Pantheon Report

Generated at 2018-03-14 05:04:16 (UTC).
Data path: GCE Tokyo Ethernet (remote) → GCE London Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).

Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5ce90f281d1c69ae1a5c6
third_party/genericCC @ 9249eeaa3238475c4d8cca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3e3ca2a6c7cd0ab9
  third_party/indigo-1-layer-128-unit @ 3ae9e4e4230db7484501f82ce8b377695f2f66d
  third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0e0edbf90c077e64d
  third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
  third_party/indigo-no-calib @ 7224f2202e8a044ed8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303aee82ea803ae6928eac4f1083a66b1
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da59ba9013db26744ccfcff93
third_party/pcc @ 1af9c95e5d0d66d1a862b23c091a55f8c872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c4f42
third_party/scream @ c3370fd7b17265a979ab34e016ad2f5956885
third_party/sourdough @ f1a14b3e79473437f61b0ae0c0e267cd6e81
third_party/sprout @ 6f2efe6e088d91066a9f023df375e6e265089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutcomm.cc
third_party/verus @ d4b447ea74c6c0a261149af2629562539f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad34825f42
test from GCE Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<td>146.29</td>
<td>106.22</td>
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<td>Copa</td>
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<td>123.06</td>
<td>62.39</td>
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<td>726.01</td>
<td>681.63</td>
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<td>164.02</td>
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<td>129.64</td>
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<td>240.46</td>
<td>185.91</td>
<td>126.63</td>
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<td>Vivace-loss</td>
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<td>285.80</td>
<td>224.26</td>
<td>134.27</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>285.83</td>
<td>188.42</td>
<td>119.72</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-03-13 20:39:44
End at: 2018-03-13 20:40:14

# Below is generated by plot.py at 2018-03-14 03:11:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.78 Mbit/s
95th percentile per-packet one-way delay: 111.763 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 93.41 Mbit/s
95th percentile per-packet one-way delay: 111.863 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 89.20 Mbit/s
95th percentile per-packet one-way delay: 110.395 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 83.32 Mbit/s
95th percentile per-packet one-way delay: 110.440 ms
Loss rate: 2.69%
Run 1: Report of TCP BBR — Data Link

![Throughput and Packet Delay Graphs](image_url)
Run 2: Statistics of TCP BBR

Start at: 2018-03-13 20:59:15
End at: 2018-03-13 20:59:45

# Below is generated by plot.py at 2018-03-14 03:11:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.55 Mbit/s
95th percentile per-packet one-way delay: 110.499 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 92.30 Mbit/s
95th percentile per-packet one-way delay: 110.412 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 110.471 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 85.43 Mbit/s
95th percentile per-packet one-way delay: 110.710 ms
Loss rate: 2.59%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-03-13 21:18:45
End at: 2018-03-13 21:19:15

# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 186.88 Mbit/s
95th percentile per-packet one-way delay: 110.682 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 110.427 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 110.988 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 89.08 Mbit/s
95th percentile per-packet one-way delay: 111.083 ms
Loss rate: 2.76%
Run 3: Report of TCP BBR — Data Link

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

Throughput: (mean 94.32 Mbps)
Flow 1 ingress (mean 94.29 Mbps)
Flow 2 ingress (mean 95.76 Mbps)
Flow 3 ingress (mean 99.51 Mbps)

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

Per-packet delay: (mean 110.43 ms)
Flow 1 (95th percentile 110.99 ms)
Flow 2 (95th percentile 111.08 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-03-13 21:38:20
End at: 2018-03-13 21:38:50

# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.26 Mbit/s
95th percentile per-packet one-way delay: 110.795 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 93.94 Mbit/s
95th percentile per-packet one-way delay: 110.792 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 110.822 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 83.65 Mbit/s
95th percentile per-packet one-way delay: 110.529 ms
Loss rate: 2.58%
Run 4: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 93.97 Mbit/s)
- Flow 1 egress (mean 93.94 Mbit/s)
- Flow 2 ingress (mean 92.13 Mbit/s)
- Flow 2 egress (mean 92.07 Mbit/s)
- Flow 3 ingress (mean 83.93 Mbit/s)
- Flow 3 egress (mean 83.65 Mbit/s)
Run 5: Statistics of TCP BBR

Start at: 2018-03-13 21:57:52
End at: 2018-03-13 21:58:22

# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 180.05 Mbit/s
95th percentile per-packet one-way delay: 114.021 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 93.06 Mbit/s
95th percentile per-packet one-way delay: 113.484 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 113.809 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 114.693 ms
Loss rate: 2.84%
Run 5: Report of TCP BBR — Data Link

[Graphs showing throughput and packet one-way delay over time for different flows.
Flow 1 ingress (mean 93.09 Mbit/s), Flow 1 egress (mean 93.06 Mbit/s),
Flow 2 ingress (mean 88.78 Mbit/s), Flow 2 egress (mean 88.67 Mbit/s),
Flow 3 ingress (mean 96.77 Mbit/s), Flow 3 egress (mean 96.84 Mbit/s).]
Run 6: Statistics of TCP BBR

Start at: 2018-03-13 22:16:45
End at: 2018-03-13 22:17:15

# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 182.20 Mbit/s
  95th percentile per-packet one-way delay: 114.187 ms
  Loss rate: 1.28%
-- Flow 1:
  Average throughput: 93.00 Mbit/s
  95th percentile per-packet one-way delay: 113.596 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 91.28 Mbit/s
  95th percentile per-packet one-way delay: 113.946 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 87.84 Mbit/s
  95th percentile per-packet one-way delay: 115.041 ms
  Loss rate: 2.80%
Run 6: Report of TCP BBR — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 93.05 Mbps)**
- **Flow 1 egress (mean 93.00 Mbps)**
- **Flow 2 ingress (mean 91.35 Mbps)**
- **Flow 2 egress (mean 91.26 Mbps)**
- **Flow 3 ingress (mean 86.31 Mbps)**
- **Flow 3 egress (mean 87.84 Mbps)**

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

- **Flow 1 (95th percentile 113.60 ms)**
- **Flow 2 (95th percentile 113.95 ms)**
- **Flow 3 (95th percentile 115.04 ms)**
Run 7: Statistics of TCP BBR

Start at: 2018-03-13 22:35:50
End at: 2018-03-13 22:36:20

# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.68 Mbit/s
95th percentile per-packet one-way delay: 112.893 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 93.90 Mbit/s
95th percentile per-packet one-way delay: 112.833 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 88.86 Mbit/s
95th percentile per-packet one-way delay: 112.942 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 113.250 ms
Loss rate: 2.60%
Run 7: Report of TCP BBR — Data Link

![Graph 1: Throughput](image)

**Throughput (Mbps)**

- Flow 1 ingress (mean 93.99 Mbps)
- Flow 2 ingress (mean 88.94 Mbps)
- Flow 3 ingress (mean 82.51 Mbps)
- Flow 1 egress (mean 93.90 Mbps)
- Flow 2 egress (mean 88.86 Mbps)
- Flow 3 egress (mean 82.17 Mbps)

![Graph 2: Packet Delay](image)

**Packet Delay (ms)**

- Flow 1 (95th percentile 112.83 ms)
- Flow 2 (95th percentile 112.94 ms)
- Flow 3 (95th percentile 113.25 ms)
Run 8: Statistics of TCP BBR


# Below is generated by plot.py at 2018-03-14 03:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 179.46 Mbit/s
  95th percentile per-packet one-way delay: 112.708 ms
  Loss rate: 1.21%
-- Flow 1:
  Average throughput: 92.44 Mbit/s
  95th percentile per-packet one-way delay: 112.634 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 91.56 Mbit/s
  95th percentile per-packet one-way delay: 112.684 ms
  Loss rate: 1.18%
-- Flow 3:
  Average throughput: 80.55 Mbit/s
  95th percentile per-packet one-way delay: 114.461 ms
  Loss rate: 2.78%
Run 8: Report of TCP BBR — Data Link

- Throughput (Mbps)
  - Flow 1 ingress (mean 92.48 Mbps)
  - Flow 1 egress (mean 92.44 Mbps)
  - Flow 2 ingress (mean 91.62 Mbps)
  - Flow 2 egress (mean 91.56 Mbps)
  - Flow 3 ingress (mean 80.97 Mbps)
  - Flow 3 egress (mean 80.55 Mbps)

- Per-packet one-way delay (μs)
  - Flow 1 (95th percentile 112.63 μs)
  - Flow 2 (95th percentile 112.68 μs)
  - Flow 3 (95th percentile 114.46 μs)
Run 9: Statistics of TCP BBR

Start at: 2018-03-13 23:14:20
End at: 2018-03-13 23:14:50

# Below is generated by plot.py at 2018-03-14 03:14:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 181.26 Mbit/s
  95th percentile per-packet one-way delay: 110.798 ms
  Loss rate: 1.22%
-- Flow 1:
  Average throughput: 93.88 Mbit/s
  95th percentile per-packet one-way delay: 110.775 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 90.17 Mbit/s
  95th percentile per-packet one-way delay: 110.838 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 84.40 Mbit/s
  95th percentile per-packet one-way delay: 110.763 ms
  Loss rate: 2.67%
Run 9: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 93.92 Mb/s)
- Flow 1 egress (mean 93.88 Mb/s)
- Flow 2 ingress (mean 90.25 Mb/s)
- Flow 2 egress (mean 90.17 Mb/s)
- Flow 3 ingress (mean 84.74 Mb/s)
- Flow 3 egress (mean 84.40 Mb/s)
Run 10: Statistics of TCP BBR

Start at: 2018-03-13 23:33:50
End at: 2018-03-13 23:34:20

# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.02 Mbit/s
95th percentile per-packet one-way delay: 111.249 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 92.93 Mbit/s
95th percentile per-packet one-way delay: 111.194 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 92.28 Mbit/s
95th percentile per-packet one-way delay: 111.249 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 82.69 Mbit/s
95th percentile per-packet one-way delay: 112.108 ms
Loss rate: 2.61%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-03-13 20:28:40
End at: 2018-03-13 20:29:10

# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 154.68 Mbit/s
  95th percentile per-packet one-way delay: 118.769 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 85.15 Mbit/s
  95th percentile per-packet one-way delay: 117.121 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 60.41 Mbit/s
  95th percentile per-packet one-way delay: 119.523 ms
  Loss rate: 1.40%
-- Flow 3:
  Average throughput: 90.92 Mbit/s
  95th percentile per-packet one-way delay: 119.939 ms
  Loss rate: 1.45%
Run 1: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 85.32 Mbps)
  - Flow 1 egress (mean 85.15 Mbps)
  - Flow 2 ingress (mean 60.58 Mbps)
  - Flow 2 egress (mean 60.41 Mbps)
  - Flow 3 ingress (mean 90.31 Mbps)
  - Flow 3 egress (mean 90.92 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 117.12 ms)
  - Flow 2 (95th percentile 119.52 ms)
  - Flow 3 (95th percentile 119.94 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-03-13 20:48:17  
End at: 2018-03-13 20:48:47  

# Below is generated by plot.py at 2018-03-14 03:14:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 126.51 Mbit/s  
95th percentile per-packet one-way delay: 113.018 ms  
Loss rate: 1.12%  
-- Flow 1:  
Average throughput: 67.86 Mbit/s  
95th percentile per-packet one-way delay: 113.092 ms  
Loss rate: 0.75%  
-- Flow 2:  
Average throughput: 65.04 Mbit/s  
95th percentile per-packet one-way delay: 113.042 ms  
Loss rate: 1.05%  
-- Flow 3:  
Average throughput: 47.71 Mbit/s  
95th percentile per-packet one-way delay: 112.301 ms  
Loss rate: 2.90%
Run 2: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 67.86 Mbps)
- Flow 1 egress (mean 67.86 Mbps)
- Flow 2 ingress (mean 64.95 Mbps)
- Flow 2 egress (mean 65.04 Mbps)
- Flow 3 ingress (mean 47.89 Mbps)
- Flow 3 egress (mean 47.71 Mbps)

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

- Flow 1 (95th percentile 113.09 ms)
- Flow 2 (95th percentile 113.04 ms)
- Flow 3 (95th percentile 112.30 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-03-13 21:07:57
End at: 2018-03-13 21:08:27

# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 120.79 Mbit/s
  95th percentile per-packet one-way delay: 112.080 ms
  Loss rate: 1.17%
-- Flow 1:
  Average throughput: 77.87 Mbit/s
  95th percentile per-packet one-way delay: 112.082 ms
  Loss rate: 0.96%
-- Flow 2:
  Average throughput: 63.96 Mbit/s
  95th percentile per-packet one-way delay: 112.089 ms
  Loss rate: 1.45%
-- Flow 3:
  Average throughput: 1.75 Mbit/s
  95th percentile per-packet one-way delay: 111.125 ms
  Loss rate: 9.06%
Run 3: Report of TCP Cubic — Data Link

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

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

- Flow 1 ingress (mean 78.03 Mbps)
- Flow 1 egress (mean 77.87 Mbps)
- Flow 2 ingress (mean 64.18 Mbps)
- Flow 2 egress (mean 63.96 Mbps)
- Flow 3 ingress (mean 1.98 Mbps)
- Flow 3 egress (mean 1.75 Mbps)
Run 4: Statistics of TCP Cubic


# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 124.71 Mbit/s
  95th percentile per-packet one-way delay: 114.912 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 82.89 Mbit/s
  95th percentile per-packet one-way delay: 114.846 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 62.51 Mbit/s
  95th percentile per-packet one-way delay: 114.967 ms
  Loss rate: 1.46%
-- Flow 3:
  Average throughput: 1.86 Mbit/s
  95th percentile per-packet one-way delay: 117.478 ms
  Loss rate: 8.79%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-03-13 21:47:01
End at: 2018-03-13 21:47:31

# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.36 Mbit/s
95th percentile per-packet one-way delay: 115.949 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 115.416 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 116.397 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 41.51 Mbit/s
95th percentile per-packet one-way delay: 117.710 ms
Loss rate: 2.99%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-03-13 22:05:57
End at: 2018-03-13 22:06:27

# Below is generated by plot.py at 2018-03-14 03:14:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.03 Mbit/s
95th percentile per-packet one-way delay: 117.262 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 84.54 Mbit/s
95th percentile per-packet one-way delay: 117.305 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 64.93 Mbit/s
95th percentile per-packet one-way delay: 117.195 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 111.042 ms
Loss rate: 10.25%
Run 6: Report of TCP Cubic — Data Link

![Graph of Throughput](image1)

![Graph of Packet Delay](image2)

Flow 1 ingress (mean 84.56 Mbit/s)  
Flow 1 egress (mean 84.54 Mbit/s)  
Flow 2 ingress (mean 65.15 Mbit/s)  
Flow 2 egress (mean 64.93 Mbit/s)  
Flow 3 ingress (mean 1.37 Mbit/s)  
Flow 3 egress (mean 1.26 Mbit/s)
Run 7: Statistics of TCP Cubic

Start at: 2018-03-13 22:24:56
End at: 2018-03-13 22:25:26

# Below is generated by plot.py at 2018-03-14 03:15:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 124.83 Mbit/s
  95th percentile per-packet one-way delay: 118.930 ms
  Loss rate: 1.12%
-- Flow 1:
  Average throughput: 58.16 Mbit/s
  95th percentile per-packet one-way delay: 119.531 ms
  Loss rate: 0.88%
-- Flow 2:
  Average throughput: 100.15 Mbit/s
  95th percentile per-packet one-way delay: 118.349 ms
  Loss rate: 1.26%
-- Flow 3:
  Average throughput: 1.58 Mbit/s
  95th percentile per-packet one-way delay: 116.393 ms
  Loss rate: 9.74%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

End at: 2018-03-13 22:44:53

# Below is generated by plot.py at 2018-03-14 03:15:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.19 Mbit/s
95th percentile per-packet one-way delay: 114.609 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 79.38 Mbit/s
95th percentile per-packet one-way delay: 114.587 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 114.652 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 114.968 ms
Loss rate: 2.95%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-03-13 23:03:27
End at: 2018-03-13 23:03:57

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 134.22 Mbit/s
  95th percentile per-packet one-way delay: 112.427 ms
  Loss rate: 1.36%
-- Flow 1:
  Average throughput: 78.17 Mbit/s
  95th percentile per-packet one-way delay: 112.516 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 60.73 Mbit/s
  95th percentile per-packet one-way delay: 112.271 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 48.43 Mbit/s
  95th percentile per-packet one-way delay: 112.441 ms
  Loss rate: 2.86%
Run 9: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 78.37 Mbps)
- Flow 1 egress (mean 78.17 Mbps)
- Flow 2 ingress (mean 60.95 Mbps)
- Flow 2 egress (mean 60.73 Mbps)
- Flow 3 ingress (mean 48.59 Mbps)
- Flow 3 egress (mean 48.43 Mbps)

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

- Flow 1 (95th percentile 112.52 ms)
- Flow 2 (95th percentile 112.27 ms)
- Flow 3 (95th percentile 112.44 ms)
Run 10: Statistics of TCP Cubic

End at: 2018-03-13 23:23:37

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 112.31 Mbit/s
  95th percentile per-packet one-way delay: 115.332 ms
  Loss rate: 1.47%
-- Flow 1:
  Average throughput: 64.70 Mbit/s
  95th percentile per-packet one-way delay: 115.187 ms
  Loss rate: 1.25%
-- Flow 2:
  Average throughput: 48.93 Mbit/s
  95th percentile per-packet one-way delay: 115.913 ms
  Loss rate: 1.37%
-- Flow 3:
  Average throughput: 47.06 Mbit/s
  95th percentile per-packet one-way delay: 115.162 ms
  Loss rate: 2.63%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-03-13 20:31:37
End at: 2018-03-13 20:32:07

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.43 Mbit/s
95th percentile per-packet one-way delay: 112.561 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 6.87 Mbit/s
95th percentile per-packet one-way delay: 112.511 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 112.724 ms
Loss rate: 2.52%
-- Flow 3:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 112.302 ms
Loss rate: 2.09%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-03-13 20:51:13
End at: 2018-03-13 20:51:43

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.17 Mbit/s
  95th percentile per-packet one-way delay: 112.493 ms
  Loss rate: 1.76%
-- Flow 1:
  Average throughput: 7.21 Mbit/s
  95th percentile per-packet one-way delay: 112.502 ms
  Loss rate: 1.49%
-- Flow 2:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 112.835 ms
  Loss rate: 0.97%
-- Flow 3:
  Average throughput: 2.27 Mbit/s
  95th percentile per-packet one-way delay: 112.364 ms
  Loss rate: 4.55%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-03-13 21:10:51
End at: 2018-03-13 21:11:21

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.92 Mbit/s
95th percentile per-packet one-way delay: 110.606 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 110.601 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 110.641 ms
Loss rate: 2.53%
-- Flow 3:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 110.474 ms
Loss rate: 4.53%
Run 3: Report of LEDBAT — Data Link

[Graph showing throughput and packet delay over time for different flows.]
Run 4: Statistics of LEDBAT

Start at: 2018-03-13 21:30:20
End at: 2018-03-13 21:30:50

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.50 Mbit/s
95th percentile per-packet one-way delay: 110.541 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 7.27 Mbit/s
95th percentile per-packet one-way delay: 110.495 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 4.76 Mbit/s
95th percentile per-packet one-way delay: 110.568 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 110.651 ms
Loss rate: 2.14%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.32 Mb/s)
- Flow 1 egress (mean 7.27 Mb/s)
- Flow 2 ingress (mean 4.91 Mb/s)
- Flow 2 egress (mean 4.76 Mb/s)
- Flow 3 ingress (mean 0.33 Mb/s)
- Flow 3 egress (mean 0.33 Mb/s)

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

- Flow 1 (95th percentile 110.50 ms)
- Flow 2 (95th percentile 110.57 ms)
- Flow 3 (95th percentile 110.65 ms)
Run 5: Statistics of LEDBAT

End at: 2018-03-13 21:50:25

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.12 Mbit/s
  95th percentile per-packet one-way delay: 110.679 ms
  Loss rate: 1.77%
  -- Flow 1:
    Average throughput: 7.21 Mbit/s
    95th percentile per-packet one-way delay: 110.688 ms
    Loss rate: 1.49%
  -- Flow 2:
    Average throughput: 0.29 Mbit/s
    95th percentile per-packet one-way delay: 110.642 ms
    Loss rate: 1.18%
  -- Flow 3:
    Average throughput: 2.27 Mbit/s
    95th percentile per-packet one-way delay: 110.657 ms
    Loss rate: 4.57%
Run 5: Report of LEDBAT — Data Link

![Throughput Graph](image)

![Packet Delay Graph](image)

Legend:
- Flow 1 ingress (mean 7.20 Mbps)
- Flow 1 egress (mean 7.21 Mbps)
- Flow 2 ingress (mean 0.29 Mbps)
- Flow 2 egress (mean 0.29 Mbps)
- Flow 3 ingress (mean 2.32 Mbps)
- Flow 3 egress (mean 2.27 Mbps)

- Flow 1 (95th percentile 110.69 ms)
- Flow 2 (95th percentile 110.64 ms)
- Flow 3 (95th percentile 110.66 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-03-13 22:08:53
End at: 2018-03-13 22:09:23

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.42 Mbit/s
  95th percentile per-packet one-way delay: 113.689 ms
  Loss rate: 1.85%
-- Flow 1:
  Average throughput: 7.06 Mbit/s
  95th percentile per-packet one-way delay: 113.662 ms
  Loss rate: 1.51%
-- Flow 2:
  Average throughput: 4.74 Mbit/s
  95th percentile per-packet one-way delay: 113.746 ms
  Loss rate: 2.21%
-- Flow 3:
  Average throughput: 0.81 Mbit/s
  95th percentile per-packet one-way delay: 113.415 ms
  Loss rate: 6.32%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

End at: 2018-03-13 22:28:21

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 113.152 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 113.092 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 113.193 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 2.25 Mbit/s
95th percentile per-packet one-way delay: 112.904 ms
Loss rate: 4.54%
Run 7: Report of LEDBAT — Data Link

[Graph showing throughput and packet delay data for different flows over time]
Run 8: Statistics of LEDBAT

Start at: 2018-03-13 22:47:18
End at: 2018-03-13 22:47:48

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.89 Mbit/s
  95th percentile per-packet one-way delay: 112.887 ms
  Loss rate: 1.93%
-- Flow 1:
  Average throughput: 7.13 Mbit/s
  95th percentile per-packet one-way delay: 112.917 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.58 Mbit/s
  95th percentile per-packet one-way delay: 112.761 ms
  Loss rate: 2.27%
-- Flow 3:
  Average throughput: 2.26 Mbit/s
  95th percentile per-packet one-way delay: 112.846 ms
  Loss rate: 4.54%
Run 8: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.19 Mbps)
- Flow 1 egress (mean 7.13 Mbps)
- Flow 2 ingress (mean 4.64 Mbps)
- Flow 2 egress (mean 4.58 Mbps)
- Flow 3 ingress (mean 2.32 Mbps)
- Flow 3 egress (mean 2.26 Mbps)

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

- Flow 1 (95th percentile 112.92 ms)
- Flow 2 (95th percentile 112.76 ms)
- Flow 3 (95th percentile 112.85 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-03-13 23:06:23
End at: 2018-03-13 23:06:53

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.06 Mbit/s
95th percentile per-packet one-way delay: 111.290 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 111.340 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 111.081 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 111.253 ms
Loss rate: 4.71%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-03-13 23:26:02
End at: 2018-03-13 23:26:32

# Below is generated by plot.py at 2018-03-14 03:15:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.56 Mbit/s
95th percentile per-packet one-way delay: 111.247 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 111.227 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 4.70 Mbit/s
95th percentile per-packet one-way delay: 111.326 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 111.085 ms
Loss rate: 4.74%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Start at: 2018-03-13 20:35:08
End at: 2018-03-13 20:35:38

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 559.89 Mbit/s
95th percentile per-packet one-way delay: 210.299 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 514.82 Mbit/s
95th percentile per-packet one-way delay: 210.453 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 66.05 Mbit/s
95th percentile per-packet one-way delay: 207.769 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 201.136 ms
Loss rate: 2.97%
Run 1: Report of PCC — Data Link

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

**Graph 1:**
- **Y-axis:** Throughput (Mb/s)
- **X-axis:** Time (s)
- Lines represent:
  - Flow 1 Ingress (mean 520.24 Mb/s)
  - Flow 1 Egress (mean 514.82 Mb/s)
  - Flow 2 Ingress (mean 66.40 Mb/s)
  - Flow 2 Egress (mean 66.05 Mb/s)
  - Flow 3 Ingress (mean 4.35 Mb/s)
  - Flow 3 Egress (mean 4.32 Mb/s)

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

**Graph 2:**
- **Y-axis:** Packet delay (ms)
- **X-axis:** Time (s)
- Lines represent:
  - Flow 1 (95th percentile 210.45 ms)
  - Flow 2 (95th percentile 207.77 ms)
  - Flow 3 (95th percentile 201.14 ms)
Run 2: Statistics of PCC

Start at: 2018-03-13 20:54:41
End at: 2018-03-13 20:55:11

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 538.90 Mbit/s
  95th percentile per-packet one-way delay: 225.356 ms
  Loss rate: 2.11%
-- Flow 1:
  Average throughput: 476.56 Mbit/s
  95th percentile per-packet one-way delay: 227.912 ms
  Loss rate: 2.17%
-- Flow 2:
  Average throughput: 63.73 Mbit/s
  95th percentile per-packet one-way delay: 209.953 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 62.29 Mbit/s
  95th percentile per-packet one-way delay: 198.591 ms
  Loss rate: 2.41%
Run 2: Report of PCC — Data Link

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

- Flow 1 Ingress (mean 483.45 Mb/s)
- Flow 1 Egress (mean 476.56 Mb/s)
- Flow 2 Ingress (mean 63.79 Mb/s)
- Flow 2 Egress (mean 63.73 Mb/s)
- Flow 3 Ingress (mean 62.36 Mb/s)
- Flow 3 Egress (mean 62.29 Mb/s)
Run 3: Statistics of PCC

Start at: 2018-03-13 21:14:20
End at: 2018-03-13 21:14:50

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 552.65 Mbit/s
95th percentile per-packet one-way delay: 224.930 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 499.95 Mbit/s
95th percentile per-packet one-way delay: 226.756 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: 222.439 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 218.233 ms
Loss rate: 2.41%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-03-13 21:33:49
End at: 2018-03-13 21:34:19

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 539.84 Mbit/s
  95th percentile per-packet one-way delay: 215.404 ms
  Loss rate: 1.66%
-- Flow 1:
  Average throughput: 506.62 Mbit/s
  95th percentile per-packet one-way delay: 214.988 ms
  Loss rate: 1.64%
-- Flow 2:
  Average throughput: 18.05 Mbit/s
  95th percentile per-packet one-way delay: 212.079 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 65.90 Mbit/s
  95th percentile per-packet one-way delay: 218.476 ms
  Loss rate: 2.43%
Run 4: Report of PCC — Data Link

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

Flow 1 Ingress (mean 511.17 Mbit/s)  Flow 1 Egress (mean 506.62 Mbit/s)
Flow 2 Ingress (mean 18.07 Mbit/s)  Flow 2 Egress (mean 18.05 Mbit/s)
Flow 3 Ingress (mean 65.99 Mbit/s)  Flow 3 Egress (mean 65.90 Mbit/s)
Run 5: Statistics of PCC

Start at: 2018-03-13 21:53:26
End at: 2018-03-13 21:53:56

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 503.36 Mbit/s
  95th percentile per-packet one-way delay: 214.551 ms
  Loss rate: 1.43%
  -- Flow 1:
  Average throughput: 460.61 Mbit/s
  95th percentile per-packet one-way delay: 216.014 ms
  Loss rate: 1.44%
  -- Flow 2:
  Average throughput: 62.45 Mbit/s
  95th percentile per-packet one-way delay: 210.202 ms
  Loss rate: 1.24%
  -- Flow 3:
  Average throughput: 4.39 Mbit/s
  95th percentile per-packet one-way delay: 141.630 ms
  Loss rate: 2.22%
Run 5: Report of PCC — Data Link

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

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

Legend:
- **Flow 1 Ingress (mean 463.86 Mbps)**
- **Flow 1 Egress (mean 460.61 Mbps)**
- **Flow 2 Ingress (mean 62.52 Mbps)**
- **Flow 2 Egress (mean 62.45 Mbps)**
- **Flow 3 Ingress (mean 4.39 Mbps)**
- **Flow 3 Egress (mean 4.39 Mbps)**

- **Flow 1 (95th percentile 216.01 ms)**
- **Flow 2 (95th percentile 210.20 ms)**
- **Flow 3 (95th percentile 141.63 ms)**
Run 6: Statistics of PCC

Start at: 2018-03-13 22:12:24
End at: 2018-03-13 22:12:54

# Below is generated by plot.py at 2018-03-14 03:24:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.21 Mbit/s
95th percentile per-packet one-way delay: 172.963 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 350.03 Mbit/s
95th percentile per-packet one-way delay: 171.619 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 82.48 Mbit/s
95th percentile per-packet one-way delay: 174.493 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 32.76 Mbit/s
95th percentile per-packet one-way delay: 175.284 ms
Loss rate: 2.47%
Run 6: Report of PCC — Data Link

![Graph of data link throughput and per-packet one-way delay for flows 1, 2, and 3, showing mean rates and 95th percentiles.](image-url)
Run 7: Statistics of PCC

End at: 2018-03-13 22:31:52

# Below is generated by plot.py at 2018-03-14 03:24:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 512.58 Mbit/s
  95th percentile per-packet one-way delay: 181.376 ms
  Loss rate: 1.68%
-- Flow 1:
  Average throughput: 479.86 Mbit/s
  95th percentile per-packet one-way delay: 181.565 ms
  Loss rate: 1.69%
-- Flow 2:
  Average throughput: 33.27 Mbit/s
  95th percentile per-packet one-way delay: 176.578 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 33.03 Mbit/s
  95th percentile per-packet one-way delay: 179.565 ms
  Loss rate: 2.40%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-03-13 22:50:49  
End at: 2018-03-13 22:51:19  

# Below is generated by plot.py at 2018-03-14 03:24:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 524.03 Mbit/s  
95th percentile per-packet one-way delay: 233.929 ms  
Loss rate: 2.52%  

-- Flow 1:  
Average throughput: 468.10 Mbit/s  
95th percentile per-packet one-way delay: 235.397 ms  
Loss rate: 2.51%  

-- Flow 2:  
Average throughput: 69.15 Mbit/s  
95th percentile per-packet one-way delay: 230.051 ms  
Loss rate: 2.60%  

-- Flow 3:  
Average throughput: 31.71 Mbit/s  
95th percentile per-packet one-way delay: 193.741 ms  
Loss rate: 2.46%
Run 8: Report of PCC — Data Link

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

![Graph 2: Packet delay (ms)](image2)
Run 9: Statistics of PCC

Start at: 2018-03-13 23:09:52
End at: 2018-03-13 23:10:22

# Below is generated by plot.py at 2018-03-14 03:31:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.11 Mbit/s
95th percentile per-packet one-way delay: 182.484 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 475.26 Mbit/s
95th percentile per-packet one-way delay: 182.904 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 34.00 Mbit/s
95th percentile per-packet one-way delay: 177.995 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 148.624 ms
Loss rate: 2.20%
Run 9: Report of PCC — Data Link

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

Legend:
- Flow 1 Ingress (mean 478.77 Mbit/s)
- Flow 1 Egress (mean 475.26 Mbit/s)
- Flow 2 Ingress (mean 34.07 Mbit/s)
- Flow 2 Egress (mean 34.00 Mbit/s)
- Flow 3 Ingress (mean 4.30 Mbit/s)
- Flow 3 Egress (mean 4.30 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 182.90 ms)
- Flow 2 (95th percentile 178.00 ms)
- Flow 3 (95th percentile 149.62 ms)

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Run 10: Statistics of PCC

Start at: 2018-03-13 23:29:30
End at: 2018-03-13 23:30:00

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 494.99 Mbit/s
  95th percentile per-packet one-way delay: 157.395 ms
  Loss rate: 1.59%
-- Flow 1:
  Average throughput: 489.47 Mbit/s
  95th percentile per-packet one-way delay: 157.806 ms
  Loss rate: 1.59%
-- Flow 2:
  Average throughput: 4.28 Mbit/s
  95th percentile per-packet one-way delay: 148.449 ms
  Loss rate: 1.11%
-- Flow 3:
  Average throughput: 8.42 Mbit/s
  95th percentile per-packet one-way delay: 140.316 ms
  Loss rate: 2.29%
Run 10: Report of PCC — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-13 20:38:50
End at: 2018-03-13 20:39:20

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.99 Mbit/s
95th percentile per-packet one-way delay: 114.851 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 54.38 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 48.84 Mbit/s
95th percentile per-packet one-way delay: 114.927 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 112.758 ms
Loss rate: 2.66%
Run 1: Report of QUIC Cubic — Data Link

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**Throughput (Mbps) vs. Time (s)**

- **Flow 1 Ingress** (mean 54.46 Mbps)
- **Flow 1 Egress** (mean 54.38 Mbps)
- **Flow 2 Ingress** (mean 49.06 Mbps)
- **Flow 2 Egress** (mean 48.84 Mbps)
- **Flow 3 Ingress** (mean 59.79 Mbps)
- **Flow 3 Egress** (mean 59.55 Mbps)

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

- **Flow 1 (95th percentile 112.28 ms)**
- **Flow 2 (95th percentile 114.93 ms)**
- **Flow 3 (95th percentile 112.76 ms)**
Run 2: Statistics of QUIC Cubic

Start at: 2018-03-13 20:58:21
End at: 2018-03-13 20:58:51

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 115.80 Mbit/s
  95th percentile per-packet one-way delay: 115.035 ms
  Loss rate: 1.44%
-- Flow 1:
  Average throughput: 68.62 Mbit/s
  95th percentile per-packet one-way delay: 112.818 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 53.34 Mbit/s
  95th percentile per-packet one-way delay: 113.104 ms
  Loss rate: 1.60%
-- Flow 3:
  Average throughput: 36.70 Mbit/s
  95th percentile per-packet one-way delay: 115.143 ms
  Loss rate: 3.54%
Run 2: Report of QUIC Cubic — Data Link

![Graph showing throughput over time for different flows and their ingress and egress rates, along with per-packet one-way delay graphs for each flow.](image-url)
Run 3: Statistics of QUIC Cubic

Start at: 2018-03-13 21:17:51
End at: 2018-03-13 21:18:21

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.39 Mbit/s
95th percentile per-packet one-way delay: 113.838 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 59.63 Mbit/s
95th percentile per-packet one-way delay: 113.870 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 58.73 Mbit/s
95th percentile per-packet one-way delay: 108.888 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 112.518 ms
Loss rate: 0.51%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-03-13 21:37:26
End at: 2018-03-13 21:37:56

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 114.00 Mbit/s
  95th percentile per-packet one-way delay: 112.842 ms
  Loss rate: 1.37%
-- Flow 1:
  Average throughput: 57.94 Mbit/s
  95th percentile per-packet one-way delay: 112.604 ms
  Loss rate: 1.06%
-- Flow 2:
  Average throughput: 58.08 Mbit/s
  95th percentile per-packet one-way delay: 112.889 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 54.54 Mbit/s
  95th percentile per-packet one-way delay: 112.561 ms
  Loss rate: 2.72%
Run 4: Report of QUIC Cubic — Data Link

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

- Blue dashed: Flow 1 ingress (mean 58.13 Mbit/s)
- Blue solid: Flow 1 egress (mean 57.94 Mbit/s)
- Green dashed: Flow 2 ingress (mean 58.15 Mbit/s)
- Green solid: Flow 2 egress (mean 58.08 Mbit/s)
- Red dashed: Flow 3 ingress (mean 54.76 Mbit/s)
- Red solid: Flow 3 egress (mean 54.54 Mbit/s)

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

- Blue: Flow 1 (95th percentile 112.60 ms)
- Green: Flow 2 (95th percentile 112.89 ms)
- Red: Flow 3 (95th percentile 112.56 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-03-13 21:56:59
End at: 2018-03-13 21:57:29

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 108.25 Mbit/s
  95th percentile per-packet one-way delay: 111.646 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 53.39 Mbit/s
  95th percentile per-packet one-way delay: 114.025 ms
  Loss rate: 0.89%
-- Flow 2:
  Average throughput: 56.64 Mbit/s
  95th percentile per-packet one-way delay: 110.968 ms
  Loss rate: 1.33%
-- Flow 3:
  Average throughput: 53.57 Mbit/s
  95th percentile per-packet one-way delay: 110.573 ms
  Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

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

- **Flow 1** ingress (mean 53.46 Mbit/s)
- **Flow 1** egress (mean 53.39 Mbit/s)
- **Flow 2** ingress (mean 56.76 Mbit/s)
- **Flow 2** egress (mean 56.64 Mbit/s)
- **Flow 3** ingress (mean 52.69 Mbit/s)
- **Flow 3** egress (mean 53.57 Mbit/s)
Run 6: Statistics of QUIC Cubic

Start at: 2018-03-13 22:15:51
End at: 2018-03-13 22:16:21

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
  -- Total of 3 flows:
    Average throughput: 112.31 Mbit/s
    95th percentile per-packet one-way delay: 112.105 ms
    Loss rate: 1.23%
  -- Flow 1:
    Average throughput: 66.61 Mbit/s
    95th percentile per-packet one-way delay: 112.092 ms
    Loss rate: 1.02%
  -- Flow 2:
    Average throughput: 37.50 Mbit/s
    95th percentile per-packet one-way delay: 111.348 ms
    Loss rate: 2.12%
  -- Flow 3:
    Average throughput: 64.45 Mbit/s
    95th percentile per-packet one-way delay: 112.155 ms
    Loss rate: 0.82%
Run 6: Report of QUIC Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 65.79 Mbit/s)
Flow 1 egress (mean 66.61 Mbit/s)
Flow 2 ingress (mean 37.89 Mbit/s)
Flow 2 egress (mean 37.50 Mbit/s)
Flow 3 ingress (mean 63.52 Mbit/s)
Flow 3 egress (mean 64.45 Mbit/s)

One-way delay (ms) vs Time (s)

Flow 1 (95th percentile 112.09 ms)
Flow 2 (95th percentile 111.35 ms)
Flow 3 (95th percentile 112.16 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-03-13 22:34:57
End at: 2018-03-13 22:35:27

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 108.01 Mbit/s
95th percentile per-packet one-way delay: 111.849 ms
 Loss rate: 1.21%
-- Flow 1:
 Average throughput: 58.31 Mbit/s
95th percentile per-packet one-way delay: 111.888 ms
 Loss rate: 0.77%
-- Flow 2:
 Average throughput: 44.79 Mbit/s
95th percentile per-packet one-way delay: 110.893 ms
 Loss rate: 1.91%
-- Flow 3:
 Average throughput: 61.79 Mbit/s
95th percentile per-packet one-way delay: 111.685 ms
 Loss rate: 1.44%
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 58.33 Mbps/s)
- Flow 1 egress (mean 58.31 Mbps/s)
- Flow 2 ingress (mean 45.15 Mbps/s)
- Flow 2 egress (mean 44.79 Mbps/s)
- Flow 3 ingress (mean 61.83 Mbps/s)
- Flow 3 egress (mean 61.79 Mbps/s)

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

- Flow 1 (95th percentile 111.89 ms)
- Flow 2 (95th percentile 110.89 ms)
- Flow 3 (95th percentile 111.69 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-03-13 22:54:26
End at: 2018-03-13 22:54:56

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 110.71 Mbit/s
  95th percentile per-packet one-way delay: 112.475 ms
  Loss rate: 1.49%
-- Flow 1:
  Average throughput: 56.72 Mbit/s
  95th percentile per-packet one-way delay: 112.366 ms
  Loss rate: 1.17%
-- Flow 2:
  Average throughput: 59.28 Mbit/s
  95th percentile per-packet one-way delay: 112.179 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 45.52 Mbit/s
  95th percentile per-packet one-way delay: 112.818 ms
  Loss rate: 3.61%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic


# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.46 Mbit/s
  95th percentile per-packet one-way delay: 112.841 ms
  Loss rate: 1.00%
-- Flow 1:
  Average throughput: 32.94 Mbit/s
  95th percentile per-packet one-way delay: 112.897 ms
  Loss rate: 0.73%
-- Flow 2:
  Average throughput: 61.92 Mbit/s
  95th percentile per-packet one-way delay: 112.652 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 44.83 Mbit/s
  95th percentile per-packet one-way delay: 112.347 ms
  Loss rate: 3.81%
Run 9: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 32.94 Mbps)
- Flow 1 egress (mean 32.94 Mbps)
- Flow 2 ingress (mean 61.35 Mbps)
- Flow 2 egress (mean 61.92 Mbps)
- Flow 3 ingress (mean 45.54 Mbps)
- Flow 3 egress (mean 44.63 Mbps)

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

Per-packet one-way delay (ms)

Time (s)

- Flow 1 (95th percentile 112.90 ms)
- Flow 2 (95th percentile 112.65 ms)
- Flow 3 (95th percentile 112.35 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-13 23:32:56
End at: 2018-03-13 23:33:26

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.33 Mbit/s
95th percentile per-packet one-way delay: 112.726 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 65.32 Mbit/s
95th percentile per-packet one-way delay: 111.380 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 51.40 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.28 Mbit/s
95th percentile per-packet one-way delay: 111.593 ms
Loss rate: 1.55%
Run 10: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps)**
- **Time (s)**
- Flow 1 ingress (mean 65.32 Mbps), Flow 1 egress (mean 65.32 Mbps), Flow 2 ingress (mean 50.78 Mbps), Flow 2 egress (mean 51.40 Mbps), Flow 3 ingress (mean 34.04 Mbps), Flow 3 egress (mean 34.28 Mbps)

![Graph of packet round-trip delay in milliseconds over time for different flows.]

- **Per packet one-way delay (ms)**
- **Time (s)**
- Flow 1 (95th percentile 111.38 ms), Flow 2 (95th percentile 112.78 ms), Flow 3 (95th percentile 111.59 ms)
Run 1: Statistics of SCReAM

Start at: 2018-03-13 20:40:41
End at: 2018-03-13 20:41:11

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.049 ms
  Loss rate: 1.12%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.120 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.006 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.146 ms
  Loss rate: 2.25%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-03-13 21:00:13
End at: 2018-03-13 21:00:43

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.808 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.833 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.245 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.911 ms
Loss rate: 2.24%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-03-13 21:19:42
End at: 2018-03-13 21:20:12

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 113.064 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.082 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.880 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.729 ms
  Loss rate: 2.25%
Run 3: Report of SCReAM — Data Link

Graph 1: Throughput (Mb/s) over time (s)

Graph 2: Packet delay (ms) over time (s)

Legend:
- Flow 1 ingress (mean 0.22 Mb/s)
- Flow 1 egress (mean 0.22 Mb/s)
- Flow 2 ingress (mean 0.21 Mb/s)
- Flow 2 egress (mean 0.21 Mb/s)
- Flow 3 ingress (mean 0.22 Mb/s)
- Flow 3 egress (mean 0.22 Mb/s)
Run 4: Statistics of SCReAM

End at: 2018-03-13 21:39:47

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.607 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.824 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.663 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.765 ms
Loss rate: 2.26%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-03-13 21:58:49
End at: 2018-03-13 21:59:19

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 113.005 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.826 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.980 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.046 ms
  Loss rate: 2.26%
Run 6: Statistics of SCReAM

Start at: 2018-03-13 22:17:42
End at: 2018-03-13 22:18:12

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.147 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.079 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.062 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.205 ms
Loss rate: 2.23%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-03-13 22:36:47
End at: 2018-03-13 22:37:17

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 111.976 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.633 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.819 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.014 ms
  Loss rate: 2.26%
Run 7: Report of SCReAM — Data Link

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

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

![Diagram 2: Packet one-way delay]
Run 8: Statistics of SCReAM

Start at: 2018-03-13 22:56:17
End at: 2018-03-13 22:56:47

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.377 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.392 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.421 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.381 ms
Loss rate: 1.87%
Run 8: Report of SCReAM — Data Link

[Graph showing throughput trends over time for different data flows, with markers indicating 95th percentile delays.

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

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

Percentile one-way delay (ms):
- Flow 1 (95th percentile 112.39 ms)
- Flow 2 (95th percentile 111.42 ms)
- Flow 3 (95th percentile 112.38 ms)
Run 9: Statistics of SCReAM

Start at: 2018-03-13 23:15:17
End at: 2018-03-13 23:15:47

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.43 Mbit/s
   95th percentile per-packet one-way delay: 111.339 ms
   Loss rate: 1.05%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 111.367 ms
   Loss rate: 0.64%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 110.683 ms
   Loss rate: 1.05%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 111.071 ms
   Loss rate: 2.26%
Run 9: Report of SCReAM — Data Link

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

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

- **Packet time delay (ms)**
  - Flow 1 (95th percentile 111.37 ms)
  - Flow 2 (95th percentile 110.68 ms)
  - Flow 3 (95th percentile 111.07 ms)
Run 10: Statistics of SCReAM

Start at: 2018-03-13 23:34:47
End at: 2018-03-13 23:35:17

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.984 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.998 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.605 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.577 ms
  Loss rate: 2.25%
Run 10: Report of SCReAM — Data Link

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

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

- **Packet delay (ms):**
  - Flow 1 (95th percentile 113.00 ms)
  - Flow 2 (95th percentile 112.61 ms)
  - Flow 3 (95th percentile 112.58 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-03-13 20:33:35
End at: 2018-03-13 20:34:05

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.86 Mbit/s
  95th percentile per-packet one-way delay: 115.090 ms
  Loss rate: 1.59%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 115.121 ms
  Loss rate: 0.97%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 113.204 ms
  Loss rate: 1.79%
-- Flow 3:
  Average throughput: 0.48 Mbit/s
  95th percentile per-packet one-way delay: 112.494 ms
  Loss rate: 3.78%
Run 1: Report of WebRTC media — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 2.11 Mbps)
  - Flow 1 egress (mean 2.10 Mbps)
  - Flow 2 ingress (mean 1.33 Mbps)
  - Flow 2 egress (mean 1.31 Mbps)
  - Flow 3 ingress (mean 0.49 Mbps)
  - Flow 3 egress (mean 0.48 Mbps)

- **Packet delay (ms)**
  - Flow 1 (95th percentile 115.12 ms)
  - Flow 2 (95th percentile 113.20 ms)
  - Flow 3 (95th percentile 112.49 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-03-13 20:53:08
End at: 2018-03-13 20:53:38

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.85 Mbit/s
  95th percentile per-packet one-way delay: 112.827 ms
  Loss rate: 1.55%
  -- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 112.855 ms
  Loss rate: 1.00%
  -- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 110.892 ms
  Loss rate: 1.72%
  -- Flow 3:
  Average throughput: 0.48 Mbit/s
  95th percentile per-packet one-way delay: 111.819 ms
  Loss rate: 3.52%
Run 2: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.11 Mbit/s)
- Flow 1 egress (mean 2.10 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.30 Mbit/s)
- Flow 3 ingress (mean 0.49 Mbit/s)
- Flow 3 egress (mean 0.48 Mbit/s)
Run 3: Statistics of WebRTC media

Start at: 2018-03-13 21:12:47
End at: 2018-03-13 21:13:17

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 113.021 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 110.738 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 113.079 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 112.455 ms
Loss rate: 3.50%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-03-13 21:32:16
End at: 2018-03-13 21:32:46

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.85 Mbit/s
  95th percentile per-packet one-way delay: 112.689 ms
  Loss rate: 1.39%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 111.624 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 112.803 ms
  Loss rate: 1.40%
-- Flow 3:
  Average throughput: 0.47 Mbit/s
  95th percentile per-packet one-way delay: 110.841 ms
  Loss rate: 3.69%
Run 4: Report of WebRTC media — Data Link

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

![Graph 2: Delay vs Time](image2)
Run 5: Statistics of WebRTC media

Start at: 2018-03-13 21:51:53
End at: 2018-03-13 21:52:23

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.85 Mbit/s
  95th percentile per-packet one-way delay: 113.044 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 113.071 ms
  Loss rate: 1.01%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 112.693 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 0.48 Mbit/s
  95th percentile per-packet one-way delay: 111.585 ms
  Loss rate: 3.59%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-03-13 22:10:51
End at: 2018-03-13 22:11:21

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.89 Mbit/s
  95th percentile per-packet one-way delay: 113.077 ms
  Loss rate: 1.37%
-- Flow 1:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: 110.880 ms
  Loss rate: 0.97%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 113.123 ms
  Loss rate: 1.23%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 112.910 ms
  Loss rate: 3.53%
Run 7: Statistics of WebRTC media

Start at: 2018-03-13 22:29:49
End at: 2018-03-13 22:30:19

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
--- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 113.099 ms
Loss rate: 1.40%
--- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 110.842 ms
Loss rate: 0.85%
--- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 112.980 ms
Loss rate: 1.72%
--- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 113.248 ms
Loss rate: 2.94%
Run 7: Report of WebRTC media — Data Link

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

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

Legend:
- Flow 1 ingress (mean 2.11 Mbit/s)
- Flow 1 egress (mean 2.11 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.30 Mbit/s)
- Flow 3 ingress (mean 0.50 Mbit/s)
- Flow 3 egress (mean 0.48 Mbit/s)

Legend for packet delay:
- Flow 1 (95th percentile 110.84 ms)
- Flow 2 (95th percentile 112.98 ms)
- Flow 3 (95th percentile 113.25 ms)
Run 8: Statistics of WebRTC media

End at: 2018-03-13 22:49:46

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.86 Mbit/s
  95th percentile per-packet one-way delay: 112.582 ms
  Loss rate: 1.40%
-- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 112.611 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 111.736 ms
  Loss rate: 1.57%
-- Flow 3:
  Average throughput: 0.48 Mbit/s
  95th percentile per-packet one-way delay: 110.698 ms
  Loss rate: 2.96%
Run 8: Report of WebRTC media — Data Link

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

Legend:
- Flow 1 ingress (mean 2.11 Mbit/s)
- Flow 1 egress (mean 2.11 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.31 Mbit/s)
- Flow 3 ingress (mean 0.49 Mbit/s)
- Flow 3 egress (mean 0.48 Mbit/s)

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 112.61 ms)
- Flow 2 (95th percentile 111.74 ms)
- Flow 3 (95th percentile 110.70 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-03-13 23:08:19
End at: 2018-03-13 23:08:49

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 112.412 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 111.143 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 112.467 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 110.922 ms
Loss rate: 3.52%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

End at: 2018-03-13 23:28:27

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.88 Mbit/s
  95th percentile per-packet one-way delay: 113.051 ms
  Loss rate: 1.60%
-- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 112.890 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 113.101 ms
  Loss rate: 1.67%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 110.892 ms
  Loss rate: 3.99%
Run 1: Statistics of Sprout

Start at: 2018-03-13 20:34:21
End at: 2018-03-13 20:34:51

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.60 Mbit/s
  95th percentile per-packet one-way delay: 112.506 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 3.06 Mbit/s
  95th percentile per-packet one-way delay: 112.378 ms
  Loss rate: 1.05%
-- Flow 2:
  Average throughput: 2.95 Mbit/s
  95th percentile per-packet one-way delay: 112.997 ms
  Loss rate: 1.65%
-- Flow 3:
  Average throughput: 1.82 Mbit/s
  95th percentile per-packet one-way delay: 112.296 ms
  Loss rate: 3.84%
Run 1: Report of Sprout — Data Link

![Graph of Throughput (Mbps)](image1)

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

Start at: 2018-03-13 20:53:55
End at: 2018-03-13 20:54:25

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.63 Mbit/s
  95th percentile per-packet one-way delay: 112.832 ms
  Loss rate: 1.44%
-- Flow 1:
  Average throughput: 2.37 Mbit/s
  95th percentile per-packet one-way delay: 112.571 ms
  Loss rate: 0.68%
-- Flow 2:
  Average throughput: 2.31 Mbit/s
  95th percentile per-packet one-way delay: 114.943 ms
  Loss rate: 1.75%
-- Flow 3:
  Average throughput: 2.26 Mbit/s
  95th percentile per-packet one-way delay: 112.483 ms
  Loss rate: 3.19%
Run 2: Report of Sprout — Data Link

**Throughput (Mbps):**
- Flow 1 ingress (mean 2.37 Mbps)
- Flow 1 egress (mean 2.37 Mbps)
- Flow 2 ingress (mean 2.33 Mbps)
- Flow 2 egress (mean 2.31 Mbps)
- Flow 3 ingress (mean 2.28 Mbps)
- Flow 3 egress (mean 2.26 Mbps)

**Packet one-way delay (ms):**
- Flow 1 (95th percentile 112.57 ms)
- Flow 2 (95th percentile 114.94 ms)
- Flow 3 (95th percentile 112.40 ms)
Run 3: Statistics of Sprout

End at: 2018-03-13 21:14:03

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 110.818 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 110.762 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 110.872 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 110.445 ms
Loss rate: 3.42%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-03-13 21:33:03
End at: 2018-03-13 21:33:33

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.86 Mbit/s
  95th percentile per-packet one-way delay: 110.926 ms
  Loss rate: 1.45%
-- Flow 1:
  Average throughput: 2.65 Mbit/s
  95th percentile per-packet one-way delay: 110.855 ms
  Loss rate: 1.21%
-- Flow 2:
  Average throughput: 2.43 Mbit/s
  95th percentile per-packet one-way delay: 111.208 ms
  Loss rate: 1.84%
-- Flow 3:
  Average throughput: 1.87 Mbit/s
  95th percentile per-packet one-way delay: 111.461 ms
  Loss rate: 1.45%
Run 4: Report of Sprout — Data Link

![Graph of throughput and packet delay over time]

- **Flow 1 ingress (mean 2.66 Mbit/s)**
- **Flow 1 egress (mean 2.65 Mbit/s)**
- **Flow 2 ingress (mean 2.45 Mbit/s)**
- **Flow 2 egress (mean 2.43 Mbit/s)**
- **Flow 3 ingress (mean 1.85 Mbit/s)**
- **Flow 3 egress (mean 1.87 Mbit/s)**

![Graph of packet delay over time]

- Flow 1 (95th percentile 110.86 ms)
- Flow 2 (95th percentile 111.21 ms)
- Flow 3 (95th percentile 111.46 ms)
Run 5: Statistics of Sprout

Start at: 2018-03-13 21:52:39
End at: 2018-03-13 21:53:09

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.81 Mbit/s
  95th percentile per-packet one-way delay: 112.821 ms
  Loss rate: 1.76%
-- Flow 1:
  Average throughput: 2.56 Mbit/s
  95th percentile per-packet one-way delay: 112.980 ms
  Loss rate: 1.35%
-- Flow 2:
  Average throughput: 2.50 Mbit/s
  95th percentile per-packet one-way delay: 112.304 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 1.84 Mbit/s
  95th percentile per-packet one-way delay: 111.874 ms
  Loss rate: 4.86%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-03-13 22:11:37
End at: 2018-03-13 22:12:07

# Below is generated by plot.py at 2018-03-14 03:32:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.21 Mbit/s
  95th percentile per-packet one-way delay: 113.571 ms
  Loss rate: 1.39%
-- Flow 1:
  Average throughput: 2.54 Mbit/s
  95th percentile per-packet one-way delay: 113.659 ms
  Loss rate: 0.97%
-- Flow 2:
  Average throughput: 1.65 Mbit/s
  95th percentile per-packet one-way delay: 113.398 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 1.77 Mbit/s
  95th percentile per-packet one-way delay: 113.395 ms
  Loss rate: 3.96%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-03-13 22:30:36
End at: 2018-03-13 22:31:06

# Below is generated by plot.py at 2018-03-14 03:32:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.55 Mbit/s
  95th percentile per-packet one-way delay: 113.081 ms
  Loss rate: 1.45%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 113.035 ms
  Loss rate: 1.52%
-- Flow 2:
  Average throughput: 2.90 Mbit/s
  95th percentile per-packet one-way delay: 113.144 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 1.62 Mbit/s
  95th percentile per-packet one-way delay: 112.847 ms
  Loss rate: 2.09%
Run 8: Statistics of Sprout

Start at: 2018-03-13 22:50:03
End at: 2018-03-13 22:50:33

# Below is generated by plot.py at 2018-03-14 03:32:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.88 Mbit/s
  95th percentile per-packet one-way delay: 113.018 ms
  Loss rate: 1.71%
-- Flow 1:
  Average throughput: 2.42 Mbit/s
  95th percentile per-packet one-way delay: 113.051 ms
  Loss rate: 1.36%
-- Flow 2:
  Average throughput: 2.68 Mbit/s
  95th percentile per-packet one-way delay: 113.012 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 2.13 Mbit/s
  95th percentile per-packet one-way delay: 112.945 ms
  Loss rate: 2.95%
Run 8: Report of Sprout — Data Link

[Graphs showing throughput and packet latency over time for different flows.]
Run 9: Statistics of Sprout

Start at: 2018-03-13 23:09:06
End at: 2018-03-13 23:09:36

# Below is generated by plot.py at 2018-03-14 03:32:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.01 Mbit/s
  95th percentile per-packet one-way delay: 111.432 ms
  Loss rate: 1.30%
-- Flow 1:
  Average throughput: 2.93 Mbit/s
  95th percentile per-packet one-way delay: 111.283 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 2.35 Mbit/s
  95th percentile per-packet one-way delay: 112.353 ms
  Loss rate: 2.05%
-- Flow 3:
  Average throughput: 1.61 Mbit/s
  95th percentile per-packet one-way delay: 111.641 ms
  Loss rate: 2.53%
Run 9: Report of Sprout — Data Link

![Throughput Time Graph](image1)

- Flow 1 ingress (mean 2.93 Mbit/s)
- Flow 1 egress (mean 2.93 Mbit/s)
- Flow 2 ingress (mean 2.37 Mbit/s)
- Flow 2 egress (mean 2.35 Mbit/s)
- Flow 3 ingress (mean 1.61 Mbit/s)
- Flow 3 egress (mean 1.61 Mbit/s)

![Delay Time Graph](image2)

- Flow 1 (95th percentile 111.28 ms)
- Flow 2 (95th percentile 112.35 ms)
- Flow 3 (95th percentile 111.64 ms)
Run 10: Statistics of Sprout


# Below is generated by plot.py at 2018-03-14 03:32:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 111.978 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 112.963 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 2.24 Mbit/s
95th percentile per-packet one-way delay: 111.549 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 111.661 ms
Loss rate: 2.21%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-13 20:43:49
End at: 2018-03-13 20:44:19

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.92 Mbit/s
95th percentile per-packet one-way delay: 113.466 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 193.04 Mbit/s
95th percentile per-packet one-way delay: 113.214 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 203.47 Mbit/s
95th percentile per-packet one-way delay: 115.259 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 16.01 Mbit/s
95th percentile per-packet one-way delay: 112.650 ms
Loss rate: 2.29%
Run 1: Report of TaoVA-100x — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows with specified mean throughputs and 95th percentiles for delay.]
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-13 21:03:26
End at: 2018-03-13 21:03:56

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.76 Mbit/s
95th percentile per-packet one-way delay: 111.479 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 135.46 Mbit/s
95th percentile per-packet one-way delay: 110.730 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 206.98 Mbit/s
95th percentile per-packet one-way delay: 114.394 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 112.699 ms
Loss rate: 2.43%
Run 3: Statistics of TaoVA-100x


# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.17 Mbit/s
95th percentile per-packet one-way delay: 112.352 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 131.55 Mbit/s
95th percentile per-packet one-way delay: 111.599 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 112.718 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 112.839 ms
Loss rate: 1.27%
Run 3: Report of TaoVA-100x — Data Link

![Graph of Throughput and Delay](image)

**Throughput (Mbps):**
- Flow 1 ingress (mean 130.87 Mbps)
- Flow 1 egress (mean 131.55 Mbps)
- Flow 2 ingress (mean 13.49 Mbps)
- Flow 2 egress (mean 13.49 Mbps)
- Flow 3 ingress (mean 29.32 Mbps)
- Flow 3 egress (mean 29.62 Mbps)

**Delay (ms):**
- Flow 1 (95th percentile 111.60 ms)
- Flow 2 (95th percentile 112.72 ms)
- Flow 3 (95th percentile 112.84 ms)
Run 4: Statistics of TaoVA-100x

End at: 2018-03-13 21:43:06

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 246.18 Mbit/s
  95th percentile per-packet one-way delay: 112.134 ms
  Loss rate: 0.87%
  -- Flow 1:
  Average throughput: 122.20 Mbit/s
  95th percentile per-packet one-way delay: 112.070 ms
  Loss rate: 0.34%
  -- Flow 2:
  Average throughput: 168.43 Mbit/s
  95th percentile per-packet one-way delay: 113.220 ms
  Loss rate: 0.75%
  -- Flow 3:
  Average throughput: 38.30 Mbit/s
  95th percentile per-packet one-way delay: 112.353 ms
  Loss rate: 6.73%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 121.70 Mb/s)
Flow 1 egress (mean 122.20 Mb/s)
Flow 2 ingress (mean 167.89 Mb/s)
Flow 2 egress (mean 168.43 Mb/s)
Flow 3 ingress (mean 40.13 Mb/s)
Flow 3 egress (mean 38.30 Mb/s)

Packet in-flight delay (ms)

Time (s)

Flow 1 (95th percentile 112.07 ms)
Flow 2 (95th percentile 113.22 ms)
Flow 3 (95th percentile 112.35 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-13 22:01:56
End at: 2018-03-13 22:02:26

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.60 Mbit/s
  95th percentile per-packet one-way delay: 114.113 ms
  Loss rate: 3.00%
-- Flow 1:
  Average throughput: 45.82 Mbit/s
  95th percentile per-packet one-way delay: 113.110 ms
  Loss rate: 3.85%
-- Flow 2:
  Average throughput: 23.12 Mbit/s
  95th percentile per-packet one-way delay: 114.172 ms
  Loss rate: 0.81%
-- Flow 3:
  Average throughput: 38.12 Mbit/s
  95th percentile per-packet one-way delay: 113.070 ms
  Loss rate: 2.47%
Run 5: Report of TaoVA-100x — Data Link

[Graph showing throughput and packet round-trip time over time for different flows]
Run 6: Statistics of TaoVA-100x


# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 40.46 Mbit/s
  95th percentile per-packet one-way delay: 113.017 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 24.91 Mbit/s
  95th percentile per-packet one-way delay: 113.041 ms
  Loss rate: 0.49%
-- Flow 2:
  Average throughput: 15.84 Mbit/s
  95th percentile per-packet one-way delay: 112.939 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 15.44 Mbit/s
  95th percentile per-packet one-way delay: 112.953 ms
  Loss rate: 2.35%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-13 22:40:04
End at: 2018-03-13 22:40:34

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 196.25 Mbit/s
  95th percentile per-packet one-way delay: 114.102 ms
  Loss rate: 0.30%
-- Flow 1:
  Average throughput: 70.56 Mbit/s
  95th percentile per-packet one-way delay: 114.620 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 136.33 Mbit/s
  95th percentile per-packet one-way delay: 113.306 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 122.46 Mbit/s
  95th percentile per-packet one-way delay: 114.402 ms
  Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

End at: 2018-03-13 23:00:02

# Below is generated by plot.py at 2018-03-14 03:38:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 112.650 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 111.493 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 14.84 Mbit/s
95th percentile per-packet one-way delay: 112.747 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 112.421 ms
Loss rate: 0.46%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-13 23:18:32
End at: 2018-03-13 23:19:02

# Below is generated by plot.py at 2018-03-14 03:42:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.27 Mbit/s
95th percentile per-packet one-way delay: 115.877 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 203.55 Mbit/s
95th percentile per-packet one-way delay: 116.076 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 171.98 Mbit/s
95th percentile per-packet one-way delay: 115.808 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 26.50 Mbit/s
95th percentile per-packet one-way delay: 114.546 ms
Loss rate: 0.53%
Run 9: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 202.35 Mbit/s)
- Flow 1 egress (mean 203.55 Mbit/s)
- Flow 2 ingress (mean 172.94 Mbit/s)
- Flow 2 egress (mean 171.98 Mbit/s)
- Flow 3 ingress (mean 25.96 Mbit/s)
- Flow 3 egress (mean 26.50 Mbit/s)

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

- Flow 1 (95th percentile 116.08 ms)
- Flow 2 (95th percentile 115.81 ms)
- Flow 3 (95th percentile 114.55 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-13 23:38:02
End at: 2018-03-13 23:38:32

# Below is generated by plot.py at 2018-03-14 03:42:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.67 Mbit/s
  95th percentile per-packet one-way delay: 112.901 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 11.92 Mbit/s
  95th percentile per-packet one-way delay: 112.813 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 22.63 Mbit/s
  95th percentile per-packet one-way delay: 112.806 ms
  Loss rate: 2.71%
-- Flow 3:
  Average throughput: 97.26 Mbit/s
  95th percentile per-packet one-way delay: 113.647 ms
  Loss rate: 0.11%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-03-13 20:29:35
End at: 2018-03-13 20:30:05

# Below is generated by plot.py at 2018-03-14 03:42:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.51 Mbit/s
  95th percentile per-packet one-way delay: 113.383 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 54.90 Mbit/s
  95th percentile per-packet one-way delay: 112.319 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 29.51 Mbit/s
  95th percentile per-packet one-way delay: 118.090 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 30.86 Mbit/s
  95th percentile per-packet one-way delay: 114.779 ms
  Loss rate: 2.39%
Run 1: Report of TCP Vegas — Data Link

![Graph of throughput vs time for Flow 1, Flow 2, and Flow 3 showing their ingress and egress rates.]

![Graph of per-packet one-way delay vs time for Flow 1, Flow 2, and Flow 3 showing their 95th percentile delays.]

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Run 2: Statistics of TCP Vegas

Start at: 2018-03-13 20:49:11
End at: 2018-03-13 20:49:41

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.12 Mbit/s
  95th percentile per-packet one-way delay: 112.802 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 47.76 Mbit/s
  95th percentile per-packet one-way delay: 113.310 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 29.26 Mbit/s
  95th percentile per-packet one-way delay: 111.531 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 36.73 Mbit/s
  95th percentile per-packet one-way delay: 113.235 ms
  Loss rate: 2.54%
Run 2: Report of TCP Vegas — Data Link

*Graph 1: Throughput (Mbps)*

*Graph 2: Per-packet one-way delay (ms)*
Run 3: Statistics of TCP Vegas

Start at: 2018-03-13 21:08:51
End at: 2018-03-13 21:09:21

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.97 Mbit/s
95th percentile per-packet one-way delay: 112.743 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 32.02 Mbit/s
95th percentile per-packet one-way delay: 111.570 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 30.19 Mbit/s
95th percentile per-packet one-way delay: 113.487 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 114.145 ms
Loss rate: 2.49%
Run 3: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 32.05 Mbit/s)
- Flow 1 egress (mean 32.02 Mbit/s)
- Flow 2 ingress (mean 30.22 Mbit/s)
- Flow 2 egress (mean 30.19 Mbit/s)
- Flow 3 ingress (mean 36.82 Mbit/s)
- Flow 3 egress (mean 36.73 Mbit/s)
Run 4: Statistics of TCP Vegas

End at: 2018-03-13 21:28:47

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.15 Mbit/s
  95th percentile per-packet one-way delay: 111.246 ms
  Loss rate: 1.12%
-- Flow 1:
  Average throughput: 48.36 Mbit/s
  95th percentile per-packet one-way delay: 111.218 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 55.88 Mbit/s
  95th percentile per-packet one-way delay: 110.817 ms
  Loss rate: 1.18%
-- Flow 3:
  Average throughput: 29.95 Mbit/s
  95th percentile per-packet one-way delay: 111.694 ms
  Loss rate: 2.54%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas


# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.48 Mbit/s
  95th percentile per-packet one-way delay: 111.778 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 32.13 Mbit/s
  95th percentile per-packet one-way delay: 111.237 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 35.14 Mbit/s
  95th percentile per-packet one-way delay: 112.431 ms
  Loss rate: 1.07%
-- Flow 3:
  Average throughput: 30.90 Mbit/s
  95th percentile per-packet one-way delay: 113.684 ms
  Loss rate: 2.35%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-03-13 22:06:51
End at: 2018-03-13 22:07:21

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.08 Mbit/s
  95th percentile per-packet one-way delay: 115.523 ms
  Loss rate: 1.20%
-- Flow 1:
  Average throughput: 27.91 Mbit/s
  95th percentile per-packet one-way delay: 116.682 ms
  Loss rate: 0.68%
-- Flow 2:
  Average throughput: 50.02 Mbit/s
  95th percentile per-packet one-way delay: 114.097 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 30.75 Mbit/s
  95th percentile per-packet one-way delay: 119.778 ms
  Loss rate: 2.55%
Run 6: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 27.89 Mbps)
  - Flow 1 egress (mean 27.91 Mbps)
  - Flow 2 ingress (mean 50.04 Mbps)
  - Flow 2 egress (mean 50.02 Mbps)
  - Flow 3 ingress (mean 30.84 Mbps)
  - Flow 3 egress (mean 30.75 Mbps)

- **Packet Delay (ms)**
  - Flow 1 (95th percentile 116.68 ms)
  - Flow 2 (95th percentile 114.10 ms)
  - Flow 3 (95th percentile 119.78 ms)
Run 7: Statistics of TCP Vegas

End at: 2018-03-13 22:26:20

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.87 Mbit/s
  95th percentile per-packet one-way delay: 114.816 ms
  Loss rate: 1.27%
-- Flow 1:
  Average throughput: 32.32 Mbit/s
  95th percentile per-packet one-way delay: 114.696 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 34.19 Mbit/s
  95th percentile per-packet one-way delay: 115.957 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 33.43 Mbit/s
  95th percentile per-packet one-way delay: 113.990 ms
  Loss rate: 2.60%
Run 7: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 32.34Mbps)**
- **Flow 1 egress (mean 32.32Mbps)**
- **Flow 2 ingress (mean 34.23Mbps)**
- **Flow 2 egress (mean 34.19Mbps)**
- **Flow 3 ingress (mean 33.57Mbps)**
- **Flow 3 egress (mean 33.43Mbps)**

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

- **Flow 1 (95th percentile 114.70 ms)**
- **Flow 2 (95th percentile 115.96 ms)**
- **Flow 3 (95th percentile 113.99 ms)**

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Run 8: Statistics of TCP Vegas

Start at: 2018-03-13 22:45:17
End at: 2018-03-13 22:45:47

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.48 Mbit/s
  95th percentile per-packet one-way delay: 113.812 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 40.32 Mbit/s
  95th percentile per-packet one-way delay: 113.180 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 37.66 Mbit/s
  95th percentile per-packet one-way delay: 113.559 ms
  Loss rate: 1.19%
-- Flow 3:
  Average throughput: 31.37 Mbit/s
  95th percentile per-packet one-way delay: 117.733 ms
  Loss rate: 2.12%
Run 8: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 40.33 Mbit/s)
- Flow 1 egress (mean 40.32 Mbit/s)
- Flow 2 ingress (mean 37.66 Mbit/s)
- Flow 2 egress (mean 37.66 Mbit/s)
- Flow 3 ingress (mean 31.34 Mbit/s)
- Flow 3 egress (mean 31.37 Mbit/s)

- Flow 1 (95th percentile 113.18 ms)
- Flow 2 (95th percentile 113.56 ms)
- Flow 3 (95th percentile 117.73 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-03-13 23:04:22
End at: 2018-03-13 23:04:52

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.86 Mbit/s
  95th percentile per-packet one-way delay: 112.811 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 56.98 Mbit/s
  95th percentile per-packet one-way delay: 112.032 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 38.39 Mbit/s
  95th percentile per-packet one-way delay: 114.435 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 111.848 ms
  Loss rate: 4.65%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-03-13 23:24:00
End at: 2018-03-13 23:24:30

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.99 Mbit/s
  95th percentile per-packet one-way delay: 114.362 ms
  Loss rate: 1.30%
-- Flow 1:
  Average throughput: 28.38 Mbit/s
  95th percentile per-packet one-way delay: 115.479 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 51.24 Mbit/s
  95th percentile per-packet one-way delay: 113.493 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 38.77 Mbit/s
  95th percentile per-packet one-way delay: 114.386 ms
  Loss rate: 2.59%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-03-13 20:36:17
End at: 2018-03-13 20:36:47

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 309.46 Mbit/s
  95th percentile per-packet one-way delay: 178.987 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 205.77 Mbit/s
  95th percentile per-packet one-way delay: 181.729 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 142.26 Mbit/s
  95th percentile per-packet one-way delay: 168.002 ms
  Loss rate: 0.93%
-- Flow 3:
  Average throughput: 33.05 Mbit/s
  95th percentile per-packet one-way delay: 172.702 ms
  Loss rate: 6.48%
Run 1: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 203.13 Mbit/s)**
- **Flow 1 egress (mean 205.77 Mbit/s)**
- **Flow 2 ingress (mean 141.59 Mbit/s)**
- **Flow 2 egress (mean 142.26 Mbit/s)**
- **Flow 3 ingress (mean 34.52 Mbit/s)**
- **Flow 3 egress (mean 33.05 Mbit/s)**

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

- **Flow 1 (95th percentile 181.73 ms)**
- **Flow 2 (95th percentile 168.00 ms)**
- **Flow 3 (95th percentile 172.70 ms)**
Run 2: Statistics of Verus

End at: 2018-03-13 20:56:20

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 300.90 Mbit/s
  95th percentile per-packet one-way delay: 238.982 ms
  Loss rate: 3.08%
-- Flow 1:
  Average throughput: 226.99 Mbit/s
  95th percentile per-packet one-way delay: 191.306 ms
  Loss rate: 1.85%
-- Flow 2:
  Average throughput: 100.70 Mbit/s
  95th percentile per-packet one-way delay: 348.649 ms
  Loss rate: 7.20%
-- Flow 3:
  Average throughput: 24.07 Mbit/s
  95th percentile per-packet one-way delay: 219.656 ms
  Loss rate: 1.72%
Run 2: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 229.58 Mbps)
- Flow 1 egress (mean 226.99 Mbps)
- Flow 2 ingress (mean 106.38 Mbps)
- Flow 2 egress (mean 100.70 Mbps)
- Flow 3 ingress (mean 23.92 Mbps)
- Flow 3 egress (mean 24.07 Mbps)

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

- Flow 1 (95th percentile 191.31 ms)
- Flow 2 (95th percentile 348.65 ms)
- Flow 3 (95th percentile 219.66 ms)
Run 3: Statistics of Verus

Start at: 2018-03-13 21:15:30
End at: 2018-03-13 21:16:00

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.94 Mbit/s
95th percentile per-packet one-way delay: 146.469 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 160.024 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.17 Mbit/s
95th percentile per-packet one-way delay: 134.387 ms
Loss rate: 1.92%
-- Flow 3:
Average throughput: 42.31 Mbit/s
95th percentile per-packet one-way delay: 123.998 ms
Loss rate: 6.27%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-03-13 21:34:58
End at: 2018-03-13 21:35:28

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.93 Mbit/s
95th percentile per-packet one-way delay: 223.440 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 140.13 Mbit/s
95th percentile per-packet one-way delay: 231.971 ms
Loss rate: 1.93%
-- Flow 2:
Average throughput: 135.71 Mbit/s
95th percentile per-packet one-way delay: 206.854 ms
Loss rate: 2.87%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 179.568 ms
Loss rate: 9.05%
Run 5: Statistics of Verus

Start at: 2018-03-13 21:54:33
End at: 2018-03-13 21:55:03

# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 225.20 Mbit/s
95th percentile per-packet one-way delay: 225.293 ms
Loss rate: 2.45%
-- Flow 1:
Average throughput: 104.56 Mbit/s
95th percentile per-packet one-way delay: 146.041 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 112.99 Mbit/s
95th percentile per-packet one-way delay: 249.662 ms
Loss rate: 2.38%
-- Flow 3:
Average throughput: 155.38 Mbit/s
95th percentile per-packet one-way delay: 252.711 ms
Loss rate: 5.84%
Run 5: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 104.37 Mbps)  Flow 1 egress (mean 104.56 Mbps)
Flow 2 ingress (mean 108.65 Mbps)  Flow 2 egress (mean 112.99 Mbps)
Flow 3 ingress (mean 161.94 Mbps)  Flow 3 egress (mean 155.38 Mbps)

Per-packet one way delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 146.04 ms)  Flow 2 (95th percentile 249.66 ms)  Flow 3 (95th percentile 252.71 ms)
Run 6: Statistics of Verus


# Below is generated by plot.py at 2018-03-14 03:42:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 167.77 Mbit/s
  95th percentile per-packet one-way delay: 185.410 ms
  Loss rate: 1.24%
  -- Flow 1:
  Average throughput: 125.05 Mbit/s
  95th percentile per-packet one-way delay: 220.805 ms
  Loss rate: 1.35%
  -- Flow 2:
  Average throughput: 45.72 Mbit/s
  95th percentile per-packet one-way delay: 160.126 ms
  Loss rate: 1.31%
  -- Flow 3:
  Average throughput: 39.18 Mbit/s
  95th percentile per-packet one-way delay: 143.175 ms
  Loss rate: 0.01%
Run 6: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 127.46 Mbit/s)
- Flow 1 egress (mean 125.05 Mbit/s)
- Flow 2 ingress (mean 45.78 Mbit/s)
- Flow 2 egress (mean 45.72 Mbit/s)
- Flow 3 ingress (mean 38.28 Mbit/s)
- Flow 3 egress (mean 39.18 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 220.81 ms)
- Flow 2 (95th percentile 160.13 ms)
- Flow 3 (95th percentile 143.18 ms)
Run 7: Statistics of Verus

Start at: 2018-03-13 22:32:29
End at: 2018-03-13 22:32:59

# Below is generated by plot.py at 2018-03-14 03:44:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 259.33 Mbit/s
  95th percentile per-packet one-way delay: 163.550 ms
  Loss rate: 0.41%
  -- Flow 1:
    Average throughput: 126.72 Mbit/s
    95th percentile per-packet one-way delay: 153.234 ms
    Loss rate: 0.50%
  -- Flow 2:
    Average throughput: 188.37 Mbit/s
    95th percentile per-packet one-way delay: 175.040 ms
    Loss rate: 0.34%
  -- Flow 3:
    Average throughput: 28.47 Mbit/s
    95th percentile per-packet one-way delay: 154.664 ms
    Loss rate: 0.12%
Run 7: Report of Verus — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.](image-url)
Run 8: Statistics of Verus

End at: 2018-03-13 22:52:27

# Below is generated by plot.py at 2018-03-14 03:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.67 Mbit/s
95th percentile per-packet one-way delay: 188.150 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 183.84 Mbit/s
95th percentile per-packet one-way delay: 189.674 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 99.53 Mbit/s
95th percentile per-packet one-way delay: 175.795 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 99.17 Mbit/s
95th percentile per-packet one-way delay: 205.784 ms
Loss rate: 2.28%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-03-13 23:10:59
End at: 2018-03-13 23:11:29

# Below is generated by plot.py at 2018-03-14 03:45:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.93 Mbit/s
95th percentile per-packet one-way delay: 198.430 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 162.92 Mbit/s
95th percentile per-packet one-way delay: 206.557 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 48.55 Mbit/s
95th percentile per-packet one-way delay: 158.231 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 83.44 Mbit/s
95th percentile per-packet one-way delay: 182.214 ms
Loss rate: 3.96%
Run 9: Report of Verus — Data Link

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

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 163.37 Mb/s)  Flow 1 egress (mean 162.92 Mb/s)
Flow 2 ingress (mean 48.10 Mb/s)  Flow 2 egress (mean 48.55 Mb/s)
Flow 3 ingress (mean 84.64 Mb/s)  Flow 3 egress (mean 83.44 Mb/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 206.56 ms)  Flow 2 (95th percentile 158.23 ms)  Flow 3 (95th percentile 182.21 ms)
Run 10: Statistics of Verus

Start at: 2018-03-13 23:30:36
End at: 2018-03-13 23:31:06

# Below is generated by plot.py at 2018-03-14 03:45:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 156.25 Mbit/s
  95th percentile per-packet one-way delay: 130.548 ms
  Loss rate: 2.99%
-- Flow 1:
  Average throughput: 90.57 Mbit/s
  95th percentile per-packet one-way delay: 121.046 ms
  Loss rate: 1.13%
-- Flow 2:
  Average throughput: 66.25 Mbit/s
  95th percentile per-packet one-way delay: 207.037 ms
  Loss rate: 7.83%
-- Flow 3:
  Average throughput: 68.40 Mbit/s
  95th percentile per-packet one-way delay: 120.754 ms
  Loss rate: 0.20%
Run 10: Report of Verus — Data Link

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

- Flow 1 ingress (mean 90.91 Mbit/s)
- Flow 1 egress (mean 90.57 Mbit/s)
- Flow 2 ingress (mean 71.19 Mbit/s)
- Flow 2 egress (mean 66.25 Mbit/s)
- Flow 3 ingress (mean 66.97 Mbit/s)
- Flow 3 egress (mean 68.40 Mbit/s)

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

- Flow 1 (95th percentile 121.05 ms)
- Flow 2 (95th percentile 207.04 ms)
- Flow 3 (95th percentile 120.75 ms)
Run 1: Statistics of Copa

Start at: 2018-03-13 20:41:27
End at: 2018-03-13 20:41:57

# Below is generated by plot.py at 2018-03-14 03:45:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.65 Mbit/s
95th percentile per-packet one-way delay: 113.050 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 74.19 Mbit/s
95th percentile per-packet one-way delay: 111.769 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 59.54 Mbit/s
95th percentile per-packet one-way delay: 112.945 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 113.153 ms
Loss rate: 3.20%
Run 1: Report of Copa — Data Link

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

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

Start at: 2018-03-13 21:00:59
End at: 2018-03-13 21:01:29

# Below is generated by plot.py at 2018-03-14 03:46:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 142.31 Mbit/s
  95th percentile per-packet one-way delay: 112.939 ms
  Loss rate: 1.19%
-- Flow 1:
  Average throughput: 75.98 Mbit/s
  95th percentile per-packet one-way delay: 112.972 ms
  Loss rate: 0.54%
-- Flow 2:
  Average throughput: 68.85 Mbit/s
  95th percentile per-packet one-way delay: 110.901 ms
  Loss rate: 1.17%
-- Flow 3:
  Average throughput: 63.30 Mbit/s
  95th percentile per-packet one-way delay: 112.430 ms
  Loss rate: 3.53%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-03-13 21:20:29
End at: 2018-03-13 21:20:59

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.30 Mbit/s
95th percentile per-packet one-way delay: 306.723 ms
Loss rate: 30.85%
-- Flow 1:
Average throughput: 331.96 Mbit/s
95th percentile per-packet one-way delay: 306.728 ms
Loss rate: 30.87%
-- Flow 2:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 240.833 ms
Loss rate: 5.37%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 241.048 ms
Loss rate: 18.52%
Run 3: Report of Copa — Data Link

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

The graphs illustrate the throughput and per-packet one-way delay for two different flows across different channels, with distinct markers for each flow. The performance metrics are detailed in the accompanying legend.
Run 4: Statistics of Copa

Start at: 2018-03-13 21:40:03
End at: 2018-03-13 21:40:33

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 158.83 Mbit/s
  95th percentile per-packet one-way delay: 111.660 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 86.63 Mbit/s
  95th percentile per-packet one-way delay: 111.621 ms
  Loss rate: 0.71%
-- Flow 2:
  Average throughput: 75.50 Mbit/s
  95th percentile per-packet one-way delay: 111.720 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 67.72 Mbit/s
  95th percentile per-packet one-way delay: 111.667 ms
  Loss rate: 2.12%
Run 5: Statistics of Copa

Start at: 2018-03-13 21:59:35
End at: 2018-03-13 22:00:05

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.40 Mbit/s
95th percentile per-packet one-way delay: 112.925 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 73.67 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 68.52 Mbit/s
95th percentile per-packet one-way delay: 112.936 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 80.51 Mbit/s
95th percentile per-packet one-way delay: 112.806 ms
Loss rate: 2.40%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

End at: 2018-03-13 22:18:58

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 154.25 Mbit/s
  95th percentile per-packet one-way delay: 113.031 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 86.06 Mbit/s
  95th percentile per-packet one-way delay: 113.048 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 65.04 Mbit/s
  95th percentile per-packet one-way delay: 112.971 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 76.73 Mbit/s
  95th percentile per-packet one-way delay: 113.014 ms
  Loss rate: 2.23%
Run 6: Report of Copa — Data Link

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

- Flow 1 ingress (mean 86.07 Mbps)
- Flow 1 egress (mean 86.06 Mbps)
- Flow 2 ingress (mean 65.22 Mbps)
- Flow 2 egress (mean 65.04 Mbps)
- Flow 3 ingress (mean 76.69 Mbps)
- Flow 3 egress (mean 76.73 Mbps)

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

- Flow 1 (95th percentile 113.05 ms)
- Flow 2 (95th percentile 112.97 ms)
- Flow 3 (95th percentile 113.01 ms)
Run 7: Statistics of Copa

Start at: 2018-03-13 22:37:33
End at: 2018-03-13 22:38:03

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 303.95 Mbit/s
  95th percentile per-packet one-way delay: 181.808 ms
  Loss rate: 3.15%
-- Flow 1:
  Average throughput: 279.05 Mbit/s
  95th percentile per-packet one-way delay: 182.534 ms
  Loss rate: 3.30%
-- Flow 2:
  Average throughput: 55.10 Mbit/s
  95th percentile per-packet one-way delay: 128.364 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 26.84 Mbit/s
  95th percentile per-packet one-way delay: 117.300 ms
  Loss rate: 3.84%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-03-13 22:57:03
End at: 2018-03-13 22:57:33

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 155.94 Mbit/s
  95th percentile per-packet one-way delay: 112.724 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 81.14 Mbit/s
  95th percentile per-packet one-way delay: 112.753 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 78.27 Mbit/s
  95th percentile per-packet one-way delay: 112.391 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 69.99 Mbit/s
  95th percentile per-packet one-way delay: 112.001 ms
  Loss rate: 2.24%
Run 8: Report of Copa — Data Link

![Graph showing throughput and per-packet one-way delay](image)
Run 9: Statistics of Copa

Start at: 2018-03-13 23:16:03  
End at: 2018-03-13 23:16:33

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.88 Mbit/s
95th percentile per-packet one-way delay: 112.291 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 52.84 Mbit/s
95th percentile per-packet one-way delay: 112.378 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 110.803 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 77.62 Mbit/s
95th percentile per-packet one-way delay: 110.685 ms
Loss rate: 2.92%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 52.81 Mbit/s)
- Flow 1 egress (mean 52.84 Mbit/s)
- Flow 2 ingress (mean 76.28 Mbit/s)
- Flow 2 egress (mean 76.44 Mbit/s)
- Flow 3 ingress (mean 78.15 Mbit/s)
- Flow 3 egress (mean 77.62 Mbit/s)

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

- Flow 1 (95th percentile 112.38 ms)
- Flow 2 (95th percentile 110.80 ms)
- Flow 3 (95th percentile 110.69 ms)
Run 10: Statistics of Copa

Start at: 2018-03-13 23:35:33
End at: 2018-03-13 23:36:03

# Below is generated by plot.py at 2018-03-14 03:54:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 164.60 Mbit/s
95th percentile per-packet one-way delay: 112.879 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 89.04 Mbit/s
95th percentile per-packet one-way delay: 112.865 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 76.23 Mbit/s
95th percentile per-packet one-way delay: 112.894 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 76.56 Mbit/s
95th percentile per-packet one-way delay: 112.885 ms
Loss rate: 2.03%
Run 10: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image)
Run 1: Statistics of FillP

Start at: 2018-03-13 20:26:46
End at: 2018-03-13 20:27:16

# Below is generated by plot.py at 2018-03-14 04:16:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1555.61 Mbit/s
  95th percentile per-packet one-way delay: 210.787 ms
  Loss rate: 7.69%
-- Flow 1:
  Average throughput: 796.87 Mbit/s
  95th percentile per-packet one-way delay: 207.635 ms
  Loss rate: 7.04%
-- Flow 2:
  Average throughput: 791.17 Mbit/s
  95th percentile per-packet one-way delay: 211.825 ms
  Loss rate: 8.87%
-- Flow 3:
  Average throughput: 717.21 Mbit/s
  95th percentile per-packet one-way delay: 288.525 ms
  Loss rate: 7.21%
Run 1: Report of FillP — Data Link

Throughput (Mbps):

Time (s):

Flow 1 Ingress (mean 850.87 Mbps) — Flow 1 Egress (mean 796.87 Mbps)
Flow 2 Ingress (mean 858.10 Mbps) — Flow 2 Egress (mean 792.17 Mbps)
Flow 3 Ingress (mean 755.55 Mbps) — Flow 3 Egress (mean 717.21 Mbps)

Packet oneway delay (ms):

Time (s):

Flow 1 (95th percentile 207.63 ms) — Flow 2 (95th percentile 211.82 ms) — Flow 3 (95th percentile 288.52 ms)

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Run 2: Statistics of FillP

Start at: 2018-03-13 20:46:26
End at: 2018-03-13 20:46:56

# Below is generated by plot.py at 2018-03-14 04:16:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1499.02 Mbit/s
  95th percentile per-packet one-way delay: 221.859 ms
  Loss rate: 8.99%
-- Flow 1:
  Average throughput: 777.60 Mbit/s
  95th percentile per-packet one-way delay: 217.334 ms
  Loss rate: 8.28%
-- Flow 2:
  Average throughput: 707.28 Mbit/s
  95th percentile per-packet one-way delay: 216.980 ms
  Loss rate: 11.01%
-- Flow 3:
  Average throughput: 774.04 Mbit/s
  95th percentile per-packet one-way delay: 238.525 ms
  Loss rate: 7.29%
Run 2: Report of FillP — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 Ingress (mean 841.38 Mb/s) — Flow 1 Egress (mean 777.60 Mb/s)
Flow 2 Ingress (mean 785.82 Mb/s) — Flow 2 Egress (mean 707.28 Mb/s)
Flow 3 Ingress (mean 815.88 Mb/s) — Flow 3 Egress (mean 774.04 Mb/s)

Delay (ms)

Time (s)

Flow 1 (95th percentile 217.33 ms) — Flow 2 (95th percentile 216.98 ms) — Flow 3 (95th percentile 218.53 ms)
Run 3: Statistics of FillP

Start at: 2018-03-13 21:06:05
End at: 2018-03-13 21:06:35

# Below is generated by plot.py at 2018-03-14 04:17:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1499.20 Mbit/s
  95th percentile per-packet one-way delay: 244.482 ms
  Loss rate: 7.59%
-- Flow 1:
  Average throughput: 759.43 Mbit/s
  95th percentile per-packet one-way delay: 256.447 ms
  Loss rate: 8.26%
-- Flow 2:
  Average throughput: 770.07 Mbit/s
  95th percentile per-packet one-way delay: 216.543 ms
  Loss rate: 5.71%
-- Flow 3:
  Average throughput: 703.48 Mbit/s
  95th percentile per-packet one-way delay: 215.037 ms
  Loss rate: 9.45%
Run 3: Report of FillP — Data Link

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

![Graph 2: Per-packet one-way delay vs. Time](image2)
Run 4: Statistics of FillP

Start at: 2018-03-13 21:25:34
End at: 2018-03-13 21:26:04

# Below is generated by plot.py at 2018-03-14 04:17:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1447.63 Mbit/s
  95th percentile per-packet one-way delay: 234.578 ms
  Loss rate: 7.27%
-- Flow 1:
  Average throughput: 751.29 Mbit/s
  95th percentile per-packet one-way delay: 274.764 ms
  Loss rate: 7.69%
-- Flow 2:
  Average throughput: 733.00 Mbit/s
  95th percentile per-packet one-way delay: 202.868 ms
  Loss rate: 4.05%
-- Flow 3:
  Average throughput: 648.45 Mbit/s
  95th percentile per-packet one-way delay: 230.050 ms
  Loss rate: 12.57%
Run 4: Report of FillP — Data Link

[Graph showing network throughput and packet delay over time for different flows with specified mean rates.]
Run 5: Statistics of FillP

Start at: 2018-03-13 21:45:11
End at: 2018-03-13 21:45:41

# Below is generated by plot.py at 2018-03-14 04:18:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1472.66 Mbit/s
  95th percentile per-packet one-way delay: 212.707 ms
  Loss rate: 9.65%
-- Flow 1:
  Average throughput: 791.92 Mbit/s
  95th percentile per-packet one-way delay: 207.620 ms
  Loss rate: 7.12%
-- Flow 2:
  Average throughput: 712.61 Mbit/s
  95th percentile per-packet one-way delay: 205.758 ms
  Loss rate: 11.67%
-- Flow 3:
  Average throughput: 638.90 Mbit/s
  95th percentile per-packet one-way delay: 233.612 ms
  Loss rate: 14.12%
Run 5: Report of FillP — Data Link

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

- **Flow 1 Ingress**: Mean 886.17 Mbps, Egress Mean 791.92 Mbps
- **Flow 2 Ingress**: Mean 977.73 Mbps, Egress Mean 712.61 Mbps
- **Flow 3 Ingress**: Mean 727.18 Mbps, Egress Mean 638.90 Mbps

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

- **Flow 1 95th percentile**: 207.62 ms
- **Flow 2 95th percentile**: 205.76 ms
- **Flow 3 95th percentile**: 233.61 ms

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Run 6: Statistics of FillP

Start at: 2018-03-13 22:04:06
End at: 2018-03-13 22:04:36

# Below is generated by plot.py at 2018-03-14 04:20:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1511.00 Mbit/s
  95th percentile per-packet one-way delay: 204.248 ms
  Loss rate: 7.47%
-- Flow 1:
  Average throughput: 792.57 Mbit/s
  95th percentile per-packet one-way delay: 198.089 ms
  Loss rate: 6.36%
-- Flow 2:
  Average throughput: 743.16 Mbit/s
  95th percentile per-packet one-way delay: 203.304 ms
  Loss rate: 8.09%
-- Flow 3:
  Average throughput: 694.78 Mbit/s
  95th percentile per-packet one-way delay: 244.471 ms
  Loss rate: 9.89%
Run 6: Report of FillP — Data Link
Run 7: Statistics of FillP

Start at: 2018-03-13 22:23:05

# Below is generated by plot.py at 2018-03-14 04:20:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1351.84 Mbit/s
95th percentile per-packet one-way delay: 346.298 ms
Loss rate: 8.31%
-- Flow 1:
Average throughput: 729.22 Mbit/s
95th percentile per-packet one-way delay: 338.071 ms
Loss rate: 6.18%
-- Flow 2:
Average throughput: 627.45 Mbit/s
95th percentile per-packet one-way delay: 361.595 ms
Loss rate: 9.26%
-- Flow 3:
Average throughput: 635.55 Mbit/s
95th percentile per-packet one-way delay: 219.249 ms
Loss rate: 13.42%
Run 7: Report of FillP — Data Link

![Graph showing throughput and packet loss](image1)

![Graph showing packet loss distribution](image2)
Run 8: Statistics of FillP

End at: 2018-03-13 22:43:01

# Below is generated by plot.py at 2018-03-14 04:24:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1511.08 Mbit/s
  95th percentile per-packet one-way delay: 224.179 ms
  Loss rate: 7.08%
-- Flow 1:
  Average throughput: 809.22 Mbit/s
  95th percentile per-packet one-way delay: 244.553 ms
  Loss rate: 5.26%
-- Flow 2:
  Average throughput: 706.68 Mbit/s
  95th percentile per-packet one-way delay: 212.072 ms
  Loss rate: 8.73%
-- Flow 3:
  Average throughput: 717.00 Mbit/s
  95th percentile per-packet one-way delay: 204.943 ms
  Loss rate: 9.80%
Run 8: Report of FillP — Data Link

![Graph of Throughput vs Time]

- Flow 1 Ingress (mean 847.72 Mbit/s)
- Flow 1 Egress (mean 809.22 Mbit/s)
- Flow 2 Ingress (mean 765.52 Mbit/s)
- Flow 2 Egress (mean 706.68 Mbit/s)
- Flow 3 Ingress (mean 776.97 Mbit/s)
- Flow 3 Egress (mean 717.00 Mbit/s)

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

- Flow 1 (95th percentile 244.55 ms)
- Flow 2 (95th percentile 212.07 ms)
- Flow 3 (95th percentile 204.94 ms)
Run 9: Statistics of FillP

Start at: 2018-03-13 23:01:35
End at: 2018-03-13 23:02:05

# Below is generated by plot.py at 2018-03-14 04:46:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1499.20 Mbit/s
95th percentile per-packet one-way delay: 219.871 ms
Loss rate: 7.89%
-- Flow 1:
Average throughput: 782.97 Mbit/s
95th percentile per-packet one-way delay: 215.928 ms
Loss rate: 5.67%
-- Flow 2:
Average throughput: 790.85 Mbit/s
95th percentile per-packet one-way delay: 209.514 ms
Loss rate: 7.93%
-- Flow 3:
Average throughput: 589.94 Mbit/s
95th percentile per-packet one-way delay: 235.436 ms
Loss rate: 15.87%
Run 9: Report of FillP — Data Link

![Graph of Throughput and Per-packet delay for different flows.](image)
Run 10: Statistics of FillP

Start at: 2018-03-13 23:21:16
End at: 2018-03-13 23:21:46

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1526.14 Mbit/s
95th percentile per-packet one-way delay: 209.820 ms
Loss rate: 8.62%
-- Flow 1:
Average throughput: 849.83 Mbit/s
95th percentile per-packet one-way delay: 195.408 ms
Loss rate: 5.23%
-- Flow 2:
Average throughput: 677.85 Mbit/s
95th percentile per-packet one-way delay: 222.379 ms
Loss rate: 13.84%
-- Flow 3:
Average throughput: 696.95 Mbit/s
95th percentile per-packet one-way delay: 215.301 ms
Loss rate: 9.87%
Run 10: Report of FillP — Data Link

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

**Throughput (Mb/s):**
- **Flow 1 Ingress (mean 890.07 Mb/s)**
- **Flow 1 Egress (mean 849.83 Mb/s)**
- **Flow 2 Ingress (mean 777.87 Mb/s)**
- **Flow 2 Egress (mean 677.85 Mb/s)**
- **Flow 3 Ingress (mean 755.65 Mb/s)**
- **Flow 3 Egress (mean 696.95 Mb/s)**

**Packet loss (ms):**
- **Flow 1 (95th percentile 195.41 ms)**
- **Flow 2 (95th percentile 222.38 ms)**
- **Flow 3 (95th percentile 215.30 ms)**
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-13 20:32:24
End at: 2018-03-13 20:32:55

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.88 Mbit/s
95th percentile per-packet one-way delay: 111.981 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 172.57 Mbit/s
95th percentile per-packet one-way delay: 111.958 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 140.58 Mbit/s
95th percentile per-packet one-way delay: 112.005 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 122.32 Mbit/s
95th percentile per-packet one-way delay: 112.027 ms
Loss rate: 2.78%
Run 1: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 172.43 Mbps)
  - Flow 1 egress (mean 172.57 Mbps)
  - Flow 2 ingress (mean 140.65 Mbps)
  - Flow 2 egress (mean 140.58 Mbps)
  - Flow 3 ingress (mean 122.92 Mbps)
  - Flow 3 egress (mean 122.32 Mbps)

- **Packet Delay (ms)**
  - Flow 1 (95th percentile 111.96 ms)
  - Flow 2 (95th percentile 112.00 ms)
  - Flow 3 (95th percentile 112.03 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-13 20:52:00
End at: 2018-03-13 20:52:30

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 285.77 Mbit/s
  95th percentile per-packet one-way delay: 112.058 ms
  Loss rate: 1.21%
-- Flow 1:
  Average throughput: 147.91 Mbit/s
  95th percentile per-packet one-way delay: 111.964 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 145.36 Mbit/s
  95th percentile per-packet one-way delay: 112.203 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 129.82 Mbit/s
  95th percentile per-packet one-way delay: 112.144 ms
  Loss rate: 2.77%
Run 2: Report of Indigo-1-32 — Data Link

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**Throughput** vs **Time**

- **Flow 1 ingress** (mean 147.96 Mbit/s)
- **Flow 1 egress** (mean 147.91 Mbit/s)
- **Flow 2 ingress** (mean 145.48 Mbit/s)
- **Flow 2 egress** (mean 145.36 Mbit/s)
- **Flow 3 ingress** (mean 130.50 Mbit/s)
- **Flow 3 egress** (mean 129.62 Mbit/s)

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**Packet one-way delay** vs **Time**

- **Flow 1 (95th percentile 111.96 ms)**
- **Flow 2 (95th percentile 112.20 ms)**
- **Flow 3 (95th percentile 112.14 ms)**
Run 3: Statistics of Indigo-1-32

Start at: 2018-03-13 21:11:38
End at: 2018-03-13 21:12:08

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.58 Mbit/s
95th percentile per-packet one-way delay: 111.316 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 150.58 Mbit/s
95th percentile per-packet one-way delay: 110.750 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 135.18 Mbit/s
95th percentile per-packet one-way delay: 111.355 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 132.28 Mbit/s
95th percentile per-packet one-way delay: 122.883 ms
Loss rate: 2.55%
Run 3: Report of Indigo-1-32 — Data Link

![Graph of Throughput vs Time with various flow characteristics]

![Graph of Per-packet one-way delay vs Time with various flow characteristics]
Run 4: Statistics of Indigo-1-32

Start at: 2018-03-13 21:31:07
End at: 2018-03-13 21:31:37

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 295.22 Mbit/s
95th percentile per-packet one-way delay: 111.262 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 151.41 Mbit/s
95th percentile per-packet one-way delay: 110.763 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 154.57 Mbit/s
95th percentile per-packet one-way delay: 111.694 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 129.27 Mbit/s
95th percentile per-packet one-way delay: 113.727 ms
Loss rate: 2.65%
Run 4: Report of Indigo-1-32 — Data Link
Run 5: Statistics of Indigo-1-32

Start at: 2018-03-13 21:50:42
End at: 2018-03-13 21:51:12

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.10 Mbit/s
95th percentile per-packet one-way delay: 111.015 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 180.13 Mbit/s
95th percentile per-packet one-way delay: 110.655 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 143.01 Mbit/s
95th percentile per-packet one-way delay: 111.183 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 131.42 Mbit/s
95th percentile per-packet one-way delay: 112.549 ms
Loss rate: 2.67%
Run 5: Report of Indigo-1-32 — Data Link

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

- **Flow 1 ingress** (mean 179.89 Mbit/s)
- **Flow 1 egress** (mean 180.13 Mbit/s)
- **Flow 2 ingress** (mean 143.13 Mbit/s)
- **Flow 2 egress** (mean 143.01 Mbit/s)
- **Flow 3 ingress** (mean 131.97 Mbit/s)
- **Flow 3 egress** (mean 131.42 Mbit/s)
Run 6: Statistics of Indigo-1-32

Start at: 2018-03-13 22:09:40
End at: 2018-03-13 22:10:10

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.85 Mbit/s
95th percentile per-packet one-way delay: 113.818 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 182.91 Mbit/s
95th percentile per-packet one-way delay: 113.423 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 143.22 Mbit/s
95th percentile per-packet one-way delay: 114.580 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 146.38 Mbit/s
95th percentile per-packet one-way delay: 117.434 ms
Loss rate: 2.46%
Run 6: Report of Indigo-1-32 — Data Link

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Run 6: Report of Indigo-1-32 — Data Link

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Run 7: Statistics of Indigo-1-32

End at: 2018-03-13 22:29:08

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 314.82 Mbit/s
  95th percentile per-packet one-way delay: 113.941 ms
  Loss rate: 1.07%
-- Flow 1:
  Average throughput: 181.19 Mbit/s
  95th percentile per-packet one-way delay: 113.526 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 142.73 Mbit/s
  95th percentile per-packet one-way delay: 114.411 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 121.88 Mbit/s
  95th percentile per-packet one-way delay: 114.785 ms
  Loss rate: 2.92%
Run 7: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 181.04 Mbps)
  - Flow 1 egress (mean 181.19 Mbps)
  - Flow 2 ingress (mean 142.63 Mbps)
  - Flow 2 egress (mean 142.73 Mbps)
  - Flow 3 ingress (mean 122.65 Mbps)
  - Flow 3 egress (mean 121.98 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 113.53 ms)
  - Flow 2 (95th percentile 114.41 ms)
  - Flow 3 (95th percentile 114.78 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-03-13 22:48:05

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.18 Mbit/s
95th percentile per-packet one-way delay: 114.547 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 174.62 Mbit/s
95th percentile per-packet one-way delay: 113.759 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 158.20 Mbit/s
95th percentile per-packet one-way delay: 115.444 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 125.04 Mbit/s
95th percentile per-packet one-way delay: 117.233 ms
Loss rate: 2.71%
Run 8: Report of Indigo-1-32 — Data Link
Run 9: Statistics of Indigo-1-32

Start at: 2018-03-13 23:07:11
End at: 2018-03-13 23:07:41

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.63 Mbit/s
95th percentile per-packet one-way delay: 112.544 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 150.21 Mbit/s
95th percentile per-packet one-way delay: 111.825 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 144.45 Mbit/s
95th percentile per-packet one-way delay: 113.397 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 129.94 Mbit/s
95th percentile per-packet one-way delay: 114.941 ms
Loss rate: 2.55%
Run 9: Report of Indigo-1-32 — Data Link

![Graphs showing network performance metrics]

Throughput (Mbps)

Delay (ms)

Legend:
- Blue dashed line: Flow 1 ingress (mean 150.22 Mbps)
- Blue solid line: Flow 1 egress (mean 150.21 Mbps)
- Green dashed line: Flow 2 ingress (mean 144.52 Mbps)
- Green solid line: Flow 2 egress (mean 144.45 Mbps)
- Red dashed line: Flow 3 ingress (mean 130.30 Mbps)
- Red solid line: Flow 3 egress (mean 129.94 Mbps)

Flow 1 (95th percentile 111.93 ms)
Flow 2 (95th percentile 113.40 ms)
Flow 3 (95th percentile 114.94 ms)
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-13 23:26:49
End at: 2018-03-13 23:27:19

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 280.42 Mbit/s
  95th percentile per-packet one-way delay: 112.405 ms
  Loss rate: 1.16%
-- Flow 1:
  Average throughput: 148.69 Mbit/s
  95th percentile per-packet one-way delay: 111.886 ms
  Loss rate: 0.76%
-- Flow 2:
  Average throughput: 136.92 Mbit/s
  95th percentile per-packet one-way delay: 112.482 ms
  Loss rate: 1.10%
-- Flow 3:
  Average throughput: 128.07 Mbit/s
  95th percentile per-packet one-way delay: 114.577 ms
  Loss rate: 2.72%
Run 10: Report of Indigo-1-32 — Data Link

![Graph showing throughput over time for different flows]

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

Flow 1 ingress (mean 148.70 Mbit/s)  Flow 1 egress (mean 148.69 Mbit/s)
Flow 2 ingress (mean 136.80 Mbit/s)  Flow 2 egress (mean 136.92 Mbit/s)
Flow 3 ingress (mean 126.61 Mbit/s)  Flow 3 egress (mean 126.07 Mbit/s)
Run 1: Statistics of Vivace-latency

Start at: 2018-03-13 20:25:26
End at: 2018-03-13 20:25:56

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.33 Mbit/s
95th percentile per-packet one-way delay: 114.264 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 230.39 Mbit/s
95th percentile per-packet one-way delay: 113.091 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 233.69 Mbit/s
95th percentile per-packet one-way delay: 118.215 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 121.79 Mbit/s
95th percentile per-packet one-way delay: 114.193 ms
Loss rate: 3.92%
Run 1: Report of Vivace-latency — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 230.48 Mbps)
- Flow 1 egress (mean 230.39 Mbps)
- Flow 2 ingress (mean 233.52 Mbps)
- Flow 2 egress (mean 233.69 Mbps)
- Flow 3 ingress (mean 123.85 Mbps)
- Flow 3 egress (mean 121.79 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 113.09 ms)
- Flow 2 (95th percentile 118.22 ms)
- Flow 3 (95th percentile 114.19 ms)
Run 2: Statistics of Vivace-latency

Start at: 2018-03-13 20:45:11
End at: 2018-03-13 20:45:41

# Below is generated by plot.py at 2018-03-14 04:46:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.53 Mbit/s
95th percentile per-packet one-way delay: 113.148 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 206.45 Mbit/s
95th percentile per-packet one-way delay: 112.940 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 184.93 Mbit/s
95th percentile per-packet one-way delay: 113.485 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 76.13 Mbit/s
95th percentile per-packet one-way delay: 109.906 ms
Loss rate: 3.32%
Run 2: Report of Vivace-latency — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 206.66 Mbit/s)
- Flow 1 egress (mean 206.45 Mbit/s)
- Flow 2 ingress (mean 184.40 Mbit/s)
- Flow 2 egress (mean 184.93 Mbit/s)
- Flow 3 ingress (mean 76.96 Mbit/s)
- Flow 3 egress (mean 76.13 Mbit/s)

---

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

- Flow 1 (95th percentile 112.94 ms)
- Flow 2 (95th percentile 113.48 ms)
- Flow 3 (95th percentile 109.91 ms)
Run 3: Statistics of Vivace-latency

Start at: 2018-03-13 21:04:43
End at: 2018-03-13 21:05:13

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 446.51 Mbit/s
  95th percentile per-packet one-way delay: 114.437 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 278.26 Mbit/s
  95th percentile per-packet one-way delay: 117.082 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 191.88 Mbit/s
  95th percentile per-packet one-way delay: 112.467 ms
  Loss rate: 1.50%
-- Flow 3:
  Average throughput: 127.05 Mbit/s
  95th percentile per-packet one-way delay: 114.134 ms
  Loss rate: 3.60%
Run 3: Report of Vivace-latency — Data Link

![Graph of throughput and latency over time for different flows.](image-url)
Run 4: Statistics of Vivace-latency

Start at: 2018-03-13 21:24:12  
End at: 2018-03-13 21:24:42

# Below is generated by plot.py at 2018-03-14 04:46:55  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 450.13 Mbit/s
95th percentile per-packet one-way delay: 112.182 ms
Loss rate: 1.38%

-- Flow 1:
Average throughput: 277.15 Mbit/s
95th percentile per-packet one-way delay: 111.606 ms
Loss rate: 0.76%

-- Flow 2:
Average throughput: 191.62 Mbit/s
95th percentile per-packet one-way delay: 111.654 ms
Loss rate: 1.66%

-- Flow 3:
Average throughput: 142.53 Mbit/s
95th percentile per-packet one-way delay: 112.811 ms
Loss rate: 4.21%
Run 4: Report of Vivace-latency — Data Link
Run 5: Statistics of Vivace-latency

Start at: 2018-03-13 21:43:50
End at: 2018-03-13 21:44:20

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 434.82 Mbit/s
  95th percentile per-packet one-way delay: 114.127 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 274.86 Mbit/s
  95th percentile per-packet one-way delay: 112.872 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 178.34 Mbit/s
  95th percentile per-packet one-way delay: 114.784 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 129.09 Mbit/s
  95th percentile per-packet one-way delay: 113.207 ms
  Loss rate: 3.98%
Run 5: Report of Vivace-latency — Data Link

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

- **Throughput** (Mbps):
  - Flow 1 Ingress (mean 274.71 Mbps)
  - Flow 1 Egress (mean 274.86 Mbps)
  - Flow 2 Ingress (mean 178.41 Mbps)
  - Flow 2 Egress (mean 178.34 Mbps)
  - Flow 3 Ingress (mean 131.40 Mbps)
  - Flow 3 Egress (mean 129.09 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 112.87 ms)
  - Flow 2 (95th percentile 114.78 ms)
  - Flow 3 (95th percentile 113.21 ms)
Run 6: Statistics of Vivace-latency

Start at: 2018-03-13 22:02:52
End at: 2018-03-13 22:03:22

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.00 Mbit/s
95th percentile per-packet one-way delay: 113.686 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 176.93 Mbit/s
95th percentile per-packet one-way delay: 112.744 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 184.99 Mbit/s
95th percentile per-packet one-way delay: 113.342 ms
Loss rate: 1.60%
-- Flow 3:
Average throughput: 137.88 Mbit/s
95th percentile per-packet one-way delay: 197.621 ms
Loss rate: 3.40%
Run 6: Report of Vivace-latency — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 7: Statistics of Vivace-latency


# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 402.12 Mbit/s
  95th percentile per-packet one-way delay: 116.405 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 223.27 Mbit/s
  95th percentile per-packet one-way delay: 113.130 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 206.44 Mbit/s
  95th percentile per-packet one-way delay: 133.469 ms
  Loss rate: 1.56%
-- Flow 3:
  Average throughput: 129.99 Mbit/s
  95th percentile per-packet one-way delay: 117.459 ms
  Loss rate: 3.45%
Run 7: Report of Vivace-latency — Data Link

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

Throughput (Mbit/s) vs. Time (s) for:
- Flow 1 ingress (mean 223.31 Mbit/s)
- Flow 1 egress (mean 223.77 Mbit/s)
- Flow 2 ingress (mean 207.31 Mbit/s)
- Flow 2 egress (mean 206.46 Mbit/s)
- Flow 3 ingress (mean 131.53 Mbit/s)
- Flow 3 egress (mean 129.99 Mbit/s)

Per-packet one-way delay (ms) vs. Time (s) for:
- Flow 1 (95th percentile 113.13 ms)
- Flow 2 (95th percentile 133.47 ms)
- Flow 3 (95th percentile 117.46 ms)
Run 8: Statistics of Vivace-latency

End at: 2018-03-13 22:41:43

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.51 Mbit/s
95th percentile per-packet one-way delay: 113.474 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 297.09 Mbit/s
95th percentile per-packet one-way delay: 114.004 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 98.03 Mbit/s
95th percentile per-packet one-way delay: 111.628 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 134.19 Mbit/s
95th percentile per-packet one-way delay: 110.450 ms
Loss rate: 3.42%
Run 8: Report of Vivace-latency — Data Link

![Graph showing throughput and packet delay over time for different flows.](image)
Run 9: Statistics of Vivace-latency

Start at: 2018-03-13 23:00:23
End at: 2018-03-13 23:00:53

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 317.40 Mbit/s
  95th percentile per-packet one-way delay: 113.052 ms
  Loss rate: 2.62%
-- Flow 1:
  Average throughput: 148.80 Mbit/s
  95th percentile per-packet one-way delay: 111.112 ms
  Loss rate: 3.81%
-- Flow 2:
  Average throughput: 191.86 Mbit/s
  95th percentile per-packet one-way delay: 112.440 ms
  Loss rate: 0.85%
-- Flow 3:
  Average throughput: 128.39 Mbit/s
  95th percentile per-packet one-way delay: 114.271 ms
  Loss rate: 3.61%
Run 9: Report of Vivace-latency — Data Link
Run 10: Statistics of Vivace-latency

End at: 2018-03-13 23:20:23

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 467.11 Mbit/s
  95th percentile per-packet one-way delay: 118.022 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 291.40 Mbit/s
  95th percentile per-packet one-way delay: 137.472 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 197.33 Mbit/s
  95th percentile per-packet one-way delay: 112.228 ms
  Loss rate: 1.51%
-- Flow 3:
  Average throughput: 139.22 Mbit/s
  95th percentile per-packet one-way delay: 114.445 ms
  Loss rate: 4.53%
Run 10: Report of Vivace-latency — Data Link

![Graph of throughput over time for different flows]

Legend:
- Flow 1 ingress (mean 290.35 Mbit/s)
- Flow 1 egress (mean 291.40 Mbit/s)
- Flow 2 ingress (mean 198.10 Mbit/s)
- Flow 2 egress (mean 197.33 Mbit/s)
- Flow 3 ingress (mean 142.50 Mbit/s)
- Flow 3 egress (mean 139.22 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 137.47 ms)
- Flow 2 (95th percentile 112.23 ms)
- Flow 3 (95th percentile 114.44 ms)
Run 1: Statistics of Vivace-loss

End at: 2018-03-13 20:42:58

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.42 Mbit/s
95th percentile per-packet one-way delay: 117.039 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 226.74 Mbit/s
95th percentile per-packet one-way delay: 114.086 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 244.60 Mbit/s
95th percentile per-packet one-way delay: 131.106 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 165.51 Mbit/s
95th percentile per-packet one-way delay: 110.284 ms
Loss rate: 5.00%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-03-13 21:02:01
End at: 2018-03-13 21:02:31

# Below is generated by plot.py at 2018-03-14 04:46:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 478.99 Mbit/s
  95th percentile per-packet one-way delay: 145.602 ms
  Loss rate: 1.52%
-- Flow 1:
  Average throughput: 300.75 Mbit/s
  95th percentile per-packet one-way delay: 183.140 ms
  Loss rate: 1.03%
-- Flow 2:
  Average throughput: 201.48 Mbit/s
  95th percentile per-packet one-way delay: 113.824 ms
  Loss rate: 1.96%
-- Flow 3:
  Average throughput: 138.28 Mbit/s
  95th percentile per-packet one-way delay: 116.534 ms
  Loss rate: 3.45%
Run 2: Report of Vivace-loss — Data Link

[Graph showing throughput and delay over time for different flows]
Run 3: Statistics of Vivace-loss


# Below is generated by plot.py at 2018-03-14 04:49:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.64 Mbit/s
95th percentile per-packet one-way delay: 138.416 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 275.34 Mbit/s
95th percentile per-packet one-way delay: 186.363 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 241.30 Mbit/s
95th percentile per-packet one-way delay: 115.263 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 111.651 ms
Loss rate: 2.44%
Run 3: Report of Vivace-loss — Data Link

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

Flow 1 ingress (mean 275.83 Mbit/s)  Flow 1 egress (mean 275.34 Mbit/s)
Flow 2 ingress (mean 241.98 Mbit/s)  Flow 2 egress (mean 241.39 Mbit/s)
Flow 3 ingress (mean 97.24 Mbit/s)  Flow 3 egress (mean 97.11 Mbit/s)

Flow 1 (95th percentile 186.36 ms)  Flow 2 (95th percentile 115.26 ms)  Flow 3 (95th percentile 111.65 ms)
Run 4: Statistics of Vivace-loss

Start at: 2018-03-13 21:41:08
End at: 2018-03-13 21:41:38

# Below is generated by plot.py at 2018-03-14 04:51:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 543.13 Mbit/s
  95th percentile per-packet one-way delay: 128.176 ms
  Loss rate: 1.21%
-- Flow 1:
  Average throughput: 312.75 Mbit/s
  95th percentile per-packet one-way delay: 118.870 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 278.30 Mbit/s
  95th percentile per-packet one-way delay: 135.315 ms
  Loss rate: 1.41%
-- Flow 3:
  Average throughput: 142.48 Mbit/s
  95th percentile per-packet one-way delay: 111.916 ms
  Loss rate: 3.25%
Run 4: Report of Vivace-loss — Data Link

![Diagram showing network performance data over time, with plots for throughput and packet delay for different flows.]
Run 5: Statistics of Vivace-loss

Start at: 2018-03-13 22:00:37
End at: 2018-03-13 22:01:07

# Below is generated by plot.py at 2018-03-14 04:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.38 Mbit/s
95th percentile per-packet one-way delay: 114.198 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 236.62 Mbit/s
95th percentile per-packet one-way delay: 113.951 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 190.34 Mbit/s
95th percentile per-packet one-way delay: 113.965 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 140.90 Mbit/s
95th percentile per-packet one-way delay: 117.010 ms
Loss rate: 3.38%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

End at: 2018-03-13 22:20:02

# Below is generated by plot.py at 2018-03-14 04:53:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.79 Mbit/s
95th percentile per-packet one-way delay: 129.607 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 294.36 Mbit/s
95th percentile per-packet one-way delay: 135.179 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 208.81 Mbit/s
95th percentile per-packet one-way delay: 113.625 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 95.99 Mbit/s
95th percentile per-packet one-way delay: 126.272 ms
Loss rate: 2.51%
Run 6: Report of Vivace-loss — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 298.20 Mbps)
- Flow 1 egress (mean 294.36 Mbps)
- Flow 2 ingress (mean 209.05 Mbps)
- Flow 2 egress (mean 208.81 Mbps)
- Flow 3 ingress (mean 96.22 Mbps)
- Flow 3 egress (mean 95.99 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 135.18 ms)
- Flow 2 (95th percentile 113.62 ms)
- Flow 3 (95th percentile 126.27 ms)
Run 7: Statistics of Vivace-loss

Start at: 2018-03-13 22:38:42
End at: 2018-03-13 22:39:12

# Below is generated by plot.py at 2018-03-14 04:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.56 Mbit/s
95th percentile per-packet one-way delay: 113.246 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 268.32 Mbit/s
95th percentile per-packet one-way delay: 111.285 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 201.75 Mbit/s
95th percentile per-packet one-way delay: 114.169 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 134.69 Mbit/s
95th percentile per-packet one-way delay: 113.678 ms
Loss rate: 3.50%
Run 7: Report of Vivace-loss — Data Link
Run 8: Statistics of Vivace-loss

Start at: 2018-03-13 22:58:06
End at: 2018-03-13 22:58:36

# Below is generated by plot.py at 2018-03-14 04:55:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 492.29 Mbit/s
95th percentile per-packet one-way delay: 142.566 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 293.53 Mbit/s
95th percentile per-packet one-way delay: 166.406 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 233.82 Mbit/s
95th percentile per-packet one-way delay: 113.206 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 135.36 Mbit/s
95th percentile per-packet one-way delay: 112.826 ms
Loss rate: 3.20%
Run 8: Report of Vivace-loss — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress** (mean 295.15 Mbps)
- **Flow 1 egress** (mean 293.53 Mbps)
- **Flow 2 ingress** (mean 234.94 Mbps)
- **Flow 2 egress** (mean 233.82 Mbps)
- **Flow 3 ingress** (mean 136.67 Mbps)
- **Flow 3 egress** (mean 135.36 Mbps)

**Per-packet one-way delay (ms):**
- **Flow 1 (95th percentile 166.41 ms)**
- **Flow 2 (95th percentile 113.21 ms)**
- **Flow 3 (95th percentile 112.83 ms)**
Run 9: Statistics of Vivace-loss

Start at: 2018-03-13 23:17:04
End at: 2018-03-13 23:17:34

# Below is generated by plot.py at 2018-03-14 04:56:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 523.40 Mbit/s
95th percentile per-packet one-way delay: 126.069 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 344.33 Mbit/s
95th percentile per-packet one-way delay: 127.208 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 222.19 Mbit/s
95th percentile per-packet one-way delay: 119.218 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 98.75 Mbit/s
95th percentile per-packet one-way delay: 129.911 ms
Loss rate: 2.45%
Run 9: Report of Vivace-loss — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 343.80 Mbit/s)
- Flow 1 egress (mean 344.33 Mbit/s)
- Flow 2 ingress (mean 223.45 Mbit/s)
- Flow 2 egress (mean 222.19 Mbit/s)
- Flow 3 ingress (mean 98.93 Mbit/s)
- Flow 3 egress (mean 98.75 Mbit/s)

![Delay Graph](image2)

- Flow 1 (95th percentile 127.21 ms)
- Flow 2 (95th percentile 119.22 ms)
- Flow 3 (95th percentile 129.91 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-03-13 23:36:35
End at: 2018-03-13 23:37:05

# Below is generated by plot.py at 2018-03-14 04:56:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.79 Mbit/s
95th percentile per-packet one-way delay: 137.485 ms
Loss rate: 2.52%
-- Flow 1:
Average throughput: 305.28 Mbit/s
95th percentile per-packet one-way delay: 145.210 ms
Loss rate: 2.51%
-- Flow 2:
Average throughput: 219.97 Mbit/s
95th percentile per-packet one-way delay: 115.874 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 193.66 Mbit/s
95th percentile per-packet one-way delay: 118.349 ms
Loss rate: 4.31%
Run 10: Report of Vivace-loss — Data Link

- Flow 1 ingress (mean 310.77 Mbit/s)
- Flow 1 egress (mean 305.28 Mbit/s)
- Flow 2 ingress (mean 223.35 Mbit/s)
- Flow 2 egress (mean 219.97 Mbit/s)
- Flow 3 ingress (mean 197.82 Mbit/s)
- Flow 3 egress (mean 193.66 Mbit/s)

Per packet one-way delay (ms)

- Flow 1 (95th percentile 145.21 ms)
- Flow 2 (95th percentile 115.87 ms)
- Flow 3 (95th percentile 118.35 ms)
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-13 20:37:28
End at: 2018-03-13 20:37:58

# Below is generated by plot.py at 2018-03-14 04:58:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 449.68 Mbit/s
  95th percentile per-packet one-way delay: 113.113 ms
  Loss rate: 1.43%
-- Flow 1:
  Average throughput: 279.19 Mbit/s
  95th percentile per-packet one-way delay: 112.622 ms
  Loss rate: 0.86%
-- Flow 2:
  Average throughput: 197.86 Mbit/s
  95th percentile per-packet one-way delay: 113.524 ms
  Loss rate: 1.86%
-- Flow 3:
  Average throughput: 121.88 Mbit/s
  95th percentile per-packet one-way delay: 113.254 ms
  Loss rate: 3.95%
Run 1: Report of Vivace-LTE — Data Link

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

Legend:
- Flow 1 ingress (mean 279.52 Mbit/s)
- Flow 1 egress (mean 279.19 Mbit/s)
- Flow 2 ingress (mean 199.35 Mbit/s)
- Flow 2 egress (mean 197.86 Mbit/s)
- Flow 3 ingress (mean 124.03 Mbit/s)
- Flow 3 egress (mean 121.88 Mbit/s)
Run 2: Statistics of Vivace-LTE

Start at: 2018-03-13 20:56:59
End at: 2018-03-13 20:57:29

# Below is generated by plot.py at 2018-03-14 04:58:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 447.19 Mbit/s
  95th percentile per-packet one-way delay: 114.270 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 294.06 Mbit/s
  95th percentile per-packet one-way delay: 114.998 ms
  Loss rate: 0.90%
-- Flow 2:
  Average throughput: 194.97 Mbit/s
  95th percentile per-packet one-way delay: 112.536 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 74.12 Mbit/s
  95th percentile per-packet one-way delay: 113.960 ms
  Loss rate: 1.67%
Run 2: Report of Vivace-LTE — Data Link

![Throughput Graph]

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 294.48 Mbit/s)
Flow 1 egress (mean 294.06 Mbit/s)
Flow 2 ingress (mean 194.80 Mbit/s)
Flow 2 egress (mean 194.97 Mbit/s)
Flow 3 ingress (mean 73.68 Mbit/s)
Flow 3 egress (mean 74.12 Mbit/s)

![Delay Graph]

Per-packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 115.00 ms)
Flow 2 (95th percentile 112.54 ms)
Flow 3 (95th percentile 113.96 ms)
Run 3: Statistics of Vivace-LTE

Start at: 2018-03-13 21:16:32
End at: 2018-03-13 21:17:02

# Below is generated by plot.py at 2018-03-14 04:59:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.01 Mbit/s
95th percentile per-packet one-way delay: 115.503 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 237.94 Mbit/s
95th percentile per-packet one-way delay: 116.981 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 193.46 Mbit/s
95th percentile per-packet one-way delay: 112.624 ms
Loss rate: 1.56%
-- Flow 3:
Average throughput: 129.78 Mbit/s
95th percentile per-packet one-way delay: 113.285 ms
Loss rate: 3.48%
Run 3: Report of Vivace-LTE — Data Link

![Graph of throughput and packet delay over time for multiple flows.](image-url)
Run 4: Statistics of Vivace-LTE

Start at: 2018-03-13 21:36:03
End at: 2018-03-13 21:36:33

# Below is generated by plot.py at 2018-03-14 05:01:41
# Datalink statistics

-- Total of 3 flows:
  Average throughput: 456.35 Mbit/s
  95th percentile per-packet one-way delay: 122.886 ms
  Loss rate: 1.12%

-- Flow 1:
  Average throughput: 293.39 Mbit/s
  95th percentile per-packet one-way delay: 114.223 ms
  Loss rate: 0.87%

-- Flow 2:
  Average throughput: 183.52 Mbit/s
  95th percentile per-packet one-way delay: 195.128 ms
  Loss rate: 0.78%

-- Flow 3:
  Average throughput: 127.79 Mbit/s
  95th percentile per-packet one-way delay: 113.696 ms
  Loss rate: 3.83%
Run 4: Report of Vivace-LTE — Data Link
Run 5: Statistics of Vivace-LTE

End at: 2018-03-13 21:56:08

# Below is generated by plot.py at 2018-03-14 05:01:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.06 Mbit/s
95th percentile per-packet one-way delay: 118.151 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 288.99 Mbit/s
95th percentile per-packet one-way delay: 122.929 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 189.54 Mbit/s
95th percentile per-packet one-way delay: 112.723 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 94.34 Mbit/s
95th percentile per-packet one-way delay: 111.843 ms
Loss rate: 2.72%
Run 5: Report of Vivace-LTE — Data Link
Run 6: Statistics of Vivace-LTE

End at: 2018-03-13 22:14:58

# Below is generated by plot.py at 2018-03-14 05:03:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 470.36 Mbit/s
  95th percentile per-packet one-way delay: 115.021 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 314.24 Mbit/s
  95th percentile per-packet one-way delay: 116.145 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 188.42 Mbit/s
  95th percentile per-packet one-way delay: 113.040 ms
  Loss rate: 0.85%
-- Flow 3:
  Average throughput: 96.71 Mbit/s
  95th percentile per-packet one-way delay: 113.711 ms
  Loss rate: 2.30%
Run 6: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 314.29 Mbit/s)
- Flow 1 egress (mean 314.24 Mbit/s)
- Flow 2 ingress (mean 187.89 Mbit/s)
- Flow 2 egress (mean 188.42 Mbit/s)
- Flow 3 ingress (mean 96.73 Mbit/s)
- Flow 3 egress (mean 96.71 Mbit/s)

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

- Flow 1 (95th percentile 116.14 ms)
- Flow 2 (95th percentile 113.04 ms)
- Flow 3 (95th percentile 113.71 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-03-13 22:33:36
End at: 2018-03-13 22:34:06

# Below is generated by plot.py at 2018-03-14 05:03:46
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 437.42 Mbit/s
   95th percentile per-packet one-way delay: 113.444 ms
   Loss rate: 1.23%
-- Flow 1:
   Average throughput: 311.94 Mbit/s
   95th percentile per-packet one-way delay: 114.377 ms
   Loss rate: 0.80%
-- Flow 2:
   Average throughput: 120.37 Mbit/s
   95th percentile per-packet one-way delay: 111.788 ms
   Loss rate: 1.74%
-- Flow 3:
   Average throughput: 141.18 Mbit/s
   95th percentile per-packet one-way delay: 111.649 ms
   Loss rate: 3.22%
Run 7: Report of Vivace-LTE — Data Link
Run 8: Statistics of Vivace-LTE

Start at: 2018-03-13 22:53:05
End at: 2018-03-13 22:53:35

# Below is generated by plot.py at 2018-03-14 05:03:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.42 Mbit/s
95th percentile per-packet one-way delay: 145.378 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 219.12 Mbit/s
95th percentile per-packet one-way delay: 112.026 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 249.51 Mbit/s
95th percentile per-packet one-way delay: 162.709 ms
Loss rate: 2.46%
-- Flow 3:
Average throughput: 185.32 Mbit/s
95th percentile per-packet one-way delay: 219.817 ms
Loss rate: 2.47%
Run 9: Statistics of Vivace-LTE

Start at: 2018-03-13 23:12:03
End at: 2018-03-13 23:12:33

# Below is generated by plot.py at 2018-03-14 05:04:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 489.87 Mbit/s
  95th percentile per-packet one-way delay: 158.114 ms
  Loss rate: 1.51%
  -- Flow 1:
    Average throughput: 336.61 Mbit/s
    95th percentile per-packet one-way delay: 203.227 ms
    Loss rate: 1.43%
  -- Flow 2:
    Average throughput: 185.43 Mbit/s
    95th percentile per-packet one-way delay: 111.276 ms
    Loss rate: 1.48%
  -- Flow 3:
    Average throughput: 94.05 Mbit/s
    95th percentile per-packet one-way delay: 110.916 ms
    Loss rate: 2.45%
Run 9: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 338.92 Mbit/s)
- Flow 1 egress (mean 336.61 Mbit/s)
- Flow 2 ingress (mean 186.07 Mbit/s)
- Flow 2 egress (mean 185.43 Mbit/s)
- Flow 3 ingress (mean 94.21 Mbit/s)
- Flow 3 egress (mean 94.05 Mbit/s)
Run 10: Statistics of Vivace-LTE

End at: 2018-03-13 23:32:05

# Below is generated by plot.py at 2018-03-14 05:04:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.51 Mbit/s
95th percentile per-packet one-way delay: 116.278 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 282.84 Mbit/s
95th percentile per-packet one-way delay: 116.603 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 181.12 Mbit/s
95th percentile per-packet one-way delay: 112.167 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 132.03 Mbit/s
95th percentile per-packet one-way delay: 153.926 ms
Loss rate: 3.78%
Run 10: Report of Vivace-LTE — Data Link

![Graph of Throughput vs Time for different flows]

![Graph of Packet Delay vs Time for different flows]

Flow 1 ingress (mean 282.86 Mbit/s), Flow 1 egress (mean 282.84 Mbit/s), Flow 2 ingress (mean 181.84 Mbit/s), Flow 2 egress (mean 181.12 Mbit/s), Flow 3 ingress (mean 134.33 Mbit/s), Flow 3 egress (mean 132.03 Mbit/s)

Flow 1 (95th percentile 116.60 ms), Flow 2 (95th percentile 112.17 ms), Flow 3 (95th percentile 153.93 ms)