Pantheon Report

Generated at 2018-02-05 02:12:22 (UTC).
Data path: AWS Brazil 2 Ethernet (local) → Colombia Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfeae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ fb9c9ab42e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622ff07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e2ca2a6c7cd0a9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db74884501f82ce8b377695f2f66d
third_party/indigo-1-layer-36-unit @ 2601c92e4aa9d59d38dc4df90ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a44d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303ae8e82ea088e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b17ebaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da59b9a9013db2674ccfcff93
third_party/pcc @ 1af1c958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.ccpp
M sender/src/buffer.h
M sender/src/core.ccpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f2c5ff42
third_party/scream @ c3370fd7bd17265a799eb34e016ad23f5965b885
third_party/sourdough @ f1a1bff749737437f61b1aeed30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a49
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba53e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197d041ace68a42849b2540ad834825f42
test from AWS Brazil 2 Ethernet to Colombia 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 3</td>
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<tr>
<td>TCP BBR</td>
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<td>52.63</td>
<td>35.50</td>
<td>23.34</td>
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<td>40.95</td>
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<td>25.20</td>
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<td>23.95</td>
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<td>11.92</td>
<td>7.00</td>
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<td>Vivace-loss</td>
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<td>7.34</td>
<td>4.12</td>
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<tr>
<td>Vivace-LTE</td>
<td>10</td>
<td>75.17</td>
<td>11.81</td>
<td>11.05</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-02-04 21:34:38
End at: 2018-02-04 21:35:08
Local clock offset: -0.141 ms
Remote clock offset: -0.836 ms

# Below is generated by plot.py at 2018-02-05 01:49:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.59 Mbit/s
95th percentile per-packet one-way delay: 128.856 ms
Loss rate: 9.15%
-- Flow 1:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 128.925 ms
Loss rate: 7.85%
-- Flow 2:
Average throughput: 36.47 Mbit/s
95th percentile per-packet one-way delay: 127.283 ms
Loss rate: 11.87%
-- Flow 3:
Average throughput: 21.19 Mbit/s
95th percentile per-packet one-way delay: 127.366 ms
Loss rate: 9.01%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-02-04 21:58:33
End at: 2018-02-04 21:59:03
Local clock offset: -0.16 ms
Remote clock offset: -2.075 ms

# Below is generated by plot.py at 2018-02-05 01:49:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.60 Mbit/s
  95th percentile per-packet one-way delay: 133.124 ms
  Loss rate: 8.14%
-- Flow 1:
  Average throughput: 56.74 Mbit/s
  95th percentile per-packet one-way delay: 123.153 ms
  Loss rate: 6.91%
-- Flow 2:
  Average throughput: 32.17 Mbit/s
  95th percentile per-packet one-way delay: 133.375 ms
  Loss rate: 9.55%
-- Flow 3:
  Average throughput: 19.52 Mbit/s
  95th percentile per-packet one-way delay: 126.362 ms
  Loss rate: 13.71%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Local clock offset: -0.218 ms
Remote clock offset: 2.435 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.32 Mbit/s
95th percentile per-packet one-way delay: 130.840 ms
Loss rate: 8.25%
-- Flow 1:
Average throughput: 53.93 Mbit/s
95th percentile per-packet one-way delay: 129.741 ms
Loss rate: 6.98%
-- Flow 2:
Average throughput: 34.32 Mbit/s
95th percentile per-packet one-way delay: 130.910 ms
Loss rate: 8.46%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: 131.020 ms
Loss rate: 15.03%
Run 3: Report of TCP BBR — Data Link

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

![Graph of Per-packet round-trip delay (ms)](image)
Run 4: Statistics of TCP BBR

Start at: 2018-02-04 22:46:19
End at: 2018-02-04 22:46:49
Local clock offset: -0.146 ms
Remote clock offset: 3.124 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.12 Mbit/s
95th percentile per-packet one-way delay: 133.162 ms
Loss rate: 9.36%
-- Flow 1:
Average throughput: 46.43 Mbit/s
95th percentile per-packet one-way delay: 130.060 ms
Loss rate: 6.32%
-- Flow 2:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 132.304 ms
Loss rate: 11.32%
-- Flow 3:
Average throughput: 26.31 Mbit/s
95th percentile per-packet one-way delay: 133.624 ms
Loss rate: 17.51%
Run 4: Report of TCP BBR — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 5: Statistics of TCP BBR

Start at: 2018-02-04 23:10:10
End at: 2018-02-04 23:10:40
Local clock offset: -0.185 ms
Remote clock offset: 4.935 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.13 Mbit/s
95th percentile per-packet one-way delay: 135.408 ms
Loss rate: 9.92%
-- Flow 1:
Average throughput: 50.94 Mbit/s
95th percentile per-packet one-way delay: 133.265 ms
Loss rate: 7.31%
-- Flow 2:
Average throughput: 36.34 Mbit/s
95th percentile per-packet one-way delay: 131.570 ms
Loss rate: 12.89%
-- Flow 3:
Average throughput: 24.06 Mbit/s
95th percentile per-packet one-way delay: 135.969 ms
Loss rate: 16.29%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-02-04 23:33:56
End at: 2018-02-04 23:34:26
Local clock offset: -0.2 ms
Remote clock offset: -0.481 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.23 Mbit/s
95th percentile per-packet one-way delay: 130.785 ms
Loss rate: 8.42%
-- Flow 1:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 125.229 ms
Loss rate: 6.82%
-- Flow 2:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 131.053 ms
Loss rate: 8.69%
-- Flow 3:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 126.984 ms
Loss rate: 17.05%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-02-04 23:57:46
End at: 2018-02-04 23:58:16
Local clock offset: ~0.174 ms
Remote clock offset: ~1.579 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.65 Mbit/s
95th percentile per-packet one-way delay: 131.670 ms
Loss rate: 8.43%
-- Flow 1:
Average throughput: 50.67 Mbit/s
95th percentile per-packet one-way delay: 126.422 ms
Loss rate: 6.73%
-- Flow 2:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 131.776 ms
Loss rate: 8.46%
-- Flow 3:
Average throughput: 25.28 Mbit/s
95th percentile per-packet one-way delay: 131.822 ms
Loss rate: 17.45%
Run 7: Report of TCP BBR — Data Link

![Graph showing network performance metrics over time.]
Run 8: Statistics of TCP BBR

Start at: 2018-02-05 00:21:39
End at: 2018-02-05 00:22:09
Local clock offset: -0.193 ms
Remote clock offset: -2.164 ms

# Below is generated by plot.py at 2018-02-05 01:49:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.24 Mbit/s
95th percentile per-packet one-way delay: 129.731 ms
Loss rate: 5.88%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 125.038 ms
Loss rate: 5.40%
-- Flow 2:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 129.828 ms
Loss rate: 7.26%
-- Flow 3:
Average throughput: 14.08 Mbit/s
95th percentile per-packet one-way delay: 131.728 ms
Loss rate: 5.40%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 61.43 Mbps)
- Flow 1 egress (mean 58.05 Mbps)
- Flow 2 ingress (mean 34.89 Mbps)
- Flow 2 egress (mean 32.32 Mbps)
- Flow 3 ingress (mean 14.88 Mbps)
- Flow 3 egress (mean 14.08 Mbps)

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

- Flow 1 (95th percentile 125.04 ms)
- Flow 2 (95th percentile 129.83 ms)
- Flow 3 (95th percentile 131.73 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-02-05 00:45:26
End at: 2018-02-05 00:45:56
Local clock offset: -0.174 ms
Remote clock offset: 3.826 ms

# Below is generated by plot.py at 2018-02-05 01:50:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.15 Mbit/s
  95th percentile per-packet one-way delay: 139.718 ms
  Loss rate: 9.61%
-- Flow 1:
  Average throughput: 50.33 Mbit/s
  95th percentile per-packet one-way delay: 135.948 ms
  Loss rate: 7.53%
-- Flow 2:
  Average throughput: 33.98 Mbit/s
  95th percentile per-packet one-way delay: 136.575 ms
  Loss rate: 10.75%
-- Flow 3:
  Average throughput: 30.66 Mbit/s
  95th percentile per-packet one-way delay: 140.103 ms
  Loss rate: 16.50%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-02-05 01:09:18
End at: 2018-02-05 01:09:48
Local clock offset: -0.096 ms
Remote clock offset: -2.118 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.23 Mbit/s
95th percentile per-packet one-way delay: 127.039 ms
Loss rate: 7.55%
-- Flow 1:
Average throughput: 52.37 Mbit/s
95th percentile per-packet one-way delay: 127.039 ms
Loss rate: 6.10%
-- Flow 2:
Average throughput: 37.24 Mbit/s
95th percentile per-packet one-way delay: 125.741 ms
Loss rate: 9.09%
-- Flow 3:
Average throughput: 21.24 Mbit/s
95th percentile per-packet one-way delay: 127.236 ms
Loss rate: 12.39%
Run 10: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 55.83 Mbit/s)
- Flow 1 egress (mean 52.37 Mbit/s)
- Flow 2 ingress (mean 41.03 Mbit/s)
- Flow 2 egress (mean 37.24 Mbit/s)
- Flow 3 ingress (mean 24.27 Mbit/s)
- Flow 3 egress (mean 21.24 Mbit/s)

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

- Flow 1 (95th percentile 127.04 ms)
- Flow 2 (95th percentile 125.74 ms)
- Flow 3 (95th percentile 127.24 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-02-04 21:25:21
End at: 2018-02-04 21:25:51
Local clock offset: -0.191 ms
Remote clock offset: -1.665 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.86 Mbit/s
95th percentile per-packet one-way delay: 128.721 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 42.30 Mbit/s
95th percentile per-packet one-way delay: 126.140 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 130.606 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 131.404 ms
Loss rate: 1.99%
Run 1: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 42.54 Mbit/s)
- Flow 1 egress (mean 42.30 Mbit/s)
- Flow 2 ingress (mean 23.24 Mbit/s)
- Flow 2 egress (mean 22.92 Mbit/s)
- Flow 3 ingress (mean 31.66 Mbit/s)
- Flow 3 egress (mean 31.06 Mbit/s)

![Graph showing per-byte delay for different flows.](image)

- Flow 1 (95th percentile 126.14 ms)
- Flow 2 (95th percentile 130.61 ms)
- Flow 3 (95th percentile 131.40 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-02-04 21:49:13
End at: 2018-02-04 21:49:43
Local clock offset: -0.149 ms
Remote clock offset: -1.098 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.80 Mbit/s
  95th percentile per-packet one-way delay: 121.890 ms
  Loss rate: 0.75%
-- Flow 1:
  Average throughput: 46.10 Mbit/s
  95th percentile per-packet one-way delay: 120.301 ms
  Loss rate: 0.43%
-- Flow 2:
  Average throughput: 33.75 Mbit/s
  95th percentile per-packet one-way delay: 121.278 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 27.78 Mbit/s
  95th percentile per-packet one-way delay: 125.732 ms
  Loss rate: 1.12%
Run 2: Report of TCP Cubic — Data Link

[Graphs showing throughput and packet loss over time for different flows, with legends indicating mean throughput and 95th percentile delay.]
Run 3: Statistics of TCP Cubic

Local clock offset: -0.159 ms
Remote clock offset: 2.586 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.53 Mbit/s
95th percentile per-packet one-way delay: 135.197 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 136.444 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 50.83 Mbit/s
95th percentile per-packet one-way delay: 133.676 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 8.89 Mbit/s
95th percentile per-packet one-way delay: 135.098 ms
Loss rate: 0.11%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-02-04 22:37:02
End at: 2018-02-04 22:37:32
Local clock offset: -0.149 ms
Remote clock offset: 2.224 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.49 Mbit/s
95th percentile per-packet one-way delay: 126.667 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 120.208 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 126.523 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 40.60 Mbit/s
95th percentile per-packet one-way delay: 132.899 ms
Loss rate: 1.45%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-02-04 23:00:54
End at: 2018-02-04 23:01:24
Local clock offset: -0.159 ms
Remote clock offset: -0.893 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.02 Mbit/s
95th percentile per-packet one-way delay: 124.532 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 121.378 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: 125.933 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 21.05 Mbit/s
95th percentile per-packet one-way delay: 129.465 ms
Loss rate: 1.08%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-02-04 23:24:43
Local clock offset: -0.154 ms
Remote clock offset: -0.606 ms

# Below is generated by plot.py at 2018-02-05 01:50:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.13 Mbit/s
95th percentile per-packet one-way delay: 122.266 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 118.160 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 35.82 Mbit/s
95th percentile per-packet one-way delay: 122.022 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 27.23 Mbit/s
95th percentile per-packet one-way delay: 126.851 ms
Loss rate: 1.16%
Run 6: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet latency]

- Flow 1 ingress (mean 47.41 Mbit/s)
- Flow 1 egress (mean 47.24 Mbit/s)
- Flow 2 ingress (mean 36.33 Mbit/s)
- Flow 2 egress (mean 35.82 Mbit/s)
- Flow 3 ingress (mean 27.54 Mbit/s)
- Flow 3 egress (mean 27.23 Mbit/s)
Run 7: Statistics of TCP Cubic

End at: 2018-02-04 23:49:01
Local clock offset: -0.098 ms
Remote clock offset: -1.073 ms

# Below is generated by plot.py at 2018-02-05 01:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.72 Mbit/s
95th percentile per-packet one-way delay: 115.864 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 45.98 Mbit/s
95th percentile per-packet one-way delay: 115.910 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 116.232 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 114.755 ms
Loss rate: 1.84%
Run 7: Report of TCP Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 46.13 Mbit/s)
Flow 1 egress (mean 45.98 Mbit/s)
Flow 2 ingress (mean 34.14 Mbit/s)
Flow 2 egress (mean 33.68 Mbit/s)
Flow 3 ingress (mean 22.49 Mbit/s)
Flow 3 egress (mean 22.07 Mbit/s)

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

Flow 1 (95th percentile 115.91 ms)
Flow 2 (95th percentile 116.23 ms)
Flow 3 (95th percentile 114.75 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-02-05 00:12:24
End at: 2018-02-05 00:12:54
Local clock offset: -0.088 ms
Remote clock offset: -1.957 ms

# Below is generated by plot.py at 2018-02-05 01:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.73 Mbit/s
95th percentile per-packet one-way delay: 106.828 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 21.45 Mbit/s
95th percentile per-packet one-way delay: 106.958 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 34.04 Mbit/s
95th percentile per-packet one-way delay: 105.390 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 108.690 ms
Loss rate: 2.33%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-02-05 00:36:12
End at: 2018-02-05 00:36:42
Local clock offset: -0.172 ms
Remote clock offset: -2.582 ms

# Below is generated by plot.py at 2018-02-05 01:51:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.38 Mbit/s
95th percentile per-packet one-way delay: 130.941 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 37.20 Mbit/s
95th percentile per-packet one-way delay: 131.082 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 45.71 Mbit/s
95th percentile per-packet one-way delay: 130.861 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 17.42 Mbit/s
95th percentile per-packet one-way delay: 130.891 ms
Loss rate: 1.20%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-02-05 01:00:02
End at: 2018-02-05 01:00:32
Local clock offset: -0.111 ms
Remote clock offset: -2.209 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 122.767 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 55.14 Mbit/s
95th percentile per-packet one-way delay: 122.967 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 122.681 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 17.80 Mbit/s
95th percentile per-packet one-way delay: 120.517 ms
Loss rate: 0.36%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-02-04 21:37:21
End at: 2018-02-04 21:37:51
Local clock offset: -0.148 ms
Remote clock offset: 3.836 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.81 Mbit/s
95th percentile per-packet one-way delay: 107.086 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 102.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 108.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 101.011 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph of throughput over time for different flows]

![Graph of packet loss over time for different flows]

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Run 2: Statistics of LEDBAT

Start at: 2018-02-04 22:01:16
End at: 2018-02-04 22:01:46
Local clock offset: -0.151 ms
Remote clock offset: -1.273 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 16.10 Mbit/s
  95th percentile per-packet one-way delay: 102.809 ms
  Loss rate: 0.00%
  -- Flow 1:
    Average throughput: 10.20 Mbit/s
    95th percentile per-packet one-way delay: 103.224 ms
    Loss rate: 0.00%
  -- Flow 2:
    Average throughput: 7.15 Mbit/s
    95th percentile per-packet one-way delay: 98.880 ms
    Loss rate: 0.00%
  -- Flow 3:
    Average throughput: 3.47 Mbit/s
    95th percentile per-packet one-way delay: 99.809 ms
    Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-02-04 22:25:10
End at: 2018-02-04 22:25:40
Local clock offset: -0.146 ms
Remote clock offset: 3.279 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.01 Mbit/s
95th percentile per-packet one-way delay: 107.204 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 10.30 Mbit/s
95th percentile per-packet one-way delay: 107.449 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 106.469 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 105.541 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-02-04 22:49:02
End at: 2018-02-04 22:49:32
Local clock offset: -0.156 ms
Remote clock offset: 2.483 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.42 Mbit/s
95th percentile per-packet one-way delay: 102.813 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.59 Mbit/s
95th percentile per-packet one-way delay: 102.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.05 Mbit/s
95th percentile per-packet one-way delay: 102.586 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 102.708 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

Start at: 2018-02-04 23:12:51
End at: 2018-02-04 23:13:21
Local clock offset: -0.167 ms
Remote clock offset: -1.581 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.18 Mbit/s
95th percentile per-packet one-way delay: 103.739 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.33 Mbit/s
95th percentile per-packet one-way delay: 104.211 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 100.087 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 103.279 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-02-04 23:36:38
End at: 2018-02-04 23:37:08
Local clock offset: -0.215 ms
Remote clock offset: 4.455 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 109.590 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 10.15 Mbit/s
95th percentile per-packet one-way delay: 110.033 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 7.30 Mbit/s
95th percentile per-packet one-way delay: 101.862 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 101.217 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-02-05 00:00:29
End at: 2018-02-05 00:00:59
Local clock offset: -0.093 ms
Remote clock offset: 4.061 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.56 Mbit/s
95th percentile per-packet one-way delay: 106.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.71 Mbit/s
95th percentile per-packet one-way delay: 106.642 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 104.339 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 103.006 ms
Loss rate: 0.00%
Run 8: Statistics of LEDBAT

Start at: 2018-02-05 00:24:20
End at: 2018-02-05 00:24:50
Local clock offset: -0.179 ms
Remote clock offset: -1.433 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.20 Mbit/s
95th percentile per-packet one-way delay: 97.892 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.12 Mbit/s
95th percentile per-packet one-way delay: 94.872 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 95.722 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.48 Mbit/s
95th percentile per-packet one-way delay: 99.037 ms
Loss rate: 0.00%
Run 9: Statistics of LEDBAT

Start at: 2018-02-05 00:48:08
End at: 2018-02-05 00:48:38
Local clock offset: -0.103 ms
Remote clock offset: 2.899 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 108.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.72 Mbit/s
95th percentile per-packet one-way delay: 105.179 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 107.540 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.32 Mbit/s
95th percentile per-packet one-way delay: 108.984 ms
Loss rate: 0.00%
Run 10: Statistics of LEDBAT

Start at: 2018-02-05 01:12:00
End at: 2018-02-05 01:12:30
Local clock offset: -0.109 ms
Remote clock offset: 2.779 ms

# Below is generated by plot.py at 2018-02-05 01:51:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 17.31 Mbit/s
  95th percentile per-packet one-way delay: 102.470 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 11.13 Mbit/s
  95th percentile per-packet one-way delay: 102.737 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.52 Mbit/s
  95th percentile per-packet one-way delay: 100.628 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.56 Mbit/s
  95th percentile per-packet one-way delay: 102.250 ms
  Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Start at: 2018-02-04 21:44:00
End at: 2018-02-04 21:44:30
Local clock offset: -0.2 ms
Remote clock offset: -1.919 ms

# Below is generated by plot.py at 2018-02-05 01:52:31
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 86.43 Mbit/s
   95th percentile per-packet one-way delay: 126.338 ms
   Loss rate: 2.52%
-- Flow 1:
   Average throughput: 78.36 Mbit/s
   95th percentile per-packet one-way delay: 126.316 ms
   Loss rate: 2.43%
-- Flow 2:
   Average throughput: 7.97 Mbit/s
   95th percentile per-packet one-way delay: 126.762 ms
   Loss rate: 2.94%
-- Flow 3:
   Average throughput: 8.41 Mbit/s
   95th percentile per-packet one-way delay: 125.099 ms
   Loss rate: 4.28%
Run 1: Report of PCC — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 80.32 Mbps)
- Flow 1 egress (mean 78.36 Mbps)
- Flow 2 ingress (mean 8.21 Mbps)
- Flow 2 egress (mean 7.97 Mbps)
- Flow 3 ingress (mean 8.78 Mbps)
- Flow 3 egress (mean 8.41 Mbps)
Run 2: Statistics of PCC

Start at: 2018-02-04 22:07:55
End at: 2018-02-04 22:08:25
Local clock offset: -0.148 ms
Remote clock offset: 3.441 ms

# Below is generated by plot.py at 2018-02-05 01:52:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.27 Mbit/s
95th percentile per-packet one-way delay: 130.656 ms
Loss rate: 3.97%
-- Flow 1:
Average throughput: 79.28 Mbit/s
95th percentile per-packet one-way delay: 130.634 ms
Loss rate: 3.52%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 130.507 ms
Loss rate: 6.92%
-- Flow 3:
Average throughput: 7.38 Mbit/s
95th percentile per-packet one-way delay: 137.342 ms
Loss rate: 11.12%
Run 2: Report of PCC — Data Link

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

- Flow 1 ingress (mean 82.18 Mbit/s)
- Flow 1 egress (mean 79.28 Mbit/s)
- Flow 2 ingress (mean 8.90 Mbit/s)
- Flow 2 egress (mean 8.36 Mbit/s)
- Flow 3 ingress (mean 8.30 Mbit/s)
- Flow 3 egress (mean 7.38 Mbit/s)
Run 3: Statistics of PCC

Start at: 2018-02-04 22:31:49
End at: 2018-02-04 22:32:19
Local clock offset: -0.237 ms
Remote clock offset: -2.479 ms

# Below is generated by plot.py at 2018-02-05 01:52:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 126.673 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 78.83 Mbit/s
95th percentile per-packet one-way delay: 126.651 ms
Loss rate: 2.20%
-- Flow 2:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 131.785 ms
Loss rate: 2.29%
-- Flow 3:
Average throughput: 8.25 Mbit/s
95th percentile per-packet one-way delay: 126.486 ms
Loss rate: 3.10%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

End at: 2018-02-04 22:56:11
Local clock offset: -0.173 ms
Remote clock offset: 2.884 ms

# Below is generated by plot.py at 2018-02-05 01:52:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.35 Mbit/s
95th percentile per-packet one-way delay: 131.578 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 77.88 Mbit/s
95th percentile per-packet one-way delay: 131.552 ms
Loss rate: 2.39%
-- Flow 2:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 134.873 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 129.526 ms
Loss rate: 3.82%
Run 4: Report of PCC — Data Link

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

- Flow 1 ingress (mean 79.80 Mbit/s)
- Flow 1 egress (mean 77.88 Mbit/s)
- Flow 2 ingress (mean 8.63 Mbit/s)
- Flow 2 egress (mean 8.61 Mbit/s)
- Flow 3 ingress (mean 8.67 Mbit/s)
- Flow 3 egress (mean 8.34 Mbit/s)

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

- Flow 1 (95th percentile 131.55 ms)
- Flow 2 (95th percentile 134.87 ms)
- Flow 3 (95th percentile 129.53 ms)
Run 5: Statistics of PCC

Start at: 2018-02-04 23:19:31
End at: 2018-02-04 23:20:01
Local clock offset: -0.173 ms
Remote clock offset: 4.156 ms

# Below is generated by plot.py at 2018-02-05 01:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.99 Mbit/s
95th percentile per-packet one-way delay: 130.680 ms
Loss rate: 2.58%
-- Flow 1:
Average throughput: 78.79 Mbit/s
95th percentile per-packet one-way delay: 130.649 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 135.602 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 8.22 Mbit/s
95th percentile per-packet one-way delay: 130.277 ms
Loss rate: 4.14%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

Start at: 2018-02-04 23:43:17
End at: 2018-02-04 23:43:47
Local clock offset: -0.116 ms
Remote clock offset: 4.532 ms

# Below is generated by plot.py at 2018-02-05 01:52:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.78 Mbit/s
  95th percentile per-packet one-way delay: 137.013 ms
  Loss rate: 2.68%
-- Flow 1:
  Average throughput: 78.22 Mbit/s
  95th percentile per-packet one-way delay: 137.022 ms
  Loss rate: 2.57%
-- Flow 2:
  Average throughput: 8.82 Mbit/s
  95th percentile per-packet one-way delay: 128.977 ms
  Loss rate: 2.94%
-- Flow 3:
  Average throughput: 8.14 Mbit/s
  95th percentile per-packet one-way delay: 130.785 ms
  Loss rate: 5.27%
Run 6: Report of PCC — Data Link
Run 7: Statistics of PCC

Start at: 2018-02-05 00:07:11
End at: 2018-02-05 00:07:41
Local clock offset: -0.175 ms
Remote clock offset: -1.824 ms

# Below is generated by plot.py at 2018-02-05 01:53:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.78 Mbit/s
95th percentile per-packet one-way delay: 130.072 ms
Loss rate: 3.92%
-- Flow 1:
Average throughput: 78.64 Mbit/s
95th percentile per-packet one-way delay: 130.047 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 8.56 Mbit/s
95th percentile per-packet one-way delay: 127.952 ms
Loss rate: 6.17%
-- Flow 3:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 133.584 ms
Loss rate: 11.98%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-02-05 00:30:59
End at: 2018-02-05 00:31:29
Local clock offset: -0.097 ms
Remote clock offset: 3.332 ms

# Below is generated by plot.py at 2018-02-05 01:53:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.83 Mbit/s
95th percentile per-packet one-way delay: 132.226 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 78.59 Mbit/s
95th percentile per-packet one-way delay: 132.219 ms
Loss rate: 2.17%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 130.348 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 8.12 Mbit/s
95th percentile per-packet one-way delay: 135.682 ms
Loss rate: 3.71%
Run 8: Report of PCC — Data Link
Run 9: Statistics of PCC

Start at: 2018-02-05 00:54:48
End at: 2018-02-05 00:55:18
Local clock offset: ~0.099 ms
Remote clock offset: 1.822 ms

# Below is generated by plot.py at 2018-02-05 01:53:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.52 Mbit/s
95th percentile per-packet one-way delay: 134.704 ms
Loss rate: 2.93%
-- Flow 1:
Average throughput: 78.32 Mbit/s
95th percentile per-packet one-way delay: 134.706 ms
Loss rate: 2.80%
-- Flow 2:
Average throughput: 8.46 Mbit/s
95th percentile per-packet one-way delay: 134.711 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 130.902 ms
Loss rate: 5.96%
Run 9: Report of PCC — Data Link

![Graph showing network performance metrics]
Run 10: Statistics of PCC

Start at: 2018-02-05 01:18:40
End at: 2018-02-05 01:19:10
Local clock offset: -0.109 ms
Remote clock offset: -1.845 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 132.649 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 80.50 Mbit/s
95th percentile per-packet one-way delay: 132.654 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 132.574 ms
Loss rate: 5.00%
-- Flow 3:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 127.266 ms
Loss rate: 4.84%
Run 10: Report of PCC — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-04 21:24:03
End at: 2018-02-04 21:24:33
Local clock offset: -0.172 ms
Remote clock offset: -1.652 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.49 Mbit/s
95th percentile per-packet one-way delay: 122.612 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 37.01 Mbit/s
95th percentile per-packet one-way delay: 122.130 ms
Loss rate: 1.55%
-- Flow 2:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 128.367 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 16.22 Mbit/s
95th percentile per-packet one-way delay: 124.585 ms
Loss rate: 5.20%
Run 1: Report of QUIC Cubic — Data Link

![Graph of data link throughput and per-packet one-way delay with labels for each flow's ingress and egress mean rates.]

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Run 2: Statistics of QUIC Cubic

Start at: 2018-02-04 21:47:55
End at: 2018-02-04 21:48:25
Local clock offset: -0.127 ms
Remote clock offset: 2.895 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.03 Mbit/s
  95th percentile per-packet one-way delay: 129.043 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 44.46 Mbit/s
  95th percentile per-packet one-way delay: 132.411 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 21.58 Mbit/s
  95th percentile per-packet one-way delay: 118.672 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 16.11 Mbit/s
  95th percentile per-packet one-way delay: 129.811 ms
  Loss rate: 0.43%
Run 2: Report of QUIC Cubic — Data Link

[Graph of throughput (Mbps/s) vs. time (s) with multiple flow lines and mean values mentioned for each flow]

[Graph of packet round trip delay (ms) vs. time (s) with 95th percentile values mentioned for each flow]
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-04 22:11:50
End at: 2018-02-04 22:12:20
Local clock offset: -0.131 ms
Remote clock offset: -1.447 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.43 Mbit/s
95th percentile per-packet one-way delay: 121.816 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 37.93 Mbit/s
95th percentile per-packet one-way delay: 120.060 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 122.380 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 21.28 Mbit/s
95th percentile per-packet one-way delay: 121.254 ms
Loss rate: 0.83%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-04 22:35:44
End at: 2018-02-04 22:36:14
Local clock offset: -0.141 ms
Remote clock offset: 3.12 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.14 Mbit/s
95th percentile per-packet one-way delay: 126.083 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 128.058 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 18.83 Mbit/s
95th percentile per-packet one-way delay: 118.917 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 14.99 Mbit/s
95th percentile per-packet one-way delay: 126.960 ms
Loss rate: 0.49%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-04 22:59:36
End at: 2018-02-04 23:00:06
Local clock offset: -0.229 ms
Remote clock offset: 3.875 ms

# Below is generated by plot.py at 2018-02-05 01:54:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.04 Mbit/s
  95th percentile per-packet one-way delay: 133.963 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 37.61 Mbit/s
  95th percentile per-packet one-way delay: 134.847 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 23.07 Mbit/s
  95th percentile per-packet one-way delay: 127.399 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 15.76 Mbit/s
  95th percentile per-packet one-way delay: 133.318 ms
  Loss rate: 0.70%
Run 5: Report of QUIC Cubic — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows with annotations for mean throughput and 95th percentile delay]

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Run 6: Statistics of QUIC Cubic

Local clock offset: -0.177 ms
Remote clock offset: 4.164 ms

# Below is generated by plot.py at 2018-02-05 01:54:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.81 Mbit/s
95th percentile per-packet one-way delay: 127.886 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 37.74 Mbit/s
95th percentile per-packet one-way delay: 126.160 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 25.37 Mbit/s
95th percentile per-packet one-way delay: 128.371 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 25.30 Mbit/s
95th percentile per-packet one-way delay: 131.418 ms
Loss rate: 1.10%
Run 6: Report of QUIC Cubic — Data Link

![Graph 1: Throughput vs. Time]

- **Flow 1 ingress** (mean 37.97 Mbit/s)
- **Flow 1 egress** (mean 37.74 Mbit/s)
- **Flow 2 ingress** (mean 25.53 Mbit/s)
- **Flow 2 egress** (mean 25.37 Mbit/s)
- **Flow 3 ingress** (mean 25.62 Mbit/s)
- **Flow 3 egress** (mean 25.30 Mbit/s)

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

- **Flow 1** (95th percentile 126.16 ms)
- **Flow 2** (95th percentile 128.37 ms)
- **Flow 3** (95th percentile 131.42 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-04 23:47:12
End at: 2018-02-04 23:47:42
Local clock offset: -0.16 ms
Remote clock offset: -1.118 ms

# Below is generated by plot.py at 2018-02-05 01:55:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.24 Mbit/s
95th percentile per-packet one-way delay: 122.253 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 42.99 Mbit/s
95th percentile per-packet one-way delay: 122.547 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 121.843 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 8.29 Mbit/s
95th percentile per-packet one-way delay: 115.536 ms
Loss rate: 0.39%
Run 7: Report of QUIC Cubic — Data Link

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

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[Image 1](image1)
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-05 00:11:06
End at: 2018-02-05 00:11:36
Local clock offset: -0.113 ms
Remote clock offset: 3.652 ms

# Below is generated by plot.py at 2018-02-05 01:55:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 130.761 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 37.79 Mbit/s
95th percentile per-packet one-way delay: 134.936 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 24.30 Mbit/s
95th percentile per-packet one-way delay: 124.782 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 14.01 Mbit/s
95th percentile per-packet one-way delay: 126.559 ms
Loss rate: 0.46%
Run 8: Report of QUIC Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 38.18 Mbps)
- **Flow 1 egress** (mean 37.79 Mbps)
- **Flow 2 ingress** (mean 24.35 Mbps)
- **Flow 2 egress** (mean 24.30 Mbps)
- **Flow 3 ingress** (mean 14.11 Mbps)
- **Flow 3 egress** (mean 14.01 Mbps)

---

**End-to-end delay (ms)**

- **Flow 1** (95th percentile 134.94 ms)
- **Flow 2** (95th percentile 124.78 ms)
- **Flow 3** (95th percentile 126.56 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-05 00:34:54
End at: 2018-02-05 00:35:24
Local clock offset: -0.101 ms
Remote clock offset: 4.033 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.02 Mbit/s
95th percentile per-packet one-way delay: 126.767 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 46.27 Mbit/s
95th percentile per-packet one-way delay: 128.544 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 18.89 Mbit/s
95th percentile per-packet one-way delay: 125.114 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 16.07 Mbit/s
95th percentile per-packet one-way delay: 125.941 ms
Loss rate: 0.50%
Run 9: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 46.51 Mbps)  
Flow 1 egress (mean 46.27 Mbps)  
Flow 2 ingress (mean 18.96 Mbps)  
Flow 2 egress (mean 18.89 Mbps)  
Flow 3 ingress (mean 16.16 Mbps)  
Flow 3 egress (mean 16.07 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 128.54 ms)  
Flow 2 (95th percentile 125.11 ms)  
Flow 3 (95th percentile 125.94 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-05 00:58:43
End at: 2018-02-05 00:59:13
Local clock offset: -0.117 ms
Remote clock offset: -2.08 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.81 Mbit/s
  95th percentile per-packet one-way delay: 123.299 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 44.50 Mbit/s
  95th percentile per-packet one-way delay: 124.793 ms
  Loss rate: 0.56%
-- Flow 2:
  Average throughput: 18.27 Mbit/s
  95th percentile per-packet one-way delay: 117.055 ms
  Loss rate: 0.44%
-- Flow 3:
  Average throughput: 15.98 Mbit/s
  95th percentile per-packet one-way delay: 123.454 ms
  Loss rate: 0.59%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-02-04 21:30:45
End at: 2018-02-04 21:31:15
Local clock offset: -0.108 ms
Remote clock offset: -1.696 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 99.201 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 99.223 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.188 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.715 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

[Graph showing throughput and packet size over time]
Run 2: Statistics of SCReAM

Start at: 2018-02-04 21:54:38
End at: 2018-02-04 21:55:09
Local clock offset: -0.22 ms
Remote clock offset: -1.996 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Data link statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 96.926 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.237 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.976 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.062 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-02-04 22:18:34
End at: 2018-02-04 22:19:04
Local clock offset: -0.201 ms
Remote clock offset: -2.409 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 102.358 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 102.377 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.324 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.956 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)

- Flow 1 ingress (mean 0.21 Mbit/s) — Flow 1 egress (mean 0.21 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 1 (95th percentile 102.38 ms) — Flow 2 (95th percentile 95.32 ms) — Flow 3 (95th percentile 98.96 ms)
Run 4: Statistics of SCReAM

Start at: 2018-02-04 22:42:26
End at: 2018-02-04 22:42:56
Local clock offset: -0.165 ms
Remote clock offset: -2.618 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 96.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.386 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 96.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 95.761 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

![Graph 2: Packet error rate (delay)]

- Flow 1 (95th percentile 95.39 ms)
- Flow 2 (95th percentile 96.99 ms)
- Flow 3 (95th percentile 95.76 ms)
Run 5: Statistics of SCReAM

Start at: 2018-02-04 23:06:17
End at: 2018-02-04 23:06:47
Local clock offset: -0.165 ms
Remote clock offset: 3.962 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 102.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 101.017 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 99.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 102.508 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-02-04 23:30:04
End at: 2018-02-04 23:30:34
Local clock offset: -0.15 ms
Remote clock offset: -0.561 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 94.203 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 93.104 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 94.233 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 93.114 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

[Graphs showing data link performance metrics over time]
Run 7: Statistics of SCReAM

End at: 2018-02-04 23:54:23
Local clock offset: -0.166 ms
Remote clock offset: -0.647 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 101.813 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 95.139 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 101.839 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 98.102 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graph showing throughput and per-packet cone-to-wire latency over time for different flows.]

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

- **Per-packet cone-to-wire delay (ms):**
  - Flow 1 (95th percentile 95.14 ms)
  - Flow 2 (95th percentile 101.84 ms)
  - Flow 3 (95th percentile 98.10 ms)
Run 8: Statistics of SCReAM

Start at: 2018-02-05 00:17:46
End at: 2018-02-05 00:18:16
Local clock offset: -0.123 ms
Remote clock offset: 3.627 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 106.385 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 99.647 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 106.411 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 101.127 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

Throughput (Mbps) vs Time (s)

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

Packet delay (ms) vs Time (s)

- Flow 1 (95th percentile 99.65 ms)
- Flow 2 (95th percentile 106.41 ms)
- Flow 3 (95th percentile 101.13 ms)
Run 9: Statistics of SCReAM

Start at: 2018-02-05 00:41:33
End at: 2018-02-05 00:42:03
Local clock offset: -0.097 ms
Remote clock offset: 3.03 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 103.100 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 100.868 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 99.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 103.180 ms
Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

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

- 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)

Packet delay (ms):
- Flow 1 (95th percentile 100.87 ms)
- Flow 2 (95th percentile 99.89 ms)
- Flow 3 (95th percentile 103.18 ms)
Run 10: Statistics of SCReAM

Start at: 2018-02-05 01:05:24
End at: 2018-02-05 01:05:54
Local clock offset: -0.174 ms
Remote clock offset: -3.049 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 97.169 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 97.216 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 95.258 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 97.144 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-02-04 21:33:23
End at: 2018-02-04 21:33:53
Local clock offset: -0.177 ms
Remote clock offset: 3.173 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.46 Mbit/s
  95th percentile per-packet one-way delay: 106.050 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 2.04 Mbit/s
  95th percentile per-packet one-way delay: 101.107 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 1.06 Mbit/s
  95th percentile per-packet one-way delay: 106.199 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 0.39 Mbit/s
  95th percentile per-packet one-way delay: 102.146 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-02-04 21:57:17
End at: 2018-02-04 21:57:47
Local clock offset: -0.196 ms
Remote clock offset: 2.774 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.79 Mbit/s
  95th percentile per-packet one-way delay: 184.621 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.72 Mbit/s
  95th percentile per-packet one-way delay: 270.050 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.86 Mbit/s
  95th percentile per-packet one-way delay: 101.798 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 98.644 ms
  Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

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

**Throughput (Mbps)**

**Time (s)**

- Flow 1 ingress (mean 1.72 Mbps)
- Flow 1 egress (mean 1.72 Mbps)
- Flow 2 ingress (mean 0.86 Mbps)
- Flow 2 egress (mean 0.86 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

**Packet delay (ms)**

**Time (s)**

- Flow 1 (95th percentile 270.05 ms)
- Flow 2 (95th percentile 101.80 ms)
- Flow 3 (95th percentile 98.64 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-02-04 22:21:12
End at: 2018-02-04 22:21:42
Local clock offset: -0.151 ms
Remote clock offset: -1.526 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.36 Mbit/s
  95th percentile per-packet one-way delay: 97.541 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 2.00 Mbit/s
  95th percentile per-packet one-way delay: 97.159 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.17 Mbit/s
  95th percentile per-packet one-way delay: 172.279 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 97.238 ms
  Loss rate: 0.14%
Run 3: Report of WebRTC media — Data Link

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

![Graph 2: Time (s) vs. Per packet end-to-end delay (ms)]
Run 4: Statistics of WebRTC media

Start at: 2018-02-04 22:45:04
End at: 2018-02-04 22:45:34
Local clock offset: -0.14 ms
Remote clock offset: 2.317 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.37 Mbit/s
  95th percentile per-packet one-way delay: 107.918 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.01 Mbit/s
  95th percentile per-packet one-way delay: 100.912 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.17 Mbit/s
  95th percentile per-packet one-way delay: 108.883 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 101.810 ms
  Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time](image-url)
Run 5: Statistics of WebRTC media

Start at: 2018-02-04 23:08:55
End at: 2018-02-04 23:09:25
Local clock offset: -0.19 ms
Remote clock offset: -1.61 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.42 Mbit/s
  95th percentile per-packet one-way delay: 97.596 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 1.92 Mbit/s
  95th percentile per-packet one-way delay: 94.312 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 1.18 Mbit/s
  95th percentile per-packet one-way delay: 97.740 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.34 Mbit/s
  95th percentile per-packet one-way delay: 96.211 ms
  Loss rate: 0.01%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-02-04 23:32:41
End at: 2018-02-04 23:33:11
Local clock offset: -0.204 ms
Remote clock offset: -1.363 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 97.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 94.242 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 99.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 96.470 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.01 Mbit/s)
- Flow 1 egress (mean 2.01 Mbit/s)
- Flow 2 ingress (mean 1.48 Mbit/s)
- Flow 2 egress (mean 1.48 Mbit/s)
- Flow 3 ingress (mean 0.28 Mbit/s)
- Flow 3 egress (mean 0.28 Mbit/s)

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

- Flow 1 (95th percentile 94.24 ms)
- Flow 2 (95th percentile 99.13 ms)
- Flow 3 (95th percentile 99.47 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-02-04 23:56:30
End at: 2018-02-04 23:57:00
Local clock offset: -0.139 ms
Remote clock offset: -1.541 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.51 Mbit/s
95th percentile per-packet one-way delay: 101.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 101.517 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.17 Mbit/s
95th percentile per-packet one-way delay: 96.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 94.930 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss over time for different flows.](image-url)
Run 8: Statistics of WebRTC media

Start at: 2018-02-05 00:20:24
End at: 2018-02-05 00:20:54
Local clock offset: -0.109 ms
Remote clock offset: 3.457 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.47 Mbit/s
95th percentile per-packet one-way delay: 106.536 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 99.676 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.18 Mbit/s
95th percentile per-packet one-way delay: 106.641 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 103.629 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 1.98 Mbit/s)
- Flow 1 egress (mean 1.98 Mbit/s)
- Flow 2 ingress (mean 1.18 Mbit/s)
- Flow 2 egress (mean 1.18 Mbit/s)
- Flow 3 ingress (mean 0.33 Mbit/s)
- Flow 3 egress (mean 0.33 Mbit/s)

![Round trip delay Graph]

- Flow 1 (95th percentile 99.68 ms)
- Flow 2 (95th percentile 106.64 ms)
- Flow 3 (95th percentile 103.63 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-02-05 00:44:11
End at: 2018-02-05 00:44:41
Local clock offset: -0.16 ms
Remote clock offset: -2.67 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 99.037 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.99 Mbit/s
95th percentile per-packet one-way delay: 99.092 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 96.221 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 96.413 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-02-05 01:08:03
End at: 2018-02-05 01:08:33
Local clock offset: -0.104 ms
Remote clock offset: -2.957 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.44 Mbit/s
95th percentile per-packet one-way delay: 101.148 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 93.283 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 96.846 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 102.039 ms
Loss rate: 0.76%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-02-04 21:45:19
End at: 2018-02-04 21:45:49
Local clock offset: -0.196 ms
Remote clock offset: 3.725 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.14 Mbit/s
  95th percentile per-packet one-way delay: 109.754 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.01 Mbit/s
  95th percentile per-packet one-way delay: 108.712 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.80 Mbit/s
  95th percentile per-packet one-way delay: 110.634 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.87 Mbit/s
  95th percentile per-packet one-way delay: 110.301 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-02-04 22:09:13
End at: 2018-02-04 22:09:43
Local clock offset: -0.142 ms
Remote clock offset: 4.316 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.54 Mbit/s
95th percentile per-packet one-way delay: 110.742 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 109.772 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 111.953 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 109.938 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-02-04 22:33:07
End at: 2018-02-04 22:33:37
Local clock offset: -0.148 ms
Remote clock offset: -2.603 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 105.019 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 3.69 Mbit/s
95th percentile per-packet one-way delay: 103.634 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 106.450 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 3.43 Mbit/s
95th percentile per-packet one-way delay: 102.858 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

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

- **Flow 1** (ingress mean 3.69 Mbit/s, egress mean 3.69 Mbit/s)
- **Flow 2** (ingress mean 3.27 Mbit/s, egress mean 3.27 Mbit/s)
- **Flow 3** (ingress mean 3.43 Mbit/s, egress mean 3.43 Mbit/s)

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

- **Flow 1** (95th percentile 103.63 ms)
- **Flow 2** (95th percentile 106.45 ms)
- **Flow 3** (95th percentile 102.86 ms)
Run 4: Statistics of Sprout

Start at: 2018-02-04 22:56:59
End at: 2018-02-04 22:57:29
Local clock offset: -0.148 ms
Remote clock offset: 3.689 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.58 Mbit/s
  95th percentile per-packet one-way delay: 110.875 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.17 Mbit/s
  95th percentile per-packet one-way delay: 110.931 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.42 Mbit/s
  95th percentile per-packet one-way delay: 111.481 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.44 Mbit/s
  95th percentile per-packet one-way delay: 109.100 ms
  Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 4.17 Mbit/s)
- Flow 1 egress (mean 4.17 Mbit/s)
- Flow 2 ingress (mean 3.42 Mbit/s)
- Flow 2 egress (mean 3.42 Mbit/s)
- Flow 3 ingress (mean 3.44 Mbit/s)
- Flow 3 egress (mean 3.44 Mbit/s)

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

- Flow 1 (95th percentile 110.93 ms)
- Flow 2 (95th percentile 111.48 ms)
- Flow 3 (95th percentile 109.10 ms)
Run 5: Statistics of Sprout

Start at: 2018-02-04 23:20:49
End at: 2018-02-04 23:21:19
Local clock offset: -0.175 ms
Remote clock offset: -0.586 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 107.301 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 107.437 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 107.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.02 Mbit/s
95th percentile per-packet one-way delay: 103.580 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-02-04 23:44:36
End at: 2018-02-04 23:45:06
Local clock offset: -0.111 ms
Remote clock offset: 3.679 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.90 Mbit/s
  95th percentile per-packet one-way delay: 111.405 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.11 Mbit/s
  95th percentile per-packet one-way delay: 112.581 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.10 Mbit/s
  95th percentile per-packet one-way delay: 108.424 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.23 Mbit/s
  95th percentile per-packet one-way delay: 109.449 ms
  Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

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

Legend:
- Flow 1 ingress (mean 3.11 Mbps)
- Flow 1 egress (mean 3.11 Mbps)
- Flow 2 ingress (mean 4.10 Mbps)
- Flow 2 egress (mean 4.10 Mbps)
- Flow 3 ingress (mean 3.23 Mbps)
- Flow 3 egress (mean 3.23 Mbps)

Legend:
- Flow 1 (95th percentile 112.50 ms)
- Flow 2 (95th percentile 108.42 ms)
- Flow 3 (95th percentile 109.43 ms)
Run 7: Statistics of Sprout

Start at: 2018-02-05 00:08:30
End at: 2018-02-05 00:09:00
Local clock offset: -0.099 ms
Remote clock offset: 4.708 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.14 Mbit/s
  95th percentile per-packet one-way delay: 111.831 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.34 Mbit/s
  95th percentile per-packet one-way delay: 112.941 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.84 Mbit/s
  95th percentile per-packet one-way delay: 108.214 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.79 Mbit/s
  95th percentile per-packet one-way delay: 110.346 ms
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 3.34 Mbps)
- Flow 1 egress (mean 3.34 Mbps)
- Flow 2 ingress (mean 3.84 Mbps)
- Flow 2 egress (mean 3.84 Mbps)
- Flow 3 ingress (mean 3.79 Mbps)
- Flow 3 egress (mean 3.79 Mbps)

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

- Flow 1 (95th percentile 112.94 ms)
- Flow 2 (95th percentile 108.21 ms)
- Flow 3 (95th percentile 110.35 ms)
Run 8: Statistics of Sprout

Start at: 2018-02-05 00:32:17
End at: 2018-02-05 00:32:47
Local clock offset: -0.098 ms
Remote clock offset: 2.35 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.82 Mbit/s
  95th percentile per-packet one-way delay: 107.537 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.26 Mbit/s
  95th percentile per-packet one-way delay: 107.287 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.80 Mbit/s
  95th percentile per-packet one-way delay: 108.039 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.15 Mbit/s
  95th percentile per-packet one-way delay: 106.998 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 4.26 Mbit/s)  Flow 1 egress (mean 4.26 Mbit/s)
Flow 2 ingress (mean 3.80 Mbit/s)  Flow 2 egress (mean 3.80 Mbit/s)
Flow 3 ingress (mean 3.15 Mbit/s)  Flow 3 egress (mean 3.15 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 107.29 ms)  Flow 2 (95th percentile 108.04 ms)  Flow 3 (95th percentile 107.00 ms)
Run 9: Statistics of Sprout

Start at: 2018-02-05 00:56:06
End at: 2018-02-05 00:56:36
Local clock offset: -0.19 ms
Remote clock offset: -2.981 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.31 Mbit/s
95th percentile per-packet one-way delay: 105.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 106.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 102.122 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 103.842 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

![Graph of Sprout Data Link](image)

- Flow 1 ingress (mean 2.92 Mbit/s)
- Flow 1 egress (mean 2.92 Mbit/s)
- Flow 2 ingress (mean 4.32 Mbit/s)
- Flow 2 egress (mean 4.32 Mbit/s)
- Flow 3 ingress (mean 1.56 Mbit/s)
- Flow 3 egress (mean 1.56 Mbit/s)

![Graph showing packet interarrival delay](image)

- Flow 1 (95th percentile 106.56 ms)
- Flow 2 (95th percentile 102.12 ms)
- Flow 3 (95th percentile 103.84 ms)
Run 10: Statistics of Sprout

Start at: 2018-02-05 01:19:59
End at: 2018-02-05 01:20:29
Local clock offset: -0.095 ms
Remote clock offset: -1.915 ms

# Below is generated by plot.py at 2018-02-05 01:55:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.83 Mbit/s
95th percentile per-packet one-way delay: 105.381 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 104.593 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 104.351 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 108.164 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

![Throughput Graph]

![Delay Graph]
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-04 21:38:37
End at: 2018-02-04 21:39:07
Local clock offset: -0.133 ms
Remote clock offset: 4.603 ms

# Below is generated by plot.py at 2018-02-05 01:56:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.39 Mbit/s
  95th percentile per-packet one-way delay: 131.319 ms
  Loss rate: 6.59%
-- Flow 1:
  Average throughput: 39.58 Mbit/s
  95th percentile per-packet one-way delay: 130.984 ms
  Loss rate: 3.92%
-- Flow 2:
  Average throughput: 33.85 Mbit/s
  95th percentile per-packet one-way delay: 130.639 ms
  Loss rate: 9.13%
-- Flow 3:
  Average throughput: 30.97 Mbit/s
  95th percentile per-packet one-way delay: 138.675 ms
  Loss rate: 10.66%

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Run 1: Report of TaoVA-100x — Data Link

![Throughput Graph]

![Latency Graph]

Flow 1 ingress (mean 41.23 Mbit/s)  
Flow 1 egress (mean 39.58 Mbit/s)  
Flow 2 ingress (mean 37.30 Mbit/s)  
Flow 2 egress (mean 33.85 Mbit/s)  
Flow 3 ingress (mean 34.70 Mbit/s)  
Flow 3 egress (mean 30.97 Mbit/s)  

Flow 1 (95th percentile 130.98 ms)  
Flow 2 (95th percentile 130.64 ms)  
Flow 3 (95th percentile 130.68 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-04 22:02:31
End at: 2018-02-04 22:03:01
Local clock offset: -0.142 ms
Remote clock offset: -2.151 ms

# Below is generated by plot.py at 2018-02-05 01:56:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.43 Mbit/s
95th percentile per-packet one-way delay: 125.120 ms
Loss rate: 6.58%
-- Flow 1:
Average throughput: 44.77 Mbit/s
95th percentile per-packet one-way delay: 124.750 ms
Loss rate: 4.80%
-- Flow 2:
Average throughput: 22.79 Mbit/s
95th percentile per-packet one-way delay: 125.867 ms
Loss rate: 10.51%
-- Flow 3:
Average throughput: 41.30 Mbit/s
95th percentile per-packet one-way delay: 125.058 ms
Loss rate: 7.73%
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-04 22:26:26
End at: 2018-02-04 22:26:56
Local clock offset: -0.213 ms
Remote clock offset: 2.402 ms

# Below is generated by plot.py at 2018-02-05 01:57:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.26 Mbit/s
  95th percentile per-packet one-way delay: 129.954 ms
  Loss rate: 7.13%
-- Flow 1:
  Average throughput: 43.18 Mbit/s
  95th percentile per-packet one-way delay: 128.378 ms
  Loss rate: 4.36%
-- Flow 2:
  Average throughput: 29.45 Mbit/s
  95th percentile per-packet one-way delay: 130.696 ms
  Loss rate: 11.79%
-- Flow 3:
  Average throughput: 40.87 Mbit/s
  95th percentile per-packet one-way delay: 129.996 ms
  Loss rate: 8.61%
Run 3: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 45.15 Mbps/s)
- Flow 1 egress (mean 43.18 Mbps/s)
- Flow 2 ingress (mean 33.38 Mbps/s)
- Flow 2 egress (mean 29.45 Mbps/s)
- Flow 3 ingress (mean 44.73 Mbps/s)
- Flow 3 egress (mean 40.67 Mbps/s)

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

- Flow 1 (95th percentile 128.38 ms)
- Flow 2 (95th percentile 130.70 ms)
- Flow 3 (95th percentile 130.00 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-04 22:50:18  
End at: 2018-02-04 22:50:48  
Local clock offset: -0.167 ms  
Remote clock offset: 3.369 ms

# Below is generated by plot.py at 2018-02-05 01:57:02  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 72.31 Mbit/s  
95th percentile per-packet one-way delay: 135.646 ms  
Loss rate: 6.70%  
-- Flow 1:  
Average throughput: 40.26 Mbit/s  
95th percentile per-packet one-way delay: 136.071 ms  
Loss rate: 5.45%  
-- Flow 2:  
Average throughput: 42.39 Mbit/s  
95th percentile per-packet one-way delay: 134.613 ms  
Loss rate: 7.53%  
-- Flow 3:  
Average throughput: 11.82 Mbit/s  
95th percentile per-packet one-way delay: 130.828 ms  
Loss rate: 12.87%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-04 23:14:07
End at: 2018-02-04 23:14:37
Local clock offset: -0.252 ms
Remote clock offset: 3.323 ms

# Below is generated by plot.py at 2018-02-05 01:57:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.59 Mbit/s
  95th percentile per-packet one-way delay: 130.150 ms
  Loss rate: 5.75%
-- Flow 1:
  Average throughput: 48.07 Mbit/s
  95th percentile per-packet one-way delay: 130.258 ms
  Loss rate: 4.18%
-- Flow 2:
  Average throughput: 39.19 Mbit/s
  95th percentile per-packet one-way delay: 130.029 ms
  Loss rate: 7.35%
-- Flow 3:
  Average throughput: 7.61 Mbit/s
  95th percentile per-packet one-way delay: 128.985 ms
  Loss rate: 16.87%
Run 5: Report of TaoVA-100x — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 50.18 Mbps)
- Flow 1 egress (mean 48.07 Mbps)
- Flow 2 ingress (mean 42.34 Mbps)
- Flow 2 egress (mean 39.19 Mbps)
- Flow 3 ingress (mean 9.18 Mbps)
- Flow 3 egress (mean 7.61 Mbps)

**Packet Delay (ms):**
- Flow 1 (95th percentile 130.26 ms)
- Flow 2 (95th percentile 130.03 ms)
- Flow 3 (95th percentile 128.99 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-04 23:37:54
End at: 2018-02-04 23:38:24
Local clock offset: -0.129 ms
Remote clock offset: -1.31 ms

# Below is generated by plot.py at 2018-02-05 01:57:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.18 Mbit/s
  95th percentile per-packet one-way delay: 124.828 ms
  Loss rate: 5.67%
-- Flow 1:
  Average throughput: 42.72 Mbit/s
  95th percentile per-packet one-way delay: 123.139 ms
  Loss rate: 4.54%
-- Flow 2:
  Average throughput: 16.11 Mbit/s
  95th percentile per-packet one-way delay: 123.242 ms
  Loss rate: 7.64%
-- Flow 3:
  Average throughput: 41.42 Mbit/s
  95th percentile per-packet one-way delay: 127.099 ms
  Loss rate: 7.54%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-05 00:01:45
End at: 2018-02-05 00:02:15
Local clock offset: -0.098 ms
Remote clock offset: 4.022 ms

# Below is generated by plot.py at 2018-02-05 01:57:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.25 Mbit/s
95th percentile per-packet one-way delay: 131.246 ms
Loss rate: 6.34%
-- Flow 1:
Average throughput: 39.20 Mbit/s
95th percentile per-packet one-way delay: 130.525 ms
Loss rate: 4.78%
-- Flow 2:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 132.691 ms
Loss rate: 7.97%
-- Flow 3:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 130.635 ms
Loss rate: 8.15%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-05 00:25:36
End at: 2018-02-05 00:26:07
Local clock offset: -0.109 ms
Remote clock offset: -1.478 ms

# Below is generated by plot.py at 2018-02-05 01:57:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.92 Mbit/s
95th percentile per-packet one-way delay: 124.965 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 38.66 Mbit/s
95th percentile per-packet one-way delay: 125.211 ms
Loss rate: 2.69%
-- Flow 2:
Average throughput: 22.43 Mbit/s
95th percentile per-packet one-way delay: 125.788 ms
Loss rate: 4.67%
-- Flow 3:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 122.297 ms
Loss rate: 0.54%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-05 00:49:24
End at: 2018-02-05 00:49:54
Local clock offset: -0.123 ms
Remote clock offset: -2.743 ms

# Below is generated by plot.py at 2018-02-05 01:58:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.42 Mbit/s
95th percentile per-packet one-way delay: 124.137 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 40.83 Mbit/s
95th percentile per-packet one-way delay: 125.300 ms
Loss rate: 3.45%
-- Flow 2:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 123.664 ms
Loss rate: 6.97%
-- Flow 3:
Average throughput: 54.93 Mbit/s
95th percentile per-packet one-way delay: 121.005 ms
Loss rate: 0.73%
Run 9: Report of TaoVA-100x — Data Link

The diagrams show the performance metrics for three different flows:

1. **Flow 1**
   - Ingress (mean 42.32 Mbit/s)
   - Egress (mean 40.83 Mbit/s)

2. **Flow 2**
   - Ingress (mean 26.51 Mbit/s)
   - Egress (mean 24.63 Mbit/s)

3. **Flow 3**
   - Ingress (mean 55.46 Mbit/s)
   - Egress (mean 54.93 Mbit/s)

The top diagram illustrates the throughput over time, while the bottom diagram shows the 95th percentile one-way delay.
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-05 01:13:16
End at: 2018-02-05 01:13:46
Local clock offset: -0.137 ms
Remote clock offset: 2.826 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.47 Mbit/s
95th percentile per-packet one-way delay: 133.750 ms
Loss rate: 7.39%
-- Flow 1:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 134.039 ms
Loss rate: 5.45%
-- Flow 2:
Average throughput: 20.68 Mbit/s
95th percentile per-packet one-way delay: 130.750 ms
Loss rate: 10.76%
-- Flow 3:
Average throughput: 29.08 Mbit/s
95th percentile per-packet one-way delay: 131.066 ms
Loss rate: 11.87%
Run 10: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet inter-arrival delay over time]

- **Throughput (Mbps):**
  - Flow 1 ingress: Mean 52.06 Mbps
  - Flow 1 egress: Mean 49.17 Mbps
  - Flow 2 ingress: Mean 23.17 Mbps
  - Flow 2 egress: Mean 20.68 Mbps
  - Flow 3 ingress: Mean 33.10 Mbps
  - Flow 3 egress: Mean 29.08 Mbps

- **Packet Inter-Arrival Delay (ms):**
  - Flow 1 (95th percentile): 134.04 ms
  - Flow 2 (95th percentile): 130.75 ms
  - Flow 3 (95th percentile): 131.07 ms
Run 1: Statistics of TCP Vegas

Start at: 2018-02-04 21:39:59
End at: 2018-02-04 21:40:29
Local clock offset: -0.208 ms
Remote clock offset: 3.84 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.86 Mbit/s
95th percentile per-packet one-way delay: 115.795 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 23.21 Mbit/s
95th percentile per-packet one-way delay: 112.458 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 115.421 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 19.53 Mbit/s
95th percentile per-packet one-way delay: 123.781 ms
Loss rate: 2.46%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-02-04 22:03:53
End at: 2018-02-04 22:04:23
Local clock offset: -0.211 ms
Remote clock offset: 4.429 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.12 Mbit/s
95th percentile per-packet one-way delay: 110.730 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 28.56 Mbit/s
95th percentile per-packet one-way delay: 107.016 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 28.97 Mbit/s
95th percentile per-packet one-way delay: 115.327 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 108.430 ms
Loss rate: 1.22%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

End at: 2018-02-04 22:28:18
Local clock offset: -0.176 ms
Remote clock offset: 3.162 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.46 Mbit/s
95th percentile per-packet one-way delay: 114.344 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 111.962 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 16.02 Mbit/s
95th percentile per-packet one-way delay: 119.138 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 34.13 Mbit/s
95th percentile per-packet one-way delay: 111.389 ms
Loss rate: 1.07%
Run 3: Report of TCP Vegas — Data Link

![Data Link Throughput and Delay Graphs](image_url)

Legend:
- **Flow 1 Ingress** (mean 20.64 Mbit/s)
- **Flow 1 Egress** (mean 20.47 Mbit/s)
- **Flow 2 Ingress** (mean 16.24 Mbit/s)
- **Flow 2 Egress** (mean 16.02 Mbit/s)
- **Flow 3 Ingress** (mean 34.50 Mbit/s)
- **Flow 3 Egress** (mean 34.13 Mbit/s)
Run 4: Statistics of TCP Vegas

Start at: 2018-02-04 22:51:40
End at: 2018-02-04 22:52:10
Local clock offset: -0.148 ms
Remote clock offset: -2.257 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: 102.870 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 25.33 Mbit/s
95th percentile per-packet one-way delay: 103.028 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 102.847 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 34.27 Mbit/s
95th percentile per-packet one-way delay: 102.975 ms
Loss rate: 1.35%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-02-04 23:15:30
End at: 2018-02-04 23:16:00
Local clock offset: -0.165 ms
Remote clock offset: 4.13 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 48.31 Mbit/s
  95th percentile per-packet one-way delay: 111.075 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 22.13 Mbit/s
  95th percentile per-packet one-way delay: 111.847 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 21.67 Mbit/s
  95th percentile per-packet one-way delay: 111.138 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 35.35 Mbit/s
  95th percentile per-packet one-way delay: 107.885 ms
  Loss rate: 1.02%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-02-04 23:39:15
End at: 2018-02-04 23:39:45
Local clock offset: -0.134 ms
Remote clock offset: 3.612 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 118.125 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 20.25 Mbit/s
95th percentile per-packet one-way delay: 113.156 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 19.86 Mbit/s
95th percentile per-packet one-way delay: 124.542 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 19.64 Mbit/s
95th percentile per-packet one-way delay: 119.557 ms
Loss rate: 2.80%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-02-05 00:03:08
End at: 2018-02-05 00:03:38
Local clock offset: -0.122 ms
Remote clock offset: 4.775 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.37 Mbit/s
  95th percentile per-packet one-way delay: 112.682 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 24.16 Mbit/s
  95th percentile per-packet one-way delay: 112.636 ms
  Loss rate: 0.55%
-- Flow 2:
  Average throughput: 28.55 Mbit/s
  95th percentile per-packet one-way delay: 113.683 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 33.76 Mbit/s
  95th percentile per-packet one-way delay: 110.788 ms
  Loss rate: 1.11%
Run 7: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)** vs **Time (s)**
  - Flow 1 ingress (mean 24.29 Mbps)
  - Flow 1 egress (mean 24.16 Mbps)
  - Flow 2 ingress (mean 28.73 Mbps)
  - Flow 2 egress (mean 28.55 Mbps)
  - Flow 3 ingress (mean 34.14 Mbps)
  - Flow 3 egress (mean 33.76 Mbps)

- **Packet one-way delay (ms)** vs **Time (s)**
  - Flow 1 (95th percentile 112.64 ms)
  - Flow 2 (95th percentile 113.68 ms)
  - Flow 3 (95th percentile 110.79 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-02-05 00:26:58
End at: 2018-02-05 00:27:28
Local clock offset: -0.123 ms
Remote clock offset: 3.373 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.36 Mbit/s
  95th percentile per-packet one-way delay: 113.801 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 23.81 Mbit/s
  95th percentile per-packet one-way delay: 114.429 ms
  Loss rate: 0.60%
-- Flow 2:
  Average throughput: 27.50 Mbit/s
  95th percentile per-packet one-way delay: 115.314 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 33.87 Mbit/s
  95th percentile per-packet one-way delay: 109.671 ms
  Loss rate: 1.05%
Run 8: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 23.95 Mbit/s)
- Flow 1 egress (mean 23.81 Mbit/s)
- Flow 2 ingress (mean 27.70 Mbit/s)
- Flow 2 egress (mean 27.50 Mbit/s)
- Flow 3 ingress (mean 34.23 Mbit/s)
- Flow 3 egress (mean 33.67 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-02-05 00:50:46
End at: 2018-02-05 00:51:16
Local clock offset: -0.166 ms
Remote clock offset: -2.831 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.25 Mbit/s
95th percentile per-packet one-way delay: 115.491 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 22.42 Mbit/s
95th percentile per-packet one-way delay: 115.034 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 112.806 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 19.32 Mbit/s
95th percentile per-packet one-way delay: 122.724 ms
Loss rate: 2.52%
Run 9: Report of TCP Vegas — Data Link

![Graph of throughput over time for different flows]

- Flow 1 ingress (mean 22.52 Mbit/s)
- Flow 1 egress (mean 22.42 Mbit/s)
- Flow 2 ingress (mean 24.90 Mbit/s)
- Flow 2 egress (mean 24.68 Mbit/s)
- Flow 3 ingress (mean 19.81 Mbit/s)
- Flow 3 egress (mean 19.32 Mbit/s)

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

- Flow 1 (95th percentile 115.03 ms)
- Flow 2 (95th percentile 112.81 ms)
- Flow 3 (95th percentile 122.72 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-02-05 01:14:38
End at: 2018-02-05 01:15:08
Local clock offset: -0.11 ms
Remote clock offset: -2.016 ms

# Below is generated by plot.py at 2018-02-05 01:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 45.28 Mbit/s
  95th percentile per-packet one-way delay: 111.652 ms
  Loss rate: 0.94%
-- Flow 1:
  Average throughput: 22.67 Mbit/s
  95th percentile per-packet one-way delay: 108.756 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 24.49 Mbit/s
  95th percentile per-packet one-way delay: 110.012 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 19.01 Mbit/s
  95th percentile per-packet one-way delay: 123.112 ms
  Loss rate: 2.49%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-02-04 21:28:02
End at: 2018-02-04 21:28:32
Local clock offset: -0.166 ms
Remote clock offset: -1.721 ms

# Below is generated by plot.py at 2018-02-05 01:59:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 171.014 ms
Loss rate: 79.81%
-- Flow 1:
Average throughput: 33.44 Mbit/s
95th percentile per-packet one-way delay: 173.340 ms
Loss rate: 81.93%
-- Flow 2:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 131.280 ms
Loss rate: 25.52%
-- Flow 3:
Average throughput: 7.58 Mbit/s
95th percentile per-packet one-way delay: 155.781 ms
Loss rate: 81.29%
Run 1: Report of Verus — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 185.12 Mbps)
  - Flow 1 egress (mean 33.44 Mbps)
  - Flow 2 ingress (mean 11.35 Mbps)
  - Flow 2 egress (mean 8.45 Mbps)
  - Flow 3 ingress (mean 32.31 Mbps)
  - Flow 3 egress (mean 7.56 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 173.34 ms)
  - Flow 2 (95th percentile 131.28 ms)
  - Flow 3 (95th percentile 155.78 ms)
Run 2: Statistics of Verus

Start at: 2018-02-04 21:51:56
End at: 2018-02-04 21:52:26
Local clock offset: -0.138 ms
Remote clock offset: -1.198 ms

# Below is generated by plot.py at 2018-02-05 01:59:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 132.103 ms
Loss rate: 55.85%
-- Flow 1:
Average throughput: 11.31 Mbit/s
95th percentile per-packet one-way delay: 131.712 ms
Loss rate: 9.11%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 133.865 ms
Loss rate: 56.02%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 130.666 ms
Loss rate: 71.83%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-02-04 22:15:52
End at: 2018-02-04 22:16:22
Local clock offset: -0.141 ms
Remote clock offset: 3.392 ms

# Below is generated by plot.py at 2018-02-05 01:59:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.05 Mbit/s
95th percentile per-packet one-way delay: 145.199 ms
Loss rate: 52.31%
-- Flow 1:
Average throughput: 27.22 Mbit/s
95th percentile per-packet one-way delay: 170.064 ms
Loss rate: 61.48%
-- Flow 2:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 130.400 ms
Loss rate: 33.27%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 129.505 ms
Loss rate: 15.84%
Run 3: Report of Verus — Data Link

![Graphs showing network traffic](image)

Legend:
- Flow 1 ingress (mean 70.72 Mbit/s)
- Flow 1 egress (mean 27.22 Mbit/s)
- Flow 2 ingress (mean 39.18 Mbit/s)
- Flow 2 egress (mean 26.14 Mbit/s)
- Flow 3 ingress (mean 12.97 Mbit/s)
- Flow 3 egress (mean 10.92 Mbit/s)

![Graphs showing packet delay](image)

Legend:
- Flow 1 (95th percentile 170.06 ms)
- Flow 2 (95th percentile 130.40 ms)
- Flow 3 (95th percentile 129.50 ms)
Run 4: Statistics of Verus

End at: 2018-02-04 22:40:13
Local clock offset: -0.135 ms
Remote clock offset: -1.704 ms

# Below is generated by plot.py at 2018-02-05 01:59:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.97 Mbit/s
95th percentile per-packet one-way delay: 157.468 ms
Loss rate: 62.42%
-- Flow 1:
Average throughput: 29.93 Mbit/s
95th percentile per-packet one-way delay: 163.007 ms
Loss rate: 69.01%
-- Flow 2:
Average throughput: 13.75 Mbit/s
95th percentile per-packet one-way delay: 132.114 ms
Loss rate: 14.97%
-- Flow 3:
Average throughput: 22.97 Mbit/s
95th percentile per-packet one-way delay: 125.911 ms
Loss rate: 47.53%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-02-04 23:03:37
End at: 2018-02-04 23:04:07
Local clock offset: -0.254 ms
Remote clock offset: 4.871 ms

# Below is generated by plot.py at 2018-02-05 01:59:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 138.435 ms
Loss rate: 44.23%
-- Flow 1:
Average throughput: 25.36 Mbit/s
95th percentile per-packet one-way delay: 139.539 ms
Loss rate: 49.14%
-- Flow 2:
Average throughput: 16.59 Mbit/s
95th percentile per-packet one-way delay: 138.858 ms
Loss rate: 38.50%
-- Flow 3:
Average throughput: 14.05 Mbit/s
95th percentile per-packet one-way delay: 131.181 ms
Loss rate: 18.51%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-02-04 23:27:24
End at: 2018-02-04 23:27:54
Local clock offset: -0.143 ms
Remote clock offset: 3.419 ms

# Below is generated by plot.py at 2018-02-05 01:59:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.85 Mbit/s
95th percentile per-packet one-way delay: 163.204 ms
Loss rate: 56.36%
-- Flow 1:
Average throughput: 20.12 Mbit/s
95th percentile per-packet one-way delay: 130.452 ms
Loss rate: 20.50%
-- Flow 2:
Average throughput: 19.18 Mbit/s
95th percentile per-packet one-way delay: 178.148 ms
Loss rate: 76.53%
-- Flow 3:
Average throughput: 21.72 Mbit/s
95th percentile per-packet one-way delay: 131.385 ms
Loss rate: 40.41%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-02-04 23:51:12
End at: 2018-02-04 23:51:42
Local clock offset: -0.168 ms
Remote clock offset: -1.381 ms

# Below is generated by plot.py at 2018-02-05 01:59:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 42.20 Mbit/s
  95th percentile per-packet one-way delay: 145.314 ms
  Loss rate: 60.49%
-- Flow 1:
  Average throughput: 20.71 Mbit/s
  95th percentile per-packet one-way delay: 131.088 ms
  Loss rate: 18.04%
-- Flow 2:
  Average throughput: 29.76 Mbit/s
  95th percentile per-packet one-way delay: 155.789 ms
  Loss rate: 75.09%
-- Flow 3:
  Average throughput: 5.35 Mbit/s
  95th percentile per-packet one-way delay: 131.060 ms
  Loss rate: 21.46%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 25.30 Mbps)
- Flow 1 egress (mean 20.71 Mbps)
- Flow 2 ingress (mean 119.63 Mbps)
- Flow 2 egress (mean 29.76 Mbps)
- Flow 3 ingress (mean 6.81 Mbps)
- Flow 3 egress (mean 5.35 Mbps)

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

- Flow 1 (95th percentile 131.09 ms)
- Flow 2 (95th percentile 155.79 ms)
- Flow 3 (95th percentile 131.06 ms)
Run 8: Statistics of Verus

Start at: 2018-02-05 00:15:03
End at: 2018-02-05 00:15:33
Local clock offset: -0.128 ms
Remote clock offset: 3.678 ms

# Below is generated by plot.py at 2018-02-05 02:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.42 Mbit/s
95th percentile per-packet one-way delay: 176.043 ms
Loss rate: 77.31%
-- Flow 1:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 177.054 ms
Loss rate: 79.45%
-- Flow 2:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 129.837 ms
Loss rate: 19.01%
-- Flow 3:
Average throughput: 0.84 Mbit/s
95th percentile per-packet one-way delay: 162.737 ms
Loss rate: 60.15%
Run 8: Report of Verus — Data Link

![Graph showing network performance metrics over time. The top graph indicates throughput in Mbps, and the bottom graph shows one-way packet delay in ms.]

- Flow 1 ingress (mean 175.93 Mbps)
- Flow 1 egress (mean 36.11 Mbps)
- Flow 2 ingress (mean 9.00 Mbps)
- Flow 2 egress (mean 7.61 Mbps)
- Flow 3 ingress (mean 2.13 Mbps)
- Flow 3 egress (mean 0.84 Mbps)

![Legend for the graphs showing different flow characteristics and their respective bandwidth and delay metrics.]

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Run 9: Statistics of Verus

Start at: 2018-02-05 00:38:53
End at: 2018-02-05 00:39:23
Local clock offset: -0.165 ms
Remote clock offset: -2.485 ms

# Below is generated by plot.py at 2018-02-05 02:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 124.897 ms
Loss rate: 10.53%
-- Flow 1:
Average throughput: 20.86 Mbit/s
95th percentile per-packet one-way delay: 125.922 ms
Loss rate: 9.12%
-- Flow 2:
Average throughput: 20.08 Mbit/s
95th percentile per-packet one-way delay: 124.628 ms
Loss rate: 12.62%
-- Flow 3:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 124.060 ms
Loss rate: 10.76%
Run 9: Report of Verus — Data Link

![Graph of throughput and packet delay over time]

**Throughput (Mbps):**
- Flow 1 ingress (mean 22.97 Mbps)
- Flow 1 egress (mean 20.86 Mbps)
- Flow 2 ingress (mean 23.00 Mbps)
- Flow 2 egress (mean 20.08 Mbps)
- Flow 3 ingress (mean 11.73 Mbps)
- Flow 3 egress (mean 10.46 Mbps)

**Packet Delay (ms):**
- Flow 1 (95th percentile 125.92 ms)
- Flow 2 (95th percentile 124.63 ms)
- Flow 3 (95th percentile 124.06 ms)
Run 10: Statistics of Verus

Start at: 2018-02-05 01:02:42
End at: 2018-02-05 01:03:12
Local clock offset: -0.171 ms
Remote clock offset: 3.442 ms

# Below is generated by plot.py at 2018-02-05 02:00:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.95 Mbit/s
95th percentile per-packet one-way delay: 139.697 ms
Loss rate: 37.82%
-- Flow 1:
Average throughput: 26.16 Mbit/s
95th percentile per-packet one-way delay: 141.485 ms
Loss rate: 41.48%
-- Flow 2:
Average throughput: 22.57 Mbit/s
95th percentile per-packet one-way delay: 134.128 ms
Loss rate: 33.39%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 139.573 ms
Loss rate: 25.28%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-02-04 21:42:38
End at: 2018-02-04 21:43:08
Local clock offset: -0.134 ms
Remote clock offset: -1.856 ms

# Below is generated by plot.py at 2018-02-05 02:01:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.79 Mbit/s
  95th percentile per-packet one-way delay: 101.689 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 46.18 Mbit/s
  95th percentile per-packet one-way delay: 100.587 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 33.09 Mbit/s
  95th percentile per-packet one-way delay: 103.960 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 19.80 Mbit/s
  95th percentile per-packet one-way delay: 109.449 ms
  Loss rate: 0.00%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-02-04 22:06:33
End at: 2018-02-04 22:07:03
Local clock offset: -0.152 ms
Remote clock offset: -1.274 ms

# Below is generated by plot.py at 2018-02-05 02:01:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.76 Mbit/s
95th percentile per-packet one-way delay: 110.254 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.63 Mbit/s
95th percentile per-packet one-way delay: 108.795 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 32.81 Mbit/s
95th percentile per-packet one-way delay: 111.771 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 21.89 Mbit/s
95th percentile per-packet one-way delay: 110.079 ms
Loss rate: 0.00%
Run 2: Report of Copa — Data Link

[Graph showing throughput and per-packet one-way delay]
Run 3: Statistics of Copa

Start at: 2018-02-04 22:30:26
End at: 2018-02-04 22:30:56
Local clock offset: -0.146 ms
Remote clock offset: 4.073 ms

# Below is generated by plot.py at 2018-02-05 02:01:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.68 Mbit/s
95th percentile per-packet one-way delay: 113.075 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 48.81 Mbit/s
95th percentile per-packet one-way delay: 111.351 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 113.755 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 9.05 Mbit/s
95th percentile per-packet one-way delay: 117.095 ms
Loss rate: 0.04%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 48.81 Mbit/s)
- Flow 1 egress (mean 48.81 Mbit/s)
- Flow 2 ingress (mean 35.85 Mbit/s)
- Flow 2 egress (mean 35.85 Mbit/s)
- Flow 3 ingress (mean 9.05 Mbit/s)
- Flow 3 egress (mean 9.05 Mbit/s)

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

- Flow 1 (95th percentile 111.35 ms)
- Flow 2 (95th percentile 113.75 ms)
- Flow 3 (95th percentile 117.09 ms)
Run 4: Statistics of Copa

Start at: 2018-02-04 22:54:19
End at: 2018-02-04 22:54:49
Local clock offset: -0.228 ms
Remote clock offset: -2.052 ms

# Below is generated by plot.py at 2018-02-05 02:01:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.78 Mbit/s
  95th percentile per-packet one-way delay: 105.850 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 38.89 Mbit/s
  95th percentile per-packet one-way delay: 101.217 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 39.12 Mbit/s
  95th percentile per-packet one-way delay: 109.520 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 17.57 Mbit/s
  95th percentile per-packet one-way delay: 108.733 ms
  Loss rate: 0.00%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-02-04 23:18:09
End at: 2018-02-04 23:18:39
Local clock offset: -0.231 ms
Remote clock offset: -1.529 ms

# Below is generated by plot.py at 2018-02-05 02:01:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.25 Mbit/s
95th percentile per-packet one-way delay: 104.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 45.14 Mbit/s
95th percentile per-packet one-way delay: 101.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 108.050 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.20 Mbit/s
95th percentile per-packet one-way delay: 106.908 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-02-04 23:41:54
End at: 2018-02-04 23:42:24
Local clock offset: -0.106 ms
Remote clock offset: -1.302 ms

# Below is generated by plot.py at 2018-02-05 02:01:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.36 Mbit/s
95th percentile per-packet one-way delay: 104.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.52 Mbit/s
95th percentile per-packet one-way delay: 101.047 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.08 Mbit/s
95th percentile per-packet one-way delay: 106.509 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 14.51 Mbit/s
95th percentile per-packet one-way delay: 109.759 ms
Loss rate: 0.02%
Run 7: Statistics of Copa

Start at: 2018-02-05 00:05:48
End at: 2018-02-05 00:06:18
Local clock offset: -0.108 ms
Remote clock offset: -1.695 ms

# Below is generated by plot.py at 2018-02-05 02:01:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.02 Mbit/s
95th percentile per-packet one-way delay: 105.775 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.55 Mbit/s
95th percentile per-packet one-way delay: 99.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 111.337 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 21.34 Mbit/s
95th percentile per-packet one-way delay: 106.337 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link

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

- Flow 1 ingress (mean 45.55 Mbit/s)
- Flow 1 egress (mean 45.55 Mbit/s)
- Flow 2 ingress (mean 35.13 Mbit/s)
- Flow 2 egress (mean 35.13 Mbit/s)
- Flow 3 ingress (mean 21.34 Mbit/s)
- Flow 3 egress (mean 21.34 Mbit/s)

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

- Flow 1 (95th percentile 99.79 ms)
- Flow 2 (95th percentile 111.34 ms)
- Flow 3 (95th percentile 106.34 ms)
Run 8: Statistics of Copa

Start at: 2018-02-05 00:29:37
End at: 2018-02-05 00:30:07
Local clock offset: -0.126 ms
Remote clock offset: -2.416 ms

# Below is generated by plot.py at 2018-02-05 02:02:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.92 Mbit/s
95th percentile per-packet one-way delay: 107.177 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 46.69 Mbit/s
95th percentile per-packet one-way delay: 105.722 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 35.64 Mbit/s
95th percentile per-packet one-way delay: 108.041 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 111.136 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 9: Statistics of Copa

Start at: 2018-02-05 00:53:25
End at: 2018-02-05 00:53:55
Local clock offset: -0.103 ms
Remote clock offset: -2.949 ms

# Below is generated by plot.py at 2018-02-05 02:02:57
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 74.22 Mbit/s
 95th percentile per-packet one-way delay: 106.580 ms 
 Loss rate: 0.01%
-- Flow 1:
 Average throughput: 45.73 Mbit/s
 95th percentile per-packet one-way delay: 98.818 ms 
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 33.30 Mbit/s
 95th percentile per-packet one-way delay: 109.929 ms 
 Loss rate: 0.02%
-- Flow 3:
 Average throughput: 19.06 Mbit/s
 95th percentile per-packet one-way delay: 117.238 ms 
 Loss rate: 0.06%
Run 9: Report of Copa — Data Link
Run 10: Statistics of Copa

Start at: 2018-02-05 01:17:17
End at: 2018-02-05 01:17:47
Local clock offset: -0.103 ms
Remote clock offset: 2.905 ms

# Below is generated by plot.py at 2018-02-05 02:03:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.03 Mbit/s
  95th percentile per-packet one-way delay: 111.800 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 45.16 Mbit/s
  95th percentile per-packet one-way delay: 110.045 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 38.22 Mbit/s
  95th percentile per-packet one-way delay: 112.849 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 7.31 Mbit/s
  95th percentile per-packet one-way delay: 114.556 ms
  Loss rate: 0.00%
Run 10: Report of Copa — Data Link

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

- Flow 1 ingress (mean 45.16 Mbit/s)
- Flow 1 egress (mean 45.16 Mbit/s)
- Flow 2 ingress (mean 38.22 Mbit/s)
- Flow 2 egress (mean 38.22 Mbit/s)
- Flow 3 ingress (mean 7.31 Mbit/s)
- Flow 3 egress (mean 7.31 Mbit/s)
Run 1: Statistics of FillP

Start at: 2018-02-04 21:31:59
End at: 2018-02-04 21:32:29
Local clock offset: -0.153 ms
Remote clock offset: -1.745 ms

# Below is generated by plot.py at 2018-02-05 02:03:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.42 Mbit/s
95th percentile per-packet one-way delay: 125.363 ms
Loss rate: 16.53%
-- Flow 1:
Average throughput: 54.12 Mbit/s
95th percentile per-packet one-way delay: 125.380 ms
Loss rate: 13.28%
-- Flow 2:
Average throughput: 35.65 Mbit/s
95th percentile per-packet one-way delay: 123.692 ms
Loss rate: 17.51%
-- Flow 3:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 125.457 ms
Loss rate: 27.50%
Run 1: Report of FillP — Data Link

![Graphs showing throughput and packet latency](image-url)
Run 2: Statistics of FillP

End at: 2018-02-04 21:56:23
Local clock offset: -0.142 ms
Remote clock offset: -1.998 ms

# Below is generated by plot.py at 2018-02-05 02:03:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 130.600 ms
Loss rate: 17.35%
-- Flow 1:
Average throughput: 52.09 Mbit/s
95th percentile per-packet one-way delay: 128.947 ms
Loss rate: 12.90%
-- Flow 2:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 130.759 ms
Loss rate: 17.94%
-- Flow 3:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 128.899 ms
Loss rate: 30.83%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 59.87 Mbps/s)
- Flow 1 egress (mean 52.09 Mbps/s)
- Flow 2 ingress (mean 45.61 Mbps/s)
- Flow 2 egress (mean 37.38 Mbps/s)
- Flow 3 ingress (mean 55.62 Mbps/s)
- Flow 3 egress (mean 38.48 Mbps/s)

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

- Flow 1 (95th percentile 128.95 ms)
- Flow 2 (95th percentile 130.76 ms)
- Flow 3 (95th percentile 128.90 ms)
Run 3: Statistics of FillP

Start at: 2018-02-04 22:19:49
End at: 2018-02-04 22:20:19
Local clock offset: -0.148 ms
Remote clock offset: 2.537 ms

# Below is generated by plot.py at 2018-02-05 02:04:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.55 Mbit/s
95th percentile per-packet one-way delay: 135.575 ms
Loss rate: 17.72%
-- Flow 1:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 135.567 ms
Loss rate: 15.58%
-- Flow 2:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 135.633 ms
Loss rate: 18.87%
-- Flow 3:
Average throughput: 34.33 Mbit/s
95th percentile per-packet one-way delay: 128.556 ms
Loss rate: 24.79%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 65.43 Mbps)
- Flow 1 egress (mean 55.19 Mbps)
- Flow 2 ingress (mean 42.58 Mbps)
- Flow 2 egress (mean 34.52 Mbps)
- Flow 3 ingress (mean 45.63 Mbps)
- Flow 3 egress (mean 34.33 Mbps)

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

- Flow 1 (95th percentile 135.57 ms)
- Flow 2 (95th percentile 135.63 ms)
- Flow 3 (95th percentile 128.56 ms)
Run 4: Statistics of FillP

Start at: 2018-02-04 22:43:41
End at: 2018-02-04 22:44:11
Local clock offset: -0.212 ms
Remote clock offset: 3.915 ms

# Below is generated by plot.py at 2018-02-05 02:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.95 Mbit/s
95th percentile per-packet one-way delay: 135.387 ms
Loss rate: 18.08%
-- Flow 1:
Average throughput: 47.36 Mbit/s
95th percentile per-packet one-way delay: 133.442 ms
Loss rate: 13.88%
-- Flow 2:
Average throughput: 42.42 Mbit/s
95th percentile per-packet one-way delay: 135.376 ms
Loss rate: 17.25%
-- Flow 3:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 135.625 ms
Loss rate: 31.40%
Run 4: Report of FillP — Data Link

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

- Flow 1 ingress (mean 55.04 Mbit/s)
- Flow 1 egress (mean 47.36 Mbit/s)
- Flow 2 ingress (mean 51.33 Mbit/s)
- Flow 2 egress (mean 42.42 Mbit/s)
- Flow 3 ingress (mean 56.73 Mbit/s)
- Flow 3 egress (mean 40.24 Mbit/s)

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

- Flow 1 (95th percentile 133.44 ms)
- Flow 2 (95th percentile 135.38 ms)
- Flow 3 (95th percentile 135.62 ms)
Run 5: Statistics of FillP

Start at: 2018-02-04 23:07:32
End at: 2018-02-04 23:08:02
Local clock offset: -0.184 ms
Remote clock offset: 4.042 ms

# Below is generated by plot.py at 2018-02-05 02:04:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: 136.281 ms
Loss rate: 16.70%
-- Flow 1:
Average throughput: 51.85 Mbit/s
95th percentile per-packet one-way delay: 136.379 ms
Loss rate: 13.71%
-- Flow 2:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 131.147 ms
Loss rate: 18.38%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 129.231 ms
Loss rate: 25.47%
Run 5: Report of FillP — Data Link

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

Flow 1 ingress (mean 60.13 Mbit/s), Flow 1 egress (mean 51.85 Mbit/s), Flow 2 ingress (mean 50.16 Mbit/s), Flow 2 egress (mean 40.89 Mbit/s), Flow 3 ingress (mean 42.70 Mbit/s), Flow 3 egress (mean 31.82 Mbit/s).
Run 6: Statistics of FillP

Start at: 2018-02-04 23:31:19
End at: 2018-02-04 23:31:49
Local clock offset: -0.209 ms
Remote clock offset: -0.574 ms

# Below is generated by plot.py at 2018-02-05 02:04:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.06 Mbit/s
  95th percentile per-packet one-way delay: 125.748 ms
  Loss rate: 14.54%
-- Flow 1:
  Average throughput: 54.50 Mbit/s
  95th percentile per-packet one-way delay: 124.419 ms
  Loss rate: 10.36%
-- Flow 2:
  Average throughput: 33.07 Mbit/s
  95th percentile per-packet one-way delay: 124.597 ms
  Loss rate: 14.29%
-- Flow 3:
  Average throughput: 37.80 Mbit/s
  95th percentile per-packet one-way delay: 126.079 ms
  Loss rate: 29.21%
Run 6: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 60.85 Mbps)
- Flow 1 egress (mean 54.50 Mbps)
- Flow 2 ingress (mean 38.64 Mbps)
- Flow 2 egress (mean 33.07 Mbps)
- Flow 3 ingress (mean 53.54 Mbps)
- Flow 3 egress (mean 37.80 Mbps)

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

- Flow 1 (95th percentile 124.42 ms)
- Flow 2 (95th percentile 124.60 ms)
- Flow 3 (95th percentile 126.08 ms)
Run 7: Statistics of FillP

End at: 2018-02-04 23:55:37
Local clock offset: -0.099 ms
Remote clock offset: 3.284 ms

# Below is generated by plot.py at 2018-02-05 02:05:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 135.248 ms
Loss rate: 17.33%
-- Flow 1:
Average throughput: 51.30 Mbit/s
95th percentile per-packet one-way delay: 128.267 ms
Loss rate: 14.02%
-- Flow 2:
Average throughput: 40.18 Mbit/s
95th percentile per-packet one-way delay: 125.660 ms
Loss rate: 19.24%
-- Flow 3:
Average throughput: 35.11 Mbit/s
95th percentile per-packet one-way delay: 135.617 ms
Loss rate: 25.89%
Run 7: Report of FillP — Data Link
Run 8: Statistics of FillP

Start at: 2018-02-05 00:19:00
End at: 2018-02-05 00:19:30
Local clock offset: -0.175 ms
Remote clock offset: -1.323 ms

# Below is generated by plot.py at 2018-02-05 02:05:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.79 Mbit/s
95th percentile per-packet one-way delay: 126.004 ms
Loss rate: 18.22%
-- Flow 1:
Average throughput: 51.72 Mbit/s
95th percentile per-packet one-way delay: 123.152 ms
Loss rate: 12.89%
-- Flow 2:
Average throughput: 38.82 Mbit/s
95th percentile per-packet one-way delay: 126.081 ms
Loss rate: 20.31%
-- Flow 3:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 126.183 ms
Loss rate: 32.01%
Run 8: Report of FillP — Data Link

---

**Diagrams:**

1. **Throughput (Mbps):**
   - Flow 1 ingress (mean 59.41 Mbps)
   - Flow 1 egress (mean 51.72 Mbps)
   - Flow 2 ingress (mean 48.73 Mbps)
   - Flow 2 egress (mean 38.82 Mbps)
   - Flow 3 ingress (mean 54.42 Mbps)
   - Flow 3 egress (mean 37.05 Mbps)

2. **Per-packet end-to-end delay (ms):**
   - Flow 1 (95th percentile 123.15 ms)
   - Flow 2 (95th percentile 126.08 ms)
   - Flow 3 (95th percentile 126.18 ms)
Run 9: Statistics of FillP

Start at: 2018-02-05 00:42:47
End at: 2018-02-05 00:43:18
Local clock offset: -0.093 ms
Remote clock offset: 3.0 ms

# Below is generated by plot.py at 2018-02-05 02:06:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 134.496 ms
Loss rate: 20.21%
-- Flow 1:
Average throughput: 50.47 Mbit/s
95th percentile per-packet one-way delay: 134.618 ms
Loss rate: 14.50%
-- Flow 2:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 130.826 ms
Loss rate: 21.46%
-- Flow 3:
Average throughput: 41.84 Mbit/s
95th percentile per-packet one-way delay: 127.773 ms
Loss rate: 34.28%
Run 9: Report of FillP — Data Link
Run 10: Statistics of FillP

Start at: 2018-02-05 01:06:39
End at: 2018-02-05 01:07:09
Local clock offset: -0.125 ms
Remote clock offset: 3.504 ms

# Below is generated by plot.py at 2018-02-05 02:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.65 Mbit/s
95th percentile per-packet one-way delay: 134.794 ms
Loss rate: 17.62%
-- Flow 1:
Average throughput: 54.39 Mbit/s
95th percentile per-packet one-way delay: 134.886 ms
Loss rate: 12.91%
-- Flow 2:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: 130.567 ms
Loss rate: 23.24%
-- Flow 3:
Average throughput: 33.63 Mbit/s
95th percentile per-packet one-way delay: 131.960 ms
Loss rate: 25.59%
Run 10: Report of FillP — Data Link
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-04 21:29:23
End at: 2018-02-04 21:29:53
Local clock offset: -0.126 ms
Remote clock offset: -0.828 ms

# Below is generated by plot.py at 2018-02-05 02:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.42 Mbit/s
95th percentile per-packet one-way delay: 134.273 ms
Loss rate: 37.84%
-- Flow 1:
Average throughput: 61.87 Mbit/s
95th percentile per-packet one-way delay: 130.824 ms
Loss rate: 21.41%
-- Flow 2:
Average throughput: 28.95 Mbit/s
95th percentile per-packet one-way delay: 134.435 ms
Loss rate: 44.66%
-- Flow 3:
Average throughput: 35.48 Mbit/s
95th percentile per-packet one-way delay: 128.904 ms
Loss rate: 67.73%
Run 1: Report of Indigo-1-32 — Data Link

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**Graph 1:**
- **Throughput (Mbps):**
- **Time (s):**
- Lines represent:
  - Flow 1 ingress (mean 78.80 Mbps)
  - Flow 1 egress (mean 61.87 Mbps)
  - Flow 2 ingress (mean 52.40 Mbps)
  - Flow 2 egress (mean 28.95 Mbps)
  - Flow 3 ingress (mean 100.98 Mbps)
  - Flow 3 egress (mean 35.48 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms):**
- **Time (s):**
- Markers represent:
  - Flow 1 (95th percentile 130.82 ms)
  - Flow 2 (95th percentile 134.44 ms)
  - Flow 3 (95th percentile 128.90 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-04 21:53:15
End at: 2018-02-04 21:53:45
Local clock offset: -0.138 ms
Remote clock offset: 3.668 ms

# Below is generated by plot.py at 2018-02-05 02:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.91 Mbit/s
95th percentile per-packet one-way delay: 137.401 ms
Loss rate: 40.78%
-- Flow 1:
Average throughput: 63.33 Mbit/s
95th percentile per-packet one-way delay: 135.852 ms
Loss rate: 19.86%
-- Flow 2:
Average throughput: 16.39 Mbit/s
95th percentile per-packet one-way delay: 132.487 ms
Loss rate: 56.09%
-- Flow 3:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 137.482 ms
Loss rate: 64.72%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-04 22:17:11
End at: 2018-02-04 22:17:41
Local clock offset: -0.223 ms
Remote clock offset: 2.494 ms

# Below is generated by plot.py at 2018-02-05 02:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.84 Mbit/s
95th percentile per-packet one-way delay: 137.651 ms
Loss rate: 43.28%
-- Flow 1:
Average throughput: 65.37 Mbit/s
95th percentile per-packet one-way delay: 130.134 ms
Loss rate: 25.24%
-- Flow 2:
Average throughput: 27.62 Mbit/s
95th percentile per-packet one-way delay: 137.813 ms
Loss rate: 53.36%
-- Flow 3:
Average throughput: 28.74 Mbit/s
95th percentile per-packet one-way delay: 130.084 ms
Loss rate: 75.15%
Run 3: Report of Indigo-1-32 — Data Link
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-04 22:41:03
End at: 2018-02-04 22:41:33
Local clock offset: -0.136 ms
Remote clock offset: -1.756 ms

# Below is generated by plot.py at 2018-02-05 02:06:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.16 Mbit/s
95th percentile per-packet one-way delay: 134.238 ms
Loss rate: 37.54%
-- Flow 1:
Average throughput: 67.54 Mbit/s
95th percentile per-packet one-way delay: 134.257 ms
Loss rate: 14.44%
-- Flow 2:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 132.130 ms
Loss rate: 51.88%
-- Flow 3:
Average throughput: 43.45 Mbit/s
95th percentile per-packet one-way delay: 129.092 ms
Loss rate: 69.88%
Run 4: Report of Indigo-1-32 — Data Link

Graph 1: Throughput (Mbps)
- Blue line: Flow 1 ingress (mean 79.02 Mbps)
- Blue line: Flow 1 egress (mean 67.54 Mbps)
- Green line: Flow 2 ingress (mean 53.64 Mbps)
- Green line: Flow 2 egress (mean 16.16 Mbps)
- Red line: Flow 3 ingress (mean 144.28 Mbps)
- Red line: Flow 3 egress (mean 43.45 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Blue line: Flow 1 (95th percentile 134.26 ms)
- Green line: Flow 2 (95th percentile 132.13 ms)
- Red line: Flow 3 (95th percentile 129.09 ms)
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-04 23:04:55
End at: 2018-02-04 23:05:25
Local clock offset: -0.176 ms
Remote clock offset: -0.921 ms

# Below is generated by plot.py at 2018-02-05 02:07:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.33 Mbit/s
95th percentile per-packet one-way delay: 130.776 ms
Loss rate: 35.39%
-- Flow 1:
Average throughput: 61.76 Mbit/s
95th percentile per-packet one-way delay: 125.626 ms
Loss rate: 18.87%
-- Flow 2:
Average throughput: 27.45 Mbit/s
95th percentile per-packet one-way delay: 130.870 ms
Loss rate: 45.10%
-- Flow 3:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 130.844 ms
Loss rate: 63.19%
Run 5: Report of Indigo-1-32 — Data Link
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-04 23:28:42
End at: 2018-02-04 23:29:12
Local clock offset: -0.215 ms
Remote clock offset: 4.218 ms

# Below is generated by plot.py at 2018-02-05 02:07:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.85 Mbit/s
95th percentile per-packet one-way delay: 131.964 ms
Loss rate: 39.68%
-- Flow 1:
Average throughput: 58.77 Mbit/s
95th percentile per-packet one-way delay: 130.064 ms
Loss rate: 26.12%
-- Flow 2:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 132.093 ms
Loss rate: 36.87%
-- Flow 3:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 131.910 ms
Loss rate: 68.56%
Run 6: Report of Indigo-1-32 — Data Link

![Throughput vs Time Graph]

- Flow 1 ingress (mean 79.64 Mbit/s)
- Flow 1 egress (mean 58.77 Mbit/s)
- Flow 2 ingress (mean 51.04 Mbit/s)
- Flow 2 egress (mean 32.18 Mbit/s)
- Flow 3 ingress (mean 126.16 Mbit/s)
- Flow 3 egress (mean 39.66 Mbit/s)

![Delay vs Time Graph]

- Flow 1 (95th percentile 130.06 ms)
- Flow 2 (95th percentile 132.09 ms)
- Flow 3 (95th percentile 131.91 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-04 23:52:31
End at: 2018-02-04 23:53:01
Local clock offset: -0.096 ms
Remote clock offset: 4.34 ms

# Below is generated by plot.py at 2018-02-05 02:07:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.40 Mbit/s
95th percentile per-packet one-way delay: 132.758 ms
Loss rate: 42.76%
-- Flow 1:
Average throughput: 57.99 Mbit/s
95th percentile per-packet one-way delay: 130.739 ms
Loss rate: 24.42%
-- Flow 2:
Average throughput: 22.91 Mbit/s
95th percentile per-packet one-way delay: 132.652 ms
Loss rate: 51.06%
-- Flow 3:
Average throughput: 59.91 Mbit/s
95th percentile per-packet one-way delay: 132.833 ms
Loss rate: 64.14%
Run 7: Report of Indigo-1-32 — Data Link

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**Throughput (Mbit/s)**

![Graph showing throughput vs time for different flows.](image)

- **Flow 1 ingress (mean 76.81 Mbit/s)**
- **Flow 1 egress (mean 57.99 Mbit/s)**
- **Flow 2 ingress (mean 46.89 Mbit/s)**
- **Flow 2 egress (mean 22.91 Mbit/s)**
- **Flow 3 ingress (mean 187.10 Mbit/s)**
- **Flow 3 egress (mean 50.91 Mbit/s)**

---

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

![Graph showing per-packet delay vs time for different flows.](image)

- **Flow 1 (95th percentile 130.74 ms)**
- **Flow 2 (95th percentile 132.65 ms)**
- **Flow 3 (95th percentile 132.83 ms)**

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Run 8: Statistics of Indigo-1-32

Start at: 2018-02-05 00:16:24
End at: 2018-02-05 00:16:54
Local clock offset: -0.123 ms
Remote clock offset: -2.12 ms

# Below is generated by plot.py at 2018-02-05 02:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.44 Mbit/s
95th percentile per-packet one-way delay: 133.089 ms
Loss rate: 36.03%
-- Flow 1:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 124.909 ms
Loss rate: 18.71%
-- Flow 2:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 133.299 ms
Loss rate: 47.57%
-- Flow 3:
Average throughput: 42.88 Mbit/s
95th percentile per-packet one-way delay: 123.335 ms
Loss rate: 63.02%
Run 8: Report of Indigo-1-32 — Data Link
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-05 00:40:11
End at: 2018-02-05 00:40:41
Local clock offset: ~0.159 ms
Remote clock offset: 3.004 ms

# Below is generated by plot.py at 2018-02-05 02:07:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: 139.065 ms
Loss rate: 34.77%
-- Flow 1:
Average throughput: 62.46 Mbit/s
95th percentile per-packet one-way delay: 132.587 ms
Loss rate: 18.12%
-- Flow 2:
Average throughput: 23.14 Mbit/s
95th percentile per-packet one-way delay: 137.088 ms
Loss rate: 44.53%
-- Flow 3:
Average throughput: 44.26 Mbit/s
95th percentile per-packet one-way delay: 139.239 ms
Loss rate: 61.67%
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-05 01:04:02
End at: 2018-02-05 01:04:32
Local clock offset: -0.099 ms
Remote clock offset: -3.149 ms

# Below is generated by plot.py at 2018-02-05 02:07:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.42 Mbit/s
  95th percentile per-packet one-way delay: 126.826 ms
  Loss rate: 40.78%
-- Flow 1:
  Average throughput: 58.61 Mbit/s
  95th percentile per-packet one-way delay: 124.929 ms
  Loss rate: 24.67%
-- Flow 2:
  Average throughput: 26.65 Mbit/s
  95th percentile per-packet one-way delay: 126.975 ms
  Loss rate: 48.79%
-- Flow 3:
  Average throughput: 50.30 Mbit/s
  95th percentile per-packet one-way delay: 124.644 ms
  Loss rate: 63.04%
Run 10: Report of Indigo-1-32 — Data Link
Run 1: Statistics of Vivace-latency

Start at: 2018-02-04 21:22:42
End at: 2018-02-04 21:23:12
Local clock offset: -0.116 ms
Remote clock offset: -1.624 ms

# Below is generated by plot.py at 2018-02-05 02:07:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.08 Mbit/s
  95th percentile per-packet one-way delay: 123.126 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 67.85 Mbit/s
  95th percentile per-packet one-way delay: 123.596 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 10.99 Mbit/s
  95th percentile per-packet one-way delay: 118.782 ms
  Loss rate: 0.73%
-- Flow 3:
  Average throughput: 5.87 Mbit/s
  95th percentile per-packet one-way delay: 112.158 ms
  Loss rate: 0.00%
Run 1: Report of Vivace-latency — Data Link

![Graph of Throughput and Per-packet one-way delay](image)
Run 2: Statistics of Vivace-latency

Start at: 2018-02-04 21:46:34
End at: 2018-02-04 21:47:04
Local clock offset: -0.212 ms
Remote clock offset: 3.654 ms

# Below is generated by plot.py at 2018-02-05 02:07:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.77 Mbit/s
95th percentile per-packet one-way delay: 123.998 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 68.65 Mbit/s
95th percentile per-packet one-way delay: 123.978 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 126.323 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 121.694 ms
Loss rate: 0.00%
Run 2: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 68.69 Mbit/s)
- Flow 1 egress (mean 68.65 Mbit/s)
- Flow 2 ingress (mean 10.53 Mbit/s)
- Flow 2 egress (mean 10.53 Mbit/s)
- Flow 3 ingress (mean 6.42 Mbit/s)
- Flow 3 egress (mean 6.42 Mbit/s)
Run 3: Statistics of Vivace-latency

Start at: 2018-02-04 22:10:29
End at: 2018-02-04 22:10:59
Local clock offset: -0.161 ms
Remote clock offset: 4.236 ms

# Below is generated by plot.py at 2018-02-05 02:08:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.99 Mbit/s
95th percentile per-packet one-way delay: 131.620 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 65.14 Mbit/s
95th percentile per-packet one-way delay: 131.544 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 14.32 Mbit/s
95th percentile per-packet one-way delay: 137.142 ms
Loss rate: 2.32%
-- Flow 3:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 136.884 ms
Loss rate: 3.14%
Run 3: Report of Vivace-latency — Data Link

![Graph of throughput and packet delay over time for Flow 1, Flow 2, and Flow 3.]
Run 4: Statistics of Vivace-latency

Start at: 2018-02-04 22:34:22
End at: 2018-02-04 22:34:52
Local clock offset: -0.206 ms
Remote clock offset: -1.772 ms

# Below is generated by plot.py at 2018-02-05 02:08:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.80 Mbit/s
95th percentile per-packet one-way delay: 123.944 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 68.31 Mbit/s
95th percentile per-packet one-way delay: 125.090 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 12.30 Mbit/s
95th percentile per-packet one-way delay: 117.513 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 3.98 Mbit/s
95th percentile per-packet one-way delay: 124.510 ms
Loss rate: 0.09%
Run 4: Report of Vivace-latency — Data Link

![Graphs showing throughput and packet delivery delay over time for different flows. The graphs illustrate the performance and latency characteristics of data link transmission during the run.](Image)
Run 5: Statistics of Vivace-latency

Start at: 2018-02-04 22:58:15
End at: 2018-02-04 22:58:45
Local clock offset: -0.166 ms
Remote clock offset: 3.735 ms

# Below is generated by plot.py at 2018-02-05 02:08:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 129.282 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 64.78 Mbit/s
95th percentile per-packet one-way delay: 129.240 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 15.32 Mbit/s
95th percentile per-packet one-way delay: 132.095 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 129.205 ms
Loss rate: 0.64%
Run 5: Report of Vivace-latency — Data Link

![Graph showing data for three different flows]

- **Flow 1** ingress (mean 65.15 Mbit/s)
- **Flow 1** egress (mean 64.78 Mbit/s)
- **Flow 2** ingress (mean 15.48 Mbit/s)
- **Flow 2** egress (mean 15.32 Mbit/s)
- **Flow 3** ingress (mean 7.27 Mbit/s)
- **Flow 3** egress (mean 7.24 Mbit/s)

![Graph showing packet delay for three different flows]

- **Flow 1** (95th percentile 129.24 ms)
- **Flow 2** (95th percentile 132.09 ms)
- **Flow 3** (95th percentile 129.21 ms)
Run 6: Statistics of Vivace-latency

End at: 2018-02-04 23:22:34
Local clock offset: -0.163 ms
Remote clock offset: 4.185 ms

# Below is generated by plot.py at 2018-02-05 02:08:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.79 Mbit/s
  95th percentile per-packet one-way delay: 112.611 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 66.94 Mbit/s
  95th percentile per-packet one-way delay: 111.905 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 11.37 Mbit/s
  95th percentile per-packet one-way delay: 115.710 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.97 Mbit/s
  95th percentile per-packet one-way delay: 112.198 ms
  Loss rate: 0.00%
Run 6: Report of Vivace-latency — Data Link

![Graph 1](Image 1)

![Graph 2](Image 2)
Run 7: Statistics of Vivace-latency

Start at: 2018-02-04 23:45:51
End at: 2018-02-04 23:46:21
Local clock offset: -0.111 ms
Remote clock offset: -0.366 ms

# Below is generated by plot.py at 2018-02-05 02:09:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.07 Mbit/s
95th percentile per-packet one-way delay: 126.082 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: 126.235 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 13.46 Mbit/s
95th percentile per-packet one-way delay: 125.625 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 111.109 ms
Loss rate: 0.00%
Run 7: Report of Vivace-latency — Data Link

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

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

Start at: 2018-02-05 00:09:45
End at: 2018-02-05 00:10:15
Local clock offset: -0.118 ms
Remote clock offset: 4.602 ms

# Below is generated by plot.py at 2018-02-05 02:09:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.86 Mbit/s
95th percentile per-packet one-way delay: 131.415 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 70.07 Mbit/s
95th percentile per-packet one-way delay: 131.380 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 8.52 Mbit/s
95th percentile per-packet one-way delay: 136.084 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 136.722 ms
Loss rate: 0.45%
Run 8: Report of Vivace-latency — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per packet one way delay (ms)
Run 9: Statistics of Vivace-latency

Start at: 2018-02-05 00:33:33
End at: 2018-02-05 00:34:03
Local clock offset: -0.155 ms
Remote clock offset: 3.164 ms

# Below is generated by plot.py at 2018-02-05 02:09:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 128.619 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 68.32 Mbit/s
95th percentile per-packet one-way delay: 128.604 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 129.180 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 130.213 ms
Loss rate: 0.25%
Run 9: Report of Vivace-latency — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 68.55 Mbps)
  - Flow 1 egress (mean 68.32 Mbps)
  - Flow 2 ingress (mean 8.92 Mbps)
  - Flow 2 egress (mean 8.83 Mbps)
  - Flow 3 ingress (mean 9.59 Mbps)
  - Flow 3 egress (mean 9.57 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 128.60 ms)
  - Flow 2 (95th percentile 129.18 ms)
  - Flow 3 (95th percentile 130.21 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-02-05 00:57:22
End at: 2018-02-05 00:57:52
Local clock offset: -0.109 ms
Remote clock offset: -3.03 ms

# Below is generated by plot.py at 2018-02-05 02:09:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.86 Mbit/s
  95th percentile per-packet one-way delay: 124.707 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 65.35 Mbit/s
  95th percentile per-packet one-way delay: 124.664 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 13.58 Mbit/s
  95th percentile per-packet one-way delay: 130.373 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 7.54 Mbit/s
  95th percentile per-packet one-way delay: 122.052 ms
  Loss rate: 0.84%
Run 10: Report of Vivace-latency — Data Link
Run 1: Statistics of Vivace-loss

Start at: 2018-02-04 21:26:40
End at: 2018-02-04 21:27:10
Local clock offset: -0.125 ms
Remote clock offset: -1.673 ms

# Below is generated by plot.py at 2018-02-05 02:09:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 130.343 ms
Loss rate: 2.99%
-- Flow 1:
Average throughput: 81.75 Mbit/s
95th percentile per-packet one-way delay: 130.348 ms
Loss rate: 2.98%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 123.302 ms
Loss rate: 3.01%
-- Flow 3:
Average throughput: 4.42 Mbit/s
95th percentile per-packet one-way delay: 125.037 ms
Loss rate: 3.32%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-02-04 21:50:33
End at: 2018-02-04 21:51:03
Local clock offset: -0.157 ms
Remote clock offset: -1.091 ms

# Below is generated by plot.py at 2018-02-05 02:09:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 131.133 ms
Loss rate: 3.34%
-- Flow 1:
Average throughput: 79.78 Mbit/s
95th percentile per-packet one-way delay: 131.107 ms
Loss rate: 3.35%
-- Flow 2:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 131.364 ms
Loss rate: 3.21%
-- Flow 3:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 131.210 ms
Loss rate: 3.27%
Run 2: Report of Vivace-loss — Data Link

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

- **Flow 1 ingress**: mean 82.61 Mbit/s
- **Flow 1 egress**: mean 79.78 Mbit/s
- **Flow 2 ingress**: mean 9.94 Mbit/s
- **Flow 2 egress**: mean 9.61 Mbit/s
- **Flow 3 ingress**: mean 5.01 Mbit/s
- **Flow 3 egress**: mean 4.84 Mbit/s

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

- **Flow 1**: 95th percentile 131.11 ms
- **Flow 2**: 95th percentile 131.36 ms
- **Flow 3**: 95th percentile 131.21 ms
Run 3: Statistics of Vivace-loss

Start at: 2018-02-04 22:14:29
End at: 2018-02-04 22:14:59
Local clock offset: -0.212 ms
Remote clock offset: -2.256 ms

# Below is generated by plot.py at 2018-02-05 02:10:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.43 Mbit/s
95th percentile per-packet one-way delay: 126.867 ms
Loss rate: 2.70%
-- Flow 1:
Average throughput: 83.41 Mbit/s
95th percentile per-packet one-way delay: 126.840 ms
Loss rate: 2.73%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 130.438 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 4.59 Mbit/s
95th percentile per-packet one-way delay: 126.538 ms
Loss rate: 2.65%
Run 3: Report of Vivace-loss — Data Link

![Graph showing throughput and per packet one-way delay over time for three flows.]
Run 4: Statistics of Vivace-loss

Start at: 2018-02-04 22:38:20
End at: 2018-02-04 22:38:50
Local clock offset: -0.143 ms
Remote clock offset: -1.728 ms

# Below is generated by plot.py at 2018-02-05 02:10:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 126.610 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 82.17 Mbit/s
95th percentile per-packet one-way delay: 126.564 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 131.003 ms
Loss rate: 3.88%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 127.441 ms
Loss rate: 4.69%
Run 4: Report of Vivace-loss — Data Link

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

Start at: 2018-02-04 23:02:14
End at: 2018-02-04 23:02:44
Local clock offset: -0.185 ms
Remote clock offset: 3.034 ms

# Below is generated by plot.py at 2018-02-05 02:10:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 130.079 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 82.75 Mbit/s
95th percentile per-packet one-way delay: 130.040 ms
Loss rate: 2.86%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 134.790 ms
Loss rate: 2.68%
-- Flow 3:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: 130.441 ms
Loss rate: 3.94%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

Start at: 2018-02-04 23:26:02
End at: 2018-02-04 23:26:32
Local clock offset: -0.251 ms
Remote clock offset: -0.638 ms

# Below is generated by plot.py at 2018-02-05 02:10:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.80 Mbit/s
95th percentile per-packet one-way delay: 125.953 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 81.84 Mbit/s
95th percentile per-packet one-way delay: 125.927 ms
Loss rate: 3.12%
-- Flow 2:
Average throughput: 5.45 Mbit/s
95th percentile per-packet one-way delay: 126.074 ms
Loss rate: 3.84%
-- Flow 3:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 131.294 ms
Loss rate: 2.89%
Run 6: Report of Vivace-loss — Data Link

Graph 1: Throughput (Mbps) vs Time (s)
- Flow 1 ingress (mean 84.55 Mbps)
- Flow 1 egress (mean 81.84 Mbps)
- Flow 2 ingress (mean 5.67 Mbps)
- Flow 2 egress (mean 5.45 Mbps)
- Flow 3 ingress (mean 7.31 Mbps)
- Flow 3 egress (mean 7.10 Mbps)

Graph 2: Per-packet one-way delay (ms) vs Time (s)
- Flow 1 (95th percentile 125.93 ms)
- Flow 2 (95th percentile 126.07 ms)
- Flow 3 (95th percentile 131.29 ms)
Run 7: Statistics of Vivace-loss

Start at: 2018-02-04 23:49:50
End at: 2018-02-04 23:50:20
Local clock offset: -0.206 ms
Remote clock offset: -1.252 ms

# Below is generated by plot.py at 2018-02-05 02:10:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.42 Mbit/s
  95th percentile per-packet one-way delay: 126.953 ms
  Loss rate: 2.90%
-- Flow 1:
  Average throughput: 83.35 Mbit/s
  95th percentile per-packet one-way delay: 126.957 ms
  Loss rate: 2.89%
-- Flow 2:
  Average throughput: 6.12 Mbit/s
  95th percentile per-packet one-way delay: 126.653 ms
  Loss rate: 2.63%
-- Flow 3:
  Average throughput: 3.03 Mbit/s
  95th percentile per-packet one-way delay: 123.782 ms
  Loss rate: 5.11%
Run 7: Report of Vivace-loss — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 85.86 Mbps)**
- **Flow 1 egress (mean 83.35 Mbps)**
- **Flow 2 ingress (mean 6.28 Mbps)**
- **Flow 2 egress (mean 6.12 Mbps)**
- **Flow 3 ingress (mean 3.19 Mbps)**
- **Flow 3 egress (mean 3.03 Mbps)**

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

- **Flow 1 (95th percentile 126.96 ms)**
- **Flow 2 (95th percentile 126.65 ms)**
- **Flow 3 (95th percentile 123.78 ms)**
Run 8: Statistics of Vivace-loss

Start at: 2018-02-05 00:13:42
End at: 2018-02-05 00:14:12
Local clock offset: -0.165 ms
Remote clock offset: -2.026 ms

# Below is generated by plot.py at 2018-02-05 02:10:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 131.766 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 131.767 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 131.782 ms
Loss rate: 2.47%
-- Flow 3:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 128.496 ms
Loss rate: 3.39%
Run 8: Report of Vivace-loss — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 84.78 Mbit/s)
- Flow 1 egress (mean 82.32 Mbit/s)
- Flow 2 ingress (mean 6.15 Mbit/s)
- Flow 2 egress (mean 6.00 Mbit/s)
- Flow 3 ingress (mean 3.73 Mbit/s)
- Flow 3 egress (mean 3.61 Mbit/s)

![Graph 2: Packet delay vs Time]

- Flow 1 (95th percentile 131.77 ms)
- Flow 2 (95th percentile 131.78 ms)
- Flow 3 (95th percentile 128.50 ms)
Run 9: Statistics of Vivace-loss

Start at: 2018-02-05 00:37:31
End at: 2018-02-05 00:38:01
Local clock offset: -0.118 ms
Remote clock offset: -1.793 ms

# Below is generated by plot.py at 2018-02-05 02:11:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.12 Mbit/s
95th percentile per-packet one-way delay: 125.974 ms
Loss rate: 3.00%

-- Flow 1:
Average throughput: 79.78 Mbit/s
95th percentile per-packet one-way delay: 125.895 ms
Loss rate: 3.07%

-- Flow 2:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 130.613 ms
Loss rate: 2.24%

-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 124.069 ms
Loss rate: 3.25%
Run 9: Report of Vivace-loss — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 82.34 Mbit/s)
Flow 1 egress (mean 79.78 Mbit/s)
Flow 2 ingress (mean 11.58 Mbit/s)
Flow 2 egress (mean 11.32 Mbit/s)
Flow 3 ingress (mean 2.57 Mbit/s)
Flow 3 egress (mean 2.49 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 125.89 ms)
Flow 2 (95th percentile 130.61 ms)
Flow 3 (95th percentile 124.07 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-02-05 01:01:21
End at: 2018-02-05 01:01:51
Local clock offset: -0.185 ms
Remote clock offset: 2.614 ms

# Below is generated by plot.py at 2018-02-05 02:11:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.26 Mbit/s
  95th percentile per-packet one-way delay: 134.692 ms
  Loss rate: 3.13%
-- Flow 1:
  Average throughput: 80.86 Mbit/s
  95th percentile per-packet one-way delay: 134.697 ms
  Loss rate: 3.10%
-- Flow 2:
  Average throughput: 7.39 Mbit/s
  95th percentile per-packet one-way delay: 127.752 ms
  Loss rate: 3.06%
-- Flow 3:
  Average throughput: 4.50 Mbit/s
  95th percentile per-packet one-way delay: 130.942 ms
  Loss rate: 5.07%
Run 10: Report of Vivace-loss — Data Link

![Graph 1: Throughput vs. Time]

- Flow 1 ingress (mean 83.52 Mbit/s)
- Flow 1 egress (mean 80.86 Mbit/s)
- Flow 2 ingress (mean 7.63 Mbit/s)
- Flow 2 egress (mean 7.39 Mbit/s)
- Flow 3 ingress (mean 4.74 Mbit/s)
- Flow 3 egress (mean 4.50 Mbit/s)

![Graph 2: Ping latency vs. Time]

- Flow 1 (95th percentile 134.70 ms)
- Flow 2 (95th percentile 127.75 ms)
- Flow 3 (95th percentile 130.94 ms)
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-04 21:41:16
End at: 2018-02-04 21:41:46
Local clock offset: -0.125 ms
Remote clock offset: -1.081 ms

# Below is generated by plot.py at 2018-02-05 02:11:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.15 Mbit/s
95th percentile per-packet one-way delay: 131.218 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 76.54 Mbit/s
95th percentile per-packet one-way delay: 131.188 ms
Loss rate: 2.95%
-- Flow 2:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 132.308 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 125.794 ms
Loss rate: 2.47%
Run 1: Report of Vivace-LTE — Data Link

[Graphs showing throughput and per-packet one-way delay for different flows]
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-04 22:05:11
End at: 2018-02-04 22:05:41
Local clock offset: -0.149 ms
Remote clock offset: -2.125 ms

# Below is generated by plot.py at 2018-02-05 02:11:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 130.223 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 77.37 Mbit/s
95th percentile per-packet one-way delay: 130.203 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 132.077 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 8.34 Mbit/s
95th percentile per-packet one-way delay: 121.936 ms
Loss rate: 1.77%
Run 2: Report of Vivace-LTE — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 79.55 Mbit/s)  Flow 1 egress (mean 77.37 Mbit/s)
Flow 2 ingress (mean 10.68 Mbit/s)  Flow 2 egress (mean 9.95 Mbit/s)
Flow 3 ingress (mean 8.49 Mbit/s)  Flow 3 egress (mean 8.34 Mbit/s)

Packet error rate (delay ms)

Time (s)

Flow 1 (95th percentile 130.20 ms)  Flow 2 (95th percentile 132.08 ms)  Flow 3 (95th percentile 121.94 ms)
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-04 22:29:05
End at: 2018-02-04 22:29:35
Local clock offset: -0.209 ms
Remote clock offset: 3.207 ms

# Below is generated by plot.py at 2018-02-05 02:11:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.96 Mbit/s
95th percentile per-packet one-way delay: 129.603 ms
Loss rate: 2.88%
-- Flow 1:
Average throughput: 72.99 Mbit/s
95th percentile per-packet one-way delay: 129.363 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 14.64 Mbit/s
95th percentile per-packet one-way delay: 132.281 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 131.139 ms
Loss rate: 2.00%
Run 3: Report of Vivace-LTE — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-04 22:52:57
End at: 2018-02-04 22:53:27
Local clock offset: -0.218 ms
Remote clock offset: 4.417 ms

# Below is generated by plot.py at 2018-02-05 02:11:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.13 Mbit/s
  95th percentile per-packet one-way delay: 130.341 ms
  Loss rate: 3.06%
-- Flow 1:
  Average throughput: 73.92 Mbit/s
  95th percentile per-packet one-way delay: 130.250 ms
  Loss rate: 3.14%
-- Flow 2:
  Average throughput: 12.44 Mbit/s
  95th percentile per-packet one-way delay: 136.795 ms
  Loss rate: 2.40%
-- Flow 3:
  Average throughput: 11.94 Mbit/s
  95th percentile per-packet one-way delay: 131.408 ms
  Loss rate: 2.95%
Run 4: Report of Vivace-LTE — Data Link
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-04 23:16:47
End at: 2018-02-04 23:17:17
Local clock offset: -0.203 ms
Remote clock offset: 3.296 ms

# Below is generated by plot.py at 2018-02-05 02:11:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: 129.674 ms
Loss rate: 3.01%
-- Flow 1:
Average throughput: 74.45 Mbit/s
95th percentile per-packet one-way delay: 129.685 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 13.66 Mbit/s
95th percentile per-packet one-way delay: 128.480 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 128.773 ms
Loss rate: 3.12%
Run 5: Report of Vivace-LTE — Data Link

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

![Graph 2: Per-packet one way delay (ms)](image2)
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-04 23:40:32
End at: 2018-02-04 23:41:02
Local clock offset: -0.12 ms
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-02-05 02:11:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.52 Mbit/s
  95th percentile per-packet one-way delay: 129.593 ms
  Loss rate: 3.00%
-- Flow 1:
  Average throughput: 75.03 Mbit/s
  95th percentile per-packet one-way delay: 129.585 ms
  Loss rate: 3.11%
-- Flow 2:
  Average throughput: 13.37 Mbit/s
  95th percentile per-packet one-way delay: 125.991 ms
  Loss rate: 2.24%
-- Flow 3:
  Average throughput: 7.86 Mbit/s
  95th percentile per-packet one-way delay: 132.708 ms
  Loss rate: 2.63%
Run 6: Report of Vivace-LTE — Data Link

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

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 77.51 Mbps)
- Flow 1 egress (mean 75.03 Mbps)
- Flow 2 ingress (mean 13.70 Mbps)
- Flow 2 egress (mean 13.37 Mbps)
- Flow 3 ingress (mean 8.09 Mbps)
- Flow 3 egress (mean 7.86 Mbps)

Delay (ms) vs. Time (s)

- Flow 1 (95th percentile 129.59 ms)
- Flow 2 (95th percentile 125.99 ms)
- Flow 3 (95th percentile 132.71 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-05 00:04:26
End at: 2018-02-05 00:04:56
Local clock offset: -0.122 ms
Remote clock offset: -1.727 ms

# Below is generated by plot.py at 2018-02-05 02:12:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.93 Mbit/s
95th percentile per-packet one-way delay: 124.864 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 73.03 Mbit/s
95th percentile per-packet one-way delay: 124.824 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 127.170 ms
Loss rate: 1.95%
-- Flow 3:
Average throughput: 14.83 Mbit/s
95th percentile per-packet one-way delay: 123.772 ms
Loss rate: 2.53%
Run 7: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 75.47 Mbit/s)
- Flow 1 egress (mean 73.03 Mbit/s)
- Flow 2 ingress (mean 12.33 Mbit/s)
- Flow 2 egress (mean 12.07 Mbit/s)
- Flow 3 ingress (mean 15.22 Mbit/s)
- Flow 3 egress (mean 14.83 Mbit/s)
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-05 00:28:16
End at: 2018-02-05 00:28:46
Local clock offset: -0.156 ms
Remote clock offset: -2.412 ms

# Below is generated by plot.py at 2018-02-05 02:12:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 126.733 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 74.65 Mbit/s
95th percentile per-packet one-way delay: 126.744 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 125.037 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 123.110 ms
Loss rate: 2.71%
Run 8: Report of Vivace-LTE — Data Link
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-05 00:52:03
End at: 2018-02-05 00:52:33
Local clock offset: -0.112 ms
Remote clock offset: -1.986 ms

# Below is generated by plot.py at 2018-02-05 02:12:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 133.078 ms
Loss rate: 3.39%

-- Flow 1:
Average throughput: 74.31 Mbit/s
95th percentile per-packet one-way delay: 133.090 ms
Loss rate: 3.41%

-- Flow 2:
Average throughput: 12.38 Mbit/s
95th percentile per-packet one-way delay: 126.232 ms
Loss rate: 3.12%

-- Flow 3:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 127.507 ms
Loss rate: 3.63%
Run 9: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 76.98 Mbit/s)
- Flow 1 egress (mean 74.31 Mbit/s)
- Flow 2 ingress (mean 12.79 Mbit/s)
- Flow 2 egress (mean 12.38 Mbit/s)
- Flow 3 ingress (mean 13.09 Mbit/s)
- Flow 3 egress (mean 13.49 Mbit/s)

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

- Flow 1 (95th percentile 133.09 ms)
- Flow 2 (95th percentile 126.23 ms)
- Flow 3 (95th percentile 127.51 ms)
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-05 01:15:55
End at: 2018-02-05 01:16:25
Local clock offset: -0.176 ms
Remote clock offset: 2.79 ms

# Below is generated by plot.py at 2018-02-05 02:12:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.81 Mbit/s
  95th percentile per-packet one-way delay: 129.071 ms
  Loss rate: 2.80%
-- Flow 1:
  Average throughput: 79.38 Mbit/s
  95th percentile per-packet one-way delay: 129.022 ms
  Loss rate: 2.80%
-- Flow 2:
  Average throughput: 8.24 Mbit/s
  95th percentile per-packet one-way delay: 130.463 ms
  Loss rate: 2.24%
-- Flow 3:
  Average throughput: 8.97 Mbit/s
  95th percentile per-packet one-way delay: 133.053 ms
  Loss rate: 3.69%
Run 10: Report of Vivace-LTE — Data Link

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

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