress (mean 48.61 Mbit/s)

![Data Link Delay Graph]

- Flow 1 (95th percentile 370.64 ms)
- Flow 2 (95th percentile 327.72 ms)
- Flow 3 (95th percentile 226.51 ms)
Run 5: Statistics of Verus

Start at: 2019-11-24 18:09:37
End at: 2019-11-24 18:10:07
Local clock offset: -0.423 ms
Remote clock offset: -41.101 ms

# Below is generated by plot.py at 2019-11-24 19:13:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.31 Mbit/s
95th percentile per-packet one-way delay: 235.667 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 133.62 Mbit/s
95th percentile per-packet one-way delay: 246.593 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 20.59 Mbit/s
95th percentile per-packet one-way delay: 166.654 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 201.663 ms
Loss rate: 3.14%
Run 5: Report of Verus — Data Link

![Graph 1: Throughput](image1.png)

- Flow 1 ingress (mean 133.67 Mbit/s)
- Flow 1 egress (mean 133.62 Mbit/s)
- Flow 2 ingress (mean 19.51 Mbit/s)
- Flow 2 egress (mean 20.59 Mbit/s)
- Flow 3 ingress (mean 93.77 Mbit/s)
- Flow 3 egress (mean 94.89 Mbit/s)

![Graph 2: One-Way Delay](image2.png)

- Flow 1 (95th percentile 246.59 ms)
- Flow 2 (95th percentile 166.65 ms)
- Flow 3 (95th percentile 201.66 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2019-11-24 16:19:09
End at: 2019-11-24 16:19:39
Local clock offset: 0.598 ms
Remote clock offset: -39.941 ms

# Below is generated by plot.py at 2019-11-24 19:13:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.08 Mbit/s
95th percentile per-packet one-way delay: 138.029 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 189.71 Mbit/s
95th percentile per-packet one-way delay: 138.044 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 16.58 Mbit/s
95th percentile per-packet one-way delay: 137.828 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 137.770 ms
Loss rate: 3.96%
Run 1: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 189.57 Mbps) — Flow 1 egress (mean 189.71 Mbps)
Flow 2 ingress (mean 16.69 Mbps) — Flow 2 egress (mean 16.58 Mbps)
Flow 3 ingress (mean 7.51 Mbps) — Flow 3 egress (mean 7.36 Mbps)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 138.04 ms) — Flow 2 (95th percentile 137.83 ms) — Flow 3 (95th percentile 137.77 ms)
Run 2: Statistics of PCC-Vivace

End at: 2019-11-24 16:54:11
Local clock offset: -2.728 ms
Remote clock offset: -41.115 ms

# Below is generated by plot.py at 2019-11-24 19:14:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 199.77 Mbit/s
  95th percentile per-packet one-way delay: 137.015 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 190.80 Mbit/s
  95th percentile per-packet one-way delay: 137.025 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 11.06 Mbit/s
  95th percentile per-packet one-way delay: 136.863 ms
  Loss rate: 1.82%
-- Flow 3:
  Average throughput: 5.03 Mbit/s
  95th percentile per-packet one-way delay: 136.754 ms
  Loss rate: 10.07%
Run 2: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 190.65 Mbit/s)
- Flow 1 egress (mean 190.80 Mbit/s)
- Flow 2 ingress (mean 11.15 Mbit/s)
- Flow 2 egress (mean 11.06 Mbit/s)
- Flow 3 ingress (mean 5.48 Mbit/s)
- Flow 3 egress (mean 5.03 Mbit/s)

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

- Flow 1 (95th percentile 137.03 ms)
- Flow 2 (95th percentile 136.86 ms)
- Flow 3 (95th percentile 136.75 ms)
Run 3: Statistics of PCC-Vivace

End at: 2019-11-24 17:28:54
Local clock offset: -2.646 ms
Remote clock offset: -40.546 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 207.79 Mbit/s
  95th percentile per-packet one-way delay: 137.017 ms
  Loss rate: 3.62%
  -- Flow 1:
    Average throughput: 192.89 Mbit/s
    95th percentile per-packet one-way delay: 137.016 ms
    Loss rate: 3.47%
    -- Flow 2:
      Average throughput: 12.61 Mbit/s
      95th percentile per-packet one-way delay: 137.008 ms
      Loss rate: 7.39%
    -- Flow 3:
      Average throughput: 20.12 Mbit/s
      95th percentile per-packet one-way delay: 137.048 ms
      Loss rate: 2.94%
Run 3: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 194.52 Mbit/s)**
- **Flow 1 egress (mean 192.89 Mbit/s)**
- **Flow 2 ingress (mean 13.08 Mbit/s)**
- **Flow 2 egress (mean 12.61 Mbit/s)**
- **Flow 3 ingress (mean 20.22 Mbit/s)**
- **Flow 3 egress (mean 20.12 Mbit/s)**
Run 4: Statistics of PCC-Vivace

Start at: 2019-11-24 18:02:46
End at: 2019-11-24 18:03:16
Local clock offset: 0.438 ms
Remote clock offset: -43.173 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 204.26 Mbit/s
  95th percentile per-packet one-way delay: 142.911 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 189.99 Mbit/s
  95th percentile per-packet one-way delay: 142.920 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 20.01 Mbit/s
  95th percentile per-packet one-way delay: 142.814 ms
  Loss rate: 2.58%
-- Flow 3:
  Average throughput: 3.10 Mbit/s
  95th percentile per-packet one-way delay: 142.775 ms
  Loss rate: 2.13%
Run 4: Report of PCC-Vivace — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress (mean 189.77 Mbps)**
- **Flow 1 egress (mean 189.99 Mbps)**
- **Flow 2 ingress (mean 20.34 Mbps)**
- **Flow 2 egress (mean 20.01 Mbps)**
- **Flow 3 ingress (mean 3.10 Mbps)**
- **Flow 3 egress (mean 3.10 Mbps)**

**Per-packet one-way delay (ms):**
- **Flow 1 (95th percentile 142.92 ms)**
- **Flow 2 (95th percentile 142.81 ms)**
- **Flow 3 (95th percentile 142.78 ms)**
Run 5: Statistics of PCC-Vivace

End at: 2019-11-24 18:37:25
Local clock offset: -1.705 ms
Remote clock offset: -41.137 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 201.81 Mbit/s
  95th percentile per-packet one-way delay: 138.647 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 177.59 Mbit/s
  95th percentile per-packet one-way delay: 138.617 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 29.35 Mbit/s
  95th percentile per-packet one-way delay: 138.776 ms
  Loss rate: 1.49%
-- Flow 3:
  Average throughput: 14.72 Mbit/s
  95th percentile per-packet one-way delay: 138.712 ms
  Loss rate: 2.79%
Run 5: Report of PCC-Vivace — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 177.28 Mbit/s)
- Flow 1 egress (mean 177.59 Mbit/s)
- Flow 2 ingress (mean 29.50 Mbit/s)
- Flow 2 egress (mean 29.35 Mbit/s)
- Flow 3 ingress (mean 14.85 Mbit/s)
- Flow 3 egress (mean 14.72 Mbit/s)

![Graph 2: Packet Delay](image2)

- Flow 1 (95th percentile 138.62 ms)
- Flow 2 (95th percentile 138.78 ms)
- Flow 3 (95th percentile 138.71 ms)
Run 1: Statistics of WebRTC media

End at: 2019-11-24 16:15:23
Local clock offset: 0.25 ms
Remote clock offset: -45.561 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 142.036 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 143.102 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.07 Mbit/s
  95th percentile per-packet one-way delay: 141.961 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 141.979 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.05 Mbit/s) — Flow 1 egress (mean 0.05 Mbit/s)
Flow 2 ingress (mean 0.07 Mbit/s) — Flow 2 egress (mean 0.07 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s) — Flow 3 egress (mean 0.05 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 143.10 ms) — Flow 2 (95th percentile 141.96 ms) — Flow 3 (95th percentile 141.98 ms)
Run 2: Statistics of WebRTC media

Local clock offset: -2.609 ms
Remote clock offset: -41.982 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 136.402 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 137.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 136.443 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 135.982 ms
Loss rate: 0.05%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput and per-packet one-way delay](image)

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.08 Mbit/s)
- Flow 2 egress (mean 0.08 Mbit/s)
- Flow 3 ingress (mean 0.04 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)

- Flow 1 (95th percentile 137.98 ms)
- Flow 2 (95th percentile 136.44 ms)
- Flow 3 (95th percentile 135.98 ms)
Run 3: Statistics of WebRTC media

Start at: 2019-11-24 17:24:09
End at: 2019-11-24 17:24:39
Local clock offset: -1.537 ms
Remote clock offset: -38.955 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 135.002 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 136.106 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 134.887 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 135.026 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.05 Mbit/s)
Flow 1 egress (mean 0.05 Mbit/s)
Flow 2 ingress (mean 0.06 Mbit/s)
Flow 2 egress (mean 0.06 Mbit/s)
Flow 3 ingress (mean 0.05 Mbit/s)
Flow 3 egress (mean 0.05 Mbit/s)

Pre-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.11 ms)
Flow 2 (95th percentile 134.89 ms)
Flow 3 (95th percentile 135.03 ms)
Run 4: Statistics of WebRTC media

Start at: 2019-11-24 17:58:30
End at: 2019-11-24 17:59:00
Local clock offset: -1.336 ms
Remote clock offset: -39.936 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 137.580 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 136.379 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.536 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graph 1: Throughput vs Time for Flows 1 to 3]

![Graph 2: Per-packet one-way delay vs Time for Flows 1 to 3]

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Run 5: Statistics of WebRTC media

Start at: 2019-11-24 18:32:40  
End at: 2019-11-24 18:33:10  
Local clock offset: -1.467 ms  
Remote clock offset: -41.161 ms

# Below is generated by plot.py at 2019-11-24 19:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 137.596 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 138.751 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 137.596 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 137.457 ms
Loss rate: 0.05%
Run 5: Report of WebRTC media — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)

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