Pantheon Report

Generated at 2018-04-04 10:05:15 (UTC).
Data path: GCE London Ethernet (local) → GCE Tokyo Ethernet (remote).
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 @ eb420b5be9bafcccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c00d1c0322cddf4e4e37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bfc1d7c797253db7e8ca04076272b2a44
third_party/genericCC @ 9249ee323f87567c4d8ccaf1443d28df70bff6c4a2
third_party/indigo @ a9b2060d94e4da2e8987e893e3eca2a6c7cd0a9
  third_party/indigo-1-layer-128-unit @ 3ae9e4e4230db748450f82ce8b377695f2f66d
  third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4f4fe0ecdbf90c077e64d
  third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed65b450c0fd505939528e2a5f
  third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0839ad84360c53d89
third_party/koho_cc @ f0f2e693303ae82ea088e6928ec4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861db659ba9013db26744ccfcf993
third_party/pcc @ 1afcf958fa0d66d18b623c091a55f9c872b4981e1
  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 @ c3370f7bd717265a79ae3a4016ad23f5965885
third_party/sourdough @ f1a14bff749737437f61e1aeeb30b267cde681
third_party/sprout @ 6f2e6e6e088d901669af023df375ee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutb2.cc
  M src/network/sproutcomm.cc
third_party/verus @ d4b447e74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f6f5c4580192120401784ce3
third_party/webrtc @ f271183af822ee5d0031620f4bebf38aedc5581
test from GCE London Ethernet to GCE Tokyo 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>
</tr>
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<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<tr>
<td>TCP BBR</td>
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<td>95.60</td>
<td>92.75</td>
<td>87.39</td>
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<td>79.82</td>
<td>70.48</td>
<td>42.78</td>
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<td>6.70</td>
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<td>92.60</td>
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<td>Copa</td>
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<td>60.45</td>
<td>85.60</td>
<td>52.94</td>
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<td>571.99</td>
<td>589.45</td>
<td>474.00</td>
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<td>247.29</td>
<td>172.32</td>
<td>124.70</td>
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<td>Vivace-loss</td>
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<td>262.26</td>
<td>216.64</td>
<td>116.50</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>243.54</td>
<td>188.46</td>
<td>132.38</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-04 03:18:52
End at: 2018-04-04 03:19:22

# Below is generated by plot.py at 2018-04-04 08:28:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 182.95 Mbit/s
  95th percentile per-packet one-way delay: 112.449 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 92.95 Mbit/s
  95th percentile per-packet one-way delay: 112.375 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 93.04 Mbit/s
  95th percentile per-packet one-way delay: 112.402 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 84.77 Mbit/s
  95th percentile per-packet one-way delay: 113.150 ms
  Loss rate: 0.02%
Run 1: Report of TCP BBR — Data Link

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

![Graph showing per-packet one-way delay over time with 95th percentile delays.]
Run 2: Statistics of TCP BBR

Start at: 2018-04-04 03:38:08
End at: 2018-04-04 03:38:38

# Below is generated by plot.py at 2018-04-04 08:28:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 186.91 Mbit/s
  95th percentile per-packet one-way delay: 124.446 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 92.56 Mbit/s
  95th percentile per-packet one-way delay: 123.538 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 97.77 Mbit/s
  95th percentile per-packet one-way delay: 127.722 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 88.44 Mbit/s
  95th percentile per-packet one-way delay: 119.041 ms
  Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-04-04 03:56:57
End at: 2018-04-04 03:57:27

# Below is generated by plot.py at 2018-04-04 08:28:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 186.23 Mbit/s
  95th percentile per-packet one-way delay: 114.780 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 96.83 Mbit/s
  95th percentile per-packet one-way delay: 114.171 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 90.47 Mbit/s
  95th percentile per-packet one-way delay: 113.557 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 88.57 Mbit/s
  95th percentile per-packet one-way delay: 117.343 ms
  Loss rate: 0.00%
Run 4: Statistics of TCP BBR

Start at: 2018-04-04 04:15:53
End at: 2018-04-04 04:16:23

# Below is generated by plot.py at 2018-04-04 08:28:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 186.69 Mbit/s
  95th percentile per-packet one-way delay: 116.698 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 97.77 Mbit/s
  95th percentile per-packet one-way delay: 116.936 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 91.82 Mbit/s
  95th percentile per-packet one-way delay: 117.024 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 83.95 Mbit/s
  95th percentile per-packet one-way delay: 114.512 ms
  Loss rate: 0.00%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-04-04 04:34:59
End at: 2018-04-04 04:35:29

# Below is generated by plot.py at 2018-04-04 08:28:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 187.71 Mbit/s
  95th percentile per-packet one-way delay: 126.609 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 96.58 Mbit/s
  95th percentile per-packet one-way delay: 124.886 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 92.93 Mbit/s
  95th percentile per-packet one-way delay: 128.634 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 88.53 Mbit/s
  95th percentile per-packet one-way delay: 130.743 ms
  Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 96.59 Mbit/s)
- Flow 1 egress (mean 96.58 Mbit/s)
- Flow 2 ingress (mean 92.93 Mbit/s)
- Flow 2 egress (mean 92.93 Mbit/s)
- Flow 3 ingress (mean 98.54 Mbit/s)
- Flow 3 egress (mean 98.53 Mbit/s)

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

- Flow 1 (95th percentile 124.89 ms)
- Flow 2 (95th percentile 128.63 ms)
- Flow 3 (95th percentile 130.74 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-04-04 04:54:17
End at: 2018-04-04 04:54:47

# Below is generated by plot.py at 2018-04-04 08:28:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 188.77 Mbit/s
  95th percentile per-packet one-way delay: 117.189 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 95.96 Mbit/s
  95th percentile per-packet one-way delay: 115.224 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 97.31 Mbit/s
  95th percentile per-packet one-way delay: 117.945 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 84.67 Mbit/s
  95th percentile per-packet one-way delay: 119.007 ms
  Loss rate: 0.03%
Run 6: Report of TCP BBR — Data Link

![Graph showing throughput and packet delay over time]

- Throughput (Mbps):
  - Flow 1 ingress (mean 95.97 Mbps)
  - Flow 1 egress (mean 95.96 Mbps)
  - Flow 2 ingress (mean 97.31 Mbps)
  - Flow 2 egress (mean 97.31 Mbps)
  - Flow 3 ingress (mean 94.65 Mbps)
  - Flow 3 egress (mean 94.67 Mbps)

- Packet one-way delay (ms):
  - Flow 1 (95th percentile 115.22 ms)
  - Flow 2 (95th percentile 117.94 ms)
  - Flow 3 (95th percentile 119.01 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-04-04 05:14:17
End at: 2018-04-04 05:14:47

# Below is generated by plot.py at 2018-04-04 08:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 186.73 Mbit/s
95th percentile per-packet one-way delay: 114.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 97.34 Mbit/s
95th percentile per-packet one-way delay: 113.556 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.24 Mbit/s
95th percentile per-packet one-way delay: 114.092 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 88.40 Mbit/s
95th percentile per-packet one-way delay: 120.655 ms
Loss rate: 0.00%
Run 8: Statistics of TCP BBR

Start at: 2018-04-04 05:34:20
End at: 2018-04-04 05:34:50

# Below is generated by plot.py at 2018-04-04 08:28:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.35 Mbit/s
95th percentile per-packet one-way delay: 113.771 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 113.169 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 89.30 Mbit/s
95th percentile per-packet one-way delay: 113.484 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 88.87 Mbit/s
95th percentile per-packet one-way delay: 114.541 ms
Loss rate: 0.00%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-04-04 05:53:31
End at: 2018-04-04 05:54:01

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 187.65 Mbit/s
  95th percentile per-packet one-way delay: 114.024 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 98.04 Mbit/s
  95th percentile per-packet one-way delay: 113.268 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 90.75 Mbit/s
  95th percentile per-packet one-way delay: 113.628 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 88.84 Mbit/s
  95th percentile per-packet one-way delay: 115.495 ms
  Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link

![Graph 1: Throughput](image1)

![Graph 2: Per-packet one-way delay](image2)
Run 10: Statistics of TCP BBR

Start at: 2018-04-04 06:12:51
End at: 2018-04-04 06:13:21

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 186.24 Mbit/s
  95th percentile per-packet one-way delay: 114.898 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 94.39 Mbit/s
  95th percentile per-packet one-way delay: 113.322 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 93.88 Mbit/s
  95th percentile per-packet one-way delay: 115.995 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 88.83 Mbit/s
  95th percentile per-packet one-way delay: 116.049 ms
  Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 1: Statistics of TCP Cubic

Start at: 2018-04-04 03:17:58
End at: 2018-04-04 03:18:28

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 108.76 Mbit/s
  95th percentile per-packet one-way delay: 119.103 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 72.10 Mbit/s
  95th percentile per-packet one-way delay: 119.652 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 54.13 Mbit/s
  95th percentile per-packet one-way delay: 114.507 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.03 Mbit/s
  95th percentile per-packet one-way delay: 112.457 ms
  Loss rate: 0.12%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-04-04 03:37:14
End at: 2018-04-04 03:37:44

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.98 Mbit/s
95th percentile per-packet one-way delay: 118.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.52 Mbit/s
95th percentile per-packet one-way delay: 117.893 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 118.499 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 54.13 Mbit/s
95th percentile per-packet one-way delay: 117.655 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-04-04 03:56:02
End at: 2018-04-04 03:56:32

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.17 Mbit/s
95th percentile per-packet one-way delay: 121.566 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 119.154 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 100.98 Mbit/s
95th percentile per-packet one-way delay: 122.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 49.65 Mbit/s
95th percentile per-packet one-way delay: 125.787 ms
Loss rate: 0.46%
Run 3: Report of TCP Cubic — Data Link

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**Throughput (Mbps):**

- Flow 1 ingress (mean 58.50 Mbps)
- Flow 1 egress (mean 58.48 Mbps)
- Flow 2 ingress (mean 101.01 Mbps)
- Flow 2 egress (mean 100.98 Mbps)
- Flow 3 ingress (mean 49.89 Mbps)
- Flow 3 egress (mean 49.65 Mbps)

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

- Flow 1 (95th percentile 119.15 ms)
- Flow 2 (95th percentile 122.02 ms)
- Flow 3 (95th percentile 125.79 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-04-04 04:14:59
End at: 2018-04-04 04:15:29

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 111.10 Mbit/s
  95th percentile per-packet one-way delay: 121.027 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 81.88 Mbit/s
  95th percentile per-packet one-way delay: 121.046 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 19.69 Mbit/s
  95th percentile per-packet one-way delay: 114.356 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 48.63 Mbit/s
  95th percentile per-packet one-way delay: 123.667 ms
  Loss rate: 0.07%
Run 5: Statistics of TCP Cubic

Start at: 2018-04-04 04:33:58
End at: 2018-04-04 04:34:28

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.39 Mbit/s
95th percentile per-packet one-way delay: 125.622 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 97.67 Mbit/s
95th percentile per-packet one-way delay: 122.450 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 82.02 Mbit/s
95th percentile per-packet one-way delay: 128.981 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 90.88 Mbit/s
95th percentile per-packet one-way delay: 125.847 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

![Throughput Graph](image)

![Delay Graph](image)

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Run 6: Statistics of TCP Cubic

Start at: 2018-04-04 04:53:20
End at: 2018-04-04 04:53:50

# Below is generated by plot.py at 2018-04-04 08:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 126.01 Mbit/s
  95th percentile per-packet one-way delay: 122.632 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 72.83 Mbit/s
  95th percentile per-packet one-way delay: 122.675 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 35.01 Mbit/s
  95th percentile per-packet one-way delay: 119.321 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 90.85 Mbit/s
  95th percentile per-packet one-way delay: 123.761 ms
  Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link

![Data Link Throughput Graph]

- Flow 1 ingress (mean 72.85 Mbit/s)
- Flow 1 egress (mean 72.83 Mbit/s)
- Flow 2 ingress (mean 35.02 Mbit/s)
- Flow 2 egress (mean 35.01 Mbit/s)
- Flow 3 ingress (mean 90.93 Mbit/s)
- Flow 3 egress (mean 90.85 Mbit/s)

![Data Link Delay Graph]

- Flow 1 (95th percentile 122.67 ms)
- Flow 2 (95th percentile 119.32 ms)
- Flow 3 (95th percentile 123.76 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-04-04 05:13:22
End at: 2018-04-04 05:13:52

# Below is generated by plot.py at 2018-04-04 08:32:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 119.08 Mbit/s
  95th percentile per-packet one-way delay: 121.484 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 81.82 Mbit/s
  95th percentile per-packet one-way delay: 121.894 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 55.11 Mbit/s
  95th percentile per-packet one-way delay: 120.938 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 1.76 Mbit/s
  95th percentile per-packet one-way delay: 121.753 ms
  Loss rate: 0.48%
Run 7: Report of TCP Cubic — Data Link

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

![Graph 2: Per-packet delay vs Time](image2)
Run 8: Statistics of TCP Cubic

Start at: 2018-04-04 05:33:09  
End at: 2018-04-04 05:33:39

# Below is generated by plot.py at 2018-04-04 08:33:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.58 Mbit/s
95th percentile per-packet one-way delay: 123.041 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.31 Mbit/s
95th percentile per-packet one-way delay: 122.502 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 123.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.94 Mbit/s
95th percentile per-packet one-way delay: 134.893 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 103.33 Mbps)
  - Flow 1 egress (mean 103.31 Mbps)
  - Flow 2 ingress (mean 93.50 Mbps)
  - Flow 2 egress (mean 93.50 Mbps)
  - Flow 3 ingress (mean 43.05 Mbps)
  - Flow 3 egress (mean 42.94 Mbps)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 122.50 ms)
  - Flow 2 (95th percentile 123.27 ms)
  - Flow 3 (95th percentile 134.89 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-04-04 05:52:35
End at: 2018-04-04 05:53:05

# Below is generated by plot.py at 2018-04-04 08:33:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 150.91 Mbit/s
  95th percentile per-packet one-way delay: 121.802 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 69.77 Mbit/s
  95th percentile per-packet one-way delay: 121.835 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 99.83 Mbit/s
  95th percentile per-packet one-way delay: 121.869 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 44.61 Mbit/s
  95th percentile per-packet one-way delay: 121.224 ms
  Loss rate: 0.03%
Run 9: Report of TCP Cubic — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 69.82 Mbps)
- Flow 1 egress (mean 69.77 Mbps)
- Flow 2 ingress (mean 99.81 Mbps)
- Flow 2 egress (mean 99.83 Mbps)
- Flow 3 ingress (mean 44.39 Mbps)
- Flow 3 egress (mean 44.61 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 121.83 ms)
- Flow 2 (95th percentile 121.87 ms)
- Flow 3 (95th percentile 121.22 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-04-04 06:11:53
End at: 2018-04-04 06:12:23

# Below is generated by plot.py at 2018-04-04 08:33:52  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 170.08 Mbit/s  
95th percentile per-packet one-way delay: 121.859 ms  
Loss rate: 0.00%

-- Flow 1:
Average throughput: 102.85 Mbit/s  
95th percentile per-packet one-way delay: 122.095 ms  
Loss rate: 0.00%

-- Flow 2:
Average throughput: 100.67 Mbit/s  
95th percentile per-packet one-way delay: 121.532 ms  
Loss rate: 0.00%

-- Flow 3:
Average throughput: 1.33 Mbit/s  
95th percentile per-packet one-way delay: 114.697 ms  
Loss rate: 0.91%
Run 10: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 102.80 Mbps)**
- **Flow 1 egress (mean 102.85 Mbps)**
- **Flow 2 ingress (mean 100.69 Mbps)**
- **Flow 2 egress (mean 100.67 Mbps)**
- **Flow 3 ingress (mean 1.34 Mbps)**
- **Flow 3 egress (mean 1.33 Mbps)**

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

- **Flow 1 (95th percentile 122.09 ms)**
- **Flow 2 (95th percentile 121.53 ms)**
- **Flow 3 (95th percentile 114.70 ms)**

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Run 1: Statistics of LEDBAT

Start at: 2018-04-04 03:17:11
End at: 2018-04-04 03:17:41

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 9.56 Mbit/s
  95th percentile per-packet one-way delay: 112.560 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 5.74 Mbit/s
  95th percentile per-packet one-way delay: 112.664 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.78 Mbit/s
  95th percentile per-packet one-way delay: 111.986 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.98 Mbit/s
  95th percentile per-packet one-way delay: 109.512 ms
  Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

[Graphs showing throughput and packet delay data for flows 1, 2, and 3 over time.]

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Run 2: Statistics of LEDBAT

Start at: 2018-04-04 03:36:27
End at: 2018-04-04 03:36:57

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.13 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.84 Mbit/s
95th percentile per-packet one-way delay: 112.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 112.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 112.519 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 6.84 Mb/s) — Flow 1 egress (mean 6.84 Mb/s)
Flow 2 ingress (mean 4.60 Mb/s) — Flow 2 egress (mean 4.60 Mb/s)
Flow 3 ingress (mean 0.75 Mb/s) — Flow 3 egress (mean 0.75 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.44 ms) — Flow 2 (95th percentile 112.56 ms) — Flow 3 (95th percentile 112.52 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-04-04 03:55:14  
End at: 2018-04-04 03:55:44

# Below is generated by plot.py at 2018-04-04 08:33:52  
# Datalink statistics

-- Total of 3 flows:  
Average throughput: 10.86 Mbit/s  
95th percentile per-packet one-way delay: 113.539 ms  
Loss rate: 0.00%

-- Flow 1:  
Average throughput: 6.94 Mbit/s  
95th percentile per-packet one-way delay: 113.611 ms  
Loss rate: 0.00%

-- Flow 2:  
Average throughput: 4.76 Mbit/s  
95th percentile per-packet one-way delay: 113.387 ms  
Loss rate: 0.00%

-- Flow 3:  
Average throughput: 2.36 Mbit/s  
95th percentile per-packet one-way delay: 109.853 ms  
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

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

Start at: 2018-04-04 04:14:12
End at: 2018-04-04 04:14:42

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 11.13 Mbit/s
  95th percentile per-packet one-way delay: 113.195 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.17 Mbit/s
  95th percentile per-packet one-way delay: 113.172 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.80 Mbit/s
  95th percentile per-packet one-way delay: 113.311 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.32 Mbit/s
  95th percentile per-packet one-way delay: 113.078 ms
  Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-04-04 04:33:11
End at: 2018-04-04 04:33:41

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 11.21 Mbit/s
  95th percentile per-packet one-way delay: 112.538 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.27 Mbit/s
  95th percentile per-packet one-way delay: 112.533 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.83 Mbit/s
  95th percentile per-packet one-way delay: 112.617 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.31 Mbit/s
  95th percentile per-packet one-way delay: 112.243 ms
  Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.27 Mbit/s)
- Flow 1 egress (mean 7.27 Mbit/s)
- Flow 2 ingress (mean 4.83 Mbit/s)
- Flow 2 egress (mean 4.83 Mbit/s)
- Flow 3 ingress (mean 2.31 Mbit/s)
- Flow 3 egress (mean 2.31 Mbit/s)

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

- Flow 1 (95th percentile 112.53 ms)
- Flow 2 (95th percentile 112.62 ms)
- Flow 3 (95th percentile 112.24 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-04-04 04:52:33
End at: 2018-04-04 04:53:03

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 9.64 Mbit/s
  95th percentile per-packet one-way delay: 113.228 ms
  Loss rate: 0.00%
  -- Flow 1:
    Average throughput: 5.85 Mbit/s
    95th percentile per-packet one-way delay: 113.257 ms
    Loss rate: 0.00%
  -- Flow 2:
    Average throughput: 4.59 Mbit/s
    95th percentile per-packet one-way delay: 113.199 ms
    Loss rate: 0.00%
  -- Flow 3:
    Average throughput: 2.26 Mbit/s
    95th percentile per-packet one-way delay: 113.160 ms
    Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 5.85 Mbps)
- Flow 1 egress (mean 5.85 Mbps)
- Flow 2 ingress (mean 4.59 Mbps)
- Flow 2 egress (mean 4.59 Mbps)
- Flow 3 ingress (mean 2.26 Mbps)
- Flow 3 egress (mean 2.26 Mbps)

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

- Flow 1 (95th percentile 113.26 ms)
- Flow 2 (95th percentile 113.20 ms)
- Flow 3 (95th percentile 113.16 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-04-04 05:12:34
End at: 2018-04-04 05:13:04

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.64 Mbit/s
95th percentile per-packet one-way delay: 113.326 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 113.415 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 113.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 113.438 ms
Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-04-04 05:32:22
End at: 2018-04-04 05:32:52

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 11.00 Mbit/s
  95th percentile per-packet one-way delay: 113.565 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.12 Mbit/s
  95th percentile per-packet one-way delay: 113.483 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.71 Mbit/s
  95th percentile per-packet one-way delay: 113.726 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.35 Mbit/s
  95th percentile per-packet one-way delay: 113.449 ms
  Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

[Graph showing throughput (Mbps) over time for different flows (flows 1, 2, and 3) with respective mean speeds in Mbps.]

[Graph showing per-packet one-way delay (ms) over time for different flows (flows 1, 2, and 3) with respective 95th percentile delays in ms.]
Run 9: Statistics of LEDBAT

Start at: 2018-04-04 05:51:47
End at: 2018-04-04 05:52:17

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.97 Mbit/s
95th percentile per-packet one-way delay: 112.924 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 112.879 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 112.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 113.049 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.15 Mbps)
- Flow 1 egress (mean 7.15 Mbps)
- Flow 2 ingress (mean 4.79 Mbps)
- Flow 2 egress (mean 4.79 Mbps)
- Flow 3 ingress (mean 1.94 Mbps)
- Flow 3 egress (mean 1.94 Mbps)

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

- Flow 1 (95th percentile 112.88 ms)
- Flow 2 (95th percentile 112.90 ms)
- Flow 3 (95th percentile 113.05 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-04-04 06:11:06
End at: 2018-04-04 06:11:36

# Below is generated by plot.py at 2018-04-04 08:33:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 9.58 Mbit/s
  95th percentile per-packet one-way delay: 113.852 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 5.95 Mbit/s
  95th percentile per-packet one-way delay: 113.856 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.34 Mbit/s
  95th percentile per-packet one-way delay: 114.084 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.27 Mbit/s
  95th percentile per-packet one-way delay: 113.317 ms
  Loss rate: 0.00%
Run 1: Statistics of PCC

Start at: 2018-04-04 03:30:51
End at: 2018-04-04 03:31:21

# Below is generated by plot.py at 2018-04-04 08:41:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 514.55 Mbit/s
  95th percentile per-packet one-way delay: 231.894 ms
  Loss rate: 1.35%
-- Flow 1:
  Average throughput: 468.91 Mbit/s
  95th percentile per-packet one-way delay: 232.088 ms
  Loss rate: 1.43%
-- Flow 2:
  Average throughput: 64.81 Mbit/s
  95th percentile per-packet one-way delay: 230.644 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 8.08 Mbit/s
  95th percentile per-packet one-way delay: 228.719 ms
  Loss rate: 0.26%
Run 1: Report of PCC — Data Link

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

- Flow 1 Ingress (mean 475.72 Mbps/s)
- Flow 1 Egress (mean 468.91 Mbps/s)
- Flow 2 Ingress (mean 65.14 Mbps/s)
- Flow 2 Egress (mean 64.81 Mbps/s)
- Flow 3 Ingress (mean 8.10 Mbps/s)
- Flow 3 Egress (mean 8.08 Mbps/s)

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

- Flow 1 (95th percentile 232.09 ms)
- Flow 2 (95th percentile 230.64 ms)
- Flow 3 (95th percentile 228.72 ms)
Run 2: Statistics of PCC

Start at: 2018-04-04 03:49:57
End at: 2018-04-04 03:50:27

# Below is generated by plot.py at 2018-04-04 08:41:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 503.26 Mbit/s
95th percentile per-packet one-way delay: 247.804 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 491.42 Mbit/s
95th percentile per-packet one-way delay: 248.013 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 16.64 Mbit/s
95th percentile per-packet one-way delay: 241.782 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 221.808 ms
Loss rate: 0.00%
Run 2: Report of PCC — Data Link
Run 3: Statistics of PCC

Start at: 2018-04-04 04:08:51  
End at: 2018-04-04 04:09:21

# Below is generated by plot.py at 2018-04-04 08:41:03  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 509.79 Mbit/s  
95th percentile per-packet one-way delay: 266.196 ms  
Loss rate: 1.15%  
-- Flow 1:  
Average throughput: 462.05 Mbit/s  
95th percentile per-packet one-way delay: 270.693 ms  
Loss rate: 1.26%  
-- Flow 2:  
Average throughput: 63.51 Mbit/s  
95th percentile per-packet one-way delay: 232.390 ms  
Loss rate: 0.08%  
-- Flow 3:  
Average throughput: 16.90 Mbit/s  
95th percentile per-packet one-way delay: 172.102 ms  
Loss rate: 0.00%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-04-04 04:27:51
End at: 2018-04-04 04:28:21

# Below is generated by plot.py at 2018-04-04 08:41:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.36 Mbit/s
95th percentile per-packet one-way delay: 242.986 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 469.11 Mbit/s
95th percentile per-packet one-way delay: 243.020 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 242.222 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 64.43 Mbit/s
95th percentile per-packet one-way delay: 243.022 ms
Loss rate: 2.45%
Run 4: Report of PCC — Data Link

[Graph showing throughput over time for different flows]

[Graph showing per-packet error rate delay over time for different flows]
Run 5: Statistics of PCC

Start at: 2018-04-04 04:46:56
End at: 2018-04-04 04:47:26

# Below is generated by plot.py at 2018-04-04 08:41:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.63 Mbit/s
95th percentile per-packet one-way delay: 250.842 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 465.75 Mbit/s
95th percentile per-packet one-way delay: 255.658 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 33.12 Mbit/s
95th percentile per-packet one-way delay: 219.617 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 63.59 Mbit/s
95th percentile per-packet one-way delay: 223.072 ms
Loss rate: 0.60%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

Start at: 2018-04-04 05:07:19
End at: 2018-04-04 05:07:49

# Below is generated by plot.py at 2018-04-04 08:41:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 495.21 Mbit/s
95th percentile per-packet one-way delay: 275.590 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 453.69 Mbit/s
95th percentile per-packet one-way delay: 282.751 ms
Loss rate: 2.46%
-- Flow 2:
Average throughput: 61.26 Mbit/s
95th percentile per-packet one-way delay: 240.529 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 239.345 ms
Loss rate: 0.70%
Run 6: Report of PCC — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 465.11 Mbit/s)
- Flow 1 egress (mean 453.69 Mbit/s)
- Flow 2 ingress (mean 61.63 Mbit/s)
- Flow 2 egress (mean 61.26 Mbit/s)
- Flow 3 ingress (mean 2.44 Mbit/s)
- Flow 3 egress (mean 2.42 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 282.75 ms)
- Flow 2 (95th percentile 240.53 ms)
- Flow 3 (95th percentile 239.34 ms)
Run 7: Statistics of PCC

Start at: 2018-04-04 05:26:46
End at: 2018-04-04 05:27:17

# Below is generated by plot.py at 2018-04-04 08:42:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 507.93 Mbit/s
  95th percentile per-packet one-way delay: 237.774 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 466.93 Mbit/s
  95th percentile per-packet one-way delay: 237.954 ms
  Loss rate: 1.21%
-- Flow 2:
  Average throughput: 60.67 Mbit/s
  95th percentile per-packet one-way delay: 237.034 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 2.23 Mbit/s
  95th percentile per-packet one-way delay: 236.828 ms
  Loss rate: 0.55%
Run 7: Report of PCC — Data Link

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

- **Flow 1 Ingress (mean 472.68 Mbit/s)**
- **Flow 1 Egress (mean 466.93 Mbit/s)**
- **Flow 2 Ingress (mean 61.00 Mbit/s)**
- **Flow 2 Egress (mean 60.67 Mbit/s)**
- **Flow 3 Ingress (mean 2.24 Mbit/s)**
- **Flow 3 Egress (mean 2.23 Mbit/s)**

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

- **Flow 1 (95th percentile 237.95 ms)**
- **Flow 2 (95th percentile 237.03 ms)**
- **Flow 3 (95th percentile 236.83 ms)**
Run 8: Statistics of PCC

Start at: 2018-04-04 05:46:20
End at: 2018-04-04 05:46:50

# Below is generated by plot.py at 2018-04-04 08:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 525.31 Mbit/s
  95th percentile per-packet one-way delay: 244.508 ms
  Loss rate: 2.57%
-- Flow 1:
  Average throughput: 483.44 Mbit/s
  95th percentile per-packet one-way delay: 245.109 ms
  Loss rate: 2.63%
-- Flow 2:
  Average throughput: 61.99 Mbit/s
  95th percentile per-packet one-way delay: 240.435 ms
  Loss rate: 1.88%
-- Flow 3:
  Average throughput: 2.18 Mbit/s
  95th percentile per-packet one-way delay: 241.778 ms
  Loss rate: 3.93%
Run 8: Report of PCC — Data Link

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

Start at: 2018-04-04 06:05:43
End at: 2018-04-04 06:06:13

# Below is generated by plot.py at 2018-04-04 08:49:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.63 Mbit/s
95th percentile per-packet one-way delay: 253.011 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 458.84 Mbit/s
95th percentile per-packet one-way delay: 255.017 ms
Loss rate: 2.31%
-- Flow 2:
Average throughput: 61.84 Mbit/s
95th percentile per-packet one-way delay: 237.713 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 238.727 ms
Loss rate: 0.79%
Run 9: Report of PCC — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 Ingress (mean 489.69 Mbps/s) — Flow 1 Egress (mean 458.84 Mbps/s)
Flow 2 Ingress (mean 62.24 Mbps/s) — Flow 2 Egress (mean 61.84 Mbps/s)
Flow 3 Ingress (mean 32.91 Mbps/s) — Flow 3 Egress (mean 32.65 Mbps/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 255.02 ms) — Flow 2 (95th percentile 237.71 ms) — Flow 3 (95th percentile 238.73 ms)
Run 10: Statistics of PCC

Start at: 2018-04-04 06:25:06
End at: 2018-04-04 06:25:36

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.81 Mbit/s
95th percentile per-packet one-way delay: 242.589 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 472.37 Mbit/s
95th percentile per-packet one-way delay: 243.056 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 239.598 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 61.80 Mbit/s
95th percentile per-packet one-way delay: 241.262 ms
Loss rate: 3.10%
Run 10: Report of PCC — Data Link

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

![Graph 2: Per-packet one-way delay](image2)
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-04 03:34:27
End at: 2018-04-04 03:34:57

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 42.19 Mbit/s
  95th percentile per-packet one-way delay: 112.182 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 111.429 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.64 Mbit/s
  95th percentile per-packet one-way delay: 112.180 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 47.25 Mbit/s
  95th percentile per-packet one-way delay: 112.188 ms
  Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-04 03:53:11
End at: 2018-04-04 03:53:41

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 110.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.61 Mbit/s
95th percentile per-packet one-way delay: 109.706 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 110.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.98 Mbit/s
95th percentile per-packet one-way delay: 109.642 ms
Loss rate: 0.01%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-04 04:12:09
End at: 2018-04-04 04:12:39

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.44 Mbit/s
  95th percentile per-packet one-way delay: 112.578 ms
  Loss rate: 0.00%
 -- Flow 1:
  Average throughput: 47.84 Mbit/s
  95th percentile per-packet one-way delay: 112.606 ms
  Loss rate: 0.00%
 -- Flow 2:
  Average throughput: 39.31 Mbit/s
  95th percentile per-packet one-way delay: 110.564 ms
  Loss rate: 0.00%
 -- Flow 3:
  Average throughput: 23.33 Mbit/s
  95th percentile per-packet one-way delay: 112.465 ms
  Loss rate: 0.00%
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-04 04:31:07
End at: 2018-04-04 04:31:37

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.32 Mbit/s
  95th percentile per-packet one-way delay: 111.342 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 44.75 Mbit/s
  95th percentile per-packet one-way delay: 111.367 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 39.35 Mbit/s
  95th percentile per-packet one-way delay: 110.301 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 17.24 Mbit/s
  95th percentile per-packet one-way delay: 109.700 ms
  Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-04 04:50:22
End at: 2018-04-04 04:50:52

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.27 Mbit/s
95th percentile per-packet one-way delay: 111.465 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 110.590 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.85 Mbit/s
95th percentile per-packet one-way delay: 111.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.36 Mbit/s
95th percentile per-packet one-way delay: 111.637 ms
Loss rate: 0.05%
Run 5: Report of QUIC Cubic — Data Link

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

- Flow 1 Ingress (mean 52.91 Mbit/s)
- Flow 1 Egress (mean 52.91 Mbit/s)
- Flow 2 Ingress (mean 31.84 Mbit/s)
- Flow 2 Egress (mean 31.85 Mbit/s)
- Flow 3 Ingress (mean 19.37 Mbit/s)
- Flow 3 Egress (mean 19.36 Mbit/s)

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

- Flow 1 (95th percentile 110.59 ms)
- Flow 2 (95th percentile 111.27 ms)
- Flow 3 (95th percentile 111.64 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-04 05:10:29
End at: 2018-04-04 05:10:59

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.18 Mbit/s
95th percentile per-packet one-way delay: 112.346 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.72 Mbit/s
95th percentile per-packet one-way delay: 112.374 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.07 Mbit/s
95th percentile per-packet one-way delay: 112.281 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.64 Mbit/s
95th percentile per-packet one-way delay: 110.820 ms
Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-04 05:30:12
End at: 2018-04-04 05:30:42

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.69 Mbit/s
95th percentile per-packet one-way delay: 111.560 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.37 Mbit/s
95th percentile per-packet one-way delay: 110.526 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.89 Mbit/s
95th percentile per-packet one-way delay: 111.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.15 Mbit/s
95th percentile per-packet one-way delay: 110.614 ms
Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-04 05:49:42
End at: 2018-04-04 05:50:12

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.84 Mbit/s
  95th percentile per-packet one-way delay: 111.338 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 46.59 Mbit/s
  95th percentile per-packet one-way delay: 109.859 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 38.47 Mbit/s
  95th percentile per-packet one-way delay: 110.509 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 20.91 Mbit/s
  95th percentile per-packet one-way delay: 111.529 ms
  Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-04 06:09:03
End at: 2018-04-04 06:09:33

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.91 Mbit/s
  95th percentile per-packet one-way delay: 112.292 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 38.67 Mbit/s
  95th percentile per-packet one-way delay: 112.332 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 44.52 Mbit/s
  95th percentile per-packet one-way delay: 110.377 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.61 Mbit/s
  95th percentile per-packet one-way delay: 110.366 ms
  Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 38.67 Mbps)
- Flow 1 egress (mean 38.67 Mbps)
- Flow 2 ingress (mean 44.52 Mbps)
- Flow 2 egress (mean 44.52 Mbps)
- Flow 3 ingress (mean 11.61 Mbps)
- Flow 3 egress (mean 11.61 Mbps)

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

- Flow 1 (95th percentile 112.33 ms)
- Flow 2 (95th percentile 110.38 ms)
- Flow 3 (95th percentile 110.37 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-04 06:28:22
End at: 2018-04-04 06:28:52

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.38 Mbit/s
  95th percentile per-packet one-way delay: 112.198 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 40.86 Mbit/s
  95th percentile per-packet one-way delay: 112.227 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 43.63 Mbit/s
  95th percentile per-packet one-way delay: 110.886 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 17.52 Mbit/s
  95th percentile per-packet one-way delay: 110.462 ms
  Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-04-04 03:19:49
End at: 2018-04-04 03:20:19

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.338 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.291 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.379 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.926 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-04-04 03:39:06
End at: 2018-04-04 03:39:36

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 111.798 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.762 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.827 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.520 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

[Graph showing throughput over time for different flows with annotations for mean egress and ingress rates.]
Run 3: Statistics of SCReAM

Start at: 2018-04-04 03:57:55
End at: 2018-04-04 03:58:25

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 111.731 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.573 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.771 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.534 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-04-04 04:16:51
End at: 2018-04-04 04:17:21

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.35 Mbit/s
  95th percentile per-packet one-way delay: 112.914 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.952 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 111.538 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.13 Mbit/s
  95th percentile per-packet one-way delay: 112.833 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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

Start at: 2018-04-04 04:36:00
End at: 2018-04-04 04:36:30

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.787 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.456 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.830 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.819 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

End at: 2018-04-04 04:55:50

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.652 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.576 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.078 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-04-04 05:15:18
End at: 2018-04-04 05:15:48

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.843 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.465 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.914 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.924 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

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

![Graph 2: Per-Packet One-Way Delay over Time](image2)
Run 8: Statistics of SCReAM

Start at: 2018-04-04 05:35:18
End at: 2018-04-04 05:35:48

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.492 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.515 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 109.847 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.563 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.52 ms)  |  Flow 2 (95th percentile 109.85 ms)  |  Flow 3 (95th percentile 110.56 ms)
Run 9: Statistics of SCReAM

Start at: 2018-04-04 05:54:30
End at: 2018-04-04 05:55:00

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.588 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.621 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.775 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.267 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Data Link Throughput Graph]

- 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)

![Data Link Delay Graph]

- Flow 1 (95th percentile 112.62 ms)
- Flow 2 (95th percentile 110.78 ms)
- Flow 3 (95th percentile 112.27 ms)
Run 10: Statistics of SCReAM

Start at: 2018-04-04 06:13:50
End at: 2018-04-04 06:14:20

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.622 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.524 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.676 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.572 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet delay (ms)]
Run 1: Statistics of WebRTC media

Start at: 2018-04-04 03:32:00
End at: 2018-04-04 03:32:30

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.277 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.659 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.383 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Graph showing network performance metrics over time for different flows.]

Throughput (Mbps)

Time (s)

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

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

Pre-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 111.66 ms)
Flow 2 (95th percentile 112.32 ms)
Flow 3 (95th percentile 111.38 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-04-04 03:51:04
End at: 2018-04-04 03:51:34

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 112.927 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.464 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.694 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.080 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

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

Throughput (Mbps)

0 5 10 15 20 25 30

Time (s)

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

Packet Loss (one way delay, ms)

0 5 10 15 20 25 30

Time (s)

- Flow 1 (95th percentile 112.46 ms)
- Flow 2 (95th percentile 112.69 ms)
- Flow 3 (95th percentile 113.08 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-04-04 04:09:58
End at: 2018-04-04 04:10:28

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 112.624 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.356 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.631 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 112.667 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-04-04 04:28:59
End at: 2018-04-04 04:29:29

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.165 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.068 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.804 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.334 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.06 Mbps)
  - Flow 1 egress (mean 0.06 Mbps)
  - Flow 2 ingress (mean 0.06 Mbps)
  - Flow 2 egress (mean 0.06 Mbps)
  - Flow 3 ingress (mean 0.05 Mbps)
  - Flow 3 egress (mean 0.05 Mbps)

- **Packet round-trip time (ms):**
  - Flow 1 (95th percentile 112.07 ms)
  - Flow 2 (95th percentile 111.80 ms)
  - Flow 3 (95th percentile 112.33 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-04-04 04:48:05
End at: 2018-04-04 04:48:35

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 113.672 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 111.736 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 113.704 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 111.530 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-04-04 05:08:27
End at: 2018-04-04 05:08:57

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.442 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.412 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 111.690 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

![Graph showing throughput and latency over time for multiple flows.]

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

![Graph showing per-packet round-trip delay for multiple flows.]
Run 7: Statistics of WebRTC media

Start at: 2018-04-04 05:28:08
End at: 2018-04-04 05:28:38

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.704 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.512 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-04-04 05:47:29
End at: 2018-04-04 05:47:59

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.603 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.556 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.647 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph showing WebRTC media throughputs and delays over time.](image)

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

- Per-packet one way delay (ms)
  - Flow 1 (95th percentile 112.56 ms)
  - Flow 2 (95th percentile 112.65 ms)
  - Flow 3 (95th percentile 112.57 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-04-04 06:06:52
End at: 2018-04-04 06:07:22

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 114.711 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.661 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.06 Mbps)
  - Flow 1 egress (mean 0.06 Mbps)
  - Flow 2 ingress (mean 0.06 Mbps)
  - Flow 2 egress (mean 0.06 Mbps)
  - Flow 3 ingress (mean 0.05 Mbps)
  - Flow 3 egress (mean 0.05 Mbps)

- **Packet Loss (1-way delay, ms):**
  - Flow 1 (95th percentile 114.75 ms)
  - Flow 2 (95th percentile 112.66 ms)
  - Flow 3 (95th percentile 112.66 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-04-04 06:26:14
End at: 2018-04-04 06:26:44

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 112.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 111.986 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.644 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.573 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-04-04 03:24:55
End at: 2018-04-04 03:25:25

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.99 Mbit/s
  95th percentile per-packet one-way delay: 111.398 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.50 Mbit/s
  95th percentile per-packet one-way delay: 111.289 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.56 Mbit/s
  95th percentile per-packet one-way delay: 111.867 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.38 Mbit/s
  95th percentile per-packet one-way delay: 110.597 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-04-04 03:44:08
End at: 2018-04-04 03:44:38

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.16 Mbit/s
  95th percentile per-packet one-way delay: 113.528 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.49 Mbit/s
  95th percentile per-packet one-way delay: 113.585 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.65 Mbit/s
  95th percentile per-packet one-way delay: 113.405 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.71 Mbit/s
  95th percentile per-packet one-way delay: 113.219 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

[Graph showing throughput (in Mbit/s) and packet one-way delay (in ms) over time for different flows.]
Run 3: Statistics of Sprout

Start at: 2018-04-04 04:03:09
End at: 2018-04-04 04:03:39

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.78 Mbit/s
  95th percentile per-packet one-way delay: 113.041 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.04 Mbit/s
  95th percentile per-packet one-way delay: 113.026 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.96 Mbit/s
  95th percentile per-packet one-way delay: 112.985 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.36 Mbit/s
  95th percentile per-packet one-way delay: 113.209 ms
  Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 3.04 Mbps)
- Flow 2 ingress (mean 2.95 Mbps)
- Flow 3 ingress (mean 2.36 Mbps)
- Flow 1 egress (mean 3.04 Mbps)
- Flow 2 egress (mean 2.96 Mbps)
- Flow 3 egress (mean 2.36 Mbps)

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

- Flow 1 (95th percentile 112.03 ms)
- Flow 2 (95th percentile 112.90 ms)
- Flow 3 (95th percentile 113.21 ms)
Run 4: Statistics of Sprout

Start at: 2018-04-04 04:21:52
End at: 2018-04-04 04:22:22

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.49 Mbit/s
  95th percentile per-packet one-way delay: 112.982 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 2.57 Mbit/s
  95th percentile per-packet one-way delay: 113.048 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 2.16 Mbit/s
  95th percentile per-packet one-way delay: 112.854 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 1.46 Mbit/s
  95th percentile per-packet one-way delay: 112.614 ms
  Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

Start at: 2018-04-04 04:40:48
End at: 2018-04-04 04:41:18

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.06 Mbit/s
  95th percentile per-packet one-way delay: 113.016 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.72 Mbit/s
  95th percentile per-packet one-way delay: 112.915 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.63 Mbit/s
  95th percentile per-packet one-way delay: 113.177 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.78 Mbit/s
  95th percentile per-packet one-way delay: 112.852 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-04-04 05:00:56
End at: 2018-04-04 05:01:26

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.18 Mbit/s
  95th percentile per-packet one-way delay: 112.860 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 2.81 Mbit/s
  95th percentile per-packet one-way delay: 112.952 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 2.95 Mbit/s
  95th percentile per-packet one-way delay: 112.787 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 1.25 Mbit/s
  95th percentile per-packet one-way delay: 111.658 ms
  Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-04-04 05:20:34
End at: 2018-04-04 05:21:04

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.82 Mbit/s
  95th percentile per-packet one-way delay: 112.921 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.04 Mbit/s
  95th percentile per-packet one-way delay: 113.014 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.26 Mbit/s
  95th percentile per-packet one-way delay: 112.795 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.83 Mbit/s
  95th percentile per-packet one-way delay: 112.615 ms
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 3.04 Mbit/s)
- Flow 1 egress (mean 3.04 Mbit/s)
- Flow 2 ingress (mean 2.26 Mbit/s)
- Flow 2 egress (mean 2.26 Mbit/s)
- Flow 3 ingress (mean 0.83 Mbit/s)
- Flow 3 egress (mean 0.83 Mbit/s)

![Graph 2: Latency vs Time (ms)]

- Flow 1 (95th percentile 113.01 ms)
- Flow 2 (95th percentile 112.80 ms)
- Flow 3 (95th percentile 112.61 ms)
Run 8: Statistics of Sprout

Start at: 2018-04-04 05:40:21
End at: 2018-04-04 05:40:51

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.94 Mbit/s
  95th percentile per-packet one-way delay: 113.551 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.28 Mbit/s
  95th percentile per-packet one-way delay: 113.465 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.82 Mbit/s
  95th percentile per-packet one-way delay: 113.842 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.39 Mbit/s
  95th percentile per-packet one-way delay: 113.387 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-04-04 05:59:34
End at: 2018-04-04 06:00:04

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.28 Mbit/s
  95th percentile per-packet one-way delay: 113.078 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.77 Mbit/s
  95th percentile per-packet one-way delay: 113.084 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.60 Mbit/s
  95th percentile per-packet one-way delay: 112.988 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.37 Mbit/s
  95th percentile per-packet one-way delay: 113.362 ms
  Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-04-04 06:18:59
End at: 2018-04-04 06:19:29

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.42 Mbit/s
  95th percentile per-packet one-way delay: 112.618 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 2.32 Mbit/s
  95th percentile per-packet one-way delay: 112.665 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 1.97 Mbit/s
  95th percentile per-packet one-way delay: 112.626 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 2.38 Mbit/s
  95th percentile per-packet one-way delay: 111.368 ms
  Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.32 Mbps)
- Flow 1 egress (mean 2.32 Mbps)
- Flow 2 ingress (mean 1.97 Mbps)
- Flow 2 egress (mean 1.97 Mbps)
- Flow 3 ingress (mean 2.38 Mbps)
- Flow 3 egress (mean 2.38 Mbps)

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

- Flow 1 (95th percentile 112.67 ms)
- Flow 2 (95th percentile 112.63 ms)
- Flow 3 (95th percentile 111.37 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-04 03:28:49
End at: 2018-04-04 03:29:19

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.12 Mbit/s
95th percentile per-packet one-way delay: 114.314 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.09 Mbit/s
95th percentile per-packet one-way delay: 112.067 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.77 Mbit/s
95th percentile per-packet one-way delay: 113.428 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.44 Mbit/s
95th percentile per-packet one-way delay: 118.802 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link

[Graph showing throughput and delay over time for different flows.]
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-04 03:48:00
End at: 2018-04-04 03:48:30

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
--- Total of 3 flows:
Average throughput: 100.25 Mbit/s
95th percentile per-packet one-way delay: 112.930 ms
Loss rate: 0.01%
--- Flow 1:
Average throughput: 49.44 Mbit/s
95th percentile per-packet one-way delay: 113.332 ms
Loss rate: 0.00%
--- Flow 2:
Average throughput: 20.69 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 0.05%
--- Flow 3:
Average throughput: 112.12 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

![Graph showing throughput and delay over time for different traffic flows. The graphs depict the throughput (Mbps) and delay (ms) for Flow 1, Flow 2, and Flow 3 with distinct markers and line styles. The throughput and delay metrics are measured over a 30-second time frame.]
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-04 04:07:01
End at: 2018-04-04 04:07:31

# Below is generated by plot.py at 2018-04-04 08:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.48 Mbit/s
95th percentile per-packet one-way delay: 112.639 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.74 Mbit/s
95th percentile per-packet one-way delay: 112.630 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 8.33 Mbit/s
95th percentile per-packet one-way delay: 112.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.65 Mbit/s
95th percentile per-packet one-way delay: 112.643 ms
Loss rate: 0.02%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-04 04:25:39
End at: 2018-04-04 04:26:09

# Below is generated by plot.py at 2018-04-04 08:51:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 227.10 Mbit/s
  95th percentile per-packet one-way delay: 119.988 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 57.58 Mbit/s
  95th percentile per-packet one-way delay: 112.041 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 161.93 Mbit/s
  95th percentile per-packet one-way delay: 127.689 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 186.30 Mbit/s
  95th percentile per-packet one-way delay: 112.767 ms
  Loss rate: 0.01%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-04 04:44:42
End at: 2018-04-04 04:45:12

# Below is generated by plot.py at 2018-04-04 08:52:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 253.41 Mbit/s
95th percentile per-packet one-way delay: 117.029 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 155.39 Mbit/s
95th percentile per-packet one-way delay: 114.805 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 94.97 Mbit/s
95th percentile per-packet one-way delay: 119.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 106.53 Mbit/s
95th percentile per-packet one-way delay: 123.389 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

![Graph of Throughput (Mbps)]

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

Flow 1 ingress (mean 155.40 Mbps)  
Flow 1 egress (mean 155.39 Mbps)  
Flow 2 ingress (mean 94.97 Mbps)  
Flow 2 egress (mean 94.97 Mbps)  
Flow 3 ingress (mean 106.53 Mbps)  
Flow 3 egress (mean 106.53 Mbps)
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-04 05:05:06
End at: 2018-04-04 05:05:36

# Below is generated by plot.py at 2018-04-04 08:52:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 211.63 Mbit/s
  95th percentile per-packet one-way delay: 117.268 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 125.42 Mbit/s
  95th percentile per-packet one-way delay: 115.823 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 76.21 Mbit/s
  95th percentile per-packet one-way delay: 120.122 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 107.34 Mbit/s
  95th percentile per-packet one-way delay: 117.648 ms
  Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps)

- Flow 1 ingress (mean 125.42 Mbps)
- Flow 1 egress (mean 125.42 Mbps)
- Flow 2 ingress (mean 76.20 Mbps)
- Flow 2 egress (mean 76.21 Mbps)
- Flow 3 ingress (mean 107.34 Mbps)
- Flow 3 egress (mean 107.34 Mbps)

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

- Flow 1 (95th percentile 115.82 ms)
- Flow 2 (95th percentile 120.12 ms)
- Flow 3 (95th percentile 117.65 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-04 05:24:41
End at: 2018-04-04 05:25:11

# Below is generated by plot.py at 2018-04-04 08:52:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 39.86 Mbit/s
  95th percentile per-packet one-way delay: 112.674 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 50.97 Mbit/s
  95th percentile per-packet one-way delay: 112.717 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 15.83 Mbit/s
  95th percentile per-packet one-way delay: 112.517 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 18.87 Mbit/s
  95th percentile per-packet one-way delay: 112.758 ms
  Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-04 05:44:17
End at: 2018-04-04 05:44:47

# Below is generated by plot.py at 2018-04-04 08:52:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 139.51 Mbit/s
  95th percentile per-packet one-way delay: 112.766 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 10.43 Mbit/s
  95th percentile per-packet one-way delay: 112.531 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 186.31 Mbit/s
  95th percentile per-packet one-way delay: 112.794 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.73 Mbit/s
  95th percentile per-packet one-way delay: 112.635 ms
  Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-04 06:03:31
End at: 2018-04-04 06:04:01

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 209.64 Mbit/s
  95th percentile per-packet one-way delay: 118.154 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 134.86 Mbit/s
  95th percentile per-packet one-way delay: 117.134 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 51.34 Mbit/s
  95th percentile per-packet one-way delay: 124.929 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 122.57 Mbit/s
  95th percentile per-packet one-way delay: 119.051 ms
  Loss rate: 0.42%
Run 9: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 134.86 Mbps)
- Flow 1 egress (mean 134.86 Mbps)
- Flow 2 ingress (mean 51.46 Mbps)
- Flow 2 egress (mean 51.34 Mbps)
- Flow 3 ingress (mean 123.02 Mbps)
- Flow 3 egress (mean 122.57 Mbps)

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

- Flow 1 (95th percentile 117.13 ms)
- Flow 2 (95th percentile 124.93 ms)
- Flow 3 (95th percentile 119.05 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-04 06:22:52
End at: 2018-04-04 06:23:22

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 178.04 Mbit/s
  95th percentile per-packet one-way delay: 113.336 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 103.81 Mbit/s
  95th percentile per-packet one-way delay: 113.275 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 104.15 Mbit/s
  95th percentile per-packet one-way delay: 113.549 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.29 Mbit/s
  95th percentile per-packet one-way delay: 112.897 ms
  Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 103.81 Mbps)
- Flow 1 egress (mean 103.81 Mbps)
- Flow 2 ingress (mean 104.16 Mbps)
- Flow 2 egress (mean 104.15 Mbps)
- Flow 3 ingress (mean 15.29 Mbps)
- Flow 3 egress (mean 15.29 Mbps)

![Graph showing packet delay over time.]

Legend:
- Flow 1 (95th percentile 113.28 ms)
- Flow 2 (95th percentile 113.55 ms)
- Flow 3 (95th percentile 112.90 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-04-04 03:26:54
End at: 2018-04-04 03:27:24

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 133.23 Mbit/s
  95th percentile per-packet one-way delay: 119.106 ms
  Loss rate: 0.00%
  -- Flow 1:
    Average throughput: 103.14 Mbit/s
    95th percentile per-packet one-way delay: 119.930 ms
    Loss rate: 0.00%
  -- Flow 2:
    Average throughput: 44.56 Mbit/s
    95th percentile per-packet one-way delay: 116.648 ms
    Loss rate: 0.00%
  -- Flow 3:
    Average throughput: 1.35 Mbit/s
    95th percentile per-packet one-way delay: 112.351 ms
    Loss rate: 0.45%
Run 1: Report of TCP Vegas — Data Link

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

The first graph illustrates the throughput in Mbps over time for different flows. The legend indicates:
- Blue dashed line: Flow 1 ingress (mean 103.13 Mbps)
- Blue solid line: Flow 1 egress (mean 103.14 Mbps)
- Green dashed line: Flow 2 ingress (mean 44.55 Mbps)
- Green solid line: Flow 2 egress (mean 44.56 Mbps)
- Red dashed line: Flow 3 ingress (mean 1.36 Mbps)
- Red solid line: Flow 3 egress (mean 1.35 Mbps)

The second graph displays the packet delay in ms over time for different flows.

Legend for packet delay:
- Blue circles: Flow 1 (95th percentile 119.93 ms)
- Green circles: Flow 2 (95th percentile 116.65 ms)
- Yellow circles: Flow 3 (95th percentile 112.35 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-04-04 03:46:06
End at: 2018-04-04 03:46:36

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.63 Mbit/s
95th percentile per-packet one-way delay: 114.597 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.77 Mbit/s
95th percentile per-packet one-way delay: 114.319 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.27 Mbit/s
95th percentile per-packet one-way delay: 114.993 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 115.218 ms
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 64.77 Mbit/s)
- Flow 1 egress (mean 64.77 Mbit/s)
- Flow 2 ingress (mean 38.27 Mbit/s)
- Flow 2 egress (mean 38.27 Mbit/s)
- Flow 3 ingress (mean 19.40 Mbit/s)
- Flow 3 egress (mean 19.39 Mbit/s)
Run 3: Statistics of TCP Vegas

Start at: 2018-04-04 04:05:06
End at: 2018-04-04 04:05:36

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.12 Mbit/s
95th percentile per-packet one-way delay: 116.085 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 42.75 Mbit/s
95th percentile per-packet one-way delay: 114.134 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 112.449 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 86.49 Mbit/s
95th percentile per-packet one-way delay: 117.161 ms
Loss rate: 0.26%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-04-04 04:23:48
End at: 2018-04-04 04:24:18

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.42 Mbit/s
95th percentile per-packet one-way delay: 115.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 20.91 Mbit/s
95th percentile per-packet one-way delay: 113.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 113.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.41 Mbit/s
95th percentile per-packet one-way delay: 120.757 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-04-04 04:42:43
End at: 2018-04-04 04:43:13

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.89 Mbit/s
95th percentile per-packet one-way delay: 120.666 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 102.01 Mbit/s
95th percentile per-packet one-way delay: 120.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 117.256 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 117.398 ms
Loss rate: 0.09%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-04-04 05:03:02
End at: 2018-04-04 05:03:32

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.09 Mbit/s
  95th percentile per-packet one-way delay: 114.270 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 27.92 Mbit/s
  95th percentile per-packet one-way delay: 115.142 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 43.15 Mbit/s
  95th percentile per-packet one-way delay: 113.800 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.34 Mbit/s
  95th percentile per-packet one-way delay: 109.835 ms
  Loss rate: 0.45%
Run 6: Report of TCP Vegas — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1** ingress: mean 27.91 Mbit/s
- **Flow 1** egress: mean 27.92 Mbit/s
- **Flow 2** ingress: mean 43.15 Mbit/s
- **Flow 2** egress: mean 43.15 Mbit/s
- **Flow 3** ingress: mean 1.35 Mbit/s
- **Flow 3** egress: mean 1.34 Mbit/s

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

- **Flow 1** (95th percentile): 115.14 ms
- **Flow 2** (95th percentile): 113.80 ms
- **Flow 3** (95th percentile): 109.83 ms
Run 7: Statistics of TCP Vegas

Start at: 2018-04-04 05:22:34
End at: 2018-04-04 05:23:04

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 59.21 Mbit/s
  95th percentile per-packet one-way delay: 121.804 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 20.67 Mbit/s
  95th percentile per-packet one-way delay: 114.197 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 31.75 Mbit/s
  95th percentile per-packet one-way delay: 118.017 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 52.73 Mbit/s
  95th percentile per-packet one-way delay: 129.033 ms
  Loss rate: 0.06%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-04-04 05:42:20
End at: 2018-04-04 05:42:50

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 105.40 Mbit/s
  95th percentile per-packet one-way delay: 114.007 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 69.69 Mbit/s
  95th percentile per-packet one-way delay: 113.602 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.28 Mbit/s
  95th percentile per-packet one-way delay: 115.173 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 26.85 Mbit/s
  95th percentile per-packet one-way delay: 114.333 ms
  Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

[Graphs showing throughput and packet round-trip delay over time for different flows with annotations for mean throughput and 95th percentile delay.]
Run 9: Statistics of TCP Vegas

Start at: 2018-04-04 06:01:35
End at: 2018-04-04 06:02:05

# Below is generated by plot.py at 2018-04-04 08:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.17 Mbit/s
95th percentile per-packet one-way delay: 113.466 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 113.500 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.50 Mbit/s
95th percentile per-packet one-way delay: 112.725 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 15.38 Mbit/s
95th percentile per-packet one-way delay: 113.562 ms
Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

![Graph of TCP Vegas data link]

---

Flow 1 ingress (mean 31.41 Mbit/s)  
Flow 1 egress (mean 31.41 Mbit/s)  
Flow 2 ingress (mean 2.50 Mbit/s)  
Flow 2 egress (mean 2.50 Mbit/s)  
Flow 3 ingress (mean 15.38 Mbit/s)  
Flow 3 egress (mean 15.38 Mbit/s)

---

Flow 1 (95th percentile 113.50 ms)  
Flow 2 (95th percentile 112.72 ms)  
Flow 3 (95th percentile 113.56 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-04-04 06:20:57
End at: 2018-04-04 06:21:27

# Below is generated by plot.py at 2018-04-04 08:55:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.44 Mbit/s
95th percentile per-packet one-way delay: 118.924 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 102.70 Mbit/s
95th percentile per-packet one-way delay: 119.129 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 115.120 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 73.45 Mbit/s
95th percentile per-packet one-way delay: 114.765 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 102.75 Mbit/s)
- Flow 1 egress (mean 102.70 Mbit/s)
- Flow 2 ingress (mean 2.23 Mbit/s)
- Flow 2 egress (mean 2.23 Mbit/s)
- Flow 3 ingress (mean 73.45 Mbit/s)
- Flow 3 egress (mean 73.45 Mbit/s)

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

- Flow 1 (95th percentile 119.13 ms)
- Flow 2 (95th percentile 115.12 ms)
- Flow 3 (95th percentile 114.77 ms)
Run 1: Statistics of Verus

Start at: 2018-04-04 03:27:48
End at: 2018-04-04 03:28:18

# Below is generated by plot.py at 2018-04-04 08:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.88 Mbit/s
95th percentile per-packet one-way delay: 312.391 ms
Loss rate: 1.98%
-- Flow 1:
Average throughput: 101.60 Mbit/s
95th percentile per-packet one-way delay: 190.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 370.382 ms
Loss rate: 6.23%
-- Flow 3:
Average throughput: 64.19 Mbit/s
95th percentile per-packet one-way delay: 160.793 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

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

- Flow 1 ingress (mean 101.66 Mbit/s)
- Flow 1 egress (mean 101.66 Mbit/s)
- Flow 2 ingress (mean 66.60 Mbit/s)
- Flow 2 egress (mean 81.35 Mbit/s)
- Flow 3 ingress (mean 64.01 Mbit/s)
- Flow 3 egress (mean 64.19 Mbit/s)
Run 2: Statistics of Verus

Start at: 2018-04-04 03:46:58
End at: 2018-04-04 03:47:28

# Below is generated by plot.py at 2018-04-04 08:56:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 203.18 Mbit/s
95th percentile per-packet one-way delay: 281.357 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 159.18 Mbit/s
95th percentile per-packet one-way delay: 301.031 ms
Loss rate: 2.71%
-- Flow 2:
Average throughput: 41.38 Mbit/s
95th percentile per-packet one-way delay: 209.000 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 233.474 ms
Loss rate: 0.18%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-04-04 04:05:57
End at: 2018-04-04 04:06:27

# Below is generated by plot.py at 2018-04-04 08:56:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.82 Mbit/s
95th percentile per-packet one-way delay: 236.255 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 156.57 Mbit/s
95th percentile per-packet one-way delay: 216.455 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 63.87 Mbit/s
95th percentile per-packet one-way delay: 341.787 ms
Loss rate: 5.12%
-- Flow 3:
Average throughput: 73.10 Mbit/s
95th percentile per-packet one-way delay: 256.068 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 157.66 Mbps)
- Flow 1 egress (mean 156.57 Mbps)
- Flow 2 ingress (mean 67.32 Mbps)
- Flow 2 egress (mean 63.87 Mbps)
- Flow 3 ingress (mean 73.15 Mbps)
- Flow 3 egress (mean 73.10 Mbps)

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

- Flow 1 (95th percentile 216.46 ms)
- Flow 2 (95th percentile 341.79 ms)
- Flow 3 (95th percentile 256.07 ms)
Run 4: Statistics of Verus

Start at: 2018-04-04 04:24:37
End at: 2018-04-04 04:25:07

# Below is generated by plot.py at 2018-04-04 08:56:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.26 Mbit/s
95th percentile per-packet one-way delay: 282.720 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 100.59 Mbit/s
95th percentile per-packet one-way delay: 236.699 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 57.80 Mbit/s
95th percentile per-packet one-way delay: 300.823 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 172.12 Mbit/s
95th percentile per-packet one-way delay: 322.282 ms
Loss rate: 1.28%
Run 4: Report of Verus — Data Link

[Graph showing throughput and packet delay]
Run 5: Statistics of Verus

Start at: 2018-04-04 04:43:36
End at: 2018-04-04 04:44:06

# Below is generated by plot.py at 2018-04-04 08:58:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 232.04 Mbit/s
95th percentile per-packet one-way delay: 260.503 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 133.30 Mbit/s
95th percentile per-packet one-way delay: 181.437 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 119.86 Mbit/s
95th percentile per-packet one-way delay: 272.971 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 363.790 ms
Loss rate: 11.36%
Run 5: Report of Verus — Data Link

![Graph](image)

- Flow 1 ingress (mean 134.09 Mbit/s)
- Flow 1 egress (mean 133.30 Mbit/s)
- Flow 2 ingress (mean 121.71 Mbit/s)
- Flow 2 egress (mean 119.86 Mbit/s)
- Flow 3 ingress (mean 66.49 Mbit/s)
- Flow 3 egress (mean 58.95 Mbit/s)

![Graph](image)

- Flow 1 (95th percentile 181.44 ms)
- Flow 2 (95th percentile 272.97 ms)
- Flow 3 (95th percentile 363.79 ms)
Run 6: Statistics of Verus

Start at: 2018-04-04 05:03:52
End at: 2018-04-04 05:04:22

# Below is generated by plot.py at 2018-04-04 08:59:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 282.97 Mbit/s
  95th percentile per-packet one-way delay: 207.281 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 153.56 Mbit/s
  95th percentile per-packet one-way delay: 192.752 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 169.39 Mbit/s
  95th percentile per-packet one-way delay: 261.293 ms
  Loss rate: 1.77%
-- Flow 3:
  Average throughput: 52.18 Mbit/s
  95th percentile per-packet one-way delay: 192.533 ms
  Loss rate: 2.31%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-04-04 05:23:25
End at: 2018-04-04 05:23:55

# Below is generated by plot.py at 2018-04-04 08:59:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.70 Mbit/s
95th percentile per-packet one-way delay: 224.936 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 172.65 Mbit/s
95th percentile per-packet one-way delay: 201.189 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 103.48 Mbit/s
95th percentile per-packet one-way delay: 224.596 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 49.72 Mbit/s
95th percentile per-packet one-way delay: 332.925 ms
Loss rate: 1.25%
Run 8: Statistics of Verus

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

# Below is generated by plot.py at 2018-04-04 08:59:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 203.96 Mbit/s
  95th percentile per-packet one-way delay: 241.000 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 122.02 Mbit/s
  95th percentile per-packet one-way delay: 197.858 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 106.28 Mbit/s
  95th percentile per-packet one-way delay: 353.292 ms
  Loss rate: 2.25%
-- Flow 3:
  Average throughput: 36.79 Mbit/s
  95th percentile per-packet one-way delay: 171.522 ms
  Loss rate: 0.00%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 122.19 Mbit/s)
- Flow 1 egress (mean 122.02 Mbit/s)
- Flow 2 ingress (mean 108.73 Mbit/s)
- Flow 2 egress (mean 106.28 Mbit/s)
- Flow 3 ingress (mean 36.77 Mbit/s)
- Flow 3 egress (mean 36.79 Mbit/s)
Run 9: Statistics of Verus

Start at: 2018-04-04 06:02:24
End at: 2018-04-04 06:02:54

# Below is generated by plot.py at 2018-04-04 09:00:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 251.30 Mbit/s
  95th percentile per-packet one-way delay: 274.896 ms
  Loss rate: 1.53%
  -- Flow 1:
  Average throughput: 179.07 Mbit/s
  95th percentile per-packet one-way delay: 280.490 ms
  Loss rate: 1.73%
  -- Flow 2:
  Average throughput: 92.09 Mbit/s
  95th percentile per-packet one-way delay: 221.901 ms
  Loss rate: 0.67%
  -- Flow 3:
  Average throughput: 35.21 Mbit/s
  95th percentile per-packet one-way delay: 235.200 ms
  Loss rate: 2.99%
Run 9: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 182.61 Mbps)  Flow 1 egress (mean 179.07 Mbps)
Flow 2 ingress (mean 92.74 Mbps)  Flow 2 egress (mean 92.09 Mbps)
Flow 3 ingress (mean 36.23 Mbps)  Flow 3 egress (mean 35.21 Mbps)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 280.49 ms)  Flow 2 (95th percentile 221.90 ms)  Flow 3 (95th percentile 235.20 ms)
Run 10: Statistics of Verus

Start at: 2018-04-04 06:21:51
End at: 2018-04-04 06:22:21

# Below is generated by plot.py at 2018-04-04 09:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.33 Mbit/s
95th percentile per-packet one-way delay: 286.767 ms
Loss rate: 3.73%
-- Flow 1:
Average throughput: 104.24 Mbit/s
95th percentile per-packet one-way delay: 223.398 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 265.739 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 60.23 Mbit/s
95th percentile per-packet one-way delay: 411.517 ms
Loss rate: 23.28%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 104.28 Mbps)
- **Flow 1 egress** (mean 104.24 Mbps)
- **Flow 2 ingress** (mean 93.88 Mbps)
- **Flow 2 egress** (mean 90.48 Mbps)
- **Flow 3 ingress** (mean 70.17 Mbps)
- **Flow 3 egress** (mean 60.23 Mbps)

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

- **Flow 1 (95th percentile 223.40 ms)**
- **Flow 2 (95th percentile 265.74 ms)**
- **Flow 3 (95th percentile 411.52 ms)**
Run 1: Statistics of Copa

Start at: 2018-04-04 03:29:50
End at: 2018-04-04 03:30:20

# Below is generated by plot.py at 2018-04-04 09:00:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.34 Mbit/s
95th percentile per-packet one-way delay: 112.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.34 Mbit/s
95th percentile per-packet one-way delay: 112.098 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.81 Mbit/s
95th percentile per-packet one-way delay: 112.264 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 112.279 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

Throughput (Mbit/s) vs Time (s) graph:
- Blue dashed line: Flow 1 ingress (mean 67.34 Mbit/s)
- Blue solid line: Flow 1 egress (mean 67.34 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 69.81 Mbit/s)
- Green solid line: Flow 2 egress (mean 69.81 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 47.05 Mbit/s)
- Red solid line: Flow 3 egress (mean 47.05 Mbit/s)

Round-trip time (ms) vs Time (s) graph:
- Blue asterisks: Flow 1 (95th percentile 112.10 ms)
- Green asterisks: Flow 2 (95th percentile 112.26 ms)
- Red asterisks: Flow 3 (95th percentile 112.28 ms)
Run 2: Statistics of Copa

Start at: 2018-04-04 03:48:57
End at: 2018-04-04 03:49:27

# Below is generated by plot.py at 2018-04-04 09:00:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 118.09 Mbit/s
  95th percentile per-packet one-way delay: 113.215 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 52.01 Mbit/s
  95th percentile per-packet one-way delay: 113.269 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 65.43 Mbit/s
  95th percentile per-packet one-way delay: 110.709 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 67.98 Mbit/s
  95th percentile per-packet one-way delay: 111.332 ms
  Loss rate: 0.01%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-04-04 04:07:49
End at: 2018-04-04 04:08:19

# Below is generated by plot.py at 2018-04-04 09:02:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.81 Mbit/s
  95th percentile per-packet one-way delay: 111.692 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 64.89 Mbit/s
  95th percentile per-packet one-way delay: 111.685 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 68.59 Mbit/s
  95th percentile per-packet one-way delay: 111.704 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 64.21 Mbit/s
  95th percentile per-packet one-way delay: 111.685 ms
  Loss rate: 0.00%
Run 3: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 64.89 Mbps)
  - Flow 1 egress (mean 64.89 Mbps)
  - Flow 2 ingress (mean 68.55 Mbps)
  - Flow 2 egress (mean 68.55 Mbps)
  - Flow 3 ingress (mean 64.20 Mbps)
  - Flow 3 egress (mean 64.21 Mbps)

- **Per-packet end-to-end delay (ms):**
  - Flow 1 (95th percentile 111.69 ms)
  - Flow 2 (95th percentile 111.70 ms)
  - Flow 3 (95th percentile 111.69 ms)
Run 4: Statistics of Copa

Start at: 2018-04-04 04:26:49
End at: 2018-04-04 04:27:20

# Below is generated by plot.py at 2018-04-04 09:02:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 135.72 Mbit/s
  95th percentile per-packet one-way delay: 111.549 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 75.97 Mbit/s
  95th percentile per-packet one-way delay: 111.557 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 63.39 Mbit/s
  95th percentile per-packet one-way delay: 111.537 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 52.99 Mbit/s
  95th percentile per-packet one-way delay: 111.342 ms
  Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 75.97 Mbps)
- Flow 1 egress (mean 75.97 Mbps)
- Flow 2 ingress (mean 63.40 Mbps)
- Flow 2 egress (mean 63.39 Mbps)
- Flow 3 ingress (mean 52.99 Mbps)
- Flow 3 egress (mean 52.99 Mbps)

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

- Flow 1 (95th percentile 111.56 ms)
- Flow 2 (95th percentile 111.54 ms)
- Flow 3 (95th percentile 111.34 ms)
Run 5: Statistics of Copa

Start at: 2018-04-04 04:45:56
End at: 2018-04-04 04:46:26

# Below is generated by plot.py at 2018-04-04 09:02:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.08 Mbit/s
95th percentile per-packet one-way delay: 112.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 110.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.65 Mbit/s
95th percentile per-packet one-way delay: 112.154 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.42 Mbit/s
95th percentile per-packet one-way delay: 110.815 ms
Loss rate: 0.01%
Run 5: Report of Copa — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 41.35 Mbps)
  - Flow 1 egress (mean 41.35 Mbps)
  - Flow 2 ingress (mean 72.65 Mbps)
  - Flow 2 egress (mean 72.65 Mbps)
  - Flow 3 ingress (mean 76.41 Mbps)
  - Flow 3 egress (mean 76.42 Mbps)

- Per-packet one-way delay (ms):
  - Flow 1 (95th percentile 110.56 ms)
  - Flow 2 (95th percentile 112.15 ms)
  - Flow 3 (95th percentile 110.81 ms)
Run 6: Statistics of Copa

Start at: 2018-04-04 05:06:18
End at: 2018-04-04 05:06:48

# Below is generated by plot.py at 2018-04-04 09:03:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.06 Mbit/s
95th percentile per-packet one-way delay: 112.335 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 64.50 Mbit/s
95th percentile per-packet one-way delay: 112.267 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 60.63 Mbit/s
95th percentile per-packet one-way delay: 112.396 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 66.98 Mbit/s
95th percentile per-packet one-way delay: 112.303 ms
Loss rate: 0.01%
Run 6: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 64.50 Mbps)
  - Flow 1 egress (mean 64.50 Mbps)
  - Flow 2 ingress (mean 60.62 Mbps)
  - Flow 2 egress (mean 60.63 Mbps)
  - Flow 3 ingress (mean 66.98 Mbps)
  - Flow 3 egress (mean 66.98 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 112.27 ms)
  - Flow 2 (95th percentile 112.40 ms)
  - Flow 3 (95th percentile 112.30 ms)
Run 7: Statistics of Copa

Start at: 2018-04-04 05:25:33
End at: 2018-04-04 05:26:03

# Below is generated by plot.py at 2018-04-04 09:03:41
# Datalink statistics

-- Total of 3 flows:
Average throughput: 119.31 Mbit/s
95th percentile per-packet one-way delay: 112.506 ms
Loss rate: 0.01%

-- Flow 1:
Average throughput: 59.06 Mbit/s
95th percentile per-packet one-way delay: 112.503 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 70.54 Mbit/s
95th percentile per-packet one-way delay: 112.490 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 112.551 ms
Loss rate: 0.06%
Run 7: Report of Copa — Data Link

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

![Graph 2: Per-packet One-Way Delay vs Time](image2)
Run 8: Statistics of Copa

Start at: 2018-04-04 05:45:20
End at: 2018-04-04 05:45:50

# Below is generated by plot.py at 2018-04-04 09:04:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 121.59 Mbit/s
  95th percentile per-packet one-way delay: 112.397 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 70.97 Mbit/s
  95th percentile per-packet one-way delay: 112.447 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 54.73 Mbit/s
  95th percentile per-packet one-way delay: 112.001 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 42.97 Mbit/s
  95th percentile per-packet one-way delay: 112.158 ms
  Loss rate: 0.00%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-04-04 06:04:40
End at: 2018-04-04 06:05:10

# Below is generated by plot.py at 2018-04-04 09:05:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.88 Mbit/s
95th percentile per-packet one-way delay: 112.564 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.61 Mbit/s
95th percentile per-packet one-way delay: 112.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 112.595 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.43 Mbit/s
95th percentile per-packet one-way delay: 112.547 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 66.61 Mbit/s)
- Flow 1 egress (mean 66.61 Mbit/s)
- Flow 2 ingress (mean 71.98 Mbit/s)
- Flow 2 egress (mean 71.98 Mbit/s)
- Flow 3 ingress (mean 70.44 Mbit/s)
- Flow 3 egress (mean 70.43 Mbit/s)
Run 10: Statistics of Copa

Start at: 2018-04-04 06:23:58
End at: 2018-04-04 06:24:28

# Below is generated by plot.py at 2018-04-04 09:08:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 213.90 Mbit/s
  95th percentile per-packet one-way delay: 324.424 ms
  Loss rate: 40.66%
-- Flow 1:
  Average throughput: 41.81 Mbit/s
  95th percentile per-packet one-way delay: 205.656 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 258.30 Mbit/s
  95th percentile per-packet one-way delay: 325.552 ms
  Loss rate: 45.97%
-- Flow 3:
  Average throughput: 0.35 Mbit/s
  95th percentile per-packet one-way delay: 232.003 ms
  Loss rate: 11.46%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-04-04 03:23:17
End at: 2018-04-04 03:23:47

# Below is generated by plot.py at 2018-04-04 09:23:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1196.29 Mbit/s
  95th percentile per-packet one-way delay: 326.948 ms
  Loss rate: 8.87%
-- Flow 1:
  Average throughput: 630.07 Mbit/s
  95th percentile per-packet one-way delay: 231.185 ms
  Loss rate: 8.04%
-- Flow 2:
  Average throughput: 616.31 Mbit/s
  95th percentile per-packet one-way delay: 339.379 ms
  Loss rate: 8.09%
-- Flow 3:
  Average throughput: 472.70 Mbit/s
  95th percentile per-packet one-way delay: 379.990 ms
  Loss rate: 13.90%
Run 1: Report of FillP — Data Link

![Graph showing network performance metrics over time, with legends indicating throughput and packet error rate, along with percentile measurements for each flow.]
Run 2: Statistics of FillP

Start at: 2018-04-04 03:42:32
End at: 2018-04-04 03:43:02

# Below is generated by plot.py at 2018-04-04 09:23:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1161.15 Mbit/s
  95th percentile per-packet one-way delay: 235.374 ms
  Loss rate: 8.29%
-- Flow 1:
  Average throughput: 606.86 Mbit/s
  95th percentile per-packet one-way delay: 232.514 ms
  Loss rate: 7.15%
-- Flow 2:
  Average throughput: 589.02 Mbit/s
  95th percentile per-packet one-way delay: 226.590 ms
  Loss rate: 7.87%
-- Flow 3:
  Average throughput: 488.63 Mbit/s
  95th percentile per-packet one-way delay: 245.619 ms
  Loss rate: 13.25%
Run 2: Report of FillP — Data Link

![Graph 1: Throughput (Mbps/s) over time for different flows.]

- Flow 1 ingress (mean 653.49 Mbps/s)
- Flow 1 egress (mean 606.86 Mbps/s)
- Flow 2 ingress (mean 639.36 Mbps/s)
- Flow 2 egress (mean 589.02 Mbps/s)
- Flow 3 ingress (mean 563.24 Mbps/s)
- Flow 3 egress (mean 488.63 Mbps/s)

![Graph 2: Packet delay over time for different flows.]

- Flow 1 (95th percentile 232.51 ms)
- Flow 2 (95th percentile 226.59 ms)
- Flow 3 (95th percentile 245.62 ms)
Run 3: Statistics of FillP

Start at: 2018-04-04 04:01:22
End at: 2018-04-04 04:01:52

# Below is generated by plot.py at 2018-04-04 09:23:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1185.74 Mbit/s
  95th percentile per-packet one-way delay: 246.286 ms
  Loss rate: 8.95%
-- Flow 1:
  Average throughput: 640.26 Mbit/s
  95th percentile per-packet one-way delay: 238.428 ms
  Loss rate: 7.97%
-- Flow 2:
  Average throughput: 589.52 Mbit/s
  95th percentile per-packet one-way delay: 224.952 ms
  Loss rate: 6.86%
-- Flow 3:
  Average throughput: 464.28 Mbit/s
  95th percentile per-packet one-way delay: 256.985 ms
  Loss rate: 17.36%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 695.75 Mbps)
- Flow 1 egress (mean 640.26 Mbps)
- Flow 2 ingress (mean 633.03 Mbps)
- Flow 2 egress (mean 589.52 Mbps)
- Flow 3 ingress (mean 561.90 Mbps)
- Flow 3 egress (mean 464.28 Mbps)

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

- Flow 1 (95th percentile 238.43 ms)
- Flow 2 (95th percentile 224.95 ms)
- Flow 3 (95th percentile 256.99 ms)
Run 4: Statistics of FillP

Start at: 2018-04-04 04:20:15
End at: 2018-04-04 04:20:45

# Below is generated by plot.py at 2018-04-04 09:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1201.22 Mbit/s
95th percentile per-packet one-way delay: 240.033 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 634.73 Mbit/s
95th percentile per-packet one-way delay: 246.131 ms
Loss rate: 8.04%
-- Flow 2:
Average throughput: 631.55 Mbit/s
95th percentile per-packet one-way delay: 216.989 ms
Loss rate: 7.10%
-- Flow 3:
Average throughput: 441.36 Mbit/s
95th percentile per-packet one-way delay: 245.985 ms
Loss rate: 12.43%
Run 4: Report of FillP — Data Link

![Graph of throughput and packet delay over time]

- **Flow 1 ingress (mean 690.21 Mbit/s)**
- **Flow 1 egress (mean 634.73 Mbit/s)**
- **Flow 2 ingress (mean 679.88 Mbit/s)**
- **Flow 2 egress (mean 631.55 Mbit/s)**
- **Flow 3 ingress (mean 503.94 Mbit/s)**
- **Flow 3 egress (mean 441.36 Mbit/s)**

- **Flow 1 (95th percentile 246.13 ms)**
- **Flow 2 (95th percentile 216.99 ms)**
- **Flow 3 (95th percentile 245.99 ms)**
Run 5: Statistics of FillP

Start at: 2018-04-04 04:39:30
End at: 2018-04-04 04:40:00

# Below is generated by plot.py at 2018-04-04 09:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 705.41 Mbit/s
95th percentile per-packet one-way delay: 229.962 ms
Loss rate: 7.72%
-- Flow 1:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 304.380 ms
Loss rate: 12.79%
-- Flow 2:
Average throughput: 634.54 Mbit/s
95th percentile per-packet one-way delay: 223.571 ms
Loss rate: 7.73%
-- Flow 3:
Average throughput: 573.24 Mbit/s
95th percentile per-packet one-way delay: 202.111 ms
Loss rate: 4.97%
Run 5: Report of FillP — Data Link

![Data Link Diagram]
Run 6: Statistics of FillP

Start at: 2018-04-04 04:59:09
End at: 2018-04-04 04:59:39

# Below is generated by plot.py at 2018-04-04 09:24:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1153.91 Mbit/s
  95th percentile per-packet one-way delay: 241.485 ms
  Loss rate: 8.63%
-- Flow 1:
  Average throughput: 643.26 Mbit/s
  95th percentile per-packet one-way delay: 229.702 ms
  Loss rate: 5.82%
-- Flow 2:
  Average throughput: 545.86 Mbit/s
  95th percentile per-packet one-way delay: 241.592 ms
  Loss rate: 10.27%
-- Flow 3:
  Average throughput: 445.51 Mbit/s
  95th percentile per-packet one-way delay: 253.079 ms
  Loss rate: 15.79%
Run 6: Report of FillP — Data Link

![Graph showing throughput and delay over time for different flows: Flow 1 ingress (mean 683.02 Mbit/s), Flow 1 egress (mean 643.26 Mbit/s), Flow 2 ingress (mean 608.30 Mbit/s), Flow 2 egress (mean 545.86 Mbit/s), Flow 3 ingress (mean 526.88 Mbit/s), Flow 3 egress (mean 445.51 Mbit/s).](image)

![Graph showing per-packet one-way delay over time for different flows: Flow 1 (95th percentile 229.70 ms), Flow 2 (95th percentile 241.59 ms), Flow 3 (95th percentile 253.08 ms).](image)
Run 7: Statistics of FILLP

Start at: 2018-04-04 05:18:54
End at: 2018-04-04 05:19:24

# Below is generated by plot.py at 2018-04-04 09:24:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1103.52 Mbit/s
  95th percentile per-packet one-way delay: 346.121 ms
  Loss rate: 7.23%
-- Flow 1:
  Average throughput: 595.05 Mbit/s
  95th percentile per-packet one-way delay: 344.072 ms
  Loss rate: 6.00%
-- Flow 2:
  Average throughput: 527.82 Mbit/s
  95th percentile per-packet one-way delay: 368.301 ms
  Loss rate: 7.87%
-- Flow 3:
  Average throughput: 477.52 Mbit/s
  95th percentile per-packet one-way delay: 240.329 ms
  Loss rate: 10.23%
Run 7: Report of FillP — Data Link

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

Legend:
- Flow 1 ingress (mean 633.02 Mbit/s)
- Flow 1 egress (mean 595.05 Mbit/s)
- Flow 2 ingress (mean 572.83 Mbit/s)
- Flow 2 egress (mean 527.82 Mbit/s)
- Flow 3 ingress (mean 531.94 Mbit/s)
- Flow 3 egress (mean 477.52 Mbit/s)

Legend (packet delay):
- Flow 1 (95th percentile 344.07 ms)
- Flow 2 (95th percentile 368.30 ms)
- Flow 3 (95th percentile 240.33 ms)
Run 8: Statistics of FillP

Start at: 2018-04-04 05:38:41
End at: 2018-04-04 05:39:12

# Below is generated by plot.py at 2018-04-04 09:31:46
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 1185.35 Mbit/s
   95th percentile per-packet one-way delay: 309.411 ms
   Loss rate: 5.65%
   -- Flow 1:
      Average throughput: 631.38 Mbit/s
      95th percentile per-packet one-way delay: 304.499 ms
      Loss rate: 5.26%
   -- Flow 2:
      Average throughput: 609.33 Mbit/s
      95th percentile per-packet one-way delay: 219.770 ms
      Loss rate: 4.83%
   -- Flow 3:
      Average throughput: 450.75 Mbit/s
      95th percentile per-packet one-way delay: 367.993 ms
      Loss rate: 9.35%
Run 8: Report of FillP — Data Link

Throughput (Mbps/s) vs Time (s)

- Flow 1 Ingress (mean 666.51 Mbps/s)
- Flow 1 Egress (mean 631.38 Mbps/s)
- Flow 2 Ingress (mean 640.27 Mbps/s)
- Flow 2 Egress (mean 609.33 Mbps/s)
- Flow 3 Ingress (mean 497.32 Mbps/s)
- Flow 3 Egress (mean 450.75 Mbps/s)

Packet delay (ms) vs Time (s)

- Flow 1 (95th percentile 304.50 ms)
- Flow 2 (95th percentile 219.77 ms)
- Flow 3 (95th percentile 367.99 ms)
Run 9: Statistics of FillP

Start at: 2018-04-04 05:57:56
End at: 2018-04-04 05:58:26

# Below is generated by plot.py at 2018-04-04 09:39:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1147.45 Mbit/s
  95th percentile per-packet one-way delay: 323.620 ms
  Loss rate: 7.38%
-- Flow 1:
  Average throughput: 623.69 Mbit/s
  95th percentile per-packet one-way delay: 224.319 ms
  Loss rate: 6.02%
-- Flow 2:
  Average throughput: 563.12 Mbit/s
  95th percentile per-packet one-way delay: 333.809 ms
  Loss rate: 6.85%
-- Flow 3:
  Average throughput: 450.10 Mbit/s
  95th percentile per-packet one-way delay: 367.829 ms
  Loss rate: 13.79%
Run 9: Report of FillP — Data Link

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**Graph 1:**

Throughput (Mbps)

- Flow 1 Ingress (mean 663.67 Mbps)
- Flow 1 Egress (mean 623.69 Mbps)
- Flow 2 Ingress (mean 604.51 Mbps)
- Flow 2 Egress (mean 563.12 Mbps)
- Flow 3 Ingress (mean 522.17 Mbps)
- Flow 3 Egress (mean 450.10 Mbps)

**Graph 2:**

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

- Flow 1 (95th percentile 224.32 ms)
- Flow 2 (95th percentile 333.81 ms)
- Flow 3 (95th percentile 367.83 ms)
Run 10: Statistics of FillP

Start at: 2018-04-04 06:17:21
End at: 2018-04-04 06:17:51

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1169.39 Mbit/s
  95th percentile per-packet one-way delay: 227.868 ms
  Loss rate: 6.52%
-- Flow 1:
  Average throughput: 621.12 Mbit/s
  95th percentile per-packet one-way delay: 226.142 ms
  Loss rate: 5.85%
-- Flow 2:
  Average throughput: 587.42 Mbit/s
  95th percentile per-packet one-way delay: 228.282 ms
  Loss rate: 6.72%
-- Flow 3:
  Average throughput: 475.91 Mbit/s
  95th percentile per-packet one-way delay: 242.045 ms
  Loss rate: 8.61%
Run 10: Report of FillIP — Data Link

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

Legend:
- Flow 1 ingress (mean 659.74 Mb/s)
- Flow 1 egress (mean 621.12 Mb/s)
- Flow 2 ingress (mean 629.77 Mb/s)
- Flow 2 egress (mean 587.42 Mb/s)
- Flow 3 ingress (mean 520.71 Mb/s)
- Flow 3 egress (mean 475.91 Mb/s)

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

Legend:
- Flow 1 (95th percentile 226.14 ms)
- Flow 2 (95th percentile 228.28 ms)
- Flow 3 (95th percentile 242.04 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-04 03:25:42
End at: 2018-04-04 03:26:12

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.94 Mbit/s
95th percentile per-packet one-way delay: 116.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.51 Mbit/s
95th percentile per-packet one-way delay: 116.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.09 Mbit/s
95th percentile per-packet one-way delay: 115.436 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.98 Mbit/s
95th percentile per-packet one-way delay: 115.816 ms
Loss rate: 0.00%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-04 03:44:55
End at: 2018-04-04 03:45:25

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 318.25 Mbit/s
  95th percentile per-packet one-way delay: 118.712 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 152.21 Mbit/s
  95th percentile per-packet one-way delay: 115.476 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 187.38 Mbit/s
  95th percentile per-packet one-way delay: 122.714 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 130.93 Mbit/s
  95th percentile per-packet one-way delay: 121.515 ms
  Loss rate: 0.00%
Run 2: Report of Indigo-1-32 — Data Link

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

- **Flow 1**
  - Ingress: Average 152.20 Mbps
  - Egress: Average 152.21 Mbps
- **Flow 2**
  - Ingress: Average 187.46 Mbps
  - Egress: Average 187.38 Mbps
- **Flow 3**
  - Ingress: Average 130.92 Mbps
  - Egress: Average 130.93 Mbps

- **Per-packet one-way delay** for each flow is also shown.
  - **Flow 1**: 95th percentile 115.48 ms
  - **Flow 2**: 95th percentile 122.71 ms
  - **Flow 3**: 95th percentile 121.52 ms
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-04 04:03:55
End at: 2018-04-04 04:04:25

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 314.67 Mbit/s
   95th percentile per-packet one-way delay: 136.803 ms
   Loss rate: 0.01%
   -- Flow 1:
      Average throughput: 138.59 Mbit/s
      95th percentile per-packet one-way delay: 123.648 ms
      Loss rate: 0.00%
   -- Flow 2:
      Average throughput: 183.49 Mbit/s
      95th percentile per-packet one-way delay: 135.384 ms
      Loss rate: 0.02%
   -- Flow 3:
      Average throughput: 169.84 Mbit/s
      95th percentile per-packet one-way delay: 142.995 ms
      Loss rate: 0.03%
Run 3: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 138.60 Mbps) — Flow 1 egress (mean 138.59 Mbps)
Flow 2 ingress (mean 183.55 Mbps) — Flow 2 egress (mean 183.49 Mbps)
Flow 3 ingress (mean 169.94 Mbps) — Flow 3 egress (mean 169.84 Mbps)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 123.65 ms) — Flow 2 (95th percentile 135.38 ms) — Flow 3 (95th percentile 143.00 ms)
Run 4: Statistics of Indigo-1-32

End at: 2018-04-04 04:23:09

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.86 Mbit/s
95th percentile per-packet one-way delay: 115.166 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 147.51 Mbit/s
95th percentile per-packet one-way delay: 114.466 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 144.28 Mbit/s
95th percentile per-packet one-way delay: 115.880 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 126.67 Mbit/s
95th percentile per-packet one-way delay: 115.551 ms
Loss rate: 0.04%
Run 4: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 147.52 Mbps)
Flow 1 egress (mean 147.51 Mbps)
Flow 2 ingress (mean 144.33 Mbps)
Flow 2 egress (mean 144.28 Mbps)
Flow 3 ingress (mean 126.77 Mbps)
Flow 3 egress (mean 126.67 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 114.47 ms)
Flow 2 (95th percentile 115.88 ms)
Flow 3 (95th percentile 115.55 ms)
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-04 04:41:34
End at: 2018-04-04 04:42:04

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
  -- Total of 3 flows:
    Average throughput: 289.05 Mbit/s
    95th percentile per-packet one-way delay: 122.560 ms
    Loss rate: 0.02%
  -- Flow 1:
    Average throughput: 151.54 Mbit/s
    95th percentile per-packet one-way delay: 117.649 ms
    Loss rate: 0.02%
  -- Flow 2:
    Average throughput: 143.63 Mbit/s
    95th percentile per-packet one-way delay: 125.967 ms
    Loss rate: 0.03%
  -- Flow 3:
    Average throughput: 132.90 Mbit/s
    95th percentile per-packet one-way delay: 129.071 ms
    Loss rate: 0.05%
Run 5: Report of Indigo-1-32 — Data Link
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-04 05:01:42
End at: 2018-04-04 05:02:12

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.98 Mbit/s
95th percentile per-packet one-way delay: 113.968 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 176.78 Mbit/s
95th percentile per-packet one-way delay: 113.760 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.69 Mbit/s
95th percentile per-packet one-way delay: 114.349 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 129.60 Mbit/s
95th percentile per-packet one-way delay: 113.823 ms
Loss rate: 0.03%
Run 6: Report of Indigo-1-32 — Data Link

![Graph of Throughput (Mbps)]

- Flow 1 ingress (mean 176.78 Mbps)
- Flow 1 egress (mean 176.78 Mbps)
- Flow 2 ingress (mean 142.70 Mbps)
- Flow 2 egress (mean 142.69 Mbps)
- Flow 3 ingress (mean 129.62 Mbps)
- Flow 3 egress (mean 129.60 Mbps)

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

- Flow 1 (95th percentile 113.76 ms)
- Flow 2 (95th percentile 114.35 ms)
- Flow 3 (95th percentile 113.82 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-04 05:21:20
End at: 2018-04-04 05:21:50

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 279.51 Mbit/s
  95th percentile per-packet one-way delay: 114.655 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 146.33 Mbit/s
  95th percentile per-packet one-way delay: 114.434 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 138.45 Mbit/s
  95th percentile per-packet one-way delay: 115.008 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 128.87 Mbit/s
  95th percentile per-packet one-way delay: 114.643 ms
  Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link

[Graph showing throughput over time]

[Graph showing per-packet one-way delay over time]
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-04 05:41:08
End at: 2018-04-04 05:41:38

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 312.14 Mbit/s
  95th percentile per-packet one-way delay: 126.504 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 147.00 Mbit/s
  95th percentile per-packet one-way delay: 120.920 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 173.64 Mbit/s
  95th percentile per-packet one-way delay: 126.340 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 156.05 Mbit/s
  95th percentile per-packet one-way delay: 133.689 ms
  Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per Packet One-Way Delay](image2)
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-04 06:00:21
End at: 2018-04-04 06:00:51

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 342.81 Mbit/s
   95th percentile per-packet one-way delay: 118.350 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 187.35 Mbit/s
   95th percentile per-packet one-way delay: 115.939 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 162.62 Mbit/s
   95th percentile per-packet one-way delay: 121.749 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 149.58 Mbit/s
   95th percentile per-packet one-way delay: 126.635 ms
   Loss rate: 0.00%
Run 9: Report of Indigo-1-32 — Data Link

---

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 187.37 Mbps)
  - Flow 1 egress (mean 187.35 Mbps)
  - Flow 2 ingress (mean 162.63 Mbps)
  - Flow 2 egress (mean 162.62 Mbps)
  - Flow 3 ingress (mean 149.62 Mbps)
  - Flow 3 egress (mean 149.58 Mbps)

- **Per-packet one way delay (ms)**
  - Flow 1 (95th percentile 115.94 ms)
  - Flow 2 (95th percentile 121.75 ms)
  - Flow 3 (95th percentile 126.64 ms)

---

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Run 10: Statistics of Indigo-1-32

Start at: 2018-04-04 06:19:46
End at: 2018-04-04 06:20:16

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.05 Mbit/s
95th percentile per-packet one-way delay: 123.063 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 153.46 Mbit/s
95th percentile per-packet one-way delay: 122.177 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.06 Mbit/s
95th percentile per-packet one-way delay: 119.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 178.43 Mbit/s
95th percentile per-packet one-way delay: 128.938 ms
Loss rate: 0.01%
Run 10: Report of Indigo-1-32 — Data Link
Run 1: Statistics of Vivace-latency

Start at: 2018-04-04 03:21:55
End at: 2018-04-04 03:22:25

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 433.54 Mbit/s
  95th percentile per-packet one-way delay: 204.192 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 276.90 Mbit/s
  95th percentile per-packet one-way delay: 213.206 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 173.08 Mbit/s
  95th percentile per-packet one-way delay: 121.373 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 126.66 Mbit/s
  95th percentile per-packet one-way delay: 256.849 ms
  Loss rate: 0.00%
Run 1: Report of Vivace-latency — Data Link

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

<table>
<thead>
<tr>
<th>Flow 1 ingress (mean 277.46 Mbit/s)</th>
<th>Flow 1 egress (mean 276.90 Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 2 ingress (mean 173.68 Mbit/s)</td>
<td>Flow 2 egress (mean 173.08 Mbit/s)</td>
</tr>
<tr>
<td>Flow 3 ingress (mean 126.66 Mbit/s)</td>
<td>Flow 3 egress (mean 126.66 Mbit/s)</td>
</tr>
</tbody>
</table>

![Graph showing packet delay for different flows.]

- Flow 1 (95th percentile 213.21 ms)
- Flow 2 (95th percentile 121.37 ms)
- Flow 3 (95th percentile 256.85 ms)

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Run 2: Statistics of Vivace-latency

Start at: 2018-04-04 03:41:15
End at: 2018-04-04 03:41:45

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.48 Mbit/s
95th percentile per-packet one-way delay: 127.049 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 214.54 Mbit/s
95th percentile per-packet one-way delay: 119.534 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 182.75 Mbit/s
95th percentile per-packet one-way delay: 125.983 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.32 Mbit/s
95th percentile per-packet one-way delay: 316.435 ms
Loss rate: 0.85%
Run 3: Statistics of Vivace-latency

Start at: 2018-04-04 04:00:01
End at: 2018-04-04 04:00:31

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.33 Mbit/s
95th percentile per-packet one-way delay: 222.655 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 272.31 Mbit/s
95th percentile per-packet one-way delay: 257.126 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 176.00 Mbit/s
95th percentile per-packet one-way delay: 168.682 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.08 Mbit/s
95th percentile per-packet one-way delay: 172.648 ms
Loss rate: 0.00%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-04-04 04:18:57
End at: 2018-04-04 04:19:27

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 369.40 Mbit/s
  95th percentile per-packet one-way delay: 168.470 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 205.54 Mbit/s
  95th percentile per-packet one-way delay: 132.427 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 184.38 Mbit/s
  95th percentile per-packet one-way delay: 239.510 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 125.51 Mbit/s
  95th percentile per-packet one-way delay: 155.863 ms
  Loss rate: 0.00%
Run 4: Report of Vivace-latency — Data Link

![Graph showing network performance metrics including throughput and per-packet one-way delay.](image-url)
Run 5: Statistics of Vivace-latency

Start at: 2018-04-04 04:38:13
End at: 2018-04-04 04:38:43

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 361.88 Mbit/s
  95th percentile per-packet one-way delay: 234.905 ms
  Loss rate: 1.02%
-- Flow 1:
  Average throughput: 261.39 Mbit/s
  95th percentile per-packet one-way delay: 195.637 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 85.58 Mbit/s
  95th percentile per-packet one-way delay: 288.511 ms
  Loss rate: 6.11%
-- Flow 3:
  Average throughput: 132.54 Mbit/s
  95th percentile per-packet one-way delay: 285.349 ms
  Loss rate: 0.03%
Run 5: Report of Vivace-latency — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 261.38 Mbps)  Flow 2 ingress (mean 91.13 Mbps)  Flow 3 ingress (mean 132.55 Mbps)

Flow 1 egress (mean 261.39 Mbps)  Flow 2 egress (mean 85.55 Mbps)  Flow 3 egress (mean 132.54 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 195.64 ms)  Flow 2 (95th percentile 288.51 ms)  Flow 3 (95th percentile 285.35 ms)
Run 6: Statistics of Vivace-latency

Start at: 2018-04-04 04:57:30
End at: 2018-04-04 04:58:00

# Below is generated by plot.py at 2018-04-04 09:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 410.26 Mbit/s
  95th percentile per-packet one-way delay: 129.864 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 249.83 Mbit/s
  95th percentile per-packet one-way delay: 138.173 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 176.52 Mbit/s
  95th percentile per-packet one-way delay: 115.714 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 131.15 Mbit/s
  95th percentile per-packet one-way delay: 120.819 ms
  Loss rate: 0.00%
Run 6: Report of Vivace-latency — Data Link

Graph showing throughput and per-packet one-way delay over time for different flows.
Run 7: Statistics of Vivace-latency

Start at: 2018-04-04 05:17:26
End at: 2018-04-04 05:17:56

# Below is generated by plot.py at 2018-04-04 09:47:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 417.10 Mbit/s
  95th percentile per-packet one-way delay: 137.894 ms
  Loss rate: 0.01%
  -- Flow 1:
    Average throughput: 250.83 Mbit/s
    95th percentile per-packet one-way delay: 151.884 ms
    Loss rate: 0.02%
  -- Flow 2:
    Average throughput: 184.37 Mbit/s
    95th percentile per-packet one-way delay: 114.791 ms
    Loss rate: 0.01%
  -- Flow 3:
    Average throughput: 133.46 Mbit/s
    95th percentile per-packet one-way delay: 169.578 ms
    Loss rate: 0.00%
Run 7: Report of Vivace-latency — Data Link

Throughput (Mb/s) vs Time (s)

Flow 1 ingress (mean 250.87 Mb/s)
Flow 1 egress (mean 250.83 Mb/s)
Flow 2 ingress (mean 184.37 Mb/s)
Flow 2 egress (mean 184.37 Mb/s)
Flow 3 ingress (mean 133.49 Mb/s)
Flow 3 egress (mean 133.46 Mb/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 151.98 ms)
Flow 2 (95th percentile 114.79 ms)
Flow 3 (95th percentile 169.58 ms)
Run 8: Statistics of Vivace-latency

Start at: 2018-04-04 05:37:18
End at: 2018-04-04 05:37:49

# Below is generated by plot.py at 2018-04-04 09:48:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 442.08 Mbit/s
  95th percentile per-packet one-way delay: 162.052 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 258.89 Mbit/s
  95th percentile per-packet one-way delay: 121.490 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 209.82 Mbit/s
  95th percentile per-packet one-way delay: 257.238 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 133.12 Mbit/s
  95th percentile per-packet one-way delay: 184.195 ms
  Loss rate: 0.00%
Run 8: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 258.90 Mbps)
- Flow 1 egress (mean 258.89 Mbps)
- Flow 2 ingress (mean 212.00 Mbps)
- Flow 2 egress (mean 209.82 Mbps)
- Flow 3 ingress (mean 132.96 Mbps)
- Flow 3 egress (mean 113.12 Mbps)

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

- Flow 1 (95th percentile 121.49 ms)
- Flow 2 (95th percentile 257.24 ms)
- Flow 3 (95th percentile 184.19 ms)
Run 9: Statistics of Vivace-latency

Start at: 2018-04-04 05:56:38
End at: 2018-04-04 05:57:08

# Below is generated by plot.py at 2018-04-04 09:48:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.11 Mbit/s
95th percentile per-packet one-way delay: 114.965 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.28 Mbit/s
95th percentile per-packet one-way delay: 115.142 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 177.46 Mbit/s
95th percentile per-packet one-way delay: 113.873 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.49 Mbit/s
95th percentile per-packet one-way delay: 124.329 ms
Loss rate: 0.00%
Run 9: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time for different flows.](image-url)
Run 10: Statistics of Vivace-latency

Start at: 2018-04-04 06:16:00
End at: 2018-04-04 06:16:30

# Below is generated by plot.py at 2018-04-04 09:48:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.64 Mbit/s
95th percentile per-packet one-way delay: 134.440 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 261.34 Mbit/s
95th percentile per-packet one-way delay: 168.292 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 173.20 Mbit/s
95th percentile per-packet one-way delay: 114.506 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.64 Mbit/s
95th percentile per-packet one-way delay: 113.221 ms
Loss rate: 0.00%
Run 10: Report of Vivace-latency — Data Link

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

Flow 1 ingress (mean 261.84 Mbit/s), Flow 1 egress (mean 261.34 Mbit/s), Flow 2 ingress (mean 173.19 Mbit/s), Flow 2 egress (mean 173.20 Mbit/s), Flow 3 ingress (mean 73.63 Mbit/s), Flow 3 egress (mean 73.64 Mbit/s).
Run 1: Statistics of Vivace-loss

Start at: 2018-04-04 03:32:46
End at: 2018-04-04 03:33:16

# Below is generated by plot.py at 2018-04-04 09:51:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 530.49 Mbit/s
  95th percentile per-packet one-way delay: 294.279 ms
  Loss rate: 2.55%
-- Flow 1:
  Average throughput: 320.66 Mbit/s
  95th percentile per-packet one-way delay: 286.242 ms
  Loss rate: 2.05%
-- Flow 2:
  Average throughput: 265.51 Mbit/s
  95th percentile per-packet one-way delay: 289.259 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 101.09 Mbit/s
  95th percentile per-packet one-way delay: 372.121 ms
  Loss rate: 11.14%
Run 1: Report of Vivac-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-04-04 03:51:50
End at: 2018-04-04 03:52:20

# Below is generated by plot.py at 2018-04-04 09:51:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 431.36 Mbit/s
  95th percentile per-packet one-way delay: 347.107 ms
  Loss rate: 9.05%
-- Flow 1:
  Average throughput: 249.51 Mbit/s
  95th percentile per-packet one-way delay: 344.272 ms
  Loss rate: 5.76%
-- Flow 2:
  Average throughput: 224.10 Mbit/s
  95th percentile per-packet one-way delay: 341.013 ms
  Loss rate: 11.73%
-- Flow 3:
  Average throughput: 100.14 Mbit/s
  95th percentile per-packet one-way delay: 419.815 ms
  Loss rate: 19.32%
Run 2: Report of Vivace-loss — Data Link
Run 3: Statistics of Vivace-loss

Start at: 2018-04-04 04:10:44
End at: 2018-04-04 04:11:14

# Below is generated by plot.py at 2018-04-04 09:51:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 471.05 Mbit/s
  95th percentile per-packet one-way delay: 275.564 ms
  Loss rate: 1.99%
-- Flow 1:
  Average throughput: 322.79 Mbit/s
  95th percentile per-packet one-way delay: 275.837 ms
  Loss rate: 1.49%
-- Flow 2:
  Average throughput: 181.63 Mbit/s
  95th percentile per-packet one-way delay: 116.835 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 83.86 Mbit/s
  95th percentile per-packet one-way delay: 350.942 ms
  Loss rate: 14.51%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-04-04 04:29:45
End at: 2018-04-04 04:30:15

# Below is generated by plot.py at 2018-04-04 09:53:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 439.63 Mbit/s
95th percentile per-packet one-way delay: 264.419 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 286.95 Mbit/s
95th percentile per-packet one-way delay: 260.366 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 128.25 Mbit/s
95th percentile per-packet one-way delay: 276.754 ms
Loss rate: 5.05%
-- Flow 3:
Average throughput: 204.92 Mbit/s
95th percentile per-packet one-way delay: 278.108 ms
Loss rate: 1.22%
Run 4: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 288.71 Mbps)
- Flow 2 ingress (mean 135.07 Mbps)
- Flow 3 ingress (mean 297.43 Mbps)
- Flow 1 egress (mean 286.95 Mbps)
- Flow 2 egress (mean 128.25 Mbps)
- Flow 3 egress (mean 204.92 Mbps)

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

- Flow 1 (95th percentile 260.37 ms)
- Flow 2 (95th percentile 276.75 ms)
- Flow 3 (95th percentile 270.11 ms)
Run 5: Statistics of Vivace-loss

Start at: 2018-04-04 04:48:50
End at: 2018-04-04 04:49:20

# Below is generated by plot.py at 2018-04-04 09:57:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 543.95 Mbit/s
  95th percentile per-packet one-way delay: 314.093 ms
  Loss rate: 3.01%
-- Flow 1:
  Average throughput: 323.89 Mbit/s
  95th percentile per-packet one-way delay: 288.612 ms
  Loss rate: 1.30%
-- Flow 2:
  Average throughput: 261.12 Mbit/s
  95th percentile per-packet one-way delay: 317.138 ms
  Loss rate: 4.61%
-- Flow 3:
  Average throughput: 141.22 Mbit/s
  95th percentile per-packet one-way delay: 342.352 ms
  Loss rate: 8.41%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

Start at: 2018-04-04 05:09:13
End at: 2018-04-04 05:09:43

# Below is generated by plot.py at 2018-04-04 09:57:36
# Datalink statistics
   -- Total of 3 flows:
   Average throughput: 340.18 Mbit/s
   95th percentile per-packet one-way delay: 333.801 ms
   Loss rate: 6.22%
   -- Flow 1:
   Average throughput: 151.62 Mbit/s
   95th percentile per-packet one-way delay: 329.193 ms
   Loss rate: 8.54%
   -- Flow 2:
   Average throughput: 233.50 Mbit/s
   95th percentile per-packet one-way delay: 329.395 ms
   Loss rate: 2.55%
   -- Flow 3:
   Average throughput: 101.71 Mbit/s
   95th percentile per-packet one-way delay: 368.788 ms
   Loss rate: 11.49%
Run 6: Report of Vivace-loss — Data Link
Run 7: Statistics of Vivace-loss

Start at: 2018-04-04 05:28:53
End at: 2018-04-04 05:29:23

# Below is generated by plot.py at 2018-04-04 09:57:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.98 Mbit/s
95th percentile per-packet one-way delay: 259.135 ms
Loss rate: 3.45%
-- Flow 1:
Average throughput: 165.66 Mbit/s
95th percentile per-packet one-way delay: 259.060 ms
Loss rate: 2.76%
-- Flow 2:
Average throughput: 194.17 Mbit/s
95th percentile per-packet one-way delay: 116.222 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 67.87 Mbit/s
95th percentile per-packet one-way delay: 380.968 ms
Loss rate: 22.87%
Run 7: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 170.35 Mbit/s)
- Flow 1 egress (mean 165.66 Mbit/s)
- Flow 2 ingress (mean 194.17 Mbit/s)
- Flow 2 egress (mean 194.17 Mbit/s)
- Flow 3 ingress (mean 87.08 Mbit/s)
- Flow 3 egress (mean 87.08 Mbit/s)

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

- Flow 1 (95th percentile 259.06 ms)
- Flow 2 (95th percentile 116.22 ms)
- Flow 3 (95th percentile 380.97 ms)
Run 8: Statistics of Vivace-loss

Start at: 2018-04-04 05:48:15
End at: 2018-04-04 05:48:45

# Below is generated by plot.py at 2018-04-04 09:57:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 479.72 Mbit/s
  95th percentile per-packet one-way delay: 297.440 ms
  Loss rate: 1.60%
-- Flow 1:
  Average throughput: 299.86 Mbit/s
  95th percentile per-packet one-way delay: 304.368 ms
  Loss rate: 1.31%
-- Flow 2:
  Average throughput: 198.93 Mbit/s
  95th percentile per-packet one-way delay: 220.985 ms
  Loss rate: 2.36%
-- Flow 3:
  Average throughput: 144.85 Mbit/s
  95th percentile per-packet one-way delay: 283.198 ms
  Loss rate: 1.34%
Run 8: Report of Vivace-loss — Data Link

![Graph showing network throughput and packet delay over time with different flow labels and their mean throughput values.]

<table>
<thead>
<tr>
<th>Flow 1 Ingress (mean 303.86 Mb/s)</th>
<th>Flow 1 Egress (mean 299.86 Mb/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 2 Ingress (mean 203.73 Mb/s)</td>
<td>Flow 2 Egress (mean 198.93 Mb/s)</td>
</tr>
<tr>
<td>Flow 3 Ingress (mean 146.79 Mb/s)</td>
<td>Flow 3 Egress (mean 144.85 Mb/s)</td>
</tr>
</tbody>
</table>

![Graph showing packet delay over time with different flow labels and their 95th percentile packet delay values.]

| Flow 1 (95th percentile 304.37 ms) | Flow 2 (95th percentile 220.99 ms) | Flow 3 (95th percentile 283.20 ms) |

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Run 9: Statistics of Vivace-loss

Start at: 2018-04-04 06:07:38
End at: 2018-04-04 06:08:08

# Below is generated by plot.py at 2018-04-04 09:58:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 450.95 Mbit/s
  95th percentile per-packet one-way delay: 294.089 ms
  Loss rate: 0.92%
-- Flow 1:
  Average throughput: 219.20 Mbit/s
  95th percentile per-packet one-way delay: 167.512 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 279.39 Mbit/s
  95th percentile per-packet one-way delay: 306.274 ms
  Loss rate: 2.01%
-- Flow 3:
  Average throughput: 140.04 Mbit/s
  95th percentile per-packet one-way delay: 256.822 ms
  Loss rate: 0.83%
Run 9: Report of Vivace-loss — Data Link
Run 10: Statistics of Vivace-loss

Start at: 2018-04-04 06:27:00
End at: 2018-04-04 06:27:30

# Below is generated by plot.py at 2018-04-04 09:59:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 441.40 Mbit/s
  95th percentile per-packet one-way delay: 318.795 ms
  Loss rate: 5.25%
-- Flow 1:
  Average throughput: 282.47 Mbit/s
  95th percentile per-packet one-way delay: 322.339 ms
  Loss rate: 5.58%
-- Flow 2:
  Average throughput: 199.81 Mbit/s
  95th percentile per-packet one-way delay: 213.372 ms
  Loss rate: 2.33%
-- Flow 3:
  Average throughput: 79.32 Mbit/s
  95th percentile per-packet one-way delay: 319.159 ms
  Loss rate: 14.89%
Run 10: Report of Vivace-loss — Data Link

![Graph showing throughput and packet delay]
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-04 03:20:35
End at: 2018-04-04 03:21:05

# Below is generated by plot.py at 2018-04-04 09:59:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 410.33 Mbit/s
  95th percentile per-packet one-way delay: 125.945 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 231.45 Mbit/s
  95th percentile per-packet one-way delay: 124.802 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 203.10 Mbit/s
  95th percentile per-packet one-way delay: 123.454 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 133.52 Mbit/s
  95th percentile per-packet one-way delay: 212.139 ms
  Loss rate: 0.00%
Run 1: Report of Vivace-LTE — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Packet Delivery Delay vs Time](image2)
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-04 03:39:52
End at: 2018-04-04 03:40:22

# Below is generated by plot.py at 2018-04-04 10:01:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 448.47 Mbit/s
95th percentile per-packet one-way delay: 224.311 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 282.02 Mbit/s
95th percentile per-packet one-way delay: 236.315 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 187.78 Mbit/s
95th percentile per-packet one-way delay: 114.974 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.89 Mbit/s
95th percentile per-packet one-way delay: 155.609 ms
Loss rate: 0.00%
Run 2: Report of Vivace-LTE — Data Link

Graph 1: Throughput vs. Time (Mbps)

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 282.31 Mbps)
- Blue solid line: Flow 1 egress (mean 282.02 Mbps)
- Green dashed line: Flow 2 ingress (mean 187.80 Mbps)
- Green solid line: Flow 2 egress (mean 187.78 Mbps)
- Red dashed line: Flow 3 ingress (mean 126.88 Mbps)
- Red solid line: Flow 3 egress (mean 126.89 Mbps)
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-04 03:58:41
End at: 2018-04-04 03:59:11

# Below is generated by plot.py at 2018-04-04 10:01:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 410.87 Mbit/s
  95th percentile per-packet one-way delay: 209.841 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 235.01 Mbit/s
  95th percentile per-packet one-way delay: 230.476 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 200.44 Mbit/s
  95th percentile per-packet one-way delay: 116.617 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 129.47 Mbit/s
  95th percentile per-packet one-way delay: 162.456 ms
  Loss rate: 0.01%
Run 3: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 235.54 Mbit/s)
- Flow 1 egress (mean 235.01 Mbit/s)
- Flow 2 ingress (mean 200.43 Mbit/s)
- Flow 2 egress (mean 200.44 Mbit/s)
- Flow 3 ingress (mean 129.46 Mbit/s)
- Flow 3 egress (mean 129.47 Mbit/s)

![Graph of per-packet one-way delay showing different flows and their delay performance.]

- Flow 1 (95th percentile 230.48 ms)
- Flow 2 (95th percentile 116.62 ms)
- Flow 3 (95th percentile 162.46 ms)
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-04 04:17:37
End at: 2018-04-04 04:18:07

# Below is generated by plot.py at 2018-04-04 10:01:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 418.38 Mbit/s
  95th percentile per-packet one-way delay: 326.161 ms
  Loss rate: 1.36%
-- Flow 1:
  Average throughput: 259.49 Mbit/s
  95th percentile per-packet one-way delay: 343.730 ms
  Loss rate: 2.18%
-- Flow 2:
  Average throughput: 173.85 Mbit/s
  95th percentile per-packet one-way delay: 115.266 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 131.34 Mbit/s
  95th percentile per-packet one-way delay: 131.825 ms
  Loss rate: 0.00%
Run 4: Report of Vivace-LTE — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 5: Statistics of Vivace-LTE

Start at: 2018-04-04 04:36:46
End at: 2018-04-04 04:37:16

# Below is generated by plot.py at 2018-04-04 10:04:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 465.17 Mbit/s
  95th percentile per-packet one-way delay: 230.403 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 296.81 Mbit/s
  95th percentile per-packet one-way delay: 258.063 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 190.01 Mbit/s
  95th percentile per-packet one-way delay: 115.898 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 129.20 Mbit/s
  95th percentile per-packet one-way delay: 230.927 ms
  Loss rate: 0.00%
Run 5: Report of Vivace-LTE — Data Link

Graph 1: Throughput (Mbps) vs Time (s)
- Flow 1 ingress (mean 297.71 Mbps)
- Flow 1 egress (mean 296.81 Mbps)
- Flow 2 ingress (mean 190.63 Mbps)
- Flow 2 egress (mean 190.01 Mbps)
- Flow 3 ingress (mean 129.20 Mbps)
- Flow 3 egress (mean 129.20 Mbps)

Graph 2: Per-packet one-way delay (ms) vs Time (s)
- Flow 1 (95th percentile 258.06 ms)
- Flow 2 (95th percentile 115.90 ms)
- Flow 3 (95th percentile 230.93 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-04 04:56:06
End at: 2018-04-04 04:56:36

# Below is generated by plot.py at 2018-04-04 10:04:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 409.21 Mbit/s
  95th percentile per-packet one-way delay: 174.320 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 236.48 Mbit/s
  95th percentile per-packet one-way delay: 223.360 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 191.53 Mbit/s
  95th percentile per-packet one-way delay: 113.400 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 138.54 Mbit/s
  95th percentile per-packet one-way delay: 211.608 ms
  Loss rate: 0.50%
Run 6: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 237.05 Mb/s)
- Flow 1 egress (mean 236.48 Mb/s)
- Flow 2 ingress (mean 191.49 Mb/s)
- Flow 2 egress (mean 191.53 Mb/s)
- Flow 3 ingress (mean 139.21 Mb/s)
- Flow 3 egress (mean 138.54 Mb/s)
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-04 05:16:04
End at: 2018-04-04 05:16:34

# Below is generated by plot.py at 2018-04-04 10:04:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.67 Mbit/s
95th percentile per-packet one-way delay: 119.943 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 206.48 Mbit/s
95th percentile per-packet one-way delay: 119.384 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 187.41 Mbit/s
95th percentile per-packet one-way delay: 114.867 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 135.82 Mbit/s
95th percentile per-packet one-way delay: 125.406 ms
Loss rate: 0.00%
Run 7: Report of Vivace-LTE — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 206.52 Mbit/s)**
- **Flow 1 egress (mean 206.48 Mbit/s)**
- **Flow 2 ingress (mean 187.44 Mbit/s)**
- **Flow 2 egress (mean 187.41 Mbit/s)**
- **Flow 3 ingress (mean 135.81 Mbit/s)**
- **Flow 3 egress (mean 135.82 Mbit/s)**

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

- **Flow 1 (95th percentile 119.38 ms)**
- **Flow 2 (95th percentile 114.87 ms)**
- **Flow 3 (95th percentile 125.41 ms)**

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Run 8: Statistics of Vivace-LTE

Start at: 2018-04-04 05:36:04  
End at: 2018-04-04 05:36:34

# Below is generated by plot.py at 2018-04-04 10:04:44  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 315.82 Mbit/s
  95th percentile per-packet one-way delay: 122.285 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 154.11 Mbit/s
  95th percentile per-packet one-way delay: 121.169 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 179.78 Mbit/s
  95th percentile per-packet one-way delay: 114.528 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 128.11 Mbit/s
  95th percentile per-packet one-way delay: 204.873 ms
  Loss rate: 0.01%
Run 8: Report of Vivace-LTE — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 154.11 Mbit/s)
- Flow 1 egress (mean 154.11 Mbit/s)
- Flow 2 ingress (mean 179.81 Mbit/s)
- Flow 2 egress (mean 179.78 Mbit/s)
- Flow 3 ingress (mean 128.12 Mbit/s)
- Flow 3 egress (mean 128.11 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 121.17 ms)
- Flow 2 (95th percentile 114.53 ms)
- Flow 3 (95th percentile 204.87 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-04 05:55:16
End at: 2018-04-04 05:55:46

# Below is generated by plot.py at 2018-04-04 10:04:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 415.31 Mbit/s
  95th percentile per-packet one-way delay: 205.885 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 243.43 Mbit/s
  95th percentile per-packet one-way delay: 240.769 ms
  Loss rate: 1.01%
-- Flow 2:
  Average throughput: 191.44 Mbit/s
  95th percentile per-packet one-way delay: 130.378 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 135.62 Mbit/s
  95th percentile per-packet one-way delay: 113.490 ms
  Loss rate: 0.00%
Run 9: Report of Vivace-LTE — Data Link

![Graphs showing throughput and packet delay for different flows.](image)

- Flow 1 ingress (mean 245.97 Mbit/s)
- Flow 1 egress (mean 243.43 Mbit/s)
- Flow 2 ingress (mean 191.49 Mbit/s)
- Flow 2 egress (mean 191.44 Mbit/s)
- Flow 3 ingress (mean 135.66 Mbit/s)
- Flow 3 egress (mean 135.62 Mbit/s)

![Graphs showing 95th percentile packet delay for different flows.](image)

- Flow 1 (95th percentile 240.77 ms)
- Flow 2 (95th percentile 130.38 ms)
- Flow 3 (95th percentile 113.49 ms)
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-04 06:14:36
End at: 2018-04-04 06:15:06

# Below is generated by plot.py at 2018-04-04 10:05:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 453.53 Mbit/s
  95th percentile per-packet one-way delay: 162.990 ms
  Loss rate: 0.14%
  -- Flow 1:
  Average throughput: 290.10 Mbit/s
  95th percentile per-packet one-way delay: 171.539 ms
  Loss rate: 0.22%
  -- Flow 2:
  Average throughput: 179.22 Mbit/s
  95th percentile per-packet one-way delay: 132.548 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 135.28 Mbit/s
  95th percentile per-packet one-way delay: 212.132 ms
  Loss rate: 0.00%
Run 10: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 290.72 Mbit/s)
- Flow 1 egress (mean 290.10 Mbit/s)
- Flow 2 ingress (mean 179.24 Mbit/s)
- Flow 2 egress (mean 179.22 Mbit/s)
- Flow 3 ingress (mean 135.27 Mbit/s)
- Flow 3 egress (mean 135.28 Mbit/s)