Pantheon Report

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

Git summary:
branch: master @ eb420b5be9baefccdb22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cd46e3a7a522e53227db50
  M datagrump/sender.cc
third_party/filllp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ 9294eaa3238475c4d8cc1a443d28df70bfff6c4a2
third_party/indigo @ a9b2060d39e4a2e28987e893e3eca2a6c7cd0ab9
  third_party/indigo-1-layer-128-unit @ 3ae9e4e4230db7484501f82ce8b377695f2f66d
  third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe02ecdbf90c077e64d
  third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
  third_party/indigo-no-calib @ 7224f2202e8a04ff8306fa0b983ad84c60c53d89
  third_party/koho_cc @ f0f2e693303ae82ea080e6928eac4f1083a6681
    M datagrump/sender.cc
  third_party/libutp @ b3465b942e2826f2b17eaaeb4a906ce66b7cf3cf
  third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
  third_party/pcc @ 1afc958fa0d66d18b623c091a555ec872b4981e1
    M receiver/src/buffer.h
    M receiver/src/core.cpp
    M sender/src/buffer.h
    M sender/src/core.cpp
  third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ec9f78f3cfcf42
  third_party/scream @ c3370fd7bd17265a79aeb34e016ad23f59656885
  third_party/sourdough @ f1a14bffe74973437f61b1eaebe3b267cde681
  third_party/sprout @ 6f2efe6e088d91066a9f023df375ee2665089ce
    M src/examples/cellsim.cc
    M src/examples/sprotbtt2.cc
    M src/network/sprotcomm.cc
  third_party/verus @ d4b447ea74c6c60a261149af2629562539f9a494
    M src/verus.hpp
    M tools/plot.py
  third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
  third_party/webRTC @ f271183af822ee5d0031620f4bebf38aedc5581
test from GCE Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1 flow 2 flow 3</td>
<td>flow 1 flow 2 flow 3</td>
<td>flow 1 flow 2 flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>91.77 90.21 83.01</td>
<td>116.68 117.59 120.43</td>
<td>0.75 1.25 2.69</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>66.90 54.67 43.76</td>
<td>117.64 117.30 118.46</td>
<td>0.80 1.49 3.28</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>6.68 4.14 1.82</td>
<td>113.57 113.58 113.55</td>
<td>1.48 2.43 3.94</td>
</tr>
<tr>
<td>PCC</td>
<td>10</td>
<td>476.32 23.05 41.35</td>
<td>228.75 226.26 203.95</td>
<td>1.92 1.75 3.09</td>
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<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>59.25 51.97 37.03</td>
<td>113.04 113.17 112.02</td>
<td>0.95 1.40 3.14</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.20 0.18 0.21</td>
<td>113.89 113.22 112.54</td>
<td>0.74 1.03 2.23</td>
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<tr>
<td>WebRTC media</td>
<td>10</td>
<td>0.06 0.06 0.05</td>
<td>113.87 114.28 113.66</td>
<td>0.00 0.00 0.38</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>2.22 1.90 1.50</td>
<td>113.93 113.95 113.93</td>
<td>0.74 1.17 3.08</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>133.94 78.26 66.27</td>
<td>113.83 115.68 115.76</td>
<td>0.84 1.14 2.81</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>36.91 41.19 35.79</td>
<td>115.10 116.13 117.19</td>
<td>0.80 1.20 2.50</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>127.96 117.70 83.54</td>
<td>183.91 208.44 233.58</td>
<td>1.05 1.82 4.62</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>78.71 64.65 69.62</td>
<td>113.52 113.81 113.70</td>
<td>0.68 1.00 2.48</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>715.27 660.13 537.99</td>
<td>217.22 207.75 202.60</td>
<td>5.31 5.22 5.97</td>
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<tr>
<td>Indigo-1-32</td>
<td>10</td>
<td>169.16 147.42 126.50</td>
<td>115.70 119.39 122.43</td>
<td>0.67 1.13 2.71</td>
</tr>
<tr>
<td>Vivace-latency</td>
<td>10</td>
<td>238.18 177.67 116.45</td>
<td>114.57 114.79 119.36</td>
<td>0.84 1.56 3.68</td>
</tr>
<tr>
<td>Vivace-loss</td>
<td>10</td>
<td>250.34 213.75 148.17</td>
<td>134.63 124.68 120.44</td>
<td>0.97 1.33 3.10</td>
</tr>
<tr>
<td>Vivace-LTE</td>
<td>10</td>
<td>234.02 186.60 131.09</td>
<td>114.63 114.18 118.13</td>
<td>0.85 1.60 3.72</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-11 03:01:15
End at: 2018-04-11 03:01:45

# Below is generated by plot.py at 2018-04-11 09:39:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 176.82 Mbit/s
  95th percentile per-packet one-way delay: 114.483 ms
  Loss rate: 1.28%
-- Flow 1:
  Average throughput: 90.87 Mbit/s
  95th percentile per-packet one-way delay: 114.451 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 89.21 Mbit/s
  95th percentile per-packet one-way delay: 114.516 ms
  Loss rate: 1.23%
-- Flow 3:
  Average throughput: 82.48 Mbit/s
  95th percentile per-packet one-way delay: 114.517 ms
  Loss rate: 2.90%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-04-11 03:20:07
End at: 2018-04-11 03:20:37

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 182.98 Mbit/s
95th percentile per-packet one-way delay: 115.533 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 91.05 Mbit/s
95th percentile per-packet one-way delay: 115.001 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 116.096 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 86.50 Mbit/s
95th percentile per-packet one-way delay: 115.332 ms
Loss rate: 2.81%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 91.09 Mbit/s)
- Flow 1 egress (mean 91.05 Mbit/s)
- Flow 2 ingress (mean 96.05 Mbit/s)
- Flow 2 egress (mean 96.01 Mbit/s)
- Flow 3 ingress (mean 96.98 Mbit/s)
- Flow 3 egress (mean 96.60 Mbit/s)
Run 3: Statistics of TCP BBR

Start at: 2018-04-11 03:38:43
End at: 2018-04-11 03:39:13

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.32 Mbit/s
95th percentile per-packet one-way delay: 114.044 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: 113.935 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 113.860 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 76.11 Mbit/s
95th percentile per-packet one-way delay: 115.733 ms
Loss rate: 3.03%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-04-11 03:57:56
End at: 2018-04-11 03:58:26

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.93 Mbit/s
95th percentile per-packet one-way delay: 113.383 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 92.01 Mbit/s
95th percentile per-packet one-way delay: 113.338 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 89.14 Mbit/s
95th percentile per-packet one-way delay: 113.376 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 113.473 ms
Loss rate: 2.67%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-04-11 04:17:02
End at: 2018-04-11 04:17:32

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 180.02 Mbit/s
  95th percentile per-packet one-way delay: 116.781 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 92.89 Mbit/s
  95th percentile per-packet one-way delay: 114.896 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 88.90 Mbit/s
  95th percentile per-packet one-way delay: 116.030 ms
  Loss rate: 1.32%
-- Flow 3:
  Average throughput: 86.63 Mbit/s
  95th percentile per-packet one-way delay: 118.859 ms
  Loss rate: 2.84%
Run 5: Report of TCP BBR — Data Link

![Graph of network throughput over time for different flows. The graph shows fluctuations in throughput with time, indicating varying network conditions.]

- **Flow 1 ingress (mean 92.93 Mbit/s)**
- **Flow 1 egress (mean 92.89 Mbit/s)**
- **Flow 2 ingress (mean 88.97 Mbit/s)**
- **Flow 2 egress (mean 88.90 Mbit/s)**
- **Flow 3 ingress (mean 86.85 Mbit/s)**
- **Flow 3 egress (mean 86.63 Mbit/s)**

![Graph of per-packet one-way delay over time for different flows. The graph shows spikes in delay with time, indicating network latency.]

- **Flow 1 (95th percentile 114.90 ms)**
- **Flow 2 (95th percentile 116.03 ms)**
- **Flow 3 (95th percentile 119.86 ms)**
Run 6: Statistics of TCP BBR

Start at: 2018-04-11 04:36:11
End at: 2018-04-11 04:36:41

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 178.47 Mbit/s
  95th percentile per-packet one-way delay: 113.031 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 92.85 Mbit/s
  95th percentile per-packet one-way delay: 112.987 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 88.70 Mbit/s
  95th percentile per-packet one-way delay: 113.013 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 82.31 Mbit/s
  95th percentile per-packet one-way delay: 113.266 ms
  Loss rate: 2.65%
Run 6: Report of TCP BBR — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 92.15 Mbps)
  - Flow 1 egress (mean 92.85 Mbps)
  - Flow 2 ingress (mean 88.77 Mbps)
  - Flow 2 egress (mean 88.70 Mbps)
  - Flow 3 ingress (mean 82.66 Mbps)
  - Flow 3 egress (mean 82.31 Mbps)

- **Packet Round-trip delay (ms)**
  - Flow 1 (95th percentile 112.99 ms)
  - Flow 2 (95th percentile 113.01 ms)
  - Flow 3 (95th percentile 113.27 ms)
Run 7: Statistics of TCP BBR


# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 177.92 Mbit/s
  95th percentile per-packet one-way delay: 113.999 ms
  Loss rate: 1.24%
-- Flow 1:
  Average throughput: 91.07 Mbit/s
  95th percentile per-packet one-way delay: 113.326 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 88.70 Mbit/s
  95th percentile per-packet one-way delay: 113.525 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 85.89 Mbit/s
  95th percentile per-packet one-way delay: 115.212 ms
  Loss rate: 2.48%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-04-11 05:14:19
End at: 2018-04-11 05:14:50

# Below is generated by plot.py at 2018-04-11 09:39:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 176.97 Mbit/s
  95th percentile per-packet one-way delay: 147.476 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 89.44 Mbit/s
  95th percentile per-packet one-way delay: 139.778 ms
  Loss rate: 0.91%
-- Flow 2:
  Average throughput: 93.01 Mbit/s
  95th percentile per-packet one-way delay: 146.749 ms
  Loss rate: 1.30%
-- Flow 3:
  Average throughput: 79.34 Mbit/s
  95th percentile per-packet one-way delay: 161.683 ms
  Loss rate: 2.77%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-04-11 05:33:34
End at: 2018-04-11 05:34:04

# Below is generated by plot.py at 2018-04-11 09:42:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 182.38 Mbit/s
  95th percentile per-packet one-way delay: 115.516 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 96.86 Mbit/s
  95th percentile per-packet one-way delay: 114.677 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 88.28 Mbit/s
  95th percentile per-packet one-way delay: 114.107 ms
  Loss rate: 1.30%
-- Flow 3:
  Average throughput: 82.46 Mbit/s
  95th percentile per-packet one-way delay: 119.895 ms
  Loss rate: 2.66%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-04-11 05:52:55
End at: 2018-04-11 05:53:25

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 180.74 Mbit/s
  95th percentile per-packet one-way delay: 115.054 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 92.52 Mbit/s
  95th percentile per-packet one-way delay: 114.441 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 90.53 Mbit/s
  95th percentile per-packet one-way delay: 114.660 ms
  Loss rate: 1.19%
-- Flow 3:
  Average throughput: 86.42 Mbit/s
  95th percentile per-packet one-way delay: 116.319 ms
  Loss rate: 2.06%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-04-11 03:09:33
End at: 2018-04-11 03:10:03

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.35 Mbit/s
  95th percentile per-packet one-way delay: 118.343 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 75.50 Mbit/s
  95th percentile per-packet one-way delay: 119.015 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 63.31 Mbit/s
  95th percentile per-packet one-way delay: 116.404 ms
  Loss rate: 1.48%
-- Flow 3:
  Average throughput: 42.65 Mbit/s
  95th percentile per-packet one-way delay: 117.883 ms
  Loss rate: 2.75%
Run 1: Report of TCP Cubic — Data Link

![Throughput and Per-packet one-way delay charts](chart.png)

- Flow 1 ingress (mean 75.57 Mbit/s)
- Flow 1 egress (mean 75.50 Mbit/s)
- Flow 2 ingress (mean 63.53 Mbit/s)
- Flow 2 egress (mean 63.31 Mbit/s)
- Flow 3 ingress (mean 42.87 Mbit/s)
- Flow 3 egress (mean 42.65 Mbit/s)
Run 2: Statistics of TCP Cubic

Start at: 2018-04-11 03:28:28
End at: 2018-04-11 03:28:58

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.35 Mbit/s
95th percentile per-packet one-way delay: 117.041 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 61.18 Mbit/s
95th percentile per-packet one-way delay: 117.597 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 60.83 Mbit/s
95th percentile per-packet one-way delay: 115.027 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 36.18 Mbit/s
95th percentile per-packet one-way delay: 119.407 ms
Loss rate: 2.52%
Run 2: Report of TCP Cubic — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 61.44 Mbit/s)
- Flow 1 egress (mean 61.18 Mbit/s)
- Flow 2 ingress (mean 60.98 Mbit/s)
- Flow 2 egress (mean 60.83 Mbit/s)
- Flow 3 ingress (mean 36.28 Mbit/s)
- Flow 3 egress (mean 36.18 Mbit/s)

![Graph 2: Packet Delay vs Time]

- Flow 1 (95th percentile 117.60 ms)
- Flow 2 (95th percentile 115.03 ms)
- Flow 3 (95th percentile 119.41 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-04-11 03:47:33
End at: 2018-04-11 03:48:03

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.09 Mbit/s
95th percentile per-packet one-way delay: 116.598 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 63.79 Mbit/s
95th percentile per-packet one-way delay: 116.702 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 48.96 Mbit/s
95th percentile per-packet one-way delay: 114.981 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 45.70 Mbit/s
95th percentile per-packet one-way delay: 117.939 ms
Loss rate: 2.96%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 64.11 Mbit/s)
- Flow 1 egress (mean 63.79 Mbit/s)
- Flow 2 ingress (mean 49.15 Mbit/s)
- Flow 2 egress (mean 48.96 Mbit/s)
- Flow 3 ingress (mean 46.02 Mbit/s)
- Flow 3 egress (mean 45.70 Mbit/s)

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

- Flow 1 (95th percentile 116.70 ms)
- Flow 2 (95th percentile 114.98 ms)
- Flow 3 (95th percentile 117.94 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-04-11 04:06:34
End at: 2018-04-11 04:07:04

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 100.34 Mbit/s
  95th percentile per-packet one-way delay: 117.884 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 67.84 Mbit/s
  95th percentile per-packet one-way delay: 117.174 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 48.23 Mbit/s
  95th percentile per-packet one-way delay: 119.454 ms
  Loss rate: 1.51%
-- Flow 3:
  Average throughput: 1.88 Mbit/s
  95th percentile per-packet one-way delay: 120.823 ms
  Loss rate: 8.03%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-04-11 04:25:47
End at: 2018-04-11 04:26:17

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.28 Mbit/s
95th percentile per-packet one-way delay: 118.622 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 61.05 Mbit/s
95th percentile per-packet one-way delay: 117.421 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 59.84 Mbit/s
95th percentile per-packet one-way delay: 119.522 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 57.03 Mbit/s
95th percentile per-packet one-way delay: 119.685 ms
Loss rate: 2.97%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-04-11 04:44:54
End at: 2018-04-11 04:45:24

# Below is generated by plot.py at 2018-04-11 09:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.58 Mbit/s
95th percentile per-packet one-way delay: 115.224 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 115.446 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 55.38 Mbit/s
95th percentile per-packet one-way delay: 113.807 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 41.53 Mbit/s
95th percentile per-packet one-way delay: 115.408 ms
Loss rate: 2.03%
Run 6: Report of TCP Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 59.16 Mbit/s)
Flow 1 egress (mean 59.27 Mbit/s)
Flow 2 ingress (mean 55.62 Mbit/s)
Flow 2 egress (mean 55.38 Mbit/s)
Flow 3 ingress (mean 41.42 Mbit/s)
Flow 3 egress (mean 41.53 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 115.45 ms)
Flow 2 (95th percentile 113.81 ms)
Flow 3 (95th percentile 115.41 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-04-11 05:03:47
End at: 2018-04-11 05:04:17

# Below is generated by plot.py at 2018-04-11 09:42:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 124.66 Mbit/s
  95th percentile per-packet one-way delay: 117.675 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 74.83 Mbit/s
  95th percentile per-packet one-way delay: 117.786 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 54.36 Mbit/s
  95th percentile per-packet one-way delay: 117.613 ms
  Loss rate: 1.53%
-- Flow 3:
  Average throughput: 42.62 Mbit/s
  95th percentile per-packet one-way delay: 117.276 ms
  Loss rate: 2.82%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-04-11 05:23:00
End at: 2018-04-11 05:23:30

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.29 Mbit/s
95th percentile per-packet one-way delay: 118.770 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 69.60 Mbit/s
95th percentile per-packet one-way delay: 118.631 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 56.27 Mbit/s
95th percentile per-packet one-way delay: 119.636 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 74.79 Mbit/s
95th percentile per-packet one-way delay: 117.683 ms
Loss rate: 2.95%
Run 8: Report of TCP Cubic — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 69.60 Mbit/s)
- Flow 1 egress (mean 69.60 Mbit/s)
- Flow 2 ingress (mean 56.43 Mbit/s)
- Flow 2 egress (mean 56.27 Mbit/s)
- Flow 3 ingress (mean 75.36 Mbit/s)
- Flow 3 egress (mean 74.79 Mbit/s)

![Packet-Size Graph]

- Flow 1 (95th percentile 118.63 ms)
- Flow 2 (95th percentile 119.64 ms)
- Flow 3 (95th percentile 117.68 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-04-11 05:42:27
End at: 2018-04-11 05:42:57

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.77 Mbit/s
95th percentile per-packet one-way delay: 117.684 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 69.44 Mbit/s
95th percentile per-packet one-way delay: 117.785 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 47.62 Mbit/s
95th percentile per-packet one-way delay: 116.843 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 45.43 Mbit/s
95th percentile per-packet one-way delay: 119.256 ms
Loss rate: 2.79%
Run 9: Report of TCP Cubic — Data Link

[Graph showing throughput and per-packet one-way delay for different flows over time.]
Run 10: Statistics of TCP Cubic

Start at: 2018-04-11 06:01:43
End at: 2018-04-11 06:02:13

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 117.18 Mbit/s
  95th percentile per-packet one-way delay: 119.235 ms
  Loss rate: 1.28%
-- Flow 1:
  Average throughput: 66.51 Mbit/s
  95th percentile per-packet one-way delay: 118.810 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 51.94 Mbit/s
  95th percentile per-packet one-way delay: 119.720 ms
  Loss rate: 1.41%
-- Flow 3:
  Average throughput: 49.78 Mbit/s
  95th percentile per-packet one-way delay: 119.268 ms
  Loss rate: 3.00%
Run 10: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet Delivery Delay (ms)]
Run 1: Statistics of LEDBAT

Start at: 2018-04-11 03:07:27
End at: 2018-04-11 03:07:57

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.29 Mbit/s
95th percentile per-packet one-way delay: 115.004 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 115.050 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 114.966 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 114.903 ms
Loss rate: 4.67%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-04-11 03:26:24
End at: 2018-04-11 03:26:54

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.31 Mbit/s
  95th percentile per-packet one-way delay: 112.714 ms
  Loss rate: 1.74%
-- Flow 1:
  Average throughput: 7.13 Mbit/s
  95th percentile per-packet one-way delay: 112.753 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.67 Mbit/s
  95th percentile per-packet one-way delay: 112.618 ms
  Loss rate: 2.27%
-- Flow 3:
  Average throughput: 0.37 Mbit/s
  95th percentile per-packet one-way delay: 112.933 ms
  Loss rate: 2.25%
Run 2: Report of LEDBAT — Data Link

Throughput (Mb/s) vs Time (s)

- Flow 1 ingress (mean 7.19 Mb/s)
- Flow 1 egress (mean 7.13 Mb/s)
- Flow 2 ingress (mean 4.72 Mb/s)
- Flow 2 egress (mean 4.67 Mb/s)
- Flow 3 ingress (mean 0.37 Mb/s)
- Flow 3 egress (mean 0.37 Mb/s)

Packet delay time (ms) vs Time (s)

- Flow 1 (95th percentile 112.75 ms)
- Flow 2 (95th percentile 112.62 ms)
- Flow 3 (95th percentile 112.93 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-04-11 03:45:29
End at: 2018-04-11 03:45:59

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.30 Mbit/s
  95th percentile per-packet one-way delay: 112.860 ms
  Loss rate: 1.98%
-- Flow 1:
  Average throughput: 7.06 Mbit/s
  95th percentile per-packet one-way delay: 112.924 ms
  Loss rate: 1.51%
-- Flow 2:
  Average throughput: 3.83 Mbit/s
  95th percentile per-packet one-way delay: 112.690 ms
  Loss rate: 2.50%
-- Flow 3:
  Average throughput: 2.28 Mbit/s
  95th percentile per-packet one-way delay: 112.296 ms
  Loss rate: 4.54%
Run 3: Report of LEDBAT — Data Link

![Graph showing throughput and one-way delay for different flows over time.](image1)

![Graph showing throughput and one-way delay for different flows over time.](image2)
Run 4: Statistics of LEDBAT

Start at: 2018-04-11 04:04:26
End at: 2018-04-11 04:04:56

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.50 Mbit/s
  95th percentile per-packet one-way delay: 112.458 ms
  Loss rate: 2.22%
-- Flow 1:
  Average throughput: 4.70 Mbit/s
  95th percentile per-packet one-way delay: 112.385 ms
  Loss rate: 1.84%
-- Flow 2:
  Average throughput: 4.72 Mbit/s
  95th percentile per-packet one-way delay: 112.535 ms
  Loss rate: 2.25%
-- Flow 3:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 112.819 ms
  Loss rate: 4.71%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-04-11 04:23:44
End at: 2018-04-11 04:24:14

# Below is generated by plot.py at 2018-04-11 09:43:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 113.561 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 113.567 ms
Loss rate: 1.52%
-- Flow 2:
Average throughput: 4.68 Mbit/s
95th percentile per-packet one-way delay: 113.554 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 113.172 ms
Loss rate: 2.29%
Run 5: Report of LEDBAT — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 7.05 Mbps)
- Flow 1 egress (mean 6.99 Mbps)
- Flow 2 ingress (mean 4.74 Mbps)
- Flow 2 egress (mean 4.68 Mbps)
- Flow 3 ingress (mean 0.35 Mbps)
- Flow 3 egress (mean 0.35 Mbps)

Flow 1 (95th percentile 113.57 ms)
Flow 2 (95th percentile 113.55 ms)
Flow 3 (95th percentile 113.17 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-04-11 04:42:54
End at: 2018-04-11 04:43:24

# Below is generated by plot.py at 2018-04-11 09:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.98 Mbit/s
95th percentile per-packet one-way delay: 113.094 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 113.017 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 4.66 Mbit/s
95th percentile per-packet one-way delay: 113.540 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 113.123 ms
Loss rate: 4.71%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-04-11 05:01:45
End at: 2018-04-11 05:02:15

# Below is generated by plot.py at 2018-04-11 09:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.10 Mbit/s
95th percentile per-packet one-way delay: 113.306 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 113.284 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 112.951 ms
Loss rate: 3.63%
-- Flow 3:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 113.428 ms
Loss rate: 4.58%
Run 7: Report of LEDBAT — Data Link

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

Start at: 2018-04-11 05:20:53
End at: 2018-04-11 05:21:23

# Below is generated by plot.py at 2018-04-11 09:43:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.65 Mbit/s
  95th percentile per-packet one-way delay: 113.924 ms
  Loss rate: 1.35%
-- Flow 1:
  Average throughput: 6.90 Mbit/s
  95th percentile per-packet one-way delay: 113.922 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 4.64 Mbit/s
  95th percentile per-packet one-way delay: 113.912 ms
  Loss rate: 2.26%
-- Flow 3:
  Average throughput: 2.13 Mbit/s
  95th percentile per-packet one-way delay: 113.948 ms
  Loss rate: 2.70%
Run 8: Report of LEDBAT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 6.90 Mbps)
Flow 1 egress (mean 6.90 Mbps)
Flow 2 ingress (mean 4.69 Mbps)
Flow 2 egress (mean 4.64 Mbps)
Flow 3 ingress (mean 2.14 Mbps)
Flow 3 egress (mean 2.13 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 113.92 ms)
Flow 2 (95th percentile 113.91 ms)
Flow 3 (95th percentile 113.95 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-04-11 05:40:17
End at: 2018-04-11 05:40:47

# Below is generated by plot.py at 2018-04-11 09:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 114.585 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 7.01 Mbit/s
95th percentile per-packet one-way delay: 114.580 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 4.65 Mbit/s
95th percentile per-packet one-way delay: 114.518 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 114.746 ms
Loss rate: 4.57%
Run 9: Report of LEDBAT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 7.00 Mbps)
Flow 1 egress (mean 7.01 Mbps)
Flow 2 ingress (mean 4.71 Mbps)
Flow 2 egress (mean 4.65 Mbps)
Flow 3 ingress (mean 2.33 Mbps)
Flow 3 egress (mean 2.28 Mbps)

Perceived one-way delay (ms)

Time (s)

Flow 1 (95th percentile 114.58 ms)
Flow 2 (95th percentile 114.52 ms)
Flow 3 (95th percentile 114.75 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-04-11 05:59:35
End at: 2018-04-11 06:00:05

# Below is generated by plot.py at 2018-04-11 09:43:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.81 Mbit/s
  95th percentile per-packet one-way delay: 114.274 ms
  Loss rate: 1.92%
-- Flow 1:
  Average throughput: 7.04 Mbit/s
  95th percentile per-packet one-way delay: 114.229 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.67 Mbit/s
  95th percentile per-packet one-way delay: 114.541 ms
  Loss rate: 2.28%
-- Flow 3:
  Average throughput: 2.15 Mbit/s
  95th percentile per-packet one-way delay: 114.174 ms
  Loss rate: 4.40%
Run 10: Report of LEDBAT — Data Link

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

Flow 1 ingress (mean 7.10 Mbit/s)  Flow 1 egress (mean 7.04 Mbit/s)
Flow 2 ingress (mean 4.73 Mbit/s)  Flow 2 egress (mean 4.67 Mbit/s)
Flow 3 ingress (mean 2.20 Mbit/s)  Flow 3 egress (mean 2.15 Mbit/s)

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Run 1: Statistics of PCC

Start at: 2018-04-11 03:12:57
End at: 2018-04-11 03:13:27

# Below is generated by plot.py at 2018-04-11 09:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.46 Mbit/s
95th percentile per-packet one-way delay: 211.995 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 440.92 Mbit/s
95th percentile per-packet one-way delay: 212.420 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 205.068 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 214.996 ms
Loss rate: 2.29%
Run 1: Report of PCC — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 445.07 Mbps)
  - Flow 1 egress (mean 440.92 Mbps)
  - Flow 2 ingress (mean 33.59 Mbps)
  - Flow 2 egress (mean 33.54 Mbps)
  - Flow 3 ingress (mean 62.01 Mbps)
  - Flow 3 egress (mean 62.90 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 212.42 ms)
  - Flow 2 (95th percentile 205.07 ms)
  - Flow 3 (95th percentile 215.00 ms)
Run 2: Statistics of PCC

Start at: 2018-04-11 03:31:50
End at: 2018-04-11 03:32:20

# Below is generated by plot.py at 2018-04-11 09:49:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 475.31 Mbit/s
95th percentile per-packet one-way delay: 244.630 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 471.17 Mbit/s
95th percentile per-packet one-way delay: 244.634 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 243.891 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 4.26 Mbit/s
95th percentile per-packet one-way delay: 245.235 ms
Loss rate: 2.50%
Run 2: Report of PCC — Data Link

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

- **Flow 1 Ingress** (mean 476.17 Mbps)
- **Flow 1 Egress** (mean 471.17 Mbps)
- **Flow 2 Ingress** (mean 4.19 Mbps)
- **Flow 2 Egress** (mean 4.17 Mbps)
- **Flow 3 Ingress** (mean 4.27 Mbps)
- **Flow 3 Egress** (mean 4.26 Mbps)

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

- **Flow 1** (95th percentile 244.63 ms)
- **Flow 2** (95th percentile 243.89 ms)
- **Flow 3** (95th percentile 245.24 ms)
Run 3: Statistics of PCC

Start at: 2018-04-11 03:50:56
End at: 2018-04-11 03:51:26

# Below is generated by plot.py at 2018-04-11 09:50:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 487.13 Mbit/s
  95th percentile per-packet one-way delay: 216.306 ms
  Loss rate: 1.54%
-- Flow 1:
  Average throughput: 463.73 Mbit/s
  95th percentile per-packet one-way delay: 216.453 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.30 Mbit/s
  95th percentile per-packet one-way delay: 211.207 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 63.65 Mbit/s
  95th percentile per-packet one-way delay: 174.133 ms
  Loss rate: 2.35%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-04-11 04:09:56
End at: 2018-04-11 04:10:27

# Below is generated by plot.py at 2018-04-11 09:50:16
# Datalink statistics
# Total of 3 flows:
Average throughput: 494.73 Mbit/s
95th percentile per-packet one-way delay: 238.573 ms
Loss rate: 2.79%
-- Flow 1:
Average throughput: 451.26 Mbit/s
95th percentile per-packet one-way delay: 239.245 ms
Loss rate: 2.49%
-- Flow 2:
Average throughput: 9.02 Mbit/s
95th percentile per-packet one-way delay: 238.493 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 115.58 Mbit/s
95th percentile per-packet one-way delay: 232.109 ms
Loss rate: 6.26%
Run 4: Report of PCC — Data Link

![Graph of throughputs and delays over time]

Legend:
- Flow 1 ingress (mean 459.33 Mbit/s)
- Flow 1 egress (mean 451.26 Mbit/s)
- Flow 2 ingress (mean 9.18 Mbit/s)
- Flow 2 egress (mean 9.02 Mbit/s)
- Flow 3 ingress (mean 120.91 Mbit/s)
- Flow 3 egress (mean 115.58 Mbit/s)

Legend for delays:
- Flow 1 (95th percentile 239.25 ms)
- Flow 2 (95th percentile 238.49 ms)
- Flow 3 (95th percentile 232.11 ms)
Run 5: Statistics of PCC

Start at: 2018-04-11 04:29:08
End at: 2018-04-11 04:29:38

# Below is generated by plot.py at 2018-04-11 09:51:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 547.33 Mbit/s
  95th percentile per-packet one-way delay: 225.024 ms
  Loss rate: 2.16%
-- Flow 1:
  Average throughput: 520.94 Mbit/s
  95th percentile per-packet one-way delay: 225.016 ms
  Loss rate: 2.11%
-- Flow 2:
  Average throughput: 10.82 Mbit/s
  95th percentile per-packet one-way delay: 224.783 ms
  Loss rate: 2.28%
-- Flow 3:
  Average throughput: 59.23 Mbit/s
  95th percentile per-packet one-way delay: 225.163 ms
  Loss rate: 3.51%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

End at: 2018-04-11 04:48:44

# Below is generated by plot.py at 2018-04-11 09:51:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.40 Mbit/s
95th percentile per-packet one-way delay: 242.681 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 476.59 Mbit/s
95th percentile per-packet one-way delay: 242.715 ms
Loss rate: 1.96%
-- Flow 2:
Average throughput: 32.20 Mbit/s
95th percentile per-packet one-way delay: 242.361 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 150.985 ms
Loss rate: 2.61%
Run 6: Report of PCC — Data Link

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

- Flow 1 ingress (mean 492.44 Mbps)
- Flow 1 egress (mean 476.59 Mbps)
- Flow 2 ingress (mean 32.32 Mbps)
- Flow 2 egress (mean 32.20 Mbps)
- Flow 3 ingress (mean 4.56 Mbps)
- Flow 3 egress (mean 4.54 Mbps)

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

- Flow 1 (95th percentile: 242.72 ms)
- Flow 2 (95th percentile: 242.36 ms)
- Flow 3 (95th percentile: 150.99 ms)
Run 7: Statistics of PCC

Start at: 2018-04-11 05:07:09
End at: 2018-04-11 05:07:39

# Below is generated by plot.py at 2018-04-11 09:51:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 509.14 Mbit/s
  95th percentile per-packet one-way delay: 208.765 ms
  Loss rate: 1.80%
-- Flow 1:
  Average throughput: 485.98 Mbit/s
  95th percentile per-packet one-way delay: 208.562 ms
  Loss rate: 1.76%
-- Flow 2:
  Average throughput: 4.34 Mbit/s
  95th percentile per-packet one-way delay: 199.343 ms
  Loss rate: 1.43%
-- Flow 3:
  Average throughput: 62.80 Mbit/s
  95th percentile per-packet one-way delay: 211.240 ms
  Loss rate: 2.85%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-04-11 05:26:24
End at: 2018-04-11 05:26:54

# Below is generated by plot.py at 2018-04-11 09:51:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 527.32 Mbit/s
95th percentile per-packet one-way delay: 217.472 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 471.93 Mbit/s
95th percentile per-packet one-way delay: 217.549 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 217.103 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 211.244 ms
Loss rate: 2.60%
Run 8: Report of PCC — Data Link

![Graph 1](image1)

![Graph 2](image2)

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Run 9: Statistics of PCC

Start at: 2018-04-11 05:45:50
End at: 2018-04-11 05:46:20

# Below is generated by plot.py at 2018-04-11 09:58:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 521.12 Mbit/s
  95th percentile per-packet one-way delay: 236.342 ms
  Loss rate: 2.00%
-- Flow 1:
  Average throughput: 478.79 Mbit/s
  95th percentile per-packet one-way delay: 236.353 ms
  Loss rate: 2.00%
-- Flow 2:
  Average throughput: 62.89 Mbit/s
  95th percentile per-packet one-way delay: 236.234 ms
  Loss rate: 1.95%
-- Flow 3:
  Average throughput: 2.25 Mbit/s
  95th percentile per-packet one-way delay: 236.922 ms
  Loss rate: 3.66%
Run 9: Report of PCC — Data Link
Run 10: Statistics of PCC

Start at: 2018-04-11 06:05:06
End at: 2018-04-11 06:05:36

# Below is generated by plot.py at 2018-04-11 09:58:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 504.75 Mbit/s
95th percentile per-packet one-way delay: 244.515 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 501.89 Mbit/s
95th percentile per-packet one-way delay: 244.521 ms
Loss rate: 2.28%
-- Flow 2:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 244.093 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 137.475 ms
Loss rate: 2.25%
Run 10: Report of PCC — Data Link

![Graph of Throughput](image1)

![Graph of Packet Delay](image2)
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-11 03:17:35
End at: 2018-04-11 03:18:05

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 90.63 Mbit/s
   95th percentile per-packet one-way delay: 117.024 ms
   Loss rate: 1.69%
-- Flow 1:
   Average throughput: 43.96 Mbit/s
   95th percentile per-packet one-way delay: 113.874 ms
   Loss rate: 1.12%
-- Flow 2:
   Average throughput: 51.02 Mbit/s
   95th percentile per-packet one-way delay: 117.063 ms
   Loss rate: 1.26%
-- Flow 3:
   Average throughput: 39.76 Mbit/s
   95th percentile per-packet one-way delay: 114.145 ms
   Loss rate: 4.67%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-11 03:36:11
End at: 2018-04-11 03:36:41

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.97 Mbit/s
95th percentile per-packet one-way delay: 113.715 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 55.99 Mbit/s
95th percentile per-packet one-way delay: 111.150 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 61.86 Mbit/s
95th percentile per-packet one-way delay: 113.652 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 113.825 ms
Loss rate: 2.77%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-11 03:55:26
End at: 2018-04-11 03:55:56

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 103.83 Mbit/s
  95th percentile per-packet one-way delay: 111.914 ms
  Loss rate: 1.55%
-- Flow 1:
  Average throughput: 65.39 Mbit/s
  95th percentile per-packet one-way delay: 111.933 ms
  Loss rate: 1.06%
-- Flow 2:
  Average throughput: 45.01 Mbit/s
  95th percentile per-packet one-way delay: 111.787 ms
  Loss rate: 1.43%
-- Flow 3:
  Average throughput: 26.74 Mbit/s
  95th percentile per-packet one-way delay: 110.039 ms
  Loss rate: 5.55%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 65.59 Mbps)
- Flow 1 egress (mean 65.39 Mbps)
- Flow 2 ingress (mean 45.15 Mbps)
- Flow 2 egress (mean 45.01 Mbps)
- Flow 3 ingress (mean 27.67 Mbps)
- Flow 3 egress (mean 26.74 Mbps)

![Graph 2: One-Way Delay (ms)](image)

- Flow 1 (95th percentile 111.93 ms)
- Flow 2 (95th percentile 111.79 ms)
- Flow 3 (95th percentile 110.04 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-11 04:14:32
End at: 2018-04-11 04:15:02

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.73 Mbit/s
  95th percentile per-packet one-way delay: 113.768 ms
  Loss rate: 1.63%
-- Flow 1:
  Average throughput: 54.93 Mbit/s
  95th percentile per-packet one-way delay: 113.794 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 43.86 Mbit/s
  95th percentile per-packet one-way delay: 113.495 ms
  Loss rate: 1.72%
-- Flow 3:
  Average throughput: 33.32 Mbit/s
  95th percentile per-packet one-way delay: 111.996 ms
  Loss rate: 5.39%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing network performance metrics over time]

Legend:
- Flow 1 ingress (mean 54.97 Mbit/s)
- Flow 2 ingress (mean 44.13 Mbit/s)
- Flow 3 ingress (mean 34.42 Mbit/s)
- Flow 1 egress (mean 54.93 Mbit/s)
- Flow 2 egress (mean 43.86 Mbit/s)
- Flow 3 egress (mean 33.32 Mbit/s)
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-11 04:33:39
End at: 2018-04-11 04:34:09

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 105.75 Mbit/s
95th percentile per-packet one-way delay: 113.728 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 69.14 Mbit/s
95th percentile per-packet one-way delay: 113.710 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 53.79 Mbit/s
95th percentile per-packet one-way delay: 113.748 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 111.071 ms
Loss rate: 5.52%
Run 5: Report of QUIC Cubic — Data Link

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

**Legend:**
- Flow 1 ingress (mean 69.23 Mbit/s)
- Flow 1 egress (mean 69.14 Mbit/s)
- Flow 2 ingress (mean 54.17 Mbit/s)
- Flow 2 egress (mean 53.79 Mbit/s)
- Flow 3 ingress (mean 3.17 Mbit/s)
- Flow 3 egress (mean 3.06 Mbit/s)
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-11 04:52:48
End at: 2018-04-11 04:53:18

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.31 Mbit/s
95th percentile per-packet one-way delay: 113.306 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 57.72 Mbit/s
95th percentile per-packet one-way delay: 113.313 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 52.77 Mbit/s
95th percentile per-packet one-way delay: 113.310 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 32.98 Mbit/s
95th percentile per-packet one-way delay: 112.644 ms
Loss rate: 2.45%
Run 6: Report of QUIC Cubic — Data Link

![Graph showing network throughput and packet delay](image-url)
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-11 05:11:48  
End at: 2018-04-11 05:12:18  

# Below is generated by plot.py at 2018-04-11 09:58:17  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 117.34 Mbit/s  
95th percentile per-packet one-way delay: 113.370 ms  
Loss rate: 1.00%  
-- Flow 1:  
Average throughput: 70.76 Mbit/s  
95th percentile per-packet one-way delay: 112.123 ms  
Loss rate: 0.99%  
-- Flow 2:  
Average throughput: 52.93 Mbit/s  
95th percentile per-packet one-way delay: 113.427 ms  
Loss rate: 1.25%  
-- Flow 3:  
Average throughput: 35.63 Mbit/s  
95th percentile per-packet one-way delay: 111.939 ms  
Loss rate: 0.25%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-11 05:31:04
End at: 2018-04-11 05:31:34

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 108.27 Mbit/s
   95th percentile per-packet one-way delay: 113.618 ms
   Loss rate: 1.34%
-- Flow 1:
   Average throughput: 56.66 Mbit/s
   95th percentile per-packet one-way delay: 113.646 ms
   Loss rate: 0.82%
-- Flow 2:
   Average throughput: 56.41 Mbit/s
   95th percentile per-packet one-way delay: 112.007 ms
   Loss rate: 1.38%
-- Flow 3:
   Average throughput: 43.88 Mbit/s
   95th percentile per-packet one-way delay: 111.965 ms
   Loss rate: 3.29%
Run 8: Report of QUIC Cubic — Data Link

[Graph showing throughput and delay over time for various flows]
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-11 05:50:22
End at: 2018-04-11 05:50:52

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.31 Mbit/s
95th percentile per-packet one-way delay: 113.882 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 113.914 ms
Loss rate: 1.00%
-- Flow 2:
Average throughput: 51.35 Mbit/s
95th percentile per-packet one-way delay: 112.004 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 64.28 Mbit/s
95th percentile per-packet one-way delay: 110.442 ms
Loss rate: 0.89%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-11 06:09:43
End at: 2018-04-11 06:10:13

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 107.24 Mbit/s
  95th percentile per-packet one-way delay: 112.922 ms
  Loss rate: 1.21%
-- Flow 1:
  Average throughput: 62.38 Mbit/s
  95th percentile per-packet one-way delay: 112.941 ms
  Loss rate: 1.06%
-- Flow 2:
  Average throughput: 50.66 Mbit/s
  95th percentile per-packet one-way delay: 111.219 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 35.04 Mbit/s
  95th percentile per-packet one-way delay: 112.146 ms
  Loss rate: 0.62%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-04-11 03:18:27
End at: 2018-04-11 03:18:57

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.34 Mbit/s
  95th percentile per-packet one-way delay: 116.230 ms
  Loss rate: 1.19%
-- Flow 1:
  Average throughput: 0.12 Mbit/s
  95th percentile per-packet one-way delay: 116.245 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.951 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.181 ms
  Loss rate: 2.24%
Run 1: Report of SCReAM — Data Link

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

Start at: 2018-04-11 03:37:05
End at: 2018-04-11 03:37:35

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 113.933 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.942 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 113.804 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.035 ms
Loss rate: 2.28%
Run 2: Report of SCReAM — Data Link

Graph 1: Throughput vs Time (Mbps)
- Flow 1 ingress (mean 0.21 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.12 Mbps)
- Flow 2 egress (mean 0.12 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 113.94 ms)
- Flow 2 (95th percentile 113.80 ms)
- Flow 3 (95th percentile 112.03 ms)
Run 3: Statistics of SCReAM

Start at: 2018-04-11 03:56:19
End at: 2018-04-11 03:56:49

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 111.986 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.996 ms
  Loss rate: 0.76%
-- Flow 2:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 111.577 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.438 ms
  Loss rate: 2.25%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-04-11 04:15:24
End at: 2018-04-11 04:15:54

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.007 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 114.011 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.021 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.121 ms
Loss rate: 2.24%
Run 4: Report of SCReAM — Data Link

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

Legend:
- Flow 1 ingress (mean 0.22 Mbps) [Blue dashed line]
- Flow 1 egress (mean 0.22 Mbps) [Blue solid line]
- Flow 2 ingress (mean 0.21 Mbps) [Green dashed line]
- Flow 2 egress (mean 0.21 Mbps) [Green solid line]
- Flow 3 ingress (mean 0.22 Mbps) [Red dashed line]
- Flow 3 egress (mean 0.22 Mbps) [Red solid line]
Run 5: Statistics of SCReAM

Start at: 2018-04-11 04:34:32
End at: 2018-04-11 04:35:02

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 113.083 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 113.104 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.864 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.183 ms
  Loss rate: 2.24%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-04-11 04:53:41
End at: 2018-04-11 04:54:11

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 114.006 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 114.022 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.843 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.766 ms
Loss rate: 2.27%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-04-11 05:12:42
End at: 2018-04-11 05:13:12

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 114.096 ms
  Loss rate: 1.04%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 114.109 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.12 Mbit/s
  95th percentile per-packet one-way delay: 112.156 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.271 ms
  Loss rate: 2.25%
Run 7: Report of SCReAM — Data Link

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

Legend:
- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)
- Flow 2 ingress (mean 0.12 Mbit/s)
- Flow 2 egress (mean 0.12 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 114.11 ms)
- Flow 2 (95th percentile 112.16 ms)
- Flow 3 (95th percentile 111.27 ms)
Run 8: Statistics of SCReAM

Start at: 2018-04-11 05:31:57
End at: 2018-04-11 05:32:27

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.41 Mbit/s
  95th percentile per-packet one-way delay: 113.868 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 113.903 ms
  Loss rate: 0.65%
-- Flow 2:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 112.862 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.030 ms
  Loss rate: 2.26%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-04-11 05:51:15
End at: 2018-04-11 05:51:45

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 113.928 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 113.559 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 113.963 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.562 ms
  Loss rate: 2.24%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-04-11 06:10:36  
End at: 2018-04-11 06:11:06

# Below is generated by plot.py at 2018-04-11 09:58:17  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 114.128 ms
  Loss rate: 0.99%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 114.043 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 114.170 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 0.13 Mbit/s
  95th percentile per-packet one-way delay: 113.769 ms
  Loss rate: 2.00%
Run 10: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.21 Mbps)
Flow 1 egress (mean 0.21 Mbps)
Flow 2 ingress (mean 0.21 Mbps)
Flow 2 egress (mean 0.21 Mbps)
Flow 3 ingress (mean 0.12 Mbps)
Flow 3 egress (mean 0.13 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 114.04 ms)
Flow 2 (95th percentile 114.17 ms)
Flow 3 (95th percentile 113.77 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-04-11 03:04:39
End at: 2018-04-11 03:05:09

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 116.448 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.561 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 116.479 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 114.363 ms
Loss rate: 0.32%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-04-11 03:23:37
End at: 2018-04-11 03:24:07

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 114.416 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.512 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.387 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 114.420 ms
Loss rate: 0.40%
Run 2: Report of WebRTC media — Data Link

![Graph of throughput over time](image1)

![Graph of per-packet delay over time](image2)
Run 3: Statistics of WebRTC media

Start at: 2018-04-11 03:42:15
End at: 2018-04-11 03:42:45

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 116.180 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 116.150 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 116.204 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 113.441 ms
  Loss rate: 0.40%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-04-11 04:01:28
End at: 2018-04-11 04:01:58

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 113.884 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.895 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.883 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 112.189 ms
Loss rate: 0.40%
Run 4: Report of WebRTC media — Data Link

[Graphs showing throughput and packet loss over time for different flows.]
Run 5: Statistics of WebRTC media

Start at: 2018-04-11 04:20:31
End at: 2018-04-11 04:21:01

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 114.017 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.831 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.392 ms
Loss rate: 0.40%
Run 5: Report of WebRTC media — Data Link

![Graph of throughput and packet loss](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)

- **Packet loss (one-way delay, ms)**
  - Flow 1 (95th percentile 113.83 ms)
  - Flow 2 (95th percentile 114.04 ms)
  - Flow 3 (95th percentile 113.39 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-04-11 04:39:41
End at: 2018-04-11 04:40:11

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 112.780 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.315 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.789 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 112.784 ms
  Loss rate: 0.32%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-04-11 04:58:44
End at: 2018-04-11 04:59:14

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 114.132 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.935 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 112.995 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 114.191 ms
  Loss rate: 0.40%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-04-11 05:17:45
End at: 2018-04-11 05:18:15

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 113.745 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 112.687 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.926 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 113.798 ms
Loss rate: 0.40%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-04-11 05:37:06
End at: 2018-04-11 05:37:36

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 114.019 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 113.849 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 114.036 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 114.026 ms
  Loss rate: 0.40%
Run 9: Report of WebRTC media — Data Link

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

- **Throughput (Mb/s):**
  - Flow 1 ingress (mean 0.06 Mb/s)
  - Flow 1 egress (mean 0.06 Mb/s)
  - Flow 2 ingress (mean 0.06 Mb/s)
  - Flow 2 egress (mean 0.06 Mb/s)
  - Flow 3 ingress (mean 0.05 Mb/s)
  - Flow 3 egress (mean 0.05 Mb/s)

- **Delay (ms):**
  - Flow 1 (95th percentile 113.85 ms)
  - Flow 2 (95th percentile 114.04 ms)
  - Flow 3 (95th percentile 114.03 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-04-11 05:56:27
End at: 2018-04-11 05:56:57

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 114.003 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 113.919 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 114.017 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 114.021 ms
Loss rate: 0.40%
Run 10: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay](image-url)
Run 1: Statistics of Sprout

Start at: 2018-04-11 03:12:10
End at: 2018-04-11 03:12:40

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 114.754 ms
Loss rate: 1.72%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 114.783 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 114.644 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 114.751 ms
Loss rate: 5.32%
Run 1: Report of Sprout — Data Link

![Graph of Throughput vs Time]

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 2.06 Mb/s) — Flow 1 egress (mean 2.05 Mb/s)
Flow 2 ingress (mean 1.13 Mb/s) — Flow 2 egress (mean 1.13 Mb/s)
Flow 3 ingress (mean 1.40 Mb/s) — Flow 3 egress (mean 1.43 Mb/s)

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

Per-packet one-way delay (ms)

Flow 1 (95th percentile 114.78 ms) — Flow 2 (95th percentile 114.64 ms) — Flow 3 (95th percentile 114.75 ms)
Run 2: Statistics of Sprout

Start at: 2018-04-11 03:31:04
End at: 2018-04-11 03:31:34

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.81 Mbit/s
  95th percentile per-packet one-way delay: 114.328 ms
  Loss rate: 1.37%
-- Flow 1:
  Average throughput: 1.80 Mbit/s
  95th percentile per-packet one-way delay: 114.306 ms
  Loss rate: 1.03%
-- Flow 2:
  Average throughput: 1.98 Mbit/s
  95th percentile per-packet one-way delay: 114.334 ms
  Loss rate: 1.31%
-- Flow 3:
  Average throughput: 2.13 Mbit/s
  95th percentile per-packet one-way delay: 114.386 ms
  Loss rate: 2.35%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-04-11 03:50:10
End at: 2018-04-11 03:50:40

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.22 Mbit/s
  95th percentile per-packet one-way delay: 113.218 ms
  Loss rate: 1.59%
-- Flow 1:
  Average throughput: 2.61 Mbit/s
  95th percentile per-packet one-way delay: 112.799 ms
  Loss rate: 1.23%
-- Flow 2:
  Average throughput: 1.79 Mbit/s
  95th percentile per-packet one-way delay: 113.757 ms
  Loss rate: 1.61%
-- Flow 3:
  Average throughput: 1.29 Mbit/s
  95th percentile per-packet one-way delay: 113.770 ms
  Loss rate: 3.73%
Run 3: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 2.63 Mbps)
  - Flow 1 egress (mean 2.61 Mbps)
  - Flow 2 ingress (mean 1.80 Mbps)
  - Flow 2 egress (mean 1.79 Mbps)
  - Flow 3 ingress (mean 1.31 Mbps)
  - Flow 3 egress (mean 1.29 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 112.80 ms)
  - Flow 2 (95th percentile 113.76 ms)
  - Flow 3 (95th percentile 113.77 ms)
Run 4: Statistics of Sprout

Start at: 2018-04-11 04:09:10
End at: 2018-04-11 04:09:40

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.15 Mbit/s
  95th percentile per-packet one-way delay: 113.838 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 1.79 Mbit/s
  95th percentile per-packet one-way delay: 113.859 ms
  Loss rate: 0.90%
-- Flow 2:
  Average throughput: 1.40 Mbit/s
  95th percentile per-packet one-way delay: 113.767 ms
  Loss rate: 1.28%
-- Flow 3:
  Average throughput: 1.34 Mbit/s
  95th percentile per-packet one-way delay: 113.801 ms
  Loss rate: 1.85%
Run 4: Report of Sprout — Data Link

![Graphs showing throughput and one-way latency over time for different flows.]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 1.79 Mbps)
Flow 1 egress (mean 1.79 Mbps)
Flow 2 ingress (mean 1.40 Mbps)
Flow 2 egress (mean 1.40 Mbps)
Flow 3 ingress (mean 1.33 Mbps)
Flow 3 egress (mean 1.34 Mbps)

One-way delay (ms)

Time (s)

Flow 1 (95th percentile 113.96 ms)
Flow 2 (95th percentile 113.77 ms)
Flow 3 (95th percentile 113.80 ms)
Run 5: Statistics of Sprout

Start at: 2018-04-11 04:28:22
End at: 2018-04-11 04:28:52

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.18 Mbit/s
  95th percentile per-packet one-way delay: 113.745 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 2.15 Mbit/s
  95th percentile per-packet one-way delay: 113.067 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 2.15 Mbit/s
  95th percentile per-packet one-way delay: 113.714 ms
  Loss rate: 1.83%
-- Flow 3:
  Average throughput: 1.86 Mbit/s
  95th percentile per-packet one-way delay: 113.934 ms
  Loss rate: 1.76%
Run 5: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 2.14 Mbps)
  - Flow 1 egress (mean 2.15 Mbps)
  - Flow 2 ingress (mean 2.16 Mbps)
  - Flow 2 egress (mean 2.15 Mbps)
  - Flow 3 ingress (mean 1.85 Mbps)
  - Flow 3 egress (mean 1.86 Mbps)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 113.07 ms)
  - Flow 2 (95th percentile 113.71 ms)
  - Flow 3 (95th percentile 113.93 ms)
Run 6: Statistics of Sprout

Start at: 2018-04-11 04:47:27
End at: 2018-04-11 04:47:57

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.24 Mbit/s
  95th percentile per-packet one-way delay: 113.106 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 2.47 Mbit/s
  95th percentile per-packet one-way delay: 113.427 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 1.92 Mbit/s
  95th percentile per-packet one-way delay: 113.068 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 1.55 Mbit/s
  95th percentile per-packet one-way delay: 113.082 ms
  Loss rate: 2.49%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-04-11 05:06:22
End at: 2018-04-11 05:06:52

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.17 Mbit/s
95th percentile per-packet one-way delay: 113.803 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 113.863 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 2.46 Mbit/s
95th percentile per-packet one-way delay: 113.269 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 112.956 ms
Loss rate: 3.39%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-04-11 05:25:38
End at: 2018-04-11 05:26:08

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.51 Mbit/s
  95th percentile per-packet one-way delay: 114.274 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 2.52 Mbit/s
  95th percentile per-packet one-way delay: 114.289 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 2.35 Mbit/s
  95th percentile per-packet one-way delay: 114.264 ms
  Loss rate: 0.16%
-- Flow 3:
  Average throughput: 1.33 Mbit/s
  95th percentile per-packet one-way delay: 114.171 ms
  Loss rate: 2.38%
Run 8: Report of Sprout — Data Link

![Graph showing data link throughput and delay](image-url)
Run 9: Statistics of Sprout

Start at: 2018-04-11 05:45:03
End at: 2018-04-11 05:45:33

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.82 Mbit/s
  95th percentile per-packet one-way delay: 114.434 ms
  Loss rate: 1.46%
-- Flow 1:
  Average throughput: 2.34 Mbit/s
  95th percentile per-packet one-way delay: 114.513 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 1.70 Mbit/s
  95th percentile per-packet one-way delay: 114.321 ms
  Loss rate: 2.04%
-- Flow 3:
  Average throughput: 1.10 Mbit/s
  95th percentile per-packet one-way delay: 114.146 ms
  Loss rate: 3.57%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-04-11 06:04:19
End at: 2018-04-11 06:04:50

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.22 Mbit/s
  95th percentile per-packet one-way delay: 114.369 ms
  Loss rate: 1.35%
-- Flow 1:
  Average throughput: 2.28 Mbit/s
  95th percentile per-packet one-way delay: 114.372 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 2.09 Mbit/s
  95th percentile per-packet one-way delay: 114.389 ms
  Loss rate: 1.17%
-- Flow 3:
  Average throughput: 1.73 Mbit/s
  95th percentile per-packet one-way delay: 114.303 ms
  Loss rate: 3.97%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-11 03:05:25
End at: 2018-04-11 03:05:55

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.33 Mbit/s
  95th percentile per-packet one-way delay: 114.402 ms
  Loss rate: 3.60%
  -- Flow 1:
  Average throughput: 23.94 Mbit/s
  95th percentile per-packet one-way delay: 114.342 ms
  Loss rate: 3.08%
  -- Flow 2:
  Average throughput: 48.94 Mbit/s
  95th percentile per-packet one-way delay: 114.470 ms
  Loss rate: 4.19%
  -- Flow 3:
  Average throughput: 15.11 Mbit/s
  95th percentile per-packet one-way delay: 114.340 ms
  Loss rate: 2.23%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 24.52 Mbit/s)
- Flow 1 egress (mean 23.94 Mbit/s)
- Flow 2 ingress (mean 50.49 Mbit/s)
- Flow 2 egress (mean 48.94 Mbit/s)
- Flow 3 ingress (mean 15.10 Mbit/s)
- Flow 3 egress (mean 15.11 Mbit/s)

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

- Flow 1 (95th percentile 114.34 ms)
- Flow 2 (95th percentile 114.47 ms)
- Flow 3 (95th percentile 114.34 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-11 03:24:23
End at: 2018-04-11 03:24:53

# Below is generated by plot.py at 2018-04-11 09:58:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 42.19 Mbit/s
  95th percentile per-packet one-way delay: 117.138 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 14.83 Mbit/s
  95th percentile per-packet one-way delay: 114.210 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 36.11 Mbit/s
  95th percentile per-packet one-way delay: 117.192 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 12.73 Mbit/s
  95th percentile per-packet one-way delay: 114.229 ms
  Loss rate: 2.64%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-11 03:43:01
End at: 2018-04-11 03:43:31

# Below is generated by plot.py at 2018-04-11 10:02:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 289.45 Mbit/s
  95th percentile per-packet one-way delay: 113.597 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 203.43 Mbit/s
  95th percentile per-packet one-way delay: 113.572 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 122.27 Mbit/s
  95th percentile per-packet one-way delay: 113.464 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 15.07 Mbit/s
  95th percentile per-packet one-way delay: 114.231 ms
  Loss rate: 2.43%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-11 04:02:14
End at: 2018-04-11 04:02:44

# Below is generated by plot.py at 2018-04-11 10:02:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.88 Mbit/s
95th percentile per-packet one-way delay: 114.483 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 113.241 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 159.87 Mbit/s
95th percentile per-packet one-way delay: 114.006 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 120.78 Mbit/s
95th percentile per-packet one-way delay: 117.152 ms
Loss rate: 4.68%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-11 04:21:17
End at: 2018-04-11 04:21:47

# Below is generated by plot.py at 2018-04-11 10:02:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 275.13 Mbit/s
  95th percentile per-packet one-way delay: 114.316 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 204.75 Mbit/s
  95th percentile per-packet one-way delay: 113.979 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 17.77 Mbit/s
  95th percentile per-packet one-way delay: 113.697 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 181.92 Mbit/s
  95th percentile per-packet one-way delay: 117.476 ms
  Loss rate: 0.54%
Run 5: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 204.80 Mbit/s)
- Flow 1 egress (mean 204.75 Mbit/s)
- Flow 2 ingress (mean 17.61 Mbit/s)
- Flow 2 egress (mean 17.77 Mbit/s)
- Flow 3 ingress (mean 177.78 Mbit/s)
- Flow 3 egress (mean 181.92 Mbit/s)

![Graph showing packet delay at 95th percentile for different flows.]

- Flow 1 (95th percentile 113.98 ms)
- Flow 2 (95th percentile 113.70 ms)
- Flow 3 (95th percentile 117.48 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-11 04:40:27
End at: 2018-04-11 04:40:57

# Below is generated by plot.py at 2018-04-11 10:03:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 284.19 Mbit/s
  95th percentile per-packet one-way delay: 113.967 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 164.77 Mbit/s
  95th percentile per-packet one-way delay: 113.780 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 128.33 Mbit/s
  95th percentile per-packet one-way delay: 114.135 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 106.27 Mbit/s
  95th percentile per-packet one-way delay: 117.136 ms
  Loss rate: 3.78%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-11 04:59:29
End at: 2018-04-11 04:59:59

# Below is generated by plot.py at 2018-04-11 10:03:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 189.82 Mbit/s
95th percentile per-packet one-way delay: 112.989 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 171.52 Mbit/s
95th percentile per-packet one-way delay: 112.867 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 14.91 Mbit/s
95th percentile per-packet one-way delay: 112.668 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 113.889 ms
Loss rate: 4.55%
Run 7: Report of TaoVA-100x — Data Link

Throughput (Mb/s):

- Flow 1 ingress (mean 171.04 Mb/s)
- Flow 1 egress (mean 171.52 Mb/s)
- Flow 2 ingress (mean 14.93 Mb/s)
- Flow 2 egress (mean 14.91 Mb/s)
- Flow 3 ingress (mean 28.05 Mb/s)
- Flow 3 egress (mean 27.40 Mb/s)

Packet delivery one way delay (ms):

- Flow 1 (95th percentile 112.87 ms)
- Flow 2 (95th percentile 112.67 ms)
- Flow 3 (95th percentile 113.89 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-11 05:18:31
End at: 2018-04-11 05:19:01

# Below is generated by plot.py at 2018-04-11 10:03:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.56 Mbit/s
95th percentile per-packet one-way delay: 114.391 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 172.43 Mbit/s
95th percentile per-packet one-way delay: 113.747 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 107.16 Mbit/s
95th percentile per-packet one-way delay: 117.038 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 113.656 ms
Loss rate: 2.40%
Run 8: Report of TaoVA-100x — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.](image-url)
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-11 05:37:51
End at: 2018-04-11 05:38:21

# Below is generated by plot.py at 2018-04-11 10:06:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 255.79 Mbit/s
  95th percentile per-packet one-way delay: 114.594 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 173.85 Mbit/s
  95th percentile per-packet one-way delay: 114.210 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 117.24 Mbit/s
  95th percentile per-packet one-way delay: 119.286 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 12.79 Mbit/s
  95th percentile per-packet one-way delay: 113.883 ms
  Loss rate: 2.52%
Run 9: Report of TaoVA-100x — Data Link

![Graph of data link performance](image)

- Flow 1 ingress (mean 174.36 Mbit/s)
- Flow 1 egress (mean 173.85 Mbit/s)
- Flow 2 ingress (mean 117.19 Mbit/s)
- Flow 2 egress (mean 117.24 Mbit/s)
- Flow 3 ingress (mean 12.83 Mbit/s)
- Flow 3 egress (mean 12.79 Mbit/s)

![Graph of packet delay](image)

- Flow 1 (95th percentile 114.21 ms)
- Flow 2 (95th percentile 119.29 ms)
- Flow 3 (95th percentile 113.88 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-11 05:57:13
End at: 2018-04-11 05:57:43

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 268.88 Mbit/s
  95th percentile per-packet one-way delay: 115.768 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 198.35 Mbit/s
  95th percentile per-packet one-way delay: 114.308 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 30.02 Mbit/s
  95th percentile per-packet one-way delay: 120.875 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 155.05 Mbit/s
  95th percentile per-packet one-way delay: 121.583 ms
  Loss rate: 2.37%
Run 10: Report of TaoVA-100x — Data Link

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

Throughput and packet delay graphs showing performance metrics over time.
Run 1: Statistics of TCP Vegas

Start at: 2018-04-11 03:19:13
End at: 2018-04-11 03:19:43

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.30 Mbit/s
95th percentile per-packet one-way delay: 115.896 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 52.03 Mbit/s
95th percentile per-packet one-way delay: 115.531 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 47.31 Mbit/s
95th percentile per-packet one-way delay: 116.575 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 117.844 ms
Loss rate: 2.47%
Run 1: Report of TCP Vegas — Data Link

![Graph of TCP Vegas data link performance with throughput and per-byte delay metrics.](image)
Run 2: Statistics of TCP Vegas

Start at: 2018-04-11 03:37:51
End at: 2018-04-11 03:38:21

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.77 Mbit/s
95th percentile per-packet one-way delay: 114.584 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 55.96 Mbit/s
95th percentile per-packet one-way delay: 114.409 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 115.551 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 19.91 Mbit/s
95th percentile per-packet one-way delay: 114.407 ms
Loss rate: 2.62%

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Run 2: Report of TCP Vegas — Data Link

![Diagram of network traffic and packet delay over time for different flows.](image)

- **Flow 1 ingress (mean 55.99 Mbit/s)**
- **Flow 1 egress (mean 55.96 Mbit/s)**
- **Flow 2 ingress (mean 27.61 Mbit/s)**
- **Flow 2 egress (mean 27.62 Mbit/s)**
- **Flow 3 ingress (mean 19.98 Mbit/s)**
- **Flow 3 egress (mean 19.91 Mbit/s)**
Run 3: Statistics of TCP Vegas

Start at: 2018-04-11 03:57:05
End at: 2018-04-11 03:57:35

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.45 Mbit/s
95th percentile per-packet one-way delay: 114.253 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 114.119 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 114.652 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 115.058 ms
Loss rate: 2.43%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-04-11 04:16:10
End at: 2018-04-11 04:16:40

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.15 Mbit/s
  95th percentile per-packet one-way delay: 117.528 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 33.53 Mbit/s
  95th percentile per-packet one-way delay: 117.062 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 35.08 Mbit/s
  95th percentile per-packet one-way delay: 118.282 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: 116.441 ms
  Loss rate: 2.46%
Run 4: Report of TCP Vegas — Data Link

![Graphs showing throughput and packet round-trip time over time for different flows.](image-url)
Run 5: Statistics of TCP Vegas

Start at: 2018-04-11 04:35:18
End at: 2018-04-11 04:35:48

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.15 Mbit/s
  95th percentile per-packet one-way delay: 113.732 ms
  Loss rate: 1.38%
-- Flow 1:
  Average throughput: 32.01 Mbit/s
  95th percentile per-packet one-way delay: 113.766 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 54.96 Mbit/s
  95th percentile per-packet one-way delay: 113.186 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 60.37 Mbit/s
  95th percentile per-packet one-way delay: 115.125 ms
  Loss rate: 2.60%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-04-11 04:54:27
End at: 2018-04-11 04:54:57

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.61 Mbit/s
  95th percentile per-packet one-way delay: 114.059 ms
  Loss rate: 1.36%
-- Flow 1:
  Average throughput: 30.39 Mbit/s
  95th percentile per-packet one-way delay: 114.244 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 30.59 Mbit/s
  95th percentile per-packet one-way delay: 113.681 ms
  Loss rate: 1.19%
-- Flow 3:
  Average throughput: 45.80 Mbit/s
  95th percentile per-packet one-way delay: 114.109 ms
  Loss rate: 2.66%
Run 6: Report of TCP Vegas — Data Link

![Graphs showing network performance metrics](image)

Flow 1 ingress (mean 30.42 Mbit/s)  
Flow 1 egress (mean 30.39 Mbit/s)  
Flow 2 ingress (mean 30.60 Mbit/s)  
Flow 2 egress (mean 30.59 Mbit/s)  
Flow 3 ingress (mean 45.99 Mbit/s)  
Flow 3 egress (mean 45.80 Mbit/s)

![Graphs showing packet delay](image)

Flow 1 (95th percentile 114.24 ms)  
Flow 2 (95th percentile 113.68 ms)  
Flow 3 (95th percentile 114.11 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-04-11 05:13:28
End at: 2018-04-11 05:13:58

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 118.909 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 117.181 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 118.875 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 123.652 ms
Loss rate: 2.30%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-04-11 05:32:42
End at: 2018-04-11 05:33:12

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.61 Mbit/s
95th percentile per-packet one-way delay: 115.273 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 16.94 Mbit/s
95th percentile per-packet one-way delay: 114.375 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 115.072 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 117.095 ms
Loss rate: 2.42%
Run 8: Report of TCP Vegas — Data Link

![Graph showing throughput over time for different flows]

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

Flow 1 ingress (mean 16.95 Mbit/s)  
Flow 1 egress (mean 16.94 Mbit/s)  
Flow 2 ingress (mean 38.39 Mbit/s)  
Flow 2 egress (mean 38.36 Mbit/s)  
Flow 3 ingress (mean 28.27 Mbit/s)  
Flow 3 egress (mean 20.23 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-04-11 05:52:01
End at: 2018-04-11 05:52:31

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.72 Mbit/s
95th percentile per-packet one-way delay: 117.707 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 56.79 Mbit/s
95th percentile per-packet one-way delay: 115.223 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 55.69 Mbit/s
95th percentile per-packet one-way delay: 119.506 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 40.00 Mbit/s
95th percentile per-packet one-way delay: 120.932 ms
Loss rate: 2.53%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-04-11 06:11:22
End at: 2018-04-11 06:11:52

# Below is generated by plot.py at 2018-04-11 10:06:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.36 Mbit/s
  95th percentile per-packet one-way delay: 115.941 ms
  Loss rate: 1.30%
-- Flow 1:
  Average throughput: 31.97 Mbit/s
  95th percentile per-packet one-way delay: 115.065 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 53.50 Mbit/s
  95th percentile per-packet one-way delay: 115.924 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 42.71 Mbit/s
  95th percentile per-packet one-way delay: 117.198 ms
  Loss rate: 2.56%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 32.00 Mbit/s)
- Flow 1 egress (mean 31.97 Mbit/s)
- Flow 2 ingress (mean 53.48 Mbit/s)
- Flow 2 egress (mean 53.50 Mbit/s)
- Flow 3 ingress (mean 42.84 Mbit/s)
- Flow 3 egress (mean 42.71 Mbit/s)

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

- Flow 1 (95th percentile 115.06 ms)
- Flow 2 (95th percentile 115.92 ms)
- Flow 3 (95th percentile 117.20 ms)
Run 1: Statistics of Verus

Start at: 2018-04-11 03:16:24
End at: 2018-04-11 03:16:54

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.19 Mbit/s
95th percentile per-packet one-way delay: 245.249 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 204.16 Mbit/s
95th percentile per-packet one-way delay: 226.546 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 130.28 Mbit/s
95th percentile per-packet one-way delay: 306.201 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 235.421 ms
Loss rate: 10.00%
Run 1: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 205.05 Mbit/s)
Flow 1 egress (mean 204.16 Mbit/s)
Flow 2 ingress (mean 132.59 Mbit/s)
Flow 2 egress (mean 130.28 Mbit/s)
Flow 3 ingress (mean 42.31 Mbit/s)
Flow 3 egress (mean 38.90 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 226.55 ms)
Flow 2 (95th percentile 306.20 ms)
Flow 3 (95th percentile 235.42 ms)
Run 2: Statistics of Verus

Start at: 2018-04-11 03:35:09
End at: 2018-04-11 03:35:39

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 208.26 Mbit/s
  95th percentile per-packet one-way delay: 218.094 ms
  Loss rate: 1.57%
-- Flow 1:
  Average throughput: 73.32 Mbit/s
  95th percentile per-packet one-way delay: 148.926 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 114.35 Mbit/s
  95th percentile per-packet one-way delay: 174.858 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 184.55 Mbit/s
  95th percentile per-packet one-way delay: 347.425 ms
  Loss rate: 4.37%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-04-11 03:54:20
End at: 2018-04-11 03:54:50

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.14 Mbit/s
95th percentile per-packet one-way delay: 300.216 ms
Loss rate: 4.24%

-- Flow 1:
Average throughput: 175.73 Mbit/s
95th percentile per-packet one-way delay: 310.719 ms
Loss rate: 3.84%

-- Flow 2:
Average throughput: 63.60 Mbit/s
95th percentile per-packet one-way delay: 221.214 ms
Loss rate: 1.58%

-- Flow 3:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 294.171 ms
Loss rate: 9.76%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-04-11 04:13:26
End at: 2018-04-11 04:13:56

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.34 Mbit/s
95th percentile per-packet one-way delay: 177.406 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 102.27 Mbit/s
95th percentile per-packet one-way delay: 163.644 ms
Loss rate: 1.36%
-- Flow 2:
Average throughput: 170.47 Mbit/s
95th percentile per-packet one-way delay: 204.305 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 43.78 Mbit/s
95th percentile per-packet one-way delay: 146.264 ms
Loss rate: 0.16%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 102.89 Mbps)
- Flow 1 egress (mean 102.27 Mbps)
- Flow 2 ingress (mean 171.91 Mbps)
- Flow 2 egress (mean 170.47 Mbps)
- Flow 3 ingress (mean 42.75 Mbps)
- Flow 3 egress (mean 43.76 Mbps)

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

- Flow 1 (95th percentile 163.64 ms)
- Flow 2 (95th percentile 204.31 ms)
- Flow 3 (95th percentile 146.26 ms)
Run 5: Statistics of Verus

Start at: 2018-04-11 04:32:38
End at: 2018-04-11 04:33:08

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 187.03 Mbit/s
  95th percentile per-packet one-way delay: 128.268 ms
  Loss rate: 1.19%
-- Flow 1:
  Average throughput: 128.27 Mbit/s
  95th percentile per-packet one-way delay: 125.757 ms
  Loss rate: 0.50%
-- Flow 2:
  Average throughput: 60.52 Mbit/s
  95th percentile per-packet one-way delay: 126.733 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 57.48 Mbit/s
  95th percentile per-packet one-way delay: 142.450 ms
  Loss rate: 7.63%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-04-11 04:51:45
End at: 2018-04-11 04:52:15

# Below is generated by plot.py at 2018-04-11 10:08:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 194.23 Mbit/s
  95th percentile per-packet one-way delay: 151.299 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 96.56 Mbit/s
  95th percentile per-packet one-way delay: 137.115 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 111.98 Mbit/s
  95th percentile per-packet one-way delay: 137.894 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 73.82 Mbit/s
  95th percentile per-packet one-way delay: 295.092 ms
  Loss rate: 0.09%
Run 6: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 96.06 Mbit/s)
- Flow 1 egress (mean 96.56 Mbit/s)
- Flow 2 ingress (mean 110.76 Mbit/s)
- Flow 2 egress (mean 111.98 Mbit/s)
- Flow 3 ingress (mean 72.21 Mbit/s)
- Flow 3 egress (mean 73.82 Mbit/s)
Run 7: Statistics of Verus

Start at: 2018-04-11 05:10:43
End at: 2018-04-11 05:11:13

# Below is generated by plot.py at 2018-04-11 10:10:20
# Datalink statistics

-- Total of 3 flows:
Average throughput: 241.46 Mbit/s
95th percentile per-packet one-way delay: 211.691 ms
Loss rate: 1.95%

-- Flow 1:
Average throughput: 139.58 Mbit/s
95th percentile per-packet one-way delay: 187.195 ms
Loss rate: 1.04%

-- Flow 2:
Average throughput: 130.37 Mbit/s
95th percentile per-packet one-way delay: 236.524 ms
Loss rate: 3.63%

-- Flow 3:
Average throughput: 50.76 Mbit/s
95th percentile per-packet one-way delay: 213.212 ms
Loss rate: 0.60%
Run 7: Report of Verus — Data Link

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**Throughput (Mbps):**
- Flow 1 ingress (mean 140.32 Mbps)
- Flow 1 egress (mean 139.58 Mbps)
- Flow 2 ingress (mean 132.40 Mbps)
- Flow 2 egress (mean 130.37 Mbps)
- Flow 3 ingress (mean 49.69 Mbps)
- Flow 3 egress (mean 50.76 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 187.19 ms)
- Flow 2 (95th percentile 236.52 ms)
- Flow 3 (95th percentile 213.21 ms)
Run 8: Statistics of Verus

Start at: 2018-04-11 05:29:58
End at: 2018-04-11 05:30:28

# Below is generated by plot.py at 2018-04-11 10:11:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.22 Mbit/s
95th percentile per-packet one-way delay: 236.095 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 156.90 Mbit/s
95th percentile per-packet one-way delay: 214.374 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 96.68 Mbit/s
95th percentile per-packet one-way delay: 265.482 ms
Loss rate: 4.75%
-- Flow 3:
Average throughput: 106.92 Mbit/s
95th percentile per-packet one-way delay: 200.108 ms
Loss rate: 3.15%
Run 8: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 156.99 Mbit/s)**
- **Flow 1 egress (mean 156.90 Mbit/s)**
- **Flow 2 ingress (mean 106.34 Mbit/s)**
- **Flow 2 egress (mean 96.65 Mbit/s)**
- **Flow 3 ingress (mean 106.26 Mbit/s)**
- **Flow 3 egress (mean 106.62 Mbit/s)**

- **Flow 1 (95th percentile 214.37 ms)**
- **Flow 2 (95th percentile 265.48 ms)**
- **Flow 3 (95th percentile 200.11 ms)**
Run 9: Statistics of Verus

Start at: 2018-04-11 05:49:17
End at: 2018-04-11 05:49:48

# Below is generated by plot.py at 2018-04-11 10:11:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 224.43 Mbit/s
  95th percentile per-packet one-way delay: 203.828 ms
  Loss rate: 2.98%
-- Flow 1:
  Average throughput: 95.67 Mbit/s
  95th percentile per-packet one-way delay: 162.174 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 128.27 Mbit/s
  95th percentile per-packet one-way delay: 179.313 ms
  Loss rate: 2.31%
-- Flow 3:
  Average throughput: 136.50 Mbit/s
  95th percentile per-packet one-way delay: 289.815 ms
  Loss rate: 9.51%
Run 9: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 95.14 Mbps)
- Flow 1 egress (mean 95.67 Mbps)
- Flow 2 ingress (mean 129.82 Mbps)
- Flow 2 egress (mean 128.27 Mbps)
- Flow 3 ingress (mean 147.80 Mbps)
- Flow 3 egress (mean 136.50 Mbps)

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

- Flow 1 (95th percentile 162.17 ms)
- Flow 2 (95th percentile 179.31 ms)
- Flow 3 (95th percentile 289.01 ms)
Run 10: Statistics of Verus

Start at: 2018-04-11 06:08:37
End at: 2018-04-11 06:09:07

# Below is generated by plot.py at 2018-04-11 10:11:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.01 Mbit/s
95th percentile per-packet one-way delay: 190.767 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 107.15 Mbit/s
95th percentile per-packet one-way delay: 162.629 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 170.43 Mbit/s
95th percentile per-packet one-way delay: 231.847 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 171.807 ms
Loss rate: 0.95%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-04-11 03:14:04
End at: 2018-04-11 03:14:34

# Below is generated by plot.py at 2018-04-11 10:12:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 160.28 Mbit/s
  95th percentile per-packet one-way delay: 117.089 ms
  Loss rate: 0.97%
  -- Flow 1:
  Average throughput: 88.53 Mbit/s
  95th percentile per-packet one-way delay: 114.316 ms
  Loss rate: 0.73%
  -- Flow 2:
  Average throughput: 73.18 Mbit/s
  95th percentile per-packet one-way delay: 114.328 ms
  Loss rate: 1.12%
  -- Flow 3:
  Average throughput: 71.28 Mbit/s
  95th percentile per-packet one-way delay: 117.217 ms
  Loss rate: 1.53%
Run 1: Report of Copa — Data Link

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

| Graph showing throughput and delay over time for different flows. | Graph showing throughput and delay over time for different flows. |

**Legend:**
- Flow 1 ingress (mean 88.52 Mbit/s)
- Flow 1 egress (mean 88.53 Mbit/s)
- Flow 2 ingress (mean 73.19 Mbit/s)
- Flow 2 egress (mean 73.18 Mbit/s)
- Flow 3 ingress (mean 70.73 Mbit/s)
- Flow 3 egress (mean 71.28 Mbit/s)

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Run 2: Statistics of Copa

Start at: 2018-04-11 03:32:56
End at: 2018-04-11 03:33:26

# Below is generated by plot.py at 2018-04-11 10:12:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 136.48 Mbit/s
  95th percentile per-packet one-way delay: 116.030 ms
  Loss rate: 1.19%
-- Flow 1:
  Average throughput: 82.15 Mbit/s
  95th percentile per-packet one-way delay: 114.005 ms
  Loss rate: 0.95%
-- Flow 2:
  Average throughput: 51.40 Mbit/s
  95th percentile per-packet one-way delay: 116.098 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 62.06 Mbit/s
  95th percentile per-packet one-way delay: 113.816 ms
  Loss rate: 3.42%
Run 2: Report of Copa — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 3: Statistics of Copa

Start at: 2018-04-11 03:52:03
End at: 2018-04-11 03:52:33

# Below is generated by plot.py at 2018-04-11 10:12:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 123.68 Mbit/s
  95th percentile per-packet one-way delay: 113.532 ms
  Loss rate: 1.37%
-- Flow 1:
  Average throughput: 60.54 Mbit/s
  95th percentile per-packet one-way delay: 113.578 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 61.76 Mbit/s
  95th percentile per-packet one-way delay: 113.274 ms
  Loss rate: 1.35%
-- Flow 3:
  Average throughput: 67.98 Mbit/s
  95th percentile per-packet one-way delay: 112.058 ms
  Loss rate: 3.08%
Run 3: Report of Copa — Data Link

![Graph showing throughput over time](image)

![Graph showing round-trip delay over time](image)
Run 4: Statistics of Copa

Start at: 2018-04-11 04:11:04
End at: 2018-04-11 04:11:34

# Below is generated by plot.py at 2018-04-11 10:13:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.63 Mbit/s
95th percentile per-packet one-way delay: 113.111 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 112.197 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 112.648 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 67.42 Mbit/s
95th percentile per-packet one-way delay: 113.759 ms
Loss rate: 2.03%
Run 4: Report of Copa — Data Link

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

- **Flow 1 ingress** (mean 81.58 Mbit/s)
- **Flow 1 egress** (mean 81.70 Mbit/s)
- **Flow 2 ingress** (mean 70.85 Mbit/s)
- **Flow 2 egress** (mean 70.80 Mbit/s)
- **Flow 3 ingress** (mean 67.26 Mbit/s)
- **Flow 3 egress** (mean 67.42 Mbit/s)
Run 5: Statistics of Copa

Start at: 2018-04-11 04:30:18
End at: 2018-04-11 04:30:48

# Below is generated by plot.py at 2018-04-11 10:14:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 141.71 Mbit/s
  95th percentile per-packet one-way delay: 112.842 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 77.40 Mbit/s
  95th percentile per-packet one-way delay: 112.872 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 60.62 Mbit/s
  95th percentile per-packet one-way delay: 113.256 ms
  Loss rate: 1.32%
-- Flow 3:
  Average throughput: 73.90 Mbit/s
  95th percentile per-packet one-way delay: 112.106 ms
  Loss rate: 1.93%
Run 5: Report of Copa — Data Link

![Graph showing throughput and delay over time for different flow ingress and egress rates.](image-url)
Run 6: Statistics of Copa

Start at: 2018-04-11 04:49:22
End at: 2018-04-11 04:49:52

# Below is generated by plot.py at 2018-04-11 10:15:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 162.83 Mbit/s
95th percentile per-packet one-way delay: 113.656 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 84.24 Mbit/s
95th percentile per-packet one-way delay: 112.973 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 81.59 Mbit/s
95th percentile per-packet one-way delay: 112.958 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 74.91 Mbit/s
95th percentile per-packet one-way delay: 113.754 ms
Loss rate: 2.42%
Run 6: Report of Copa — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per-packet one-way delay (ms)
Run 7: Statistics of Copa

Start at: 2018-04-11 05:08:16
End at: 2018-04-11 05:08:46

# Below is generated by plot.py at 2018-04-11 10:15:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.93 Mbit/s
95th percentile per-packet one-way delay: 113.804 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 80.03 Mbit/s
95th percentile per-packet one-way delay: 113.824 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 79.33 Mbit/s
95th percentile per-packet one-way delay: 113.736 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 112.684 ms
Loss rate: 1.59%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-04-11 05:27:33
End at: 2018-04-11 05:28:03

# Below is generated by plot.py at 2018-04-11 10:15:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.45 Mbit/s
95th percentile per-packet one-way delay: 113.844 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 79.53 Mbit/s
95th percentile per-packet one-way delay: 113.665 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 58.79 Mbit/s
95th percentile per-packet one-way delay: 113.920 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 113.709 ms
Loss rate: 3.09%
Run 9: Statistics of Copa

Start at: 2018-04-11 05:46:58
End at: 2018-04-11 05:47:28

# Below is generated by plot.py at 2018-04-11 10:16:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 137.12 Mbit/s
95th percentile per-packet one-way delay: 113.887 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 77.70 Mbit/s
95th percentile per-packet one-way delay: 113.876 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 55.01 Mbit/s
95th percentile per-packet one-way delay: 113.883 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 70.19 Mbit/s
95th percentile per-packet one-way delay: 113.921 ms
Loss rate: 2.60%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 77.41 Mbps)
- Flow 1 egress (mean 77.70 Mbps)
- Flow 2 ingress (mean 54.83 Mbps)
- Flow 2 egress (mean 55.01 Mbps)
- Flow 3 ingress (mean 70.41 Mbps)
- Flow 3 egress (mean 70.19 Mbps)

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

- Flow 1 (95th percentile 113.88 ms)
- Flow 2 (95th percentile 113.88 ms)
- Flow 3 (95th percentile 113.92 ms)
Run 10: Statistics of Copa

Start at: 2018-04-11 06:06:13
End at: 2018-04-11 06:06:43

# Below is generated by plot.py at 2018-04-11 10:16:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 135.91 Mbit/s
  95th percentile per-packet one-way delay: 113.954 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 75.28 Mbit/s
  95th percentile per-packet one-way delay: 113.892 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 54.06 Mbit/s
  95th percentile per-packet one-way delay: 114.029 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 76.06 Mbit/s
  95th percentile per-packet one-way delay: 113.934 ms
  Loss rate: 3.09%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-04-11 03:10:28
End at: 2018-04-11 03:10:58

# Below is generated by plot.py at 2018-04-11 10:34:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1302.80 Mbit/s
  95th percentile per-packet one-way delay: 235.926 ms
  Loss rate: 6.14%
-- Flow 1:
  Average throughput: 712.87 Mbit/s
  95th percentile per-packet one-way delay: 257.606 ms
  Loss rate: 5.08%
-- Flow 2:
  Average throughput: 644.37 Mbit/s
  95th percentile per-packet one-way delay: 214.249 ms
  Loss rate: 7.58%
-- Flow 3:
  Average throughput: 499.45 Mbit/s
  95th percentile per-packet one-way delay: 208.537 ms
  Loss rate: 6.87%
Run 1: Report of FillP — Data Link

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

- **Flow 1 Ingress**: (mean 745.26 Mbps/s)
- **Flow 1 Egress**: (mean 712.87 Mbps/s)
- **Flow 2 Ingress**: (mean 699.19 Mbps/s)
- **Flow 2 Egress**: (mean 644.37 Mbps/s)
- **Flow 3 Ingress**: (mean 523.82 Mbps/s)
- **Flow 3 Egress**: (mean 499.45 Mbps/s)

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

- **Flow 1 (95th percentile)**: 257.61 ms
- **Flow 2 (95th percentile)**: 214.25 ms
- **Flow 3 (95th percentile)**: 208.54 ms
Run 2: Statistics of FillP

Start at: 2018-04-11 03:29:21
End at: 2018-04-11 03:29:51

# Below is generated by plot.py at 2018-04-11 10:35:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1322.56 Mbit/s
95th percentile per-packet one-way delay: 217.623 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 731.51 Mbit/s
95th percentile per-packet one-way delay: 220.531 ms
Loss rate: 5.88%
-- Flow 2:
Average throughput: 648.40 Mbit/s
95th percentile per-packet one-way delay: 216.377 ms
Loss rate: 5.51%
-- Flow 3:
Average throughput: 493.89 Mbit/s
95th percentile per-packet one-way delay: 141.144 ms
Loss rate: 2.74%
Run 2: Report of FillP — Data Link

![Graph showing data link throughput over time for different flows.](image)

![Graph showing data link delay over time for different flows.](image)
Run 3: Statistics of FillP

Start at: 2018-04-11 03:48:26
End at: 2018-04-11 03:48:56

# Below is generated by plot.py at 2018-04-11 10:38:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1371.35 Mbit/s
  95th percentile per-packet one-way delay: 212.514 ms
  Loss rate: 5.73%
  -- Flow 1:
  Average throughput: 745.22 Mbit/s
  95th percentile per-packet one-way delay: 214.067 ms
  Loss rate: 5.68%
  -- Flow 2:
  Average throughput: 675.79 Mbit/s
  95th percentile per-packet one-way delay: 200.808 ms
  Loss rate: 5.06%
  -- Flow 3:
  Average throughput: 547.41 Mbit/s
  95th percentile per-packet one-way delay: 222.117 ms
  Loss rate: 7.59%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-04-11 04:07:27
End at: 2018-04-11 04:07:57

# Below is generated by plot.py at 2018-04-11 10:38:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1356.02 Mbit/s
  95th percentile per-packet one-way delay: 206.328 ms
  Loss rate: 5.71%
-- Flow 1:
  Average throughput: 728.67 Mbit/s
  95th percentile per-packet one-way delay: 205.962 ms
  Loss rate: 5.80%
-- Flow 2:
  Average throughput: 676.99 Mbit/s
  95th percentile per-packet one-way delay: 206.857 ms
  Loss rate: 5.87%
-- Flow 3:
  Average throughput: 547.32 Mbit/s
  95th percentile per-packet one-way delay: 212.730 ms
  Loss rate: 4.94%
Run 4: Report of FillP — Data Link

Throughput (Mbps/s)

0  5  10  15  20  25  30

0  200  400  600  800  1000

- Flow 1 ingress (mean 787.91 Mbps/s)
- Flow 1 egress (mean 728.67 Mbps/s)
- Flow 2 ingress (mean 711.10 Mbps/s)
- Flow 2 egress (mean 676.99 Mbps/s)
- Flow 3 ingress (mean 562.83 Mbps/s)
- Flow 3 egress (mean 547.32 Mbps/s)

Per-packet one way delay (ms)

0  100  200  300  400  500

- Flow 1 (95th percentile 205.96 ms)
- Flow 2 (95th percentile 206.86 ms)
- Flow 3 (95th percentile 212.73 ms)
Run 5: Statistics of FillP

Start at: 2018-04-11 04:26:40
End at: 2018-04-11 04:27:10

# Below is generated by plot.py at 2018-04-11 10:38:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1287.17 Mbit/s
  95th percentile per-packet one-way delay: 232.596 ms
  Loss rate: 7.08%
-- Flow 1:
  Average throughput: 696.29 Mbit/s
  95th percentile per-packet one-way delay: 228.359 ms
  Loss rate: 6.13%
-- Flow 2:
  Average throughput: 608.66 Mbit/s
  95th percentile per-packet one-way delay: 241.517 ms
  Loss rate: 10.01%
-- Flow 3:
  Average throughput: 574.32 Mbit/s
  95th percentile per-packet one-way delay: 188.753 ms
  Loss rate: 3.94%
Run 5: Report of FillP — Data Link

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 736.22 Mb/s), Flow 1 egress (mean 696.29 Mb/s)
- Blue solid line: Flow 2 ingress (mean 668.79 Mb/s), Flow 2 egress (mean 608.66 Mb/s)
- Green dash-dotted line: Flow 3 ingress (mean 584.33 Mb/s), Flow 3 egress (mean 574.32 Mb/s)

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

Legend:
- Blue line: Flow 1 (95th percentile 228.36 ms)
- Green line: Flow 2 (95th percentile 241.52 ms)
- Red line: Flow 3 (95th percentile 188.75 ms)
Run 6: Statistics of FillP

Start at: 2018-04-11 04:45:46
End at: 2018-04-11 04:46:16

# Below is generated by plot.py at 2018-04-11 10:38:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1278.24 Mbit/s
95th percentile per-packet one-way delay: 218.416 ms
Loss rate: 6.94%
-- Flow 1:
Average throughput: 652.28 Mbit/s
95th percentile per-packet one-way delay: 221.244 ms
Loss rate: 7.95%
-- Flow 2:
Average throughput: 679.32 Mbit/s
95th percentile per-packet one-way delay: 205.163 ms
Loss rate: 4.62%
-- Flow 3:
Average throughput: 538.59 Mbit/s
95th percentile per-packet one-way delay: 221.021 ms
Loss rate: 8.95%
Run 6: Report of FillP — Data Link

![Graph of data link performance with timelines and throughput metrics for various flows.]

![Graph of data link latency with timelines and per-packet one-way delay metrics for various flows.]

Flow 1 Ingress (mean 703.36 Mbps) — Flow 1 Egress (mean 652.28 Mbps)
Flow 2 Ingress (mean 704.11 Mbps) — Flow 2 Egress (mean 679.32 Mbps)
Flow 3 Ingress (mean 578.06 Mbps) — Flow 3 Egress (mean 538.59 Mbps)

Flow 1 (95th percentile 221.24 ms) — Flow 2 (95th percentile 205.16 ms) — Flow 3 (95th percentile 221.02 ms)
Run 7: Statistics of FillP

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

# Below is generated by plot.py at 2018-04-11 10:38:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1289.13 Mbit/s
95th percentile per-packet one-way delay: 207.300 ms
Loss rate: 4.44%
-- Flow 1:
Average throughput: 702.87 Mbit/s
95th percentile per-packet one-way delay: 205.015 ms
Loss rate: 3.82%
-- Flow 2:
Average throughput: 643.30 Mbit/s
95th percentile per-packet one-way delay: 198.913 ms
Loss rate: 3.19%
-- Flow 3:
Average throughput: 491.21 Mbit/s
95th percentile per-packet one-way delay: 229.703 ms
Loss rate: 10.09%
Run 7: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 Ingress (mean 725.38 Mbps)  Flow 1 Egress (mean 702.87 Mbps)
Flow 2 Ingress (mean 656.96 Mbps)  Flow 2 Egress (mean 643.30 Mbps)
Flow 3 Ingress (mean 533.96 Mbps)  Flow 3 Egress (mean 491.21 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 205.01 ms)  Flow 2 (95th percentile 198.91 ms)  Flow 3 (95th percentile 229.70 ms)
Run 8: Statistics of FillP

Start at: 2018-04-11 05:23:54
End at: 2018-04-11 05:24:24

# Below is generated by plot.py at 2018-04-11 10:39:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1374.54 Mbit/s
  95th percentile per-packet one-way delay: 188.152 ms
  Loss rate: 3.26%
-- Flow 1:
  Average throughput: 769.98 Mbit/s
  95th percentile per-packet one-way delay: 188.820 ms
  Loss rate: 3.69%
-- Flow 2:
  Average throughput: 649.28 Mbit/s
  95th percentile per-packet one-way delay: 184.537 ms
  Loss rate: 2.33%
-- Flow 3:
  Average throughput: 533.98 Mbit/s
  95th percentile per-packet one-way delay: 191.281 ms
  Loss rate: 3.63%
Run 9: Statistics of FillP

Start at: 2018-04-11 05:43:20  
End at: 2018-04-11 05:43:50

# Below is generated by plot.py at 2018-04-11 10:59:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1349.87 Mbit/s
95th percentile per-packet one-way delay: 202.702 ms
Loss rate: 3.81%
-- Flow 1:
  Average throughput: 698.78 Mbit/s
95th percentile per-packet one-way delay: 204.646 ms
Loss rate: 3.99%
-- Flow 2:
  Average throughput: 710.49 Mbit/s
95th percentile per-packet one-way delay: 194.489 ms
Loss rate: 3.12%
-- Flow 3:
  Average throughput: 552.70 Mbit/s
95th percentile per-packet one-way delay: 205.022 ms
Loss rate: 4.92%
Run 9: Report of FillP — Data Link

![Graph of data link throughput and packet delay]

1. Throughput (Mbps):
   - Flow 1 ingress (mean 722.31 Mbps)
   - Flow 1 egress (mean 698.78 Mbps)
   - Flow 2 ingress (mean 725.01 Mbps)
   - Flow 2 egress (mean 710.49 Mbps)
   - Flow 3 ingress (mean 568.06 Mbps)
   - Flow 3 egress (mean 552.70 Mbps)

2. Packet delay (ms):
   - Flow 1 (95th percentile 204.65 ms)
   - Flow 2 (95th percentile 194.49 ms)
   - Flow 3 (95th percentile 205.02 ms)
Run 10: Statistics of FillP

Start at: 2018-04-11 06:02:37
End at: 2018-04-11 06:03:07

# Below is generated by plot.py at 2018-04-11 11:00:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1351.38 Mbit/s
95th percentile per-packet one-way delay: 218.484 ms
Loss rate: 5.18%
-- Flow 1:
Average throughput: 714.20 Mbit/s
95th percentile per-packet one-way delay: 225.923 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 664.70 Mbit/s
95th percentile per-packet one-way delay: 214.603 ms
Loss rate: 4.95%
-- Flow 3:
Average throughput: 601.00 Mbit/s
95th percentile per-packet one-way delay: 205.688 ms
Loss rate: 6.05%
Run 10: Report of FillIP — Data Link

![Graph](image1)

![Graph](image2)
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-11 03:06:18
End at: 2018-04-11 03:06:48

# Below is generated by plot.py at 2018-04-11 11:00:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 282.62 Mbit/s
  95th percentile per-packet one-way delay: 116.365 ms
  Loss rate: 1.16%
-- Flow 1:
  Average throughput: 142.13 Mbit/s
  95th percentile per-packet one-way delay: 115.452 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 153.42 Mbit/s
  95th percentile per-packet one-way delay: 117.815 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 121.42 Mbit/s
  95th percentile per-packet one-way delay: 123.336 ms
  Loss rate: 2.92%
Run 1: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 142.16 Mbit/s)
- Flow 1 egress (mean 142.13 Mbit/s)
- Flow 2 ingress (mean 153.20 Mbit/s)
- Flow 2 egress (mean 153.42 Mbit/s)
- Flow 3 ingress (mean 122.14 Mbit/s)
- Flow 3 egress (mean 121.42 Mbit/s)

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

- Flow 1 (95th percentile 115.45 ms)
- Flow 2 (95th percentile 117.81 ms)
- Flow 3 (95th percentile 123.34 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-11 03:25:13
End at: 2018-04-11 03:25:43

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 307.96 Mbit/s
  95th percentile per-packet one-way delay: 117.996 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 173.75 Mbit/s
  95th percentile per-packet one-way delay: 116.655 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 141.82 Mbit/s
  95th percentile per-packet one-way delay: 119.156 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 126.46 Mbit/s
  95th percentile per-packet one-way delay: 119.617 ms
  Loss rate: 2.71%
Run 2: Report of Indigo-1-32 — Data Link

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

Legend:
- Flow 1 ingress (mean 173.55 Mbit/s)
- Flow 1 egress (mean 173.75 Mbit/s)
- Flow 2 ingress (mean 141.87 Mbit/s)
- Flow 2 egress (mean 141.82 Mbit/s)
- Flow 3 ingress (mean 126.99 Mbit/s)
- Flow 3 egress (mean 126.46 Mbit/s)
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-11 03:44:17
End at: 2018-04-11 03:44:47

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 331.10 Mbit/s
  95th percentile per-packet one-way delay: 146.900 ms
  Loss rate: 0.99%
-- Flow 1:
  Average throughput: 195.12 Mbit/s
  95th percentile per-packet one-way delay: 124.625 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 140.37 Mbit/s
  95th percentile per-packet one-way delay: 145.856 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 133.97 Mbit/s
  95th percentile per-packet one-way delay: 153.242 ms
  Loss rate: 2.48%
Run 3: Report of Indigo-1-32 — Data Link

![Graph showing throughput and per-packet one-way delay over time for Flow 1, 2, and 3, with their respective mean values and 95th percentiles.]
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-11 04:03:17
End at: 2018-04-11 04:03:47

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 288.42 Mbit/s
  95th percentile per-packet one-way delay: 114.750 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 141.38 Mbit/s
  95th percentile per-packet one-way delay: 114.248 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 160.36 Mbit/s
  95th percentile per-packet one-way delay: 114.614 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 126.60 Mbit/s
  95th percentile per-packet one-way delay: 122.604 ms
  Loss rate: 2.78%
Run 4: Report of Indigo-1-32 — Data Link
Run 5: Statistics of Indigo-1-32

End at: 2018-04-11 04:23:01

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 323.08 Mbit/s
  95th percentile per-packet one-way delay: 115.639 ms
  Loss rate: 1.04%
-- Flow 1:
  Average throughput: 188.31 Mbit/s
  95th percentile per-packet one-way delay: 115.139 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 145.00 Mbit/s
  95th percentile per-packet one-way delay: 116.629 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 121.10 Mbit/s
  95th percentile per-packet one-way delay: 115.780 ms
  Loss rate: 2.88%
Run 5: Report of Indigo-1-32 — Data Link

![Graph of Throughput and Delay](image)

- **Throughput**:
  - **Flow 1 ingress**: mean 188.08 Mbit/s
  - **Flow 1 egress**: mean 188.31 Mbit/s
  - **Flow 2 ingress**: mean 144.93 Mbit/s
  - **Flow 2 egress**: mean 145.00 Mbit/s
  - **Flow 3 ingress**: mean 121.89 Mbit/s
  - **Flow 3 egress**: mean 121.10 Mbit/s

- **Delay**:
  - **Flow 1**: 95th percentile 115.14 ms
  - **Flow 2**: 95th percentile 116.63 ms
  - **Flow 3**: 95th percentile 115.78 ms

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Run 6: Statistics of Indigo-1-32

Start at: 2018-04-11 04:41:43

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.69 Mbit/s
95th percentile per-packet one-way delay: 113.277 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 178.59 Mbit/s
95th percentile per-packet one-way delay: 112.789 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 149.62 Mbit/s
95th percentile per-packet one-way delay: 114.384 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 119.89 Mbit/s
95th percentile per-packet one-way delay: 113.546 ms
Loss rate: 2.72%
Run 6: Report of Indigo-1-32 — Data Link

![Throughput Chart](image1)

![Delay Chart](image2)
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-11 05:00:36
End at: 2018-04-11 05:01:06

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.46 Mbit/s
95th percentile per-packet one-way delay: 114.602 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 143.84 Mbit/s
95th percentile per-packet one-way delay: 114.118 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 164.85 Mbit/s
95th percentile per-packet one-way delay: 115.406 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 123.67 Mbit/s
95th percentile per-packet one-way delay: 115.078 ms
Loss rate: 2.79%
Run 7: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 143.88 Mbit/s)
- Flow 1 egress (mean 143.84 Mbit/s)
- Flow 2 ingress (mean 164.66 Mbit/s)
- Flow 2 egress (mean 164.85 Mbit/s)
- Flow 3 ingress (mean 124.29 Mbit/s)
- Flow 3 egress (mean 123.67 Mbit/s)

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

- Flow 1 (95th percentile 114.12 ms)
- Flow 2 (95th percentile 115.41 ms)
- Flow 3 (95th percentile 115.08 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-11 05:19:43
End at: 2018-04-11 05:20:13

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 313.86 Mbit/s
  95th percentile per-packet one-way delay: 113.717 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 181.15 Mbit/s
  95th percentile per-packet one-way delay: 113.365 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 140.05 Mbit/s
  95th percentile per-packet one-way delay: 113.910 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 124.23 Mbit/s
  95th percentile per-packet one-way delay: 115.241 ms
  Loss rate: 2.77%
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-11 05:39:05
End at: 2018-04-11 05:39:35

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 329.24 Mbit/s
  95th percentile per-packet one-way delay: 120.142 ms
  Loss rate: 1.02%
-- Flow 1:
  Average throughput: 196.45 Mbit/s
  95th percentile per-packet one-way delay: 115.556 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 138.00 Mbit/s
  95th percentile per-packet one-way delay: 120.370 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 128.44 Mbit/s
  95th percentile per-packet one-way delay: 129.469 ms
  Loss rate: 2.60%
Run 9: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 196.10 Mbit/s)
- Flow 1 egress (mean 196.45 Mbit/s)
- Flow 2 ingress (mean 138.11 Mbit/s)
- Flow 2 egress (mean 138.00 Mbit/s)
- Flow 3 ingress (mean 128.85 Mbit/s)
- Flow 3 egress (mean 128.44 Mbit/s)
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-11 05:58:27
End at: 2018-04-11 05:58:57

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.86 Mbit/s
95th percentile per-packet one-way delay: 115.537 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 150.90 Mbit/s
95th percentile per-packet one-way delay: 115.074 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 140.72 Mbit/s
95th percentile per-packet one-way delay: 115.751 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 139.26 Mbit/s
95th percentile per-packet one-way delay: 116.436 ms
Loss rate: 2.42%
Run 10: Report of Indigo-1-32 — Data Link

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

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 150.99 Mbps) — Flow 1 egress (mean 150.99 Mbps)
Flow 2 ingress (mean 140.87 Mbps) — Flow 2 egress (mean 140.72 Mbps)
Flow 3 ingress (mean 139.38 Mbps) — Flow 3 egress (mean 139.26 Mbps)

Per-packet one-way delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 115.07 ms) — Flow 2 (95th percentile 115.75 ms) — Flow 3 (95th percentile 116.44 ms)
Run 1: Statistics of Vivace-latency

Start at: 2018-04-11 03:08:14
End at: 2018-04-11 03:08:44

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 403.08 Mbit/s
  95th percentile per-packet one-way delay: 116.436 ms
  Loss rate: 1.78%
-- Flow 1:
  Average throughput: 234.22 Mbit/s
  95th percentile per-packet one-way delay: 114.114 ms
  Loss rate: 1.07%
-- Flow 2:
  Average throughput: 194.42 Mbit/s
  95th percentile per-packet one-way delay: 118.924 ms
  Loss rate: 2.33%
-- Flow 3:
  Average throughput: 123.85 Mbit/s
  95th percentile per-packet one-way delay: 117.066 ms
  Loss rate: 4.05%
Run 2: Statistics of Vivace-latency

Start at: 2018-04-11 03:27:11
End at: 2018-04-11 03:27:41

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.05 Mbit/s
95th percentile per-packet one-way delay: 116.298 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 213.49 Mbit/s
95th percentile per-packet one-way delay: 112.933 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 197.15 Mbit/s
95th percentile per-packet one-way delay: 116.921 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 80.36 Mbit/s
95th percentile per-packet one-way delay: 113.837 ms
Loss rate: 2.90%
Run 2: Report of Vivace-latency — Data Link

[Graph showing throughput and latency over time for different flows, with labels indicating mean throughput values for each flow's ingress and egress.]
Run 3: Statistics of Vivace-latency

Start at: 2018-04-11 03:46:16
End at: 2018-04-11 03:46:46

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.39 Mbit/s
95th percentile per-packet one-way delay: 113.953 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 214.77 Mbit/s
95th percentile per-packet one-way delay: 113.205 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 170.02 Mbit/s
95th percentile per-packet one-way delay: 114.161 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 126.91 Mbit/s
95th percentile per-packet one-way delay: 114.968 ms
Loss rate: 3.43%
Run 3: Report of Vivace-latency — Data Link

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

Start at: 2018-04-11 04:05:13
End at: 2018-04-11 04:05:43

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 436.89 Mbit/s
  95th percentile per-packet one-way delay: 114.291 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 271.27 Mbit/s
  95th percentile per-packet one-way delay: 114.372 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 188.27 Mbit/s
  95th percentile per-packet one-way delay: 114.297 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 126.26 Mbit/s
  95th percentile per-packet one-way delay: 113.257 ms
  Loss rate: 3.62%
Run 4: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 271.33 Mbit/s)
- Flow 1 egress (mean 271.27 Mbit/s)
- Flow 2 ingress (mean 188.73 Mbit/s)
- Flow 2 egress (mean 188.27 Mbit/s)
- Flow 3 ingress (mean 127.93 Mbit/s)
- Flow 3 egress (mean 126.26 Mbit/s)
Run 5: Statistics of Vivace-latency

Start at: 2018-04-11 04:24:31
End at: 2018-04-11 04:25:01

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.17 Mbit/s
95th percentile per-packet one-way delay: 114.333 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 207.80 Mbit/s
95th percentile per-packet one-way delay: 113.975 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 183.92 Mbit/s
95th percentile per-packet one-way delay: 113.876 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 125.20 Mbit/s
95th percentile per-packet one-way delay: 165.684 ms
Loss rate: 3.79%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-04-11 04:43:41
End at: 2018-04-11 04:44:11

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 322.13 Mbit/s
  95th percentile per-packet one-way delay: 120.202 ms
  Loss rate: 1.74%
-- Flow 1:
  Average throughput: 226.59 Mbit/s
  95th percentile per-packet one-way delay: 124.526 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 80.83 Mbit/s
  95th percentile per-packet one-way delay: 113.455 ms
  Loss rate: 3.24%
-- Flow 3:
  Average throughput: 129.88 Mbit/s
  95th percentile per-packet one-way delay: 114.199 ms
  Loss rate: 3.53%
Run 6: Report of Vivace-latency — Data Link

![Graph with throughput and delay for different flows](image-url)
Run 7: Statistics of Vivace-latency

Start at: 2018-04-11 05:02:32
End at: 2018-04-11 05:03:02

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.68 Mbit/s
95th percentile per-packet one-way delay: 114.084 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 203.15 Mbit/s
95th percentile per-packet one-way delay: 113.874 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 192.59 Mbit/s
95th percentile per-packet one-way delay: 114.271 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 71.25 Mbit/s
95th percentile per-packet one-way delay: 113.930 ms
Loss rate: 3.65%
Run 8: Statistics of Vivace-latency

Start at: 2018-04-11 05:21:41
End at: 2018-04-11 05:22:11

# Below is generated by plot.py at 2018-04-11 11:00:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 419.47 Mbit/s
  95th percentile per-packet one-way delay: 113.667 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 257.48 Mbit/s
  95th percentile per-packet one-way delay: 113.470 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 183.93 Mbit/s
  95th percentile per-packet one-way delay: 113.839 ms
  Loss rate: 1.46%
-- Flow 3:
  Average throughput: 123.88 Mbit/s
  95th percentile per-packet one-way delay: 111.877 ms
  Loss rate: 3.60%
Run 8: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 257.46 Mbit/s)
- Flow 1 egress (mean 257.48 Mbit/s)
- Flow 2 ingress (mean 184.55 Mbit/s)
- Flow 2 egress (mean 183.93 Mbit/s)
- Flow 3 ingress (mean 126.58 Mbit/s)
- Flow 3 egress (mean 123.88 Mbit/s)

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

- Flow 1 (95th percentile 113.47 ms)
- Flow 2 (95th percentile 113.84 ms)
- Flow 3 (95th percentile 111.88 ms)
Run 9: Statistics of Vivace-latency

Start at: 2018-04-11 05:41:04
End at: 2018-04-11 05:41:34

# Below is generated by plot.py at 2018-04-11 11:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 454.87 Mbit/s
95th percentile per-packet one-way delay: 113.936 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 278.42 Mbit/s
95th percentile per-packet one-way delay: 113.014 ms
Loss rate: 0.88%
-- Flow 2:
Average throughput: 199.69 Mbit/s
95th percentile per-packet one-way delay: 113.444 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 136.40 Mbit/s
95th percentile per-packet one-way delay: 114.823 ms
Loss rate: 4.10%
Run 9: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 278.78 Mbit/s)
- Flow 1 egress (mean 278.42 Mbit/s)
- Flow 2 ingress (mean 200.44 Mbit/s)
- Flow 2 egress (mean 199.69 Mbit/s)
- Flow 3 ingress (mean 136.98 Mbit/s)
- Flow 3 egress (mean 136.40 Mbit/s)
Run 10: Statistics of Vivace-latency

Start at: 2018-04-11 06:00:22
End at: 2018-04-11 06:00:52

# Below is generated by plot.py at 2018-04-11 11:00:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.70 Mbit/s
95th percentile per-packet one-way delay: 114.212 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 274.58 Mbit/s
95th percentile per-packet one-way delay: 112.183 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 185.83 Mbit/s
95th percentile per-packet one-way delay: 114.705 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 120.47 Mbit/s
95th percentile per-packet one-way delay: 113.968 ms
Loss rate: 4.15%
Run 10: Report of Vivace-latency — Data Link
Run 1: Statistics of Vivace-loss

Start at: 2018-04-11 03:03:23
End at: 2018-04-11 03:03:53

# Below is generated by plot.py at 2018-04-11 11:00:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 349.18 Mbit/s
  95th percentile per-packet one-way delay: 122.267 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 166.82 Mbit/s
  95th percentile per-packet one-way delay: 140.723 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 217.44 Mbit/s
  95th percentile per-packet one-way delay: 119.727 ms
  Loss rate: 1.57%
-- Flow 3:
  Average throughput: 130.87 Mbit/s
  95th percentile per-packet one-way delay: 114.579 ms
  Loss rate: 3.74%
Run 1: Report of Vivace-loss — Data Link

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

Legend:
- Flow 1 ingress (mean 162.12 Mbit/s) - Flow 1 egress (mean 166.82 Mbit/s)
- Flow 2 ingress (mean 218.35 Mbit/s) - Flow 2 egress (mean 217.44 Mbit/s)
- Flow 3 ingress (mean 132.76 Mbit/s) - Flow 3 egress (mean 130.87 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 140.72 ms)
- Flow 2 (95th percentile 119.73 ms)
- Flow 3 (95th percentile 114.58 ms)
Run 2: Statistics of Vivace-loss

End at: 2018-04-11 03:22:44

# Below is generated by plot.py at 2018-04-11 11:02:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 447.33 Mbit/s
  95th percentile per-packet one-way delay: 116.480 ms
  Loss rate: 1.41%
-- Flow 1:
  Average throughput: 235.22 Mbit/s
  95th percentile per-packet one-way delay: 116.321 ms
  Loss rate: 0.93%
-- Flow 2:
  Average throughput: 254.65 Mbit/s
  95th percentile per-packet one-way delay: 117.035 ms
  Loss rate: 1.48%
-- Flow 3:
  Average throughput: 134.37 Mbit/s
  95th percentile per-packet one-way delay: 140.982 ms
  Loss rate: 3.61%
Run 2: Report of Vivace-loss — Data Link

![Graph showing network performance metrics over time]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 235.62 Mbps)
  - Flow 1 egress (mean 235.22 Mbps)
  - Flow 2 ingress (mean 235.54 Mbps)
  - Flow 2 egress (mean 254.05 Mbps)
  - Flow 3 ingress (mean 136.16 Mbps)
  - Flow 3 egress (mean 134.37 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 116.32 ms)
  - Flow 2 (95th percentile 117.03 ms)
  - Flow 3 (95th percentile 140.98 ms)
Run 3: Statistics of Vivace-loss

Start at: 2018-04-11 03:40:51
End at: 2018-04-11 03:41:21

# Below is generated by plot.py at 2018-04-11 11:04:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 469.89 Mbit/s
  95th percentile per-packet one-way delay: 141.122 ms
  Loss rate: 2.11%
  -- Flow 1:
    Average throughput: 272.70 Mbit/s
    95th percentile per-packet one-way delay: 242.418 ms
    Loss rate: 2.14%
  -- Flow 2:
    Average throughput: 232.88 Mbit/s
    95th percentile per-packet one-way delay: 114.391 ms
    Loss rate: 1.61%
  -- Flow 3:
    Average throughput: 133.26 Mbit/s
    95th percentile per-packet one-way delay: 114.654 ms
    Loss rate: 3.66%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-04-11 04:00:04
End at: 2018-04-11 04:00:34

# Below is generated by plot.py at 2018-04-11 11:07:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 485.99 Mbit/s
95th percentile per-packet one-way delay: 114.629 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 304.48 Mbit/s
95th percentile per-packet one-way delay: 114.679 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 195.49 Mbit/s
95th percentile per-packet one-way delay: 115.129 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 160.85 Mbit/s
95th percentile per-packet one-way delay: 112.798 ms
Loss rate: 4.95%
Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-04-11 04:19:10
End at: 2018-04-11 04:19:40

# Below is generated by plot.py at 2018-04-11 11:07:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 432.41 Mbit/s
  95th percentile per-packet one-way delay: 116.213 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 250.81 Mbit/s
  95th percentile per-packet one-way delay: 115.122 ms
  Loss rate: 0.54%
-- Flow 2:
  Average throughput: 187.31 Mbit/s
  95th percentile per-packet one-way delay: 119.773 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 180.90 Mbit/s
  95th percentile per-packet one-way delay: 118.690 ms
  Loss rate: 0.01%
Run 5: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 250.27 Mb/s)
- Flow 1 egress (mean 250.81 Mb/s)
- Flow 2 ingress (mean 187.26 Mb/s)
- Flow 2 egress (mean 187.31 Mb/s)
- Flow 3 ingress (mean 174.68 Mb/s)
- Flow 3 egress (mean 180.90 Mb/s)

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

- Flow 1 (95th percentile 115.12 ms)
- Flow 2 (95th percentile 119.77 ms)
- Flow 3 (95th percentile 118.69 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-04-11 04:38:18
End at: 2018-04-11 04:38:48

# Below is generated by plot.py at 2018-04-11 11:07:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 453.94 Mbit/s
  95th percentile per-packet one-way delay: 136.530 ms
  Loss rate: 1.42%
-- Flow 1:
  Average throughput: 256.01 Mbit/s
  95th percentile per-packet one-way delay: 115.283 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 227.65 Mbit/s
  95th percentile per-packet one-way delay: 163.785 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 145.41 Mbit/s
  95th percentile per-packet one-way delay: 111.381 ms
  Loss rate: 3.04%
Run 6: Report of Vivace-loss — Data Link

---

[Graph showing throughput and packet delay over time for different flows with annotations for mean and 95th percentile values.]
Run 7: Statistics of Vivace-loss

Start at: 2018-04-11 04:57:26
End at: 2018-04-11 04:57:56

# Below is generated by plot.py at 2018-04-11 11:07:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 386.29 Mbit/s
  95th percentile per-packet one-way delay: 147.235 ms
  Loss rate: 1.74%
-- Flow 1:
  Average throughput: 183.29 Mbit/s
  95th percentile per-packet one-way delay: 159.608 ms
  Loss rate: 1.45%
-- Flow 2:
  Average throughput: 236.79 Mbit/s
  95th percentile per-packet one-way delay: 125.011 ms
  Loss rate: 1.62%
-- Flow 3:
  Average throughput: 142.60 Mbit/s
  95th percentile per-packet one-way delay: 114.198 ms
  Loss rate: 3.29%
Run 7: Report of Vivace-loss — Data Link

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

Flow 1 (ingress: mean 184.59 Mbit/s, egress: mean 183.29 Mbit/s)
Flow 2 (ingress: mean 238.00 Mbit/s, egress: mean 236.79 Mbit/s)
Flow 3 (ingress: mean 143.98 Mbit/s, egress: mean 142.69 Mbit/s)

Flow 1 (95th percentile: 159.61 ms)
Flow 2 (95th percentile: 125.01 ms)
Flow 3 (95th percentile: 114.20 ms)
Run 8: Statistics of Vivace-loss

Start at: 2018-04-11 05:16:27
End at: 2018-04-11 05:16:57

# Below is generated by plot.py at 2018-04-11 11:07:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.66 Mbit/s
95th percentile per-packet one-way delay: 124.173 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 249.41 Mbit/s
95th percentile per-packet one-way delay: 113.575 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 163.69 Mbit/s
95th percentile per-packet one-way delay: 146.878 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 135.66 Mbit/s
95th percentile per-packet one-way delay: 150.592 ms
Loss rate: 3.49%
Run 8: Report of Vivace-loss — Data Link
Run 9: Statistics of Vivace-loss

Start at: 2018-04-11 05:35:41
End at: 2018-04-11 05:36:11

# Below is generated by plot.py at 2018-04-11 11:09:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 483.95 Mbit/s
  95th percentile per-packet one-way delay: 114.144 ms
  Loss rate: 1.48%
-- Flow 1:
  Average throughput: 276.21 Mbit/s
  95th percentile per-packet one-way delay: 114.436 ms
  Loss rate: 0.88%
-- Flow 2:
  Average throughput: 237.58 Mbit/s
  95th percentile per-packet one-way delay: 113.844 ms
  Loss rate: 1.30%
-- Flow 3:
  Average throughput: 155.77 Mbit/s
  95th percentile per-packet one-way delay: 114.434 ms
  Loss rate: 5.19%
Run 10: Statistics of Vivace-loss

Start at: 2018-04-11 05:55:02
End at: 2018-04-11 05:55:32

# Below is generated by plot.py at 2018-04-11 11:11:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 481.81 Mbit/s
  95th percentile per-packet one-way delay: 113.748 ms
  Loss rate: 0.80%
-- Flow 1:
  Average throughput: 308.43 Mbit/s
  95th percentile per-packet one-way delay: 114.104 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 184.03 Mbit/s
  95th percentile per-packet one-way delay: 111.264 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 161.98 Mbit/s
  95th percentile per-packet one-way delay: 112.110 ms
  Loss rate: 0.00%
Run 10: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 308.71 Mbps)
- Flow 1 egress (mean 308.43 Mbps)
- Flow 2 ingress (mean 183.91 Mbps)
- Flow 2 egress (mean 184.03 Mbps)
- Flow 3 ingress (mean 157.96 Mbps)
- Flow 3 egress (mean 161.98 Mbps)

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

- Flow 1 (95th percentile 114.10 ms)
- Flow 2 (95th percentile 111.26 ms)
- Flow 3 (95th percentile 112.11 ms)
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-11 03:15:08
End at: 2018-04-11 03:15:38

# Below is generated by plot.py at 2018-04-11 11:11:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.05 Mbit/s
95th percentile per-packet one-way delay: 118.994 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 172.79 Mbit/s
95th percentile per-packet one-way delay: 113.793 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 228.17 Mbit/s
95th percentile per-packet one-way delay: 119.267 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 126.82 Mbit/s
95th percentile per-packet one-way delay: 129.445 ms
Loss rate: 3.94%
Run 1: Report of Vivace-LTE — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 173.51 Mbps)
  - Flow 1 egress (mean 172.79 Mbps)
  - Flow 2 ingress (mean 228.84 Mbps)
  - Flow 2 egress (mean 228.17 Mbps)
  - Flow 3 ingress (mean 126.93 Mbps)
  - Flow 3 egress (mean 126.62 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 113.79 ms)
  - Flow 2 (95th percentile 119.27 ms)
  - Flow 3 (95th percentile 129.44 ms)
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-11 03:33:58
End at: 2018-04-11 03:34:28

# Below is generated by plot.py at 2018-04-11 11:11:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 292.72 Mbit/s
  95th percentile per-packet one-way delay: 113.044 ms
  Loss rate: 1.57%
-- Flow 1:
  Average throughput: 133.16 Mbit/s
  95th percentile per-packet one-way delay: 113.043 ms
  Loss rate: 1.07%
-- Flow 2:
  Average throughput: 179.42 Mbit/s
  95th percentile per-packet one-way delay: 113.241 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 126.16 Mbit/s
  95th percentile per-packet one-way delay: 111.350 ms
  Loss rate: 3.66%
Run 2: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 133.58 Mbit/s)
- Flow 1 egress (mean 133.16 Mbit/s)
- Flow 2 ingress (mean 179.96 Mbit/s)
- Flow 2 egress (mean 179.42 Mbit/s)
- Flow 3 ingress (mean 127.95 Mbit/s)
- Flow 3 egress (mean 126.16 Mbit/s)
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-11 03:53:04
End at: 2018-04-11 03:53:34

# Below is generated by plot.py at 2018-04-11 11:12:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.97 Mbit/s
95th percentile per-packet one-way delay: 113.612 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 241.26 Mbit/s
95th percentile per-packet one-way delay: 112.409 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 120.51 Mbit/s
95th percentile per-packet one-way delay: 113.717 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 132.33 Mbit/s
95th percentile per-packet one-way delay: 112.469 ms
Loss rate: 3.50%
Run 3: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 241.58 Mbit/s)
- Flow 1 egress (mean 241.26 Mbit/s)
- Flow 2 ingress (mean 121.84 Mbit/s)
- Flow 2 egress (mean 120.51 Mbit/s)
- Flow 3 ingress (mean 134.01 Mbit/s)
- Flow 3 egress (mean 132.33 Mbit/s)
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-11 04:12:07
End at: 2018-04-11 04:12:37

# Below is generated by plot.py at 2018-04-11 11:13:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 415.55 Mbit/s
  95th percentile per-packet one-way delay: 114.475 ms
  Loss rate: 1.27%
-- Flow 1:
  Average throughput: 240.89 Mbit/s
  95th percentile per-packet one-way delay: 114.695 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 199.06 Mbit/s
  95th percentile per-packet one-way delay: 114.157 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 132.18 Mbit/s
  95th percentile per-packet one-way delay: 113.959 ms
  Loss rate: 3.79%
Run 4: Report of Vivace-LTE — Data Link
Run 5: Statistics of Vivace-LTE

Start at: 2018-04-11 04:31:20
End at: 2018-04-11 04:31:50

# Below is generated by plot.py at 2018-04-11 11:14:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 395.79 Mbit/s
  95th percentile per-packet one-way delay: 114.365 ms
  Loss rate: 1.44%
-- Flow 1:
  Average throughput: 224.35 Mbit/s
  95th percentile per-packet one-way delay: 114.153 ms
  Loss rate: 0.86%
-- Flow 2:
  Average throughput: 191.73 Mbit/s
  95th percentile per-packet one-way delay: 114.639 ms
  Loss rate: 1.68%
-- Flow 3:
  Average throughput: 137.47 Mbit/s
  95th percentile per-packet one-way delay: 114.821 ms
  Loss rate: 3.61%
Run 5: Report of Vivace-LTE — Data Link

Throughput vs Time (Mbps)

Time (s)

Throughput (Mbps)

Flow 1 ingress (mean 224.59 Mbps) — Flow 1 egress (mean 224.35 Mbps)
Flow 2 ingress (mean 192.72 Mbps) — Flow 2 egress (mean 191.73 Mbps)
Flow 3 ingress (mean 139.34 Mbps) — Flow 3 egress (mean 137.47 Mbps)

Delay vs Time (ms)

Time (s)

Delay (ms)

Flow 1 (95th percentile 114.15 ms) — Flow 2 (95th percentile 114.64 ms) — Flow 3 (95th percentile 114.02 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-11 04:50:27
End at: 2018-04-11 04:50:57

# Below is generated by plot.py at 2018-04-11 11:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.28 Mbit/s
95th percentile per-packet one-way delay: 122.060 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 221.81 Mbit/s
95th percentile per-packet one-way delay: 122.061 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 192.52 Mbit/s
95th percentile per-packet one-way delay: 114.638 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 135.94 Mbit/s
95th percentile per-packet one-way delay: 141.529 ms
Loss rate: 3.81%
Run 6: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 221.52 Mbps)
- Flow 1 egress (mean 221.81 Mbps)
- Flow 2 ingress (mean 193.25 Mbps)
- Flow 2 egress (mean 192.52 Mbps)
- Flow 3 ingress (mean 135.68 Mbps)
- Flow 3 egress (mean 135.94 Mbps)

![Graph 2: Per-Packet One-Way Delay (ms)](image2)

- Flow 1 (95th percentile 122.06 ms)
- Flow 2 (95th percentile 114.64 ms)
- Flow 3 (95th percentile 141.53 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-11 05:09:20
End at: 2018-04-11 05:09:50

# Below is generated by plot.py at 2018-04-11 11:15:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 453.93 Mbit/s
  95th percentile per-packet one-way delay: 113.938 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 286.41 Mbit/s
  95th percentile per-packet one-way delay: 113.998 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 188.34 Mbit/s
  95th percentile per-packet one-way delay: 113.381 ms
  Loss rate: 1.45%
-- Flow 3:
  Average throughput: 132.22 Mbit/s
  95th percentile per-packet one-way delay: 113.298 ms
  Loss rate: 3.54%
Run 7: Report of Vivace-LTE — Data Link
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-11 05:28:35
End at: 2018-04-11 05:29:05

# Below is generated by plot.py at 2018-04-11 11:16:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 464.50 Mbit/s
  95th percentile per-packet one-way delay: 114.478 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 298.38 Mbit/s
  95th percentile per-packet one-way delay: 114.849 ms
  Loss rate: 0.75%
-- Flow 2:
  Average throughput: 186.13 Mbit/s
  95th percentile per-packet one-way delay: 112.561 ms
  Loss rate: 1.61%
-- Flow 3:
  Average throughput: 132.39 Mbit/s
  95th percentile per-packet one-way delay: 113.815 ms
  Loss rate: 3.69%
Run 8: Report of Vivace-LTE — Data Link
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-11 05:47:59
End at: 2018-04-11 05:48:29

# Below is generated by plot.py at 2018-04-11 11:16:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 390.81 Mbit/s
  95th percentile per-packet one-way delay: 113.885 ms
  Loss rate: 1.47%
-- Flow 1:
  Average throughput: 219.32 Mbit/s
  95th percentile per-packet one-way delay: 113.591 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 196.34 Mbit/s
  95th percentile per-packet one-way delay: 114.234 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 128.42 Mbit/s
  95th percentile per-packet one-way delay: 117.873 ms
  Loss rate: 4.00%
Run 9: Report of Vivace-LTE — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 219.72 Mbps)
  - Flow 2 ingress (mean 197.13 Mbps)
  - Flow 3 ingress (mean 130.29 Mbps)
  - Flow 1 egress (mean 219.32 Mbps)
  - Flow 2 egress (mean 196.34 Mbps)
  - Flow 3 egress (mean 126.42 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 113.59 ms)
  - Flow 2 (95th percentile 114.23 ms)
  - Flow 3 (95th percentile 117.87 ms)
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-11 06:07:14
End at: 2018-04-11 06:07:44

# Below is generated by plot.py at 2018-04-11 11:16:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.72 Mbit/s
95th percentile per-packet one-way delay: 113.526 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 301.87 Mbit/s
95th percentile per-packet one-way delay: 113.672 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 183.74 Mbit/s
95th percentile per-packet one-way delay: 111.956 ms
Loss rate: 1.63%
-- Flow 3:
Average throughput: 126.95 Mbit/s
95th percentile per-packet one-way delay: 112.753 ms
Loss rate: 3.65%
Run 10: Report of Vivace-LTE — Data Link