Pantheon Report

Generated at 2018-02-03 07:03:35 (UTC).
Data path: Mexico Ethernet (remote) → AWS California 2 Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322c9f4e46ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e898e893e3ec2a6c7cd0a9b
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4df6e0ecdfb90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0e893ad84360c53d89
third_party/koho_cc @ f0f2e693303aee8e808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e282f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2b861da659ba9013db26744ccf993
third_party/pcc @ 1afc9558a0d66d18b623c091a55feca872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1fa82733a86b42f1b8143ec978f3c2ff242
third_party/scream @ c3370fd7bd17265a79aeb34e016ad23f596588
third_party/sourdough @ f1a14bf0f749737f437f61b1eaeab3b267cd681
third_party/sprout @ 6f2efe6e088d91066a9f023d37f5ee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197dd041ace68a42849b2540ad834825f42
test from Mexico Ethernet to AWS California 2 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>
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<tr>
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<td>41.02</td>
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<td>TCP Cubic</td>
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<td>39.20</td>
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<td>QUIC Cubic</td>
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<td>43.22</td>
<td>35.51</td>
<td>34.08</td>
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<td>0.22</td>
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<td>WebRTC media</td>
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<td>2.51</td>
<td>1.58</td>
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<td>Sprout</td>
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<td>14.78</td>
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<td>40.79</td>
<td>29.34</td>
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<td>Verus</td>
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<td>55.67</td>
<td>40.32</td>
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<td>Copa</td>
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<td>45.10</td>
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<td>FillP</td>
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<td>57.61</td>
<td>37.56</td>
<td>30.25</td>
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<td>Indigo-1-32</td>
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<td>26.27</td>
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<td>Vivace-latency</td>
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<td>56.72</td>
<td>29.64</td>
<td>20.41</td>
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<td>Vivace-loss</td>
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<td>53.81</td>
<td>41.19</td>
<td>24.52</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>54.45</td>
<td>34.87</td>
<td>27.56</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-02-02 22:13:34
End at: 2018-02-02 22:14:04
Local clock offset: 0.862 ms
Remote clock offset: -4.762 ms

# Below is generated by plot.py at 2018-02-03 06:38:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.68 Mbit/s
95th percentile per-packet one-way delay: 70.025 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 55.81 Mbit/s
95th percentile per-packet one-way delay: 69.846 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 36.03 Mbit/s
95th percentile per-packet one-way delay: 70.482 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 52.989 ms
Loss rate: 0.97%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-02-02 22:38:14
End at: 2018-02-02 22:38:44
Local clock offset: 1.125 ms
Remote clock offset: -2.484 ms

# Below is generated by plot.py at 2018-02-03 06:38:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.54 Mbit/s
  95th percentile per-packet one-way delay: 69.600 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 56.15 Mbit/s
  95th percentile per-packet one-way delay: 69.493 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 47.55 Mbit/s
  95th percentile per-packet one-way delay: 51.740 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 23.52 Mbit/s
  95th percentile per-packet one-way delay: 73.422 ms
  Loss rate: 1.16%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-02-02 23:02:55
End at: 2018-02-02 23:03:25
Local clock offset: 0.953 ms
Remote clock offset: -3.274 ms

# Below is generated by plot.py at 2018-02-03 06:38:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.99 Mbit/s
  95th percentile per-packet one-way delay: 71.791 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 55.89 Mbit/s
  95th percentile per-packet one-way delay: 71.596 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 36.08 Mbit/s
  95th percentile per-packet one-way delay: 72.232 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 48.67 Mbit/s
  95th percentile per-packet one-way delay: 51.934 ms
  Loss rate: 0.82%
Run 3: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 55.94 Mbps)**
- **Flow 1 egress (mean 55.89 Mbps)**
- **Flow 2 ingress (mean 36.67 Mbps)**
- **Flow 2 egress (mean 36.08 Mbps)**
- **Flow 3 ingress (mean 48.74 Mbps)**
- **Flow 3 egress (mean 48.67 Mbps)**

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

- **Flow 1 (95th percentile 71.60 ms)**
- **Flow 2 (95th percentile 72.23 ms)**
- **Flow 3 (95th percentile 51.93 ms)**
Run 4: Statistics of TCP BBR

Start at: 2018-02-02 23:27:33
End at: 2018-02-02 23:28:03
Local clock offset: 1.155 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-02-03 06:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.29 Mbit/s
95th percentile per-packet one-way delay: 58.884 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 58.58 Mbit/s
95th percentile per-packet one-way delay: 58.818 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 58.897 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 33.09 Mbit/s
95th percentile per-packet one-way delay: 58.948 ms
Loss rate: 0.88%
Run 4: Report of TCP BBR — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 58.54 Mbps)
  - Flow 1 egress (mean 58.58 Mbps)
  - Flow 2 ingress (mean 40.23 Mbps)
  - Flow 2 egress (mean 40.23 Mbps)
  - Flow 3 ingress (mean 33.15 Mbps)
  - Flow 3 egress (mean 33.09 Mbps)

- **Round-trip time (ms):**
  - Flow 1 (95th percentile 58.82 ms)
  - Flow 2 (95th percentile 58.90 ms)
  - Flow 3 (95th percentile 58.95 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-02-02 23:52:12
End at: 2018-02-02 23:52:42
Local clock offset: 1.078 ms
Remote clock offset: -0.871 ms

# Below is generated by plot.py at 2018-02-03 06:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 60.660 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 58.28 Mbit/s
95th percentile per-packet one-way delay: 60.459 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 39.74 Mbit/s
95th percentile per-packet one-way delay: 60.838 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 65.493 ms
Loss rate: 0.98%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-02-03 00:17:48
End at: 2018-02-03 00:18:18
Local clock offset: 0.839 ms
Remote clock offset: 0.972 ms

# Below is generated by plot.py at 2018-02-03 06:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 64.475 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 58.01 Mbit/s
95th percentile per-packet one-way delay: 61.929 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 65.037 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 31.59 Mbit/s
95th percentile per-packet one-way delay: 66.169 ms
Loss rate: 1.19%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-02-03 00:42:29
End at: 2018-02-03 00:42:59
Local clock offset: 0.818 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2018-02-03 06:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.31 Mbit/s
95th percentile per-packet one-way delay: 60.883 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 58.17 Mbit/s
95th percentile per-packet one-way delay: 58.865 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 62.605 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 31.89 Mbit/s
95th percentile per-packet one-way delay: 64.831 ms
Loss rate: 1.12%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-02-03 01:07:25
End at: 2018-02-03 01:07:55
Local clock offset: 0.935 ms
Remote clock offset: -1.431 ms

# Below is generated by plot.py at 2018-02-03 06:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 69.583 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 55.72 Mbit/s
95th percentile per-packet one-way delay: 69.475 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 36.13 Mbit/s
95th percentile per-packet one-way delay: 71.846 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 47.57 Mbit/s
95th percentile per-packet one-way delay: 54.294 ms
Loss rate: 1.03%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-02-03 01:32:15
End at: 2018-02-03 01:32:45
Local clock offset: 1.148 ms
Remote clock offset: -1.459 ms

# Below is generated by plot.py at 2018-02-03 06:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.09 Mbit/s
95th percentile per-packet one-way delay: 69.961 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 55.78 Mbit/s
95th percentile per-packet one-way delay: 69.732 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 47.50 Mbit/s
95th percentile per-packet one-way delay: 52.897 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 74.870 ms
Loss rate: 1.36%
Run 9: Report of TCP BBR — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 10: Statistics of TCP BBR

Start at: 2018-02-03 01:57:01
End at: 2018-02-03 01:57:31
Local clock offset: 1.017 ms
Remote clock offset: -1.878 ms

# Below is generated by plot.py at 2018-02-03 06:39:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.78 Mbit/s
  95th percentile per-packet one-way delay: 72.021 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 56.05 Mbit/s
  95th percentile per-packet one-way delay: 71.930 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 47.30 Mbit/s
  95th percentile per-packet one-way delay: 54.488 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 25.04 Mbit/s
  95th percentile per-packet one-way delay: 75.800 ms
  Loss rate: 1.02%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-02-02 22:06:46
End at: 2018-02-02 22:07:16
Local clock offset: 0.71 ms
Remote clock offset: -7.249 ms

# Below is generated by plot.py at 2018-02-03 06:39:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.49 Mbit/s
95th percentile per-packet one-way delay: 48.183 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 59.09 Mbit/s
95th percentile per-packet one-way delay: 48.883 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 29.78 Mbit/s
95th percentile per-packet one-way delay: 34.307 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 34.99 Mbit/s
95th percentile per-packet one-way delay: 30.915 ms
Loss rate: 0.68%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-02-02 22:31:25
End at: 2018-02-02 22:31:55
Local clock offset: 0.921 ms
Remote clock offset: -3.314 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.54 Mbit/s
95th percentile per-packet one-way delay: 69.895 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 56.76 Mbit/s
95th percentile per-packet one-way delay: 69.842 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.21 Mbit/s
95th percentile per-packet one-way delay: 70.051 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 47.51 Mbit/s
95th percentile per-packet one-way delay: 47.467 ms
Loss rate: 0.80%
Run 3: Statistics of TCP Cubic

Start at: 2018-02-02 22:56:07
End at: 2018-02-02 22:56:37
Local clock offset: 1.044 ms
Remote clock offset: -1.646 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 61.323 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 37.86 Mbit/s
95th percentile per-packet one-way delay: 60.593 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 62.945 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 48.499 ms
Loss rate: 0.55%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-02-02 23:20:44
End at: 2018-02-02 23:21:14
Local clock offset: 1.149 ms
Remote clock offset: -2.418 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.51 Mbit/s
95th percentile per-packet one-way delay: 61.052 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.23 Mbit/s
95th percentile per-packet one-way delay: 60.990 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 61.077 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 61.090 ms
Loss rate: 0.91%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 59.21 Mbit/s)
- Flow 1 egress (mean 59.23 Mbit/s)
- Flow 2 ingress (mean 40.28 Mbit/s)
- Flow 2 egress (mean 40.24 Mbit/s)
- Flow 3 ingress (mean 31.85 Mbit/s)
- Flow 3 egress (mean 31.78 Mbit/s)

![Graph showing packet loss rates](image-url)

- Flow 1 (95th percentile 60.99 ms)
- Flow 2 (95th percentile 61.08 ms)
- Flow 3 (95th percentile 61.09 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-02-02 23:45:21
End at: 2018-02-02 23:45:51
Local clock offset: 1.072 ms
Remote clock offset: 0.999 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.63 Mbit/s
95th percentile per-packet one-way delay: 46.911 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 33.50 Mbit/s
95th percentile per-packet one-way delay: 40.110 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.54 Mbit/s
95th percentile per-packet one-way delay: 42.756 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 38.77 Mbit/s
95th percentile per-packet one-way delay: 50.015 ms
Loss rate: 0.46%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-02-03 00:10:51
End at: 2018-02-03 00:11:21
Local clock offset: 0.95 ms
Remote clock offset: 1.168 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.82 Mbit/s
95th percentile per-packet one-way delay: 31.378 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 28.920 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 21.19 Mbit/s
95th percentile per-packet one-way delay: 32.025 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 23.37 Mbit/s
95th percentile per-packet one-way delay: 31.497 ms
Loss rate: 0.97%
Run 7: Statistics of TCP Cubic

Start at: 2018-02-03 00:35:43
End at: 2018-02-03 00:36:13
Local clock offset: 0.818 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-02-03 06:39:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.02 Mbit/s
95th percentile per-packet one-way delay: 31.984 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 16.76 Mbit/s
95th percentile per-packet one-way delay: 31.572 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 18.93 Mbit/s
95th percentile per-packet one-way delay: 34.543 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 29.26 Mbit/s
95th percentile per-packet one-way delay: 32.249 ms
Loss rate: 0.83%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-02-03 01:00:24
End at: 2018-02-03 01:00:54
Local clock offset: 0.959 ms
Remote clock offset: -1.532 ms

# Below is generated by plot.py at 2018-02-03 06:40:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 31.334 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 28.73 Mbit/s
95th percentile per-packet one-way delay: 30.094 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 19.16 Mbit/s
95th percentile per-packet one-way delay: 31.155 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 36.83 Mbit/s
95th percentile per-packet one-way delay: 35.126 ms
Loss rate: 0.41%
Run 8: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 28.78 Mbps)
- Flow 1 egress (mean 28.73 Mbps)
- Flow 2 ingress (mean 19.18 Mbps)
- Flow 2 egress (mean 19.16 Mbps)
- Flow 3 ingress (mean 36.78 Mbps)
- Flow 3 egress (mean 36.83 Mbps)

![Graph of Per packet end-to-end delay (ms)](image)

- Flow 1 (95th percentile 30.09 ms)
- Flow 2 (95th percentile 31.16 ms)
- Flow 3 (95th percentile 35.13 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-02-03 01:25:27
End at: 2018-02-03 01:25:57
Local clock offset: 1.071 ms
Remote clock offset: -1.28 ms

# Below is generated by plot.py at 2018-02-03 06:40:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.29 Mbit/s
  95th percentile per-packet one-way delay: 52.201 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 44.27 Mbit/s
  95th percentile per-packet one-way delay: 35.269 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 36.06 Mbit/s
  95th percentile per-packet one-way delay: 47.621 ms
  Loss rate: 0.30%
-- Flow 3:
  Average throughput: 45.42 Mbit/s
  95th percentile per-packet one-way delay: 58.436 ms
  Loss rate: 1.31%
Run 10: Statistics of TCP Cubic

Start at: 2018-02-03 01:50:10
End at: 2018-02-03 01:50:40
Local clock offset: 0.927 ms
Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-02-03 06:40:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.87 Mbit/s
95th percentile per-packet one-way delay: 51.960 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 38.128 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 46.828 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 45.48 Mbit/s
95th percentile per-packet one-way delay: 56.540 ms
Loss rate: 0.78%
Run 10: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 43.81 Mbps)
  - Flow 1 egress (mean 43.79 Mbps)
  - Flow 2 ingress (mean 40.64 Mbps)
  - Flow 2 egress (mean 40.64 Mbps)
  - Flow 3 ingress (mean 45.60 Mbps)
  - Flow 3 egress (mean 45.48 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 38.13 ms)
  - Flow 2 (95th percentile 46.83 ms)
  - Flow 3 (95th percentile 56.54 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-02-02 22:24:30
End at: 2018-02-02 22:25:00
Local clock offset: 0.873 ms
Remote clock offset: -3.775 ms

# Below is generated by plot.py at 2018-02-03 06:40:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 55.00 Mbit/s
  95th percentile per-packet one-way delay: 55.109 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 31.89 Mbit/s
  95th percentile per-packet one-way delay: 40.659 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 26.85 Mbit/s
  95th percentile per-packet one-way delay: 56.803 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 15.88 Mbit/s
  95th percentile per-packet one-way delay: 57.100 ms
  Loss rate: 1.22%
Run 1: Report of LEDBAT — Data Link

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

Run 2: Statistics of LEDBAT

Start at: 2018-02-02 22:49:09
End at: 2018-02-02 22:49:39
Local clock offset: 1.09 ms
Remote clock offset: -1.712 ms

# Below is generated by plot.py at 2018-02-03 06:40:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.48 Mbit/s
95th percentile per-packet one-way delay: 41.359 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 34.00 Mbit/s
95th percentile per-packet one-way delay: 27.536 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 53.475 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 56.100 ms
Loss rate: 1.19%
Run 2: Report of LEDBAT — Data Link

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

Legend for throughput graph:
- Flow 1 (mean 34.05 Mbit/s)
- Flow 2 (mean 26.22 Mbit/s)
- Flow 3 (mean 15.19 Mbit/s)

Legend for per-packet round-trip time graph:
- Flow 1 (95th percentile 27.54 ms)
- Flow 2 (95th percentile 53.48 ms)
- Flow 3 (95th percentile 56.10 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-02-02 23:13:50
End at: 2018-02-02 23:14:20
Local clock offset: 1.096 ms
Remote clock offset: -0.627 ms

# Below is generated by plot.py at 2018-02-03 06:40:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.17 Mbit/s
  95th percentile per-packet one-way delay: 67.317 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 48.52 Mbit/s
  95th percentile per-packet one-way delay: 65.130 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 28.06 Mbit/s
  95th percentile per-packet one-way delay: 69.104 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 33.21 Mbit/s
  95th percentile per-packet one-way delay: 46.274 ms
  Loss rate: 1.13%
Run 3: Report of LEDBAT — Data Link

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

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

Start at: 2018-02-02 23:38:23
End at: 2018-02-02 23:38:53
Local clock offset: 1.15 ms
Remote clock offset: -1.508 ms

# Below is generated by plot.py at 2018-02-03 06:40:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 50.22 Mbit/s
  95th percentile per-packet one-way delay: 32.412 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 27.19 Mbit/s
  95th percentile per-packet one-way delay: 30.558 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 24.41 Mbit/s
  95th percentile per-packet one-way delay: 33.670 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 20.64 Mbit/s
  95th percentile per-packet one-way delay: 35.485 ms
  Loss rate: 0.89%
Run 4: Report of LEDBAT — Data Link

![Graph of throughput and per-packet round-trip time](image)

Legend:
- Flow 1 ingress (mean 27.22 Mbit/s)
- Flow 1 egress (mean 27.19 Mbit/s)
- Flow 2 ingress (mean 24.43 Mbit/s)
- Flow 2 egress (mean 24.41 Mbit/s)
- Flow 3 ingress (mean 20.72 Mbit/s)
- Flow 3 egress (mean 20.64 Mbit/s)

Legend for per-packet round-trip time:
- Flow 1 (95th percentile 30.56 ms)
- Flow 2 (95th percentile 33.67 ms)
- Flow 3 (95th percentile 35.48 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-02-03 00:03:22
End at: 2018-02-03 00:03:52
Local clock offset: 1.172 ms
Remote clock offset: -1.011 ms

# Below is generated by plot.py at 2018-02-03 06:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.65 Mbit/s
95th percentile per-packet one-way delay: 33.167 ms
Loss rate: 0.40%

-- Flow 1:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 32.923 ms
Loss rate: 0.38%

-- Flow 2:
Average throughput: 15.13 Mbit/s
95th percentile per-packet one-way delay: 33.425 ms
Loss rate: 0.38%

-- Flow 3:
Average throughput: 13.53 Mbit/s
95th percentile per-packet one-way delay: 33.120 ms
Loss rate: 0.51%
Run 5: Report of LEDBAT — Data Link

![Graph showing throughput and packet size delay](image-url)
Run 6: Statistics of LEDBAT

Start at: 2018-02-03 00:28:42
End at: 2018-02-03 00:29:13
Local clock offset: 0.841 ms
Remote clock offset: 0.476 ms

# Below is generated by plot.py at 2018-02-03 06:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.09 Mbit/s
95th percentile per-packet one-way delay: 29.690 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 19.23 Mbit/s
95th percentile per-packet one-way delay: 29.249 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 23.78 Mbit/s
95th percentile per-packet one-way delay: 29.746 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 18.31 Mbit/s
95th percentile per-packet one-way delay: 30.613 ms
Loss rate: 0.92%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-02-03 00:53:29
End at: 2018-02-03 00:53:59
Local clock offset: 0.768 ms
Remote clock offset: -1.044 ms

# Below is generated by plot.py at 2018-02-03 06:40:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.91 Mbit/s
95th percentile per-packet one-way delay: 31.794 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 22.98 Mbit/s
95th percentile per-packet one-way delay: 31.298 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 18.15 Mbit/s
95th percentile per-packet one-way delay: 29.439 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 17.78 Mbit/s
95th percentile per-packet one-way delay: 42.096 ms
Loss rate: 0.87%
Run 8: Statistics of LEDBAT

Start at: 2018-02-03 01:18:29
End at: 2018-02-03 01:18:59
Local clock offset: 1.005 ms
Remote clock offset: -1.818 ms

# Below is generated by plot.py at 2018-02-03 06:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.08 Mbit/s
95th percentile per-packet one-way delay: 44.971 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 45.382 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 26.59 Mbit/s
95th percentile per-packet one-way delay: 46.232 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 21.96 Mbit/s
95th percentile per-packet one-way delay: 37.113 ms
Loss rate: 1.08%
Run 8: Report of LEDBAT — Data Link

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

- **Flow 1 Ingress** (mean 23.19 Mbps/s)
- **Flow 1 Egress** (mean 23.12 Mbps/s)
- **Flow 2 Ingress** (mean 26.67 Mbps/s)
- **Flow 2 Egress** (mean 26.59 Mbps/s)
- **Flow 3 Ingress** (mean 22.00 Mbps/s)
- **Flow 3 Egress** (mean 21.96 Mbps/s)

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

- **Flow 1** (95th percentile 45.38 ms)
- **Flow 2** (95th percentile 46.23 ms)
- **Flow 3** (95th percentile 37.11 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-02-03 01:43:11
End at: 2018-02-03 01:43:41
Local clock offset: 0.918 ms
Remote clock offset: -2.912 ms

# Below is generated by plot.py at 2018-02-03 06:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.94 Mbit/s
95th percentile per-packet one-way delay: 30.820 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 25.48 Mbit/s
95th percentile per-packet one-way delay: 30.636 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 14.85 Mbit/s
95th percentile per-packet one-way delay: 31.046 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 31.542 ms
Loss rate: 1.09%
Run 10: Statistics of LEDBAT

Start at: 2018-02-03 02:08:13
End at: 2018-02-03 02:08:43
Local clock offset: 1.04 ms
Remote clock offset: 1.04 ms

# Below is generated by plot.py at 2018-02-03 06:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.42 Mbit/s
95th percentile per-packet one-way delay: 42.748 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 26.87 Mbit/s
95th percentile per-packet one-way delay: 44.199 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 20.31 Mbit/s
95th percentile per-packet one-way delay: 52.171 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 30.238 ms
Loss rate: 0.31%
Run 10: Report of LEDBAT — Data Link

![Graph of Throughput and Delay](image-url)
Run 1: Statistics of PCC

Start at: 2018-02-02 22:08:07
End at: 2018-02-02 22:08:37
Local clock offset: 0.738 ms
Remote clock offset: -7.125 ms

# Below is generated by plot.py at 2018-02-03 06:41:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 58.593 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 56.62 Mbit/s
95th percentile per-packet one-way delay: 58.715 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 44.77 Mbit/s
95th percentile per-packet one-way delay: 34.611 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 68.048 ms
Loss rate: 1.21%
Run 1: Report of PCC — Data Link

![Graph of data link throughput and latency over time]

- Flow 1 ingress (mean 56.71 Mbit/s)
- Flow 1 egress (mean 56.62 Mbit/s)
- Flow 2 ingress (mean 44.93 Mbit/s)
- Flow 2 egress (mean 44.77 Mbit/s)
- Flow 3 ingress (mean 16.25 Mbit/s)
- Flow 3 egress (mean 16.18 Mbit/s)

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

- Flow 1 (95th percentile 58.72 ms)
- Flow 2 (95th percentile 34.61 ms)
- Flow 3 (95th percentile 68.05 ms)
Run 2: Statistics of PCC

Start at: 2018-02-02 22:32:47
End at: 2018-02-02 22:33:17
Local clock offset: 0.985 ms
Remote clock offset: -3.23 ms

# Below is generated by plot.py at 2018-02-03 06:42:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.28 Mbit/s
  95th percentile per-packet one-way delay: 66.353 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 57.83 Mbit/s
  95th percentile per-packet one-way delay: 65.709 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 31.05 Mbit/s
  95th percentile per-packet one-way delay: 67.987 ms
  Loss rate: 0.45%
-- Flow 3:
  Average throughput: 42.08 Mbit/s
  95th percentile per-packet one-way delay: 43.051 ms
  Loss rate: 0.89%
Run 2: Report of PCC — Data Link
Run 3: Statistics of PCC

Start at: 2018-02-02 22:57:29
End at: 2018-02-02 22:57:59
Local clock offset: 0.97 ms
Remote clock offset: -3.631 ms

# Below is generated by plot.py at 2018-02-03 06:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.57 Mbit/s
95th percentile per-packet one-way delay: 58.513 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 58.42 Mbit/s
95th percentile per-packet one-way delay: 58.603 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 44.72 Mbit/s
95th percentile per-packet one-way delay: 33.872 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 16.56 Mbit/s
95th percentile per-packet one-way delay: 68.487 ms
Loss rate: 0.97%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-02-02 23:22:06
End at: 2018-02-02 23:22:36
Local clock offset: 1.112 ms
Remote clock offset: -0.35 ms

# Below is generated by plot.py at 2018-02-03 06:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: 57.746 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 52.90 Mbit/s
95th percentile per-packet one-way delay: 56.785 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 38.38 Mbit/s
95th percentile per-packet one-way delay: 57.767 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 29.28 Mbit/s
95th percentile per-packet one-way delay: 58.795 ms
Loss rate: 0.58%
Run 4: Report of PCC — Data Link

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

- **Flow 1 ingress (mean 52.91 Mbit/s)**
- **Flow 1 egress (mean 52.90 Mbit/s)**
- **Flow 2 ingress (mean 38.41 Mbit/s)**
- **Flow 2 egress (mean 38.38 Mbit/s)**
- **Flow 3 ingress (mean 29.29 Mbit/s)**
- **Flow 3 egress (mean 29.28 Mbit/s)**

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

- **Flow 1 (95th percentile 56.78 ms)**
- **Flow 2 (95th percentile 57.77 ms)**
- **Flow 3 (95th percentile 58.80 ms)**
Run 5: Statistics of PCC

Start at: 2018-02-02 23:46:43
End at: 2018-02-02 23:47:13
Local clock offset: 1.165 ms
Remote clock offset: 1.458 ms

# Below is generated by plot.py at 2018-02-03 06:42:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 55.856 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 62.14 Mbit/s
95th percentile per-packet one-way delay: 46.493 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 60.607 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 68.568 ms
Loss rate: 1.23%
Run 5: Report of PCC — Data Link

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

- Flow 1 ingress (mean 62.31 Mbit/s)
- Flow 1 egress (mean 62.14 Mbit/s)
- Flow 2 ingress (mean 35.35 Mbit/s)
- Flow 2 egress (mean 35.27 Mbit/s)
- Flow 3 ingress (mean 15.67 Mbit/s)
- Flow 3 egress (mean 15.59 Mbit/s)

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

- Flow 1 (95th percentile 46.49 ms)
- Flow 2 (95th percentile 60.61 ms)
- Flow 3 (95th percentile 68.57 ms)
Run 6: Statistics of PCC

Start at: 2018-02-03 00:12:11
End at: 2018-02-03 00:12:41
Local clock offset: 1.038 ms
Remote clock offset: -1.044 ms

# Below is generated by plot.py at 2018-02-03 06:42:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 45.422 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 44.837 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 46.639 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 16.81 Mbit/s
95th percentile per-packet one-way delay: 48.282 ms
Loss rate: 1.20%
Run 6: Report of PCC — Data Link

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

**Network Throughput**
- Flow 1 ingress (mean 70.36 Mbit/s)
- Flow 1 egress (mean 69.95 Mbit/s)
- Flow 2 ingress (mean 8.53 Mbit/s)
- Flow 2 egress (mean 8.47 Mbit/s)
- Flow 3 ingress (mean 16.90 Mbit/s)
- Flow 3 egress (mean 16.61 Mbit/s)

**Per-packet one-way delay**
- Flow 1 (95th percentile 44.84 ms)
- Flow 2 (95th percentile 46.64 ms)
- Flow 3 (95th percentile 48.28 ms)
Run 7: Statistics of PCC

Start at: 2018-02-03 00:37:02
End at: 2018-02-03 00:37:32
Local clock offset: 0.729 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-02-03 06:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.58 Mbit/s
95th percentile per-packet one-way delay: 51.295 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 59.70 Mbit/s
95th percentile per-packet one-way delay: 52.146 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 40.91 Mbit/s
95th percentile per-packet one-way delay: 45.186 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 57.885 ms
Loss rate: 0.78%
Run 7: Report of PCC — Data Link

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

- Flow 1 ingress (mean 59.77 Mbps)
- Flow 1 egress (mean 59.70 Mbps)
- Flow 2 ingress (mean 41.02 Mbps)
- Flow 2 egress (mean 40.91 Mbps)
- Flow 3 ingress (mean 8.22 Mbps)
- Flow 3 egress (mean 8.22 Mbps)

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

- Flow 1 (95th percentile 52.15 ms)
- Flow 2 (95th percentile 45.19 ms)
- Flow 3 (95th percentile 57.88 ms)
Run 8: Statistics of PCC

Start at: 2018-02-03 01:01:44
End at: 2018-02-03 01:02:14
Local clock offset: 0.959 ms
Remote clock offset: -1.649 ms

# Below is generated by plot.py at 2018-02-03 06:42:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.57 Mbit/s
95th percentile per-packet one-way delay: 58.956 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 50.52 Mbit/s
95th percentile per-packet one-way delay: 57.794 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 59.320 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 29.15 Mbit/s
95th percentile per-packet one-way delay: 62.218 ms
Loss rate: 0.73%
Run 8: Report of PCC — Data Link

[Graph showing throughput and packet delay over time for different flows.]
Run 9: Statistics of PCC

Start at: 2018-02-03 01:26:49
End at: 2018-02-03 01:27:19
Local clock offset: 1.158 ms
Remote clock offset: -1.833 ms

# Below is generated by plot.py at 2018-02-03 06:43:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 58.507 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 57.386 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 36.42 Mbit/s
95th percentile per-packet one-way delay: 58.607 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 30.42 Mbit/s
95th percentile per-packet one-way delay: 60.684 ms
Loss rate: 0.97%
Run 9: Report of PCC — Data Link

![Throughput Graph](image1)

![Per Packet One Way Delay Graph](image2)
Run 10: Statistics of PCC

Start at: 2018-02-03 01:51:33
End at: 2018-02-03 01:52:03
Local clock offset: 0.931 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-02-03 06:43:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.75 Mbit/s
95th percentile per-packet one-way delay: 51.565 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 59.34 Mbit/s
95th percentile per-packet one-way delay: 50.102 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 43.77 Mbit/s
95th percentile per-packet one-way delay: 53.833 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 11.29 Mbit/s
95th percentile per-packet one-way delay: 39.357 ms
Loss rate: 1.61%
Run 10: Report of PCC — Data Link

![Graph of data link throughput and packet delay over time.]

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 59.38 Mbps)
- Flow 1 egress (mean 59.34 Mbps)
- Flow 2 ingress (mean 43.23 Mbps)
- Flow 2 egress (mean 43.77 Mbps)
- Flow 3 ingress (mean 11.42 Mbps)
- Flow 3 egress (mean 11.29 Mbps)

Packet delay (ms) vs. Time (s)

- Flow 1 (95th percentile 50.10 ms)
- Flow 2 (95th percentile 53.83 ms)
- Flow 3 (95th percentile 39.36 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-02 22:27:14
End at: 2018-02-02 22:27:44
Local clock offset: 0.978 ms
Remote clock offset: -3.526 ms

# Below is generated by plot.py at 2018-02-03 06:43:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.89 Mbit/s
95th percentile per-packet one-way delay: 67.367 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 46.126 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 67.526 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 23.57 Mbit/s
95th percentile per-packet one-way delay: 67.712 ms
Loss rate: 1.14%
Run 1: Report of QUIC Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 56.83 Mbit/s)
Flow 1 egress (mean 56.82 Mbit/s)
Flow 2 ingress (mean 36.66 Mbit/s)
Flow 2 egress (mean 36.68 Mbit/s)
Flow 3 ingress (mean 23.61 Mbit/s)
Flow 3 egress (mean 23.57 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 46.13 ms)
Flow 2 (95th percentile 67.53 ms)
Flow 3 (95th percentile 67.71 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-02 22:51:56
End at: 2018-02-02 22:52:26
Local clock offset: 1.081 ms
Remote clock offset: -1.914 ms

# Below is generated by plot.py at 2018-02-03 06:43:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.02 Mbit/s
95th percentile per-packet one-way delay: 57.092 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 48.91 Mbit/s
95th percentile per-packet one-way delay: 57.101 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 57.014 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 31.08 Mbit/s
95th percentile per-packet one-way delay: 58.239 ms
Loss rate: 0.99%
Run 2: Report of QUIC Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 48.94 Mbit/s)
- Flow 1 egress (mean 48.91 Mbit/s)
- Flow 2 ingress (mean 37.49 Mbit/s)
- Flow 2 egress (mean 37.48 Mbit/s)
- Flow 3 ingress (mean 31.18 Mbit/s)
- Flow 3 egress (mean 31.08 Mbit/s)
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-02 23:16:35
End at: 2018-02-02 23:17:05
Local clock offset: 1.02 ms
Remote clock offset: -2.677 ms

# Below is generated by plot.py at 2018-02-03 06:43:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.26 Mbit/s
  95th percentile per-packet one-way delay: 57.953 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 49.82 Mbit/s
  95th percentile per-packet one-way delay: 57.325 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 41.18 Mbit/s
  95th percentile per-packet one-way delay: 57.921 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 30.74 Mbit/s
  95th percentile per-packet one-way delay: 58.617 ms
  Loss rate: 0.88%
Run 3: Report of QUIC Cubic — Data Link

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

![Graph 2: Packet Round-trip Time vs Time (ms)]

Legend:
- Flow 1 ingress (mean 49.79 Mbps)
- Flow 1 egress (mean 49.82 Mbps)
- Flow 2 ingress (mean 41.17 Mbps)
- Flow 2 egress (mean 41.18 Mbps)
- Flow 3 ingress (mean 30.73 Mbps)
- Flow 3 egress (mean 30.74 Mbps)

Flow 1 (95th percentile 57.33 ms)  Flow 2 (95th percentile 57.92 ms)  Flow 3 (95th percentile 58.62 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-02 23:41:09
End at: 2018-02-02 23:41:39
Local clock offset: 1.158 ms
Remote clock offset: -1.248 ms

# Below is generated by plot.py at 2018-02-03 06:43:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.22 Mbit/s
95th percentile per-packet one-way delay: 45.321 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 41.689 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 24.94 Mbit/s
95th percentile per-packet one-way delay: 43.567 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 47.41 Mbit/s
95th percentile per-packet one-way delay: 48.466 ms
Loss rate: 1.37%
Run 4: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 32.19 Mbps)
- Flow 1 egress (mean 32.08 Mbps)
- Flow 2 ingress (mean 25.06 Mbps)
- Flow 2 egress (mean 24.94 Mbps)
- Flow 3 ingress (mean 47.76 Mbps)
- Flow 3 egress (mean 47.41 Mbps)

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

- Flow 1 (95th percentile 41.69 ms)
- Flow 2 (95th percentile 43.57 ms)
- Flow 3 (95th percentile 48.47 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-03 00:06:17
End at: 2018-02-03 00:06:47
Local clock offset: 1.162 ms
Remote clock offset: -0.851 ms

# Below is generated by plot.py at 2018-02-03 06:43:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.66 Mbit/s
  95th percentile per-packet one-way delay: 47.026 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 33.53 Mbit/s
  95th percentile per-packet one-way delay: 43.463 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 33.64 Mbit/s
  95th percentile per-packet one-way delay: 48.590 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 29.79 Mbit/s
  95th percentile per-packet one-way delay: 34.085 ms
  Loss rate: 0.85%
Run 5: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 33.68 Mbps)
- Flow 1 egress (mean 33.53 Mbps)
- Flow 2 ingress (mean 33.71 Mbps)
- Flow 2 egress (mean 33.64 Mbps)
- Flow 3 ingress (mean 29.88 Mbps)
- Flow 3 egress (mean 29.79 Mbps)

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

- Flow 1 (95th percentile 43.46 ms)
- Flow 2 (95th percentile 48.59 ms)
- Flow 3 (95th percentile 34.09 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-03 00:31:29
End at: 2018-02-03 00:31:59
Local clock offset: 0.84 ms
Remote clock offset: 0.901 ms

# Below is generated by plot.py at 2018-02-03 06:43:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.99 Mbit/s
95th percentile per-packet one-way delay: 45.073 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 35.90 Mbit/s
95th percentile per-packet one-way delay: 40.531 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 32.81 Mbit/s
95th percentile per-packet one-way delay: 48.094 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 34.41 Mbit/s
95th percentile per-packet one-way delay: 49.093 ms
Loss rate: 0.80%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-03 00:56:14
End at: 2018-02-03 00:56:44
Local clock offset: 0.917 ms
Remote clock offset: -3.392 ms

# Below is generated by plot.py at 2018-02-03 06:44:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.91 Mbit/s
95th percentile per-packet one-way delay: 49.775 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 34.19 Mbit/s
95th percentile per-packet one-way delay: 33.888 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 40.21 Mbit/s
95th percentile per-packet one-way delay: 49.177 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 56.846 ms
Loss rate: 1.02%
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 34.36 Mbit/s)
- Flow 1 egress (mean 34.19 Mbit/s)
- Flow 2 ingress (mean 40.34 Mbit/s)
- Flow 2 egress (mean 40.21 Mbit/s)
- Flow 3 ingress (mean 39.78 Mbit/s)
- Flow 3 egress (mean 39.60 Mbit/s)

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

- Flow 1 (95th percentile 33.89 ms)
- Flow 2 (95th percentile 49.18 ms)
- Flow 3 (95th percentile 56.85 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-03 01:21:14
End at: 2018-02-03 01:21:44
Local clock offset: 1.042 ms
Remote clock offset: -4.036 ms

# Below is generated by plot.py at 2018-02-03 06:44:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 54.578 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 42.63 Mbit/s
95th percentile per-packet one-way delay: 48.992 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 55.674 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 37.78 Mbit/s
95th percentile per-packet one-way delay: 61.389 ms
Loss rate: 1.01%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-03 01:45:58  
End at: 2018-02-03 01:46:28  
Local clock offset: 0.913 ms  
Remote clock offset: -0.611 ms

# Below is generated by plot.py at 2018-02-03 06:45:10  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 84.46 Mbit/s  
95th percentile per-packet one-way delay: 65.043 ms  
Loss rate: 0.50%  
-- Flow 1:  
Average throughput: 52.59 Mbit/s  
95th percentile per-packet one-way delay: 46.191 ms  
Loss rate: 0.43%  
-- Flow 2:  
Average throughput: 37.40 Mbit/s  
95th percentile per-packet one-way delay: 66.284 ms  
Loss rate: 0.48%  
-- Flow 3:  
Average throughput: 21.44 Mbit/s  
95th percentile per-packet one-way delay: 67.636 ms  
Loss rate: 1.13%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-03 02:10:56
End at: 2018-02-03 02:11:26
Local clock offset: 1.052 ms
Remote clock offset: -1.34 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.93 Mbit/s
95th percentile per-packet one-way delay: 69.764 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 69.737 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 70.567 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 45.01 Mbit/s
95th percentile per-packet one-way delay: 54.599 ms
Loss rate: 0.93%
Run 10: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 45.81 Mbit/s)
- Flow 1 egress (mean 45.75 Mbit/s)
- Flow 2 ingress (mean 35.38 Mbit/s)
- Flow 2 egress (mean 35.28 Mbit/s)
- Flow 3 ingress (mean 45.16 Mbit/s)
- Flow 3 egress (mean 45.01 Mbit/s)
Run 1: Statistics of SCReAM

Start at: 2018-02-02 22:12:16
End at: 2018-02-02 22:12:46
Local clock offset: 0.874 ms
Remote clock offset: -6.902 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 25.896 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.899 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.899 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.852 ms
  Loss rate: 0.35%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-02-02 22:36:56
End at: 2018-02-02 22:37:26
Local clock offset: 1.01 ms
Remote clock offset: -2.493 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.186 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.192 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.170 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.179 ms
Loss rate: 0.35%
Run 2: Report of SCReAM — Data Link

![Graph of Throughput and Delay vs Time]

**Throughput vs Time**
- 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)

**Delay vs Time**
- Flow 1 (95th percentile 23.19 ms)
- Flow 2 (95th percentile 23.17 ms)
- Flow 3 (95th percentile 23.18 ms)
Run 3: Statistics of SCReAM

Start at: 2018-02-02 23:01:38
End at: 2018-02-02 23:02:08
Local clock offset: 1.048 ms
Remote clock offset: -0.684 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.250 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.244 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.258 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.213 ms
Loss rate: 0.35%
Run 3: Report of SCReAM — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 4: Statistics of SCReAM

Start at: 2018-02-02 23:26:15
End at: 2018-02-02 23:26:45
Local clock offset: 1.029 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 23.632 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.639 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.603 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.622 ms
  Loss rate: 0.35%
Run 4: Report of SCReAM — Data Link

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

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

Flow 1 (95th percentile 23.64 ms)  Flow 2 (95th percentile 23.60 ms)  Flow 3 (95th percentile 23.62 ms)
Run 5: Statistics of SCReAM

Start at: 2018-02-02 23:50:54
End at: 2018-02-02 23:51:24
Local clock offset: 1.085 ms
Remote clock offset: -0.98 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 25.724 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 25.706 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.706 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.738 ms
  Loss rate: 0.35%
Run 5: Report of SCReAM — Data Link

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

Start at: 2018-02-03 00:16:31
End at: 2018-02-03 00:17:01
Local clock offset: 0.956 ms
Remote clock offset: -0.977 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 25.899 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.769 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 25.899 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 28.579 ms
  Loss rate: 0.35%
Run 7: Statistics of SCReAM

Start at: 2018-02-03 00:41:12
End at: 2018-02-03 00:41:42
Local clock offset: 0.848 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 23.634 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.643 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.576 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.633 ms
  Loss rate: 0.35%
Run 7: Report of SCReAM — Data Link

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

- **Throughput**: Variations in throughput are observed as a function of time, with peaks and troughs indicating fluctuations in data transmission rates.
- **Latency**: The latency graph shows similar variations, with some higher spikes indicating increased delay.

**Legend**:
- 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)

**Flow Characteristics**:
- Flow 1: 95th percentile latency 23.64 ms
- Flow 2: 95th percentile latency 23.58 ms
- Flow 3: 95th percentile latency 23.63 ms
Run 8: Statistics of SCReAM

Start at: 2018-02-03 01:06:07
End at: 2018-02-03 01:06:37
Local clock offset: 0.921 ms
Remote clock offset: -1.756 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.37 Mbit/s
  95th percentile per-packet one-way delay: 23.624 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 23.577 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.587 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.632 ms
  Loss rate: 0.35%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-02-03 01:30:58
End at: 2018-02-03 01:31:28
Local clock offset: 1.144 ms
Remote clock offset: -1.144 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 23.317 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.320 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.272 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 23.325 ms
Loss rate: 0.35%
Run 10: Statistics of SCReAM

Start at: 2018-02-03 01:55:43
End at: 2018-02-03 01:56:13
Local clock offset: 1.023 ms
Remote clock offset: 0.537 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 23.240 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.248 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 23.205 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 23.161 ms
  Loss rate: 0.75%
Run 1: Statistics of WebRTC media

Start at: 2018-02-02 22:23:12
End at: 2018-02-02 22:23:42
Local clock offset: 0.855 ms
Remote clock offset: -3.474 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 23.953 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 23.863 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 24.016 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 24.028 ms
Loss rate: 0.55%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-02-02 22:47:52
End at: 2018-02-02 22:48:22
Local clock offset: 1.08 ms
Remote clock offset: -4.324 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 26.530 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 26.424 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 26.544 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 26.753 ms
Loss rate: 0.49%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput and per-packet delay over time for different flows.](image-url)
Run 3: Statistics of WebRTC media

Start at: 2018-02-02 23:12:32
End at: 2018-02-02 23:13:02
Local clock offset: 1.0 ms
Remote clock offset: -2.815 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.38 Mbit/s
  95th percentile per-packet one-way delay: 26.453 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 2.29 Mbit/s
  95th percentile per-packet one-way delay: 26.323 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 1.48 Mbit/s
  95th percentile per-packet one-way delay: 26.518 ms
  Loss rate: 0.31%
-- Flow 3:
  Average throughput: 0.64 Mbit/s
  95th percentile per-packet one-way delay: 26.642 ms
  Loss rate: 0.28%
Run 3: Report of WebRTC media — Data Link

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

Flow 1 ingress (mean 2.29 Mbit/s)  Flow 1 egress (mean 2.29 Mbit/s)
Flow 2 ingress (mean 1.48 Mbit/s)  Flow 2 egress (mean 1.48 Mbit/s)
Flow 3 ingress (mean 0.64 Mbit/s)  Flow 3 egress (mean 0.64 Mbit/s)
Run 4: Statistics of WebRTC media

Start at: 2018-02-02 23:37:06
End at: 2018-02-02 23:37:36
Local clock offset: 1.161 ms
Remote clock offset: 0.596 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 24.617 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 24.382 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 24.673 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 24.896 ms
Loss rate: 0.24%
Run 4: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 2.30 Mbps)
  - Flow 1 egress (mean 2.30 Mbps)
  - Flow 2 ingress (mean 1.58 Mbps)
  - Flow 2 egress (mean 1.58 Mbps)
  - Flow 3 ingress (mean 0.76 Mbps)
  - Flow 3 egress (mean 0.76 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 24.38 ms)
  - Flow 2 (95th percentile 24.67 ms)
  - Flow 3 (95th percentile 24.90 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-02-03 00:02:04
End at: 2018-02-03 00:02:34
Local clock offset: 1.052 ms
Remote clock offset: -0.776 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.33 Mbit/s
95th percentile per-packet one-way delay: 32.728 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 32.677 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 33.025 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 32.353 ms
Loss rate: 0.98%
Run 5: Report of WebRTC media — Data Link

---

**Throughput (Mbps):**

- Flow 1 ingress (mean 2.81 Mbps)
- Flow 1 egress (mean 2.80 Mbps)
- Flow 2 ingress (mean 1.78 Mbps)
- Flow 2 egress (mean 1.78 Mbps)
- Flow 3 ingress (mean 0.78 Mbps)
- Flow 3 egress (mean 0.77 Mbps)

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

- Flow 1 (95th percentile 32.68 ms)
- Flow 2 (95th percentile 33.02 ms)
- Flow 3 (95th percentile 32.35 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-02-03 00:27:25
End at: 2018-02-03 00:27:55
Local clock offset: 0.738 ms
Remote clock offset: 0.615 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.94 Mbit/s
95th percentile per-packet one-way delay: 27.687 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 2.56 Mbit/s
95th percentile per-packet one-way delay: 27.265 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 28.539 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 26.504 ms
Loss rate: 0.61%
Run 6: Report of WebRTC media — Data Link

![Graph of throughput and delay over time]

- Throughput (Mbps):
  - Flow 1 ingress (mean 2.57 Mbps)
  - Flow 1 egress (mean 2.56 Mbps)
  - Flow 2 ingress (mean 1.77 Mbps)
  - Flow 2 egress (mean 1.76 Mbps)
  - Flow 3 ingress (mean 0.64 Mbps)
  - Flow 3 egress (mean 0.64 Mbps)

- Delay (ms):
  - Flow 1 (95th percentile 27.27 ms)
  - Flow 2 (95th percentile 28.54 ms)
  - Flow 3 (95th percentile 26.50 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-02-03 00:52:11
End at: 2018-02-03 00:52:41
Local clock offset: 0.841 ms
Remote clock offset: -0.582 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.03 Mbit/s
  95th percentile per-packet one-way delay: 25.350 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 2.66 Mbit/s
  95th percentile per-packet one-way delay: 25.641 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 1.72 Mbit/s
  95th percentile per-packet one-way delay: 25.027 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 0.67 Mbit/s
  95th percentile per-packet one-way delay: 24.986 ms
  Loss rate: 0.72%
Run 8: Statistics of WebRTC media

Start at: 2018-02-03 01:17:11
End at: 2018-02-03 01:17:41
Local clock offset: 1.028 ms
Remote clock offset: -3.966 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 28.293 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 2.82 Mbit/s
95th percentile per-packet one-way delay: 27.344 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 28.212 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.67 Mbit/s
95th percentile per-packet one-way delay: 30.770 ms
Loss rate: 0.74%
Run 8: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.82 Mbit/s)
- Flow 1 egress (mean 2.82 Mbit/s)
- Flow 2 ingress (mean 1.47 Mbit/s)
- Flow 2 egress (mean 1.47 Mbit/s)
- Flow 3 ingress (mean 0.68 Mbit/s)
- Flow 3 egress (mean 0.67 Mbit/s)
Run 9: Statistics of WebRTC media

Start at: 2018-02-03 01:41:54
End at: 2018-02-03 01:42:24
Local clock offset: 1.025 ms
Remote clock offset: -0.907 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.38 Mbit/s
95th percentile per-packet one-way delay: 24.772 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 24.730 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 24.853 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 24.778 ms
Loss rate: 0.73%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-02-03 02:06:56
End at: 2018-02-03 02:07:26
Local clock offset: 1.054 ms
Remote clock offset: -1.5 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 26.651 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 26.669 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 26.564 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 26.744 ms
Loss rate: 0.50%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-02-02 22:20:31
End at: 2018-02-02 22:21:01
Local clock offset: 0.834 ms
Remote clock offset: -4.182 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.68 Mbit/s
95th percentile per-packet one-way delay: 30.646 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 15.25 Mbit/s
95th percentile per-packet one-way delay: 30.322 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 14.66 Mbit/s
95th percentile per-packet one-way delay: 30.708 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 14.24 Mbit/s
95th percentile per-packet one-way delay: 31.351 ms
Loss rate: 0.72%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-02-02 22:45:11
End at: 2018-02-02 22:45:41
Local clock offset: 0.991 ms
Remote clock offset: -2.102 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 30.00 Mbit/s
  95th percentile per-packet one-way delay: 31.165 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 15.46 Mbit/s
  95th percentile per-packet one-way delay: 30.176 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 14.62 Mbit/s
  95th percentile per-packet one-way delay: 33.798 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 14.66 Mbit/s
  95th percentile per-packet one-way delay: 29.027 ms
  Loss rate: 0.67%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-02-02 23:09:52
End at: 2018-02-02 23:10:22
Local clock offset: 1.085 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 30.34 Mbit/s
  95th percentile per-packet one-way delay: 29.759 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 15.57 Mbit/s
  95th percentile per-packet one-way delay: 28.298 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 15.02 Mbit/s
  95th percentile per-packet one-way delay: 29.936 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 14.53 Mbit/s
  95th percentile per-packet one-way delay: 32.040 ms
  Loss rate: 0.68%
Run 3: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 15.57 Mbps)
- Flow 1 egress (mean 15.57 Mbps)
- Flow 2 ingress (mean 15.02 Mbps)
- Flow 2 egress (mean 15.02 Mbps)
- Flow 3 ingress (mean 14.54 Mbps)
- Flow 3 egress (mean 14.53 Mbps)

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

- Flow 1 (95th percentile 28.30 ms)
- Flow 2 (95th percentile 29.94 ms)
- Flow 3 (95th percentile 32.04 ms)
Run 4: Statistics of Sprout

Start at: 2018-02-02 23:34:27
End at: 2018-02-02 23:34:57
Local clock offset: 1.145 ms
Remote clock offset: 0.852 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 30.03 Mbit/s
  95th percentile per-packet one-way delay: 31.338 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 15.28 Mbit/s
  95th percentile per-packet one-way delay: 33.907 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 14.75 Mbit/s
  95th percentile per-packet one-way delay: 29.346 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 15.03 Mbit/s
  95th percentile per-packet one-way delay: 28.888 ms
  Loss rate: 0.65%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-02-02 23:59:22
End at: 2018-02-02 23:59:52
Local clock offset: 1.093 ms
Remote clock offset: 1.601 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 29.38 Mbit/s
  95th percentile per-packet one-way delay: 31.030 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 14.85 Mbit/s
  95th percentile per-packet one-way delay: 30.715 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 14.56 Mbit/s
  95th percentile per-packet one-way delay: 31.164 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 14.73 Mbit/s
  95th percentile per-packet one-way delay: 31.744 ms
  Loss rate: 0.80%
Run 5: Report of Sprout — Data Link

![Graph: Throughput vs Time](image1)

- Flow 1 ingress (mean 14.85 Mbit/s)
- Flow 1 egress (mean 14.85 Mbit/s)
- Flow 2 ingress (mean 14.56 Mbit/s)
- Flow 2 egress (mean 14.56 Mbit/s)
- Flow 3 ingress (mean 14.77 Mbit/s)
- Flow 3 egress (mean 14.77 Mbit/s)

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

- Flow 1 (95th percentile 30.71 ms)
- Flow 2 (95th percentile 31.16 ms)
- Flow 3 (95th percentile 31.74 ms)
Run 6: Statistics of Sprout

Start at: 2018-02-03 00:24:48
End at: 2018-02-03 00:25:18
Local clock offset: 0.836 ms
Remote clock offset: 0.762 ms

# Below is generated by plot.py at 2018-02-03 06:45:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 30.743 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 15.52 Mbit/s
95th percentile per-packet one-way delay: 28.825 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 14.94 Mbit/s
95th percentile per-packet one-way delay: 32.097 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 14.26 Mbit/s
95th percentile per-packet one-way delay: 31.541 ms
Loss rate: 0.81%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-02-03 00:49:33
End at: 2018-02-03 00:50:03
Local clock offset: 0.834 ms
Remote clock offset: -2.817 ms

# Below is generated by plot.py at 2018-02-03 06:45:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 33.783 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 15.23 Mbit/s
95th percentile per-packet one-way delay: 31.871 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: 35.753 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 14.34 Mbit/s
95th percentile per-packet one-way delay: 34.126 ms
Loss rate: 0.66%
Run 7: Report of Sprout — Data Link

---

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 15.24 Mbps)
- Flow 1 egress (mean 15.23 Mbps)
- Flow 2 ingress (mean 14.33 Mbps)
- Flow 2 egress (mean 14.48 Mbps)
- Flow 3 ingress (mean 14.38 Mbps)
- Flow 3 egress (mean 14.34 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 31.87 ms)
- Flow 2 (95th percentile 35.75 ms)
- Flow 3 (95th percentile 34.13 ms)
Run 8: Statistics of Sprout

Start at: 2018-02-03 01:14:32
End at: 2018-02-03 01:15:02
Local clock offset: 1.113 ms
Remote clock offset: -1.444 ms

# Below is generated by plot.py at 2018-02-03 06:45:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 30.39 Mbit/s
  95th percentile per-packet one-way delay: 28.996 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 15.56 Mbit/s
  95th percentile per-packet one-way delay: 27.754 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 15.04 Mbit/s
  95th percentile per-packet one-way delay: 29.293 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 14.73 Mbit/s
  95th percentile per-packet one-way delay: 30.378 ms
  Loss rate: 0.86%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-02-03 01:39:09
End at: 2018-02-03 01:39:39
Local clock offset: 1.076 ms
Remote clock offset: -1.007 ms

# Below is generated by plot.py at 2018-02-03 06:45:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 29.94 Mbit/s
  95th percentile per-packet one-way delay: 31.530 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 15.46 Mbit/s
  95th percentile per-packet one-way delay: 29.457 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 14.89 Mbit/s
  95th percentile per-packet one-way delay: 31.995 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 13.93 Mbit/s
  95th percentile per-packet one-way delay: 35.703 ms
  Loss rate: 0.92%
Run 9: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 15.47 Mbit/s)
Flow 1 egress (mean 15.46 Mbit/s)
Flow 2 ingress (mean 14.91 Mbit/s)
Flow 2 egress (mean 14.89 Mbit/s)
Flow 3 ingress (mean 13.97 Mbit/s)
Flow 3 egress (mean 13.93 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 29.46 ms)
Flow 2 (95th percentile 32.00 ms)
Flow 3 (95th percentile 35.70 ms)
Run 10: Statistics of Sprout

Start at: 2018-02-03 02:04:16
End at: 2018-02-03 02:04:46
Local clock offset: 1.039 ms
Remote clock offset: -1.694 ms

# Below is generated by plot.py at 2018-02-03 06:45:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 30.16 Mbit/s
  95th percentile per-packet one-way delay: 32.411 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 15.45 Mbit/s
  95th percentile per-packet one-way delay: 31.476 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 14.86 Mbit/s
  95th percentile per-packet one-way delay: 32.509 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 14.68 Mbit/s
  95th percentile per-packet one-way delay: 35.628 ms
  Loss rate: 0.78%
Run 10: Report of Sprout — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-02 22:10:51
End at: 2018-02-02 22:11:21
Local clock offset: 0.836 ms
Remote clock offset: -6.997 ms

# Below is generated by plot.py at 2018-02-03 06:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.70 Mbit/s
95th percentile per-packet one-way delay: 63.917 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 47.68 Mbit/s
95th percentile per-packet one-way delay: 63.927 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 46.87 Mbit/s
95th percentile per-packet one-way delay: 46.669 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: 64.404 ms
Loss rate: 1.08%
Run 1: Report of TaoVA-100x — Data Link

![Graph showing throughput and per packet one way delay over time for different flows.](image-url)
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-02 22:35:31
End at: 2018-02-02 22:36:01
Local clock offset: 1.031 ms
Remote clock offset: -3.024 ms

# Below is generated by plot.py at 2018-02-03 06:47:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.49 Mbit/s
95th percentile per-packet one-way delay: 52.838 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 52.869 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 52.640 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 52.793 ms
Loss rate: 0.93%
Run 2: Report of TaoVA-100x — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)

Legend:
- Flow 1 ingress (mean 49.70 Mbit/s)
- Flow 1 egress (mean 49.70 Mbit/s)
- Flow 2 ingress (mean 39.66 Mbit/s)
- Flow 2 egress (mean 39.64 Mbit/s)
- Flow 3 ingress (mean 31.54 Mbit/s)
- Flow 3 egress (mean 31.46 Mbit/s)

Legend for Packet Delay:
- Flow 1 (95th percentile 52.87 ms)
- Flow 2 (95th percentile 52.64 ms)
- Flow 3 (95th percentile 52.79 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-02 23:00:13
End at: 2018-02-02 23:00:43
Local clock offset: 0.988 ms
Remote clock offset: -1.251 ms

# Below is generated by plot.py at 2018-02-03 06:47:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.97 Mbit/s
95th percentile per-packet one-way delay: 52.740 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 50.34 Mbit/s
95th percentile per-packet one-way delay: 52.674 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 39.42 Mbit/s
95th percentile per-packet one-way delay: 52.579 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 31.41 Mbit/s
95th percentile per-packet one-way delay: 54.232 ms
Loss rate: 1.74%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-02 23:24:50
End at: 2018-02-02 23:25:20
Local clock offset: 1.108 ms
Remote clock offset: 0.171 ms

# Below is generated by plot.py at 2018-02-03 06:47:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 54.934 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 42.892 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 59.651 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 34.11 Mbit/s
95th percentile per-packet one-way delay: 61.040 ms
Loss rate: 0.73%
Run 4: Report of TaoVA-100x — Data Link

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**Throughput (Mbit/s)**

Time (s)

- **Flow 1 ingress (mean 55.15 Mbit/s)**
- **Flow 1 egress (mean 55.14 Mbit/s)**
- **Flow 2 ingress (mean 30.60 Mbit/s)**
- **Flow 2 egress (mean 30.66 Mbit/s)**
- **Flow 3 ingress (mean 34.15 Mbit/s)**
- **Flow 3 egress (mean 34.11 Mbit/s)**

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

Time (s)

- **Flow 1 (95th percentile 42.89 ms)**
- **Flow 2 (95th percentile 59.65 ms)**
- **Flow 3 (95th percentile 61.04 ms)**

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Run 5: Statistics of TaoVA-100x

Start at: 2018-02-02 23:49:28
End at: 2018-02-02 23:49:58
Local clock offset: 1.174 ms
Remote clock offset: 1.04 ms

# Below is generated by plot.py at 2018-02-03 06:47:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.76 Mbit/s
  95th percentile per-packet one-way delay: 56.188 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 49.17 Mbit/s
  95th percentile per-packet one-way delay: 52.810 ms
  Loss rate: 0.55%
-- Flow 2:
  Average throughput: 39.34 Mbit/s
  95th percentile per-packet one-way delay: 56.726 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 31.43 Mbit/s
  95th percentile per-packet one-way delay: 59.780 ms
  Loss rate: 1.86%
Run 5: Report of TaoVA-100x — Data Link

[Graph showing throughput over time]

[Graph showing per-packet one-way delay over time]
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-03 00:15:01
End at: 2018-02-03 00:15:31
Local clock offset: 0.948 ms
Remote clock offset: 0.972 ms

# Below is generated by plot.py at 2018-02-03 06:47:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.30 Mbit/s
  95th percentile per-packet one-way delay: 59.273 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 49.92 Mbit/s
  95th percentile per-packet one-way delay: 57.940 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 39.38 Mbit/s
  95th percentile per-packet one-way delay: 59.324 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 30.86 Mbit/s
  95th percentile per-packet one-way delay: 60.656 ms
  Loss rate: 1.66%
Run 6: Report of TaoVA-100x — Data Link

![Graph of throughput and per-packet one-way delay over time]
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-03 00:39:46
End at: 2018-02-03 00:40:16
Local clock offset: 0.81 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-02-03 06:47:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 52.698 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 52.488 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 52.532 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 56.312 ms
Loss rate: 0.98%
Run 7: Report of TaoVA-100x — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 50.08 Mbit/s)
- Blue solid line: Flow 1 egress (mean 50.06 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 39.52 Mbit/s)
- Green solid line: Flow 2 egress (mean 39.48 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 31.34 Mbit/s)
- Red solid line: Flow 3 egress (mean 31.44 Mbit/s)

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

- Yellow square: Flow 1 (95th percentile 52.49 ms)
- Green circle: Flow 2 (95th percentile 52.53 ms)
- Red triangle: Flow 3 (95th percentile 56.31 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-03 01:04:31
End at: 2018-02-03 01:05:01
Local clock offset: 0.988 ms
Remote clock offset: -3.763 ms

# Below is generated by plot.py at 2018-02-03 06:47:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.18 Mbit/s
  95th percentile per-packet one-way delay: 63.955 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 48.16 Mbit/s
  95th percentile per-packet one-way delay: 63.844 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 46.74 Mbit/s
  95th percentile per-packet one-way delay: 49.825 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 23.95 Mbit/s
  95th percentile per-packet one-way delay: 68.671 ms
  Loss rate: 1.45%
Run 8: Report of TaoVA-100x — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 ingress** (mean 48.27 Mbit/s)
- **Flow 1 egress** (mean 48.16 Mbit/s)
- **Flow 2 ingress** (mean 46.83 Mbit/s)
- **Flow 2 egress** (mean 46.74 Mbit/s)
- **Flow 3 ingress** (mean 24.10 Mbit/s)
- **Flow 3 egress** (mean 23.95 Mbit/s)

![Graph 2: Delay](image2)

- **Flow 1 (95th percentile 63.84 ms)**
- **Flow 2 (95th percentile 49.83 ms)**
- **Flow 3 (95th percentile 68.67 ms)**

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Run 9: Statistics of TaoVA-100x

Start at: 2018-02-03 01:29:33
End at: 2018-02-03 01:30:03
Local clock offset: 1.155 ms
Remote clock offset: -1.228 ms

# Below is generated by plot.py at 2018-02-03 06:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.03 Mbit/s
95th percentile per-packet one-way delay: 52.449 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 49.42 Mbit/s
95th percentile per-packet one-way delay: 52.136 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 39.37 Mbit/s
95th percentile per-packet one-way delay: 52.516 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 31.43 Mbit/s
95th percentile per-packet one-way delay: 57.161 ms
Loss rate: 1.04%
Run 9: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 49.55 Mbit/s)
Flow 1 egress (mean 49.42 Mbit/s)
Flow 2 ingress (mean 39.48 Mbit/s)
Flow 2 egress (mean 39.37 Mbit/s)
Flow 3 ingress (mean 31.55 Mbit/s)
Flow 3 egress (mean 31.43 Mbit/s)

Per packet one way delay [ms]

Time (s)

Flow 1 (95th percentile 52.14 ms)
Flow 2 (95th percentile 52.52 ms)
Flow 3 (95th percentile 57.16 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-03 01:54:18
End at: 2018-02-03 01:54:48
Local clock offset: 0.934 ms
Remote clock offset: -2.161 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.57 Mbit/s
  95th percentile per-packet one-way delay: 63.974 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 47.42 Mbit/s
  95th percentile per-packet one-way delay: 63.867 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 47.03 Mbit/s
  95th percentile per-packet one-way delay: 45.399 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 23.70 Mbit/s
  95th percentile per-packet one-way delay: 67.337 ms
  Loss rate: 1.12%
Run 10: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 47.50 Mbps)
  - Flow 1 egress (mean 47.42 Mbps)
  - Flow 2 ingress (mean 47.11 Mbps)
  - Flow 2 egress (mean 47.03 Mbps)
  - Flow 3 ingress (mean 23.76 Mbps)
  - Flow 3 egress (mean 23.70 Mbps)

- **Packet One Way Delay (ms):**
  - Flow 1 (95th percentile 63.87 ms)
  - Flow 2 (95th percentile 45.40 ms)
  - Flow 3 (95th percentile 67.34 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-02-02 22:21:49
End at: 2018-02-02 22:22:19
Local clock offset: 0.913 ms
Remote clock offset: -3.654 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.17 Mbit/s
95th percentile per-packet one-way delay: 46.858 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 66.64 Mbit/s
95th percentile per-packet one-way delay: 46.739 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 48.051 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 48.349 ms
Loss rate: 0.62%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-02-02 22:46:30  
End at: 2018-02-02 22:47:00  
Local clock offset: 0.982 ms  
Remote clock offset: -2.444 ms

# Below is generated by plot.py at 2018-02-03 06:49:43  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 78.25 Mbit/s  
95th percentile per-packet one-way delay: 48.003 ms  
Loss rate: 0.30%  
-- Flow 1:  
Average throughput: 39.98 Mbit/s  
95th percentile per-packet one-way delay: 46.451 ms  
Loss rate: 0.05%  
-- Flow 2:  
Average throughput: 29.92 Mbit/s  
95th percentile per-packet one-way delay: 47.045 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 55.55 Mbit/s  
95th percentile per-packet one-way delay: 49.300 ms  
Loss rate: 0.85%
Run 2: Report of TCP Vegas — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows.
Flow 1 ingress (mean 39.92 Mbit/s), Flow 1 egress (mean 39.98 Mbit/s), Flow 2 ingress (mean 29.94 Mbit/s), Flow 2 egress (mean 29.92 Mbit/s), Flow 3 ingress (mean 55.68 Mbit/s), Flow 3 egress (mean 55.55 Mbit/s)]
Run 3: Statistics of TCP Vegas

Start at: 2018-02-02 23:11:10
End at: 2018-02-02 23:11:40
Local clock offset: 0.996 ms
Remote clock offset: -0.785 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.31 Mbit/s
95th percentile per-packet one-way delay: 58.880 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 58.46 Mbit/s
95th percentile per-packet one-way delay: 36.753 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 41.07 Mbit/s
95th percentile per-packet one-way delay: 59.021 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 58.945 ms
Loss rate: 0.79%
Run 3: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 4: Statistics of TCP Vegas

Start at: 2018-02-02 23:35:46
End at: 2018-02-02 23:36:16
Local clock offset: 1.135 ms
Remote clock offset: -1.735 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 55.78 Mbit/s
  95th percentile per-packet one-way delay: 32.457 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 32.48 Mbit/s
  95th percentile per-packet one-way delay: 33.818 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 23.46 Mbit/s
  95th percentile per-packet one-way delay: 31.554 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 23.27 Mbit/s
  95th percentile per-packet one-way delay: 31.269 ms
  Loss rate: 0.80%
Run 4: Report of TCP Vegas — Data Link

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

**Throughput Graph**
- Flow 1 ingress (mean 32.55 Mbit/s)
- Flow 1 egress (mean 32.48 Mbit/s)
- Flow 2 ingress (mean 23.49 Mbit/s)
- Flow 2 egress (mean 23.46 Mbit/s)
- Flow 3 ingress (mean 23.33 Mbit/s)
- Flow 3 egress (mean 23.27 Mbit/s)

**Packet Delay Graph**
- Flow 1 (95th percentile 33.82 ms)
- Flow 2 (95th percentile 31.55 ms)
- Flow 3 (95th percentile 31.27 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-02-03 00:00:42
End at: 2018-02-03 00:01:12
Local clock offset: 1.156 ms
Remote clock offset: 1.622 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 37.29 Mbit/s
  95th percentile per-packet one-way delay: 41.011 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 19.94 Mbit/s
  95th percentile per-packet one-way delay: 35.414 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 16.56 Mbit/s
  95th percentile per-packet one-way delay: 41.114 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 19.20 Mbit/s
  95th percentile per-packet one-way delay: 46.208 ms
  Loss rate: 0.48%
Run 5: Report of TCP Vegas — Data Link

![Graph 1: Throughput overtime](image)

- **Flow 1 Ingress** (mean 19.99 Mbit/s)
- **Flow 1 Egress** (mean 19.94 Mbit/s)
- **Flow 2 Ingress** (mean 16.61 Mbit/s)
- **Flow 2 Egress** (mean 16.56 Mbit/s)
- **Flow 3 Ingress** (mean 19.19 Mbit/s)
- **Flow 3 Egress** (mean 19.20 Mbit/s)

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

- **Flow 1 (95th percentile 35.41 ms)**
- **Flow 2 (95th percentile 41.11 ms)**
- **Flow 3 (95th percentile 46.21 ms)**
Run 6: Statistics of TCP Vegas

Start at: 2018-02-03 00:26:06
End at: 2018-02-03 00:26:36
Local clock offset: 0.766 ms
Remote clock offset: -1.35 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.40 Mbit/s
95th percentile per-packet one-way delay: 45.040 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 37.631 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 23.78 Mbit/s
95th percentile per-packet one-way delay: 41.477 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 0.40%
Run 6: Report of TCP Vegas — Data Link

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

**Legend:**
- Flow 1 Ingress (mean 16.88 Mbps/s)
- Flow 1 Egress (mean 16.83 Mbps/s)
- Flow 2 Ingress (mean 23.81 Mbps/s)
- Flow 2 Egress (mean 23.78 Mbps/s)
- Flow 3 Ingress (mean 17.44 Mbps/s)
- Flow 3 Egress (mean 17.47 Mbps/s)

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

**Legend:**
- Flow 1 (95th percentile 37.63 ms)
- Flow 2 (95th percentile 41.48 ms)
- Flow 3 (95th percentile 50.76 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-02-03 00:50:51
End at: 2018-02-03 00:51:21
Local clock offset: 0.816 ms
Remote clock offset: -0.466 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.24 Mbit/s
95th percentile per-packet one-way delay: 39.474 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 22.19 Mbit/s
95th percentile per-packet one-way delay: 40.814 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 36.570 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 14.09 Mbit/s
95th percentile per-packet one-way delay: 28.993 ms
Loss rate: 0.99%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-02-03 01:15:51
End at: 2018-02-03 01:16:21
Local clock offset: 1.114 ms
Remote clock offset: -1.397 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.17 Mbit/s
  95th percentile per-packet one-way delay: 42.765 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 21.58 Mbit/s
  95th percentile per-packet one-way delay: 36.267 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 25.35 Mbit/s
  95th percentile per-packet one-way delay: 43.622 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 32.39 Mbit/s
  95th percentile per-packet one-way delay: 47.230 ms
  Loss rate: 0.62%
Run 8: Report of TCP Vegas — Data Link

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

- Blue line: Flow 1 ingress (mean 21.63 Mbps)
- Blue dotted line: Flow 1 egress (mean 21.58 Mbps)
- Green line: Flow 2 ingress (mean 25.38 Mbps)
- Green dotted line: Flow 2 egress (mean 25.35 Mbps)
- Red line: Flow 3 ingress (mean 32.42 Mbps)
- Red dotted line: Flow 3 egress (mean 32.39 Mbps)

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

- Blue line: Flow 1 (95th percentile 36.27 ms)
- Green line: Flow 2 (95th percentile 43.62 ms)
- Red line: Flow 3 (95th percentile 47.23 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-02-03 01:40:30
End at: 2018-02-03 01:41:00
Local clock offset: 0.937 ms
Remote clock offset: -0.791 ms

# Below is generated by plot.py at 2018-02-03 06:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 40.872 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 27.71 Mbit/s
95th percentile per-packet one-way delay: 37.465 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 29.13 Mbit/s
95th percentile per-packet one-way delay: 40.967 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 42.46 Mbit/s
95th percentile per-packet one-way delay: 42.057 ms
Loss rate: 0.62%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-02-03 02:05:34
End at: 2018-02-03 02:06:04
Local clock offset: 1.02 ms
Remote clock offset: 0.649 ms

# Below is generated by plot.py at 2018-02-03 06:49:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.96 Mbit/s
  95th percentile per-packet one-way delay: 40.777 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 40.23 Mbit/s
  95th percentile per-packet one-way delay: 35.366 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 36.79 Mbit/s
  95th percentile per-packet one-way delay: 47.181 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 55.20 Mbit/s
  95th percentile per-packet one-way delay: 43.475 ms
  Loss rate: 0.27%
Run 10: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 40.26 Mbit/s)
- Flow 1 egress (mean 40.23 Mbit/s)
- Flow 2 ingress (mean 36.77 Mbit/s)
- Flow 2 egress (mean 36.79 Mbit/s)
- Flow 3 ingress (mean 55.32 Mbit/s)
- Flow 3 egress (mean 55.20 Mbit/s)
Run 1: Statistics of Verus

Start at: 2018-02-02 22:17:44
End at: 2018-02-02 22:18:14
Local clock offset: 0.908 ms
Remote clock offset: -3.873 ms

# Below is generated by plot.py at 2018-02-03 06:50:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.49 Mbit/s
95th percentile per-packet one-way delay: 57.538 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 54.27 Mbit/s
95th percentile per-packet one-way delay: 56.314 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 57.598 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 28.87 Mbit/s
95th percentile per-packet one-way delay: 57.724 ms
Loss rate: 1.49%
Run 1: Report of Verus — Data Link

![Graph showing data link performance over time with throughput and per-packet one-way delay analysis.](image-url)
Run 2: Statistics of Verus

Start at: 2018-02-02 22:42:23
End at: 2018-02-02 22:42:53
Local clock offset: 1.092 ms
Remote clock offset: -2.246 ms

# Below is generated by plot.py at 2018-02-03 06:50:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.07 Mbit/s
95th percentile per-packet one-way delay: 59.220 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 55.16 Mbit/s
95th percentile per-packet one-way delay: 58.232 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 38.57 Mbit/s
95th percentile per-packet one-way delay: 59.800 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 63.772 ms
Loss rate: 1.20%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 55.26 Mbit/s)
- Flow 1 egress (mean 55.16 Mbit/s)
- Flow 2 ingress (mean 38.65 Mbit/s)
- Flow 2 egress (mean 38.57 Mbit/s)
- Flow 3 ingress (mean 31.16 Mbit/s)
- Flow 3 egress (mean 31.01 Mbit/s)
Run 3: Statistics of Verus

Start at: 2018-02-02 23:07:05
End at: 2018-02-02 23:07:35
Local clock offset: 0.99 ms
Remote clock offset: -2.937 ms

# Below is generated by plot.py at 2018-02-03 06:50:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.01 Mbit/s
  95th percentile per-packet one-way delay: 60.580 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 56.78 Mbit/s
  95th percentile per-packet one-way delay: 60.537 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 39.44 Mbit/s
  95th percentile per-packet one-way delay: 60.627 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 30.24 Mbit/s
  95th percentile per-packet one-way delay: 60.550 ms
  Loss rate: 1.01%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-02-02 23:31:41
End at: 2018-02-02 23:32:11
Local clock offset: 1.058 ms
Remote clock offset: -1.924 ms

# Below is generated by plot.py at 2018-02-03 06:50:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.74 Mbit/s
95th percentile per-packet one-way delay: 60.628 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 56.74 Mbit/s
95th percentile per-packet one-way delay: 60.608 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 60.614 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 33.34 Mbit/s
95th percentile per-packet one-way delay: 61.171 ms
Loss rate: 0.97%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-02-02 23:56:31
End at: 2018-02-02 23:57:01
Local clock offset: 1.081 ms
Remote clock offset: 1.69 ms

# Below is generated by plot.py at 2018-02-03 06:50:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.71 Mbit/s
  95th percentile per-packet one-way delay: 62.225 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 51.17 Mbit/s
  95th percentile per-packet one-way delay: 57.975 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 42.93 Mbit/s
  95th percentile per-packet one-way delay: 62.956 ms
  Loss rate: 0.69%
-- Flow 3:
  Average throughput: 30.23 Mbit/s
  95th percentile per-packet one-way delay: 65.035 ms
  Loss rate: 1.25%
Run 5: Report of Verus — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 51.39 Mbps)
  - Flow 1 egress (mean 51.17 Mbps)
  - Flow 2 ingress (mean 43.07 Mbps)
  - Flow 2 egress (mean 42.93 Mbps)
  - Flow 3 ingress (mean 30.46 Mbps)
  - Flow 3 egress (mean 30.23 Mbps)

- Per packet one way delay (ms):
  - Flow 1 (95th percentile 57.98 ms)
  - Flow 2 (95th percentile 62.96 ms)
  - Flow 3 (95th percentile 65.03 ms)
Run 6: Statistics of Verus

Start at: 2018-02-03 00:22:00
End at: 2018-02-03 00:22:30
Local clock offset: 0.855 ms
Remote clock offset: 0.876 ms

# Below is generated by plot.py at 2018-02-03 06:51:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.07 Mbit/s
  95th percentile per-packet one-way delay: 59.720 ms
  Loss rate: 0.85%
-- Flow 1:
  Average throughput: 53.32 Mbit/s
  95th percentile per-packet one-way delay: 58.522 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 41.60 Mbit/s
  95th percentile per-packet one-way delay: 60.043 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 30.47 Mbit/s
  95th percentile per-packet one-way delay: 65.409 ms
  Loss rate: 1.59%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-02-03 00:46:41
End at: 2018-02-03 00:47:11
Local clock offset: 0.731 ms
Remote clock offset: -0.453 ms

# Below is generated by plot.py at 2018-02-03 06:51:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.65 Mbit/s
  95th percentile per-packet one-way delay: 57.698 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 54.35 Mbit/s
  95th percentile per-packet one-way delay: 56.917 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 39.99 Mbit/s
  95th percentile per-packet one-way delay: 57.730 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 32.60 Mbit/s
  95th percentile per-packet one-way delay: 61.347 ms
  Loss rate: 1.10%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 54.38 Mbit/s)
- Flow 1 egress (mean 54.35 Mbit/s)
- Flow 2 ingress (mean 40.08 Mbit/s)
- Flow 2 egress (mean 39.99 Mbit/s)
- Flow 3 ingress (mean 32.82 Mbit/s)
- Flow 3 egress (mean 32.60 Mbit/s)

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

- Flow 1 (95th percentile 56.92 ms)
- Flow 2 (95th percentile 57.73 ms)
- Flow 3 (95th percentile 61.35 ms)
Run 8: Statistics of Verus

Start at: 2018-02-03 01:11:43
End at: 2018-02-03 01:12:13
Local clock offset: 1.061 ms
Remote clock offset: -1.877 ms

# Below is generated by plot.py at 2018-02-03 06:51:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.64 Mbit/s
95th percentile per-packet one-way delay: 58.537 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 58.06 Mbit/s
95th percentile per-packet one-way delay: 58.466 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 38.09 Mbit/s
95th percentile per-packet one-way delay: 58.555 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 63.347 ms
Loss rate: 1.03%
Run 8: Report of Verus — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 9: Statistics of Verus

Start at: 2018-02-03 01:36:23
End at: 2018-02-03 01:36:53
Local clock offset: 1.095 ms
Remote clock offset: -0.828 ms

# Below is generated by plot.py at 2018-02-03 06:51:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 58.234 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: 58.106 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 36.82 Mbit/s
95th percentile per-packet one-way delay: 58.252 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 31.90 Mbit/s
95th percentile per-packet one-way delay: 61.639 ms
Loss rate: 1.15%
Run 9: Report of Verus — Data Link

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

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

Start at: 2018-02-03 02:01:20
End at: 2018-02-03 02:01:50
Local clock offset: 0.948 ms
Remote clock offset: 0.699 ms

# Below is generated by plot.py at 2018-02-03 06:51:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.44 Mbit/s
95th percentile per-packet one-way delay: 65.608 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 59.49 Mbit/s
95th percentile per-packet one-way delay: 62.782 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 44.96 Mbit/s
95th percentile per-packet one-way delay: 51.084 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 17.68 Mbit/s
95th percentile per-packet one-way delay: 71.316 ms
Loss rate: 0.17%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-02-02 22:28:37
End at: 2018-02-02 22:29:07
Local clock offset: 0.963 ms
Remote clock offset: -3.481 ms

# Below is generated by plot.py at 2018-02-03 06:52:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.00 Mbit/s
  95th percentile per-packet one-way delay: 24.632 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 47.88 Mbit/s
  95th percentile per-packet one-way delay: 24.319 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 38.94 Mbit/s
  95th percentile per-packet one-way delay: 25.781 ms
  Loss rate: 0.24%
-- Flow 3:
  Average throughput: 27.83 Mbit/s
  95th percentile per-packet one-way delay: 24.523 ms
  Loss rate: 0.63%
Run 1: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 47.85 Mbps)
  - Flow 1 egress (mean 47.88 Mbps)
  - Flow 2 ingress (mean 38.93 Mbps)
  - Flow 2 egress (mean 38.94 Mbps)
  - Flow 3 ingress (mean 27.85 Mbps)
  - Flow 3 egress (mean 27.83 Mbps)

- **Packet one-way delay (ms):**
  - Flow 1 (95th percentile 24.32 ms)
  - Flow 2 (95th percentile 25.78 ms)
  - Flow 3 (95th percentile 24.52 ms)
Run 2: Statistics of Copa

Start at: 2018-02-02 22:53:19
End at: 2018-02-02 22:53:49
Local clock offset: 0.978 ms
Remote clock offset: -1.72 ms

# Below is generated by plot.py at 2018-02-03 06:52:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.12 Mbit/s
95th percentile per-packet one-way delay: 24.559 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 24.484 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 39.58 Mbit/s
95th percentile per-packet one-way delay: 25.469 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 23.16 Mbit/s
95th percentile per-packet one-way delay: 24.512 ms
Loss rate: 0.75%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-02-02 23:17:57
End at: 2018-02-02 23:18:27
Local clock offset: 1.034 ms
Remote clock offset: -0.469 ms

# Below is generated by plot.py at 2018-02-03 06:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.67 Mbit/s
95th percentile per-packet one-way delay: 26.631 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 47.86 Mbit/s
95th percentile per-packet one-way delay: 28.184 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 24.467 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 26.014 ms
Loss rate: 0.86%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-02-02 23:42:30
End at: 2018-02-02 23:43:00
Local clock offset: 1.156 ms
Remote clock offset: 1.026 ms

# Below is generated by plot.py at 2018-02-03 06:53:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.62 Mbit/s
95th percentile per-packet one-way delay: 29.290 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 28.553 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 32.61 Mbit/s
95th percentile per-packet one-way delay: 29.841 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 30.113 ms
Loss rate: 0.92%
Run 4: Report of Copa — Data Link

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

Start at: 2018-02-03 00:07:42
End at: 2018-02-03 00:08:12
Local clock offset: 1.096 ms
Remote clock offset: 1.163 ms

# Below is generated by plot.py at 2018-02-03 06:53:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.80 Mbit/s
95th percentile per-packet one-way delay: 31.649 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 31.508 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 31.813 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 25.86 Mbit/s
95th percentile per-packet one-way delay: 31.730 ms
Loss rate: 1.22%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-02-03 00:32:52
End at: 2018-02-03 00:33:22
Local clock offset: 0.734 ms
Remote clock offset: 0.379 ms

# Below is generated by plot.py at 2018-02-03 06:53:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.16 Mbit/s
95th percentile per-packet one-way delay: 31.293 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 40.45 Mbit/s
95th percentile per-packet one-way delay: 31.168 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 34.39 Mbit/s
95th percentile per-packet one-way delay: 31.511 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 14.59 Mbit/s
95th percentile per-packet one-way delay: 31.019 ms
Loss rate: 0.90%
Run 6: Report of Copa — Data Link

Throughput (Mbps): [Graph]

Flow 1 ingress (mean 40.56 Mbps)  Flow 1 egress (mean 40.45 Mbps)
Flow 2 ingress (mean 34.46 Mbps)  Flow 2 egress (mean 34.39 Mbps)
Flow 3 ingress (mean 14.65 Mbps)  Flow 3 egress (mean 14.59 Mbps)

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

Flow 1 (95th percentile 31.17 ms)  Flow 2 (95th percentile 31.51 ms)  Flow 3 (95th percentile 31.02 ms)
Run 7: Statistics of Copa

Start at: 2018-02-03 00:57:35
End at: 2018-02-03 00:58:05
Local clock offset: 0.847 ms
Remote clock offset: -1.345 ms

# Below is generated by plot.py at 2018-02-03 06:53:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.48 Mbit/s
95th percentile per-packet one-way delay: 30.802 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 42.23 Mbit/s
95th percentile per-packet one-way delay: 30.563 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 30.819 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 24.64 Mbit/s
95th percentile per-packet one-way delay: 31.509 ms
Loss rate: 0.84%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-02-03 01:22:37
End at: 2018-02-03 01:23:07
Local clock offset: 1.131 ms
Remote clock offset: -1.808 ms

# Below is generated by plot.py at 2018-02-03 06:53:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.13 Mbit/s
95th percentile per-packet one-way delay: 27.975 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 44.80 Mbit/s
95th percentile per-packet one-way delay: 27.744 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 39.86 Mbit/s
95th percentile per-packet one-way delay: 27.759 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 26.60 Mbit/s
95th percentile per-packet one-way delay: 29.224 ms
Loss rate: 0.76%
Run 9: Statistics of Copa

Start at: 2018-02-03 01:47:21
End at: 2018-02-03 01:47:51
Local clock offset: 1.031 ms
Remote clock offset: -0.531 ms

# Below is generated by plot.py at 2018-02-03 06:54:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.16 Mbit/s
  95th percentile per-packet one-way delay: 29.894 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 44.99 Mbit/s
  95th percentile per-packet one-way delay: 29.556 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 38.26 Mbit/s
  95th percentile per-packet one-way delay: 30.182 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 17.22 Mbit/s
  95th percentile per-packet one-way delay: 30.768 ms
  Loss rate: 1.07%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 45.04 Mbps)
- Flow 1 egress (mean 44.99 Mbps)
- Flow 2 ingress (mean 38.30 Mbps)
- Flow 2 egress (mean 38.26 Mbps)
- Flow 3 ingress (mean 17.32 Mbps)
- Flow 3 egress (mean 17.22 Mbps)

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

- Flow 1 (95th percentile 29.56 ms)
- Flow 2 (95th percentile 30.18 ms)
- Flow 3 (95th percentile 30.77 ms)
Run 10: Statistics of Copa

Start at: 2018-02-03 02:12:18
End at: 2018-02-03 02:12:48
Local clock offset: 0.962 ms
Remote clock offset: 1.295 ms

# Below is generated by plot.py at 2018-02-03 06:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.59 Mbit/s
95th percentile per-packet one-way delay: 29.045 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 46.81 Mbit/s
95th percentile per-packet one-way delay: 29.220 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 37.02 Mbit/s
95th percentile per-packet one-way delay: 28.451 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 18.55 Mbit/s
95th percentile per-packet one-way delay: 29.810 ms
Loss rate: 0.73%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-02-02 22:25:51
End at: 2018-02-02 22:26:21
Local clock offset: 0.874 ms
Remote clock offset: -3.704 ms

# Below is generated by plot.py at 2018-02-03 06:55:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.13 Mbit/s
95th percentile per-packet one-way delay: 52.074 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 60.60 Mbit/s
95th percentile per-packet one-way delay: 38.811 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 55.231 ms
Loss rate: 0.86%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-02-02 22:50:31
End at: 2018-02-02 22:51:01
Local clock offset: 0.971 ms
Remote clock offset: -1.952 ms

# Below is generated by plot.py at 2018-02-03 06:55:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 46.063 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 57.61 Mbit/s
95th percentile per-packet one-way delay: 45.323 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 46.729 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 46.394 ms
Loss rate: 0.72%
Run 2: Report of FillP — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 57.64 Mbit/s)
- Flow 1 egress (mean 57.61 Mbit/s)
- Flow 2 ingress (mean 38.33 Mbit/s)
- Flow 2 egress (mean 38.31 Mbit/s)
- Flow 3 ingress (mean 29.36 Mbit/s)
- Flow 3 egress (mean 29.29 Mbit/s)

Per packet one way delay (ms)

- Flow 1 (95th percentile 45.32 ms)
- Flow 2 (95th percentile 46.73 ms)
- Flow 3 (95th percentile 46.39 ms)
Run 3: Statistics of FillP

Start at: 2018-02-02 23:15:12
End at: 2018-02-02 23:15:42
Local clock offset: 1.098 ms
Remote clock offset: -2.688 ms

# Below is generated by plot.py at 2018-02-03 06:55:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.74 Mbit/s
  95th percentile per-packet one-way delay: 47.801 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 56.89 Mbit/s
  95th percentile per-packet one-way delay: 47.280 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 38.16 Mbit/s
  95th percentile per-packet one-way delay: 48.595 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 28.64 Mbit/s
  95th percentile per-packet one-way delay: 44.342 ms
  Loss rate: 1.47%
Run 3: Report of FillP — Data Link

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

Flow 1 ingress (mean 56.86 Mbit/s)  
Flow 1 egress (mean 56.89 Mbit/s)  
Flow 2 ingress (mean 38.25 Mbit/s)  
Flow 2 egress (mean 38.16 Mbit/s)  
Flow 3 ingress (mean 20.81 Mbit/s)  
Flow 3 egress (mean 20.64 Mbit/s)
Run 4: Statistics of FillP

Start at: 2018-02-02 23:39:44
End at: 2018-02-02 23:40:14
Local clock offset: 1.145 ms
Remote clock offset: -1.267 ms

# Below is generated by plot.py at 2018-02-03 06:55:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.71 Mbit/s
95th percentile per-packet one-way delay: 55.945 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 55.414 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 57.722 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 45.33 Mbit/s
95th percentile per-packet one-way delay: 46.287 ms
Loss rate: 1.13%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-02-03 00:04:46
End at: 2018-02-03 00:05:16
Local clock offset: 1.054 ms
Remote clock offset: 1.121 ms

# Below is generated by plot.py at 2018-02-03 06:55:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.92 Mbit/s
  95th percentile per-packet one-way delay: 54.748 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 54.83 Mbit/s
  95th percentile per-packet one-way delay: 54.148 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 45.93 Mbit/s
  95th percentile per-packet one-way delay: 45.641 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 22.88 Mbit/s
  95th percentile per-packet one-way delay: 60.846 ms
  Loss rate: 1.48%
Run 5: Report of FillP — Data Link

![Graph showing throughput and packet delay over time for different flows.]
Run 6: Statistics of FillP

Start at: 2018-02-03 00:30:03
End at: 2018-02-03 00:30:33
Local clock offset: 0.724 ms
Remote clock offset: 0.387 ms

# Below is generated by plot.py at 2018-02-03 06:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 55.362 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 55.16 Mbit/s
95th percentile per-packet one-way delay: 54.658 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 58.102 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 45.18 Mbit/s
95th percentile per-packet one-way delay: 45.409 ms
Loss rate: 1.21%
Run 6: Report of FillP — Data Link

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

Start at: 2018-02-03 00:54:49
End at: 2018-02-03 00:55:19
Local clock offset: 0.902 ms
Remote clock offset: -3.239 ms

# Below is generated by plot.py at 2018-02-03 06:56:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.52 Mbit/s
  95th percentile per-packet one-way delay: 55.079 ms
  Loss rate: 0.92%
-- Flow 1:
  Average throughput: 61.51 Mbit/s
  95th percentile per-packet one-way delay: 43.149 ms
  Loss rate: 0.65%
-- Flow 2:
  Average throughput: 35.06 Mbit/s
  95th percentile per-packet one-way delay: 56.842 ms
  Loss rate: 1.11%
-- Flow 3:
  Average throughput: 23.33 Mbit/s
  95th percentile per-packet one-way delay: 60.221 ms
  Loss rate: 2.51%
Run 7: Report of FillP — Data Link
Run 8: Statistics of FillP

Start at: 2018-02-03 01:19:50
End at: 2018-02-03 01:20:20
Local clock offset: 1.032 ms
Remote clock offset: -1.992 ms

# Below is generated by plot.py at 2018-02-03 06:57:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 52.335 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 61.16 Mbit/s
95th percentile per-packet one-way delay: 39.746 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 53.954 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 23.74 Mbit/s
95th percentile per-packet one-way delay: 55.525 ms
Loss rate: 0.97%
Run 8: Report of FillP — Data Link
Run 9: Statistics of FillP

Start at: 2018-02-03 01:44:33
End at: 2018-02-03 01:45:03
Local clock offset: 1.015 ms
Remote clock offset: -0.719 ms

# Below is generated by plot.py at 2018-02-03 06:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.99 Mbit/s
95th percentile per-packet one-way delay: 47.099 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 57.51 Mbit/s
95th percentile per-packet one-way delay: 46.183 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 38.11 Mbit/s
95th percentile per-packet one-way delay: 47.088 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 49.059 ms
Loss rate: 0.95%
Run 9: Report of FillP — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 57.72 Mbps)
  - Flow 1 egress (mean 57.51 Mbps)
  - Flow 2 ingress (mean 38.21 Mbps)
  - Flow 2 egress (mean 38.11 Mbps)
  - Flow 3 ingress (mean 30.84 Mbps)
  - Flow 3 egress (mean 30.71 Mbps)

- Per-packet one-way delay (ms):
  - Flow 1 (95th percentile 46.18 ms)
  - Flow 2 (95th percentile 47.09 ms)
  - Flow 3 (95th percentile 49.06 ms)
Run 10: Statistics of FILLP

Start at: 2018-02-03 02:09:33
End at: 2018-02-03 02:10:03
Local clock offset: 0.953 ms
Remote clock offset: 0.624 ms

# Below is generated by plot.py at 2018-02-03 06:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 46.682 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 46.026 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 39.26 Mbit/s
95th percentile per-packet one-way delay: 47.355 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 29.41 Mbit/s
95th percentile per-packet one-way delay: 46.506 ms
Loss rate: 1.02%
Run 10: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-02 22:14:56
End at: 2018-02-02 22:15:26
Local clock offset: 0.888 ms
Remote clock offset: -6.714 ms

# Below is generated by plot.py at 2018-02-03 06:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.805 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 58.83 Mbit/s
95th percentile per-packet one-way delay: 39.823 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 39.91 Mbit/s
95th percentile per-packet one-way delay: 34.720 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.70 Mbit/s
95th percentile per-packet one-way delay: 34.826 ms
Loss rate: 0.58%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-02 22:39:36
End at: 2018-02-02 22:40:06
Local clock offset: 1.117 ms
Remote clock offset: -2.794 ms

# Below is generated by plot.py at 2018-02-03 06:57:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.36 Mbit/s
  95th percentile per-packet one-way delay: 32.749 ms
  Loss rate: 0.30%
-- Flow 1:
  Average throughput: 61.88 Mbit/s
  95th percentile per-packet one-way delay: 32.117 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 36.45 Mbit/s
  95th percentile per-packet one-way delay: 33.031 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 22.43 Mbit/s
  95th percentile per-packet one-way delay: 37.199 ms
  Loss rate: 0.75%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-02 23:04:18
End at: 2018-02-02 23:04:48
Local clock offset: 1.053 ms
Remote clock offset: -2.996 ms

# Below is generated by plot.py at 2018-02-03 06:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 35.782 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 37.221 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 39.50 Mbit/s
95th percentile per-packet one-way delay: 34.315 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 31.68 Mbit/s
95th percentile per-packet one-way delay: 34.599 ms
Loss rate: 0.62%
Run 3: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 58.88 Mbps)
  - Flow 1 egress (mean 58.90 Mbps)
  - Flow 2 ingress (mean 39.50 Mbps)
  - Flow 2 egress (mean 39.50 Mbps)
  - Flow 3 ingress (mean 31.69 Mbps)
  - Flow 3 egress (mean 31.68 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 37.22 ms)
  - Flow 2 (95th percentile 34.31 ms)
  - Flow 3 (95th percentile 34.60 ms)
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-02 23:28:55
End at: 2018-02-02 23:29:25
Local clock offset: 1.147 ms
Remote clock offset: 0.355 ms

# Below is generated by plot.py at 2018-02-03 06:57:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 33.192 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 59.36 Mbit/s
95th percentile per-packet one-way delay: 33.841 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 39.73 Mbit/s
95th percentile per-packet one-way delay: 32.484 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 31.488 ms
Loss rate: 0.60%
Run 4: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 59.32 Mbit/s)
- Flow 1 egress (mean 59.36 Mbit/s)
- Flow 2 ingress (mean 39.73 Mbit/s)
- Flow 2 egress (mean 39.73 Mbit/s)
- Flow 3 ingress (mean 31.86 Mbit/s)
- Flow 3 egress (mean 31.84 Mbit/s)
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-02 23:53:39
End at: 2018-02-02 23:54:09
Local clock offset: 1.187 ms
Remote clock offset: 1.086 ms

# Below is generated by plot.py at 2018-02-03 06:58:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.97 Mbit/s
95th percentile per-packet one-way delay: 33.587 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 32.131 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 38.02 Mbit/s
95th percentile per-packet one-way delay: 36.837 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 20.41 Mbit/s
95th percentile per-packet one-way delay: 40.770 ms
Loss rate: 0.82%
Run 5: Report of Indigo-1-32 — Data Link

![Graph showing throughput over time for different flows]

- **Flow 1 ingress** (mean 61.15 Mbit/s)
- **Flow 1 egress** (mean 61.10 Mbit/s)
- **Flow 2 ingress** (mean 38.12 Mbit/s)
- **Flow 2 egress** (mean 38.02 Mbit/s)
- **Flow 3 ingress** (mean 20.47 Mbit/s)
- **Flow 3 egress** (mean 20.41 Mbit/s)

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

- **Flow 1** (95th percentile 32.13 ms)
- **Flow 2** (95th percentile 36.84 ms)
- **Flow 3** (95th percentile 40.77 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-03 00:19:12
End at: 2018-02-03 00:19:42
Local clock offset: 0.91 ms
Remote clock offset: 1.003 ms

# Below is generated by plot.py at 2018-02-03 06:58:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.96 Mbit/s
95th percentile per-packet one-way delay: 33.594 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 33.229 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 38.74 Mbit/s
95th percentile per-packet one-way delay: 34.604 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 27.87 Mbit/s
95th percentile per-packet one-way delay: 32.512 ms
Loss rate: 0.86%
Run 6: Report of Indigo-1-32 — Data Link

---

**Throughput (Mbps):**

*Flow 1 ingress (mean 53.27 Mbps)*

*Flow 1 egress (mean 53.15 Mbps)*

*Flow 2 ingress (mean 38.83 Mbps)*

*Flow 2 egress (mean 38.74 Mbps)*

*Flow 3 ingress (mean 27.96 Mbps)*

*Flow 3 egress (mean 27.87 Mbps)*

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

*Flow 1 (95th percentile 33.23 ms)*

*Flow 2 (95th percentile 34.60 ms)*

*Flow 3 (95th percentile 32.51 ms)*

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Run 7: Statistics of Indigo-1-32

Start at: 2018-02-03 00:43:52
End at: 2018-02-03 00:44:22
Local clock offset: 0.807 ms
Remote clock offset: -2.537 ms

# Below is generated by plot.py at 2018-02-03 06:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 36.731 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 37.155 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 42.96 Mbit/s
95th percentile per-packet one-way delay: 34.207 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 22.75 Mbit/s
95th percentile per-packet one-way delay: 47.127 ms
Loss rate: 0.91%
Run 7: Report of Indigo-1-32 — Data Link
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-03 01:08:51
End at: 2018-02-03 01:09:21
Local clock offset: 1.033 ms
Remote clock offset: -3.841 ms

# Below is generated by plot.py at 2018-02-03 06:58:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 37.495 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 55.94 Mbit/s
95th percentile per-packet one-way delay: 35.893 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 39.494 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 35.070 ms
Loss rate: 0.69%
Run 8: Report of Indigo-1-32 — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 56.07 Mbit/s)
- Flow 1 egress (mean 55.94 Mbit/s)
- Flow 2 ingress (mean 39.70 Mbit/s)
- Flow 2 egress (mean 39.67 Mbit/s)
- Flow 3 ingress (mean 31.49 Mbit/s)
- Flow 3 egress (mean 31.46 Mbit/s)

![Graph of Per Packet One Way Delay vs Time](image2)

- Flow 1 (95th percentile 35.89 ms)
- Flow 2 (95th percentile 39.49 ms)
- Flow 3 (95th percentile 35.07 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-03 01:33:37
End at: 2018-02-03 01:34:07
Local clock offset: 1.127 ms
Remote clock offset: -1.36 ms

# Below is generated by plot.py at 2018-02-03 06:58:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.20 Mbit/s
  95th percentile per-packet one-way delay: 33.891 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 62.76 Mbit/s
  95th percentile per-packet one-way delay: 32.846 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 36.97 Mbit/s
  95th percentile per-packet one-way delay: 34.646 ms
  Loss rate: 0.44%
-- Flow 3:
  Average throughput: 21.16 Mbit/s
  95th percentile per-packet one-way delay: 39.529 ms
  Loss rate: 0.88%
Run 9: Report of Indigo-1-32 — Data Link

[Graph showing throughput and delay over time for different flows]
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-03 01:58:24
End at: 2018-02-03 01:58:54
Local clock offset: 1.033 ms
Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-02-03 06:58:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.90 Mbit/s
95th percentile per-packet one-way delay: 34.602 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 58.88 Mbit/s
95th percentile per-packet one-way delay: 34.848 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 43.77 Mbit/s
95th percentile per-packet one-way delay: 29.597 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 46.643 ms
Loss rate: 0.76%

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Run 10: Report of Indigo-1-32 — Data Link

![Graph showing throughput over time for different flows with annotations for each flow's mean throughput and 95th percentile delay.]
Run 1: Statistics of Vivace-latency

Start at: 2018-02-02 22:19:07
End at: 2018-02-02 22:19:37
Local clock offset: 0.91 ms
Remote clock offset: -6.284 ms

# Below is generated by plot.py at 2018-02-03 06:59:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.68 Mbit/s
95th percentile per-packet one-way delay: 51.740 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 60.55 Mbit/s
95th percentile per-packet one-way delay: 52.013 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 38.951 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 6.98 Mbit/s
95th percentile per-packet one-way delay: 53.800 ms
Loss rate: 1.07%
Run 1: Report of Vivace-latency — Data Link

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

![Graph 2: Per-packet one-way delay (ms) vs Time (s)]
Run 2: Statistics of Vivace-latency

Start at: 2018-02-02 22:43:46
End at: 2018-02-02 22:44:16
Local clock offset: 1.093 ms
Remote clock offset: -2.578 ms

# Below is generated by plot.py at 2018-02-03 06:59:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.48 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 58.49 Mbit/s
95th percentile per-packet one-way delay: 46.139 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 34.90 Mbit/s
95th percentile per-packet one-way delay: 51.465 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 8.53 Mbit/s
95th percentile per-packet one-way delay: 51.388 ms
Loss rate: 1.06%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

Start at: 2018-02-02 23:08:28
End at: 2018-02-02 23:08:58
Local clock offset: 1.07 ms
Remote clock offset: -0.766 ms

# Below is generated by plot.py at 2018-02-03 06:59:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.47 Mbit/s
95th percentile per-packet one-way delay: 54.158 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 56.47 Mbit/s
95th percentile per-packet one-way delay: 46.281 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 56.393 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 57.157 ms
Loss rate: 0.56%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-02-02 23:33:04
End at: 2018-02-02 23:33:34
Local clock offset: 1.066 ms
Remote clock offset: 0.286 ms

# Below is generated by plot.py at 2018-02-03 06:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 51.918 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 59.44 Mbit/s
95th percentile per-packet one-way delay: 45.895 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 35.92 Mbit/s
95th percentile per-packet one-way delay: 53.755 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 14.69 Mbit/s
95th percentile per-packet one-way delay: 54.284 ms
Loss rate: 1.34%
Run 4: Report of Vivace-latency — Data Link

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

- **Flow 1 ingress** (mean 59.43 Mbit/s)
- **Flow 1 egress** (mean 59.44 Mbit/s)
- **Flow 2 ingress** (mean 35.90 Mbit/s)
- **Flow 2 egress** (mean 35.92 Mbit/s)
- **Flow 3 ingress** (mean 14.81 Mbit/s)
- **Flow 3 egress** (mean 14.69 Mbit/s)

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

- **Flow 1** (95th percentile 45.90 ms)
- **Flow 2** (95th percentile 53.76 ms)
- **Flow 3** (95th percentile 54.28 ms)
Run 5: Statistics of Vivace-latency

Start at: 2018-02-02 23:57:57
End at: 2018-02-02 23:58:27
Local clock offset: 1.163 ms
Remote clock offset: 1.131 ms

# Below is generated by plot.py at 2018-02-03 06:59:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.55 Mbit/s
95th percentile per-packet one-way delay: 56.187 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 45.28 Mbit/s
95th percentile per-packet one-way delay: 53.332 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 23.95 Mbit/s
95th percentile per-packet one-way delay: 57.386 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 19.31 Mbit/s
95th percentile per-packet one-way delay: 51.329 ms
Loss rate: 1.40%
Run 5: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time for different flows.](image-url)
Run 6: Statistics of Vivace-latency

Start at: 2018-02-03 00:23:24
End at: 2018-02-03 00:23:54
Local clock offset: 0.752 ms
Remote clock offset: 1.214 ms

# Below is generated by plot.py at 2018-02-03 06:59:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.62 Mbit/s
95th percentile per-packet one-way delay: 64.790 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 55.54 Mbit/s
95th percentile per-packet one-way delay: 59.576 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 19.63 Mbit/s
95th percentile per-packet one-way delay: 67.570 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 33.57 Mbit/s
95th percentile per-packet one-way delay: 48.684 ms
Loss rate: 0.93%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-02-03 00:48:07
End at: 2018-02-03 00:48:37
Local clock offset: 0.831 ms
Remote clock offset: -0.776 ms

# Below is generated by plot.py at 2018-02-03 07:00:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.59 Mbit/s
95th percentile per-packet one-way delay: 48.256 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 58.80 Mbit/s
95th percentile per-packet one-way delay: 46.767 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 24.03 Mbit/s
95th percentile per-packet one-way delay: 53.786 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 20.78 Mbit/s
95th percentile per-packet one-way delay: 39.964 ms
Loss rate: 1.19%
Run 7: Report of Vivace-latency — Data Link

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

- **Flow 1 ingress (mean 58.96 Mbit/s)**
- **Flow 1 egress (mean 58.80 Mbit/s)**
- **Flow 2 ingress (mean 24.15 Mbit/s)**
- **Flow 2 egress (mean 24.03 Mbit/s)**
- **Flow 3 ingress (mean 20.92 Mbit/s)**
- **Flow 3 egress (mean 20.78 Mbit/s)**

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

- **Flow 1 (95th percentile 46.77 ms)**
- **Flow 2 (95th percentile 53.79 ms)**
- **Flow 3 (95th percentile 39.96 ms)**

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Run 8: Statistics of Vivace-latency

Start at: 2018-02-03 01:13:08
End at: 2018-02-03 01:13:38
Local clock offset: 1.094 ms
Remote clock offset: -1.913 ms

# Below is generated by plot.py at 2018-02-03 07:00:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.28 Mbit/s
95th percentile per-packet one-way delay: 51.519 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 55.35 Mbit/s
95th percentile per-packet one-way delay: 43.096 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 31.505 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 18.48 Mbit/s
95th percentile per-packet one-way delay: 61.074 ms
Loss rate: 0.96%
Run 8: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 55.50 Mbit/s)
- Flow 1 egress (mean 55.35 Mbit/s)
- Flow 2 ingress (mean 27.01 Mbit/s)
- Flow 2 egress (mean 26.86 Mbit/s)
- Flow 3 ingress (mean 18.56 Mbit/s)
- Flow 3 egress (mean 18.48 Mbit/s)

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

- Flow 1 (95th percentile 43.10 ms)
- Flow 2 (95th percentile 31.50 ms)
- Flow 3 (95th percentile 61.07 ms)
Run 9: Statistics of Vivace-latency

Start at: 2018-02-03 01:37:46
End at: 2018-02-03 01:38:16
Local clock offset: 0.997 ms
Remote clock offset: -3.33 ms

# Below is generated by plot.py at 2018-02-03 07:00:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.50 Mbit/s
95th percentile per-packet one-way delay: 54.360 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 53.07 Mbit/s
95th percentile per-packet one-way delay: 54.342 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 39.16 Mbit/s
95th percentile per-packet one-way delay: 47.815 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 19.50 Mbit/s
95th percentile per-packet one-way delay: 61.405 ms
Loss rate: 0.85%
Run 10: Statistics of Vivace-latency

Start at: 2018-02-03 02:02:46
End at: 2018-02-03 02:03:16
Local clock offset: 0.993 ms
Remote clock offset: -1.618 ms

# Below is generated by plot.py at 2018-02-03 07:00:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.92 Mbit/s
  95th percentile per-packet one-way delay: 62.591 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 64.20 Mbit/s
  95th percentile per-packet one-way delay: 58.522 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 18.08 Mbit/s
  95th percentile per-packet one-way delay: 69.392 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 35.64 Mbit/s
  95th percentile per-packet one-way delay: 47.988 ms
  Loss rate: 0.79%
Run 10: Report of Vivace-latency — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 64.36 Mbps)
  - Flow 1 egress (mean 64.20 Mbps)
  - Flow 2 ingress (mean 18.14 Mbps)
  - Flow 2 egress (mean 18.08 Mbps)
  - Flow 3 ingress (mean 35.69 Mbps)
  - Flow 3 egress (mean 35.64 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 58.52 ms)
  - Flow 2 (95th percentile 69.39 ms)
  - Flow 3 (95th percentile 47.99 ms)
Run 1: Statistics of Vivace-loss

Start at: 2018-02-02 22:09:27
End at: 2018-02-02 22:09:58
Local clock offset: 0.855 ms
Remote clock offset: -4.904 ms

# Below is generated by plot.py at 2018-02-03 07:00:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 57.848 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 55.43 Mbit/s
95th percentile per-packet one-way delay: 57.370 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 39.55 Mbit/s
95th percentile per-packet one-way delay: 58.619 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 63.691 ms
Loss rate: 1.35%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-02-02 22:34:08
End at: 2018-02-02 22:34:38
Local clock offset: 1.038 ms
Remote clock offset: -2.687 ms

# Below is generated by plot.py at 2018-02-03 07:01:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.02 Mbit/s
95th percentile per-packet one-way delay: 57.083 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 56.691 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 56.991 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 57.883 ms
Loss rate: 1.25%
Run 2: Report of Vivace-loss — Data Link

---

Line graph with two plots showing throughput and one-way delay over time. The graphs display multiple flows with different throughputs and delays.
Run 3: Statistics of Vivace-loss

Start at: 2018-02-02 22:58:49
End at: 2018-02-02 22:59:19
Local clock offset: 1.063 ms
Remote clock offset: -0.887 ms

# Below is generated by plot.py at 2018-02-03 07:01:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 57.136 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 55.01 Mbit/s
95th percentile per-packet one-way delay: 56.942 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 57.106 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 25.07 Mbit/s
95th percentile per-packet one-way delay: 59.568 ms
Loss rate: 1.28%
Run 3: Report of Vivace-loss — Data Link

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

- **Flow 1**: Ingress (mean 55.01 Mbit/s), Egress (mean 55.01 Mbit/s)
- **Flow 2**: Ingress (mean 39.72 Mbit/s), Egress (mean 39.67 Mbit/s)
- **Flow 3**: Ingress (mean 25.21 Mbit/s), Egress (mean 25.07 Mbit/s)

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Run 4: Statistics of Vivace-loss

Start at: 2018-02-02 23:23:27
End at: 2018-02-02 23:23:57
Local clock offset: 1.117 ms
Remote clock offset: -0.326 ms

# Below is generated by plot.py at 2018-02-03 07:01:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.14 Mbit/s
  95th percentile per-packet one-way delay: 68.018 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 52.85 Mbit/s
  95th percentile per-packet one-way delay: 67.771 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 45.37 Mbit/s
  95th percentile per-packet one-way delay: 46.372 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 21.80 Mbit/s
  95th percentile per-packet one-way delay: 68.861 ms
  Loss rate: 1.00%
Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-02-02 23:48:04
End at: 2018-02-02 23:48:34
Local clock offset: 1.102 ms
Remote clock offset: 1.034 ms

# Below is generated by plot.py at 2018-02-03 07:01:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.76 Mbit/s
95th percentile per-packet one-way delay: 67.959 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 52.46 Mbit/s
95th percentile per-packet one-way delay: 67.835 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 45.41 Mbit/s
95th percentile per-packet one-way delay: 53.185 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 21.73 Mbit/s
95th percentile per-packet one-way delay: 72.533 ms
Loss rate: 1.55%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

Start at: 2018-02-03 00:13:34  
End at: 2018-02-03 00:14:04  
Local clock offset: 0.896 ms  
Remote clock offset: 1.575 ms

# Below is generated by plot.py at 2018-02-03 07:01:36  
# Datalink statistics

-- Total of 3 flows:  
Average throughput: 86.33 Mbit/s  
95th percentile per-packet one-way delay: 67.244 ms  
Loss rate: 4.16%  
-- Flow 1:  
Average throughput: 51.15 Mbit/s  
95th percentile per-packet one-way delay: 67.032 ms  
Loss rate: 3.16%  
-- Flow 2:  
Average throughput: 45.62 Mbit/s  
95th percentile per-packet one-way delay: 53.315 ms  
Loss rate: 6.08%  
-- Flow 3:  
Average throughput: 14.88 Mbit/s  
95th percentile per-packet one-way delay: 74.444 ms  
Loss rate: 2.24%
Run 6: Report of Vivace-loss — Data Link

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

Start at: 2018-02-03 00:38:23
End at: 2018-02-03 00:38:53
Local clock offset: 0.749 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-02-03 07:01:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.44 Mbit/s
95th percentile per-packet one-way delay: 67.922 ms
Loss rate: 0.57%

-- Flow 1:
Average throughput: 50.62 Mbit/s
95th percentile per-packet one-way delay: 67.778 ms
Loss rate: 0.44%

-- Flow 2:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 52.955 ms
Loss rate: 0.64%

-- Flow 3:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 74.112 ms
Loss rate: 1.33%
Run 7: Report of Vivace-loss — Data Link

![Graph showing data link performance metrics]

Legend:
- Flow 1 ingress (mean 50.71 Mbit/s)
- Flow 1 egress (mean 50.62 Mbit/s)
- Flow 2 ingress (mean 45.96 Mbit/s)
- Flow 2 egress (mean 45.83 Mbit/s)
- Flow 3 ingress (mean 19.58 Mbit/s)
- Flow 3 egress (mean 19.52 Mbit/s)

![Graph showing per-packet one-way delay]

Legend:
- Flow 1 (95th percentile 67.78 ms)
- Flow 2 (95th percentile 52.95 ms)
- Flow 3 (95th percentile 74.11 ms)
Run 8: Statistics of Vivace-loss

Start at: 2018-02-03 01:03:06
End at: 2018-02-03 01:03:36
Local clock offset: 0.998 ms
Remote clock offset: -1.66 ms

# Below is generated by plot.py at 2018-02-03 07:02:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.53 Mbit/s
95th percentile per-packet one-way delay: 61.811 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 58.269 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 62.762 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 64.787 ms
Loss rate: 1.41%
Run 8: Report of Vivace-loss — Data Link
Run 9: Statistics of Vivace-loss

Start at: 2018-02-03 01:28:09
End at: 2018-02-03 01:28:39
Local clock offset: 1.045 ms
Remote clock offset: -3.801 ms

# Below is generated by plot.py at 2018-02-03 07:02:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.61 Mbit/s
  95th percentile per-packet one-way delay: 69.926 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 53.40 Mbit/s
  95th percentile per-packet one-way delay: 69.685 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 35.27 Mbit/s
  95th percentile per-packet one-way delay: 70.231 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 38.89 Mbit/s
  95th percentile per-packet one-way delay: 52.837 ms
  Loss rate: 1.41%
Run 9: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 53.56 Mbps)
- Flow 1 egress (mean 53.40 Mbps)
- Flow 2 ingress (mean 35.35 Mbps)
- Flow 2 egress (mean 35.27 Mbps)
- Flow 3 ingress (mean 39.21 Mbps)
- Flow 3 egress (mean 38.89 Mbps)

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

- Flow 1 (95th percentile 69.69 ms)
- Flow 2 (95th percentile 70.23 ms)
- Flow 3 (95th percentile 52.84 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-02-03 01:52:54
End at: 2018-02-03 01:53:24
Local clock offset: 1.004 ms
Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2018-02-03 07:02:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: 57.225 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 54.74 Mbit/s
95th percentile per-packet one-way delay: 56.782 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 38.88 Mbit/s
95th percentile per-packet one-way delay: 57.724 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 28.15 Mbit/s
95th percentile per-packet one-way delay: 61.597 ms
Loss rate: 2.47%
Run 10: Report of Vivace-loss — Data Link

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

- **Flow 1:**
  - Ingress: Average 54.77 Mbps
  - Egress: Average 54.74 Mbps

- **Flow 2:**
  - Ingress: Average 38.95 Mbps
  - Egress: Average 38.85 Mbps

- **Flow 3:**
  - Ingress: Average 26.40 Mbps
  - Egress: Average 28.15 Mbps

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Run 1: Statistics of Vivace-LTE

Start at: 2018-02-02 22:16:20
End at: 2018-02-02 22:16:50
Local clock offset: 0.797 ms
Remote clock offset: -4.425 ms

# Below is generated by plot.py at 2018-02-03 07:02:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.16 Mbit/s
95th percentile per-packet one-way delay: 56.121 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 55.58 Mbit/s
95th percentile per-packet one-way delay: 56.160 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 54.947 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 56.887 ms
Loss rate: 0.69%
Run 1: Report of Vivace-LTE — Data Link

![Graph showing data for three different flows]
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-02 22:40:59
End at: 2018-02-02 22:41:29
Local clock offset: 1.103 ms
Remote clock offset: -2.705 ms

# Below is generated by plot.py at 2018-02-03 07:02:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.46 Mbit/s
95th percentile per-packet one-way delay: 56.569 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 58.96 Mbit/s
95th percentile per-packet one-way delay: 55.487 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 32.52 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 27.10 Mbit/s
95th percentile per-packet one-way delay: 59.023 ms
Loss rate: 1.10%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-02 23:05:41
End at: 2018-02-02 23:06:11
Local clock offset: 1.053 ms
Remote clock offset: -3.057 ms

# Below is generated by plot.py at 2018-02-03 07:02:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.84 Mbit/s
95th percentile per-packet one-way delay: 69.428 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 68.072 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 69.899 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 37.01 Mbit/s
95th percentile per-packet one-way delay: 48.536 ms
Loss rate: 0.68%
Run 3: Report of Vivace-LTE — Data Link
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-02 23:30:18
End at: 2018-02-02 23:30:48
Local clock offset: 1.156 ms
Remote clock offset: 0.441 ms

# Below is generated by plot.py at 2018-02-03 07:02:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.40 Mbit/s
95th percentile per-packet one-way delay: 55.615 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 55.827 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 36.24 Mbit/s
95th percentile per-packet one-way delay: 54.385 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 27.92 Mbit/s
95th percentile per-packet one-way delay: 56.349 ms
Loss rate: 0.63%
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-02 23:55:05
End at: 2018-02-02 23:55:35
Local clock offset: 1.165 ms
Remote clock offset: 1.617 ms

# Below is generated by plot.py at 2018-02-03 07:03:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.43 Mbit/s
95th percentile per-packet one-way delay: 55.272 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 53.338 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 35.14 Mbit/s
95th percentile per-packet one-way delay: 59.145 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 27.25 Mbit/s
95th percentile per-packet one-way delay: 56.369 ms
Loss rate: 1.04%
Run 5: Report of Vivace-LTE — Data Link

[Graphs showing throughput and per-packet one-way delay for different flows over time]
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-03 00:20:36
End at: 2018-02-03 00:21:06
Local clock offset: 0.788 ms
Remote clock offset: 0.944 ms

# Below is generated by plot.py at 2018-02-03 07:03:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.29 Mbit/s
95th percentile per-packet one-way delay: 61.462 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 57.89 Mbit/s
95th percentile per-packet one-way delay: 59.047 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 62.707 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 27.50 Mbit/s
95th percentile per-packet one-way delay: 63.879 ms
Loss rate: 1.08%
Run 6: Report of Vivace-LTE — Data Link
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-03 00:45:16
End at: 2018-02-03 00:45:46
Local clock offset: 0.729 ms
Remote clock offset: -2.518 ms

# Below is generated by plot.py at 2018-02-03 07:03:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.22 Mbit/s
  95th percentile per-packet one-way delay: 59.409 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 53.97 Mbit/s
  95th percentile per-packet one-way delay: 58.902 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 38.03 Mbit/s
  95th percentile per-packet one-way delay: 59.337 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 24.28 Mbit/s
  95th percentile per-packet one-way delay: 60.939 ms
  Loss rate: 1.01%
Run 7: Report of Vivace-LTE — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 34.05 Mbps) blue
Flow 1 egress (mean 33.97 Mbps) blue
Flow 2 ingress (mean 38.10 Mbps) green
Flow 2 egress (mean 38.03 Mbps) green
Flow 3 ingress (mean 24.40 Mbps) red
Flow 3 egress (mean 24.28 Mbps) red

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 58.90 ms) blue
Flow 2 (95th percentile 59.34 ms) green
Flow 3 (95th percentile 60.94 ms) red
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-03 01:10:17
End at: 2018-02-03 01:10:47
Local clock offset: 1.049 ms
Remote clock offset: -1.857 ms

# Below is generated by plot.py at 2018-02-03 07:03:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.53 Mbit/s
95th percentile per-packet one-way delay: 56.639 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 55.30 Mbit/s
95th percentile per-packet one-way delay: 50.831 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 61.405 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 27.57 Mbit/s
95th percentile per-packet one-way delay: 56.759 ms
Loss rate: 1.40%
Run 8: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 55.53 Mbit/s)
- Flow 1 egress (mean 55.30 Mbit/s)
- Flow 2 ingress (mean 35.00 Mbit/s)
- Flow 2 egress (mean 34.86 Mbit/s)
- Flow 3 ingress (mean 27.80 Mbit/s)
- Flow 3 egress (mean 27.57 Mbit/s)

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

- Flow 1 (95th percentile 50.83 ms)
- Flow 2 (95th percentile 61.41 ms)
- Flow 3 (95th percentile 56.76 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-03 01:35:00
End at: 2018-02-03 01:35:30
Local clock offset: 1.107 ms
Remote clock offset: -0.792 ms

# Below is generated by plot.py at 2018-02-03 07:03:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.37 Mbit/s
95th percentile per-packet one-way delay: 58.441 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 46.94 Mbit/s
95th percentile per-packet one-way delay: 55.160 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 62.727 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 34.71 Mbit/s
95th percentile per-packet one-way delay: 45.545 ms
Loss rate: 1.01%
Run 9: Report of Vivace-LTE — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 46.99 Mbps)
- Flow 1 egress (mean 46.94 Mbps)
- Flow 2 ingress (mean 31.74 Mbps)
- Flow 2 egress (mean 31.65 Mbps)
- Flow 3 ingress (mean 34.87 Mbps)
- Flow 3 egress (mean 34.71 Mbps)

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

- Flow 1 (95th percentile 55.16 ms)
- Flow 2 (95th percentile 62.73 ms)
- Flow 3 (95th percentile 45.55 ms)
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-03 01:59:49
End at: 2018-02-03 02:00:19
Local clock offset: 1.04 ms
Remote clock offset: -1.859 ms

# Below is generated by plot.py at 2018-02-03 07:03:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.09 Mbit/s
95th percentile per-packet one-way delay: 57.934 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 54.77 Mbit/s
95th percentile per-packet one-way delay: 58.166 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 41.24 Mbit/s
95th percentile per-packet one-way delay: 48.592 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 14.98 Mbit/s
95th percentile per-packet one-way delay: 61.502 ms
Loss rate: 0.86%
Run 10: Report of Vivace-LTE — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 34.83 Mbps)
- Flow 1 egress (mean 54.77 Mbps)
- Flow 2 ingress (mean 41.34 Mbps)
- Flow 2 egress (mean 41.24 Mbps)
- Flow 3 ingress (mean 15.00 Mbps)
- Flow 3 egress (mean 14.98 Mbps)

![Graph 2: Packet Delay (ms)]

- Flow 1 (95th percentile 58.17 ms)
- Flow 2 (95th percentile 48.59 ms)
- Flow 3 (95th percentile 61.50 ms)