Pantheon Report

Generated at 2019-08-27 15:00:31 (UTC).
Data path: Mexico on em1 (remote) → AWS California 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 time.stanford.edu and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1043-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 @ de42328552b3776a75a3932a94dfaf8722537b0ec
third_party/fillp @ d64a1459332fceed5963885ed7e8a17e632d4519
third_party/fillp-sheep @ 0e5bb722943babc22090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa9e93b03218cedb4e58e562f4
third_party/indigo @ 2601c92e4aa9db5d38dc4dfe0edc9f90d7e77464
third_party/libutp @ b3465b942e2826f2b179e9aba6a4906e6b7cf3cf
third_party/muses @ 5ce721187ad8232d2a0955d33773cc746486ca4966
third_party/muses_dtree @ 3872245b75f61d0e92d708988694b84eb3200
third_party/pantheon-tunnel @ f8663f58d279af92717625ee3a354cc2e802bd
third_party/pcc @ 1afc958f0ad6d18b623c091a55fecc8724981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f55f5613e8adc08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42flb8143e9c978f3cfc4
third_party/scream-reproduce @ f099118d1421aa313bf11ff1964974e1a83b0b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b0e1e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4f47ea74c6c60a261149af2629562939f9a49
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from Mexico to AWS California 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>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<td>Copa</td>
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Run 1: Statistics of TCP BBR

Start at: 2019-08-27 11:45:54
End at: 2019-08-27 11:46:24
Local clock offset: -0.522 ms
Remote clock offset: 5.438 ms

# Below is generated by plot.py at 2019-08-27 14:44:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.14 Mbit/s
95th percentile per-packet one-way delay: 223.632 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 55.55 Mbit/s
95th percentile per-packet one-way delay: 217.902 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 35.89 Mbit/s
95th percentile per-packet one-way delay: 211.131 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 47.45 Mbit/s
95th percentile per-packet one-way delay: 321.146 ms
Loss rate: 2.07%
Run 1: Report of TCP BBR — Data Link

![Graph showing throughput and packet error rate over time for TCP BBR with three flows.](image)

**Throughput (Mbit/s)**
- Flow 1 ingress (mean 56.39 Mbit/s)
- Flow 1 egress (mean 55.55 Mbit/s)
- Flow 2 ingress (mean 36.41 Mbit/s)
- Flow 2 egress (mean 35.89 Mbit/s)
- Flow 3 ingress (mean 48.14 Mbit/s)
- Flow 3 egress (mean 47.45 Mbit/s)

** Packet error delay (ms)**
- Flow 1 (95th percentile 217.90 ms)
- Flow 2 (95th percentile 211.13 ms)
- Flow 3 (95th percentile 321.15 ms)
Run 2: Statistics of TCP BBR

Start at: 2019-08-27 12:25:00
End at: 2019-08-27 12:25:30
Local clock offset: -0.624 ms
Remote clock offset: 5.94 ms

# Below is generated by plot.py at 2019-08-27 14:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.87 Mbit/s
95th percentile per-packet one-way delay: 230.569 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 221.600 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 36.30 Mbit/s
95th percentile per-packet one-way delay: 354.293 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 156.531 ms
Loss rate: 1.64%
Run 2: Report of TCP BBR — Data Link

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**Graph 1:**
- X-axis: Time (s)
- Y-axis: Throughput (Mbps)
- Legend:
  - Flow 1 ingress (mean 56.82 Mbps)
  - Flow 1 egress (mean 56.10 Mbps)
  - Flow 2 ingress (mean 37.10 Mbps)
  - Flow 2 egress (mean 36.30 Mbps)
  - Flow 3 ingress (mean 47.60 Mbps)
  - Flow 3 egress (mean 47.13 Mbps)

**Graph 2:**
- X-axis: Time (s)
- Y-axis: Per-packet one-way delay (ms)
- Legend:
  - Flow 1 (95th percentile 221.60 ms)
  - Flow 2 (95th percentile 354.29 ms)
  - Flow 3 (95th percentile 156.53 ms)
Run 3: Statistics of TCP BBR

Start at: 2019-08-27 13:02:17
End at: 2019-08-27 13:02:47
Local clock offset: -0.607 ms
Remote clock offset: 3.468 ms

# Below is generated by plot.py at 2019-08-27 14:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.33 Mbit/s
95th percentile per-packet one-way delay: 222.946 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 58.08 Mbit/s
95th percentile per-packet one-way delay: 198.704 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 39.68 Mbit/s
95th percentile per-packet one-way delay: 159.837 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 528.839 ms
Loss rate: 2.84%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2019-08-27 13:41:07
End at: 2019-08-27 13:41:38
Local clock offset: -0.632 ms
Remote clock offset: 6.072 ms

# Below is generated by plot.py at 2019-08-27 14:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.31 Mbit/s
95th percentile per-packet one-way delay: 221.631 ms
Loss rate: 1.89%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 171.584 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 39.77 Mbit/s
95th percentile per-packet one-way delay: 157.509 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 493.186 ms
Loss rate: 4.09%
Run 4: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 58.77 Mbit/s)
- Flow 1 egress (mean 58.05 Mbit/s)
- Flow 2 ingress (mean 40.42 Mbit/s)
- Flow 2 egress (mean 39.77 Mbit/s)
- Flow 3 ingress (mean 33.80 Mbit/s)
- Flow 3 egress (mean 32.63 Mbit/s)

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

- Flow 1 (95th percentile 171.58 ms)
- Flow 2 (95th percentile 157.51 ms)
- Flow 3 (95th percentile 493.19 ms)
Run 5: Statistics of TCP BBR

Start at: 2019-08-27 14:21:18
End at: 2019-08-27 14:21:48
Local clock offset: -0.491 ms
Remote clock offset: 3.971 ms

# Below is generated by plot.py at 2019-08-27 14:44:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.31 Mbit/s
95th percentile per-packet one-way delay: 281.119 ms
Loss rate: 2.00%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 200.146 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 160.946 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 525.165 ms
Loss rate: 3.58%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2019-08-27 11:51:58
End at: 2019-08-27 11:52:28
Local clock offset: -0.555 ms
Remote clock offset: 5.807 ms

# Below is generated by plot.py at 2019-08-27 14:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 55.596 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 53.462 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 49.406 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 71.218 ms
Loss rate: 0.74%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2019-08-27 12:31:26
End at: 2019-08-27 12:31:56
Local clock offset: -0.62 ms
Remote clock offset: 6.339 ms

# Below is generated by plot.py at 2019-08-27 14:45:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.68 Mbit/s
95th percentile per-packet one-way delay: 71.448 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 52.38 Mbit/s
95th percentile per-packet one-way delay: 99.368 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 42.672 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 44.934 ms
Loss rate: 0.47%
Run 2: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 3: Statistics of Copa

Start at: 2019-08-27 13:08:45
End at: 2019-08-27 13:09:15
Local clock offset: -0.644 ms
Remote clock offset: 2.874 ms

# Below is generated by plot.py at 2019-08-27 14:45:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 55.657 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 99.541 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 38.605 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 28.56 Mbit/s
95th percentile per-packet one-way delay: 38.900 ms
Loss rate: 0.81%
Run 3: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 53.09 Mbps)
- Flow 1 egress (mean 53.13 Mbps)
- Flow 2 ingress (mean 40.89 Mbps)
- Flow 2 egress (mean 40.89 Mbps)
- Flow 3 ingress (mean 28.61 Mbps)
- Flow 3 egress (mean 28.56 Mbps)

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

- Flow 1 (95th percentile 99.54 ms)
- Flow 2 (95th percentile 38.60 ms)
- Flow 3 (95th percentile 38.90 ms)
Run 4: Statistics of Copa

Start at: 2019-08-27 13:47:49
Local clock offset: -0.681 ms
Remote clock offset: 6.325 ms

# Below is generated by plot.py at 2019-08-27 14:45:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.30 Mbit/s
95th percentile per-packet one-way delay: 59.871 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 43.88 Mbit/s
95th percentile per-packet one-way delay: 64.520 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 27.00 Mbit/s
95th percentile per-packet one-way delay: 53.282 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: 43.399 ms
Loss rate: 0.89%
Run 4: Report of Copa — Data Link

[Graph showing throughput over time with various flow characteristics]

[Graph showing per-packet one-way delay over time with various flow characteristics]
Run 5: Statistics of Copa

Start at: 2019-08-27 14:28:08
End at: 2019-08-27 14:28:38
Local clock offset: -0.47 ms
Remote clock offset: 3.573 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.62 Mbit/s
  95th percentile per-packet one-way delay: 49.680 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 52.34 Mbit/s
  95th percentile per-packet one-way delay: 53.021 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 43.62 Mbit/s
  95th percentile per-packet one-way delay: 41.320 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 27.90 Mbit/s
  95th percentile per-packet one-way delay: 58.812 ms
  Loss rate: 0.63%
Run 5: Report of Copa — Data Link

![Graphs showing network performance metrics over time with legends for different flow ingress and egress rates, and per-packet one-way delay distributions.]

- Flow 1 ingress (mean 52.31 Mbit/s) - Flow 1 egress (mean 52.34 Mbit/s)
- Flow 2 ingress (mean 43.60 Mbit/s) - Flow 2 egress (mean 43.62 Mbit/s)
- Flow 3 ingress (mean 27.89 Mbit/s) - Flow 3 egress (mean 27.90 Mbit/s)

- Flow 1 (95th percentile 53.02 ms)
- Flow 2 (95th percentile 41.32 ms)
- Flow 3 (95th percentile 58.81 ms)
Run 1: Statistics of TCP Cubic

Start at: 2019-08-27 11:57:06
End at: 2019-08-27 11:57:36
Local clock offset: -0.557 ms
Remote clock offset: 5.789 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 38.050 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 53.73 Mbit/s
95th percentile per-packet one-way delay: 37.572 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 37.859 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 26.16 Mbit/s
95th percentile per-packet one-way delay: 39.285 ms
Loss rate: 0.78%
Run 1: Report of TCP Cubic — Data Link

![Graph of network throughput and packet delay over time for TCP Cubic flows.]
Run 2: Statistics of TCP Cubic

Start at: 2019-08-27 12:36:35
End at: 2019-08-27 12:37:05
Local clock offset: -0.649 ms
Remote clock offset: 6.398 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.59 Mbit/s
  95th percentile per-packet one-way delay: 39.677 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 52.82 Mbit/s
  95th percentile per-packet one-way delay: 38.935 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 36.90 Mbit/s
  95th percentile per-packet one-way delay: 39.799 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 24.77 Mbit/s
  95th percentile per-packet one-way delay: 47.171 ms
  Loss rate: 0.82%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

End at: 2019-08-27 13:14:26
Local clock offset: -0.616 ms
Remote clock offset: 2.79 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.83 Mbit/s
95th percentile per-packet one-way delay: 40.762 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 46.12 Mbit/s
95th percentile per-packet one-way delay: 47.860 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 37.845 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 26.42 Mbit/s
95th percentile per-packet one-way delay: 55.451 ms
Loss rate: 0.66%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 46.08 Mbps)
- Flow 1 egress (mean 46.12 Mbps)
- Flow 2 ingress (mean 46.52 Mbps)
- Flow 2 egress (mean 46.52 Mbps)
- Flow 3 ingress (mean 26.42 Mbps)
- Flow 3 egress (mean 26.42 Mbps)

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

- Flow 1 (95th percentile 47.86 ms)
- Flow 2 (95th percentile 37.84 ms)
- Flow 3 (95th percentile 55.45 ms)
Run 4: Statistics of TCP Cubic

Start at: 2019-08-27 13:53:05
Local clock offset: -0.689 ms
Remote clock offset: 6.764 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.66 Mbit/s
95th percentile per-packet one-way delay: 38.602 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 53.76 Mbit/s
95th percentile per-packet one-way delay: 37.258 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 39.021 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 47.41 Mbit/s
95th percentile per-packet one-way delay: 47.895 ms
Loss rate: 0.77%
Run 4: Report of TCP Cubic — Data Link

![Graph showing throughput and packet loss over time for three flows: Flow 1, Flow 2, and Flow 3. The graphs illustrate the variation in throughput and packet loss across different time intervals.]
Run 5: Statistics of TCP Cubic

Start at: 2019-08-27 14:33:46
End at: 2019-08-27 14:34:16
Local clock offset: -0.451 ms
Remote clock offset: 3.912 ms

# Below is generated by plot.py at 2019-08-27 14:46:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.32 Mbit/s
95th percentile per-packet one-way delay: 42.456 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 45.59 Mbit/s
95th percentile per-packet one-way delay: 48.740 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 36.10 Mbit/s
95th percentile per-packet one-way delay: 38.154 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 47.38 Mbit/s
95th percentile per-packet one-way delay: 48.208 ms
Loss rate: 0.77%
Run 5: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 45.56 Mbps)
  - Flow 1 egress (mean 45.59 Mbps)
  - Flow 2 ingress (mean 36.06 Mbps)
  - Flow 2 egress (mean 36.10 Mbps)
  - Flow 3 ingress (mean 47.44 Mbps)
  - Flow 3 egress (mean 47.38 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 48.74 ms)
  - Flow 2 (95th percentile 38.15 ms)
  - Flow 3 (95th percentile 48.21 ms)
Run 1: Statistics of FillP

Start at: 2019-08-27 11:50:38
End at: 2019-08-27 11:51:08
Local clock offset: -0.554 ms
Remote clock offset: 5.721 ms

# Below is generated by plot.py at 2019-08-27 14:46:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.68 Mbit/s
  95th percentile per-packet one-way delay: 111.496 ms
  Loss rate: 1.09%
-- Flow 1:
  Average throughput: 56.56 Mbit/s
  95th percentile per-packet one-way delay: 99.033 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 42.59 Mbit/s
  95th percentile per-packet one-way delay: 129.565 ms
  Loss rate: 2.51%
-- Flow 3:
  Average throughput: 29.49 Mbit/s
  95th percentile per-packet one-way delay: 86.963 ms
  Loss rate: 1.06%
Run 1: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 56.65 Mbps) — Flow 1 egress (mean 56.56 Mbps)
Flow 2 ingress (mean 43.59 Mbps) — Flow 2 egress (mean 42.59 Mbps)
Flow 3 ingress (mean 29.59 Mbps) — Flow 3 egress (mean 29.49 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 99.03 ms) — Flow 2 (95th percentile 129.56 ms) — Flow 3 (95th percentile 86.96 ms)
Run 2: Statistics of FillP

Start at: 2019-08-27 12:29:51
End at: 2019-08-27 12:30:21
Local clock offset: -0.648 ms
Remote clock offset: 5.975 ms

# Below is generated by plot.py at 2019-08-27 14:46:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 110.227 ms
Loss rate: 1.59%
-- Flow 1:
Average throughput: 56.90 Mbit/s
95th percentile per-packet one-way delay: 95.187 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 42.35 Mbit/s
95th percentile per-packet one-way delay: 118.283 ms
Loss rate: 4.15%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 92.125 ms
Loss rate: 1.05%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 57.02 Mbps)
- Flow 1 egress (mean 56.90 Mbps)
- Flow 2 ingress (mean 44.05 Mbps)
- Flow 2 egress (mean 42.35 Mbps)
- Flow 3 ingress (mean 29.29 Mbps)
- Flow 3 egress (mean 29.15 Mbps)

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

- Flow 1 (95th percentile 95.19 ms)
- Flow 2 (95th percentile 118.28 ms)
- Flow 3 (95th percentile 92.12 ms)
Run 3: Statistics of FillP

Start at: 2019-08-27 13:07:16
End at: 2019-08-27 13:07:46
Local clock offset: -0.63 ms
Remote clock offset: 2.922 ms

# Below is generated by plot.py at 2019-08-27 14:46:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.71 Mbit/s
  95th percentile per-packet one-way delay: 118.588 ms
  Loss rate: 2.22%
-- Flow 1:
  Average throughput: 60.77 Mbit/s
  95th percentile per-packet one-way delay: 62.645 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 39.08 Mbit/s
  95th percentile per-packet one-way delay: 144.564 ms
  Loss rate: 5.42%
-- Flow 3:
  Average throughput: 23.95 Mbit/s
  95th percentile per-packet one-way delay: 140.164 ms
  Loss rate: 5.87%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Local clock offset: -0.673 ms
Remote clock offset: 6.294 ms

# Below is generated by plot.py at 2019-08-27 14:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 111.694 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 57.06 Mbit/s
95th percentile per-packet one-way delay: 91.750 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 41.18 Mbit/s
95th percentile per-packet one-way delay: 124.352 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 105.343 ms
Loss rate: 1.27%
Run 4: Report of FillP — Data Link

**Graph 1:**
- **Throughput (Mbps):**
- **Time (s):** 0 to 30
- Lines indicating throughput for different flows with mean values.

**Graph 2:**
- **Per-packet one-way delay (ms):**
- **Time (s):** 0 to 30
- Legend showing percentiles and delay values for each flow.

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Run 5: Statistics of FillP

Start at: 2019-08-27 14:26:40
End at: 2019-08-27 14:27:10
Local clock offset: -0.473 ms
Remote clock offset: 3.7 ms

# Below is generated by plot.py at 2019-08-27 14:47:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.54 Mbit/s
  95th percentile per-packet one-way delay: 118.726 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 55.18 Mbit/s
  95th percentile per-packet one-way delay: 110.903 ms
  Loss rate: 0.71%
-- Flow 2:
  Average throughput: 37.91 Mbit/s
  95th percentile per-packet one-way delay: 132.663 ms
  Loss rate: 2.25%
-- Flow 3:
  Average throughput: 42.72 Mbit/s
  95th percentile per-packet one-way delay: 67.355 ms
  Loss rate: 0.85%
Run 5: Report of FillP — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 1: Statistics of FillP-Sheep

Start at: 2019-08-27 11:53:45
End at: 2019-08-27 11:54:15
Local clock offset: -0.568 ms
Remote clock offset: 5.813 ms

# Below is generated by plot.py at 2019-08-27 14:47:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.25 Mbit/s
95th percentile per-packet one-way delay: 99.801 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 55.57 Mbit/s
95th percentile per-packet one-way delay: 112.043 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 62.277 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 26.25 Mbit/s
95th percentile per-packet one-way delay: 136.454 ms
Loss rate: 1.46%
Run 1: Report of FillP-Sheep — Data Link

![Graph showing throughput over time for different flows with latency measurements]
Run 2: Statistics of FillP-Sheep

Start at: 2019-08-27 12:33:18
End at: 2019-08-27 12:33:48
Local clock offset: -0.651 ms
Remote clock offset: 6.392 ms

# Below is generated by plot.py at 2019-08-27 14:47:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.46 Mbit/s
95th percentile per-packet one-way delay: 101.592 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 56.09 Mbit/s
95th percentile per-packet one-way delay: 107.472 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 44.54 Mbit/s
95th percentile per-packet one-way delay: 61.590 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 26.37 Mbit/s
95th percentile per-packet one-way delay: 200.540 ms
Loss rate: 1.46%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

Start at: 2019-08-27 13:10:35
End at: 2019-08-27 13:11:05
Local clock offset: -0.634 ms
Remote clock offset: 2.857 ms

# Below is generated by plot.py at 2019-08-27 14:47:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 112.200 ms
Loss rate: 0.48%

-- Flow 1:
Average throughput: 54.10 Mbit/s
95th percentile per-packet one-way delay: 110.883 ms
Loss rate: 0.21%

-- Flow 2:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 74.638 ms
Loss rate: 0.49%

-- Flow 3:
Average throughput: 27.20 Mbit/s
95th percentile per-packet one-way delay: 133.327 ms
Loss rate: 2.03%
Run 3: Report of FillP-Sheep — Data Link

![Graph of Throughput vs Time with overlay of different flow characteristics.](image1)

![Graph of Per-packet one-way delay vs Time with overlay of different flow characteristics.](image2)
Run 4: Statistics of FillP-Sheep

End at: 2019-08-27 13:50:16
Local clock offset: -0.646 ms
Remote clock offset: 6.537 ms

# Below is generated by plot.py at 2019-08-27 14:47:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.04 Mbit/s
95th percentile per-packet one-way delay: 89.225 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 57.63 Mbit/s
95th percentile per-packet one-way delay: 86.572 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 97.275 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 79.068 ms
Loss rate: 1.08%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2019-08-27 14:30:09
End at: 2019-08-27 14:30:39
Local clock offset: -0.45 ms
Remote clock offset: 3.536 ms

# Below is generated by plot.py at 2019-08-27 14:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.28 Mbit/s
95th percentile per-packet one-way delay: 104.782 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 55.37 Mbit/s
95th percentile per-packet one-way delay: 114.813 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 45.25 Mbit/s
95th percentile per-packet one-way delay: 66.220 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 130.309 ms
Loss rate: 1.63%
Run 5: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 55.42 Mbit/s)  Flow 1 egress (mean 55.37 Mbit/s)
Flow 2 ingress (mean 45.32 Mbit/s)  Flow 2 egress (mean 45.25 Mbit/s)
Flow 3 ingress (mean 26.83 Mbit/s)  Flow 3 egress (mean 26.57 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 114.81 ms)  Flow 2 (95th percentile 66.22 ms)  Flow 3 (95th percentile 130.31 ms)
Run 1: Statistics of Indigo

Local clock offset: -0.547 ms
Remote clock offset: 5.855 ms

# Below is generated by plot.py at 2019-08-27 14:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.82 Mbit/s
95th percentile per-packet one-way delay: 41.893 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 56.41 Mbit/s
95th percentile per-packet one-way delay: 44.456 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 47.60 Mbit/s
95th percentile per-packet one-way delay: 37.813 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 23.84 Mbit/s
95th percentile per-packet one-way delay: 42.919 ms
Loss rate: 0.75%
Run 1: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 56.38 Mbit/s)
- Flow 1 egress (mean 56.41 Mbit/s)
- Flow 2 ingress (mean 47.61 Mbit/s)
- Flow 2 egress (mean 47.60 Mbit/s)
- Flow 3 ingress (mean 23.86 Mbit/s)
- Flow 3 egress (mean 23.84 Mbit/s)
Run 2: Statistics of Indigo

Start at: 2019-08-27 12:34:50
End at: 2019-08-27 12:35:20
Local clock offset: -0.644 ms
Remote clock offset: 6.01 ms

# Below is generated by plot.py at 2019-08-27 14:48:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.89 Mbit/s
95th percentile per-packet one-way delay: 42.417 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 64.14 Mbit/s
95th percentile per-packet one-way delay: 39.776 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 36.09 Mbit/s
95th percentile per-packet one-way delay: 45.882 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 45.475 ms
Loss rate: 0.78%
Run 2: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 64.15 Mbit/s)
- Flow 1 egress (mean 64.14 Mbit/s)
- Flow 2 ingress (mean 36.10 Mbit/s)
- Flow 2 egress (mean 36.09 Mbit/s)
- Flow 3 ingress (mean 23.82 Mbit/s)
- Flow 3 egress (mean 23.79 Mbit/s)
Run 3: Statistics of Indigo

Start at: 2019-08-27 13:12:09
End at: 2019-08-27 13:12:39
Local clock offset: -0.626 ms
Remote clock offset: 2.836 ms

# Below is generated by plot.py at 2019-08-27 14:48:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.83 Mbit/s
95th percentile per-packet one-way delay: 43.879 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.51 Mbit/s
95th percentile per-packet one-way delay: 44.077 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.12 Mbit/s
95th percentile per-packet one-way delay: 47.060 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 46.87 Mbit/s
95th percentile per-packet one-way delay: 40.006 ms
Loss rate: 0.72%
Run 3: Report of Indigo — Data Link

![Graph of data link performance](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 56.48 Mbps)
  - Flow 1 egress (mean 56.51 Mbps)
  - Flow 2 ingress (mean 36.15 Mbps)
  - Flow 2 egress (mean 36.12 Mbps)
  - Flow 3 ingress (mean 46.91 Mbps)
  - Flow 3 egress (mean 46.87 Mbps)

- **Per-packet end-to-end delay (ms)**
  - Flow 1 (95th percentile 44.08 ms)
  - Flow 2 (95th percentile 47.06 ms)
  - Flow 3 (95th percentile 40.01 ms)
Run 4: Statistics of Indigo

End at: 2019-08-27 13:51:50
Local clock offset: -0.68 ms
Remote clock offset: 6.637 ms

# Below is generated by plot.py at 2019-08-27 14:48:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 43.136 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 59.13 Mbit/s
95th percentile per-packet one-way delay: 44.973 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 40.09 Mbit/s
95th percentile per-packet one-way delay: 40.898 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 39.695 ms
Loss rate: 0.78%
Run 4: Report of Indigo — Data Link

![Graph of Throughput and Per-packet round-trip delay](image-url)
Run 5: Statistics of Indigo

Start at: 2019-08-27 14:31:43
End at: 2019-08-27 14:32:13
Local clock offset: -0.464 ms
Remote clock offset: 3.787 ms

# Below is generated by plot.py at 2019-08-27 14:48:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.92 Mbit/s
95th percentile per-packet one-way delay: 42.657 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 43.723 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.02 Mbit/s
95th percentile per-packet one-way delay: 42.431 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 31.38 Mbit/s
95th percentile per-packet one-way delay: 38.408 ms
Loss rate: 0.70%
Run 5: Report of Indigo — Data Link

[Graphs showing throughput and per-packet one-way delay for different flows.]
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-08-27 11:29:54
End at: 2019-08-27 11:30:24
Local clock offset: -0.501 ms
Remote clock offset: 4.933 ms

# Below is generated by plot.py at 2019-08-27 14:48:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.40 Mbit/s
  95th percentile per-packet one-way delay: 64.057 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 58.58 Mbit/s
  95th percentile per-packet one-way delay: 58.394 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 37.40 Mbit/s
  95th percentile per-packet one-way delay: 74.638 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 47.10 Mbit/s
  95th percentile per-packet one-way delay: 54.397 ms
  Loss rate: 0.93%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-08-27 12:07:30
End at: 2019-08-27 12:08:00
Local clock offset: -0.575 ms
Remote clock offset: 6.179 ms

# Below is generated by plot.py at 2019-08-27 14:49:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 65.964 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 58.65 Mbit/s
95th percentile per-packet one-way delay: 58.714 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 77.667 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 46.71 Mbit/s
95th percentile per-packet one-way delay: 58.463 ms
Loss rate: 1.02%
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-08-27 12:46:33
End at: 2019-08-27 12:47:03
Local clock offset: -0.695 ms
Remote clock offset: 6.352 ms

# Below is generated by plot.py at 2019-08-27 14:49:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.35 Mbit/s
  95th percentile per-packet one-way delay: 62.266 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 58.55 Mbit/s
  95th percentile per-packet one-way delay: 62.195 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 48.14 Mbit/s
  95th percentile per-packet one-way delay: 54.293 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 23.46 Mbit/s
  95th percentile per-packet one-way delay: 70.319 ms
  Loss rate: 1.33%
Run 3: Report of Indigo-MusesC3 — Data Link

![Graph of throughput and per-packet one-way delay](image-url)
Run 4: Statistics of Indigo-MusesC3

End at: 2019-08-27 13:25:09
Local clock offset: -0.648 ms
Remote clock offset: 3.725 ms

# Below is generated by plot.py at 2019-08-27 14:49:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.46 Mbit/s
  95th percentile per-packet one-way delay: 45.680 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 60.89 Mbit/s
  95th percentile per-packet one-way delay: 45.552 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 41.50 Mbit/s
  95th percentile per-packet one-way delay: 45.202 ms
  Loss rate: 0.84%
-- Flow 3:
  Average throughput: 29.92 Mbit/s
  95th percentile per-packet one-way delay: 46.798 ms
  Loss rate: 0.87%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-08-27 14:03:27
End at: 2019-08-27 14:03:57
Local clock offset: -0.67 ms
Remote clock offset: 5.422 ms

# Below is generated by plot.py at 2019-08-27 14:49:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.49 Mbit/s
95th percentile per-packet one-way delay: 52.775 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 42.437 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 56.422 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 22.17 Mbit/s
95th percentile per-packet one-way delay: 59.173 ms
Loss rate: 0.97%
Run 5: Report of Indigo-MusesC3 — Data Link
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-08-27 11:49:04
End at: 2019-08-27 11:49:34
Local clock offset: -0.483 ms
Remote clock offset: 5.455 ms

# Below is generated by plot.py at 2019-08-27 14:49:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.72 Mbit/s
95th percentile per-packet one-way delay: 107.725 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 57.28 Mbit/s
95th percentile per-packet one-way delay: 121.618 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 47.40 Mbit/s
95th percentile per-packet one-way delay: 88.546 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 27.44 Mbit/s
95th percentile per-packet one-way delay: 110.193 ms
Loss rate: 7.26%
Run 1: Report of Indigo-MusesC5 — Data Link

- Flow 1 ingress (mean 58.18 Mbit/s)
- Flow 1 egress (mean 57.28 Mbit/s)
- Flow 2 ingress (mean 48.28 Mbit/s)
- Flow 2 egress (mean 47.40 Mbit/s)
- Flow 3 ingress (mean 29.36 Mbit/s)
- Flow 3 egress (mean 27.44 Mbit/s)

- Flow 1 (95th percentile 121.62 ms)
- Flow 2 (95th percentile 88.55 ms)
- Flow 3 (95th percentile 110.19 ms)
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-08-27 12:28:12
End at: 2019-08-27 12:28:42
Local clock offset: -0.611 ms
Remote clock offset: 5.985 ms

# Below is generated by plot.py at 2019-08-27 14:49:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.10 Mbit/s
95th percentile per-packet one-way delay: 115.838 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 58.13 Mbit/s
95th percentile per-packet one-way delay: 90.433 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 44.95 Mbit/s
95th percentile per-packet one-way delay: 127.266 ms
Loss rate: 5.07%
-- Flow 3:
Average throughput: 30.47 Mbit/s
95th percentile per-packet one-way delay: 117.053 ms
Loss rate: 6.08%
Run 2: Report of Indigo-MusesC5 — Data Link
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-08-27 13:05:38
End at: 2019-08-27 13:06:08
Local clock offset: -0.646 ms
Remote clock offset: 3.246 ms

# Below is generated by plot.py at 2019-08-27 14:49:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.85 Mbit/s
  95th percentile per-packet one-way delay: 113.744 ms
  Loss rate: 3.08%
-- Flow 1:
  Average throughput: 58.86 Mbit/s
  95th percentile per-packet one-way delay: 89.995 ms
  Loss rate: 1.70%
-- Flow 2:
  Average throughput: 43.42 Mbit/s
  95th percentile per-packet one-way delay: 123.199 ms
  Loss rate: 4.44%
-- Flow 3:
  Average throughput: 31.18 Mbit/s
  95th percentile per-packet one-way delay: 94.192 ms
  Loss rate: 7.46%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-08-27 13:44:27
End at: 2019-08-27 13:44:57
Local clock offset: -0.629 ms
Remote clock offset: 6.215 ms

# Below is generated by plot.py at 2019-08-27 14:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 105.808 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 60.35 Mbit/s
95th percentile per-packet one-way delay: 112.592 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 69.579 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 100.211 ms
Loss rate: 4.80%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-08-27 14:24:56
End at: 2019-08-27 14:25:26
Local clock offset: -0.456 ms
Remote clock offset: 3.74 ms

# Below is generated by plot.py at 2019-08-27 14:50:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.60 Mbit/s
  95th percentile per-packet one-way delay: 127.767 ms
  Loss rate: 2.46%
-- Flow 1:
  Average throughput: 58.51 Mbit/s
  95th percentile per-packet one-way delay: 124.078 ms
  Loss rate: 1.21%
-- Flow 2:
  Average throughput: 43.68 Mbit/s
  95th percentile per-packet one-way delay: 133.350 ms
  Loss rate: 3.91%
-- Flow 3:
  Average throughput: 30.50 Mbit/s
  95th percentile per-packet one-way delay: 96.842 ms
  Loss rate: 5.73%
Run 5: Report of Indigo-MusesC5 — Data Link

![Graphs showing network performance metrics over time]
Run 1: Statistics of Indigo-MusesD

Start at: 2019-08-27 11:35:40
End at: 2019-08-27 11:36:10
Local clock offset: -0.529 ms
Remote clock offset: 4.851 ms

# Below is generated by plot.py at 2019-08-27 14:50:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.11 Mbit/s
  95th percentile per-packet one-way delay: 140.521 ms
  Loss rate: 4.56%
-- Flow 1:
  Average throughput: 61.62 Mbit/s
  95th percentile per-packet one-way delay: 144.550 ms
  Loss rate: 5.60%
-- Flow 2:
  Average throughput: 38.55 Mbit/s
  95th percentile per-packet one-way delay: 54.771 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 32.95 Mbit/s
  95th percentile per-packet one-way delay: 134.137 ms
  Loss rate: 8.15%
Run 1: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 65.13 Mbit/s)
- Flow 1 egress (mean 61.62 Mbit/s)
- Flow 2 ingress (mean 38.55 Mbit/s)
- Flow 2 egress (mean 38.55 Mbit/s)
- Flow 3 ingress (mean 35.63 Mbit/s)
- Flow 3 egress (mean 32.95 Mbit/s)

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

- Flow 1 (95th percentile 144.55 ms)
- Flow 2 (95th percentile 54.77 ms)
- Flow 3 (95th percentile 134.14 ms)
Run 2: Statistics of Indigo-MusesD

End at: 2019-08-27 12:13:58
Local clock offset: -0.572 ms
Remote clock offset: 6.547 ms

# Below is generated by plot.py at 2019-08-27 14:50:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.31 Mbit/s
  95th percentile per-packet one-way delay: 144.873 ms
  Loss rate: 2.66%
-- Flow 1:
  Average throughput: 61.27 Mbit/s
  95th percentile per-packet one-way delay: 150.412 ms
  Loss rate: 3.84%
-- Flow 2:
  Average throughput: 35.56 Mbit/s
  95th percentile per-packet one-way delay: 83.747 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 41.28 Mbit/s
  95th percentile per-packet one-way delay: 37.153 ms
  Loss rate: 0.62%
Run 2: Report of Indigo-MusesD — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 63.57 Mbit/s)
Flow 1 egress (mean 61.27 Mbit/s)
Flow 2 ingress (mean 35.62 Mbit/s)
Flow 2 egress (mean 35.56 Mbit/s)
Flow 3 ingress (mean 41.22 Mbit/s)
Flow 3 egress (mean 41.28 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 150.41 ms)
Flow 2 (95th percentile 83.75 ms)
Flow 3 (95th percentile 37.15 ms)
Run 3: Statistics of Indigo-MusesD

Start at: 2019-08-27 12:52:14
End at: 2019-08-27 12:52:44
Local clock offset: -0.634 ms
Remote clock offset: 4.72 ms

# Below is generated by plot.py at 2019-08-27 14:50:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 153.785 ms
Loss rate: 7.11%
-- Flow 1:
Average throughput: 60.95 Mbit/s
95th percentile per-packet one-way delay: 148.134 ms
Loss rate: 5.70%
-- Flow 2:
Average throughput: 40.79 Mbit/s
95th percentile per-packet one-way delay: 161.276 ms
Loss rate: 12.04%
-- Flow 3:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 72.317 ms
Loss rate: 1.00%
Run 3: Report of Indigo-MusesD — Data Link
Run 4: Statistics of Indigo-MusesD

Start at: 2019-08-27 13:30:29
End at: 2019-08-27 13:30:59
Local clock offset: -0.671 ms
Remote clock offset: 4.806 ms

# Below is generated by plot.py at 2019-08-27 14:50:56
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 141.686 ms
Loss rate: 5.08%
-- Flow 1:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 141.511 ms
Loss rate: 5.44%
-- Flow 2:
Average throughput: 36.72 Mbit/s
95th percentile per-packet one-way delay: 100.361 ms
Loss rate: 3.33%
-- Flow 3:
Average throughput: 45.72 Mbit/s
95th percentile per-packet one-way delay: 144.462 ms
Loss rate: 6.48%
Run 4: Report of Indigo-MusesD — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 62.52 Mbps)
- Flow 1 egress (mean 59.24 Mbps)
- Flow 2 ingress (mean 37.86 Mbps)
- Flow 2 egress (mean 36.72 Mbps)
- Flow 3 ingress (mean 46.51 Mbps)
- Flow 3 egress (mean 45.72 Mbps)

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

- Flow 1 (95th percentile 141.51 ms)
- Flow 2 (95th percentile 100.36 ms)
- Flow 3 (95th percentile 144.46 ms)
Run 5: Statistics of Indigo-MusesD

Start at: 2019-08-27 14:09:59
End at: 2019-08-27 14:10:29
Local clock offset: -0.624 ms
Remote clock offset: 4.592 ms

# Below is generated by plot.py at 2019-08-27 14:51:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.20 Mbit/s
  95th percentile per-packet one-way delay: 142.688 ms
  Loss rate: 3.77%
-- Flow 1:
  Average throughput: 62.12 Mbit/s
  95th percentile per-packet one-way delay: 144.984 ms
  Loss rate: 5.41%
-- Flow 2:
  Average throughput: 38.50 Mbit/s
  95th percentile per-packet one-way delay: 72.512 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 32.02 Mbit/s
  95th percentile per-packet one-way delay: 56.777 ms
  Loss rate: 1.08%
Run 5: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 65.54 Mbit/s)
- Flow 1 egress (mean 62.12 Mbit/s)
- Flow 2 ingress (mean 38.54 Mbit/s)
- Flow 2 egress (mean 38.50 Mbit/s)
- Flow 3 ingress (mean 32.12 Mbit/s)
- Flow 3 egress (mean 32.02 Mbit/s)]
Run 1: Statistics of Indigo-MusesT

Start at: 2019-08-27 11:40:43
End at: 2019-08-27 11:41:13
Local clock offset: -0.535 ms
Remote clock offset: 5.182 ms

# Below is generated by plot.py at 2019-08-27 14:51:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.45 Mbit/s
  95th percentile per-packet one-way delay: 194.945 ms
  Loss rate: 3.59%
-- Flow 1:
  Average throughput: 61.10 Mbit/s
  95th percentile per-packet one-way delay: 136.266 ms
  Loss rate: 2.02%
-- Flow 2:
  Average throughput: 41.20 Mbit/s
  95th percentile per-packet one-way delay: 206.055 ms
  Loss rate: 5.66%
-- Flow 3:
  Average throughput: 31.06 Mbit/s
  95th percentile per-packet one-way delay: 214.502 ms
  Loss rate: 7.76%
Run 1: Report of Indigo-MusesT — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 62.25 Mbit/s)
Flow 1 egress (mean 61.10 Mbit/s)
Flow 2 ingress (mean 43.52 Mbit/s)
Flow 2 egress (mean 41.20 Mbit/s)
Flow 3 ingress (mean 33.41 Mbit/s)
Flow 3 egress (mean 31.06 Mbit/s)

Pre-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.27 ms)
Flow 2 (95th percentile 206.06 ms)
Flow 3 (95th percentile 214.50 ms)

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Run 2: Statistics of Indigo-MusesT

Start at: 2019-08-27 12:19:20
End at: 2019-08-27 12:19:50
Local clock offset: −0.595 ms
Remote clock offset: 6.048 ms

# Below is generated by plot.py at 2019-08-27 14:51:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 198.513 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 166.855 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 208.731 ms
Loss rate: 6.10%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 264.904 ms
Loss rate: 4.98%
Run 2: Report of Indigo-MusesT — Data Link
Run 3: Statistics of Indigo-MusesT

Start at: 2019-08-27 12:57:19
End at: 2019-08-27 12:57:49
Local clock offset: -0.642 ms
Remote clock offset: 4.072 ms

# Below is generated by plot.py at 2019-08-27 14:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.45 Mbit/s
95th percentile per-packet one-way delay: 140.190 ms
Loss rate: 3.32%
-- Flow 1:
Average throughput: 58.77 Mbit/s
95th percentile per-packet one-way delay: 136.054 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 47.79 Mbit/s
95th percentile per-packet one-way delay: 87.233 ms
Loss rate: 4.46%
-- Flow 3:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 272.664 ms
Loss rate: 8.25%
Run 3: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 59.90 Mbit/s)
- Flow 1 egress (mean 58.77 Mbit/s)
- Flow 2 ingress (mean 49.64 Mbit/s)
- Flow 2 egress (mean 47.79 Mbit/s)
- Flow 3 ingress (mean 25.34 Mbit/s)
- Flow 3 egress (mean 23.41 Mbit/s)

- Flow 1 (95th percentile 136.05 ms)
- Flow 2 (95th percentile 87.23 ms)
- Flow 3 (95th percentile 272.66 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-08-27 13:35:33  
End at: 2019-08-27 13:36:03  
Local clock offset: -0.644 ms  
Remote clock offset: 5.425 ms

# Below is generated by plot.py at 2019-08-27 14:51:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 96.53 Mbit/s  
95th percentile per-packet one-way delay: 200.056 ms  
Loss rate: 3.86%  
-- Flow 1:  
Average throughput: 60.94 Mbit/s  
95th percentile per-packet one-way delay: 157.480 ms  
Loss rate: 2.22%  
-- Flow 2:  
Average throughput: 40.67 Mbit/s  
95th percentile per-packet one-way delay: 195.172 ms  
Loss rate: 6.03%  
-- Flow 3:  
Average throughput: 31.70 Mbit/s  
95th percentile per-packet one-way delay: 247.113 ms  
Loss rate: 7.98%
Run 4: Report of Indigo-MusesT — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 5: Statistics of Indigo-MusesT

Start at: 2019-08-27 14:15:24
End at: 2019-08-27 14:15:54
Local clock offset: -0.551 ms
Remote clock offset: 4.224 ms

# Below is generated by plot.py at 2019-08-27 14:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.50 Mbit/s
95th percentile per-packet one-way delay: 149.464 ms
Loss rate: 4.49%
-- Flow 1:
Average throughput: 60.98 Mbit/s
95th percentile per-packet one-way delay: 107.569 ms
Loss rate: 2.85%
-- Flow 2:
Average throughput: 40.71 Mbit/s
95th percentile per-packet one-way delay: 195.025 ms
Loss rate: 6.78%
-- Flow 3:
Average throughput: 31.74 Mbit/s
95th percentile per-packet one-way delay: 218.142 ms
Loss rate: 8.32%
Run 5: Report of Indigo-MusesT — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 62.72 Mbps)
  - Flow 1 egress (mean 60.98 Mbps)
  - Flow 2 ingress (mean 45.53 Mbps)
  - Flow 2 egress (mean 40.71 Mbps)
  - Flow 3 ingress (mean 34.54 Mbps)
  - Flow 3 egress (mean 31.74 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 107.57 ms)
  - Flow 2 (95th percentile 195.03 ms)
  - Flow 3 (95th percentile 210.14 ms)
Run 1: Statistics of LEDBAT

Start at: 2019-08-27 11:34:13
End at: 2019-08-27 11:34:43
Local clock offset: -0.513 ms
Remote clock offset: 4.844 ms

# Below is generated by plot.py at 2019-08-27 14:51:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.47 Mbit/s
95th percentile per-packet one-way delay: 39.175 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 40.18 Mbit/s
95th percentile per-packet one-way delay: 39.168 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 31.16 Mbit/s
95th percentile per-packet one-way delay: 39.039 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 22.85 Mbit/s
95th percentile per-packet one-way delay: 39.586 ms
Loss rate: 0.92%
Run 1: Report of LEDBAT — Data Link

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

Flow 1 ingress (mean 40.15 Mbit/s)  
Flow 1 egress (mean 40.18 Mbit/s)  
Flow 2 ingress (mean 31.18 Mbit/s)  
Flow 2 egress (mean 31.16 Mbit/s)  
Flow 3 ingress (mean 22.91 Mbit/s)  
Flow 3 egress (mean 22.83 Mbit/s)
Run 2: Statistics of LEDBAT

Start at: 2019-08-27 12:11:52
End at: 2019-08-27 12:12:22
Local clock offset: -0.602 ms
Remote clock offset: 6.446 ms

# Below is generated by plot.py at 2019-08-27 14:51:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.66 Mbit/s
95th percentile per-packet one-way delay: 38.252 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 38.95 Mbit/s
95th percentile per-packet one-way delay: 38.719 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 36.423 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 19.46 Mbit/s
95th percentile per-packet one-way delay: 41.144 ms
Loss rate: 0.67%
Run 2: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 38.93 Mbit/s)
- Flow 1 egress (mean 38.95 Mbit/s)
- Flow 2 ingress (mean 35.03 Mbit/s)
- Flow 2 egress (mean 34.97 Mbit/s)
- Flow 3 ingress (mean 19.46 Mbit/s)
- Flow 3 egress (mean 19.46 Mbit/s)

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

- Flow 1 (95th percentile 38.72 ms)
- Flow 2 (95th percentile 36.42 ms)
- Flow 3 (95th percentile 41.14 ms)
Run 3: Statistics of LEDBAT

Start at: 2019-08-27 12:50:44
End at: 2019-08-27 12:51:14
Local clock offset: -0.655 ms
Remote clock offset: 5.263 ms

# Below is generated by plot.py at 2019-08-27 14:51:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.61 Mbit/s
95th percentile per-packet one-way delay: 37.995 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 39.32 Mbit/s
95th percentile per-packet one-way delay: 37.933 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 30.34 Mbit/s
95th percentile per-packet one-way delay: 40.352 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 34.173 ms
Loss rate: 1.31%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

End at: 2019-08-27 13:29:22
Local clock offset: -0.657 ms
Remote clock offset: 4.672 ms

# Below is generated by plot.py at 2019-08-27 14:51:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.92 Mbit/s
95th percentile per-packet one-way delay: 39.077 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 40.22 Mbit/s
95th percentile per-packet one-way delay: 38.545 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 30.89 Mbit/s
95th percentile per-packet one-way delay: 40.551 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 21.56 Mbit/s
95th percentile per-packet one-way delay: 37.660 ms
Loss rate: 1.06%
Run 4: Report of LEDBAT — Data Link

![Graph of throughput and packet error rate over time for different flows.]

- Flow 1 ingress (mean 40.19 Mbit/s)
- Flow 1 egress (mean 40.22 Mbit/s)
- Flow 2 ingress (mean 30.91 Mbit/s)
- Flow 2 egress (mean 30.89 Mbit/s)
- Flow 3 ingress (mean 21.65 Mbit/s)
- Flow 3 egress (mean 21.56 Mbit/s)
Run 5: Statistics of LEDBAT

Start at: 2019-08-27 14:08:13
End at: 2019-08-27 14:08:43
Local clock offset: -0.663 ms
Remote clock offset: 4.881 ms

# Below is generated by plot.py at 2019-08-27 14:52:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.40 Mbit/s
95th percentile per-packet one-way delay: 38.708 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 38.982 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 39.712 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 34.394 ms
Loss rate: 1.31%
Run 5: Report of LEDBAT — Data Link

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

Legend:
- Flow 1 ingress (mean 39.19 Mbit/s)
- Flow 1 egress (mean 39.21 Mbit/s)
- Flow 2 ingress (mean 30.18 Mbit/s)
- Flow 2 egress (mean 30.21 Mbit/s)
- Flow 3 ingress (mean 27.67 Mbit/s)
- Flow 3 egress (mean 27.48 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 38.90 ms)
- Flow 2 (95th percentile 39.71 ms)
- Flow 3 (95th percentile 34.39 ms)

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Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 11:37:10
End at: 2019-08-27 11:37:40
Local clock offset: -0.481 ms
Remote clock offset: 4.924 ms

# Below is generated by plot.py at 2019-08-27 14:52:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 44.620 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 42.916 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 44.432 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 50.460 ms
Loss rate: 0.91%
Run 1: Report of Muses_DecisionTree — Data Link

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

- Flow 1 ingress (mean 57.37 Mbit/s)
- Flow 1 egress (mean 57.39 Mbit/s)
- Flow 2 ingress (mean 39.19 Mbit/s)
- Flow 2 egress (mean 39.18 Mbit/s)
- Flow 3 ingress (mean 31.65 Mbit/s)
- Flow 3 egress (mean 31.57 Mbit/s)

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

- Flow 1 (95th percentile 42.92 ms)
- Flow 2 (95th percentile 44.43 ms)
- Flow 3 (95th percentile 50.46 ms)
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 12:15:12
End at: 2019-08-27 12:15:42
Local clock offset: -0.595 ms
Remote clock offset: 6.273 ms

# Below is generated by plot.py at 2019-08-27 14:52:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.75 Mbit/s
95th percentile per-packet one-way delay: 42.924 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 55.79 Mbit/s
95th percentile per-packet one-way delay: 42.612 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 41.783 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 47.54 Mbit/s
95th percentile per-packet one-way delay: 44.725 ms
Loss rate: 0.79%
Run 2: Report of Muses_DecisionTree — Data Link
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 12:53:49  
End at: 2019-08-27 12:54:19  
Local clock offset: -0.675 ms  
Remote clock offset: 4.476 ms

# Below is generated by plot.py at 2019-08-27 14:52:45  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 94.03 Mbit/s  
95th percentile per-packet one-way delay: 42.462 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 54.75 Mbit/s  
95th percentile per-packet one-way delay: 42.544 ms  
Loss rate: 0.21%  
-- Flow 2:  
Average throughput: 47.40 Mbit/s  
95th percentile per-packet one-way delay: 41.896 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 24.56 Mbit/s  
95th percentile per-packet one-way delay: 44.075 ms  
Loss rate: 0.78%
Run 3: Report of Muses_DecimalTree — Data Link

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

- **Flow 1 ingress (mean 54.72 Mbit/s)**
- **Flow 1 egress (mean 54.75 Mbit/s)**
- **Flow 2 ingress (mean 47.44 Mbit/s)**
- **Flow 2 egress (mean 47.40 Mbit/s)**
- **Flow 3 ingress (mean 24.58 Mbit/s)**
- **Flow 3 egress (mean 24.56 Mbit/s)**

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

- **Flow 1 (95th percentile 42.54 ms)**
- **Flow 2 (95th percentile 41.90 ms)**
- **Flow 3 (95th percentile 44.08 ms)**
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 13:32:03
End at: 2019-08-27 13:32:33
Local clock offset: ~0.649 ms
Remote clock offset: 5.299 ms

# Below is generated by plot.py at 2019-08-27 14:52:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 43.934 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 54.55 Mbit/s
95th percentile per-packet one-way delay: 42.265 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 36.58 Mbit/s
95th percentile per-packet one-way delay: 45.810 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 47.27 Mbit/s
95th percentile per-packet one-way delay: 45.971 ms
Loss rate: 0.75%
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 14:11:32
End at: 2019-08-27 14:12:02
Local clock offset: -0.583 ms
Remote clock offset: 4.419 ms

# Below is generated by plot.py at 2019-08-27 14:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.22 Mbit/s
95th percentile per-packet one-way delay: 43.585 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 57.64 Mbit/s
95th percentile per-packet one-way delay: 42.483 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 45.634 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.87 Mbit/s
95th percentile per-packet one-way delay: 42.262 ms
Loss rate: 0.75%
Run 5: Report of Muses_DecisionTree — Data Link
Run 1: Statistics of Muses\_DecisionTreeHO

End at: 2019-08-27 11:27:43
Local clock offset: -0.516 ms
Remote clock offset: 4.945 ms

# Below is generated by plot.py at 2019-08-27 14:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.99 Mbit/s
95th percentile per-packet one-way delay: 180.641 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 52.86 Mbit/s
95th percentile per-packet one-way delay: 172.924 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 200.942 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 18.59 Mbit/s
95th percentile per-packet one-way delay: 88.136 ms
Loss rate: 1.98%
Run 1: Report of Muses DecisionTreeH0 — Data Link

![Graph showing network performance metrics over time.](image1)

![Graph showing packet loss over time.](image2)
Run 2: Statistics of Muses\_DecisionTreeHO

Start at: 2019-08-27 12:04:40
End at: 2019-08-27 12:05:10
Local clock offset: -0.572 ms
Remote clock offset: 6.103 ms

# Below is generated by plot.py at 2019-08-27 14:53:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.14 Mbit/s
95th percentile per-packet one-way delay: 179.929 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 52.15 Mbit/s
95th percentile per-packet one-way delay: 175.556 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 30.96 Mbit/s
95th percentile per-packet one-way delay: 202.612 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 29.20 Mbit/s
95th percentile per-packet one-way delay: 88.569 ms
Loss rate: 1.36%
Run 2: Report of Muses_DecisionTreeH0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-27 12:43:44  
End at: 2019-08-27 12:44:14  
Local clock offset: -0.64 ms  
Remote clock offset: 6.435 ms

# Below is generated by plot.py at 2019-08-27 14:53:15  
# Datalink statistics

-- Total of 3 flows:  
  Average throughput: 82.27 Mbit/s  
  95th percentile per-packet one-way delay: 159.738 ms  
  Loss rate: 0.52%  

-- Flow 1:  
  Average throughput: 50.12 Mbit/s  
  95th percentile per-packet one-way delay: 164.556 ms  
  Loss rate: 0.31%  

-- Flow 2:  
  Average throughput: 31.13 Mbit/s  
  95th percentile per-packet one-way delay: 149.749 ms  
  Loss rate: 0.28%  

-- Flow 3:  
  Average throughput: 35.76 Mbit/s  
  95th percentile per-packet one-way delay: 138.930 ms  
  Loss rate: 1.82%
Run 3: Report of Muses_DecisionTreeH0 — Data Link
Run 4: Statistics of Muses\_DecisionTreeH0

Local clock offset: -0.672 ms
Remote clock offset: 2.773 ms

# Below is generated by plot.py at 2019-08-27 14:53:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.67 Mbit/s
95th percentile per-packet one-way delay: 167.432 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 51.89 Mbit/s
95th percentile per-packet one-way delay: 170.839 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 31.61 Mbit/s
95th percentile per-packet one-way delay: 174.063 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 27.30 Mbit/s
95th percentile per-packet one-way delay: 94.296 ms
Loss rate: 1.02%
Run 4: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing throughput and per-packet end-to-end delay over time for different data flows.](image-url)
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-27 14:00:38
End at: 2019-08-27 14:01:08
Local clock offset: -0.679 ms
Remote clock offset: 5.761 ms

# Below is generated by plot.py at 2019-08-27 14:53:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.12 Mbit/s
95th percentile per-packet one-way delay: 183.376 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: 170.891 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 225.600 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 22.06 Mbit/s
95th percentile per-packet one-way delay: 96.437 ms
Loss rate: 1.48%
Run 5: Report of Muses: DecisionTreeH0 — Data Link

![Graphs showing throughput and round-trip time for different flows](image_url)

- Flow 1 ingress (mean 53.30 Mbit/s)
- Flow 1 egress (mean 52.89 Mbit/s)
- Flow 2 ingress (mean 32.00 Mbit/s)
- Flow 2 egress (mean 31.93 Mbit/s)
- Flow 3 ingress (mean 22.24 Mbit/s)
- Flow 3 egress (mean 22.06 Mbit/s)

Flow 1 (95th percentile 170.89 ms)
Flow 2 (95th percentile 225.60 ms)
Flow 3 (95th percentile 96.44 ms)
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 12:00:11
End at: 2019-08-27 12:00:41
Local clock offset: -0.591 ms
Remote clock offset: 5.977 ms

# Below is generated by plot.py at 2019-08-27 14:53:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 45.250 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 57.26 Mbit/s
95th percentile per-packet one-way delay: 43.681 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 45.686 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 32.25 Mbit/s
95th percentile per-packet one-way delay: 50.485 ms
Loss rate: 0.75%
Run 1: Report of Muses_DecisionTreeR0 — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 57.22 Mbit/s)
- Flow 1 egress (mean 57.26 Mbit/s)
- Flow 2 ingress (mean 39.51 Mbit/s)
- Flow 2 egress (mean 39.53 Mbit/s)
- Flow 3 ingress (mean 32.28 Mbit/s)
- Flow 3 egress (mean 32.25 Mbit/s)

![Graph 2](image2.png)

- Flow 1 (95th percentile 43.68 ms)
- Flow 2 (95th percentile 45.69 ms)
- Flow 3 (95th percentile 50.48 ms)
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 12:39:32
End at: 2019-08-27 12:40:02
Local clock offset: -0.649 ms
Remote clock offset: 6.24 ms

# Below is generated by plot.py at 2019-08-27 14:53:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.24 Mbit/s
95th percentile per-packet one-way delay: 42.742 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 54.88 Mbit/s
95th percentile per-packet one-way delay: 43.265 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 47.15 Mbit/s
95th percentile per-packet one-way delay: 41.021 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 25.13 Mbit/s
95th percentile per-packet one-way delay: 48.023 ms
Loss rate: 0.71%
Run 2: Report of Muses_DecisionTreeR0 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 54.84 Mbps)
  - Flow 1 egress (mean 54.88 Mbps)
  - Flow 2 ingress (mean 47.15 Mbps)
  - Flow 2 egress (mean 47.15 Mbps)
  - Flow 3 ingress (mean 25.14 Mbps)
  - Flow 3 egress (mean 25.13 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 43.27 ms)
  - Flow 2 (95th percentile 41.02 ms)
  - Flow 3 (95th percentile 48.02 ms)
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 13:17:31
End at: 2019-08-27 13:18:01
Local clock offset: -0.636 ms
Remote clock offset: 2.592 ms

# Below is generated by plot.py at 2019-08-27 14:54:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 43.614 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 54.45 Mbit/s
95th percentile per-packet one-way delay: 44.447 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 47.09 Mbit/s
95th percentile per-packet one-way delay: 42.604 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 43.549 ms
Loss rate: 0.57%
Run 3: Report of Muses_DecisionTreeR0 — Data Link

![Graph of network performance metrics over time]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 54.44 Mbps)
  - Flow 1 egress (mean 54.45 Mbps)
  - Flow 2 ingress (mean 47.10 Mbps)
  - Flow 2 egress (mean 47.09 Mbps)
  - Flow 3 ingress (mean 24.58 Mbps)
  - Flow 3 egress (mean 24.61 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 44.45 ms)
  - Flow 2 (95th percentile 42.60 ms)
  - Flow 3 (95th percentile 43.55 ms)
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 13:56:11
End at: 2019-08-27 13:56:41
Local clock offset: -0.695 ms
Remote clock offset: 6.71 ms

# Below is generated by plot.py at 2019-08-27 14:54:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 43.577 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 42.408 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 43.503 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 45.801 ms
Loss rate: 0.76%
Run 4: Report of Muses DecisionTreeR0 — Data Link

![Run 4: Report of Muses DecisionTreeR0 — Data Link](image-url)
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 14:36:50
End at: 2019-08-27 14:37:20
Local clock offset: -0.419 ms
Remote clock offset: 3.953 ms

# Below is generated by plot.py at 2019-08-27 14:54:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.39 Mbit/s
  95th percentile per-packet one-way delay: 41.112 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 49.57 Mbit/s
  95th percentile per-packet one-way delay: 39.012 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 50.97 Mbit/s
  95th percentile per-packet one-way delay: 40.557 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 31.00 Mbit/s
  95th percentile per-packet one-way delay: 45.631 ms
  Loss rate: 0.68%
Run 5: Report of Muses_DecisionTreeR0 — Data Link

Diagram 1: Throughput (Mbps) vs. Time (s)
- Blue line: Flow 1 ingress (mean 49.50 Mbps)
- Green line: Flow 1 egress (mean 49.57 Mbps)
- Purple line: Flow 2 ingress (mean 50.98 Mbps)
- Brown line: Flow 2 egress (mean 50.97 Mbps)
- Black line: Flow 3 ingress (mean 30.99 Mbps)
- Red line: Flow 3 egress (mean 31.00 Mbps)

Diagram 2: Per packet one way delay (ms) vs. Time (s)
- Blue dots: Flow 1 (95th percentile 39.01 ms)
- Green dots: Flow 2 (95th percentile 40.56 ms)
- Red dots: Flow 3 (95th percentile 45.63 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2019-08-27 12:01:46
End at: 2019-08-27 12:02:16
Local clock offset: -0.578 ms
Remote clock offset: 5.986 ms

# Below is generated by plot.py at 2019-08-27 14:54:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.18 Mbit/s
  95th percentile per-packet one-way delay: 2124.321 ms
  Loss rate: 11.38%
-- Flow 1:
  Average throughput: 57.05 Mbit/s
  95th percentile per-packet one-way delay: 2154.595 ms
  Loss rate: 10.71%
-- Flow 2:
  Average throughput: 37.68 Mbit/s
  95th percentile per-packet one-way delay: 2002.563 ms
  Loss rate: 13.47%
-- Flow 3:
  Average throughput: 30.70 Mbit/s
  95th percentile per-packet one-way delay: 893.190 ms
  Loss rate: 9.84%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-08-27 12:41:03
End at: 2019-08-27 12:41:33
Local clock offset: -0.651 ms
Remote clock offset: 6.247 ms

# Below is generated by plot.py at 2019-08-27 14:54:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.96 Mbit/s
95th percentile per-packet one-way delay: 1645.786 ms
Loss rate: 10.50%
-- Flow 1:
Average throughput: 62.32 Mbit/s
95th percentile per-packet one-way delay: 1630.807 ms
Loss rate: 9.84%
-- Flow 2:
Average throughput: 34.81 Mbit/s
95th percentile per-packet one-way delay: 2844.499 ms
Loss rate: 14.50%
-- Flow 3:
Average throughput: 19.82 Mbit/s
95th percentile per-packet one-way delay: 142.389 ms
Loss rate: 0.97%
Run 2: Report of PCC-Allegro — Data Link

![Graphs showing throughput and delay over time.]

- Throughput (Mbps):
  - Flow 1 ingress (mean 68.97 Mbps)
  - Flow 2 ingress (mean 39.01 Mbps)
  - Flow 3 ingress (mean 19.88 Mbps)
  - Flow 1 egress (mean 62.32 Mbps)
  - Flow 2 egress (mean 34.81 Mbps)
  - Flow 3 egress (mean 19.82 Mbps)

- Delay (ms):
  - Flow 1 (95th percentile 1630.81 ms)
  - Flow 2 (95th percentile 2844.50 ms)
  - Flow 3 (95th percentile 142.39 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2019-08-27 13:19:12
End at: 2019-08-27 13:19:42
Local clock offset: -0.627 ms
Remote clock offset: 2.526 ms

# Below is generated by plot.py at 2019-08-27 14:54:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.22 Mbit/s
  95th percentile per-packet one-way delay: 1554.777 ms
  Loss rate: 22.96%
-- Flow 1:
  Average throughput: 56.07 Mbit/s
  95th percentile per-packet one-way delay: 1597.916 ms
  Loss rate: 27.04%
-- Flow 2:
  Average throughput: 32.19 Mbit/s
  95th percentile per-packet one-way delay: 1353.198 ms
  Loss rate: 22.70%
-- Flow 3:
  Average throughput: 41.89 Mbit/s
  95th percentile per-packet one-way delay: 118.709 ms
  Loss rate: 0.87%
Run 3: Report of PCC-Allegro — Data Link

Throughput (Mbps):

Time (s):

Flow 1 ingress (mean 76.68 Mbps)
Flow 1 egress (mean 56.07 Mbps)
Flow 2 ingress (mean 41.52 Mbps)
Flow 2 egress (mean 32.19 Mbps)
Flow 3 ingress (mean 41.98 Mbps)
Flow 3 egress (mean 41.89 Mbps)

Per-packet one-way delay (ms):

Time (s):

Flow 1 (95th percentile 1597.92 ms)
Flow 2 (95th percentile 1353.20 ms)
Flow 3 (95th percentile 118.71 ms)
Run 4: Statistics of PCC-Allegro

End at: 2019-08-27 13:58:17
Local clock offset: -0.675 ms
Remote clock offset: 6.32 ms

# Below is generated by plot.py at 2019-08-27 14:55:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.39 Mbit/s
95th percentile per-packet one-way delay: 2104.173 ms
Loss rate: 7.01%
-- Flow 1:
Average throughput: 57.28 Mbit/s
95th percentile per-packet one-way delay: 2142.511 ms
Loss rate: 10.59%
-- Flow 2:
Average throughput: 44.19 Mbit/s
95th percentile per-packet one-way delay: 40.648 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 133.245 ms
Loss rate: 1.07%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2019-08-27 14:38:46
End at: 2019-08-27 14:39:16
Local clock offset: -0.435 ms
Remote clock offset: 4.107 ms

# Below is generated by plot.py at 2019-08-27 14:55:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.16 Mbit/s
95th percentile per-packet one-way delay: 1353.629 ms
Loss rate: 24.05%
-- Flow 1:
Average throughput: 58.18 Mbit/s
95th percentile per-packet one-way delay: 1474.562 ms
Loss rate: 28.20%
-- Flow 2:
Average throughput: 34.45 Mbit/s
95th percentile per-packet one-way delay: 1167.643 ms
Loss rate: 17.39%
-- Flow 3:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: 955.177 ms
Loss rate: 10.60%
Run 5: Report of PCC-Allegro — Data Link

![Graphs showing throughput and packet one-way delay over time for different flows.]
Run 1: Statistics of PCC-Expr

Start at: 2019-08-27 11:42:17
End at: 2019-08-27 11:42:47
Local clock offset: -0.526 ms
Remote clock offset: 5.202 ms

# Below is generated by plot.py at 2019-08-27 14:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 1475.126 ms
Loss rate: 30.00%
-- Flow 1:
Average throughput: 58.04 Mbit/s
95th percentile per-packet one-way delay: 751.827 ms
Loss rate: 37.82%
-- Flow 2:
Average throughput: 38.43 Mbit/s
95th percentile per-packet one-way delay: 1540.949 ms
Loss rate: 14.58%
-- Flow 3:
Average throughput: 27.76 Mbit/s
95th percentile per-packet one-way delay: 50.010 ms
Loss rate: 0.93%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2019-08-27 12:21:02
End at: 2019-08-27 12:21:32
Local clock offset: -0.569 ms
Remote clock offset: 5.935 ms

# Below is generated by plot.py at 2019-08-27 14:56:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.96 Mbit/s
95th percentile per-packet one-way delay: 970.903 ms
Loss rate: 26.91%
-- Flow 1:
Average throughput: 56.10 Mbit/s
95th percentile per-packet one-way delay: 898.089 ms
Loss rate: 35.51%
-- Flow 2:
Average throughput: 38.99 Mbit/s
95th percentile per-packet one-way delay: 1390.340 ms
Loss rate: 8.81%
-- Flow 3:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 109.008 ms
Loss rate: 1.14%
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 86.80 Mbit/s)**
- **Flow 1 egress (mean 56.10 Mbit/s)**
- **Flow 2 ingress (mean 42.62 Mbit/s)**
- **Flow 2 egress (mean 38.99 Mbit/s)**
- **Flow 3 ingress (mean 27.31 Mbit/s)**
- **Flow 3 egress (mean 27.18 Mbit/s)**
Run 3: Statistics of PCC-Expr

Start at: 2019-08-27 12:58:48
End at: 2019-08-27 12:59:18
Local clock offset: -0.618 ms
Remote clock offset: 3.782 ms

# Below is generated by plot.py at 2019-08-27 14:56:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 1327.693 ms
Loss rate: 25.97%
-- Flow 1:
Average throughput: 58.44 Mbit/s
95th percentile per-packet one-way delay: 877.552 ms
Loss rate: 32.86%
-- Flow 2:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: 1539.819 ms
Loss rate: 13.28%
-- Flow 3:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 45.207 ms
Loss rate: 0.76%
Run 3: Report of PCC-Expr — Data Link

![Graph 1: Throughput vs Time (Mbps)]
- Flow 1 ingress (mean 86.85 Mbps)
- Flow 1 egress (mean 58.44 Mbps)
- Flow 2 ingress (mean 45.57 Mbps)
- Flow 2 egress (mean 37.91 Mbps)
- Flow 3 ingress (mean 27.65 Mbps)
- Flow 3 egress (mean 27.62 Mbps)

![Graph 2: Per-packet delay vs Time (ms)]
- Flow 1 (95th percentile 87.75 ms)
- Flow 2 (95th percentile 153.92 ms)
- Flow 3 (95th percentile 45.21 ms)
Run 4: Statistics of PCC-Expr

Start at: 2019-08-27 13:37:09
End at: 2019-08-27 13:37:39
Local clock offset: -0.648 ms
Remote clock offset: 5.634 ms

# Below is generated by plot.py at 2019-08-27 14:56:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.00 Mbit/s
  95th percentile per-packet one-way delay: 1450.251 ms
  Loss rate: 27.98%
-- Flow 1:
  Average throughput: 56.52 Mbit/s
  95th percentile per-packet one-way delay: 891.387 ms
  Loss rate: 35.11%
-- Flow 2:
  Average throughput: 38.30 Mbit/s
  95th percentile per-packet one-way delay: 1499.801 ms
  Loss rate: 15.25%
-- Flow 3:
  Average throughput: 27.44 Mbit/s
  95th percentile per-packet one-way delay: 156.524 ms
  Loss rate: 2.08%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2019-08-27 14:17:08
End at: 2019-08-27 14:17:38
Local clock offset: -0.569 ms
Remote clock offset: 4.336 ms

# Below is generated by plot.py at 2019-08-27 14:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.00 Mbit/s
95th percentile per-packet one-way delay: 1071.298 ms
Loss rate: 25.25%
-- Flow 1:
Average throughput: 57.24 Mbit/s
95th percentile per-packet one-way delay: 844.953 ms
Loss rate: 32.66%
-- Flow 2:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 1551.446 ms
Loss rate: 10.96%
-- Flow 3:
Average throughput: 27.42 Mbit/s
95th percentile per-packet one-way delay: 89.889 ms
Loss rate: 1.56%
Run 5: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2019-08-27 11:32:45
End at: 2019-08-27 11:33:15
Local clock offset: -0.486 ms
Remote clock offset: 4.904 ms

# Below is generated by plot.py at 2019-08-27 14:57:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.33 Mbit/s
  95th percentile per-packet one-way delay: 99.338 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 43.10 Mbit/s
  95th percentile per-packet one-way delay: 88.155 ms
  Loss rate: 0.21%
-- Flow 2:
  Average throughput: 34.80 Mbit/s
  95th percentile per-packet one-way delay: 119.806 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 30.68 Mbit/s
  95th percentile per-packet one-way delay: 99.950 ms
  Loss rate: 0.91%
Run 2: Statistics of QUIC Cubic

Start at: 2019-08-27 12:10:18
End at: 2019-08-27 12:10:48
Local clock offset: -0.608 ms
Remote clock offset: 6.37 ms

# Below is generated by plot.py at 2019-08-27 14:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.89 Mbit/s
95th percentile per-packet one-way delay: 70.796 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 57.53 Mbit/s
95th percentile per-packet one-way delay: 42.438 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 126.963 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 23.11 Mbit/s
95th percentile per-packet one-way delay: 164.217 ms
Loss rate: 1.16%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2019-08-27 12:49:11
End at: 2019-08-27 12:49:41
Local clock offset: -0.676 ms
Remote clock offset: 5.568 ms

# Below is generated by plot.py at 2019-08-27 14:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 103.953 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 41.38 Mbit/s
95th percentile per-packet one-way delay: 97.690 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 42.12 Mbit/s
95th percentile per-packet one-way delay: 108.776 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 156.613 ms
Loss rate: 1.09%
Run 3: Report of QUIC Cubic — Data Link

---

Flow 1 ingress (mean 41.37 Mbit/s)  Flow 1 egress (mean 41.38 Mbit/s)
Flow 2 ingress (mean 42.18 Mbit/s)  Flow 2 egress (mean 42.12 Mbit/s)
Flow 3 ingress (mean 23.49 Mbit/s)  Flow 3 egress (mean 23.39 Mbit/s)

---

Flow 1 (95th percentile 97.69 ms)  Flow 2 (95th percentile 108.78 ms)  Flow 3 (95th percentile 156.61 ms)

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Run 4: Statistics of QUIC Cubic

Local clock offset: -0.645 ms
Remote clock offset: 4.273 ms

# Below is generated by plot.py at 2019-08-27 14:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 95.489 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 43.20 Mbit/s
95th percentile per-packet one-way delay: 89.563 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 36.07 Mbit/s
95th percentile per-packet one-way delay: 104.156 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 98.092 ms
Loss rate: 0.89%
Run 4: Report of QUIC Cubic — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 43.20 Mbps)
  - Flow 2 ingress (mean 36.68 Mbps)
  - Flow 3 ingress (mean 30.79 Mbps)
  - Flow 1 egress (mean 43.20 Mbps)
  - Flow 2 egress (mean 36.07 Mbps)
  - Flow 3 egress (mean 30.71 Mbps)

- Per-packet one-way delay (ms):
  - Flow 1 (95th percentile 89.56 ms)
  - Flow 2 (95th percentile 104.16 ms)
  - Flow 3 (95th percentile 98.09 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2019-08-27 14:06:31
End at: 2019-08-27 14:07:01
Local clock offset: -0.62 ms
Remote clock offset: 4.956 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.04 Mbit/s
95th percentile per-packet one-way delay: 100.262 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 93.446 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 120.102 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 30.93 Mbit/s
95th percentile per-packet one-way delay: 91.411 ms
Loss rate: 0.88%
Run 5: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 42.82 Mbps)
Flow 1 egress (mean 42.82 Mbps)
Flow 2 ingress (mean 34.69 Mbps)
Flow 2 egress (mean 34.66 Mbps)
Flow 3 ingress (mean 31.00 Mbps)
Flow 3 egress (mean 30.93 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 93.45 ms)
Flow 2 (95th percentile 120.10 ms)
Flow 3 (95th percentile 91.41 ms)
Run 1: Statistics of SCReAM

Start at: 2019-08-27 11:31:36
End at: 2019-08-27 11:32:06
Local clock offset: -0.481 ms
Remote clock offset: 4.887 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 30.407 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.435 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.359 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 30.422 ms
  Loss rate: 0.71%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2019-08-27 12:09:09
End at: 2019-08-27 12:09:39
Local clock offset: -0.598 ms
Remote clock offset: 6.345 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.492 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.453 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.464 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.786 ms
Loss rate: 0.71%
Run 2: Report of SCReAM — Data Link

![Graph showing throughput and per-packet round trip times](image-url)
Run 3: Statistics of SCReAM

Start at: 2019-08-27 12:48:02
End at: 2019-08-27 12:48:32
Local clock offset: -0.677 ms
Remote clock offset: 6.062 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 30.292 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.290 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.329 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 30.124 ms
  Loss rate: 0.71%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2019-08-27 13:26:08
End at: 2019-08-27 13:26:38
Local clock offset: -0.652 ms
Remote clock offset: 4.032 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 30.696 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.744 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.627 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.607 ms
Loss rate: 0.36%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2019-08-27 14:05:21
End at: 2019-08-27 14:05:51
Local clock offset: -0.694 ms
Remote clock offset: 5.195 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 30.353 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.246 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 30.330 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 30.717 ms
  Loss rate: 0.71%
Run 5: Report of SCReAM — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 0.21 Mbps)
- Flow 1 egress (mean 0.21 Mbps)
- Flow 2 ingress (mean 0.21 Mbps)
- Flow 2 egress (mean 0.21 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

Delay (ms):
- Flow 1 (95th percentile 30.25 ms)
- Flow 2 (95th percentile 30.33 ms)
- Flow 3 (95th percentile 30.72 ms)
Run 1: Statistics of Sprout

Start at: 2019-08-27 11:28:41
End at: 2019-08-27 11:29:11
Local clock offset: -0.499 ms
Remote clock offset: 4.989 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.84 Mbit/s
  95th percentile per-packet one-way delay: 39.155 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 12.08 Mbit/s
  95th percentile per-packet one-way delay: 38.894 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 11.97 Mbit/s
  95th percentile per-packet one-way delay: 39.222 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 11.64 Mbit/s
  95th percentile per-packet one-way delay: 40.004 ms
  Loss rate: 0.48%
Run 1: Report of Sprout — Data Link

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

- **Flow 1 Ingress** (mean 12.08 Mbit/s)
- **Flow 1 Egress** (mean 12.08 Mbit/s)
- **Flow 2 Ingress** (mean 11.97 Mbit/s)
- **Flow 2 Egress** (mean 11.97 Mbit/s)
- **Flow 3 Ingress** (mean 11.64 Mbit/s)
- **Flow 3 Egress** (mean 11.64 Mbit/s)

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

- **Flow 1** (95th percentile 38.89 ms)
- **Flow 2** (95th percentile 39.22 ms)
- **Flow 3** (95th percentile 40.00 ms)

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Run 2: Statistics of Sprout

Start at: 2019-08-27 12:06:12
End at: 2019-08-27 12:06:42
Local clock offset: -0.575 ms
Remote clock offset: 6.23 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 38.557 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 38.557 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 11.97 Mbit/s
95th percentile per-packet one-way delay: 38.471 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.67 Mbit/s
95th percentile per-packet one-way delay: 38.747 ms
Loss rate: 0.86%
Run 2: Report of Sprout — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ing (mean 12.06 Mbps)**
- **Flow 1 egress (mean 12.07 Mbps)**
- **Flow 2 ing (mean 11.97 Mbps)**
- **Flow 2 egress (mean 11.97 Mbps)**
- **Flow 3 ing (mean 11.67 Mbps)**
- **Flow 3 egress (mean 11.67 Mbps)**

**Per-packet end-to-end delay (ms):**
- **Flow 1 (95th percentile 38.56 ms)**
- **Flow 2 (95th percentile 38.47 ms)**
- **Flow 3 (95th percentile 38.75 ms)**
Run 3: Statistics of Sprout

Start at: 2019-08-27 12:45:19
End at: 2019-08-27 12:45:49
Local clock offset: -0.668 ms
Remote clock offset: 6.436 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.76 Mbit/s
95th percentile per-packet one-way delay: 39.065 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 38.847 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 39.249 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 11.71 Mbit/s
95th percentile per-packet one-way delay: 39.333 ms
Loss rate: 0.81%
Run 3: Report of Sprout — Data Link

![Throughput Graph](chart1)

- **Flow 1 Ingress** (mean 12.01 Mbit/s)
- **Flow 1 Egress** (mean 12.00 Mbit/s)
- **Flow 2 Ingress** (mean 11.92 Mbit/s)
- **Flow 2 Egress** (mean 11.92 Mbit/s)
- **Flow 3 Ingress** (mean 11.71 Mbit/s)
- **Flow 3 Egress** (mean 11.71 Mbit/s)

![Delay Graph](chart2)

- **Flow 1** (95th percentile 38.85 ms)
- **Flow 2** (95th percentile 39.25 ms)
- **Flow 3** (95th percentile 39.33 ms)
Run 4: Statistics of Sprout

Local clock offset: -0.672 ms
Remote clock offset: 3.276 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.76 Mbit/s
  95th percentile per-packet one-way delay: 38.781 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 12.00 Mbit/s
  95th percentile per-packet one-way delay: 37.940 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 11.95 Mbit/s
  95th percentile per-packet one-way delay: 39.262 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 11.65 Mbit/s
  95th percentile per-packet one-way delay: 39.910 ms
  Loss rate: 0.86%
Run 4: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 Ingress (mean 12.02 Mbps)
  - Flow 1 Egress (mean 12.00 Mbps)
  - Flow 2 Ingress (mean 11.97 Mbps)
  - Flow 2 Egress (mean 11.95 Mbps)
  - Flow 3 Ingress (mean 11.66 Mbps)
  - Flow 3 Egress (mean 11.65 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 37.94 ms)
  - Flow 2 (95th percentile 39.26 ms)
  - Flow 3 (95th percentile 39.91 ms)
Run 5: Statistics of Sprout

Start at: 2019-08-27 14:02:14
End at: 2019-08-27 14:02:44
Local clock offset: -0.693 ms
Remote clock offset: 5.547 ms

# Below is generated by plot.py at 2019-08-27 14:57:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 37.837 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 37.304 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 37.742 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 11.81 Mbit/s
95th percentile per-packet one-way delay: 39.135 ms
Loss rate: 0.70%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2019-08-27 11:38:48
End at: 2019-08-27 11:39:18
Local clock offset: -0.531 ms
Remote clock offset: 5.084 ms

# Below is generated by plot.py at 2019-08-27 14:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 110.253 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 53.77 Mbit/s
95th percentile per-packet one-way delay: 104.978 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 99.776 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 173.912 ms
Loss rate: 2.67%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 53.90 Mbps/s)
- Flow 1 egress (mean 53.77 Mbps/s)
- Flow 2 ingress (mean 46.48 Mbps/s)
- Flow 2 egress (mean 46.38 Mbps/s)
- Flow 3 ingress (mean 24.69 Mbps/s)
- Flow 3 egress (mean 24.19 Mbps/s)

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

- Flow 1 (95th percentile 104.98 ms)
- Flow 2 (95th percentile 99.78 ms)
- Flow 3 (95th percentile 173.91 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2019-08-27 12:16:56
End at: 2019-08-27 12:17:26
Local clock offset: -0.6 ms
Remote clock offset: 6.082 ms

# Below is generated by plot.py at 2019-08-27 14:59:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.65 Mbit/s
95th percentile per-packet one-way delay: 123.787 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 56.19 Mbit/s
95th percentile per-packet one-way delay: 123.263 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 39.13 Mbit/s
95th percentile per-packet one-way delay: 123.935 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 31.36 Mbit/s
95th percentile per-packet one-way delay: 124.346 ms
Loss rate: 4.09%
Run 2: Report of TaoVA-100x — Data Link

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

- **Flow 1 Ingress**: (mean 56.47 Mbit/s)
- **Flow 1 Egress**: (mean 56.19 Mbit/s)
- **Flow 2 Ingress**: (mean 39.91 Mbit/s)
- **Flow 2 Egress**: (mean 39.13 Mbit/s)
- **Flow 3 Ingress**: (mean 32.49 Mbit/s)
- **Flow 3 Egress**: (mean 31.36 Mbit/s)

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

- **Flow 1 95th Percentile**: 123.26 ms
- **Flow 2 95th Percentile**: 123.94 ms
- **Flow 3 95th Percentile**: 124.35 ms

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Run 3: Statistics of TaoVA-100x

End at: 2019-08-27 12:55:50
Local clock offset: -0.663 ms
Remote clock offset: 4.281 ms

# Below is generated by plot.py at 2019-08-27 14:59:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.88 Mbit/s
95th percentile per-packet one-way delay: 123.850 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: 122.074 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 39.30 Mbit/s
95th percentile per-packet one-way delay: 124.451 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 124.441 ms
Loss rate: 2.50%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2019-08-27 13:33:34
End at: 2019-08-27 13:34:04
Local clock offset: -0.653 ms
Remote clock offset: 5.28 ms

# Below is generated by plot.py at 2019-08-27 14:59:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.67 Mbit/s
95th percentile per-packet one-way delay: 114.307 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 53.75 Mbit/s
95th percentile per-packet one-way delay: 108.161 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 46.41 Mbit/s
95th percentile per-packet one-way delay: 99.454 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 173.125 ms
Loss rate: 2.23%
Run 4: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 53.86 Mbit/s)
- Flow 1 egress (mean 53.75 Mbit/s)
- Flow 2 ingress (mean 46.61 Mbit/s)
- Flow 2 egress (mean 46.41 Mbit/s)
- Flow 3 ingress (mean 24.56 Mbit/s)
- Flow 3 egress (mean 24.17 Mbit/s)

Per packet one-way delay (ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-08-27 14:13:11
End at: 2019-08-27 14:13:41
Local clock offset: -0.583 ms
Remote clock offset: 4.3 ms

# Below is generated by plot.py at 2019-08-27 14:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.52 Mbit/s
95th percentile per-packet one-way delay: 110.524 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 60.75 Mbit/s
95th percentile per-packet one-way delay: 93.570 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 131.895 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 173.715 ms
Loss rate: 2.67%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2019-08-27 11:58:43
End at: 2019-08-27 11:59:13
Local clock offset: -0.555 ms
Remote clock offset: 5.923 ms

# Below is generated by plot.py at 2019-08-27 14:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.29 Mbit/s
95th percentile per-packet one-way delay: 38.389 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 37.66 Mbit/s
95th percentile per-packet one-way delay: 48.875 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 33.469 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 43.543 ms
Loss rate: 0.68%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2019-08-27 12:38:02
End at: 2019-08-27 12:38:32
Local clock offset: -0.662 ms
Remote clock offset: 6.2 ms

# Below is generated by plot.py at 2019-08-27 14:59:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.45 Mbit/s
  95th percentile per-packet one-way delay: 33.638 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 45.14 Mbit/s
  95th percentile per-packet one-way delay: 33.258 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 36.76 Mbit/s
  95th percentile per-packet one-way delay: 33.003 ms
  Loss rate: 0.31%
-- Flow 3:
  Average throughput: 32.75 Mbit/s
  95th percentile per-packet one-way delay: 42.905 ms
  Loss rate: 0.69%
Run 2: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 45.12 Mbit/s)**
- **Flow 1 egress (mean 45.14 Mbit/s)**
- **Flow 2 ingress (mean 36.75 Mbit/s)**
- **Flow 2 egress (mean 36.76 Mbit/s)**
- **Flow 3 ingress (mean 32.77 Mbit/s)**
- **Flow 3 egress (mean 32.75 Mbit/s)**

![Graph 2: Per-packet One-Way Delay over Time](image2)

- **Flow 1 (95th percentile 33.26 ms)**
- **Flow 2 (95th percentile 33.00 ms)**
- **Flow 3 (95th percentile 42.91 ms)**

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Run 3: Statistics of TCP Vegas

Start at: 2019-08-27 13:15:40
End at: 2019-08-27 13:16:10
Local clock offset: -0.622 ms
Remote clock offset: 2.74 ms

# Below is generated by plot.py at 2019-08-27 14:59:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.84 Mbit/s
  95th percentile per-packet one-way delay: 44.035 ms
  Loss rate: 0.30%
-- Flow 1:
  Average throughput: 36.53 Mbit/s
  95th percentile per-packet one-way delay: 52.263 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 37.02 Mbit/s
  95th percentile per-packet one-way delay: 36.254 ms
  Loss rate: 0.24%
-- Flow 3:
  Average throughput: 44.29 Mbit/s
  95th percentile per-packet one-way delay: 43.903 ms
  Loss rate: 0.71%
Run 3: Report of TCP Vegas — Data Link

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

*Flow 1 ingress (mean 36.51 Mbit/s)  Flow 1 egress (mean 36.53 Mbit/s)*
*Flow 2 ingress (mean 36.99 Mbit/s)  Flow 2 egress (mean 37.02 Mbit/s)*
*Flow 3 ingress (mean 44.32 Mbit/s)  Flow 3 egress (mean 44.29 Mbit/s)*
Run 4: Statistics of TCP Vegas

Start at: 2019-08-27 13:54:40
End at: 2019-08-27 13:55:10
Local clock offset: -0.676 ms
Remote clock offset: 6.725 ms

# Below is generated by plot.py at 2019-08-27 14:59:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.38 Mbit/s
95th percentile per-packet one-way delay: 33.737 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 41.83 Mbit/s
95th percentile per-packet one-way delay: 36.135 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 46.75 Mbit/s
95th percentile per-packet one-way delay: 33.616 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 22.42 Mbit/s
95th percentile per-packet one-way delay: 32.677 ms
Loss rate: 0.81%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2019-08-27 14:35:19
End at: 2019-08-27 14:35:49
Local clock offset: -0.435 ms
Remote clock offset: 3.86 ms

# Below is generated by plot.py at 2019-08-27 14:59:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.27 Mbit/s
95th percentile per-packet one-way delay: 36.257 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 36.76 Mbit/s
95th percentile per-packet one-way delay: 52.493 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 43.70 Mbit/s
95th percentile per-packet one-way delay: 33.334 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 31.52 Mbit/s
95th percentile per-packet one-way delay: 35.878 ms
Loss rate: 0.66%
Run 5: Report of TCP Vegas — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 36.75 Mbit/s)  Flow 1 egress (mean 36.76 Mbit/s)
Flow 2 ingress (mean 43.69 Mbit/s)  Flow 2 egress (mean 43.70 Mbit/s)
Flow 3 ingress (mean 31.52 Mbit/s)  Flow 3 egress (mean 31.52 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 52.49 ms)  Flow 2 (95th percentile 33.33 ms)  Flow 3 (95th percentile 35.88 ms)
Run 1: Statistics of Verus

Start at: 2019-08-27 11:47:26
End at: 2019-08-27 11:47:56
Local clock offset: -0.54 ms
Remote clock offset: 5.511 ms

# Below is generated by plot.py at 2019-08-27 14:59:22
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 86.21 Mbit/s
   95th percentile per-packet one-way delay: 198.235 ms
   Loss rate: 0.52%
-- Flow 1:
   Average throughput: 52.00 Mbit/s
   95th percentile per-packet one-way delay: 140.427 ms
   Loss rate: 0.22%
-- Flow 2:
   Average throughput: 32.05 Mbit/s
   95th percentile per-packet one-way delay: 231.498 ms
   Loss rate: 1.02%
-- Flow 3:
   Average throughput: 39.00 Mbit/s
   95th percentile per-packet one-way delay: 297.866 ms
   Loss rate: 0.89%
Run 1: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 52.08 Mbps)
- Flow 1 egress (mean 52.00 Mbps)
- Flow 2 ingress (mean 32.28 Mbps)
- Flow 2 egress (mean 32.05 Mbps)
- Flow 3 ingress (mean 39.09 Mbps)
- Flow 3 egress (mean 39.00 Mbps)

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

- Flow 1 (95th percentile 140.43 ms)
- Flow 2 (95th percentile 231.50 ms)
- Flow 3 (95th percentile 297.87 ms)
Run 2: Statistics of Verus

Start at: 2019-08-27 12:26:37
End at: 2019-08-27 12:27:07
Local clock offset: -0.614 ms
Remote clock offset: 5.957 ms

# Below is generated by plot.py at 2019-08-27 15:00:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 143.671 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 51.64 Mbit/s
95th percentile per-packet one-way delay: 148.248 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 45.71 Mbit/s
95th percentile per-packet one-way delay: 88.392 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 310.412 ms
Loss rate: 1.49%
Run 2: Report of Verus — Data Link

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

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 51.68 Mbps)
- Flow 1 egress (mean 51.64 Mbps)
- Flow 2 ingress (mean 45.68 Mbps)
- Flow 2 egress (mean 45.71 Mbps)
- Flow 3 ingress (mean 21.22 Mbps)
- Flow 3 egress (mean 21.04 Mbps)

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

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

- Flow 1 (95th percentile 148.25 ms)
- Flow 2 (95th percentile 88.39 ms)
- Flow 3 (95th percentile 310.41 ms)
Run 3: Statistics of Verus

Start at: 2019-08-27 13:04:02
End at: 2019-08-27 13:04:32
Local clock offset: -0.617 ms
Remote clock offset: 3.198 ms

# Below is generated by plot.py at 2019-08-27 15:00:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.97 Mbit/s
95th percentile per-packet one-way delay: 143.552 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 53.54 Mbit/s
95th percentile per-packet one-way delay: 141.545 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 36.85 Mbit/s
95th percentile per-packet one-way delay: 136.545 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 29.97 Mbit/s
95th percentile per-packet one-way delay: 214.873 ms
Loss rate: 1.26%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Local clock offset: ~0.621 ms
Remote clock offset: 6.387 ms

# Below is generated by plot.py at 2019-08-27 15:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.45 Mbit/s
95th percentile per-packet one-way delay: 193.667 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: 128.472 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 33.60 Mbit/s
95th percentile per-packet one-way delay: 263.354 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 19.92 Mbit/s
95th percentile per-packet one-way delay: 306.652 ms
Loss rate: 1.27%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2019-08-27 14:23:15
End at: 2019-08-27 14:23:45
Local clock offset: -0.51 ms
Remote clock offset: 3.729 ms

# Below is generated by plot.py at 2019-08-27 15:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.10 Mbit/s
95th percentile per-packet one-way delay: 155.435 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 155.180 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 37.59 Mbit/s
95th percentile per-packet one-way delay: 113.398 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 251.066 ms
Loss rate: 1.56%
Run 5: Report of Verus — Data Link

[Graph showing throughput over time for different flows and their ingress and egress rates.]

[Graph showing per-packet one-way delay over time for different flows and their 95th percentile rates.]
Run 1: Statistics of PCC-Vivace

Start at: 2019-08-27 11:44:22
End at: 2019-08-27 11:44:52
Local clock offset: -0.492 ms
Remote clock offset: 5.312 ms

# Below is generated by plot.py at 2019-08-27 15:00:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.11 Mbit/s
95th percentile per-packet one-way delay: 266.053 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 53.05 Mbit/s
95th percentile per-packet one-way delay: 227.834 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 313.064 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 28.11 Mbit/s
95th percentile per-packet one-way delay: 70.394 ms
Loss rate: 0.73%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing throughput and round-trip time for three flows over time](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 53.14 Mbps)
  - Flow 2 ingress (mean 37.67 Mbps)
  - Flow 3 ingress (mean 28.13 Mbps)
  - Flow 1 egress (mean 53.05 Mbps)
  - Flow 2 egress (mean 37.35 Mbps)
  - Flow 3 egress (mean 28.11 Mbps)

- **Round-trip time (ms):**
  - Flow 1 (95th percentile 227.83 ms)
  - Flow 2 (95th percentile 313.06 ms)
  - Flow 3 (95th percentile 70.39 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2019-08-27 12:23:09
End at: 2019-08-27 12:23:39
Local clock offset: -0.582 ms
Remote clock offset: 6.184 ms

# Below is generated by plot.py at 2019-08-27 15:00:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 2131.753 ms
Loss rate: 5.00%
-- Flow 1:
Average throughput: 54.19 Mbit/s
95th percentile per-packet one-way delay: 2240.145 ms
Loss rate: 7.49%
-- Flow 2:
Average throughput: 40.78 Mbit/s
95th percentile per-packet one-way delay: 48.881 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 254.198 ms
Loss rate: 1.98%
Run 2: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 58.45 Mbit/s)
- Flow 1 egress (mean 54.19 Mbit/s)
- Flow 2 ingress (mean 40.82 Mbit/s)
- Flow 2 egress (mean 40.78 Mbit/s)
- Flow 3 ingress (mean 21.50 Mbit/s)
- Flow 3 egress (mean 21.21 Mbit/s)

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

- Flow 1 (95th percentile 2240.14 ms)
- Flow 2 (95th percentile 48.88 ms)
- Flow 3 (95th percentile 254.20 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-08-27 13:00:44
End at: 2019-08-27 13:01:14
Local clock offset: -0.619 ms
Remote clock offset: 3.551 ms

# Below is generated by plot.py at 2019-08-27 15:00:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.08 Mbit/s
95th percentile per-packet one-way delay: 1764.779 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 1820.168 ms
Loss rate: 4.99%
-- Flow 2:
Average throughput: 34.05 Mbit/s
95th percentile per-packet one-way delay: 176.567 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 27.37 Mbit/s
95th percentile per-packet one-way delay: 87.644 ms
Loss rate: 1.36%
Run 3: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 59.28 Mbit/s)
- Flow 1 egress (mean 56.43 Mbit/s)
- Flow 2 ingress (mean 34.18 Mbit/s)
- Flow 2 egress (mean 34.05 Mbit/s)
- Flow 3 ingress (mean 27.56 Mbit/s)
- Flow 3 egress (mean 27.37 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 1820.17 ms)
- Flow 2 (95th percentile 176.57 ms)
- Flow 3 (95th percentile 87.64 ms)
Run 4: Statistics of PCC-Vivace

End at: 2019-08-27 13:39:54
Local clock offset: -0.609 ms
Remote clock offset: 5.971 ms

# Below is generated by plot.py at 2019-08-27 15:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.02 Mbit/s
95th percentile per-packet one-way delay: 97.823 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 52.97 Mbit/s
95th percentile per-packet one-way delay: 63.884 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 36.29 Mbit/s
95th percentile per-packet one-way delay: 199.224 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 27.14 Mbit/s
95th percentile per-packet one-way delay: 91.978 ms
Loss rate: 0.85%
Run 4: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 52.99 Mbps)
  - Flow 1 egress (mean 52.97 Mbps)
  - Flow 2 ingress (mean 36.42 Mbps)
  - Flow 2 egress (mean 36.29 Mbps)
  - Flow 3 ingress (mean 27.20 Mbps)
  - Flow 3 egress (mean 27.14 Mbps)

- **Delay (ms)**
  - Flow 1 (95th percentile 63.88 ms)
  - Flow 2 (95th percentile 199.22 ms)
  - Flow 3 (95th percentile 91.98 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2019-08-27 14:19:21  
End at: 2019-08-27 14:19:51  
Local clock offset: -0.526 ms  
Remote clock offset: 4.105 ms

# Below is generated by plot.py at 2019-08-27 15:00:29  
# Datalink statistics

-- Total of 3 flows:  
Average throughput: 87.60 Mbit/s  
95th percentile per-packet one-way delay: 1128.272 ms  
Loss rate: 1.39%  
-- Flow 1:  
Average throughput: 54.55 Mbit/s  
95th percentile per-packet one-way delay: 1195.721 ms  
Loss rate: 1.81%  
-- Flow 2:  
Average throughput: 36.43 Mbit/s  
95th percentile per-packet one-way delay: 168.558 ms  
Loss rate: 0.62%  
-- Flow 3:  
Average throughput: 26.85 Mbit/s  
95th percentile per-packet one-way delay: 80.647 ms  
Loss rate: 0.84%
Run 5: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 55.44 Mbps)
  - Flow 1 egress (mean 54.55 Mbps)
  - Flow 2 ingress (mean 36.54 Mbps)
  - Flow 2 egress (mean 36.43 Mbps)
  - Flow 3 ingress (mean 26.91 Mbps)
  - Flow 3 egress (mean 26.85 Mbps)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 1195.72 ms)
  - Flow 2 (95th percentile 168.56 ms)
  - Flow 3 (95th percentile 80.65 ms)
Run 1: Statistics of WebRTC media

Start at: 2019-08-27 11:26:03
End at: 2019-08-27 11:26:33
Local clock offset: -0.504 ms
Remote clock offset: 4.967 ms

# Below is generated by plot.py at 2019-08-27 15:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 31.055 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 30.938 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 31.103 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 31.318 ms
Loss rate: 0.79%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2019-08-27 12:03:30
End at: 2019-08-27 12:04:00
Local clock offset: -0.585 ms
Remote clock offset: 6.064 ms

# Below is generated by plot.py at 2019-08-27 15:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.29 Mbit/s
95th percentile per-packet one-way delay: 31.159 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 31.120 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 1.06 Mbit/s
95th percentile per-packet one-way delay: 31.089 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 31.365 ms
Loss rate: 0.80%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2019-08-27 12:42:34
End at: 2019-08-27 12:43:04
Local clock offset: -0.642 ms
Remote clock offset: 6.316 ms

# Below is generated by plot.py at 2019-08-27 15:00:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.15 Mbit/s
  95th percentile per-packet one-way delay: 31.094 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 1.74 Mbit/s
  95th percentile per-packet one-way delay: 30.960 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 0.98 Mbit/s
  95th percentile per-packet one-way delay: 31.121 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 31.323 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

![Graph showing throughput and packet inter-arrival delay over time for flows 1, 2, and 3.](image)

- Flow 1 ingress (mean 1.74 Mbit/s)
- Flow 1 egress (mean 1.74 Mbit/s)
- Flow 2 ingress (mean 0.98 Mbit/s)
- Flow 2 egress (mean 0.98 Mbit/s)
- Flow 3 ingress (mean 0.44 Mbit/s)
- Flow 3 egress (mean 0.44 Mbit/s)

![Graph showing packet inter-arrival delay over time for flows 1, 2, and 3.](image)

- Flow 1 (95th percentile 30.96 ms)
- Flow 2 (95th percentile 31.12 ms)
- Flow 3 (95th percentile 31.32 ms)
Run 4: Statistics of WebRTC media

Start at: 2019-08-27 13:20:38
End at: 2019-08-27 13:21:08
Local clock offset: -0.643 ms
Remote clock offset: 2.535 ms

# Below is generated by plot.py at 2019-08-27 15:00:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.23 Mbit/s
  95th percentile per-packet one-way delay: 31.168 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 1.77 Mbit/s
  95th percentile per-packet one-way delay: 31.131 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 1.03 Mbit/s
  95th percentile per-packet one-way delay: 31.137 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 31.314 ms
  Loss rate: 0.53%
Run 4: Report of WebRTC media — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 1.77 Mbps)
- Blue solid line: Flow 1 egress (mean 1.77 Mbps)
- Green dashed line: Flow 2 ingress (mean 1.03 Mbps)
- Green solid line: Flow 2 egress (mean 1.03 Mbps)
- Red dashed line: Flow 3 ingress (mean 0.45 Mbps)
- Red solid line: Flow 3 egress (mean 0.44 Mbps)

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

- Blue circle: Flow 1 (95th percentile 31.13 ms)
- Green circle: Flow 2 (95th percentile 31.14 ms)
- Red circle: Flow 3 (95th percentile 31.31 ms)
Run 5: Statistics of WebRTC media

End at: 2019-08-27 13:59:58
Local clock offset: -0.679 ms
Remote clock offset: 5.918 ms

# Below is generated by plot.py at 2019-08-27 15:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 30.919 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 30.862 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 30.929 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 31.028 ms
Loss rate: 0.79%
Run 5: Report of WebRTC media — Data Link