Pantheon Report

Data path: AWS Brazil 1 Ethernet (local) → Brazil Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ 9249ee3238475c4d8c1a443d28df770ff6f4ca2
third_party/indigo @ a9b2060d39e4da2e8987e893e3ca2a6c7cd0a9b
third_party/indigo-1-layer-128-unit @ 3ae9e4f4230db7484501f82ce8b377695f266d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a04ed8306fa0b9833d84360c53d89
third_party/koho_cc @ f0f2e693303ae8e8a08e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b17eaaab4a9068e6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba39133d2b2744ccff93
third_party/pcc @ 1aef5958af0d66d18b623c091a55b8ec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ed9c78f3cfff2
third_party/scream @ c3370fd7bd17265a92b34e016ad23f5965885
third_party/sourdough @ f1a14bbfe749737437f61b1eaeeb3d0b627cede681
third_party/sprout @ 6f2e6e0e08d91066a9f023df375ee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562539f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784c46
third_party/webrtc @ f271183af820ee5d0031620f4bebf38aecd5581
test from AWS Brazil 1 Ethernet to Brazil 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>
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<td>flow 2</td>
<td>flow 3</td>
</tr>
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<td>60.08</td>
<td>42.80</td>
<td>22.06</td>
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<tr>
<td>TCP Cubic</td>
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<td>66.20</td>
<td>31.62</td>
<td>30.86</td>
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<td>LEDBAT</td>
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<td>58.09</td>
<td>36.95</td>
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<td>PCC</td>
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<td>QUIC Cubic</td>
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<td>59.37</td>
<td>34.83</td>
<td>26.59</td>
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<td>SCReAM</td>
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<td>0.22</td>
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<td>WebRTC media</td>
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<td>0.09</td>
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<td>37.50</td>
<td>42.60</td>
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<td>42.76</td>
<td>43.13</td>
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<tr>
<td>Verus</td>
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<td>36.86</td>
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<td>Copa</td>
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<td>52.73</td>
<td>43.06</td>
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<td>FillP</td>
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<td>37.89</td>
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<td>63.80</td>
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<td>Vivace-latency</td>
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<td>40.28</td>
<td>30.11</td>
<td>21.78</td>
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<td>Vivace-loss</td>
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<td>69.66</td>
<td>27.37</td>
<td>19.45</td>
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<tr>
<td>Vivace-LTE</td>
<td>10</td>
<td>59.36</td>
<td>40.35</td>
<td>20.46</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-10 21:48:56
End at: 2018-04-10 21:49:26
Local clock offset: -5.992 ms
Remote clock offset: -6.991 ms

# Below is generated by plot.py at 2018-04-11 01:25:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.46 Mbit/s
  95th percentile per-packet one-way delay: 15.076 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 69.07 Mbit/s
  95th percentile per-packet one-way delay: 15.115 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 35.67 Mbit/s
  95th percentile per-packet one-way delay: 14.543 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 13.99 Mbit/s
  95th percentile per-packet one-way delay: 15.918 ms
  Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 (ingress: 69.11 Mbit/s, egress: 69.07 Mbit/s)
- Flow 2 (ingress: 35.68 Mbit/s, egress: 35.67 Mbit/s)
- Flow 3 (ingress: 14.00 Mbit/s, egress: 13.99 Mbit/s)
Run 2: Statistics of TCP BBR

Start at: 2018-04-10 22:09:23
End at: 2018-04-10 22:09:53
Local clock offset: -7.519 ms
Remote clock offset: -7.029 ms

# Below is generated by plot.py at 2018-04-11 01:25:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 17.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.69 Mbit/s
95th percentile per-packet one-way delay: 17.498 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.74 Mbit/s
95th percentile per-packet one-way delay: 18.422 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 18.016 ms
Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

![Graph 1: Throughput vs Time (Mbps)](image1)
- Flow 1 ingress (mean 61.73 Mbps)
- Flow 1 egress (mean 61.69 Mbps)
- Flow 2 ingress (mean 47.77 Mbps)
- Flow 2 egress (mean 47.74 Mbps)
- Flow 3 ingress (mean 12.06 Mbps)
- Flow 3 egress (mean 12.05 Mbps)

![Graph 2: Per-packet one-way delay (ms)](image2)
- Flow 1 (95th percentile 17.50 ms)
- Flow 2 (95th percentile 18.42 ms)
- Flow 3 (95th percentile 18.02 ms)
Run 3: Statistics of TCP BBR

End at: 2018-04-10 22:30:28
Local clock offset: -7.346 ms
Remote clock offset: -7.061 ms

# Below is generated by plot.py at 2018-04-11 01:25:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 23.555 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 23.357 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 16.12 Mbit/s
95th percentile per-packet one-way delay: 22.331 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 31.175 ms
Loss rate: 0.16%
Run 3: Report of TCP BBR — Data Link

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

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

Start at: 2018-04-10 22:50:25
End at: 2018-04-10 22:50:55
Local clock offset: -6.508 ms
Remote clock offset: -7.368 ms

# Below is generated by plot.py at 2018-04-11 01:25:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 10.667 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 60.93 Mbit/s
95th percentile per-packet one-way delay: 10.167 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 48.46 Mbit/s
95th percentile per-packet one-way delay: 11.344 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 10.520 ms
Loss rate: 0.00%
Run 4: Report of TCP BBR — Data Link

![Graph 1: Throughput of TCP BBR Flows](image1)

![Graph 2: Packet Per Flow](image2)

Legend:
- Flow 1 ingress (mean 60.95 Mbit/s)
- Flow 1 egress (mean 60.93 Mbit/s)
- Flow 2 ingress (mean 48.50 Mbit/s)
- Flow 2 egress (mean 48.46 Mbit/s)
- Flow 3 ingress (mean 12.88 Mbit/s)
- Flow 3 egress (mean 12.80 Mbit/s)
Run 5: Statistics of TCP BBR

Start at: 2018-04-10 23:10:53
End at: 2018-04-10 23:11:23
Local clock offset: -7.196 ms
Remote clock offset: -7.038 ms

# Below is generated by plot.py at 2018-04-11 01:25:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: 18.138 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 63.48 Mbit/s
  95th percentile per-packet one-way delay: 18.096 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 44.98 Mbit/s
  95th percentile per-packet one-way delay: 18.386 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 12.20 Mbit/s
  95th percentile per-packet one-way delay: 18.347 ms
  Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-04-10 23:31:21
End at: 2018-04-10 23:31:51
Local clock offset: -6.981 ms
Remote clock offset: -7.102 ms

# Below is generated by plot.py at 2018-04-11 01:25:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.46 Mbit/s
  95th percentile per-packet one-way delay: 13.945 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 62.12 Mbit/s
  95th percentile per-packet one-way delay: 13.330 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 44.79 Mbit/s
  95th percentile per-packet one-way delay: 13.829 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 16.60 Mbit/s
  95th percentile per-packet one-way delay: 16.903 ms
  Loss rate: 0.02%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-04-10 23:51:45
End at: 2018-04-10 23:52:15
Local clock offset: -8.607 ms
Remote clock offset: -6.938 ms

# Below is generated by plot.py at 2018-04-11 01:25:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.35 Mbit/s
  95th percentile per-packet one-way delay: 34.902 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 46.69 Mbit/s
  95th percentile per-packet one-way delay: 10.060 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 43.22 Mbit/s
  95th percentile per-packet one-way delay: 12.132 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 66.10 Mbit/s
  95th percentile per-packet one-way delay: 37.751 ms
  Loss rate: 0.51%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-04-11 00:12:09
End at: 2018-04-11 00:12:39
Local clock offset: -5.551 ms
Remote clock offset: -6.543 ms

# Below is generated by plot.py at 2018-04-11 01:25:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.99 Mbit/s
  95th percentile per-packet one-way delay: 35.709 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 44.89 Mbit/s
  95th percentile per-packet one-way delay: 36.855 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 45.86 Mbit/s
  95th percentile per-packet one-way delay: 25.086 ms
  Loss rate: 2.81%
-- Flow 3:
  Average throughput: 19.70 Mbit/s
  95th percentile per-packet one-way delay: 23.178 ms
  Loss rate: 0.00%
Run 8: Report of TCP BBR — Data Link

![Graph](image)

**Throughput (Mbps) vs Time (s)**
- Flow 1 ingress (mean 44.95 Mbps)
- Flow 1 egress (mean 44.89 Mbps)
- Flow 2 ingress (mean 47.24 Mbps)
- Flow 2 egress (mean 45.86 Mbps)
- Flow 3 ingress (mean 19.74 Mbps)
- Flow 3 egress (mean 19.70 Mbps)

**Per packet one way delay (ms) vs Time (s)**
- Flow 1 (95th percentile 36.85 ms)
- Flow 2 (95th percentile 25.09 ms)
- Flow 3 (95th percentile 23.18 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-04-11 00:32:32
End at: 2018-04-11 00:33:02
Local clock offset: -5.027 ms
Remote clock offset: -6.278 ms

# Below is generated by plot.py at 2018-04-11 01:26:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.49 Mbit/s
  95th percentile per-packet one-way delay: 23.005 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 61.72 Mbit/s
  95th percentile per-packet one-way delay: 20.387 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 43.28 Mbit/s
  95th percentile per-packet one-way delay: 23.651 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 20.89 Mbit/s
  95th percentile per-packet one-way delay: 26.717 ms
  Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link

Graph 1: Throughput (Mbps) vs Time (s)

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 61.77 Mbps)
- Blue solid line: Flow 1 egress (mean 61.72 Mbps)
- Green dashed line: Flow 2 ingress (mean 43.33 Mbps)
- Green solid line: Flow 2 egress (mean 43.28 Mbps)
- Red dashed line: Flow 3 ingress (mean 20.93 Mbps)
- Red solid line: Flow 3 egress (mean 20.89 Mbps)
Run 10: Statistics of TCP BBR

Start at: 2018-04-11 00:52:55
End at: 2018-04-11 00:53:25
Local clock offset: -4.579 ms
Remote clock offset: -6.123 ms

# Below is generated by plot.py at 2018-04-11 01:26:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.31 Mbit/s
  95th percentile per-packet one-way delay: 11.160 ms
  Loss rate: 1.49%
-- Flow 1:
  Average throughput: 51.15 Mbit/s
  95th percentile per-packet one-way delay: 11.032 ms
  Loss rate: 2.80%
-- Flow 2:
  Average throughput: 57.84 Mbit/s
  95th percentile per-packet one-way delay: 11.297 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 22.98 Mbit/s
  95th percentile per-packet one-way delay: 7.029 ms
  Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 52.63 Mbps)
  - Flow 2 ingress (mean 57.85 Mbps)
  - Flow 3 ingress (mean 22.97 Mbps)
  - Flow 1 egress (mean 51.15 Mbps)
  - Flow 2 egress (mean 57.84 Mbps)
  - Flow 3 egress (mean 22.96 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 11.03 ms)
  - Flow 2 (95th percentile 11.30 ms)
  - Flow 3 (95th percentile 7.03 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-04-10 21:45:28
End at: 2018-04-10 21:45:58
Local clock offset: -7.539 ms
Remote clock offset: -6.95 ms

# Below is generated by plot.py at 2018-04-11 01:26:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.51 Mbit/s
  95th percentile per-packet one-way delay: 32.675 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 63.75 Mbit/s
  95th percentile per-packet one-way delay: 31.823 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 32.29 Mbit/s
  95th percentile per-packet one-way delay: 33.381 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 37.01 Mbit/s
  95th percentile per-packet one-way delay: 33.349 ms
  Loss rate: 0.06%
Run 1: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 63.83 Mbit/s)
- Flow 1 egress (mean 63.75 Mbit/s)
- Flow 2 ingress (mean 32.31 Mbit/s)
- Flow 2 egress (mean 32.29 Mbit/s)
- Flow 3 ingress (mean 37.06 Mbit/s)
- Flow 3 egress (mean 37.01 Mbit/s)

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 31.82 ms)
- Flow 2 (95th percentile 33.38 ms)
- Flow 3 (95th percentile 33.35 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-04-10 22:05:56
End at: 2018-04-10 22:06:26
Local clock offset: -5.873 ms
Remote clock offset: -7.041 ms

# Below is generated by plot.py at 2018-04-11 01:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 31.419 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.73 Mbit/s
95th percentile per-packet one-way delay: 31.662 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.40 Mbit/s
95th percentile per-packet one-way delay: 30.459 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 30.485 ms
Loss rate: 0.14%
Run 2: Report of TCP Cubic — Data Link

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

![Graph 2: Per-packet one-way delay vs. Time](image)
Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 22:26:23
End at: 2018-04-10 22:26:53
Local clock offset: -7.357 ms
Remote clock offset: -7.132 ms

# Below is generated by plot.py at 2018-04-11 01:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.420 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 66.62 Mbit/s
95th percentile per-packet one-way delay: 32.450 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 28.32 Mbit/s
95th percentile per-packet one-way delay: 31.180 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 36.18 Mbit/s
95th percentile per-packet one-way delay: 32.622 ms
Loss rate: 0.11%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

End at: 2018-04-10 22:47:27
Local clock offset: -7.313 ms
Remote clock offset: -7.255 ms

# Below is generated by plot.py at 2018-04-11 01:26:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.51 Mbit/s
  95th percentile per-packet one-way delay: 31.341 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 65.70 Mbit/s
  95th percentile per-packet one-way delay: 31.061 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 31.60 Mbit/s
  95th percentile per-packet one-way delay: 31.326 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 32.51 Mbit/s
  95th percentile per-packet one-way delay: 32.563 ms
  Loss rate: 0.11%
Run 4: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 65.79 Mbit/s)  
Flow 2 ingress (mean 31.63 Mbit/s)  
Flow 3 ingress (mean 32.56 Mbit/s)

Flow 1 egress (mean 65.70 Mbit/s)  
Flow 2 egress (mean 31.60 Mbit/s)  
Flow 3 egress (mean 32.51 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 31.06 ms)  
Flow 2 (95th percentile 31.33 ms)  
Flow 3 (95th percentile 32.56 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-04-10 23:07:26
End at: 2018-04-10 23:07:56
Local clock offset: -7.908 ms
Remote clock offset: -7.096 ms

# Below is generated by plot.py at 2018-04-11 01:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.357 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 67.81 Mbit/s
95th percentile per-packet one-way delay: 31.730 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 33.392 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 31.961 ms
Loss rate: 0.04%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-04-10 23:27:53
End at: 2018-04-10 23:28:23
Local clock offset: -7.73 ms
Remote clock offset: -7.005 ms

# Below is generated by plot.py at 2018-04-11 01:26:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 33.265 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 64.52 Mbit/s
95th percentile per-packet one-way delay: 33.257 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.49 Mbit/s
95th percentile per-packet one-way delay: 33.707 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 32.918 ms
Loss rate: 0.12%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-04-10 23:48:18
End at: 2018-04-10 23:48:48
Local clock offset: -8.715 ms
Remote clock offset: -7.037 ms

# Below is generated by plot.py at 2018-04-11 01:28:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 32.356 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 64.34 Mbit/s
95th percentile per-packet one-way delay: 31.616 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 33.130 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 28.07 Mbit/s
95th percentile per-packet one-way delay: 33.022 ms
Loss rate: 0.12%
Run 7: Report of TCP Cubic — Data Link

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

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

Start at: 2018-04-11 00:08:41
End at: 2018-04-11 00:09:12
Local clock offset: -6.521 ms
Remote clock offset: -6.692 ms

# Below is generated by plot.py at 2018-04-11 01:28:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 47.424 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 70.23 Mbit/s
95th percentile per-packet one-way delay: 32.377 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 27.15 Mbit/s
95th percentile per-packet one-way delay: 55.449 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 27.64 Mbit/s
95th percentile per-packet one-way delay: 30.944 ms
Loss rate: 0.17%
Run 8: Report of TCP Cubic — Data Link

---

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 70.32 Mbit/s)
Flow 1 egress (mean 70.23 Mbit/s)
Flow 2 ingress (mean 27.20 Mbit/s)
Flow 2 egress (mean 27.15 Mbit/s)
Flow 3 ingress (mean 27.70 Mbit/s)
Flow 3 egress (mean 27.64 Mbit/s)

---

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 32.38 ms)
Flow 2 (95th percentile 55.45 ms)
Flow 3 (95th percentile 30.94 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-04-11 00:29:05
End at: 2018-04-11 00:29:35
Local clock offset: -5.848 ms
Remote clock offset: -6.326 ms

# Below is generated by plot.py at 2018-04-11 01:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.38 Mbit/s
95th percentile per-packet one-way delay: 33.308 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 66.56 Mbit/s
95th percentile per-packet one-way delay: 33.079 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 35.109 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 30.723 ms
Loss rate: 0.14%
Run 9: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 66.63 Mbps)
  - Flow 1 egress (mean 66.56 Mbps)
  - Flow 2 ingress (mean 35.17 Mbps)
  - Flow 2 egress (mean 33.13 Mbps)
  - Flow 3 ingress (mean 26.56 Mbps)
  - Flow 3 egress (mean 26.52 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 33.08 ms)
  - Flow 2 (95th percentile 35.11 ms)
  - Flow 3 (95th percentile 30.72 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-04-11 00:49:28
End at: 2018-04-11 00:49:58
Local clock offset: -5.486 ms
Remote clock offset: -6.099 ms

# Below is generated by plot.py at 2018-04-11 01:28:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.529 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 32.535 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 27.39 Mbit/s
95th percentile per-packet one-way delay: 31.275 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 28.65 Mbit/s
95th percentile per-packet one-way delay: 32.851 ms
Loss rate: 0.10%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 21:50:04
End at: 2018-04-10 21:50:34
Local clock offset: -6.728 ms
Remote clock offset: -6.942 ms

# Below is generated by plot.py at 2018-04-11 01:28:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 32.391 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 79.30 Mbit/s
95th percentile per-packet one-way delay: 31.931 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 69.023 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 46.00 Mbit/s
95th percentile per-packet one-way delay: 32.045 ms
Loss rate: 0.04%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-04-10 22:10:31
End at: 2018-04-10 22:11:01
Local clock offset: -6.023 ms
Remote clock offset: -7.04 ms

# Below is generated by plot.py at 2018-04-11 01:28:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: 31.065 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 63.90 Mbit/s
95th percentile per-packet one-way delay: 31.321 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 33.30 Mbit/s
95th percentile per-packet one-way delay: 30.111 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 33.78 Mbit/s
95th percentile per-packet one-way delay: 30.084 ms
Loss rate: 0.06%
Run 2: Report of LEDBAT — Data Link

![Data Link Graph]

---

Flow 1 ingress (mean 64.00 Mbit/s)  Flow 1 egress (mean 63.90 Mbit/s)
Flow 2 ingress (mean 33.36 Mbit/s)  Flow 2 egress (mean 33.30 Mbit/s)
Flow 3 ingress (mean 33.84 Mbit/s)  Flow 3 egress (mean 33.78 Mbit/s)

---

Flow 1 (95th percentile 31.32 ms)  Flow 2 (95th percentile 30.11 ms)  Flow 3 (95th percentile 30.08 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-04-10 22:31:06
End at: 2018-04-10 22:31:36
Local clock offset: -7.371 ms
Remote clock offset: -7.167 ms

# Below is generated by plot.py at 2018-04-11 01:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.37 Mbit/s
95th percentile per-packet one-way delay: 35.216 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 69.38 Mbit/s
95th percentile per-packet one-way delay: 30.550 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 26.31 Mbit/s
95th percentile per-packet one-way delay: 42.173 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 30.765 ms
Loss rate: 0.11%
Run 3: Report of LEDBAT — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 69.46 Mbps)
  - Flow 1 egress (mean 69.38 Mbps)
  - Flow 2 ingress (mean 26.32 Mbps)
  - Flow 2 egress (mean 26.31 Mbps)
  - Flow 3 ingress (mean 31.68 Mbps)
  - Flow 3 egress (mean 31.66 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 30.55 ms)
  - Flow 2 (95th percentile 42.17 ms)
  - Flow 3 (95th percentile 30.77 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-04-10 22:51:33
End at: 2018-04-10 22:52:03
Local clock offset: -7.273 ms
Remote clock offset: -7.212 ms

# Below is generated by plot.py at 2018-04-11 01:28:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.30 Mbit/s
  95th percentile per-packet one-way delay: 31.215 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 60.10 Mbit/s
  95th percentile per-packet one-way delay: 30.924 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 41.77 Mbit/s
  95th percentile per-packet one-way delay: 32.196 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 30.85 Mbit/s
  95th percentile per-packet one-way delay: 30.922 ms
  Loss rate: 0.11%
Run 4: Report of LEDBAT — Data Link

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

- **Throughput (Mbit/s)**
  - Flow 1 Ingress (mean 60.18 Mbit/s)
  - Flow 1 Egress (mean 60.10 Mbit/s)
  - Flow 2 Ingress (mean 41.79 Mbit/s)
  - Flow 2 Egress (mean 41.77 Mbit/s)
  - Flow 3 Ingress (mean 30.87 Mbit/s)
  - Flow 3 Egress (mean 30.85 Mbit/s)

- **Packet Delay (ms)**
  - Flow 1 (95th percentile 30.92 ms)
  - Flow 2 (95th percentile 32.20 ms)
  - Flow 3 (95th percentile 30.92 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-04-10 23:12:02
End at: 2018-04-10 23:12:32
Local clock offset: -7.13 ms
Remote clock offset: -7.13 ms

# Below is generated by plot.py at 2018-04-11 01:29:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.31 Mbit/s
95th percentile per-packet one-way delay: 32.087 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 65.28 Mbit/s
95th percentile per-packet one-way delay: 32.076 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 32.293 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 23.03 Mbit/s
95th percentile per-packet one-way delay: 30.862 ms
Loss rate: 0.30%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-04-10 23:32:29  
End at: 2018-04-10 23:32:59  
Local clock offset: -6.989 ms  
Remote clock offset: -6.988 ms

# Below is generated by plot.py at 2018-04-11 01:29:57  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s  
95th percentile per-packet one-way delay: 30.317 ms  
Loss rate: 0.06%
-- Flow 1:
Average throughput: 62.53 Mbit/s  
95th percentile per-packet one-way delay: 29.925 ms  
Loss rate: 0.04%
-- Flow 2:
Average throughput: 35.91 Mbit/s  
95th percentile per-packet one-way delay: 31.337 ms  
Loss rate: 0.10%
-- Flow 3:
Average throughput: 32.99 Mbit/s  
95th percentile per-packet one-way delay: 30.117 ms  
Loss rate: 0.09%
Run 6: Report of LEDBAT — Data Link

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

![Graph 2: Per packet one way delay (ms)](image2)
Run 7: Statistics of LEDBAT

Start at: 2018-04-10 23:52:53
End at: 2018-04-10 23:53:23
Local clock offset: -7.703 ms
Remote clock offset: -6.933 ms

# Below is generated by plot.py at 2018-04-11 01:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.25 Mbit/s
95th percentile per-packet one-way delay: 32.513 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 68.95 Mbit/s
95th percentile per-packet one-way delay: 32.258 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 34.325 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 68.936 ms
Loss rate: 2.97%
Run 7: Report of LEDBAT — Data Link

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

- **Flow 1**
  - Ingress: Mean 69.02 Mbit/s
  - Egress: Mean 68.95 Mbit/s
- **Flow 2**
  - Ingress: Mean 41.53 Mbit/s
  - Egress: Mean 41.47 Mbit/s
- **Flow 3**
  - Ingress: Mean 2.15 Mbit/s
  - Egress: Mean 2.09 Mbit/s

- **Packet Delay**
  - Flow 1: 95th percentile 32.26 ms
  - Flow 2: 95th percentile 34.33 ms
  - Flow 3: 95th percentile 68.94 ms
Run 8: Statistics of LEDBAT

Start at: 2018-04-11 00:13:17
End at: 2018-04-11 00:13:47
Local clock offset: -5.521 ms
Remote clock offset: -8.618 ms

# Below is generated by plot.py at 2018-04-11 01:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.60 Mbit/s
95th percentile per-packet one-way delay: 45.570 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 47.43 Mbit/s
95th percentile per-packet one-way delay: 48.567 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 27.797 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 28.023 ms
Loss rate: 0.08%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-04-11 00:33:40
End at: 2018-04-11 00:34:10
Local clock offset: -6.473 ms
Remote clock offset: -6.271 ms

# Below is generated by plot.py at 2018-04-11 01:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.24 Mbit/s
95th percentile per-packet one-way delay: 32.919 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 32.919 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 45.85 Mbit/s
95th percentile per-packet one-way delay: 32.918 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.77 Mbit/s
95th percentile per-packet one-way delay: 33.029 ms
Loss rate: 0.14%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-04-11 00:54:04
End at: 2018-04-11 00:54:34
Local clock offset: -4.55 ms
Remote clock offset: -6.139 ms

# Below is generated by plot.py at 2018-04-11 01:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 50.732 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 24.979 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 55.07 Mbit/s
95th percentile per-packet one-way delay: 51.561 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 61.13 Mbit/s
95th percentile per-packet one-way delay: 36.321 ms
Loss rate: 0.07%
Run 10: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.02 Mbps)
- Flow 1 egress (mean 6.82 Mbps)
- Flow 2 ingress (mean 55.16 Mbps)
- Flow 2 egress (mean 55.07 Mbps)
- Flow 3 ingress (mean 61.33 Mbps)
- Flow 3 egress (mean 61.13 Mbps)

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

- Flow 1 (95th percentile 24.98 ms)
- Flow 2 (95th percentile 51.56 ms)
- Flow 3 (95th percentile 36.32 ms)
Run 1: Statistics of PCC

Start at: 2018-04-10 21:38:49
End at: 2018-04-10 21:39:19
Local clock offset: -7.805 ms
Remote clock offset: -6.867 ms

# Below is generated by plot.py at 2018-04-11 01:30:01
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 77.42 Mbit/s
 95th percentile per-packet one-way delay: 16.923 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 65.37 Mbit/s
 95th percentile per-packet one-way delay: 14.371 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 3.82 Mbit/s
 95th percentile per-packet one-way delay: 17.603 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 28.85 Mbit/s
 95th percentile per-packet one-way delay: 20.884 ms
 Loss rate: 0.02%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-04-10 21:59:16
End at: 2018-04-10 21:59:46
Local clock offset: -6.664 ms
Remote clock offset: -6.995 ms

# Below is generated by plot.py at 2018-04-11 01:30:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.59 Mbit/s
  95th percentile per-packet one-way delay: 20.680 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 65.02 Mbit/s
  95th percentile per-packet one-way delay: 19.669 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 25.49 Mbit/s
  95th percentile per-packet one-way delay: 21.270 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 13.99 Mbit/s
  95th percentile per-packet one-way delay: 22.637 ms
  Loss rate: 0.00%
Run 2: Report of PCC — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 65.08 Mbps)  Flow 1 egress (mean 65.02 Mbps)
Flow 2 ingress (mean 25.52 Mbps)  Flow 2 egress (mean 25.49 Mbps)
Flow 3 ingress (mean 14.03 Mbps)  Flow 3 egress (mean 13.99 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 19.67 ms)  Flow 2 (95th percentile 21.27 ms)  Flow 3 (95th percentile 22.64 ms)
Run 3: Statistics of PCC

Start at: 2018-04-10 22:19:43
Local clock offset: -7.995 ms
Remote clock offset: -7.149 ms

# Below is generated by plot.py at 2018-04-11 01:30:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.55 Mbit/s
  95th percentile per-packet one-way delay: 6.228 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 68.06 Mbit/s
  95th percentile per-packet one-way delay: 6.513 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.36 Mbit/s
  95th percentile per-packet one-way delay: 4.917 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.95 Mbit/s
  95th percentile per-packet one-way delay: 2.208 ms
  Loss rate: 0.00%
Run 3: Report of PCC — Data Link

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Throughput (Mbps)

**Flow 1 ingress (mean 68.06 Mbps)**
**Flow 1 egress (mean 68.06 Mbps)**
**Flow 2 ingress (mean 24.37 Mbps)**
**Flow 2 egress (mean 24.36 Mbps)**
**Flow 3 ingress (mean 3.95 Mbps)**
**Flow 3 egress (mean 3.95 Mbps)**

---

Per-packet one way delay (ms)

**Flow 1 (95th percentile 6.51 ms)**
**Flow 2 (95th percentile 4.92 ms)**
**Flow 3 (95th percentile 2.21 ms)**
Run 4: Statistics of PCC

Start at: 2018-04-10 22:40:18
End at: 2018-04-10 22:40:48
Local clock offset: -7.491 ms
Remote clock offset: -7.14 ms

# Below is generated by plot.py at 2018-04-11 01:31:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.34 Mbit/s
  95th percentile per-packet one-way delay: 50.314 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 72.66 Mbit/s
  95th percentile per-packet one-way delay: 51.750 ms
  Loss rate: 1.21%
-- Flow 2:
  Average throughput: 19.38 Mbit/s
  95th percentile per-packet one-way delay: 31.675 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 5.40 Mbit/s
  95th percentile per-packet one-way delay: 31.708 ms
  Loss rate: 0.90%
Run 4: Report of PCC — Data Link

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

- Flow 1 ingress (mean 73.56 Mbps/s)
- Flow 1 egress (mean 72.66 Mbps/s)
- Flow 2 ingress (mean 19.45 Mbps/s)
- Flow 2 egress (mean 19.38 Mbps/s)
- Flow 3 ingress (mean 5.46 Mbps/s)
- Flow 3 egress (mean 5.40 Mbps/s)

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

- Flow 1 (95th percentile 51.75 ms)
- Flow 2 (95th percentile 31.68 ms)
- Flow 3 (95th percentile 31.71 ms)
Run 5: Statistics of PCC

Start at: 2018-04-10 23:00:46
End at: 2018-04-10 23:01:16
Local clock offset: -7.143 ms
Remote clock offset: -7.127 ms

# Below is generated by plot.py at 2018-04-11 01:31:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.81 Mbit/s
95th percentile per-packet one-way delay: 4.648 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.81 Mbit/s
95th percentile per-packet one-way delay: 4.077 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 34.12 Mbit/s
95th percentile per-packet one-way delay: 6.809 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: 4.589 ms
Loss rate: 0.00%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

End at: 2018-04-10 23:21:44
Local clock offset: -6.647 ms
Remote clock offset: -7.015 ms

# Below is generated by plot.py at 2018-04-11 01:31:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.27 Mbit/s
  95th percentile per-packet one-way delay: 2.381 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 48.96 Mbit/s
  95th percentile per-packet one-way delay: 1.146 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 38.96 Mbit/s
  95th percentile per-packet one-way delay: 4.089 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 7.31 Mbit/s
  95th percentile per-packet one-way delay: 1.829 ms
  Loss rate: 0.00%
Run 6: Report of PCC — Data Link

- Flow 1 ingress (mean 48.96 Mbit/s)
- Flow 1 egress (mean 48.96 Mbit/s)
- Flow 2 ingress (mean 38.96 Mbit/s)
- Flow 2 egress (mean 38.96 Mbit/s)
- Flow 3 ingress (mean 7.31 Mbit/s)
- Flow 3 egress (mean 7.31 Mbit/s)

Throughput (Mbps)

Time (s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 1.15 ms)
Flow 2 (95th percentile 4.09 ms)
Flow 3 (95th percentile 1.83 ms)
Run 7: Statistics of PCC

Start at: 2018-04-10 23:41:39
End at: 2018-04-10 23:42:09
Local clock offset: -7.151 ms
Remote clock offset: -6.958 ms

# Below is generated by plot.py at 2018-04-11 01:31:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.99 Mbit/s
95th percentile per-packet one-way delay: 13.705 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 13.751 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.73 Mbit/s
95th percentile per-packet one-way delay: 13.548 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: 13.812 ms
Loss rate: 0.01%
Run 7: Report of PCC — Data Link

![Throughput Graph]

- **Flow 1 Ingress (mean 40.13 Mbit/s)**
- **Flow 1 Egress (mean 40.13 Mbit/s)**
- **Flow 2 Ingress (mean 31.73 Mbit/s)**
- **Flow 2 Egress (mean 31.73 Mbit/s)**
- **Flow 3 Ingress (mean 11.50 Mbit/s)**
- **Flow 3 Egress (mean 11.49 Mbit/s)**

![Per-packet One-way Delay Graph]

- **Flow 1 (95th percentile 13.75 ms)**
- **Flow 2 (95th percentile 13.55 ms)**
- **Flow 3 (95th percentile 13.81 ms)**
Run 8: Statistics of PCC

Start at: 2018-04-11 00:02:02
End at: 2018-04-11 00:02:32
Local clock offset: -6.737 ms
Remote clock offset: -24.928 ms

# Below is generated by plot.py at 2018-04-11 01:31:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.01 Mbit/s
95th percentile per-packet one-way delay: 11.791 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 62.87 Mbit/s
95th percentile per-packet one-way delay: 11.002 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 14.879 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 4.16 Mbit/s
95th percentile per-packet one-way delay: 20.469 ms
Loss rate: 0.18%
Run 8: Report of PCC — Data Link

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

- Flow 1 ingress (mean 63.05 Mbit/s)
- Flow 1 egress (mean 62.87 Mbit/s)
- Flow 2 ingress (mean 34.32 Mbit/s)
- Flow 2 egress (mean 34.23 Mbit/s)
- Flow 3 ingress (mean 4.18 Mbit/s)
- Flow 3 egress (mean 4.16 Mbit/s)
Run 9: Statistics of PCC

Start at: 2018-04-11 00:22:26
End at: 2018-04-11 00:22:56
Local clock offset: -6.082 ms
Remote clock offset: -6.423 ms

# Below is generated by plot.py at 2018-04-11 01:31:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.09 Mbit/s
95th percentile per-packet one-way delay: 11.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.29 Mbit/s
95th percentile per-packet one-way delay: 10.738 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 11.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.51 Mbit/s
95th percentile per-packet one-way delay: 12.242 ms
Loss rate: 0.00%
Run 9: Report of PCC — Data Link

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

- Flow 1 ingress (mean 35.29 Mbit/s)
- Flow 1 egress (mean 36.29 Mbit/s)
- Flow 2 ingress (mean 38.15 Mbit/s)
- Flow 2 egress (mean 38.14 Mbit/s)
- Flow 3 ingress (mean 13.31 Mbit/s)
- Flow 3 egress (mean 13.51 Mbit/s)
Run 10: Statistics of PCC

Start at: 2018-04-11 00:42:49
End at: 2018-04-11 00:43:19
Local clock offset: -5.627 ms
Remote clock offset: -6.292 ms

# Below is generated by plot.py at 2018-04-11 01:31:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 41.50 Mbit/s
  95th percentile per-packet one-way delay: 33.009 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 33.91 Mbit/s
  95th percentile per-packet one-way delay: 3.886 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 9.60 Mbit/s
  95th percentile per-packet one-way delay: 35.631 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 3.71 Mbit/s
  95th percentile per-packet one-way delay: 41.610 ms
  Loss rate: 3.53%
Run 10: Report of PCC — Data Link

Throughput (Mbps/s) vs Time (s)

Flow 1 ingress (mean 33.91 Mbit/s)  
Flow 1 egress (mean 33.91 Mbit/s)  
Flow 2 ingress (mean 9.61 Mbit/s)  
Flow 2 egress (mean 9.60 Mbit/s)  
Flow 3 ingress (mean 3.83 Mbit/s)  
Flow 3 egress (mean 3.71 Mbit/s)  

Packet Loss vs Time (s)

Flow 1 (95th percentile 3.89 ms)  
Flow 2 (95th percentile 35.63 ms)  
Flow 3 (95th percentile 41.61 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-10 21:44:20
End at: 2018-04-10 21:44:50
Local clock offset: -7.607 ms
Remote clock offset: -6.869 ms

# Below is generated by plot.py at 2018-04-11 01:32:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.45 Mbit/s
  95th percentile per-packet one-way delay: 31.834 ms
  Loss rate: 0.23%
-- Flow 1:
  Average throughput: 59.30 Mbit/s
  95th percentile per-packet one-way delay: 32.017 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 38.00 Mbit/s
  95th percentile per-packet one-way delay: 30.714 ms
  Loss rate: 0.30%
-- Flow 3:
  Average throughput: 24.29 Mbit/s
  95th percentile per-packet one-way delay: 30.733 ms
  Loss rate: 0.31%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-10 22:04:48
End at: 2018-04-10 22:05:18
Local clock offset: -5.871 ms
Remote clock offset: -7.106 ms

# Below is generated by plot.py at 2018-04-11 01:32:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.42 Mbit/s
95th percentile per-packet one-way delay: 30.257 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 57.67 Mbit/s
95th percentile per-packet one-way delay: 30.299 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 29.093 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 27.20 Mbit/s
95th percentile per-packet one-way delay: 30.509 ms
Loss rate: 0.18%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 22:25:15
End at: 2018-04-10 22:25:45
Local clock offset: -8.103 ms
Remote clock offset: -7.151 ms

# Below is generated by plot.py at 2018-04-11 01:32:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.36 Mbit/s
  95th percentile per-packet one-way delay: 31.751 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 59.26 Mbit/s
  95th percentile per-packet one-way delay: 31.853 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 35.07 Mbit/s
  95th percentile per-packet one-way delay: 30.780 ms
  Loss rate: 0.29%
-- Flow 3:
  Average throughput: 30.10 Mbit/s
  95th percentile per-packet one-way delay: 30.613 ms
  Loss rate: 0.20%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-10 22:45:49
End at: 2018-04-10 22:46:19
Local clock offset: -6.636 ms
Remote clock offset: -7.178 ms

# Below is generated by plot.py at 2018-04-11 01:32:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.41 Mbit/s
  95th percentile per-packet one-way delay: 29.237 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 55.00 Mbit/s
  95th percentile per-packet one-way delay: 29.193 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 36.27 Mbit/s
  95th percentile per-packet one-way delay: 29.328 ms
  Loss rate: 0.22%
-- Flow 3:
  Average throughput: 31.55 Mbit/s
  95th percentile per-packet one-way delay: 29.239 ms
  Loss rate: 0.21%
Run 4: Report of QUIC Cubic — Data Link

[Graph 1: Throughput (Mbps)]

[Graph 2: Per-packet one-way delay (ms)]
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-10 23:06:18
End at: 2018-04-10 23:06:48
Local clock offset: -7.227 ms
Remote clock offset: -7.096 ms

# Below is generated by plot.py at 2018-04-11 01:32:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.64 Mbit/s
95th percentile per-packet one-way delay: 30.152 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 29.887 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 37.96 Mbit/s
95th percentile per-packet one-way delay: 30.026 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 26.75 Mbit/s
95th percentile per-packet one-way delay: 31.711 ms
Loss rate: 0.30%
Run 5: Report of QUIC Cubic — Data Link

[Graph showing throughput and per-packet round-trip delays for multiple flows over time]
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-10 23:26:45
End at: 2018-04-10 23:27:15
Local clock offset: -7.616 ms
Remote clock offset: -18.049 ms

# Below is generated by plot.py at 2018-04-11 01:32:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.31 Mbit/s
  95th percentile per-packet one-way delay: 20.191 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 56.29 Mbit/s
  95th percentile per-packet one-way delay: 18.729 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 35.67 Mbit/s
  95th percentile per-packet one-way delay: 20.301 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 31.64 Mbit/s
  95th percentile per-packet one-way delay: 22.965 ms
  Loss rate: 0.16%
Run 6: Report of QUIC Cubic — Data Link

![Graph showing network performance metrics over time]

- **Throughput**: The top graph illustrates the throughput (Mbps) over time, with different lines representing different flows (Ingress and Egress) and their respective mean speeds.
- **Per-packet one-way delay**: The bottom graph shows the per-packet one-way delay (ms) over time, indicating the delay experienced by packets in different flows.

Legend:
- Flow 1 Ingress (mean 56.39 Mbps)
- Flow 1 Egress (mean 56.29 Mbps)
- Flow 2 Ingress (mean 35.80 Mbps)
- Flow 2 Egress (mean 35.67 Mbps)
- Flow 3 Ingress (mean 31.70 Mbps)
- Flow 3 Egress (mean 31.64 Mbps)
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-10 23:47:10
End at: 2018-04-10 23:47:40
Local clock offset: -7.932 ms
Remote clock offset: -24.453 ms

# Below is generated by plot.py at 2018-04-11 01:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.26 Mbit/s
95th percentile per-packet one-way delay: 13.510 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 13.201 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 11.31 Mbit/s
95th percentile per-packet one-way delay: 13.344 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 37.15 Mbit/s
95th percentile per-packet one-way delay: 15.497 ms
Loss rate: 0.43%
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 69.72 Mbps/s)
- Flow 1 egress (mean 69.58 Mbps/s)
- Flow 2 ingress (mean 11.64 Mbps/s)
- Flow 2 egress (mean 11.31 Mbps/s)
- Flow 3 ingress (mean 37.37 Mbps/s)
- Flow 3 egress (mean 37.15 Mbps/s)

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

- Flow 1 (95th percentile 13.20 ms)
- Flow 2 (95th percentile 13.34 ms)
- Flow 3 (95th percentile 15.50 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-11 00:07:33
End at: 2018-04-11 00:08:03
Local clock offset: -6.463 ms
Remote clock offset: -6.653 ms

# Below is generated by plot.py at 2018-04-11 01:33:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.60 Mbit/s
  95th percentile per-packet one-way delay: 31.550 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 61.51 Mbit/s
  95th percentile per-packet one-way delay: 30.194 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 43.92 Mbit/s
  95th percentile per-packet one-way delay: 32.678 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 5.89 Mbit/s
  95th percentile per-packet one-way delay: 31.138 ms
  Loss rate: 3.23%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-11 00:27:57
End at: 2018-04-11 00:28:27
Local clock offset: -6.601 ms
Remote clock offset: -6.316 ms

# Below is generated by plot.py at 2018-04-11 01:34:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.02 Mbit/s
  95th percentile per-packet one-way delay: 31.852 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 60.84 Mbit/s
  95th percentile per-packet one-way delay: 31.961 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 33.68 Mbit/s
  95th percentile per-packet one-way delay: 30.643 ms
  Loss rate: 0.29%
-- Flow 3:
  Average throughput: 27.04 Mbit/s
  95th percentile per-packet one-way delay: 31.834 ms
  Loss rate: 0.20%
Run 9: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 60.96 Mbit/s)
- **Flow 1 egress** (mean 60.84 Mbit/s)
- **Flow 2 ingress** (mean 33.82 Mbit/s)
- **Flow 2 egress** (mean 33.68 Mbit/s)
- **Flow 3 ingress** (mean 27.13 Mbit/s)
- **Flow 3 egress** (mean 27.04 Mbit/s)

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

- **Flow 1** (95th percentile 31.96 ms)
- **Flow 2** (95th percentile 30.64 ms)
- **Flow 3** (95th percentile 31.83 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-11 00:48:20
End at: 2018-04-11 00:48:50
Local clock offset: -5.437 ms
Remote clock offset: -6.122 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.29 Mbit/s
95th percentile per-packet one-way delay: 31.441 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 57.53 Mbit/s
95th percentile per-packet one-way delay: 29.711 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.44 Mbit/s
95th percentile per-packet one-way delay: 32.976 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: 32.728 ms
Loss rate: 0.33%
Run 10: Report of QUIC Cubic — Data Link

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

![Graph 2: Per-packet one-way delay vs. Time](image2)
Run 1: Statistics of SCReAM

Start at: 2018-04-10 21:41:05
End at: 2018-04-10 21:41:35
Local clock offset: -7.668 ms
Remote clock offset: -6.854 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 3.311 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 3.177 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.744 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.900 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

Throughput (Mbit/s)

Time (s)

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

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 3.18 ms)
Flow 2 (95th percentile 1.74 ms)
Flow 3 (95th percentile 4.90 ms)
Run 2: Statistics of SCReAM

Start at: 2018-04-10 22:01:33
End at: 2018-04-10 22:02:03
Local clock offset: -5.895 ms
Remote clock offset: -7.004 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 8.355 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.209 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 13.280 ms
Loss rate: 0.00%
Run 3: Statistics of SCReAM

Local clock offset: -6.498 ms
Remote clock offset: -7.069 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 6.333 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.754 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.791 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 10.546 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

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**Throughput (Mbps)**

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

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

- Flow 1 (95th percentile 1.75 ms)
- Flow 2 (95th percentile 1.79 ms)
- Flow 3 (95th percentile 10.55 ms)
Run 4: Statistics of SCReAM

Start at: 2018-04-10 22:42:34
End at: 2018-04-10 22:43:04
Local clock offset: -6.76 ms
Remote clock offset: -7.221 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 0.184 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 0.184 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 0.179 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 0.222 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph of Throughput and Delay vs Time]

**Graph 1:**
- X-axis: Time (s)
- Y-axis: Throughput (Mb/s)
- Legend:
  - Flow 1 ingress (mean 0.22 Mb/s)
  - Flow 1 egress (mean 0.22 Mb/s)
  - Flow 2 ingress (mean 0.22 Mb/s)
  - Flow 2 egress (mean 0.22 Mb/s)
  - Flow 3 ingress (mean 0.22 Mb/s)
  - Flow 3 egress (mean 0.22 Mb/s)

**Graph 2:**
- X-axis: Time (s)
- Y-axis: Per-packet one-way delay (ms)
- Legend:
  - Flow 1 (95th percentile 0.18 ms)
  - Flow 2 (95th percentile 0.18 ms)
  - Flow 3 (95th percentile 0.22 ms)
Run 5: Statistics of SCReAM

Start at: 2018-04-10 23:03:01
End at: 2018-04-10 23:03:31
Local clock offset: -6.382 ms
Remote clock offset: -7.102 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 1.852 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.699 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 3.819 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 0.228 ms
  Loss rate: 0.00%
Run 6: Statistics of SCReAM

Start at: 2018-04-10 23:23:30
End at: 2018-04-10 23:24:00
Local clock offset: -7.502 ms
Remote clock offset: -7.036 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.977 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.475 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.598 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.396 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

Throughput (Mbps/s)

Time (s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 3.48 ms)
Flow 2 (95th percentile 2.60 ms)
Flow 3 (95th percentile 2.40 ms)
Run 7: Statistics of SCReAM

Start at: 2018-04-10 23:43:54
End at: 2018-04-10 23:44:24
Local clock offset: -7.166 ms
Remote clock offset: -7.197 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.486 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.134 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -0.004 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

Throughput vs Time (s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile: 1.62 ms)  Flow 2 (95th percentile: 0.13 ms)  Flow 3 (95th percentile: -0.00 ms)
Run 8: Statistics of SCReAM

Start at: 2018-04-11 00:04:18
End at: 2018-04-11 00:04:48
Local clock offset: -6.641 ms
Remote clock offset: -6.823 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 15.635 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 0.958 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.360 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 19.735 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

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

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

- Flow 1 (99th percentile 0.96 ms)
- Flow 2 (99th percentile 2.36 ms)
- Flow 3 (99th percentile 19.73 ms)
Run 9: Statistics of SCReAM

Start at: 2018-04-11 00:24:42
End at: 2018-04-11 00:25:12
Local clock offset: -5.914 ms
Remote clock offset: -11.673 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 4.540 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 0.683 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.200 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -2.786 ms
  Loss rate: 0.00%
Run 10: Statistics of SCReAM

Start at: 2018-04-11 00:45:04
End at: 2018-04-11 00:45:34
Local clock offset: -5.463 ms
Remote clock offset: -6.154 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 10.824 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 12.393 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.385 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 5.535 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-04-10 21:43:16
End at: 2018-04-10 21:43:46
Local clock offset: -6.846 ms
Remote clock offset: -6.84 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 4.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 2.992 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 2.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.476 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.06 Mbps) | Flow 1 egress (mean 0.06 Mbps)
Flow 2 ingress (mean 0.06 Mbps) | Flow 2 egress (mean 0.06 Mbps)
Flow 3 ingress (mean 0.05 Mbps) | Flow 3 egress (mean 0.05 Mbps)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 2.99 ms) | Flow 2 (95th percentile 2.99 ms) | Flow 3 (95th percentile 5.48 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-04-10 22:03:44
End at: 2018-04-10 22:04:14
Local clock offset: -6.635 ms
Remote clock offset: -7.025 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.672 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 4.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 4.932 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.415 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.11 Mbit/s)
Flow 1 egress (mean 0.11 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 one-way delay (ms)

Time (s)

Flow 1 (95th percentile 4.78 ms)
Flow 2 (95th percentile 4.93 ms)
Flow 3 (95th percentile 3.42 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-04-10 22:24:11
End at: 2018-04-10 22:24:41
Local clock offset: -8.112 ms
Remote clock offset: -7.08 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 5.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 5.438 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 5.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 5.651 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-04-10 22:44:45
End at: 2018-04-10 22:45:15
Local clock offset: -7.488 ms
Remote clock offset: -7.172 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 39.047 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 4.275 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 4.030 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 39.731 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-04-10 23:05:14
End at: 2018-04-10 23:05:44
Local clock offset: -7.094 ms
Remote clock offset: -7.067 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 6.315 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 2.779 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 8.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 3.152 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

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

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

- **Flow 1 (95th percentile 2.78 ms)**
- **Flow 2 (95th percentile 8.47 ms)**
- **Flow 3 (95th percentile 3.15 ms)**
Run 6: Statistics of WebRTC media

Start at: 2018-04-10 23:25:41
End at: 2018-04-10 23:26:11
Local clock offset: -7.587 ms
Remote clock offset: -7.032 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.27 Mbit/s
  95th percentile per-packet one-way delay: 4.348 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 4.126 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 3.786 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.10 Mbit/s
  95th percentile per-packet one-way delay: 4.764 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-04-10 23:46:06
End at: 2018-04-10 23:46:36
Local clock offset: -8.681 ms
Remote clock offset: -7.03 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 5.445 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 5.940 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 3.581 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 5.533 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-04-11 00:06:30
End at: 2018-04-11 00:07:00
Local clock offset: -6.614 ms
Remote clock offset: -6.742 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 9.005 ms
Loss rate: 0.01%

-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 9.703 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 8.599 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 7.885 ms
Loss rate: 0.04%
Run 8: Report of WebRTC media — Data Link

![Graph showing throughputs and per-packet end-to-end delay](image-url)
Run 9: Statistics of WebRTC media

Start at: 2018-04-11 00:26:53
End at: 2018-04-11 00:27:23
Local clock offset: -5.144 ms
Remote clock offset: -6.335 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 4.176 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 4.204 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 3.435 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 4.378 ms
  Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-04-11 00:47:16
End at: 2018-04-11 00:47:46
Local clock offset: -6.178 ms
Remote clock offset: -6.139 ms

# Below is generated by plot.py at 2018-04-11 01:34:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 6.569 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 4.261 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 7.312 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 6.415 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-04-10 21:35:25
End at: 2018-04-10 21:35:55
Local clock offset: -7.202 ms
Remote clock offset: -6.879 ms

# Below is generated by plot.py at 2018-04-11 01:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.74 Mbit/s
95th percentile per-packet one-way delay: 23.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.09 Mbit/s
95th percentile per-packet one-way delay: 21.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 23.307 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 26.494 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

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

Legend:
- Flow 1 Ingress (mean 43.10 Mbit/s)
- Flow 1 Egress (mean 43.09 Mbit/s)
- Flow 2 Ingress (mean 40.28 Mbit/s)
- Flow 2 Egress (mean 40.28 Mbit/s)
- Flow 3 Ingress (mean 29.88 Mbit/s)
- Flow 3 Egress (mean 29.88 Mbit/s)

Legend:
- Flow 1 (95th percentile 21.67 ms)
- Flow 2 (95th percentile 23.31 ms)
- Flow 3 (95th percentile 26.49 ms)
Run 2: Statistics of Sprout

Start at: 2018-04-10 21:55:52
End at: 2018-04-10 21:56:22
Local clock offset: -5.916 ms
Remote clock offset: -6.982 ms

# Below is generated by plot.py at 2018-04-11 01:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.41 Mbit/s
  95th percentile per-packet one-way delay: 22.291 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 44.18 Mbit/s
  95th percentile per-packet one-way delay: 19.373 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 39.21 Mbit/s
  95th percentile per-packet one-way delay: 21.608 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 27.67 Mbit/s
  95th percentile per-packet one-way delay: 25.877 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 44.21 Mb/s)
Flow 1 egress (mean 44.18 Mb/s)
Flow 2 ingress (mean 39.25 Mb/s)
Flow 2 egress (mean 39.21 Mb/s)
Flow 3 ingress (mean 27.72 Mb/s)
Flow 3 egress (mean 27.67 Mb/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 19.37 ms)
Flow 2 (95th percentile 21.61 ms)
Flow 3 (95th percentile 25.88 ms)
Run 3: Statistics of Sprout

Start at: 2018-04-10 22:16:19
End at: 2018-04-10 22:16:49
Local clock offset: -7.084 ms
Remote clock offset: -7.14 ms

# Below is generated by plot.py at 2018-04-11 01:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.57 Mbit/s
  95th percentile per-packet one-way delay: 23.140 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 42.47 Mbit/s
  95th percentile per-packet one-way delay: 22.342 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 38.64 Mbit/s
  95th percentile per-packet one-way delay: 22.249 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 31.45 Mbit/s
  95th percentile per-packet one-way delay: 25.096 ms
  Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

![Graph of data link throughout and per-packet round-trip delay over time.]

- Flow 1 ingress (mean 42.50 Mbit/s)
- Flow 1 egress (mean 42.47 Mbit/s)
- Flow 2 ingress (mean 38.68 Mbit/s)
- Flow 2 egress (mean 38.64 Mbit/s)
- Flow 3 ingress (mean 31.47 Mbit/s)
- Flow 3 egress (mean 31.45 Mbit/s)
Run 4: Statistics of Sprout

Start at: 2018-04-10 22:36:54
End at: 2018-04-10 22:37:24
Local clock offset: -7.482 ms
Remote clock offset: -7.088 ms

# Below is generated by plot.py at 2018-04-11 01:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.69 Mbit/s
95th percentile per-packet one-way delay: 22.330 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.42 Mbit/s
95th percentile per-packet one-way delay: 20.383 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.13 Mbit/s
95th percentile per-packet one-way delay: 22.466 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.00 Mbit/s
95th percentile per-packet one-way delay: 25.623 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-04-10 22:57:21
End at: 2018-04-10 22:57:51
Local clock offset: -7.191 ms
Remote clock offset: -7.219 ms

# Below is generated by plot.py at 2018-04-11 01:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.39 Mbit/s
95th percentile per-packet one-way delay: 23.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: 23.369 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.17 Mbit/s
95th percentile per-packet one-way delay: 23.505 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.50 Mbit/s
95th percentile per-packet one-way delay: 24.523 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 6: Statistics of Sprout

Start at: 2018-04-10 23:17:49
End at: 2018-04-10 23:18:19
Local clock offset: -7.26 ms
Remote clock offset: -7.041 ms

# Below is generated by plot.py at 2018-04-11 01:34:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.79 Mbit/s
95th percentile per-packet one-way delay: 22.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.74 Mbit/s
95th percentile per-packet one-way delay: 21.045 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 20.812 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 27.36 Mbit/s
95th percentile per-packet one-way delay: 26.220 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph showing data link performance metrics](image1)

![Graph showing packet delay](image2)

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Run 7: Statistics of Sprout

Start at: 2018-04-10 23:38:15
End at: 2018-04-10 23:38:45
Local clock offset: -8.616 ms
Remote clock offset: -7.131 ms

# Below is generated by plot.py at 2018-04-11 01:35:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 24.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.14 Mbit/s
95th percentile per-packet one-way delay: 23.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.98 Mbit/s
95th percentile per-packet one-way delay: 24.433 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 25.785 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

[Graph showing throughput and packet loss over time for different flows with mean rates and 95th percentile delays indicated]
Run 8: Statistics of Sprout

Start at: 2018-04-10 23:58:38
End at: 2018-04-10 23:59:08
Local clock offset: -6.262 ms
Remote clock offset: -6.948 ms

# Below is generated by plot.py at 2018-04-11 01:35:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 25.585 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 28.247 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 40.86 Mbit/s
95th percentile per-packet one-way delay: 21.213 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.42 Mbit/s
95th percentile per-packet one-way delay: 21.983 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 34.11 Mbit/s)
Flow 1 egress (mean 34.09 Mbit/s)
Flow 2 ingress (mean 40.90 Mbit/s)
Flow 2 egress (mean 40.86 Mbit/s)
Flow 3 ingress (mean 37.52 Mbit/s)
Flow 3 egress (mean 37.42 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 20.25 ms)
Flow 2 (95th percentile 21.21 ms)
Flow 3 (95th percentile 21.98 ms)
Run 9: Statistics of Sprout

Start at: 2018-04-11 00:19:02
End at: 2018-04-11 00:19:32
Local clock offset: -6.823 ms
Remote clock offset: -6.502 ms

# Below is generated by plot.py at 2018-04-11 01:35:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.79 Mbit/s
95th percentile per-packet one-way delay: 25.253 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.62 Mbit/s
95th percentile per-packet one-way delay: 22.958 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 26.783 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.10 Mbit/s
95th percentile per-packet one-way delay: 25.719 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-04-11 00:39:26
End at: 2018-04-11 00:39:56
Local clock offset: -4.854 ms
Remote clock offset: -6.228 ms

# Below is generated by plot.py at 2018-04-11 01:35:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.92 Mbit/s
  95th percentile per-packet one-way delay: 52.451 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 15.16 Mbit/s
  95th percentile per-packet one-way delay: 56.324 ms
  Loss rate: 3.12%
-- Flow 2:
  Average throughput: 44.80 Mbit/s
  95th percentile per-packet one-way delay: 17.981 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 42.02 Mbit/s
  95th percentile per-packet one-way delay: 18.637 ms
  Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 15.65 Mbps)
- Flow 1 egress (mean 15.16 Mbps)
- Flow 2 ingress (mean 44.84 Mbps)
- Flow 2 egress (mean 44.80 Mbps)
- Flow 3 ingress (mean 42.05 Mbps)
- Flow 3 egress (mean 42.02 Mbps)

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

- Flow 1 (95th percentile 56.32 ms)
- Flow 2 (95th percentile 17.98 ms)
- Flow 3 (95th percentile 18.64 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 21:31:56
End at: 2018-04-10 21:32:26
Local clock offset: -7.167 ms
Remote clock offset: -6.9 ms

# Below is generated by plot.py at 2018-04-11 01:36:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.75 Mbit/s
95th percentile per-packet one-way delay: 7.293 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 41.66 Mbit/s
95th percentile per-packet one-way delay: 4.296 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 47.95 Mbit/s
95th percentile per-packet one-way delay: 8.028 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 48.70 Mbit/s
95th percentile per-packet one-way delay: 9.697 ms
Loss rate: 0.05%
Run 1: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 41.69 Mbit/s)
- **Flow 1 egress** (mean 41.66 Mbit/s)
- **Flow 2 ingress** (mean 47.96 Mbit/s)
- **Flow 2 egress** (mean 47.95 Mbit/s)
- **Flow 3 ingress** (mean 48.72 Mbit/s)
- **Flow 3 egress** (mean 48.70 Mbit/s)

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

- Flow 1 (95th percentile 4.30 ms)
- Flow 2 (95th percentile 8.03 ms)
- Flow 3 (95th percentile 9.70 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 21:52:24
End at: 2018-04-10 21:52:54
Local clock offset: -5.951 ms
Remote clock offset: -7.02 ms

# Below is generated by plot.py at 2018-04-11 01:36:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.71 Mbit/s
  95th percentile per-packet one-way delay: 5.652 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 42.74 Mbit/s
  95th percentile per-packet one-way delay: 3.530 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 51.46 Mbit/s
  95th percentile per-packet one-way delay: 5.824 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 41.35 Mbit/s
  95th percentile per-packet one-way delay: 6.776 ms
  Loss rate: 0.07%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-10 22:12:51
End at: 2018-04-10 22:13:21
Local clock offset: -6.939 ms
Remote clock offset: -7.062 ms

# Below is generated by plot.py at 2018-04-11 01:36:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.00 Mbit/s
95th percentile per-packet one-way delay: 46.498 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 50.382 ms
Loss rate: 1.70%
-- Flow 2:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 14.964 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 24.734 ms
Loss rate: 0.63%
Run 3: Report of TaoVA-100x — Data Link

![Graphs showing throughput and packet delay over time]

- **Throughput (Mbps/s)**
  - Flow 1 ingress (mean 49.10 Mbps/s)
  - Flow 2 ingress (mean 45.98 Mbps/s)
  - Flow 3 ingress (mean 6.28 Mbps/s)
  - Flow 1 egress (mean 48.31 Mbps/s)
  - Flow 2 egress (mean 45.95 Mbps/s)
  - Flow 3 egress (mean 6.24 Mbps/s)

- **Packet Delay (ms)**
  - Flow 1 (95th percentile 50.38 ms)
  - Flow 2 (95th percentile 14.96 ms)
  - Flow 3 (95th percentile 24.73 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-10 22:33:25
End at: 2018-04-10 22:33:55
Local clock offset: -7.514 ms
Remote clock offset: -7.166 ms

# Below is generated by plot.py at 2018-04-11 01:36:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.13 Mbit/s
95th percentile per-packet one-way delay: 4.041 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 4.674 ms
Loss rate: 2.60%
-- Flow 2:
Average throughput: 47.38 Mbit/s
95th percentile per-packet one-way delay: 3.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.61 Mbit/s
95th percentile per-packet one-way delay: 1.490 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 47.00 Mbps)
- Flow 1 egress (mean 45.78 Mbps)
- Flow 2 ingress (mean 47.39 Mbps)
- Flow 2 egress (mean 47.38 Mbps)
- Flow 3 ingress (mean 41.61 Mbps)
- Flow 3 egress (mean 41.61 Mbps)

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

- Flow 1 (95th percentile 4.67 ms)
- Flow 2 (95th percentile 3.66 ms)
- Flow 3 (95th percentile 1.49 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-10 22:53:52
End at: 2018-04-10 22:54:22
Local clock offset: -7.948 ms
Remote clock offset: -7.187 ms

# Below is generated by plot.py at 2018-04-11 01:37:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.74 Mbit/s
95th percentile per-packet one-way delay: 8.718 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 45.08 Mbit/s
95th percentile per-packet one-way delay: 8.345 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 48.98 Mbit/s
95th percentile per-packet one-way delay: 9.189 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: 8.633 ms
Loss rate: 0.10%
Run 5: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 45.09 Mbit/s)
Flow 1 egress (mean 45.08 Mbit/s)
Flow 2 ingress (mean 49.00 Mbit/s)
Flow 2 egress (mean 48.98 Mbit/s)
Flow 3 ingress (mean 42.42 Mbit/s)
Flow 3 egress (mean 42.38 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 8.35 ms)
Flow 2 (95th percentile 9.19 ms)
Flow 3 (95th percentile 8.63 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-10 23:14:21
End at: 2018-04-10 23:14:51
Local clock offset: -7.84 ms
Remote clock offset: -7.053 ms

# Below is generated by plot.py at 2018-04-11 01:37:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 7.365 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 7.925 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 27.21 Mbit/s
95th percentile per-packet one-way delay: 7.032 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 3.678 ms
Loss rate: 0.02%
Run 6: Report of TaoVA-100x — Data Link

The diagrams show the throughput and packet delivery delay over time for different flows. The throughput graph indicates fluctuations in data transfer rates, with specific trends and deviations highlighted. The packet delay graph demonstrates varying delays across different time intervals, with notable peaks and troughs.

Flow 1 ingress (mean 49.24 Mbit/s) and egress (mean 49.22 Mbit/s)
Flow 2 ingress (mean 27.23 Mbit/s) and egress (mean 27.21 Mbit/s)
Flow 3 ingress (mean 59.44 Mbit/s) and egress (mean 59.43 Mbit/s)

The figures provide a comprehensive view of network performance under various conditions, enabling a detailed analysis of data transmission and packet delivery.
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-10 23:34:49
End at: 2018-04-10 23:35:19
Local clock offset: -7.802 ms
Remote clock offset: -8.125 ms

# Below is generated by plot.py at 2018-04-11 01:37:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.75 Mbit/s
  95th percentile per-packet one-way delay: 5.941 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 45.39 Mbit/s
  95th percentile per-packet one-way delay: 3.114 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 23.52 Mbit/s
  95th percentile per-packet one-way delay: 2.192 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 44.29 Mbit/s
  95th percentile per-packet one-way delay: 12.011 ms
  Loss rate: 0.09%
Run 7: Report of TaoVA-100x — Data Link

![Throughput and Delay Graphs]

Legend for Throughput Graph:
- Blue dotted line: Flow 1 ingress (mean 45.39 Mbit/s)
- Blue solid line: Flow 1 egress (mean 45.39 Mbit/s)
- Green dotted line: Flow 2 ingress (mean 23.54 Mbit/s)
- Green solid line: Flow 2 egress (mean 23.52 Mbit/s)
- Red dotted line: Flow 3 ingress (mean 44.32 Mbit/s)
- Red solid line: Flow 3 egress (mean 44.29 Mbit/s)

Legend for Delay Graph:
- Blue circle: Flow 1 (95th percentile 3.11 ms)
- Green circle: Flow 2 (95th percentile 2.19 ms)
- Red circle: Flow 3 (95th percentile 12.01 ms)
Run 8: Statistics of TaoVA-100x

End at: 2018-04-10 23:55:43
Local clock offset: -7.365 ms
Remote clock offset: -7.108 ms

# Below is generated by plot.py at 2018-04-11 01:37:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.60 Mbit/s
95th percentile per-packet one-way delay: 32.399 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 1.189 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.85 Mbit/s
95th percentile per-packet one-way delay: 37.576 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 41.90 Mbit/s
95th percentile per-packet one-way delay: 2.856 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

\[\text{Throughput (Mb/s)}\]

\[\text{Time (s)}\]

\[\text{Flow 1 ingress (mean 7.52 Mb/s)}\]
\[\text{Flow 1 egress (mean 7.52 Mb/s)}\]
\[\text{Flow 2 ingress (mean 43.85 Mb/s)}\]
\[\text{Flow 2 egress (mean 43.85 Mb/s)}\]
\[\text{Flow 3 ingress (mean 41.90 Mb/s)}\]
\[\text{Flow 3 egress (mean 41.90 Mb/s)}\]

\[\text{Per-packet one-way delay (ms)}\]

\[\text{Time (s)}\]

\[\text{Flow 1 (95th percentile 1.19 ms)}\]
\[\text{Flow 2 (95th percentile 37.58 ms)}\]
\[\text{Flow 3 (95th percentile 2.86 ms)}\]
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-11 00:15:36
End at: 2018-04-11 00:16:06
Local clock offset: -6.159 ms
Remote clock offset: -6.561 ms

# Below is generated by plot.py at 2018-04-11 01:38:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.45 Mbit/s
  95th percentile per-packet one-way delay: 11.489 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 20.68 Mbit/s
  95th percentile per-packet one-way delay: 10.454 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.92 Mbit/s
  95th percentile per-packet one-way delay: 13.520 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 49.79 Mbit/s
  95th percentile per-packet one-way delay: 3.655 ms
  Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 20.68 Mbit/s)
- Flow 1 egress (mean 20.68 Mbit/s)
- Flow 2 ingress (mean 40.90 Mbit/s)
- Flow 2 egress (mean 40.92 Mbit/s)
- Flow 3 ingress (mean 49.79 Mbit/s)
- Flow 3 egress (mean 49.79 Mbit/s)
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-11 00:35:59
End at: 2018-04-11 00:36:29
Local clock offset: -6.449 ms
Remote clock offset: -6.24 ms

# Below is generated by plot.py at 2018-04-11 01:38:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.34 Mbit/s
95th percentile per-packet one-way delay: 7.384 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 6.908 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 7.307 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 10.598 ms
Loss rate: 0.15%
Run 10: Report of TaoVA-100x — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 28.63 Mbit/s)
- Flow 1 egress (mean 28.60 Mbit/s)
- Flow 2 ingress (mean 48.79 Mbit/s)
- Flow 2 egress (mean 48.75 Mbit/s)
- Flow 3 ingress (mean 40.05 Mbit/s)
- Flow 3 egress (mean 39.98 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 6.91 ms)
- Flow 2 (95th percentile 7.31 ms)
- Flow 3 (95th percentile 10.60 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-04-10 21:33:07
End at: 2018-04-10 21:33:37
Local clock offset: -6.412 ms
Remote clock offset: -6.901 ms

# Below is generated by plot.py at 2018-04-11 01:38:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 3.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.48 Mbit/s
95th percentile per-packet one-way delay: 3.455 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.84 Mbit/s
95th percentile per-packet one-way delay: 3.619 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: 3.740 ms
Loss rate: 0.01%
Run 1: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 46.48 Mbit/s)
- Flow 1 egress (mean 46.48 Mbit/s)
- Flow 2 ingress (mean 44.85 Mbit/s)
- Flow 2 egress (mean 44.84 Mbit/s)
- Flow 3 ingress (mean 63.57 Mbit/s)
- Flow 3 egress (mean 63.53 Mbit/s)
Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 21:53:35
End at: 2018-04-10 21:54:05
Local clock offset: -7.471 ms
Remote clock offset: -6.965 ms

# Below is generated by plot.py at 2018-04-11 01:38:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.57 Mbit/s
  95th percentile per-packet one-way delay: 4.679 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 61.23 Mbit/s
  95th percentile per-packet one-way delay: 4.936 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 32.08 Mbit/s
  95th percentile per-packet one-way delay: 3.487 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 42.12 Mbit/s
  95th percentile per-packet one-way delay: 3.889 ms
  Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 61.23 Mbps)
- Flow 1 egress (mean 61.23 Mbps)
- Flow 2 ingress (mean 32.08 Mbps)
- Flow 2 egress (mean 32.08 Mbps)
- Flow 3 ingress (mean 42.12 Mbps)
- Flow 3 egress (mean 42.12 Mbps)

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

- Flow 1 (95th percentile 4.94 ms)
- Flow 2 (95th percentile 3.49 ms)
- Flow 3 (95th percentile 3.89 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 22:14:01
End at: 2018-04-10 22:14:31
Local clock offset: -6.987 ms
Remote clock offset: -7.097 ms

# Below is generated by plot.py at 2018-04-11 01:38:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.05 Mbit/s
  95th percentile per-packet one-way delay: 3.819 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 50.86 Mbit/s
  95th percentile per-packet one-way delay: 2.191 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 50.35 Mbit/s
  95th percentile per-packet one-way delay: 4.067 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 38.20 Mbit/s
  95th percentile per-packet one-way delay: 2.609 ms
  Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

![Graph showing TCP Vegas Data Link performance](image-url)
Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 22:34:36
End at: 2018-04-10 22:35:06
Local clock offset: -8.187 ms
Remote clock offset: -7.1 ms

# Below is generated by plot.py at 2018-04-11 01:38:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.79 Mbit/s
95th percentile per-packet one-way delay: 4.862 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 5.156 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 48.81 Mbit/s
95th percentile per-packet one-way delay: 4.643 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 3.691 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

End at: 2018-04-10 22:55:34
Local clock offset: -8.003 ms
Remote clock offset: -7.479 ms

# Below is generated by plot.py at 2018-04-11 01:39:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.22 Mbit/s
95th percentile per-packet one-way delay: 4.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.50 Mbit/s
95th percentile per-packet one-way delay: 4.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 3.155 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.50 Mbit/s
95th percentile per-packet one-way delay: 3.245 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-04-10 23:15:32
End at: 2018-04-10 23:16:02
Local clock offset: -7.078 ms
Remote clock offset: -7.116 ms

# Below is generated by plot.py at 2018-04-11 01:39:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.93 Mbit/s
95th percentile per-packet one-way delay: 3.582 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 2.141 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 3.818 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.56 Mbit/s
95th percentile per-packet one-way delay: 2.512 ms
Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-04-10 23:35:58
End at: 2018-04-10 23:36:28
Local clock offset: -7.907 ms
Remote clock offset: -6.979 ms

# Below is generated by plot.py at 2018-04-11 01:39:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.14 Mbit/s
  95th percentile per-packet one-way delay: 6.681 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 19.32 Mbit/s
  95th percentile per-packet one-way delay: 8.464 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 49.02 Mbit/s
  95th percentile per-packet one-way delay: 2.468 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 51.72 Mbit/s
  95th percentile per-packet one-way delay: 9.190 ms
  Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-04-10 23:56:21
End at: 2018-04-10 23:56:51
Local clock offset: -7.251 ms
Remote clock offset: -6.953 ms

# Below is generated by plot.py at 2018-04-11 01:39:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.50 Mbit/s
95th percentile per-packet one-way delay: 4.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.09 Mbit/s
95th percentile per-packet one-way delay: 4.408 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.49 Mbit/s
95th percentile per-packet one-way delay: 2.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 3.181 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 59.09 Mbps)
  - Flow 1 egress (mean 59.09 Mbps)
  - Flow 2 ingress (mean 33.49 Mbps)
  - Flow 2 egress (mean 33.49 Mbps)
  - Flow 3 ingress (mean 36.44 Mbps)
  - Flow 3 egress (mean 36.44 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 4.41 ms)
  - Flow 2 (95th percentile 2.54 ms)
  - Flow 3 (95th percentile 3.18 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-04-11 00:16:45
End at: 2018-04-11 00:17:15
Local clock offset: -6.132 ms
Remote clock offset: -6.794 ms

# Below is generated by plot.py at 2018-04-11 01:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.04 Mbit/s
  95th percentile per-packet one-way delay: 2.288 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 43.63 Mbit/s
  95th percentile per-packet one-way delay: 2.744 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 43.63 Mbit/s
  95th percentile per-packet one-way delay: 1.910 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 43.23 Mbit/s
  95th percentile per-packet one-way delay: 2.070 ms
  Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-04-11 00:37:09
End at: 2018-04-11 00:37:39
Local clock offset: -5.749 ms
Remote clock offset: -6.228 ms

# Below is generated by plot.py at 2018-04-11 01:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.05 Mbit/s
95th percentile per-packet one-way delay: 6.556 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 25.74 Mbit/s
95th percentile per-packet one-way delay: 7.497 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.90 Mbit/s
95th percentile per-packet one-way delay: 5.773 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 48.44 Mbit/s
95th percentile per-packet one-way delay: 5.279 ms
Loss rate: 0.01%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-04-10 21:42:09
End at: 2018-04-10 21:42:39
Local clock offset: -6.885 ms
Remote clock offset: -6.851 ms

# Below is generated by plot.py at 2018-04-11 01:39:51
# Datalink statistics

-- Total of 3 flows:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 23.574 ms
Loss rate: 4.67%
-- Flow 1:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 17.766 ms
Loss rate: 3.24%
-- Flow 2:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 30.002 ms
Loss rate: 6.33%
-- Flow 3:
Average throughput: 20.61 Mbit/s
95th percentile per-packet one-way delay: 31.364 ms
Loss rate: 8.91%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-04-10 22:02:36
End at: 2018-04-10 22:03:06
Local clock offset: -6.723 ms
Remote clock offset: -7.024 ms

# Below is generated by plot.py at 2018-04-11 01:39:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.69 Mbit/s
95th percentile per-packet one-way delay: 23.113 ms
Loss rate: 4.08%
-- Flow 1:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 19.087 ms
Loss rate: 3.33%
-- Flow 2:
Average throughput: 27.78 Mbit/s
95th percentile per-packet one-way delay: 24.165 ms
Loss rate: 4.21%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 32.849 ms
Loss rate: 6.28%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-04-10 22:23:03
End at: 2018-04-10 22:23:33
Local clock offset: -6.499 ms
Remote clock offset: -7.113 ms

# Below is generated by plot.py at 2018-04-11 01:40:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.35 Mbit/s
95th percentile per-packet one-way delay: 53.220 ms
Loss rate: 51.44%
-- Flow 1:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 31.882 ms
Loss rate: 17.19%
-- Flow 2:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 32.161 ms
Loss rate: 29.14%
-- Flow 3:
Average throughput: 42.68 Mbit/s
95th percentile per-packet one-way delay: 60.907 ms
Loss rate: 78.66%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 38.64 Mbit/s)
- Flow 1 egress (mean 31.97 Mbit/s)
- Flow 2 ingress (mean 32.34 Mbit/s)
- Flow 2 egress (mean 23.12 Mbit/s)
- Flow 3 ingress (mean 200.04 Mbit/s)
- Flow 3 egress (mean 42.68 Mbit/s)

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

- Flow 1 (95th percentile 31.88 ms)
- Flow 2 (95th percentile 32.16 ms)
- Flow 3 (95th percentile 68.91 ms)
Run 4: Statistics of Verus

Start at: 2018-04-10 22:43:38
End at: 2018-04-10 22:44:08
Local clock offset: -8.266 ms
Remote clock offset: -7.146 ms

# Below is generated by plot.py at 2018-04-11 01:40:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.74 Mbit/s
95th percentile per-packet one-way delay: 23.885 ms
Loss rate: 4.88%
-- Flow 1:
Average throughput: 33.54 Mbit/s
95th percentile per-packet one-way delay: 17.335 ms
Loss rate: 3.88%
-- Flow 2:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 25.437 ms
Loss rate: 5.37%
-- Flow 3:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 33.448 ms
Loss rate: 7.01%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 34.90 Mbit/s)
- Flow 1 egress (mean 33.54 Mbit/s)
- Flow 2 ingress (mean 32.74 Mbit/s)
- Flow 2 egress (mean 30.98 Mbit/s)
- Flow 3 ingress (mean 34.34 Mbit/s)
- Flow 3 egress (mean 31.93 Mbit/s)

![Graph of per-packet one way delay for different flows.](image-url)

- Flow 1 (95th percentile 17.34 ms)
- Flow 2 (95th percentile 25.44 ms)
- Flow 3 (95th percentile 33.45 ms)
Run 5: Statistics of Verus

Start at: 2018-04-10 23:04:05
End at: 2018-04-10 23:04:35
Local clock offset: -6.368 ms
Remote clock offset: -7.106 ms

# Below is generated by plot.py at 2018-04-11 01:40:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.51 Mbit/s
95th percentile per-packet one-way delay: 48.495 ms
Loss rate: 30.28%
-- Flow 1:
Average throughput: 44.81 Mbit/s
95th percentile per-packet one-way delay: 37.860 ms
Loss rate: 11.03%
-- Flow 2:
Average throughput: 23.82 Mbit/s
95th percentile per-packet one-way delay: 30.928 ms
Loss rate: 42.89%
-- Flow 3:
Average throughput: 41.95 Mbit/s
95th percentile per-packet one-way delay: 57.088 ms
Loss rate: 51.82%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-04-10 23:24:33
End at: 2018-04-10 23:25:03
Local clock offset: -7.546 ms
Remote clock offset: -7.011 ms

# Below is generated by plot.py at 2018-04-11 01:40:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.13 Mbit/s
  95th percentile per-packet one-way delay: 31.416 ms
  Loss rate: 11.09%
-- Flow 1:
  Average throughput: 36.42 Mbit/s
  95th percentile per-packet one-way delay: 25.839 ms
  Loss rate: 6.96%
-- Flow 2:
  Average throughput: 36.54 Mbit/s
  95th percentile per-packet one-way delay: 32.819 ms
  Loss rate: 12.77%
-- Flow 3:
  Average throughput: 19.26 Mbit/s
  95th percentile per-packet one-way delay: 32.536 ms
  Loss rate: 24.64%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-04-10 23:44:58
End at: 2018-04-10 23:45:28
Local clock offset: -7.93 ms
Remote clock offset: -6.951 ms

# Below is generated by plot.py at 2018-04-11 01:40:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 28.909 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 44.92 Mbit/s
95th percentile per-packet one-way delay: 20.628 ms
Loss rate: 3.50%
-- Flow 2:
Average throughput: 22.36 Mbit/s
95th percentile per-packet one-way delay: 30.977 ms
Loss rate: 7.08%
-- Flow 3:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 32.854 ms
Loss rate: 7.17%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 46.58 Mbps)
- Flow 1 egress (mean 44.92 Mbps)
- Flow 2 ingress (mean 24.07 Mbps)
- Flow 2 egress (mean 22.36 Mbps)
- Flow 3 ingress (mean 35.27 Mbps)
- Flow 3 egress (mean 32.73 Mbps)

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

- Flow 1 (95th percentile 20.63 ms)
- Flow 2 (95th percentile 30.98 ms)
- Flow 3 (95th percentile 32.85 ms)
Run 8: Statistics of Verus

Start at: 2018-04-11 00:05:22
End at: 2018-04-11 00:05:52
Local clock offset: -7.384 ms
Remote clock offset: -6.71 ms

# Below is generated by plot.py at 2018-04-11 01:40:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.70 Mbit/s
95th percentile per-packet one-way delay: 28.889 ms
Loss rate: 4.97%
-- Flow 1:
Average throughput: 37.69 Mbit/s
95th percentile per-packet one-way delay: 23.222 ms
Loss rate: 3.40%
-- Flow 2:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 31.521 ms
Loss rate: 7.80%
-- Flow 3:
Average throughput: 26.80 Mbit/s
95th percentile per-packet one-way delay: 32.163 ms
Loss rate: 6.53%
Run 8: Report of Verus — Data Link

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

Key:
- Flow 1 ingress (mean 39.02 Mbit/s)
- Flow 1 egress (mean 37.69 Mbit/s)
- Flow 2 ingress (mean 24.90 Mbit/s)
- Flow 2 egress (mean 22.92 Mbit/s)
- Flow 3 ingress (mean 28.67 Mbit/s)
- Flow 3 egress (mean 26.80 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 23.22 ms)
- Flow 2 (95th percentile 31.52 ms)
- Flow 3 (95th percentile 32.16 ms)
Run 9: Statistics of Verus

Start at: 2018-04-11 00:25:46
End at: 2018-04-11 00:26:16
Local clock offset: -6.696 ms
Remote clock offset: -6.432 ms

# Below is generated by plot.py at 2018-04-11 01:40:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.28 Mbit/s
95th percentile per-packet one-way delay: 32.256 ms
Loss rate: 10.99%
-- Flow 1:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 32.009 ms
Loss rate: 6.90%
-- Flow 2:
Average throughput: 27.59 Mbit/s
95th percentile per-packet one-way delay: 33.217 ms
Loss rate: 12.06%
-- Flow 3:
Average throughput: 15.52 Mbit/s
95th percentile per-packet one-way delay: 32.201 ms
Loss rate: 27.57%
Run 9: Report of Verus — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 34.15 Mbit/s)
- Flow 1 egress (mean 31.78 Mbit/s)
- Flow 2 ingress (mean 31.40 Mbit/s)
- Flow 2 egress (mean 27.59 Mbit/s)
- Flow 3 ingress (mean 21.45 Mbit/s)
- Flow 3 egress (mean 15.52 Mbit/s)

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

- Flow 1 (95th percentile 32.01 ms)
- Flow 2 (95th percentile 33.22 ms)
- Flow 3 (95th percentile 32.20 ms)

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Run 10: Statistics of Verus

Start at: 2018-04-11 00:46:08
End at: 2018-04-11 00:46:38
Local clock offset: -5.475 ms
Remote clock offset: -6.144 ms

# Below is generated by plot.py at 2018-04-11 01:41:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.07 Mbit/s
95th percentile per-packet one-way delay: 31.465 ms
Loss rate: 13.04%
-- Flow 1:
Average throughput: 37.25 Mbit/s
95th percentile per-packet one-way delay: 27.914 ms
Loss rate: 14.18%
-- Flow 2:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 31.613 ms
Loss rate: 9.02%
-- Flow 3:
Average throughput: 20.78 Mbit/s
95th percentile per-packet one-way delay: 31.584 ms
Loss rate: 18.67%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput vs Time](image1)
- Flow 1 ingress (mean 43.40 Mbit/s)
- Flow 1 egress (mean 37.25 Mbit/s)
- Flow 2 ingress (mean 36.27 Mbit/s)
- Flow 2 egress (mean 32.97 Mbit/s)
- Flow 3 ingress (mean 25.55 Mbit/s)
- Flow 3 egress (mean 20.78 Mbit/s)

![Graph 2: Per-packet one way delay vs Time](image2)
- Flow 1 (95th percentile 27.91 ms)
- Flow 2 (95th percentile 31.61 ms)
- Flow 3 (95th percentile 31.58 ms)
Run 1: Statistics of Copa

Start at: 2018-04-10 21:46:36
End at: 2018-04-10 21:47:06
Local clock offset: -6.77 ms
Remote clock offset: -6.916 ms

# Below is generated by plot.py at 2018-04-11 01:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.98 Mbit/s
95th percentile per-packet one-way delay: 29.578 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 60.49 Mbit/s
95th percentile per-packet one-way delay: 28.888 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.29 Mbit/s
95th percentile per-packet one-way delay: 30.826 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 26.17 Mbit/s
95th percentile per-packet one-way delay: 29.549 ms
Loss rate: 0.01%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-04-10 22:07:04
End at: 2018-04-10 22:07:34
Local clock offset: -7.38 ms
Remote clock offset: -7.055 ms

# Below is generated by plot.py at 2018-04-11 01:43:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.82 Mbit/s
  95th percentile per-packet one-way delay: 29.255 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 54.70 Mbit/s
  95th percentile per-packet one-way delay: 28.393 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 36.23 Mbit/s
  95th percentile per-packet one-way delay: 29.704 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 12.00 Mbit/s
  95th percentile per-packet one-way delay: 30.145 ms
  Loss rate: 0.02%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

End at: 2018-04-10 22:28:01
Local clock offset: -7.351 ms
Remote clock offset: -7.083 ms

# Below is generated by plot.py at 2018-04-11 01:43:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.75 Mbit/s
  95th percentile per-packet one-way delay: 28.244 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 77.05 Mbit/s
  95th percentile per-packet one-way delay: 27.412 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 8.67 Mbit/s
  95th percentile per-packet one-way delay: 19.667 ms
  Loss rate: 2.41%
-- Flow 3:
  Average throughput: 29.89 Mbit/s
  95th percentile per-packet one-way delay: 30.899 ms
  Loss rate: 0.01%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-04-10 22:48:06
End at: 2018-04-10 22:48:36
Local clock offset: -7.388 ms
Remote clock offset: -7.211 ms

# Below is generated by plot.py at 2018-04-11 01:43:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 29.660 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 60.64 Mbit/s
95th percentile per-packet one-way delay: 29.669 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 37.50 Mbit/s
95th percentile per-packet one-way delay: 29.436 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 22.57 Mbit/s
95th percentile per-packet one-way delay: 30.247 ms
Loss rate: 0.04%
Run 4: Report of Copa — Data Link

**Throughput (Mb/s)**

![Graph showing throughput over time](image1)

Legend:
- Flow 1 ingress (mean 60.69 Mb/s)
- Flow 1 egress (mean 60.64 Mb/s)
- Flow 2 ingress (mean 37.52 Mb/s)
- Flow 2 egress (mean 37.50 Mb/s)
- Flow 3 ingress (mean 22.57 Mb/s)
- Flow 3 egress (mean 22.57 Mb/s)

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

![Graph showing per-packet one-way delay over time](image2)

Legend:
- Flow 1 (95th percentile 29.67 ms)
- Flow 2 (95th percentile 29.44 ms)
- Flow 3 (95th percentile 30.25 ms)
Run 5: Statistics of Copa

Start at: 2018-04-10 23:08:34
End at: 2018-04-10 23:09:04
Local clock offset: -6.364 ms
Remote clock offset: -7.082 ms

# Below is generated by plot.py at 2018-04-11 01:43:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.45 Mbit/s
  95th percentile per-packet one-way delay: 28.496 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 52.97 Mbit/s
  95th percentile per-packet one-way delay: 28.530 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 44.56 Mbit/s
  95th percentile per-packet one-way delay: 28.382 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 32.52 Mbit/s
  95th percentile per-packet one-way delay: 28.645 ms
  Loss rate: 0.03%
Run 6: Statistics of Copa

Start at: 2018-04-10 23:29:01
End at: 2018-04-10 23:29:31
Local clock offset: -7.771 ms
Remote clock offset: -7.027 ms

# Below is generated by plot.py at 2018-04-11 01:43:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.14 Mbit/s
95th percentile per-packet one-way delay: 29.457 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 37.50 Mbit/s
95th percentile per-packet one-way delay: 28.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.74 Mbit/s
95th percentile per-packet one-way delay: 29.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 30.959 ms
Loss rate: 0.01%
Run 6: Report of Copa — Data Link

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

- Flow 1 ingress (mean 37.50 Mbit/s)
- Flow 1 egress (mean 37.50 Mbit/s)
- Flow 2 ingress (mean 59.75 Mbit/s)
- Flow 2 egress (mean 59.74 Mbit/s)
- Flow 3 ingress (mean 35.72 Mbit/s)
- Flow 3 egress (mean 35.70 Mbit/s)
Run 7: Statistics of Copa

Start at: 2018-04-10 23:49:26
End at: 2018-04-10 23:49:56
Local clock offset: -7.235 ms
Remote clock offset: -6.962 ms

# Below is generated by plot.py at 2018-04-11 01:43:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.70 Mbit/s
  95th percentile per-packet one-way delay: 29.315 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 42.88 Mbit/s
  95th percentile per-packet one-way delay: 28.276 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 53.23 Mbit/s
  95th percentile per-packet one-way delay: 30.202 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 49.38 Mbit/s
  95th percentile per-packet one-way delay: 29.967 ms
  Loss rate: 0.03%
Run 7: Report of Copa — Data Link

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The upper graph shows the throughput (Mbps) over time for different flows, with blue indicating ingress and green indicating egress.

- Flow 1 ingress (mean 42.92 Mbps)
- Flow 1 egress (mean 42.88 Mbps)
- Flow 2 ingress (mean 53.31 Mbps)
- Flow 2 egress (mean 53.23 Mbps)
- Flow 3 ingress (mean 49.42 Mbps)
- Flow 3 egress (mean 49.38 Mbps)

The lower graph displays the per-packet one-way delay (ms) over time for the same flows.

- Flow 1 (95th percentile 28.28 ms)
- Flow 2 (95th percentile 30.20 ms)
- Flow 3 (95th percentile 29.97 ms)
Run 8: Statistics of Copa

Start at: 2018-04-11 00:09:50
End at: 2018-04-11 00:10:20
Local clock offset: -6.382 ms
Remote clock offset: -6.588 ms

# Below is generated by plot.py at 2018-04-11 01:43:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.06 Mbit/s
  95th percentile per-packet one-way delay: 31.584 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 48.97 Mbit/s
  95th percentile per-packet one-way delay: 29.080 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 44.38 Mbit/s
  95th percentile per-packet one-way delay: 34.488 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 40.86 Mbit/s
  95th percentile per-packet one-way delay: 29.216 ms
  Loss rate: 0.03%
Run 8: Report of Copa — Data Link

---

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 48.96 Mbit/s)
- Flow 1 egress (mean 48.97 Mbit/s)
- Flow 2 ingress (mean 44.39 Mbit/s)
- Flow 2 egress (mean 44.38 Mbit/s)
- Flow 3 ingress (mean 40.81 Mbit/s)
- Flow 3 egress (mean 40.86 Mbit/s)

---

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

- Flow 1 (95th percentile 29.08 ms)
- Flow 2 (95th percentile 34.49 ms)
- Flow 3 (95th percentile 29.22 ms)
Run 9: Statistics of Copa

Start at: 2018-04-11 00:30:13
End at: 2018-04-11 00:30:43
Local clock offset: -5.783 ms
Remote clock offset: -6.305 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.95 Mbit/s
95th percentile per-packet one-way delay: 44.318 ms
Loss rate: 35.29%
-- Flow 1:
Average throughput: 25.80 Mbit/s
95th percentile per-packet one-way delay: 5.014 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 95.28 Mbit/s
95th percentile per-packet one-way delay: 45.487 ms
Loss rate: 42.68%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 33.091 ms
Loss rate: 66.67%
Run 9: Report of Copa — Data Link

![Throughput and Delay Graphs](image-url)
Run 10: Statistics of Copa

Start at: 2018-04-11 00:50:36
End at: 2018-04-11 00:51:06
Local clock offset: -4.625 ms
Remote clock offset: -6.173 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.19 Mbit/s
95th percentile per-packet one-way delay: 50.722 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 28.528 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 13.69 Mbit/s
95th percentile per-packet one-way delay: 61.287 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 28.762 ms
Loss rate: 0.06%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-04-10 21:36:31
End at: 2018-04-10 21:37:01
Local clock offset: -7.074 ms
Remote clock offset: -6.883 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 67.167 ms
Loss rate: 15.48%
-- Flow 1:
Average throughput: 60.02 Mbit/s
95th percentile per-packet one-way delay: 29.502 ms
Loss rate: 10.07%
-- Flow 2:
Average throughput: 27.10 Mbit/s
95th percentile per-packet one-way delay: 69.373 ms
Loss rate: 24.83%
-- Flow 3:
Average throughput: 48.98 Mbit/s
95th percentile per-packet one-way delay: 29.604 ms
Loss rate: 22.01%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-04-10 21:56:59
End at: 2018-04-10 21:57:29
Local clock offset: -5.911 ms
Remote clock offset: -6.982 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.42 Mbit/s
  95th percentile per-packet one-way delay: 29.908 ms
  Loss rate: 13.97%
-- Flow 1:
  Average throughput: 60.15 Mbit/s
  95th percentile per-packet one-way delay: 28.756 ms
  Loss rate: 10.29%
-- Flow 2:
  Average throughput: 28.68 Mbit/s
  95th percentile per-packet one-way delay: 28.813 ms
  Loss rate: 23.72%
-- Flow 3:
  Average throughput: 45.83 Mbit/s
  95th percentile per-packet one-way delay: 30.276 ms
  Loss rate: 14.14%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 67.11 Mbps)
- Flow 1 egress (mean 60.15 Mbps)
- Flow 2 ingress (mean 37.64 Mbps)
- Flow 2 egress (mean 28.65 Mbps)
- Flow 3 ingress (mean 53.39 Mbps)
- Flow 3 egress (mean 45.83 Mbps)

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

- Flow 1 (95th percentile 28.76 ms)
- Flow 2 (95th percentile 28.81 ms)
- Flow 3 (95th percentile 30.28 ms)
Run 3: Statistics of FillP

Start at: 2018-04-10 22:17:25
End at: 2018-04-10 22:17:55
Local clock offset: -7.193 ms
Remote clock offset: -7.092 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.38 Mbit/s
95th percentile per-packet one-way delay: 31.040 ms
Loss rate: 14.53%
-- Flow 1:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 29.606 ms
Loss rate: 11.69%
-- Flow 2:
Average throughput: 45.15 Mbit/s
95th percentile per-packet one-way delay: 31.117 ms
Loss rate: 17.34%
-- Flow 3:
Average throughput: 47.10 Mbit/s
95th percentile per-packet one-way delay: 31.111 ms
Loss rate: 17.43%
Run 3: Report of FillP — Data Link

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

![Graph of Per-packet one-way delay (ms)](image2)
Run 4: Statistics of FillP

Start at: 2018-04-10 22:38:00
End at: 2018-04-10 22:38:30
Local clock offset: -7.455 ms
Remote clock offset: -7.138 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.23 Mbit/s
95th percentile per-packet one-way delay: 30.840 ms
Loss rate: 14.36%
-- Flow 1:
Average throughput: 47.89 Mbit/s
95th percentile per-packet one-way delay: 29.441 ms
Loss rate: 11.04%
-- Flow 2:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 30.977 ms
Loss rate: 16.91%
-- Flow 3:
Average throughput: 43.26 Mbit/s
95th percentile per-packet one-way delay: 29.546 ms
Loss rate: 18.87%
Run 4: Report of FillP — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows.]
Run 5: Statistics of FillP

Start at: 2018-04-10 22:58:27
End at: 2018-04-10 22:58:57
Local clock offset: -7.924 ms
Remote clock offset: -7.128 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: 31.789 ms
Loss rate: 15.04%
-- Flow 1:
Average throughput: 56.36 Mbit/s
95th percentile per-packet one-way delay: 31.585 ms
Loss rate: 10.77%
-- Flow 2:
Average throughput: 44.72 Mbit/s
95th percentile per-packet one-way delay: 31.813 ms
Loss rate: 21.05%
-- Flow 3:
Average throughput: 24.99 Mbit/s
95th percentile per-packet one-way delay: 30.360 ms
Loss rate: 19.32%
Run 5: Report of FillP — Data Link

![Graphs showing throughput and per-packet one-way delay](#)
Run 6: Statistics of FillP

Start at: 2018-04-10 23:18:56
End at: 2018-04-10 23:19:26
Local clock offset: -7.236 ms
Remote clock offset: -7.111 ms

# Below is generated by plot.py at 2018-04-11 01:45:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.40 Mbit/s
95th percentile per-packet one-way delay: 30.770 ms
Loss rate: 13.75%
-- Flow 1:
Average throughput: 51.18 Mbit/s
95th percentile per-packet one-way delay: 30.793 ms
Loss rate: 9.82%
-- Flow 2:
Average throughput: 42.61 Mbit/s
95th percentile per-packet one-way delay: 29.424 ms
Loss rate: 17.53%
-- Flow 3:
Average throughput: 44.84 Mbit/s
95th percentile per-packet one-way delay: 30.865 ms
Loss rate: 18.82%
Run 6: Report of FillP — Data Link

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

- Flow 1 ingress (mean 56.80 Mbit/s)
- Flow 1 egress (mean 51.18 Mbit/s)
- Flow 2 ingress (mean 51.72 Mbit/s)
- Flow 2 egress (mean 42.61 Mbit/s)
- Flow 3 ingress (mean 55.24 Mbit/s)
- Flow 3 egress (mean 44.84 Mbit/s)
Run 7: Statistics of FillP

Start at: 2018-04-10 23:39:21
End at: 2018-04-10 23:39:51
Local clock offset: -7.847 ms
Remote clock offset: -6.954 ms

# Below is generated by plot.py at 2018-04-11 01:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 30.973 ms
Loss rate: 12.34%
-- Flow 1:
Average throughput: 50.99 Mbit/s
95th percentile per-packet one-way delay: 31.481 ms
Loss rate: 10.61%
-- Flow 2:
Average throughput: 27.02 Mbit/s
95th percentile per-packet one-way delay: 30.997 ms
Loss rate: 20.08%
-- Flow 3:
Average throughput: 69.44 Mbit/s
95th percentile per-packet one-way delay: 29.527 ms
Loss rate: 9.35%
Run 7: Report of FillP — Data Link

- Flow 1 ingress (mean 57.05 Mbit/s)
- Flow 1 egress (mean 50.99 Mbit/s)
- Flow 2 ingress (mean 33.82 Mbit/s)
- Flow 2 egress (mean 27.02 Mbit/s)
- Flow 3 ingress (mean 76.43 Mbit/s)
- Flow 3 egress (mean 69.44 Mbit/s)

- Flow 1 (95th percentile 31.48 ms)
- Flow 2 (95th percentile 31.00 ms)
- Flow 3 (95th percentile 29.53 ms)
Run 8: Statistics of FillP

Start at: 2018-04-10 23:59:44
End at: 2018-04-11 00:00:14
Local clock offset: -7.025 ms
Remote clock offset: -7.013 ms

# Below is generated by plot.py at 2018-04-11 01:46:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.13 Mbit/s
95th percentile per-packet one-way delay: 31.086 ms
Loss rate: 15.29%
-- Flow 1:
Average throughput: 58.99 Mbit/s
95th percentile per-packet one-way delay: 31.017 ms
Loss rate: 10.01%
-- Flow 2:
Average throughput: 30.94 Mbit/s
95th percentile per-packet one-way delay: 31.274 ms
Loss rate: 24.85%
-- Flow 3:
Average throughput: 43.94 Mbit/s
95th percentile per-packet one-way delay: 31.102 ms
Loss rate: 19.88%
Run 8: Report of FillP — Data Link

[Graphs showing throughput and per-packet one-way delay for different flows over time]
Run 9: Statistics of FillP

Start at: 2018-04-11 00:20:08
End at: 2018-04-11 00:20:38
Local clock offset: -6.052 ms
Remote clock offset: -6.591 ms

# Below is generated by plot.py at 2018-04-11 01:46:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.49 Mbit/s
  95th percentile per-packet one-way delay: 33.874 ms
  Loss rate: 14.86%
-- Flow 1:
  Average throughput: 58.25 Mbit/s
  95th percentile per-packet one-way delay: 30.137 ms
  Loss rate: 10.94%
-- Flow 2:
  Average throughput: 40.09 Mbit/s
  95th percentile per-packet one-way delay: 35.343 ms
  Loss rate: 20.27%
-- Flow 3:
  Average throughput: 28.83 Mbit/s
  95th percentile per-packet one-way delay: 36.143 ms
  Loss rate: 21.05%
Run 9: Report of FillP — Data Link

---

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 65.47 Mbit/s)
- Flow 1 egress (mean 58.25 Mbit/s)
- Flow 2 ingress (mean 50.35 Mbit/s)
- Flow 2 egress (mean 40.09 Mbit/s)
- Flow 3 ingress (mean 36.52 Mbit/s)
- Flow 3 egress (mean 28.83 Mbit/s)

---

Per packet one way delay (ms)

Time (s)

- Flow 1 (95th percentile 30.14 ms)
- Flow 2 (95th percentile 35.34 ms)
- Flow 3 (95th percentile 36.14 ms)

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Run 10: Statistics of FillP

Start at: 2018-04-11 00:40:31
End at: 2018-04-11 00:41:01
Local clock offset: -5.588 ms
Remote clock offset: -25.227 ms

# Below is generated by plot.py at 2018-04-11 01:46:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 12.417 ms
Loss rate: 10.37%
-- Flow 1:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 11.835 ms
Loss rate: 8.87%
-- Flow 2:
Average throughput: 44.49 Mbit/s
95th percentile per-packet one-way delay: 12.943 ms
Loss rate: 13.30%
-- Flow 3:
Average throughput: 79.89 Mbit/s
95th percentile per-packet one-way delay: 15.405 ms
Loss rate: 8.87%
Run 10: Report of FillIP — Data Link

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

- Flow 1 ingress (mean 37.93 Mbit/s)
- Flow 2 ingress (mean 51.32 Mbit/s)
- Flow 3 ingress (mean 81.60 Mbit/s)
- Flow 1 egress (mean 34.57 Mbit/s)
- Flow 2 egress (mean 44.49 Mbit/s)
- Flow 3 egress (mean 79.89 Mbit/s)
Run 1: Statistics of Indigo-1-32

End at: 2018-04-10 21:40:25
Local clock offset: -6.941 ms
Remote clock offset: -6.867 ms

# Below is generated by plot.py at 2018-04-11 01:46:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 12.412 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.07 Mbit/s
95th percentile per-packet one-way delay: 10.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 11.295 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 74.72 Mbit/s
95th percentile per-packet one-way delay: 12.709 ms
Loss rate: 0.01%
Run 1: Report of Indigo-1-32 — Data Link

---

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

- Blue dashed line: Flow 1 ingress (mean 44.08 Mbit/s)
- Blue solid line: Flow 1 egress (mean 44.07 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 43.93 Mbit/s)
- Green solid line: Flow 2 egress (mean 43.91 Mbit/s)
- Black dashed line: Flow 3 ingress (mean 74.78 Mbit/s)
- Black solid line: Flow 3 egress (mean 74.72 Mbit/s)

![Graph 2: Delay vs Time](image)

- Blue circles: Flow 1 (95th percentile 10.22 ms)
- Green circles: Flow 2 (95th percentile 11.29 ms)
- Red circles: Flow 3 (95th percentile 12.71 ms)

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Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 22:00:23
End at: 2018-04-10 22:00:53
Local clock offset: -6.738 ms
Remote clock offset: -7.013 ms

# Below is generated by plot.py at 2018-04-11 01:46:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 12.671 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.73 Mbit/s
95th percentile per-packet one-way delay: 10.551 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.69 Mbit/s
95th percentile per-packet one-way delay: 12.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.79 Mbit/s
95th percentile per-packet one-way delay: 11.707 ms
Loss rate: 0.00%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-10 22:20:49
End at: 2018-04-10 22:21:19
Local clock offset: -7.296 ms
Remote clock offset: -7.098 ms

# Below is generated by plot.py at 2018-04-11 01:47:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 11.076 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 9.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.46 Mbit/s
95th percentile per-packet one-way delay: 10.043 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.79 Mbit/s
95th percentile per-packet one-way delay: 11.332 ms
Loss rate: 0.01%
Run 3: Report of Indigo-1-32 — Data Link
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 22:41:24
End at: 2018-04-10 22:41:54
Local clock offset: -6.757 ms
Remote clock offset: -7.153 ms

# Below is generated by plot.py at 2018-04-11 01:47:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.19 Mbit/s
  95th percentile per-packet one-way delay: 12.947 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 44.29 Mbit/s
  95th percentile per-packet one-way delay: 11.922 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 50.51 Mbit/s
  95th percentile per-packet one-way delay: 12.336 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 59.76 Mbit/s
  95th percentile per-packet one-way delay: 13.285 ms
  Loss rate: 0.01%
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-10 23:01:52
End at: 2018-04-10 23:02:22
Local clock offset: -7.888 ms
Remote clock offset: -7.105 ms

# Below is generated by plot.py at 2018-04-11 01:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 15.024 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.54 Mbit/s
95th percentile per-packet one-way delay: 13.293 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.46 Mbit/s
95th percentile per-packet one-way delay: 15.207 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.84 Mbit/s
95th percentile per-packet one-way delay: 15.829 ms
Loss rate: 0.02%
Run 5: Report of Indigo-1-32 — Data Link
Run 6: Statistics of Indigo-1-32

End at: 2018-04-10 23:22:50
Local clock offset: -8.215 ms
Remote clock offset: -7.023 ms

# Below is generated by plot.py at 2018-04-11 01:48:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 13.197 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.95 Mbit/s
95th percentile per-packet one-way delay: 12.742 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.98 Mbit/s
95th percentile per-packet one-way delay: 12.437 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.90 Mbit/s
95th percentile per-packet one-way delay: 13.611 ms
Loss rate: 0.02%
Run 6: Report of Indigo-1-32 — Data Link

[Graph of network performance over time]

[Graph of network delay over time]

Legend:
- Flow 1 ingress (mean 44.96 Mbit/s)
- Flow 1 egress (mean 44.95 Mbit/s)
- Flow 2 ingress (mean 47.00 Mbit/s)
- Flow 2 egress (mean 46.98 Mbit/s)
- Flow 3 ingress (mean 65.92 Mbit/s)
- Flow 3 egress (mean 65.90 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 12.74 ms)
- Flow 2 (95th percentile 12.44 ms)
- Flow 3 (95th percentile 13.61 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-10 23:42:45
End at: 2018-04-10 23:43:15
Local clock offset: -7.91 ms
Remote clock offset: -6.962 ms

# Below is generated by plot.py at 2018-04-11 01:48:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.39 Mbit/s
95th percentile per-packet one-way delay: 12.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 12.529 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 54.78 Mbit/s
95th percentile per-packet one-way delay: 12.847 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 12.681 ms
Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-11 00:03:09
End at: 2018-04-11 00:03:39
Local clock offset: -5.963 ms
Remote clock offset: -6.791 ms

# Below is generated by plot.py at 2018-04-11 01:48:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.08 Mbit/s
  95th percentile per-packet one-way delay: 10.502 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 66.39 Mbit/s
  95th percentile per-packet one-way delay: 7.286 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 12.79 Mbit/s
  95th percentile per-packet one-way delay: 14.234 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 68.18 Mbit/s
  95th percentile per-packet one-way delay: 8.343 ms
  Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 66.41 Mbps)
  - Flow 1 egress (mean 66.39 Mbps)
  - Flow 2 ingress (mean 12.79 Mbps)
  - Flow 2 egress (mean 12.79 Mbps)
  - Flow 3 ingress (mean 68.22 Mbps)
  - Flow 3 egress (mean 68.18 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 7.29 ms)
  - Flow 2 (95th percentile 14.23 ms)
  - Flow 3 (95th percentile 8.34 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-11 00:23:33
End at: 2018-04-11 00:24:03
Local clock offset: -5.233 ms
Remote clock offset: -6.44 ms

# Below is generated by plot.py at 2018-04-11 01:48:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 13.389 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.30 Mbit/s
95th percentile per-packet one-way delay: 10.786 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 13.746 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 60.09 Mbit/s
95th percentile per-packet one-way delay: 14.306 ms
Loss rate: 0.02%
Run 9: Report of Indigo-1-32 — Data Link

The graphs show the throughput and per-packet one-way delay over time for three flows:

- **Flow 1 ingress (mean 45.31 Mbit/s)**
- **Flow 1 egress (mean 45.30 Mbit/s)**
- **Flow 2 ingress (mean 49.18 Mbit/s)**
- **Flow 2 egress (mean 49.16 Mbit/s)**
- **Flow 3 ingress (mean 60.08 Mbit/s)**
- **Flow 3 egress (mean 60.09 Mbit/s)**

Throughput (Mbps)

Time (s)

Per-packet one-way delay (ms)

Time (s)
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-11 00:43:55
End at: 2018-04-11 00:44:25
Local clock offset: -5.519 ms
Remote clock offset: -6.175 ms

# Below is generated by plot.py at 2018-04-11 01:48:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.57 Mbit/s
95th percentile per-packet one-way delay: 12.904 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.09 Mbit/s
95th percentile per-packet one-way delay: 11.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 43.15 Mbit/s
95th percentile per-packet one-way delay: 12.810 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 67.53 Mbit/s
95th percentile per-packet one-way delay: 13.028 ms
Loss rate: 0.03%
Run 10: Report of Indigo-1-32 — Data Link

[Graph showing throughput and latency over time for different flows, with annotations for each flow's throughput and latency.]
Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 21:47:48
End at: 2018-04-10 21:48:18
Local clock offset: -6.004 ms
Remote clock offset: -6.919 ms

# Below is generated by plot.py at 2018-04-11 01:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.11 Mbit/s
95th percentile per-packet one-way delay: 2.363 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: 2.132 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 2.792 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 3.015 ms
Loss rate: 0.00%
Run 1: Report of Vivace-latency — Data Link

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

Start at: 2018-04-10 22:08:14
End at: 2018-04-10 22:08:44
Local clock offset: -6.583 ms
Remote clock offset: -7.061 ms

# Below is generated by plot.py at 2018-04-11 01:48:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.33 Mbit/s
95th percentile per-packet one-way delay: 3.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 3.070 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.07 Mbit/s
95th percentile per-packet one-way delay: 3.495 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 2.910 ms
Loss rate: 0.00%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

Local clock offset: -7.377 ms
Remote clock offset: -7.095 ms

# Below is generated by plot.py at 2018-04-11 01:49:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.50 Mbit/s
  95th percentile per-packet one-way delay: 36.966 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 6.61 Mbit/s
  95th percentile per-packet one-way delay: 39.453 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 59.03 Mbit/s
  95th percentile per-packet one-way delay: 2.822 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 26.05 Mbit/s
  95th percentile per-packet one-way delay: 1.425 ms
  Loss rate: 0.00%
Run 3: Report of Vivace-latency — Data Link

![Throughput Graph](image1)

- **Flow 1 ingress (mean 6.63 Mbit/s)**
- **Flow 1 egress (mean 6.61 Mbit/s)**
- **Flow 2 ingress (mean 59.03 Mbit/s)**
- **Flow 2 egress (mean 59.03 Mbit/s)**
- **Flow 3 ingress (mean 26.05 Mbit/s)**
- **Flow 3 egress (mean 26.05 Mbit/s)**

![Delay Graph](image2)

- **Flow 1 (95th percentile 39.45 ms)**
- **Flow 2 (95th percentile 2.82 ms)**
- **Flow 3 (95th percentile 1.43 ms)**
Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 22:49:17
End at: 2018-04-10 22:49:47
Local clock offset: -8.053 ms
Remote clock offset: -7.26 ms

# Below is generated by plot.py at 2018-04-11 01:49:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.24 Mbit/s
  95th percentile per-packet one-way delay: 5.215 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 36.89 Mbit/s
  95th percentile per-packet one-way delay: 4.151 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 31.74 Mbit/s
  95th percentile per-packet one-way delay: 6.481 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 22.05 Mbit/s
  95th percentile per-packet one-way delay: 4.063 ms
  Loss rate: 0.00%
Run 4: Report of Vivace-latency — Data Link

[Graph showing throughput and round-trip time over time for different flows]
Run 5: Statistics of Vivace-latency

Start at: 2018-04-10 23:09:45
End at: 2018-04-10 23:10:15
Local clock offset: -7.917 ms
Remote clock offset: -7.082 ms

# Below is generated by plot.py at 2018-04-11 01:49:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.21 Mbit/s
  95th percentile per-packet one-way delay: 12.601 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 36.70 Mbit/s
  95th percentile per-packet one-way delay: 5.289 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 30.73 Mbit/s
  95th percentile per-packet one-way delay: 7.188 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 27.57 Mbit/s
  95th percentile per-packet one-way delay: 31.921 ms
  Loss rate: 0.14%
Run 5: Report of Vivace-latency — Data Link

![Graph of throughput and packet delay over time for different flow rates and error percentages.](image)

Legend:
- Flow 1 ingress (mean 35.71 Mb/s)
- Flow 1 egress (mean 36.70 Mb/s)
- Flow 2 ingress (mean 30.73 Mb/s)
- Flow 2 egress (mean 30.73 Mb/s)
- Flow 3 ingress (mean 27.61 Mb/s)
- Flow 3 egress (mean 27.57 Mb/s)

![Graph of packet delay over time for different error rates.](image)

Legend:
- Flow 1 (95th percentile 5.29 ms)
- Flow 2 (95th percentile 7.19 ms)
- Flow 3 (95th percentile 31.92 ms)
Run 6: Statistics of Vivace-latency

Start at: 2018-04-10 23:30:12
End at: 2018-04-10 23:30:42
Local clock offset: -7.692 ms
Remote clock offset: -6.999 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.45 Mbit/s
95th percentile per-packet one-way delay: 40.487 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 66.58 Mbit/s
95th percentile per-packet one-way delay: 2.875 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.65 Mbit/s
95th percentile per-packet one-way delay: 41.851 ms
Loss rate: 3.67%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 10.805 ms
Loss rate: 0.06%
Run 6: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 66.59 Mbit/s)
- Flow 1 egress (mean 66.58 Mbit/s)
- Flow 2 ingress (mean 7.93 Mbit/s)
- Flow 2 egress (mean 7.95 Mbit/s)
- Flow 3 ingress (mean 23.69 Mbit/s)
- Flow 3 egress (mean 23.66 Mbit/s)

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

- Flow 1 (95th percentile 2.88 ms)
- Flow 2 (95th percentile 41.85 ms)
- Flow 3 (95th percentile 10.80 ms)
Run 7: Statistics of Vivace-latency

Start at: 2018-04-10 23:50:38
End at: 2018-04-10 23:51:08
Local clock offset: -8.827 ms
Remote clock offset: -6.948 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.91 Mbit/s
95th percentile per-packet one-way delay: 31.544 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 37.21 Mbit/s
95th percentile per-packet one-way delay: 10.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 39.755 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 8.444 ms
Loss rate: 0.01%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-04-11 00:11:01
End at: 2018-04-11 00:11:31
Local clock offset: -5.584 ms
Remote clock offset: -8.147 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.25 Mbit/s
95th percentile per-packet one-way delay: 0.588 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 38.53 Mbit/s
95th percentile per-packet one-way delay: -1.023 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.80 Mbit/s
95th percentile per-packet one-way delay: 0.600 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 33.762 ms
Loss rate: 0.51%
Run 9: Statistics of Vivace-latency

Start at: 2018-04-11 00:31:24
End at: 2018-04-11 00:31:54
Local clock offset: -5.816 ms
Remote clock offset: -6.353 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.81 Mbit/s
95th percentile per-packet one-way delay: 3.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 4.586 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 1.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 2.509 ms
Loss rate: 0.00%
Run 9: Report of Vivace-latency — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 35.73 Mbps)
- Flow 1 egress (mean 36.73 Mbps)
- Flow 2 ingress (mean 29.63 Mbps)
- Flow 2 egress (mean 29.62 Mbps)
- Flow 3 ingress (mean 25.43 Mbps)
- Flow 3 egress (mean 25.42 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 4.59 ms)
- Flow 2 (95th percentile 1.77 ms)
- Flow 3 (95th percentile 2.51 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-04-11 00:51:47
End at: 2018-04-11 00:52:17
Local clock offset: -5.355 ms
Remote clock offset: -6.115 ms

# Below is generated by plot.py at 2018-04-11 01:49:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.96 Mbit/s
95th percentile per-packet one-way delay: 24.325 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 1.812 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 3.972 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 36.524 ms
Loss rate: 0.33%
Run 10: Report of Vivace-latency — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 38.54 Mbps)
  - Flow 1 egress (mean 38.54 Mbps)
  - Flow 2 ingress (mean 29.54 Mbps)
  - Flow 2 egress (mean 29.54 Mbps)
  - Flow 3 ingress (mean 11.50 Mbps)
  - Flow 3 egress (mean 11.48 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 1.81 ms)
  - Flow 2 (95th percentile 3.97 ms)
  - Flow 3 (95th percentile 36.52 ms)
Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 21:37:39
End at: 2018-04-10 21:38:09
Local clock offset: -7.738 ms
Remote clock offset: -6.933 ms

# Below is generated by plot.py at 2018-04-11 01:50:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.79 Mbit/s
95th percentile per-packet one-way delay: 32.766 ms
Loss rate: 3.45%
-- Flow 1:
Average throughput: 64.98 Mbit/s
95th percentile per-packet one-way delay: 32.790 ms
Loss rate: 4.20%
-- Flow 2:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 31.311 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 17.22 Mbit/s
95th percentile per-packet one-way delay: 32.719 ms
Loss rate: 1.65%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-04-10 21:58:07
End at: 2018-04-10 21:58:37
Local clock offset: -7.415 ms
Remote clock offset: -7.067 ms

# Below is generated by plot.py at 2018-04-11 01:50:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.91 Mbit/s
95th percentile per-packet one-way delay: 32.392 ms
Loss rate: 5.69%
-- Flow 1:
Average throughput: 72.15 Mbit/s
95th percentile per-packet one-way delay: 31.417 ms
Loss rate: 6.64%
-- Flow 2:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 31.285 ms
Loss rate: 2.33%
-- Flow 3:
Average throughput: 21.62 Mbit/s
95th percentile per-packet one-way delay: 32.780 ms
Loss rate: 3.12%
Run 2: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 77.36 Mbit/s)
- Flow 2 ingress (mean 24.10 Mbit/s)
- Flow 3 ingress (mean 22.31 Mbit/s)
- Flow 1 egress (mean 72.15 Mbit/s)
- Flow 2 egress (mean 23.53 Mbit/s)
- Flow 3 egress (mean 21.62 Mbit/s)

- Flow 1 (95th percentile 31.42 ms)
- Flow 2 (95th percentile 31.29 ms)
- Flow 3 (95th percentile 32.78 ms)
Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 22:18:33
End at: 2018-04-10 22:19:03
Local clock offset: -7.233 ms
Remote clock offset: -7.149 ms

# Below is generated by plot.py at 2018-04-11 01:51:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.89 Mbit/s
95th percentile per-packet one-way delay: 31.891 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 72.09 Mbit/s
95th percentile per-packet one-way delay: 30.625 ms
Loss rate: 4.97%
-- Flow 2:
Average throughput: 28.55 Mbit/s
95th percentile per-packet one-way delay: 32.026 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 32.051 ms
Loss rate: 1.51%
Run 3: Report of Vivace-loss — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 75.94 Mbps)
- Flow 1 egress (mean 72.09 Mbps)
- Flow 2 ingress (mean 28.92 Mbps)
- Flow 2 egress (mean 28.55 Mbps)
- Flow 3 ingress (mean 11.66 Mbps)
- Flow 3 egress (mean 11.66 Mbps)

Per packet one way delay (ms):

- Flow 1 (95th percentile 30.62 ms)
- Flow 2 (95th percentile 32.03 ms)
- Flow 3 (95th percentile 32.05 ms)
Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 22:39:08
End at: 2018-04-10 22:39:38
Local clock offset: -8.276 ms
Remote clock offset: -7.127 ms

# Below is generated by plot.py at 2018-04-11 01:51:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.80 Mbit/s
  95th percentile per-packet one-way delay: 32.857 ms
  Loss rate: 3.18%
-- Flow 1:
  Average throughput: 66.73 Mbit/s
  95th percentile per-packet one-way delay: 32.880 ms
  Loss rate: 3.79%
-- Flow 2:
  Average throughput: 32.77 Mbit/s
  95th percentile per-packet one-way delay: 31.411 ms
  Loss rate: 1.71%
-- Flow 3:
  Average throughput: 19.63 Mbit/s
  95th percentile per-packet one-way delay: 31.410 ms
  Loss rate: 1.68%
Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-04-10 22:59:36
End at: 2018-04-10 23:00:06
Local clock offset: -7.147 ms
Remote clock offset: -7.141 ms

# Below is generated by plot.py at 2018-04-11 01:51:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 32.155 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 67.71 Mbit/s
95th percentile per-packet one-way delay: 32.257 ms
Loss rate: 3.32%
-- Flow 2:
Average throughput: 31.96 Mbit/s
95th percentile per-packet one-way delay: 32.030 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 17.74 Mbit/s
95th percentile per-packet one-way delay: 30.642 ms
Loss rate: 1.98%
Run 5: Report of Vivace-loss — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 70.10 Mbit/s)
- Flow 1 egress (mean 67.71 Mbit/s)
- Flow 2 ingress (mean 32.49 Mbit/s)
- Flow 2 egress (mean 31.96 Mbit/s)
- Flow 3 ingress (mean 18.10 Mbit/s)
- Flow 3 egress (mean 17.74 Mbit/s)

![Latency Graph]

- Flow 1 (95th percentile 32.26 ms)
- Flow 2 (95th percentile 32.03 ms)
- Flow 3 (95th percentile 30.64 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-04-10 23:20:04
End at: 2018-04-10 23:20:34
Local clock offset: -7.414 ms
Remote clock offset: -7.033 ms

# Below is generated by plot.py at 2018-04-11 01:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.04 Mbit/s
95th percentile per-packet one-way delay: 32.103 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 68.81 Mbit/s
95th percentile per-packet one-way delay: 32.125 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 30.35 Mbit/s
95th percentile per-packet one-way delay: 30.716 ms
Loss rate: 2.72%
-- Flow 3:
Average throughput: 18.94 Mbit/s
95th percentile per-packet one-way delay: 30.723 ms
Loss rate: 3.00%
Run 6: Report of Vivace-loss — Data Link
Run 7: Statistics of Vivace-loss

Start at: 2018-04-10 23:40:29
End at: 2018-04-10 23:40:59
Local clock offset: -7.137 ms
Remote clock offset: -6.962 ms

# Below is generated by plot.py at 2018-04-11 01:51:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.07 Mbit/s
95th percentile per-packet one-way delay: 38.048 ms
Loss rate: 3.85%
-- Flow 1:
Average throughput: 70.56 Mbit/s
95th percentile per-packet one-way delay: 29.966 ms
Loss rate: 4.03%
-- Flow 2:
Average throughput: 26.27 Mbit/s
95th percentile per-packet one-way delay: 42.216 ms
Loss rate: 2.81%
-- Flow 3:
Average throughput: 21.42 Mbit/s
95th percentile per-packet one-way delay: 35.042 ms
Loss rate: 4.63%
Run 7: Report of Vivace-loss — Data Link

![Graph showing throughput and packet delay over time for three different flows with mean values provided for each.]

- Flow 1: Ingress (Mean: 73.60 Mbit/s), Egress (Mean: 70.56 Mbit/s)
- Flow 2: Ingress (Mean: 27.05 Mbit/s), Egress (Mean: 26.27 Mbit/s)
- Flow 3: Ingress (Mean: 22.47 Mbit/s), Egress (Mean: 21.42 Mbit/s)

![Graph showing packet delay over time for the same flows with 95th percentile values provided.]

- Flow 1: 95th percentile 29.97 ms
- Flow 2: 95th percentile 42.22 ms
- Flow 3: 95th percentile 35.04 ms
Run 8: Statistics of Vivace-loss

Start at: 2018-04-11 00:00:52
End at: 2018-04-11 00:01:22
Local clock offset: -6.92 ms
Remote clock offset: -6.901 ms

# Below is generated by plot.py at 2018-04-11 01:51:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: 53.991 ms
Loss rate: 5.42%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 32.248 ms
Loss rate: 5.94%
-- Flow 2:
Average throughput: 33.33 Mbit/s
95th percentile per-packet one-way delay: 60.537 ms
Loss rate: 5.24%
-- Flow 3:
Average throughput: 43.06 Mbit/s
95th percentile per-packet one-way delay: 31.291 ms
Loss rate: 3.75%
Run 8: Report of Vivace-loss — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 55.06 Mbps)
  - Flow 1 egress (mean 51.75 Mbps)
  - Flow 2 ingress (mean 35.13 Mbps)
  - Flow 2 egress (mean 33.33 Mbps)
  - Flow 3 ingress (mean 44.81 Mbps)
  - Flow 3 egress (mean 43.06 Mbps)

- **Per-packet round-trip time (ms):**
  - Flow 1 (95th percentile 32.25 ms)
  - Flow 2 (95th percentile 60.54 ms)
  - Flow 3 (95th percentile 31.29 ms)
Run 9: Statistics of Vivace-loss

Start at: 2018-04-11 00:21:17
End at: 2018-04-11 00:21:47
Local clock offset: -6.061 ms
Remote clock offset: -6.415 ms

# Below is generated by plot.py at 2018-04-11 01:52:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.81 Mbit/s
95th percentile per.packet one-way delay: 32.176 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 69.55 Mbit/s
95th percentile per.packet one-way delay: 32.149 ms
Loss rate: 3.38%
-- Flow 2:
Average throughput: 29.02 Mbit/s
95th percentile per.packet one-way delay: 33.500 ms
Loss rate: 2.04%
-- Flow 3:
Average throughput: 18.21 Mbit/s
95th percentile per.packet one-way delay: 32.191 ms
Loss rate: 2.20%
Run 9: Report of Vivace-loss — Data Link

[Graphs showing network performance metrics over time, including throughput and per-packet one-way delay for Flows 1, 2, and 3]
Run 10: Statistics of Vivace-loss

Start at: 2018-04-11 00:41:39
End at: 2018-04-11 00:42:09
Local clock offset: -6.343 ms
Remote clock offset: -6.21 ms

# Below is generated by plot.py at 2018-04-11 01:52:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.87 Mbit/s
95th percentile per-packet one-way delay: 31.508 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 92.22 Mbit/s
95th percentile per-packet one-way delay: 31.458 ms
Loss rate: 3.98%
-- Flow 2:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 70.075 ms
Loss rate: 10.56%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 71.394 ms
Loss rate: 6.70%
Run 10: Report of Vivace-loss — Data Link
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 21:51:14
End at: 2018-04-10 21:51:44
Local clock offset: -7.504 ms
Remote clock offset: -6.944 ms

# Below is generated by plot.py at 2018-04-11 01:52:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.44 Mbit/s
  95th percentile per-packet one-way delay: 32.708 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 59.43 Mbit/s
  95th percentile per-packet one-way delay: 31.287 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 39.87 Mbit/s
  95th percentile per-packet one-way delay: 32.798 ms
  Loss rate: 1.07%
-- Flow 3:
  Average throughput: 22.68 Mbit/s
  95th percentile per-packet one-way delay: 32.838 ms
  Loss rate: 1.56%
Run 1: Report of Vivace-LTE — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 59.72 Mbps)
  - Flow 1 egress (mean 59.43 Mbps)
  - Flow 2 ingress (mean 40.36 Mbps)
  - Flow 2 egress (mean 39.87 Mbps)
  - Flow 3 ingress (mean 23.10 Mbps)
  - Flow 3 egress (mean 22.68 Mbps)

- **Packet delay (ms)**
  - Flow 1 (95th percentile 31.29 ms)
  - Flow 2 (95th percentile 32.80 ms)
  - Flow 3 (95th percentile 32.84 ms)
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 22:11:41
End at: 2018-04-10 22:12:11
Local clock offset: -6.853 ms
Remote clock offset: -7.069 ms

# Below is generated by plot.py at 2018-04-11 01:52:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.76 Mbit/s
  95th percentile per-packet one-way delay: 61.044 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 61.76 Mbit/s
  95th percentile per-packet one-way delay: 31.804 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 38.69 Mbit/s
  95th percentile per-packet one-way delay: 30.510 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 19.17 Mbit/s
  95th percentile per-packet one-way delay: 68.962 ms
  Loss rate: 2.87%
Run 2: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 61.98 Mbit/s)
- Flow 1 egress (mean 61.76 Mbit/s)
- Flow 2 ingress (mean 38.90 Mbit/s)
- Flow 2 egress (mean 38.69 Mbit/s)
- Flow 3 ingress (mean 19.72 Mbit/s)
- Flow 3 egress (mean 19.17 Mbit/s)

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

- Flow 1 (95th percentile 31.80 ms)
- Flow 2 (95th percentile 30.51 ms)
- Flow 3 (95th percentile 68.96 ms)
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-10 22:32:15
End at: 2018-04-10 22:32:45
Local clock offset: -6.659 ms
Remote clock offset: -7.091 ms

# Below is generated by plot.py at 2018-04-11 01:52:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 29.993 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 59.22 Mbit/s
95th percentile per-packet one-way delay: 29.601 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 31.178 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 29.785 ms
Loss rate: 1.46%
Run 3: Report of Vivace-LTE — Data Link

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

Start at: 2018-04-10 22:52:43
Local clock offset: -7.215 ms
Remote clock offset: -7.193 ms

# Below is generated by plot.py at 2018-04-11 01:52:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.83 Mbit/s
95th percentile per-packet one-way delay: 30.605 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 60.75 Mbit/s
95th percentile per-packet one-way delay: 30.497 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 40.00 Mbit/s
95th percentile per-packet one-way delay: 30.508 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 16.57 Mbit/s
95th percentile per-packet one-way delay: 32.070 ms
Loss rate: 1.87%
Run 4: Report of Vivace-LTE — Data Link

![Graph of Throughput vs. Time](image1)

- Flow 1 ingress (mean 61.02 Mbit/s)
- Flow 1 egress (mean 60.75 Mbit/s)
- Flow 2 ingress (mean 40.36 Mbit/s)
- Flow 2 egress (mean 40.00 Mbit/s)
- Flow 3 ingress (mean 16.92 Mbit/s)
- Flow 3 egress (mean 16.57 Mbit/s)

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

- Flow 1 (95th percentile 30.50 ms)
- Flow 2 (95th percentile 30.51 ms)
- Flow 3 (95th percentile 32.07 ms)
Run 5: Statistics of Vivace-LTE

End at: 2018-04-10 23:13:41
Local clock offset: -6.374 ms
Remote clock offset: -7.08 ms

# Below is generated by plot.py at 2018-04-11 01:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 31.132 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 60.68 Mbit/s
95th percentile per-packet one-way delay: 31.160 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 29.703 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 27.91 Mbit/s
95th percentile per-packet one-way delay: 31.242 ms
Loss rate: 1.24%
Run 5: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress (mean 61.02 Mbit/s)**
- **Flow 1 egress (mean 60.68 Mbit/s)**
- **Flow 2 ingress (mean 36.65 Mbit/s)**
- **Flow 2 egress (mean 36.35 Mbit/s)**
- **Flow 3 ingress (mean 28.29 Mbit/s)**
- **Flow 3 egress (mean 27.91 Mbit/s)**

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

- **Flow 1 (95th percentile 31.16 ms)**
- **Flow 2 (95th percentile 29.70 ms)**
- **Flow 3 (95th percentile 31.24 ms)**
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-10 23:33:39
End at: 2018-04-10 23:34:09
Local clock offset: -7.807 ms
Remote clock offset: -6.983 ms

# Below is generated by plot.py at 2018-04-11 01:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.31 Mbit/s
95th percentile per-packet one-way delay: 32.980 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 30.462 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 43.08 Mbit/s
95th percentile per-packet one-way delay: 36.124 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 19.63 Mbit/s
95th percentile per-packet one-way delay: 32.064 ms
Loss rate: 1.36%
Run 6: Report of Vivace-LTE — Data Link

[Graphs showing throughput and per packet one way delay over time]

Throughput (Mbps/s) vs. Time (s)
- Flow 1 ingress (mean 57.40 Mbps/s)
- Flow 1 egress (mean 57.20 Mbps/s)
- Flow 2 ingress (mean 43.43 Mbps/s)
- Flow 2 egress (mean 43.08 Mbps/s)
- Flow 3 ingress (mean 19.89 Mbps/s)
- Flow 3 egress (mean 19.63 Mbps/s)

Per packet one way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 30.46 ms)
- Flow 2 (95th percentile 36.12 ms)
- Flow 3 (95th percentile 32.06 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-10 23:54:03
End at: 2018-04-10 23:54:33
Local clock offset: -7.524 ms
Remote clock offset: -6.984 ms

# Below is generated by plot.py at 2018-04-11 01:53:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.05 Mbit/s
95th percentile per-packet one-way delay: 32.096 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 61.35 Mbit/s
95th percentile per-packet one-way delay: 32.016 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 40.86 Mbit/s
95th percentile per-packet one-way delay: 30.554 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 13.76 Mbit/s
95th percentile per-packet one-way delay: 45.902 ms
Loss rate: 1.00%
Run 7: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 61.51 Mbit/s)
- Flow 1 egress (mean 61.35 Mbit/s)
- Flow 2 ingress (mean 41.04 Mbit/s)
- Flow 2 egress (mean 40.86 Mbit/s)
- Flow 3 ingress (mean 13.90 Mbit/s)
- Flow 3 egress (mean 13.76 Mbit/s)

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

- Flow 1 (95th percentile 32.02 ms)
- Flow 2 (95th percentile 30.55 ms)
- Flow 3 (95th percentile 45.90 ms)
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-11 00:14:26
End at: 2018-04-11 00:14:56
Local clock offset: -6.203 ms
Remote clock offset: -6.491 ms

# Below is generated by plot.py at 2018-04-11 01:53:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: 40.023 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 55.97 Mbit/s
95th percentile per-packet one-way delay: 37.872 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 40.83 Mbit/s
95th percentile per-packet one-way delay: 41.870 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 38.664 ms
Loss rate: 2.63%
Run 8: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 56.45 Mbit/s)
- Flow 1 egress (mean 55.97 Mbit/s)
- Flow 2 ingress (mean 41.51 Mbit/s)
- Flow 2 egress (mean 40.83 Mbit/s)
- Flow 3 ingress (mean 25.04 Mbit/s)
- Flow 3 egress (mean 24.38 Mbit/s)

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

- Flow 1 (95th percentile 37.87 ms)
- Flow 2 (95th percentile 41.87 ms)
- Flow 3 (95th percentile 38.66 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-11 00:34:50
End at: 2018-04-11 00:35:20
Local clock offset: -5.693 ms
Remote clock offset: -6.257 ms

# Below is generated by plot.py at 2018-04-11 01:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 31.800 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 57.93 Mbit/s
95th percentile per-packet one-way delay: 30.346 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 42.00 Mbit/s
95th percentile per-packet one-way delay: 31.909 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 21.53 Mbit/s
95th percentile per-packet one-way delay: 33.291 ms
Loss rate: 0.73%
Run 9: Report of Vivace-LTE — Data Link
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-11 00:55:11
End at: 2018-04-11 00:55:41
Local clock offset: -5.254 ms
Remote clock offset: -24.754 ms

# Below is generated by plot.py at 2018-04-11 01:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.20 Mbit/s
95th percentile per-packet one-way delay: 12.903 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.33 Mbit/s
95th percentile per-packet one-way delay: 11.734 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 43.72 Mbit/s
95th percentile per-packet one-way delay: 13.145 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 13.271 ms
Loss rate: 3.30%
Run 10: Report of Vivace-LTE — Data Link

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

- Blue line: Flow 1 ingress (mean 59.43 Mbps)
- Blue line: Flow 1 egress (mean 59.33 Mbps)
- Green line: Flow 2 ingress (mean 43.84 Mbps)
- Green line: Flow 2 egress (mean 43.72 Mbps)
- Red line: Flow 3 ingress (mean 12.00 Mbps)
- Red line: Flow 3 egress (mean 11.61 Mbps)

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

- Blue line: Flow 1 (95th percentile 11.73 ms)
- Green line: Flow 2 (95th percentile 13.14 ms)
- Red line: Flow 3 (95th percentile 13.27 ms)