Pantheon Report

Generated at 2020-04-16 16:19:10 (UTC).
Data path: GCE Sydney on ens4 (local) → GCE Iowa on ens4 (remote).
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.google.com and have been applied to correct the timestamps in logs.

System info:
Linux 5.0.0-1031-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafd722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedb958e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da2095537730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61dbbe92d708a8869ffbb84e63200
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1af9958fa0d66d18b623c091a55fec8724981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M receiver/src/buffer.h
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ebc978f3cff442
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a454d19c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Sydney to GCE Iowa, 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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<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<td>610.40</td>
<td>545.53</td>
<td>481.82</td>
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<td>Copa</td>
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<td>257.82</td>
<td>236.69</td>
<td>191.77</td>
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<td>363.63</td>
<td>300.50</td>
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Run 1: Statistics of TCP BBR

Start at: 2020-04-16 10:07:36
End at: 2020-04-16 10:08:06
Local clock offset: -0.135 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2020-04-16 13:40:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1128.95 Mbit/s
95th percentile per-packet one-way delay: 202.970 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 586.16 Mbit/s
95th percentile per-packet one-way delay: 179.352 ms
Loss rate: 3.53%
-- Flow 2:
Average throughput: 584.18 Mbit/s
95th percentile per-packet one-way delay: 214.034 ms
Loss rate: 7.63%
-- Flow 3:
Average throughput: 461.83 Mbit/s
95th percentile per-packet one-way delay: 234.204 ms
Loss rate: 6.54%
Run 1: Report of TCP BBR — Data Link

![Graph 1](image1)

- Flow 1 Ingress (mean 607.62 Mbit/s)
- Flow 1 Egress (mean 586.16 Mbit/s)
- Flow 2 Ingress (mean 632.49 Mbit/s)
- Flow 2 Egress (mean 584.18 Mbit/s)
- Flow 3 Ingress (mean 494.06 Mbit/s)
- Flow 3 Egress (mean 463.83 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 179.35 ms)
- Flow 2 (95th percentile 214.03 ms)
- Flow 3 (95th percentile 234.20 ms)
Run 2: Statistics of TCP BBR

Start at: 2020-04-16 10:50:01
End at: 2020-04-16 10:50:31
Local clock offset: -0.417 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2020-04-16 13:40:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1126.59 Mbit/s
95th percentile per-packet one-way delay: 219.025 ms
Loss rate: 4.86%
-- Flow 1:
Average throughput: 569.37 Mbit/s
95th percentile per-packet one-way delay: 229.464 ms
Loss rate: 6.26%
-- Flow 2:
Average throughput: 584.37 Mbit/s
95th percentile per-packet one-way delay: 189.936 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 505.44 Mbit/s
95th percentile per-packet one-way delay: 225.950 ms
Loss rate: 6.36%
Run 2: Report of TCP BBR — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 607.37 Mbps)
  - Flow 1 egress (mean 569.37 Mbps)
  - Flow 2 ingress (mean 596.64 Mbps)
  - Flow 2 egress (mean 584.37 Mbps)
  - Flow 3 ingress (mean 539.79 Mbps)
  - Flow 3 egress (mean 505.44 Mbps)

- **One-way delay (ms)**
  - Flow 1 (95th percentile 229.46 ms)
  - Flow 2 (95th percentile 189.94 ms)
  - Flow 3 (95th percentile 225.95 ms)
Run 3: Statistics of TCP BBR

Start at: 2020-04-16 11:32:14
End at: 2020-04-16 11:32:44
Local clock offset: -0.065 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2020-04-16 13:40:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1052.28 Mbit/s
95th percentile per-packet one-way delay: 219.770 ms
Loss rate: 7.61%
-- Flow 1:
Average throughput: 588.51 Mbit/s
95th percentile per-packet one-way delay: 215.766 ms
Loss rate: 8.21%
-- Flow 2:
Average throughput: 434.65 Mbit/s
95th percentile per-packet one-way delay: 223.762 ms
Loss rate: 3.66%
-- Flow 3:
Average throughput: 524.45 Mbit/s
95th percentile per-packet one-way delay: 224.870 ms
Loss rate: 11.65%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2020-04-16 12:14:23
End at: 2020-04-16 12:14:53
Local clock offset: 0.26 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2020-04-16 13:40:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1136.68 Mbit/s
  95th percentile per-packet one-way delay: 215.259 ms
  Loss rate: 6.71%
-- Flow 1:
  Average throughput: 625.31 Mbit/s
  95th percentile per-packet one-way delay: 204.557 ms
  Loss rate: 5.32%
-- Flow 2:
  Average throughput: 560.69 Mbit/s
  95th percentile per-packet one-way delay: 211.092 ms
  Loss rate: 7.55%
-- Flow 3:
  Average throughput: 417.00 Mbit/s
  95th percentile per-packet one-way delay: 249.122 ms
  Loss rate: 10.45%
Run 4: Report of TCP BBR — Data Link

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

Legend:
- Flow 1 ingress (mean 660.48 Mbit/s)
- Flow 1 egress (mean 625.31 Mbit/s)
- Flow 2 ingress (mean 606.49 Mbit/s)
- Flow 2 egress (mean 560.69 Mbit/s)
- Flow 3 ingress (mean 465.75 Mbit/s)
- Flow 3 egress (mean 417.00 Mbit/s)
Run 5: Statistics of TCP BBR

Start at: 2020-04-16 12:56:08
End at: 2020-04-16 12:56:38
Local clock offset: -0.04 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2020-04-16 13:41:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1224.34 Mbit/s
95th percentile per-packet one-way delay: 221.672 ms
Loss rate: 10.54%
-- Flow 1:
Average throughput: 682.63 Mbit/s
95th percentile per-packet one-way delay: 197.606 ms
Loss rate: 8.67%
-- Flow 2:
Average throughput: 563.78 Mbit/s
95th percentile per-packet one-way delay: 236.974 ms
Loss rate: 13.29%
-- Flow 3:
Average throughput: 500.36 Mbit/s
95th percentile per-packet one-way delay: 235.120 ms
Loss rate: 11.65%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2020-04-16 09:58:11
End at: 2020-04-16 09:58:41
Local clock offset: -0.123 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2020-04-16 13:41:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 481.67 Mbit/s
95th percentile per-packet one-way delay: 123.953 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 255.48 Mbit/s
95th percentile per-packet one-way delay: 121.970 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 253.40 Mbit/s
95th percentile per-packet one-way delay: 141.590 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 173.24 Mbit/s
95th percentile per-packet one-way delay: 107.527 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2020-04-16 10:40:28
End at: 2020-04-16 10:40:58
Local clock offset: -0.076 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2020-04-16 13:41:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 534.85 Mbit/s
  95th percentile per-packet one-way delay: 139.470 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 293.61 Mbit/s
  95th percentile per-packet one-way delay: 139.404 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 251.85 Mbit/s
  95th percentile per-packet one-way delay: 141.301 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 221.44 Mbit/s
  95th percentile per-packet one-way delay: 138.686 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 293.61 Mbps)  Flow 1 egress (mean 293.61 Mbps)
Flow 2 ingress (mean 252.05 Mbps)  Flow 2 egress (mean 251.05 Mbps)
Flow 3 ingress (mean 221.44 Mbps)  Flow 3 egress (mean 221.44 Mbps)

![Graph 2: Per-packet delay over time](image2)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 139.40 ms)  Flow 2 (95th percentile 141.30 ms)  Flow 3 (95th percentile 138.69 ms)
Run 3: Statistics of Copa

Start at: 2020-04-16 11:22:46
End at: 2020-04-16 11:23:16
Local clock offset: -0.042 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2020-04-16 13:41:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.63 Mbit/s
95th percentile per-packet one-way delay: 131.265 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 241.02 Mbit/s
95th percentile per-packet one-way delay: 118.311 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 208.93 Mbit/s
95th percentile per-packet one-way delay: 154.982 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 207.99 Mbit/s
95th percentile per-packet one-way delay: 123.702 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2020-04-16 12:04:53
End at: 2020-04-16 12:05:23
Local clock offset: -0.068 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2020-04-16 13:51:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 462.59 Mbit/s
95th percentile per-packet one-way delay: 126.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.75 Mbit/s
95th percentile per-packet one-way delay: 122.564 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 244.65 Mbit/s
95th percentile per-packet one-way delay: 135.376 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 201.30 Mbit/s
95th percentile per-packet one-way delay: 103.915 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 232.75 Mbps)
- Flow 1 egress (mean 232.75 Mbps)
- Flow 2 ingress (mean 244.66 Mbps)
- Flow 2 egress (mean 244.65 Mbps)
- Flow 3 ingress (mean 201.32 Mbps)
- Flow 3 egress (mean 201.30 Mbps)

Per-packet one-way delay (ms)

Time (s)

- Flow 1 (95th percentile 122.56 ms)
- Flow 2 (95th percentile 135.38 ms)
- Flow 3 (95th percentile 103.92 ms)
Run 5: Statistics of Copa

Start at: 2020-04-16 12:47:00
End at: 2020-04-16 12:47:30
Local clock offset: -0.077 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-04-16 13:53:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.28 Mbit/s
95th percentile per-packet one-way delay: 138.972 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 266.25 Mbit/s
95th percentile per-packet one-way delay: 143.459 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 224.64 Mbit/s
95th percentile per-packet one-way delay: 136.791 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 154.90 Mbit/s
95th percentile per-packet one-way delay: 97.629 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2020-04-16 09:54:28
End at: 2020-04-16 09:54:58
Local clock offset: -0.072 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2020-04-16 13:53:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 582.81 Mbit/s
95th percentile per-packet one-way delay: 195.252 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 354.95 Mbit/s
95th percentile per-packet one-way delay: 201.884 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 304.54 Mbit/s
95th percentile per-packet one-way delay: 174.038 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 75.23 Mbit/s
95th percentile per-packet one-way delay: 85.348 ms
Loss rate: 0.00%
Run 1: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 355.89 Mbit/s)
- Flow 1 egress (mean 354.95 Mbit/s)
- Flow 2 ingress (mean 305.01 Mbit/s)
- Flow 2 egress (mean 364.54 Mbit/s)
- Flow 3 ingress (mean 75.23 Mbit/s)
- Flow 3 egress (mean 75.23 Mbit/s)

![Graph showing packet inter-arrival delay.](image)

Legend:
- Flow 1 (95th percentile 201.88 ms)
- Flow 2 (95th percentile 174.04 ms)
- Flow 3 (95th percentile 85.35 ms)
Run 2: Statistics of TCP Cubic

Start at: 2020-04-16 10:36:41
End at: 2020-04-16 10:37:11
Local clock offset: -0.094 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2020-04-16 13:53:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.44 Mbit/s
95th percentile per-packet one-way delay: 181.505 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 383.27 Mbit/s
95th percentile per-packet one-way delay: 172.928 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 263.36 Mbit/s
95th percentile per-packet one-way delay: 137.566 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 384.47 Mbit/s
95th percentile per-packet one-way delay: 227.476 ms
Loss rate: 1.06%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2020-04-16 11:18:57
End at: 2020-04-16 11:19:27
Local clock offset: -0.053 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2020-04-16 13:55:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 781.97 Mbit/s
95th percentile per-packet one-way delay: 183.950 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 553.97 Mbit/s
95th percentile per-packet one-way delay: 186.356 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 314.21 Mbit/s
95th percentile per-packet one-way delay: 154.348 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 56.25 Mbit/s
95th percentile per-packet one-way delay: 84.258 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 555.29 Mbps)
- **Flow 1 egress** (mean 553.97 Mbps)
- **Flow 2 ingress** (mean 314.43 Mbps)
- **Flow 2 egress** (mean 314.21 Mbps)
- **Flow 3 ingress** (mean 56.25 Mbps)
- **Flow 3 egress** (mean 56.25 Mbps)

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

- **Flow 1** (95th percentile 186.36 ms)
- **Flow 2** (95th percentile 154.35 ms)
- **Flow 3** (95th percentile 84.26 ms)
Run 4: Statistics of TCP Cubic

Start at: 2020-04-16 12:01:18
End at: 2020-04-16 12:01:48
Local clock offset: -0.115 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2020-04-16 13:55:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.70 Mbit/s
95th percentile per-packet one-way delay: 183.404 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 349.61 Mbit/s
95th percentile per-packet one-way delay: 186.753 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 139.77 Mbit/s
95th percentile per-packet one-way delay: 84.634 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 144.49 Mbit/s
95th percentile per-packet one-way delay: 84.732 ms
Loss rate: 0.09%
Run 4: Report of TCP Cubic — Data Link

[Graph 1: Throughput (Mbps) vs. Time (s)]
- Flow 1 ingress (mean 349.92 Mbps)
- Flow 1 egress (mean 349.61 Mbps)
- Flow 2 ingress (mean 139.77 Mbps)
- Flow 2 egress (mean 139.77 Mbps)
- Flow 3 ingress (mean 144.84 Mbps)
- Flow 3 egress (mean 144.49 Mbps)

[Graph 2: Per-packet one-way delay (ms) vs. Time (s)]
- Flow 1 (95th percentile 186.75 ms)
- Flow 2 (95th percentile 84.63 ms)
- Flow 3 (95th percentile 84.73 ms)
Run 5: Statistics of TCP Cubic

Start at: 2020-04-16 12:43:29
End at: 2020-04-16 12:43:59
Local clock offset: 0.25 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2020-04-16 13:55:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 544.43 Mbit/s
95th percentile per-packet one-way delay: 178.936 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 176.37 Mbit/s
95th percentile per-packet one-way delay: 86.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 480.62 Mbit/s
95th percentile per-packet one-way delay: 187.416 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 144.15 Mbit/s
95th percentile per-packet one-way delay: 98.104 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

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

**Throughput (Mbit/s):**
- Flow 1 ingress (mean 176.37 Mbit/s)
- Flow 1 egress (mean 176.37 Mbit/s)
- Flow 2 ingress (mean 480.62 Mbit/s)
- Flow 2 egress (mean 480.62 Mbit/s)
- Flow 3 ingress (mean 144.14 Mbit/s)
- Flow 3 egress (mean 144.15 Mbit/s)

**Packet one-way delay (ms):**
- Flow 1 (95th percentile 66.22 ms)
- Flow 2 (95th percentile 187.42 ms)
- Flow 3 (95th percentile 98.10 ms)
Run 1: Statistics of FillP

Start at: 2020-04-16 10:02:06
End at: 2020-04-16 10:02:36
Local clock offset: -0.105 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2020-04-16 13:56:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 623.23 Mbit/s
95th percentile per-packet one-way delay: 147.604 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 319.63 Mbit/s
95th percentile per-packet one-way delay: 150.954 ms
Loss rate: 4.44%
-- Flow 2:
Average throughput: 346.25 Mbit/s
95th percentile per-packet one-way delay: 88.835 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 219.49 Mbit/s
95th percentile per-packet one-way delay: 86.980 ms
Loss rate: 0.00%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2020-04-16 10:44:27
End at: 2020-04-16 10:44:57
Local clock offset: -0.074 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-04-16 14:08:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 853.79 Mbit/s
  95th percentile per-packet one-way delay: 107.138 ms
  Loss rate: 0.24%
  -- Flow 1:
    Average throughput: 526.68 Mbit/s
    95th percentile per-packet one-way delay: 111.335 ms
    Loss rate: 0.38%
  -- Flow 2:
    Average throughput: 360.76 Mbit/s
    95th percentile per-packet one-way delay: 92.479 ms
    Loss rate: 0.00%
  -- Flow 3:
    Average throughput: 263.52 Mbit/s
    95th percentile per-packet one-way delay: 88.706 ms
    Loss rate: 0.00%
Run 2: Report of FillP — Data Link

![Thoroughput Graph](image)

- **Flow 1 Ingress (mean 526.70 Mbit/s)**
- **Flow 1 Egress (mean 526.68 Mbit/s)**
- **Flow 2 Ingress (mean 360.77 Mbit/s)**
- **Flow 2 Egress (mean 360.76 Mbit/s)**
- **Flow 3 Ingress (mean 263.58 Mbit/s)**
- **Flow 3 Egress (mean 263.52 Mbit/s)**

![Delay Graph](image)

- **Flow 1 (95th percentile 111.33 ms)**
- **Flow 2 (95th percentile 92.48 ms)**
- **Flow 3 (95th percentile 88.71 ms)**
Run 3: Statistics of FillP

Start at: 2020-04-16 11:26:37
End at: 2020-04-16 11:27:07
Local clock offset: -0.132 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2020-04-16 14:10:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 838.15 Mbit/s
95th percentile per-packet one-way delay: 143.372 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 509.56 Mbit/s
95th percentile per-packet one-way delay: 146.442 ms
Loss rate: 2.36%
-- Flow 2:
Average throughput: 366.10 Mbit/s
95th percentile per-packet one-way delay: 91.628 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 258.18 Mbit/s
95th percentile per-packet one-way delay: 89.524 ms
Loss rate: 0.00%
Run 3: Report of FillP — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 Ingress (mean 521.89 Mbps)
- Flow 1 Egress (mean 509.56 Mbps)
- Flow 2 Ingress (mean 366.15 Mbps)
- Flow 2 Egress (mean 366.10 Mbps)
- Flow 3 Ingress (mean 258.21 Mbps)
- Flow 3 Egress (mean 258.18 Mbps)

Packet Delay (ms) vs Time (s)

- Flow 1 (95th percentile 146.44 ms)
- Flow 2 (95th percentile 91.63 ms)
- Flow 3 (95th percentile 89.52 ms)
Run 4: Statistics of FillP

Start at: 2020-04-16 12:08:42
End at: 2020-04-16 12:09:12
Local clock offset: -0.049 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2020-04-16 14:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 900.76 Mbit/s
95th percentile per-packet one-way delay: 106.413 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 589.88 Mbit/s
95th percentile per-packet one-way delay: 113.419 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 333.44 Mbit/s
95th percentile per-packet one-way delay: 90.503 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 267.35 Mbit/s
95th percentile per-packet one-way delay: 89.017 ms
Loss rate: 0.00%
Run 4: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 Ingress (mean 591.93 Mbps)
Flow 1 Egress (mean 589.88 Mbps)
Flow 2 Ingress (mean 333.45 Mbps)
Flow 2 Egress (mean 333.44 Mbps)
Flow 3 Ingress (mean 267.35 Mbps)
Flow 3 Egress (mean 267.35 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 113.42 ms)
Flow 2 (95th percentile 90.50 ms)
Flow 3 (95th percentile 89.02 ms)
Run 5: Statistics of FillP

Start at: 2020-04-16 12:50:53
End at: 2020-04-16 12:51:23
Local clock offset: -0.084 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2020-04-16 14:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.86 Mbit/s
95th percentile per-packet one-way delay: 96.251 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 103.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 384.95 Mbit/s
95th percentile per-packet one-way delay: 95.249 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 218.76 Mbit/s
95th percentile per-packet one-way delay: 86.537 ms
Loss rate: 0.00%
Run 5: Report of FillP — Data Link

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Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 59.00 Mbps)
Flow 1 egress (mean 59.00 Mbps)
Flow 2 ingress (mean 384.95 Mbps)
Flow 2 egress (mean 384.95 Mbps)
Flow 3 ingress (mean 218.76 Mbps)
Flow 3 egress (mean 218.76 Mbps)

---

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 103.40 ms)
Flow 2 (95th percentile 95.25 ms)
Flow 3 (95th percentile 86.54 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2020-04-16 09:30:25
End at: 2020-04-16 09:30:55
Local clock offset: -0.037 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2020-04-16 14:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 846.04 Mbit/s
95th percentile per-packet one-way delay: 90.534 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 526.17 Mbit/s
95th percentile per-packet one-way delay: 92.003 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 363.89 Mbit/s
95th percentile per-packet one-way delay: 89.577 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 233.08 Mbit/s
95th percentile per-packet one-way delay: 85.741 ms
Loss rate: 0.00%
Run 1: Report of FillP-Sheep — Data Link

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Graph showing throughput and per-packet one-way delay over time for flows 1 to 3.}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Graph showing throughput and per-packet one-way delay over time for flows 1 to 3.}
\end{figure}
Run 2: Statistics of FillP-Sheep

Start at: 2020-04-16 10:12:55
End at: 2020-04-16 10:13:25
Local clock offset: -0.109 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2020-04-16 14:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 318.15 Mbit/s
95th percentile per-packet one-way delay: 93.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.12 Mbit/s
95th percentile per-packet one-way delay: 108.886 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 307.87 Mbit/s
95th percentile per-packet one-way delay: 89.324 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 221.37 Mbit/s
95th percentile per-packet one-way delay: 86.881 ms
Loss rate: 0.00%
Run 2: Report of FillP-Sheep — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 3: Statistics of FillP-Sheep

Start at: 2020-04-16 10:55:23
End at: 2020-04-16 10:55:53
Local clock offset: 0.259 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2020-04-16 14:13:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 374.67 Mbit/s
95th percentile per-packet one-way delay: 91.954 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 106.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 345.54 Mbit/s
95th percentile per-packet one-way delay: 90.817 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 266.87 Mbit/s
95th percentile per-packet one-way delay: 90.588 ms
Loss rate: 0.02%
Run 3: Report of FillP-Sheep — Data Link

The graphs depict the throughput and per-packet one-way delay over time for three different flows. The throughput graph shows the rate of data transmission, with peaks indicating high data transfer activity. The per-packet delay graph illustrates the delay experienced by each packet, with higher values indicating longer delays.

Legend for Throughput:
- Flow 1 ingress (mean 56.23 Mbit/s)
- Flow 1 egress (mean 56.23 Mbit/s)
- Flow 2 ingress (mean 345.54 Mbit/s)
- Flow 2 egress (mean 345.54 Mbit/s)
- Flow 3 ingress (mean 266.91 Mbit/s)
- Flow 3 egress (mean 266.87 Mbit/s)

Legend for Delay:
- Flow 1 (95th percentile 106.09 ms)
- Flow 2 (95th percentile 90.82 ms)
- Flow 3 (95th percentile 90.59 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2020-04-16 11:37:33
End at: 2020-04-16 11:38:03
Local clock offset: ~0.074 ms
Remote clock offset: ~0.07 ms

# Below is generated by plot.py at 2020-04-16 14:17:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 824.18 Mbit/s
95th percentile per-packet one-way delay: 117.628 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 539.93 Mbit/s
95th percentile per-packet one-way delay: 122.931 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 304.63 Mbit/s
95th percentile per-packet one-way delay: 89.922 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 247.28 Mbit/s
95th percentile per-packet one-way delay: 91.849 ms
Loss rate: 0.00%
Run 4: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 540.32 Mb/s)
- Flow 1 egress (mean 539.93 Mb/s)
- Flow 2 ingress (mean 304.64 Mb/s)
- Flow 2 egress (mean 304.63 Mb/s)
- Flow 3 ingress (mean 247.29 Mb/s)
- Flow 3 egress (mean 247.28 Mb/s)

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

- Flow 1 (95th percentile 122.93 ms)
- Flow 2 (95th percentile 89.92 ms)
- Flow 3 (95th percentile 91.85 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2020-04-16 12:19:44
End at: 2020-04-16 12:20:14
Local clock offset: -0.077 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2020-04-16 14:20:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 818.93 Mbit/s
  95th percentile per-packet one-way delay: 131.655 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 528.01 Mbit/s
  95th percentile per-packet one-way delay: 138.258 ms
  Loss rate: 1.08%
-- Flow 2:
  Average throughput: 316.93 Mbit/s
  95th percentile per-packet one-way delay: 88.462 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 242.33 Mbit/s
  95th percentile per-packet one-way delay: 90.390 ms
  Loss rate: 0.01%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2020-04-16 09:28:36
End at: 2020-04-16 09:29:06
Local clock offset: -0.046 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2020-04-16 14:20:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.06 Mbit/s
95th percentile per-packet one-way delay: 92.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.93 Mbit/s
95th percentile per-packet one-way delay: 88.019 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.13 Mbit/s
95th percentile per-packet one-way delay: 94.306 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.93 Mbit/s
95th percentile per-packet one-way delay: 88.249 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2020-04-16 10:11:03
End at: 2020-04-16 10:11:33
Local clock offset: -0.11 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2020-04-16 14:20:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.17 Mbit/s
95th percentile per-packet one-way delay: 89.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.04 Mbit/s
95th percentile per-packet one-way delay: 88.946 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 185.96 Mbit/s
95th percentile per-packet one-way delay: 88.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 158.74 Mbit/s
95th percentile per-packet one-way delay: 89.776 ms
Loss rate: 0.02%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2020-04-16 10:53:29
End at: 2020-04-16 10:53:59
Local clock offset: -0.115 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2020-04-16 14:23:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.47 Mbit/s
95th percentile per-packet one-way delay: 89.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.78 Mbit/s
95th percentile per-packet one-way delay: 88.468 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.56 Mbit/s
95th percentile per-packet one-way delay: 90.314 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.45 Mbit/s
95th percentile per-packet one-way delay: 96.590 ms
Loss rate: 0.00%
Run 3: Report of Indigo — Data Link

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

Legend:
- Flow 1 ingress (mean 205.77 Mbit/s)
- Flow 1 egress (mean 205.78 Mbit/s)
- Flow 2 ingress (mean 192.56 Mbit/s)
- Flow 2 egress (mean 192.56 Mbit/s)
- Flow 3 ingress (mean 153.45 Mbit/s)
- Flow 3 egress (mean 153.45 Mbit/s)

Packet delay statistics:
- Flow 1 (95th percentile 88.47 ms)
- Flow 2 (95th percentile 90.31 ms)
- Flow 3 (95th percentile 96.59 ms)
Run 4: Statistics of Indigo

Start at: 2020-04-16 11:35:40
End at: 2020-04-16 11:36:10
Local clock offset: -0.037 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2020-04-16 14:24:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.93 Mbit/s
95th percentile per-packet one-way delay: 87.987 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.65 Mbit/s
95th percentile per-packet one-way delay: 88.160 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 172.77 Mbit/s
95th percentile per-packet one-way delay: 88.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.14 Mbit/s
95th percentile per-packet one-way delay: 86.610 ms
Loss rate: 0.00%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2020-04-16 12:17:52
End at: 2020-04-16 12:18:22
Local clock offset: -0.067 ms
Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2020-04-16 14:26:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.77 Mbit/s
95th percentile per-packet one-way delay: 91.716 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 204.72 Mbit/s
95th percentile per-packet one-way delay: 91.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.89 Mbit/s
95th percentile per-packet one-way delay: 92.454 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.83 Mbit/s
95th percentile per-packet one-way delay: 91.103 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 204.72 Mbit/s)
- Flow 1 egress (mean 204.72 Mbit/s)
- Flow 2 ingress (mean 169.89 Mbit/s)
- Flow 2 egress (mean 169.89 Mbit/s)
- Flow 3 ingress (mean 160.83 Mbit/s)
- Flow 3 egress (mean 160.83 Mbit/s)
Run 1: Statistics of Indigo-MusesC3

Start at: 2020-04-16 10:05:41
End at: 2020-04-16 10:06:11
Local clock offset: -0.463 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2020-04-16 14:28:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 798.63 Mbit/s
95th percentile per-packet one-way delay: 96.366 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 488.41 Mbit/s
95th percentile per-packet one-way delay: 97.738 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 386.09 Mbit/s
95th percentile per-packet one-way delay: 94.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 278.31 Mbit/s
95th percentile per-packet one-way delay: 95.317 ms
Loss rate: 0.00%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

Start at: 2020-04-16 10:48:06
End at: 2020-04-16 10:48:36
Local clock offset: -0.135 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2020-04-16 14:28:34
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 802.80 Mbit/s
  95th percentile per-packet one-way delay: 114.918 ms
  Loss rate: 0.41%
  -- Flow 1:
  Average throughput: 472.08 Mbit/s
  95th percentile per-packet one-way delay: 119.129 ms
  Loss rate: 0.16%
  -- Flow 2:
  Average throughput: 404.42 Mbit/s
  95th percentile per-packet one-way delay: 99.039 ms
  Loss rate: 0.49%
  -- Flow 3:
  Average throughput: 281.77 Mbit/s
  95th percentile per-packet one-way delay: 93.044 ms
  Loss rate: 1.71%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2020-04-16 11:30:20
End at: 2020-04-16 11:30:50
Local clock offset: -0.09 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2020-04-16 14:31:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.45 Mbit/s
95th percentile per-packet one-way delay: 111.696 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 459.76 Mbit/s
95th percentile per-packet one-way delay: 113.965 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 373.94 Mbit/s
95th percentile per-packet one-way delay: 109.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 284.94 Mbit/s
95th percentile per-packet one-way delay: 90.978 ms
Loss rate: 0.00%
Run 3: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 459.76 Mbit/s)
- Flow 1 egress (mean 459.76 Mbit/s)
- Flow 2 ingress (mean 373.94 Mbit/s)
- Flow 2 egress (mean 373.94 Mbit/s)
- Flow 3 ingress (mean 285.03 Mbit/s)
- Flow 3 egress (mean 284.94 Mbit/s)

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

- Flow 1 (95th percentile 113.97 ms)
- Flow 2 (95th percentile 109.23 ms)
- Flow 3 (95th percentile 90.98 ms)
Run 4: Statistics of Indigo-MusesC3

Start at: 2020-04-16 12:12:29
End at: 2020-04-16 12:12:59
Local clock offset: -0.088 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2020-04-16 14:33:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 769.24 Mbit/s
95th percentile per-packet one-way delay: 108.143 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 465.47 Mbit/s
95th percentile per-packet one-way delay: 112.833 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 381.04 Mbit/s
95th percentile per-packet one-way delay: 93.247 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 264.49 Mbit/s
95th percentile per-packet one-way delay: 91.375 ms
Loss rate: 0.00%
Run 4: Report of Indigo-MusesC3 — Data Link

![Graphs showing throughput and packet delay over time for different flows.
Flow 1 ingress (mean 465.45 Mbit/s), Flow 1 egress (mean 465.47 Mbit/s), Flow 2 ingress (mean 381.04 Mbit/s), Flow 2 egress (mean 381.04 Mbit/s), Flow 3 ingress (mean 264.49 Mbit/s), Flow 3 egress (mean 264.49 Mbit/s).]
Run 5: Statistics of Indigo-MusesC3

Start at: 2020-04-16 12:54:12
End at: 2020-04-16 12:54:42
Local clock offset: -0.464 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2020-04-16 14:34:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 794.03 Mbit/s
  95th percentile per-packet one-way delay: 111.999 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 474.90 Mbit/s
  95th percentile per-packet one-way delay: 114.924 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 396.54 Mbit/s
  95th percentile per-packet one-way delay: 107.818 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 275.99 Mbit/s
  95th percentile per-packet one-way delay: 100.472 ms
  Loss rate: 0.00%
Run 5: Report of Indigo-MusesC3 — Data Link
Run 1: Statistics of Indigo-MusesC5

Start at: 2020-04-16 09:37:14
End at: 2020-04-16 09:37:44
Local clock offset: -0.043 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2020-04-16 14:37:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 764.42 Mbit/s
95th percentile per-packet one-way delay: 105.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 457.84 Mbit/s
95th percentile per-packet one-way delay: 106.869 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 362.60 Mbit/s
95th percentile per-packet one-way delay: 97.734 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 286.93 Mbit/s
95th percentile per-packet one-way delay: 120.229 ms
Loss rate: 0.00%
Run 1: Report of Indigo-MusesC5 — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 457.83 Mbit/s)
Flow 1 egress (mean 457.84 Mbit/s)
Flow 2 ingress (mean 362.64 Mbit/s)
Flow 2 egress (mean 362.66 Mbit/s)
Flow 3 ingress (mean 286.93 Mbit/s)
Flow 3 egress (mean 286.93 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 106.87 ms)
Flow 2 (95th percentile 97.73 ms)
Flow 3 (95th percentile 120.23 ms)
Run 2: Statistics of Indigo-MusesC5

Start at: 2020-04-16 10:19:23
End at: 2020-04-16 10:19:53
Local clock offset: -0.122 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2020-04-16 14:38:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 763.66 Mbit/s
95th percentile per-packet one-way delay: 125.795 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 506.40 Mbit/s
95th percentile per-packet one-way delay: 132.165 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 351.55 Mbit/s
95th percentile per-packet one-way delay: 116.615 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.76 Mbit/s
95th percentile per-packet one-way delay: 85.509 ms
Loss rate: 0.00%
Run 2: Report of Indigo-MusesC5 — Data Link

---

**Throughput (Mbps):**

- **Flow 1 ingress (mean 506.47 Mbps)**
- **Flow 1 egress (mean 506.40 Mbps)**
- **Flow 2 ingress (mean 351.55 Mbps)**
- **Flow 2 egress (mean 351.55 Mbps)**
- **Flow 3 ingress (mean 124.75 Mbps)**
- **Flow 3 egress (mean 124.76 Mbps)**

---

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

- **Flow 1 (95th percentile 132.16 ms)**
- **Flow 2 (95th percentile 116.61 ms)**
- **Flow 3 (95th percentile 85.51 ms)**

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Run 3: Statistics of Indigo-MusesC5

Start at: 2020-04-16 11:01:51
End at: 2020-04-16 11:02:21
Local clock offset: -0.09 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2020-04-16 14:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 759.23 Mbit/s
95th percentile per-packet one-way delay: 127.432 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 428.89 Mbit/s
95th percentile per-packet one-way delay: 128.013 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 376.21 Mbit/s
95th percentile per-packet one-way delay: 132.519 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 346.82 Mbit/s
95th percentile per-packet one-way delay: 102.555 ms
Loss rate: 0.06%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2020-04-16 11:44:21
End at: 2020-04-16 11:44:51
Local clock offset: -0.084 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2020-04-16 14:43:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 772.54 Mbit/s
  95th percentile per-packet one-way delay: 134.402 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 445.58 Mbit/s
  95th percentile per-packet one-way delay: 139.449 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 433.91 Mbit/s
  95th percentile per-packet one-way delay: 128.062 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 203.16 Mbit/s
  95th percentile per-packet one-way delay: 90.099 ms
  Loss rate: 0.00%
Run 4: Report of Indigo-MusesC5 — Data Link

[Graph showing throughput over time for different flows]

[Graph showing per-packet one-way delay over time for different flows]
Run 5: Statistics of Indigo-MusesC5

Start at: 2020-04-16 12:26:32
End at: 2020-04-16 12:27:02
Local clock offset: -0.117 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2020-04-16 14:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 781.69 Mbit/s
95th percentile per-packet one-way delay: 147.778 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 459.36 Mbit/s
95th percentile per-packet one-way delay: 169.120 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 373.72 Mbit/s
95th percentile per-packet one-way delay: 117.467 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 334.84 Mbit/s
95th percentile per-packet one-way delay: 101.845 ms
Loss rate: 0.00%
Run 5: Report of Indigo-MusesC5 — Data Link

![Graph showing throughput and per-packet transmission delay over time for Flow 1, Flow 2, and Flow 3.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 459.83 Mbps)
  - Flow 1 egress (mean 459.36 Mbps)
  - Flow 2 ingress (mean 373.77 Mbps)
  - Flow 2 egress (mean 373.72 Mbps)
  - Flow 3 ingress (mean 334.84 Mbps)
  - Flow 3 egress (mean 334.64 Mbps)

- **Per-packet transmission delay (ms):**
  - Flow 1 (95th percentile 169.12 ms)
  - Flow 2 (95th percentile 117.47 ms)
  - Flow 3 (95th percentile 101.84 ms)
Run 1: Statistics of Indigo-MusesD

Start at: 2020-04-16 10:00:15
End at: 2020-04-16 10:00:45
Local clock offset: -0.116 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2020-04-16 14:44:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 701.63 Mbit/s
  95th percentile per-packet one-way delay: 114.969 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 445.11 Mbit/s
  95th percentile per-packet one-way delay: 113.311 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 285.97 Mbit/s
  95th percentile per-packet one-way delay: 145.480 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 288.25 Mbit/s
  95th percentile per-packet one-way delay: 89.298 ms
  Loss rate: 0.00%
Run 1: Report of Indigo-MusesD — Data Link

![Graph 1](Image 1)

![Graph 2](Image 2)

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Run 2: Statistics of Indigo-MusesD

Start at: 2020-04-16 10:42:36
End at: 2020-04-16 10:43:06
Local clock offset: -0.076 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2020-04-16 14:46:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 732.17 Mbit/s
95th percentile per-packet one-way delay: 133.427 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 398.83 Mbit/s
95th percentile per-packet one-way delay: 142.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 390.56 Mbit/s
95th percentile per-packet one-way delay: 112.682 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 296.63 Mbit/s
95th percentile per-packet one-way delay: 93.401 ms
Loss rate: 0.00%
Run 2: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 398.81 Mbit/s)
- Flow 1 egress (mean 398.83 Mbit/s)
- Flow 2 ingress (mean 390.47 Mbit/s)
- Flow 2 egress (mean 390.56 Mbit/s)
- Flow 3 ingress (mean 296.83 Mbit/s)
- Flow 3 egress (mean 296.63 Mbit/s)

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

- Flow 1 (95th percentile 142.72 ms)
- Flow 2 (95th percentile 112.68 ms)
- Flow 3 (95th percentile 93.40 ms)
Run 3: Statistics of Indigo-MusesD

Start at: 2020-04-16 11:24:45
End at: 2020-04-16 11:25:15
Local clock offset: -0.407 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2020-04-16 14:48:52
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 728.35 Mbit/s
    95th percentile per-packet one-way delay: 115.731 ms
    Loss rate: 0.00%
-- Flow 1:
    Average throughput: 452.56 Mbit/s
    95th percentile per-packet one-way delay: 116.177 ms
    Loss rate: 0.00%
-- Flow 2:
    Average throughput: 325.05 Mbit/s
    95th percentile per-packet one-way delay: 124.769 ms
    Loss rate: 0.00%
-- Flow 3:
    Average throughput: 286.75 Mbit/s
    95th percentile per-packet one-way delay: 91.592 ms
    Loss rate: 0.02%
Run 3: Report of Indigo-MusesD — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 452.55 Mb/s)
Flow 1 egress (mean 452.56 Mb/s)
Flow 2 ingress (mean 325.06 Mb/s)
Flow 2 egress (mean 325.05 Mb/s)
Flow 3 ingress (mean 286.76 Mb/s)
Flow 3 egress (mean 286.75 Mb/s)

Round-trip one-way delay (ms)

Flow 1 (95th percentile 116.18 ms)
Flow 2 (95th percentile 124.77 ms)
Flow 3 (95th percentile 91.59 ms)
Run 4: Statistics of Indigo-MusesD

Start at: 2020-04-16 12:06:53
End at: 2020-04-16 12:07:23
Local clock offset: 0.283 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2020-04-16 14:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 674.59 Mbit/s
95th percentile per-packet one-way delay: 119.040 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 415.60 Mbit/s
95th percentile per-packet one-way delay: 124.038 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 301.96 Mbit/s
95th percentile per-packet one-way delay: 92.111 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 299.42 Mbit/s
95th percentile per-packet one-way delay: 90.991 ms
Loss rate: 0.09%
Run 4: Report of Indigo-MusesD — Data Link

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

- **Throughput (Mbps)**
  - Flow 1: Mean 415.60 Mbps
  - Flow 2: Mean 301.97 Mbps
  - Flow 3: Mean 299.37 Mbps

- **Per-packet one-way delay (ms)**
  - Flow 1: 95th percentile 124.04 ms
  - Flow 2: 95th percentile 92.11 ms
  - Flow 3: 95th percentile 90.99 ms
Run 5: Statistics of Indigo-MusesD

Start at: 2020-04-16 12:49:01
End at: 2020-04-16 12:49:31
Local clock offset: -0.073 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-04-16 14:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 734.07 Mbit/s
95th percentile per-packet one-way delay: 127.065 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 423.91 Mbit/s
95th percentile per-packet one-way delay: 133.582 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 386.81 Mbit/s
95th percentile per-packet one-way delay: 106.847 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 264.73 Mbit/s
95th percentile per-packet one-way delay: 92.056 ms
Loss rate: 0.00%
Run 5: Report of Indigo-MusesD — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 423.90 Mbit/s)
- Flow 2 ingress (mean 386.87 Mbit/s)
- Flow 3 ingress (mean 264.59 Mbit/s)
- Flow 1 egress (mean 423.91 Mbit/s)
- Flow 2 egress (mean 386.81 Mbit/s)
- Flow 3 egress (mean 264.73 Mbit/s)

![Delay Graph](image)

- Flow 1 (95th percentile 133.58 ms)
- Flow 2 (95th percentile 106.85 ms)
- Flow 3 (95th percentile 92.06 ms)
Run 1: Statistics of Indigo-MusesT

Start at: 2020-04-16 09:50:41  
End at: 2020-04-16 09:51:11  
Local clock offset: -0.468 ms  
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2020-04-16 14:56:44  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 852.69 Mbit/s  
95th percentile per-packet one-way delay: 142.599 ms  
Loss rate: 0.10%
-- Flow 1:
Average throughput: 506.02 Mbit/s  
95th percentile per-packet one-way delay: 150.645 ms  
Loss rate: 0.16%
-- Flow 2:
Average throughput: 427.32 Mbit/s  
95th percentile per-packet one-way delay: 109.884 ms  
Loss rate: 0.01%
-- Flow 3:
Average throughput: 298.38 Mbit/s  
95th percentile per-packet one-way delay: 88.945 ms  
Loss rate: 0.00%
Run 1: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 506.82 Mbit/s)
- Flow 1 egress (mean 506.02 Mbit/s)
- Flow 2 ingress (mean 427.23 Mbit/s)
- Flow 2 egress (mean 427.32 Mbit/s)
- Flow 3 ingress (mean 296.38 Mbit/s)
- Flow 3 egress (mean 296.38 Mbit/s)

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

- Flow 1 (95th percentile 150.65 ms)
- Flow 2 (95th percentile 109.88 ms)
- Flow 3 (95th percentile 88.94 ms)
Run 2: Statistics of Indigo-MusesT

Start at: 2020-04-16 10:32:58
End at: 2020-04-16 10:33:28
Local clock offset: -0.093 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2020-04-16 14:59:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 859.80 Mbit/s
95th percentile per-packet one-way delay: 107.301 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 521.09 Mbit/s
95th percentile per-packet one-way delay: 109.450 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 415.19 Mbit/s
95th percentile per-packet one-way delay: 106.554 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 288.93 Mbit/s
95th percentile per-packet one-way delay: 100.111 ms
Loss rate: 0.03%
Run 2: Report of Indigo-MusesT — Data Link

![Graph](image-url)

- Flow 1 ingress (mean 521.04 Mbit/s)
- Flow 1 egress (mean 521.09 Mbit/s)
- Flow 2 ingress (mean 415.27 Mbit/s)
- Flow 2 egress (mean 415.19 Mbit/s)
- Flow 3 ingress (mean 288.98 Mbit/s)
- Flow 3 egress (mean 288.93 Mbit/s)

![Graph](image-url)

- Flow 1 (95th percentile 109.45 ms)
- Flow 2 (95th percentile 106.55 ms)
- Flow 3 (95th percentile 100.11 ms)
Run 3: Statistics of Indigo-MusesT

Start at: 2020-04-16 11:15:25
End at: 2020-04-16 11:15:55
Local clock offset: -0.087 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2020-04-16 14:59:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 808.31 Mbit/s
95th percentile per-packet one-way delay: 123.062 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 492.66 Mbit/s
95th percentile per-packet one-way delay: 125.334 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 389.19 Mbit/s
95th percentile per-packet one-way delay: 120.870 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 255.96 Mbit/s
95th percentile per-packet one-way delay: 97.842 ms
Loss rate: 0.03%
Run 3: Report of Indigo-MusesT — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 492.93 Mbps)
  - Flow 1 egress (mean 492.66 Mbps)
  - Flow 2 ingress (mean 388.67 Mbps)
  - Flow 2 egress (mean 389.19 Mbps)
  - Flow 3 ingress (mean 256.01 Mbps)
  - Flow 3 egress (mean 255.96 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 125.33 ms)
  - Flow 2 (95th percentile 120.87 ms)
  - Flow 3 (95th percentile 97.84 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2020-04-16 11:57:44
End at: 2020-04-16 11:58:14
Local clock offset: -0.055 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2020-04-16 15:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 826.60 Mbit/s
95th percentile per-packet one-way delay: 143.849 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 492.57 Mbit/s
95th percentile per-packet one-way delay: 150.501 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 397.93 Mbit/s
95th percentile per-packet one-way delay: 141.726 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 308.49 Mbit/s
95th percentile per-packet one-way delay: 104.944 ms
Loss rate: 0.05%
Run 4: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 492.56 Mbit/s)
- Flow 1 egress (mean 492.57 Mbit/s)
- Flow 2 ingress (mean 397.81 Mbit/s)
- Flow 2 egress (mean 397.93 Mbit/s)
- Flow 3 ingress (mean 308.65 Mbit/s)
- Flow 3 egress (mean 308.49 Mbit/s)
Run 5: Statistics of Indigo-MusesT

Start at: 2020-04-16 12:39:49
End at: 2020-04-16 12:40:19
Local clock offset: -0.093 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 815.78 Mbit/s
  95th percentile per-packet one-way delay: 139.808 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 479.44 Mbit/s
  95th percentile per-packet one-way delay: 147.437 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 412.86 Mbit/s
  95th percentile per-packet one-way delay: 107.146 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 284.80 Mbit/s
  95th percentile per-packet one-way delay: 95.972 ms
  Loss rate: 0.00%
Run 5: Report of Indigo-MusesT — Data Link

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

- **Flow 1** (ingress mean 479.62 Mbit/s, egress mean 479.44 Mbit/s)
- **Flow 2** (ingress mean 412.86 Mbit/s, egress mean 412.86 Mbit/s)
- **Flow 3** (ingress mean 284.80 Mbit/s, egress mean 284.90 Mbit/s)

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

- Flow 1 (95th percentile 147.44 ms)
- Flow 2 (95th percentile 107.15 ms)
- Flow 3 (95th percentile 95.97 ms)
Run 1: Statistics of LEDBAT

Start at: 2020-04-16 09:27:18
End at: 2020-04-16 09:27:48
Local clock offset: -0.086 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 92.005 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.18 Mbit/s
95th percentile per-packet one-way delay: 92.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.65 Mbit/s
95th percentile per-packet one-way delay: 86.642 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.35 Mbit/s
95th percentile per-packet one-way delay: 85.044 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 2: Statistics of LEDBAT

Start at: 2020-04-16 10:09:46
End at: 2020-04-16 10:10:16
Local clock offset: -0.115 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.11 Mbit/s
95th percentile per-packet one-way delay: 85.972 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 85.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 86.814 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 85.874 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 12.99 Mbps/s)
  - Flow 1 egress (mean 12.99 Mbps/s)
  - Flow 2 ingress (mean 8.66 Mbps/s)
  - Flow 2 egress (mean 8.66 Mbps/s)
  - Flow 3 ingress (mean 4.15 Mbps/s)
  - Flow 3 egress (mean 4.15 Mbps/s)

- **Per packet one way delay (ms)**
  - Flow 1 (95th percentile 85.59 ms)
  - Flow 2 (95th percentile 86.81 ms)
  - Flow 3 (95th percentile 85.87 ms)
Run 3: Statistics of LEDBAT

Start at: 2020-04-16 10:52:12
End at: 2020-04-16 10:52:42
Local clock offset: -0.061 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 20.04 Mbit/s
  95th percentile per-packet one-way delay: 86.316 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 12.88 Mbit/s
  95th percentile per-packet one-way delay: 86.341 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 8.66 Mbit/s
  95th percentile per-packet one-way delay: 86.336 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 4.35 Mbit/s
  95th percentile per-packet one-way delay: 84.712 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 12.88 Mbit/s)
- Flow 1 egress (mean 12.88 Mbit/s)
- Flow 2 ingress (mean 8.66 Mbit/s)
- Flow 2 egress (mean 8.66 Mbit/s)
- Flow 3 ingress (mean 4.35 Mbit/s)
- Flow 3 egress (mean 4.35 Mbit/s)
Run 4: Statistics of LEDBAT

Start at: 2020-04-16 11:34:23
End at: 2020-04-16 11:34:53
Local clock offset: -0.086 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: 85.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.19 Mbit/s
95th percentile per-packet one-way delay: 85.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.66 Mbit/s
95th percentile per-packet one-way delay: 84.779 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 84.760 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](image1)

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

Legend:
- Flow 1 ingress (mean 13.19 Mbit/s)
- Flow 1 egress (mean 13.19 Mbit/s)
- Flow 2 ingress (mean 8.66 Mbit/s)
- Flow 2 egress (mean 8.66 Mbit/s)
- Flow 3 ingress (mean 4.18 Mbit/s)
- Flow 3 egress (mean 4.18 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 85.38 ms)
- Flow 2 (95th percentile 84.78 ms)
- Flow 3 (95th percentile 84.76 ms)
Run 5: Statistics of LEDBAT

Start at: 2020-04-16 12:16:35
End at: 2020-04-16 12:17:05
Local clock offset: -0.098 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2020-04-16 15:03:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.38 Mbit/s
95th percentile per-packet one-way delay: 85.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.18 Mbit/s
95th percentile per-packet one-way delay: 85.524 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.78 Mbit/s
95th percentile per-packet one-way delay: 85.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 85.929 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 09:32:17
End at: 2020-04-16 09:32:47
Local clock offset: -0.048 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2020-04-16 15:06:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 740.65 Mbit/s
95th percentile per-packet one-way delay: 101.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 448.56 Mbit/s
95th percentile per-packet one-way delay: 105.531 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 329.25 Mbit/s
95th percentile per-packet one-way delay: 87.988 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 229.39 Mbit/s
95th percentile per-packet one-way delay: 88.809 ms
Loss rate: 0.00%
Run 1: Report of Muses_DecisionTree — Data Link
Run 2: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 10:14:25
End at: 2020-04-16 10:14:55
Local clock offset: -0.123 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2020-04-16 15:06:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 720.10 Mbit/s
  95th percentile per-packet one-way delay: 104.964 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 438.13 Mbit/s
  95th percentile per-packet one-way delay: 108.291 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 352.71 Mbit/s
  95th percentile per-packet one-way delay: 102.820 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 152.13 Mbit/s
  95th percentile per-packet one-way delay: 86.195 ms
  Loss rate: 0.00%
Run 2: Report of Muses

---

DecisionTree — Data Link

---

**Throughput (Mbps)**

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Flow 1 ingress (mean 438.20 Mbps)</th>
<th>Flow 1 egress (mean 438.13 Mbps)</th>
<th>Flow 2 ingress (mean 352.71 Mbps)</th>
<th>Flow 2 egress (mean 352.71 Mbps)</th>
<th>Flow 3 ingress (mean 152.13 Mbps)</th>
<th>Flow 3 egress (mean 152.13 Mbps)</th>
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**Per-packet one-way delay (ms)**

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Flow 1 (95th percentile 108.29 ms)</th>
<th>Flow 2 (95th percentile 102.82 ms)</th>
<th>Flow 3 (95th percentile 86.19 ms)</th>
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</table>

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Run 3: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 10:56:55
End at: 2020-04-16 10:57:25
Local clock offset: 0.295 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2020-04-16 15:06:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 671.02 Mbit/s
95th percentile per-packet one-way delay: 88.796 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 392.33 Mbit/s
95th percentile per-packet one-way delay: 89.756 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 318.64 Mbit/s
95th percentile per-packet one-way delay: 87.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 214.04 Mbit/s
95th percentile per-packet one-way delay: 86.919 ms
Loss rate: 0.00%
Run 3: Report of Muses - DecisionTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 11:39:24
End at: 2020-04-16 11:39:54
Local clock offset: -0.092 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2020-04-16 15:11:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 691.66 Mbit/s
95th percentile per-packet one-way delay: 108.365 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 396.52 Mbit/s
95th percentile per-packet one-way delay: 113.155 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 337.29 Mbit/s
95th percentile per-packet one-way delay: 106.349 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 227.41 Mbit/s
95th percentile per-packet one-way delay: 86.688 ms
Loss rate: 0.00%
Run 4: Report of Muses

DecisionTree — Data Link

![Graph 1: Throughput over time for different flows](image1.png)

- Flow 1 ingress (mean 396.79 Mbit/s)
- Flow 2 ingress (mean 337.29 Mbit/s)
- Flow 3 ingress (mean 227.40 Mbit/s)
- Flow 1 egress (mean 396.52 Mbit/s)
- Flow 2 egress (mean 337.29 Mbit/s)
- Flow 3 egress (mean 227.41 Mbit/s)

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

- Flow 1 (95th percentile 113.16 ms)
- Flow 2 (95th percentile 106.35 ms)
- Flow 3 (95th percentile 86.69 ms)
Run 5: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 12:21:35
End at: 2020-04-16 12:22:05
Local clock offset: -0.082 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2020-04-16 15:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 683.11 Mbit/s
95th percentile per-packet one-way delay: 113.607 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 387.30 Mbit/s
95th percentile per-packet one-way delay: 122.574 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 332.83 Mbit/s
95th percentile per-packet one-way delay: 100.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 242.49 Mbit/s
95th percentile per-packet one-way delay: 88.649 ms
Loss rate: 0.00%
Run 5: Report of Muses_DecisionTree — Data Link

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

- Flow 1 ingress (mean 387.93 Mbps)
- Flow 1 egress (mean 387.30 Mbps)
- Flow 2 ingress (mean 332.83 Mbps)
- Flow 2 egress (mean 332.83 Mbps)
- Flow 3 ingress (mean 242.49 Mbps)
- Flow 3 egress (mean 242.49 Mbps)

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

- Flow 1 (95th percentile 122.57 ms)
- Flow 2 (95th percentile 100.94 ms)
- Flow 3 (95th percentile 88.65 ms)
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 09:35:30
End at: 2020-04-16 09:36:00
Local clock offset: -0.061 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2020-04-16 15:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 537.41 Mbit/s
95th percentile per-packet one-way delay: 169.363 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 287.59 Mbit/s
95th percentile per-packet one-way delay: 175.428 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 254.48 Mbit/s
95th percentile per-packet one-way delay: 139.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 252.85 Mbit/s
95th percentile per-packet one-way delay: 92.203 ms
Loss rate: 0.00%
Run 1: Report of Muses_DecisionTreeH0 — Data Link
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 10:17:39
End at: 2020-04-16 10:18:09
Local clock offset: 0.237 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2020-04-16 15:13:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.91 Mbit/s
95th percentile per-packet one-way delay: 164.534 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 282.61 Mbit/s
95th percentile per-packet one-way delay: 167.398 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 270.29 Mbit/s
95th percentile per-packet one-way delay: 154.098 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 265.78 Mbit/s
95th percentile per-packet one-way delay: 97.073 ms
Loss rate: 0.00%
Run 2: Report of Muses DecisionTreeH0 — Data Link

**Throughput (Mbps):**

- Flow 1 ingress (mean 288.18 Mbps)
- Flow 1 egress (mean 282.61 Mbps)
- Flow 2 ingress (mean 271.96 Mbps)
- Flow 2 egress (mean 270.29 Mbps)
- Flow 3 ingress (mean 265.78 Mbps)
- Flow 3 egress (mean 265.78 Mbps)

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

- Flow 1 (95th percentile 167.40 ms)
- Flow 2 (95th percentile 154.10 ms)
- Flow 3 (95th percentile 97.07 ms)
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 11:00:05
End at: 2020-04-16 11:00:35
Local clock offset: -0.436 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2020-04-16 15:14:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 583.29 Mbit/s
  95th percentile per-packet one-way delay: 151.742 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 320.80 Mbit/s
  95th percentile per-packet one-way delay: 145.671 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 299.91 Mbit/s
  95th percentile per-packet one-way delay: 154.423 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 203.79 Mbit/s
  95th percentile per-packet one-way delay: 176.286 ms
  Loss rate: 0.25%
Run 3: Report of Muses \_DecisionTreeH0 \_— Data Link
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 11:42:35
End at: 2020-04-16 11:43:05
Local clock offset: -0.095 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2020-04-16 15:18:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 570.64 Mbit/s
95th percentile per-packet one-way delay: 165.520 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 332.06 Mbit/s
95th percentile per-packet one-way delay: 175.401 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 251.81 Mbit/s
95th percentile per-packet one-way delay: 162.879 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 223.92 Mbit/s
95th percentile per-packet one-way delay: 100.898 ms
Loss rate: 0.12%
Run 4: Report of Muses DecisionTreeH0 — Data Link
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 12:24:48  
End at: 2020-04-16 12:25:18  
Local clock offset: -0.072 ms  
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2020-04-16 15:18:07  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 544.04 Mbit/s  
95th percentile per-packet one-way delay: 171.423 ms  
Loss rate: 1.05%  
-- Flow 1:  
Average throughput: 311.98 Mbit/s  
95th percentile per-packet one-way delay: 172.420 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 234.32 Mbit/s  
95th percentile per-packet one-way delay: 178.152 ms  
Loss rate: 1.69%  
-- Flow 3:  
Average throughput: 245.93 Mbit/s  
95th percentile per-packet one-way delay: 102.057 ms  
Loss rate: 0.00%
Run 5: Report of Muses.DecisionTreeH0 — Data Link

The diagram shows the throughput and per-packet delay for three different flows over a 30-second period. The throughput is measured in megabytes per second (Mbps), and the per-packet delay is measured in milliseconds (ms).

- **Throughput Diagram:**
  - Flow 1 ingress (mean 315.06 Mbps)
  - Flow 1 egress (mean 311.98 Mbps)
  - Flow 2 ingress (mean 238.47 Mbps)
  - Flow 2 egress (mean 234.32 Mbps)
  - Flow 3 ingress (mean 247.18 Mbps)
  - Flow 3 egress (mean 245.93 Mbps)

- **Per-Packet Delay Diagram:**
  - Flow 1 (95th percentile 172.42 ms)
  - Flow 2 (95th percentile 178.15 ms)
  - Flow 3 (95th percentile 102.06 ms)
Run 1: Statistics of Muses\_DecisionTreeRO

Start at: 2020-04-16 09:56:16
End at: 2020-04-16 09:56:46
Local clock offset: -0.124 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2020-04-16 15:22:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 745.25 Mbit/s
95th percentile per-packet one-way delay: 106.686 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 455.29 Mbit/s
95th percentile per-packet one-way delay: 118.108 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 332.67 Mbit/s
95th percentile per-packet one-way delay: 87.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 221.06 Mbit/s
95th percentile per-packet one-way delay: 88.307 ms
Loss rate: 0.00%
Run 1: Report of Muses_DecisionTreeR0 — Data Link
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2020-04-16 10:38:34
End at: 2020-04-16 10:39:04
Local clock offset: -0.127 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2020-04-16 15:25:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 771.16 Mbit/s
95th percentile per-packet one-way delay: 108.956 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 465.42 Mbit/s
95th percentile per-packet one-way delay: 114.656 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 354.27 Mbit/s
95th percentile per-packet one-way delay: 106.861 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 189.03 Mbit/s
95th percentile per-packet one-way delay: 90.738 ms
Loss rate: 0.13%
Run 2: Report of Muses DecisionTreeR0 — Data Link

![Graph showing throughput and delay over time for different flow ingress and egress rates.]

- Flow 1 ingress (mean 466.66 Mbit/s)
- Flow 1 egress (mean 465.42 Mbit/s)
- Flow 2 ingress (mean 354.29 Mbit/s)
- Flow 2 egress (mean 354.27 Mbit/s)
- Flow 3 ingress (mean 189.20 Mbit/s)
- Flow 3 egress (mean 189.03 Mbit/s)

![Graph showing per-packet one-way delay over time for different flow 95th percentiles.]

- Flow 1 (95th percentile 114.66 ms)
- Flow 2 (95th percentile 106.86 ms)
- Flow 3 (95th percentile 90.74 ms)
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2020-04-16 11:20:54
End at: 2020-04-16 11:21:24
Local clock offset: -0.076 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2020-04-16 15:25:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.46 Mbit/s
95th percentile per-packet one-way delay: 109.782 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 423.41 Mbit/s
95th percentile per-packet one-way delay: 113.605 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 309.25 Mbit/s
95th percentile per-packet one-way delay: 92.725 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 213.51 Mbit/s
95th percentile per-packet one-way delay: 89.497 ms
Loss rate: 0.00%
Run 4: Statistics of Muses\_DecisionTreeRO

Start at: 2020-04-16 12:03:00
End at: 2020-04-16 12:03:30
Local clock offset: -0.088 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2020-04-16 15:25:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 711.30 Mbit/s
  95th percentile per-packet one-way delay: 116.654 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 421.13 Mbit/s
  95th percentile per-packet one-way delay: 133.384 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 331.95 Mbit/s
  95th percentile per-packet one-way delay: 90.473 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 222.57 Mbit/s
  95th percentile per-packet one-way delay: 92.847 ms
  Loss rate: 0.01%
Run 4: Report of Muses_DecisionTreeR0 — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 422.38 Mbps)
  - Flow 1 egress (mean 421.13 Mbps)
  - Flow 2 ingress (mean 331.95 Mbps)
  - Flow 2 egress (mean 331.95 Mbps)
  - Flow 3 ingress (mean 222.58 Mbps)
  - Flow 3 egress (mean 222.57 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 133.38 ms)
  - Flow 2 (95th percentile 90.47 ms)
  - Flow 3 (95th percentile 92.85 ms)
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2020-04-16 12:45:14
End at: 2020-04-16 12:45:44
Local clock offset: -0.076 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2020-04-16 15:25:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.56 Mbit/s
95th percentile per-packet one-way delay: 110.094 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 309.23 Mbit/s
95th percentile per-packet one-way delay: 130.972 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 315.07 Mbit/s
95th percentile per-packet one-way delay: 107.323 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 211.32 Mbit/s
95th percentile per-packet one-way delay: 86.937 ms
Loss rate: 0.00%
Run 5: Report of Muses_DecisionTreeR0 — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2020-04-16 09:44:25
End at: 2020-04-16 09:44:55
Local clock offset: -0.084 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2020-04-16 15:39:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 659.47 Mbit/s
95th percentile per-packet one-way delay: 214.868 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 404.39 Mbit/s
95th percentile per-packet one-way delay: 213.823 ms
Loss rate: 1.85%
-- Flow 2:
Average throughput: 265.02 Mbit/s
95th percentile per-packet one-way delay: 225.341 ms
Loss rate: 4.73%
-- Flow 3:
Average throughput: 239.22 Mbit/s
95th percentile per-packet one-way delay: 123.336 ms
Loss rate: 0.00%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2020-04-16 10:26:34
End at: 2020-04-16 10:27:04
Local clock offset: -0.059 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2020-04-16 15:40:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 599.54 Mbit/s
95th percentile per-packet one-way delay: 162.764 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 332.43 Mbit/s
95th percentile per-packet one-way delay: 183.111 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 283.44 Mbit/s
95th percentile per-packet one-way delay: 140.827 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 239.31 Mbit/s
95th percentile per-packet one-way delay: 154.329 ms
Loss rate: 0.00%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1**
  - Ingress: Mean 336.91 Mbit/s
  - Egress: Mean 332.43 Mbit/s

- **Flow 2**
  - Ingress: Mean 284.74 Mbit/s
  - Egress: Mean 263.44 Mbit/s

- **Flow 3**
  - Ingress: Mean 239.30 Mbit/s
  - Egress: Mean 239.31 Mbit/s

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

- **Flow 1**
  - 95th Percentile: 183.11 ms

- **Flow 2**
  - 95th Percentile: 140.83 ms

- **Flow 3**
  - 95th Percentile: 154.33 ms
Run 3: Statistics of PCC-Allegro

Start at: 2020-04-16 11:08:58
End at: 2020-04-16 11:09:28
Local clock offset: -0.055 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2020-04-16 15:41:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 603.74 Mbit/s
  95th percentile per-packet one-way delay: 182.137 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 364.08 Mbit/s
  95th percentile per-packet one-way delay: 190.902 ms
  Loss rate: 1.79%
-- Flow 2:
  Average throughput: 295.65 Mbit/s
  95th percentile per-packet one-way delay: 147.052 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 129.88 Mbit/s
  95th percentile per-packet one-way delay: 182.012 ms
  Loss rate: 0.00%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 370.75 Mbit/s)
- Flow 1 egress (mean 364.08 Mbit/s)
- Flow 2 ingress (mean 297.50 Mbit/s)
- Flow 2 egress (mean 295.65 Mbit/s)
- Flow 3 ingress (mean 129.88 Mbit/s)
- Flow 3 egress (mean 129.88 Mbit/s)

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

- Flow 1 (95th percentile 190.90 ms)
- Flow 2 (95th percentile 147.05 ms)
- Flow 3 (95th percentile 182.01 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2020-04-16 11:51:18
End at: 2020-04-16 11:51:48
Local clock offset: -0.071 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2020-04-16 15:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 605.47 Mbit/s
95th percentile per-packet one-way delay: 193.992 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 348.40 Mbit/s
95th percentile per-packet one-way delay: 207.863 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 268.50 Mbit/s
95th percentile per-packet one-way delay: 137.472 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 238.70 Mbit/s
95th percentile per-packet one-way delay: 139.743 ms
Loss rate: 0.01%
Run 4: Report of PCC-Allegro — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 351.19 Mbps)
  - Flow 2 ingress (mean 269.70 Mbps)
  - Flow 3 ingress (mean 236.72 Mbps)
  - Flow 1 egress (mean 348.40 Mbps)
  - Flow 2 egress (mean 268.50 Mbps)
  - Flow 3 egress (mean 238.70 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 207.96 ms)
  - Flow 2 (95th percentile 137.47 ms)
  - Flow 3 (95th percentile 139.74 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2020-04-16 12:33:32
End at: 2020-04-16 12:34:02
Local clock offset: -0.101 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2020-04-16 15:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 564.61 Mbit/s
95th percentile per-packet one-way delay: 204.898 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 316.86 Mbit/s
95th percentile per-packet one-way delay: 198.286 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 259.57 Mbit/s
95th percentile per-packet one-way delay: 145.185 ms
Loss rate: 2.62%
-- Flow 3:
Average throughput: 228.54 Mbit/s
95th percentile per-packet one-way delay: 269.982 ms
Loss rate: 4.31%
Run 5: Report of PCC-Allegro — Data Link

![Graph](image)

**Throughput (Mbps)**

- Flow 1 ingress (mean 317.91 Mbps)
- Flow 1 egress (mean 316.86 Mbps)
- Flow 2 ingress (mean 266.55 Mbps)
- Flow 2 egress (mean 259.57 Mbps)
- Flow 3 ingress (mean 238.85 Mbps)
- Flow 3 egress (mean 228.54 Mbps)

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

- Flow 1 (95th percentile 198.29 ms)
- Flow 2 (95th percentile 145.19 ms)
- Flow 3 (95th percentile 269.98 ms)
Run 1: Statistics of PCC-Expr

Start at: 2020-04-16 09:39:09
End at: 2020-04-16 09:39:39
Local clock offset: -0.085 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2020-04-16 15:46:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 519.39 Mbit/s
  95th percentile per-packet one-way delay: 225.625 ms
  Loss rate: 4.95%
-- Flow 1:
  Average throughput: 323.22 Mbit/s
  95th percentile per-packet one-way delay: 207.706 ms
  Loss rate: 5.50%
-- Flow 2:
  Average throughput: 215.23 Mbit/s
  95th percentile per-packet one-way delay: 248.338 ms
  Loss rate: 5.37%
-- Flow 3:
  Average throughput: 159.16 Mbit/s
  95th percentile per-packet one-way delay: 227.326 ms
  Loss rate: 0.24%
Run 1: Report of PCC-Expr — Data Link

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![Graph of Throughput (Mbps) over Time (s)]

- Flow 1 ingress (mean 342.13 Mbps)
- Flow 1 egress (mean 323.22 Mbps)
- Flow 2 ingress (mean 227.44 Mbps)
- Flow 2 egress (mean 215.23 Mbps)
- Flow 3 ingress (mean 159.55 Mbps)
- Flow 3 egress (mean 159.16 Mbps)

![Graph of Per-packet one-way delay (ms) over Time (s)]

- Flow 1 (95th percentile 207.71 ms)
- Flow 2 (95th percentile 248.34 ms)
- Flow 3 (95th percentile 227.33 ms)

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Run 2: Statistics of PCC-Expr

Start at: 2020-04-16 10:21:17
End at: 2020-04-16 10:21:47
Local clock offset: ~0.1 ms
Remote clock offset: ~0.014 ms

# Below is generated by plot.py at 2020-04-16 15:46:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 522.50 Mbit/s
  95th percentile per-packet one-way delay: 213.020 ms
  Loss rate: 6.47%
-- Flow 1:
  Average throughput: 280.05 Mbit/s
  95th percentile per-packet one-way delay: 168.199 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 285.62 Mbit/s
  95th percentile per-packet one-way delay: 222.634 ms
  Loss rate: 15.12%
-- Flow 3:
  Average throughput: 159.07 Mbit/s
  95th percentile per-packet one-way delay: 123.606 ms
  Loss rate: 0.00%
Run 2: Report of PCC-Expr — Data Link

- **Throughput (Mbit/s)**
  - Flow 1 ingress (mean 282.35 Mbit/s)
  - Flow 1 egress (mean 280.05 Mbit/s)
  - Flow 2 ingress (mean 336.49 Mbit/s)
  - Flow 2 egress (mean 285.62 Mbit/s)
  - Flow 3 ingress (mean 159.07 Mbit/s)
  - Flow 3 egress (mean 159.07 Mbit/s)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 168.20 ms)
  - Flow 2 (95th percentile 222.63 ms)
  - Flow 3 (95th percentile 123.61 ms)
Run 3: Statistics of PCC-Expr

Start at: 2020-04-16 11:03:46
End at: 2020-04-16 11:04:16
Local clock offset: -0.069 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2020-04-16 15:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 480.70 Mbit/s
95th percentile per-packet one-way delay: 191.765 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 280.46 Mbit/s
95th percentile per-packet one-way delay: 192.578 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 221.65 Mbit/s
95th percentile per-packet one-way delay: 195.878 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 159.62 Mbit/s
95th percentile per-packet one-way delay: 89.028 ms
Loss rate: 0.00%
Run 3: Report of PCC-Expr — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 284.56 Mbps)
- Flow 1 egress (mean 280.46 Mbps)
- Flow 2 ingress (mean 223.68 Mbps)
- Flow 2 egress (mean 221.05 Mbps)
- Flow 3 ingress (mean 159.62 Mbps)
- Flow 3 egress (mean 159.62 Mbps)

**Per-packet one way delay (ms):**
- Flow 1 (95th percentile 192.58 ms)
- Flow 2 (95th percentile 195.88 ms)
- Flow 3 (95th percentile 89.03 ms)
Run 4: Statistics of PCC-Expr

Start at: 2020-04-16 11:46:14
End at: 2020-04-16 11:46:44
Local clock offset: -0.095 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2020-04-16 15:53:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.19 Mbit/s
95th percentile per-packet one-way delay: 194.171 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 217.89 Mbit/s
95th percentile per-packet one-way delay: 205.859 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 183.23 Mbit/s
95th percentile per-packet one-way delay: 119.741 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.22 Mbit/s
95th percentile per-packet one-way delay: 112.933 ms
Loss rate: 0.00%
Run 4: Report of PCC-Expr — Data Link

![Graph 1: Throughput](image1)

*Legend:*
- Flow 1 ingress (mean 222.80 Mbit/s)
- Flow 1 egress (mean 217.89 Mbit/s)
- Flow 2 ingress (mean 183.24 Mbit/s)
- Flow 2 egress (mean 183.23 Mbit/s)
- Flow 3 ingress (mean 174.22 Mbit/s)
- Flow 3 egress (mean 174.22 Mbit/s)

![Graph 2: Jitter](image2)

*Legend:*
- Flow 1 (95th percentile 205.86 ms)
- Flow 2 (95th percentile 119.74 ms)
- Flow 3 (95th percentile 112.93 ms)
Run 5: Statistics of PCC-Expr

Start at: 2020-04-16 12:28:27
End at: 2020-04-16 12:28:57
Local clock offset: -0.1 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.12 Mbit/s
95th percentile per-packet one-way delay: 137.857 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 234.37 Mbit/s
95th percentile per-packet one-way delay: 142.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 211.92 Mbit/s
95th percentile per-packet one-way delay: 108.699 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.02 Mbit/s
95th percentile per-packet one-way delay: 197.696 ms
Loss rate: 0.99%
Run 5: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 234.36 Mbps)
  - Flow 1 egress (mean 234.37 Mbps)
  - Flow 2 ingress (mean 211.92 Mbps)
  - Flow 2 egress (mean 211.92 Mbps)
  - Flow 3 ingress (mean 149.47 Mbps)
  - Flow 3 egress (mean 148.02 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 142.12 ms)
  - Flow 2 (95th percentile 108.70 ms)
  - Flow 3 (95th percentile 197.70 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2020-04-16 09:34:12
End at: 2020-04-16 09:34:42
Local clock offset: -0.062 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.54 Mbit/s
95th percentile per-packet one-way delay: 90.763 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.01 Mbit/s
95th percentile per-packet one-way delay: 86.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 58.45 Mbit/s
95th percentile per-packet one-way delay: 90.775 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.92 Mbit/s
95th percentile per-packet one-way delay: 85.213 ms
Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2020-04-16 10:16:18
End at: 2020-04-16 10:16:48
Local clock offset: -0.423 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 101.38 Mbit/s
95th percentile per-packet one-way delay: 91.058 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 60.69 Mbit/s
95th percentile per-packet one-way delay: 85.472 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.08 Mbit/s
95th percentile per-packet one-way delay: 91.108 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 26.88 Mbit/s
95th percentile per-packet one-way delay: 84.679 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 60.69 Mbps)
  - Flow 1 egress (mean 60.69 Mbps)
  - Flow 2 ingress (mean 48.09 Mbps)
  - Flow 2 egress (mean 48.08 Mbps)
  - Flow 3 ingress (mean 26.88 Mbps)
  - Flow 3 egress (mean 26.88 Mbps)

- **Per-packet one-way delays (ms):**
  - Flow 1 (95th percentile 85.47 ms)
  - Flow 2 (95th percentile 91.11 ms)
  - Flow 3 (95th percentile 84.68 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2020-04-16 10:58:45
End at: 2020-04-16 10:59:15
Local clock offset: -0.097 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.31 Mbit/s
95th percentile per-packet one-way delay: 85.123 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.71 Mbit/s
95th percentile per-packet one-way delay: 84.077 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 85.170 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.30 Mbit/s
95th percentile per-packet one-way delay: 84.086 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2020-04-16 11:41:15
End at: 2020-04-16 11:41:45
Local clock offset: -0.439 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 85.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.90 Mbit/s
95th percentile per-packet one-way delay: 85.786 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.74 Mbit/s
95th percentile per-packet one-way delay: 84.727 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.50 Mbit/s
95th percentile per-packet one-way delay: 85.858 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2020-04-16 12:23:27
End at: 2020-04-16 12:23:57
Local clock offset: 0.27 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 85.161 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.56 Mbit/s
95th percentile per-packet one-way delay: 84.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.13 Mbit/s
95th percentile per-packet one-way delay: 85.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.68 Mbit/s
95th percentile per-packet one-way delay: 85.655 ms
Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2020-04-16 09:49:27
End at: 2020-04-16 09:49:57
Local clock offset: -0.439 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.642 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.720 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.692 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

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

- **Flow 1** (95th percentile 85.64 ms)
- **Flow 2** (95th percentile 85.72 ms)
- **Flow 3** (95th percentile 85.69 ms)
Run 2: Statistics of SCReAM

Start at: 2020-04-16 10:31:44
End at: 2020-04-16 10:32:14
Local clock offset: -0.441 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 85.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.656 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.609 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.699 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2020-04-16 11:14:11
End at: 2020-04-16 11:14:41
Local clock offset: -0.071 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 84.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.162 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.180 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.406 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2020-04-16 11:56:29
End at: 2020-04-16 11:56:59
Local clock offset: -0.436 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 85.924 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.662 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.951 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 84.502 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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

- Throughput (Mbps): 0.00 to 0.30
- Time (s): 0 to 30
- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.22 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

- Per-packet error rate: 0.45 to 0.85
- Time (s): 0 to 30
- Flow 1 (95th percentile 85.66 ms)
- Flow 2 (95th percentile 85.95 ms)
- Flow 3 (95th percentile 84.50 ms)
Run 5: Statistics of SCReAM

Start at: 2020-04-16 12:38:34
End at: 2020-04-16 12:39:04
Local clock offset: -0.13 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 85.349 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 84.236 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.404 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 84.296 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.22 Mbit/s)
- Flow 2 egress (mean 0.22 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

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

- Flow 1 (95th percentile 84.24 ms)
- Flow 2 (95th percentile 85.40 ms)
- Flow 3 (95th percentile 84.30 ms)
Run 1: Statistics of Sprout

Start at: 2020-04-16 09:43:09
End at: 2020-04-16 09:43:39
Local clock offset: -0.101 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.93 Mbit/s
  95th percentile per-packet one-way delay: 91.320 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.75 Mbit/s
  95th percentile per-packet one-way delay: 86.290 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.84 Mbit/s
  95th percentile per-packet one-way delay: 85.933 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.90 Mbit/s
  95th percentile per-packet one-way delay: 91.677 ms
  Loss rate: 0.00%
Run 2: Statistics of Sprout

Start at: 2020-04-16 10:25:18
End at: 2020-04-16 10:25:48
Local clock offset: -0.108 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 9.10 Mbit/s
  95th percentile per-packet one-way delay: 85.881 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.78 Mbit/s
  95th percentile per-packet one-way delay: 85.878 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.48 Mbit/s
  95th percentile per-packet one-way delay: 85.920 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 4.09 Mbit/s
  95th percentile per-packet one-way delay: 85.815 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 4.78 Mbit/s)
- Flow 1 egress (mean 4.78 Mbit/s)
- Flow 2 ingress (mean 4.48 Mbit/s)
- Flow 2 egress (mean 4.48 Mbit/s)
- Flow 3 ingress (mean 4.09 Mbit/s)
- Flow 3 egress (mean 4.09 Mbit/s)

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

- Flow 1 (95th percentile 85.88 ms)
- Flow 2 (95th percentile 85.92 ms)
- Flow 3 (95th percentile 85.81 ms)
Run 3: Statistics of Sprout

Start at: 2020-04-16 11:07:42
End at: 2020-04-16 11:08:12
Local clock offset: -0.082 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.86 Mbit/s
95th percentile per-packet one-way delay: 85.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 85.975 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 85.987 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 85.786 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

[Graph showing throughput and per-packet end-to-end delay over time for different flows.]
Run 4: Statistics of Sprout

Start at: 2020-04-16 11:50:02
End at: 2020-04-16 11:50:32
Local clock offset: -0.098 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2020-04-16 15:56:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 85.403 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.67 Mbit/s
95th percentile per-packet one-way delay: 85.029 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 84.875 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 85.632 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

Start at: 2020-04-16 12:32:16  
End at: 2020-04-16 12:32:46  
Local clock offset: 0.266 ms  
Remote clock offset: 0.021 ms  

# Below is generated by plot.py at 2020-04-16 15:56:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 8.82 Mbit/s  
95th percentile per-packet one-way delay: 85.137 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 4.69 Mbit/s  
95th percentile per-packet one-way delay: 84.433 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 4.34 Mbit/s  
95th percentile per-packet one-way delay: 84.543 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 3.79 Mbit/s  
95th percentile per-packet one-way delay: 85.530 ms  
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

0 1 2 3 4 5 6 7

Flow 1 ingress (mean 4.69 Mbps)  Flow 1 egress (mean 4.69 Mbps)
Flow 2 ingress (mean 4.34 Mbps)  Flow 2 egress (mean 4.34 Mbps)
Flow 3 ingress (mean 3.79 Mbps)  Flow 3 egress (mean 3.79 Mbps)

Per packet one way delay (ms)

Time (s)

0 5 10 15 20 25 30

0 0.5 1 1.5 2 2.5 3 3.5 4

Flow 1 (95th percentile 84.43 ms)  Flow 2 (95th percentile 84.54 ms)  Flow 3 (95th percentile 85.53 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2020-04-16 09:41:15
End at: 2020-04-16 09:41:45
Local clock offset: -0.39 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2020-04-16 16:00:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.23 Mbit/s
95th percentile per-packet one-way delay: 92.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.89 Mbit/s
95th percentile per-packet one-way delay: 92.837 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.83 Mbit/s
95th percentile per-packet one-way delay: 87.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.82 Mbit/s
95th percentile per-packet one-way delay: 89.256 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link

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

Flow 1 ingress (mean 203.89 Mbit/s)  Flow 1 egress (mean 203.89 Mbit/s)
Flow 2 ingress (mean 191.84 Mbit/s)  Flow 2 egress (mean 191.83 Mbit/s)
Flow 3 ingress (mean 174.82 Mbit/s)  Flow 3 egress (mean 174.82 Mbit/s)
Run 2: Statistics of TaoVA-100x

Start at: 2020-04-16 10:23:23
End at: 2020-04-16 10:23:53
Local clock offset: -0.067 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2020-04-16 16:01:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 409.97 Mbit/s
  95th percentile per-packet one-way delay: 87.962 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 208.98 Mbit/s
  95th percentile per-packet one-way delay: 85.933 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 207.08 Mbit/s
  95th percentile per-packet one-way delay: 87.835 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 189.95 Mbit/s
  95th percentile per-packet one-way delay: 92.973 ms
  Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 208.98 Mbit/s)
- Flow 1 egress (mean 208.98 Mbit/s)
- Flow 2 ingress (mean 207.18 Mbit/s)
- Flow 2 egress (mean 207.08 Mbit/s)
- Flow 3 ingress (mean 189.94 Mbit/s)
- Flow 3 egress (mean 189.95 Mbit/s)
Run 3: Statistics of TaoVA-100x

Start at: 2020-04-16 11:05:47
End at: 2020-04-16 11:06:17
Local clock offset: 0.264 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2020-04-16 16:01:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 400.54 Mbit/s
  95th percentile per-packet one-way delay: 90.047 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 210.42 Mbit/s
  95th percentile per-packet one-way delay: 88.476 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 197.57 Mbit/s
  95th percentile per-packet one-way delay: 91.200 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 176.17 Mbit/s
  95th percentile per-packet one-way delay: 91.762 ms
  Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2020-04-16 11:48:08
End at: 2020-04-16 11:48:38
Local clock offset: -0.101 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2020-04-16 16:01:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.35 Mbit/s
95th percentile per-packet one-way delay: 90.795 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.68 Mbit/s
95th percentile per-packet one-way delay: 89.155 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.33 Mbit/s
95th percentile per-packet one-way delay: 89.948 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.29 Mbit/s
95th percentile per-packet one-way delay: 98.883 ms
Loss rate: 0.00%
Run 5: Statistics of TaoVA-100x

Start at: 2020-04-16 12:30:23
End at: 2020-04-16 12:30:53
Local clock offset: -0.095 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2020-04-16 16:01:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 381.25 Mbit/s
95th percentile per-packet one-way delay: 92.761 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.10 Mbit/s
95th percentile per-packet one-way delay: 90.560 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.67 Mbit/s
95th percentile per-packet one-way delay: 94.910 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 184.37 Mbit/s
95th percentile per-packet one-way delay: 94.097 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2020-04-16 09:46:26
End at: 2020-04-16 09:46:56
Local clock offset: 0.294 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2020-04-16 16:01:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 554.85 Mbit/s
95th percentile per-packet one-way delay: 138.452 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 229.69 Mbit/s
95th percentile per-packet one-way delay: 85.239 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 247.32 Mbit/s
95th percentile per-packet one-way delay: 91.449 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 481.99 Mbit/s
95th percentile per-packet one-way delay: 169.798 ms
Loss rate: 0.02%
Run 1: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 229.68 Mbit/s)
- Flow 1 egress (mean 229.69 Mbit/s)
- Flow 2 ingress (mean 247.32 Mbit/s)
- Flow 2 egress (mean 247.32 Mbit/s)
- Flow 3 ingress (mean 481.38 Mbit/s)
- Flow 3 egress (mean 481.99 Mbit/s)

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

- Flow 1 (95th percentile 85.24 ms)
- Flow 2 (95th percentile 91.45 ms)
- Flow 3 (95th percentile 169.80 ms)
Run 2: Statistics of TCP Vegas

Start at: 2020-04-16 10:28:31
End at: 2020-04-16 10:29:01
Local clock offset: -0.127 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2020-04-16 16:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 793.92 Mbit/s
95th percentile per-packet one-way delay: 122.770 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 486.87 Mbit/s
95th percentile per-packet one-way delay: 118.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 321.80 Mbit/s
95th percentile per-packet one-way delay: 175.048 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 278.84 Mbit/s
95th percentile per-packet one-way delay: 124.990 ms
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 486.86 Mbit/s)
- Flow 1 egress (mean 486.87 Mbit/s)
- Flow 2 ingress (mean 326.15 Mbit/s)
- Flow 2 egress (mean 321.80 Mbit/s)
- Flow 3 ingress (mean 278.84 Mbit/s)
- Flow 3 egress (mean 278.84 Mbit/s)

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

- Flow 1 (95th percentile 118.97 ms)
- Flow 2 (95th percentile 175.05 ms)
- Flow 3 (95th percentile 124.99 ms)
Run 3: Statistics of TCP Vegas

Start at: 2020-04-16 11:10:55
End at: 2020-04-16 11:11:25
Local clock offset: -0.08 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2020-04-16 16:13:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 851.25 Mbit/s
95th percentile per-packet one-way delay: 140.920 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 455.12 Mbit/s
95th percentile per-packet one-way delay: 144.782 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 450.40 Mbit/s
95th percentile per-packet one-way delay: 136.895 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 290.24 Mbit/s
95th percentile per-packet one-way delay: 123.831 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2020-04-16 11:53:15
End at: 2020-04-16 11:53:45
Local clock offset: -0.138 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 835.80 Mbit/s
  95th percentile per-packet one-way delay: 160.603 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 487.82 Mbit/s
  95th percentile per-packet one-way delay: 135.936 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 318.58 Mbit/s
  95th percentile per-packet one-way delay: 88.301 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 408.72 Mbit/s
  95th percentile per-packet one-way delay: 219.930 ms
  Loss rate: 2.85%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2020-04-16 12:35:27
End at: 2020-04-16 12:35:57
Local clock offset: -0.107 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 182.830 ms
Loss rate: 0.62%
-- Flow 1:
95th percentile per-packet one-way delay: 91.934 ms
Loss rate: 1.06%
-- Flow 2:
95th percentile per-packet one-way delay: 199.079 ms
Loss rate: 0.32%
-- Flow 3:
95th percentile per-packet one-way delay: 125.365 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 331.66 Mbit/s)
- Flow 1 egress (mean 328.16 Mbit/s)
- Flow 2 ingress (mean 411.78 Mbit/s)
- Flow 2 egress (mean 410.45 Mbit/s)
- Flow 3 ingress (mean 297.32 Mbit/s)
- Flow 3 egress (mean 297.32 Mbit/s)

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

- Flow 1 (95th percentile 91.93 ms)
- Flow 2 (95th percentile 199.08 ms)
- Flow 3 (95th percentile 125.36 ms)
Run 1: Statistics of Verus

Start at: 2020-04-16 09:52:40
End at: 2020-04-16 09:53:10
Local clock offset: -0.069 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.66 Mbit/s
95th percentile per-packet one-way delay: 214.414 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 194.66 Mbit/s
95th percentile per-packet one-way delay: 217.079 ms
Loss rate: 2.22%
-- Flow 2:
Average throughput: 156.29 Mbit/s
95th percentile per-packet one-way delay: 206.575 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 129.691 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)

Flow 1 ingress (mean 199.07 Mbit/s) — Flow 1 egress (mean 194.66 Mbit/s)
Flow 2 ingress (mean 156.74 Mbit/s) — Flow 2 egress (mean 156.29 Mbit/s)
Flow 3 ingress (mean 77.10 Mbit/s) — Flow 3 egress (mean 77.10 Mbit/s)

Flow 1 (95th percentile 217.08 ms) — Flow 2 (95th percentile 206.57 ms) — Flow 3 (95th percentile 129.69 ms)
Run 2: Statistics of Verus

Start at: 2020-04-16 10:34:56
End at: 2020-04-16 10:35:26
Local clock offset: -0.084 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 299.12 Mbit/s
  95th percentile per-packet one-way delay: 218.341 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 173.48 Mbit/s
  95th percentile per-packet one-way delay: 218.487 ms
  Loss rate: 1.76%
-- Flow 2:
  Average throughput: 172.13 Mbit/s
  95th percentile per-packet one-way delay: 217.460 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 36.51 Mbit/s
  95th percentile per-packet one-way delay: 220.884 ms
  Loss rate: 0.00%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 176.59 Mbit/s)
- Flow 1 egress (mean 173.48 Mbit/s)
- Flow 2 ingress (mean 172.40 Mbit/s)
- Flow 2 egress (mean 172.13 Mbit/s)
- Flow 3 ingress (mean 36.51 Mbit/s)
- Flow 3 egress (mean 36.51 Mbit/s)
Run 3: Statistics of Verus

Start at: 2020-04-16 11:17:20
End at: 2020-04-16 11:17:50
Local clock offset: -0.089 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.54 Mbit/s
95th percentile per-packet one-way delay: 224.741 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 156.29 Mbit/s
95th percentile per-packet one-way delay: 231.260 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 54.23 Mbit/s
95th percentile per-packet one-way delay: 108.513 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 55.95 Mbit/s
95th percentile per-packet one-way delay: 91.351 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 160.79 Mbit/s)
- Flow 2 ingress (mean 54.30 Mbit/s)
- Flow 3 ingress (mean 55.97 Mbit/s)
- Flow 1 egress (mean 156.29 Mbit/s)
- Flow 2 egress (mean 54.23 Mbit/s)
- Flow 3 egress (mean 55.95 Mbit/s)
Run 4: Statistics of Verus

Start at: 2020-04-16 11:59:40
End at: 2020-04-16 12:00:10
Local clock offset: -0.075 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2020-04-16 16:14:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 213.68 Mbit/s
  95th percentile per-packet one-way delay: 230.125 ms
  Loss rate: 3.45%
-- Flow 1:
  Average throughput: 75.54 Mbit/s
  95th percentile per-packet one-way delay: 139.778 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 180.99 Mbit/s
  95th percentile per-packet one-way delay: 243.996 ms
  Loss rate: 5.79%
-- Flow 3:
  Average throughput: 54.94 Mbit/s
  95th percentile per-packet one-way delay: 123.360 ms
  Loss rate: 0.00%
Run 4: Report of Verus — Data Link

![Graph showing throughput and delay over time]

**Throughput (Mbps):**
- Flow 1 ingress (mean 75.79 Mbps)
- Flow 1 egress (mean 75.54 Mbps)
- Flow 2 ingress (mean 192.10 Mbps)
- Flow 2 egress (mean 180.99 Mbps)
- Flow 3 ingress (mean 54.94 Mbps)
- Flow 3 egress (mean 54.94 Mbps)

**Delay (ms):**
- Flow 1 (95th percentile 139.78 ms)
- Flow 2 (95th percentile 244.00 ms)
- Flow 3 (95th percentile 123.36 ms)
Run 5: Statistics of Verus

Start at: 2020-04-16 12:41:44
End at: 2020-04-16 12:42:14
Local clock offset: -0.093 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2020-04-16 16:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.14 Mbit/s
95th percentile per-packet one-way delay: 228.611 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 179.14 Mbit/s
95th percentile per-packet one-way delay: 230.906 ms
Loss rate: 3.51%
-- Flow 2:
Average throughput: 110.96 Mbit/s
95th percentile per-packet one-way delay: 214.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.11 Mbit/s
95th percentile per-packet one-way delay: 155.313 ms
Loss rate: 1.12%
Run 5: Report of Verus — Data Link

![Graph of Throughput Vs Time for different flows](image1)

![Graph of Per-packet one way delay Vs Time for different flows](image2)
Run 1: Statistics of PCC-Vivace

Start at: 2020-04-16 10:03:50
End at: 2020-04-16 10:04:20
Local clock offset: -0.102 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2020-04-16 16:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 479.02 Mbit/s
95th percentile per-packet one-way delay: 218.509 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 293.10 Mbit/s
95th percentile per-packet one-way delay: 252.156 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 191.38 Mbit/s
95th percentile per-packet one-way delay: 97.692 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 177.60 Mbit/s
95th percentile per-packet one-way delay: 130.978 ms
Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2020-04-16 10:46:19
End at: 2020-04-16 10:46:49
Local clock offset: -0.098 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2020-04-16 16:18:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.14 Mbit/s
95th percentile per-packet one-way delay: 119.398 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 276.72 Mbit/s
95th percentile per-packet one-way delay: 115.115 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 149.21 Mbit/s
95th percentile per-packet one-way delay: 230.705 ms
Loss rate: 4.45%
-- Flow 3:
Average throughput: 149.27 Mbit/s
95th percentile per-packet one-way delay: 101.462 ms
Loss rate: 0.00%
Run 3: Statistics of PCC-Vivace

Start at: 2020-04-16 11:28:29
End at: 2020-04-16 11:28:59
Local clock offset: -0.041 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2020-04-16 16:19:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 489.55 Mbit/s
  95th percentile per-packet one-way delay: 123.710 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 309.85 Mbit/s
  95th percentile per-packet one-way delay: 136.404 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 193.51 Mbit/s
  95th percentile per-packet one-way delay: 87.096 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 154.94 Mbit/s
  95th percentile per-packet one-way delay: 86.998 ms
  Loss rate: 0.00%
Run 4: Statistics of PCC-Vivace

Start at: 2020-04-16 12:10:38
End at: 2020-04-16 12:11:08
Local clock offset: -0.085 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2020-04-16 16:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.53 Mbit/s
95th percentile per-packet one-way delay: 161.973 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 317.82 Mbit/s
95th percentile per-packet one-way delay: 170.075 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 203.37 Mbit/s
95th percentile per-packet one-way delay: 87.694 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 149.70 Mbit/s
95th percentile per-packet one-way delay: 113.773 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 318.86 Mbit/s)
- Flow 1 egress (mean 317.82 Mbit/s)
- Flow 2 ingress (mean 203.37 Mbit/s)
- Flow 2 egress (mean 203.37 Mbit/s)
- Flow 3 ingress (mean 149.70 Mbit/s)
- Flow 3 egress (mean 149.70 Mbit/s)

![Graph 2: Packet Loss vs Time](image2)

- Flow 1 (95th percentile 170.07 ms)
- Flow 2 (95th percentile 87.69 ms)
- Flow 3 (95th percentile 113.77 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2020-04-16 12:52:26
End at: 2020-04-16 12:52:56
Local clock offset: -0.101 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2020-04-16 16:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.47 Mbit/s
95th percentile per-packet one-way delay: 96.925 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 234.65 Mbit/s
95th percentile per-packet one-way delay: 95.339 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 207.89 Mbit/s
95th percentile per-packet one-way delay: 90.884 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 141.04 Mbit/s
95th percentile per-packet one-way delay: 126.599 ms
Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

[Graph showing throughput and packet delay over time for different flows with mean values.]
Run 1: Statistics of WebRTC media

Start at: 2020-04-16 09:48:13
End at: 2020-04-16 09:48:43
Local clock offset: -0.071 ms
Remote clock offset: -0.019 ms
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay](image)

- Flow 1 ingress (mean 0.01 Mbit/s)
- Flow 1 egress (mean 0.01 Mbit/s)
- Flow 2 ingress (mean 0.93 Mbit/s)
- Flow 2 egress (mean 0.93 Mbit/s)
- Flow 3 ingress (mean 0.91 Mbit/s)
- Flow 3 egress (mean 0.91 Mbit/s)

- Flow 1 (95th percentile 84.93 ms)
- Flow 2 (95th percentile 85.38 ms)
- Flow 3 (95th percentile 85.33 ms)
Run 2: Statistics of WebRTC media

Start at: 2020-04-16 10:30:30
End at: 2020-04-16 10:31:00
Local clock offset: 0.295 ms
Remote clock offset: -0.008 ms
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2020-04-16 11:12:57
End at: 2020-04-16 11:13:27
Local clock offset: -0.068 ms
Remote clock offset: 0.0 ms
Run 3: Report of WebRTC media — Data Link

![Data Link Graph]

![Per Packet One-Way Delay Graph]
Run 4: Statistics of WebRTC media

Start at: 2020-04-16 11:55:15
End at: 2020-04-16 11:55:45
Local clock offset: -0.069 ms
Remote clock offset: -0.011 ms
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.94 Mbit/s)
- Flow 1 egress (mean 0.94 Mbit/s)
- Flow 2 ingress (mean 0.93 Mbit/s)
- Flow 2 egress (mean 0.93 Mbit/s)
- Flow 3 ingress (mean 0.96 Mbit/s)
- Flow 3 egress (mean 0.96 Mbit/s)

![Graph 2: Per-packet round-trip delay vs Time](image2)

- Flow 1 (95th percentile 84.13 ms)
- Flow 2 (95th percentile 84.12 ms)
- Flow 3 (95th percentile 85.61 ms)
Run 5: Statistics of WebRTC media

Start at: 2020-04-16 12:37:20
End at: 2020-04-16 12:37:50
Local clock offset: -0.04 ms
Remote clock offset: -0.021 ms
Run 5: Report of WebRTC media — Data Link

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

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