Pantheon Report

Generated at 2018-02-03 05:53:04 (UTC).
Data path: AWS Brazil 1 Ethernet (local) → Brazil Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdefae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b206d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db74835f1f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4fdefe0ecdbf90c077664
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f7541135ed5b540c0d3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a04e8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303ae82ea808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b17eaab4a906e6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861d659ba9013db2674ccff993
third_party/pcc @ 1afc9558a0d66d18b623c091a55feca872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b24f1bc81436bc978f3ccf42
third_party/scream @ c3370fd7bd17265a97ae34e016ad23f5956885
third_party/sourdough @ f1a14bffe749737437fe61b1eaeeb3eb267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375ee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plt.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c458019212041784ce3
third_party/webRTC @ a488197dd041ace68a42849b2540ad834825f42
test from AWS Brazil 1 Ethernet to Brazil Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
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<td>67.66</td>
<td>31.84</td>
<td>24.41</td>
</tr>
<tr>
<td>TCP Cubic</td>
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<td>65.29</td>
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<td>LEDBAT</td>
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<td>QUIC Cubic</td>
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<td>54.88</td>
<td>33.39</td>
<td>28.10</td>
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<td>0.21</td>
<td>0.21</td>
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<td>WebRTC media</td>
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<td>2.52</td>
<td>1.68</td>
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<td>Sprout</td>
<td>10</td>
<td>42.01</td>
<td>37.92</td>
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<td>TaoVA-100x</td>
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<td>40.47</td>
<td>27.70</td>
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<td>41.89</td>
<td>60.29</td>
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<td>Verus</td>
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<td>44.58</td>
<td>34.42</td>
<td>28.47</td>
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<td>Copa</td>
<td>10</td>
<td>48.52</td>
<td>39.04</td>
<td>31.92</td>
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<td>37.78</td>
<td>58.09</td>
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<td>Vivace-latency</td>
<td>10</td>
<td>51.57</td>
<td>33.03</td>
<td>27.46</td>
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<tr>
<td>Vivace-loss</td>
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<td>70.18</td>
<td>30.47</td>
<td>13.80</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>61.95</td>
<td>40.13</td>
<td>16.48</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-02-03 01:30:22
End at: 2018-02-03 01:30:52
Local clock offset: 0.08 ms
Remote clock offset: 0.861 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 27.130 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 26.396 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 24.63 Mbit/s
95th percentile per-packet one-way delay: 27.949 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 31.28 Mbit/s
95th percentile per-packet one-way delay: 32.484 ms
Loss rate: 1.19%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-02-03 01:50:54
End at: 2018-02-03 01:51:24
Local clock offset: 0.071 ms
Remote clock offset: 0.566 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 67.155 ms
Loss rate: 4.13%
-- Flow 1:
Average throughput: 67.53 Mbit/s
95th percentile per-packet one-way delay: 69.351 ms
Loss rate: 5.41%
-- Flow 2:
Average throughput: 22.43 Mbit/s
95th percentile per-packet one-way delay: 25.066 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 32.308 ms
Loss rate: 0.75%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-02-03 02:11:30
End at: 2018-02-03 02:12:00
Local clock offset: 0.016 ms
Remote clock offset: 0.326 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 22.081 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 71.44 Mbit/s
95th percentile per-packet one-way delay: 21.926 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 30.87 Mbit/s
95th percentile per-packet one-way delay: 21.473 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.43 Mbit/s
95th percentile per-packet one-way delay: 28.262 ms
Loss rate: 0.12%
Run 3: Report of TCP BBR — Data Link

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

- **Throughput (Mbit/s):**
  - **Flow 1 ingress (mean 71.49 Mbit/s)**
  - **Flow 1 egress (mean 71.44 Mbit/s)**
  - **Flow 2 ingress (mean 30.90 Mbit/s)**
  - **Flow 2 egress (mean 30.87 Mbit/s)**
  - **Flow 3 ingress (mean 16.47 Mbit/s)**
  - **Flow 3 egress (mean 16.43 Mbit/s)**

- **Per-packet one-way delay (ms):**
  - **Flow 1 (95th percentile 21.93 ms)**
  - **Flow 2 (95th percentile 21.47 ms)**
  - **Flow 3 (95th percentile 28.26 ms)**
Run 4: Statistics of TCP BBR

Start at: 2018-02-03 02:32:04
End at: 2018-02-03 02:32:34
Local clock offset: -0.064 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 23.335 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 61.09 Mbit/s
95th percentile per-packet one-way delay: 22.693 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 35.58 Mbit/s
95th percentile per-packet one-way delay: 23.391 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 29.439 ms
Loss rate: 0.21%
Run 4: Report of TCP BBR — Data Link

![Graph showing data link performance metrics for different flows over time. The graphs illustrate throughput and per-packet one-way delay.]

- Flow 1 ingress (mean 61.14 Mbit/s)
- Flow 1 egress (mean 61.09 Mbit/s)
- Flow 2 ingress (mean 35.61 Mbit/s)
- Flow 2 egress (mean 35.55 Mbit/s)
- Flow 3 ingress (mean 38.28 Mbit/s)
- Flow 3 egress (mean 38.14 Mbit/s)
Run 5: Statistics of TCP BBR

Start at: 2018-02-03 02:52:39
End at: 2018-02-03 02:53:09
Local clock offset: -0.056 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.44 Mbit/s
  95th percentile per-packet one-way delay: 19.233 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 63.10 Mbit/s
  95th percentile per-packet one-way delay: 18.759 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 33.50 Mbit/s
  95th percentile per-packet one-way delay: 19.205 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 36.24 Mbit/s
  95th percentile per-packet one-way delay: 26.209 ms
  Loss rate: 0.19%
Run 5: Report of TCP BBR — Data Link

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 63.15 Mbit/s) and egress (mean 63.10 Mbit/s)
- Green dotted line: Flow 2 ingress (mean 33.52 Mbit/s) and egress (mean 33.50 Mbit/s)
- Red solid line: Flow 3 ingress (mean 36.34 Mbit/s) and egress (mean 36.24 Mbit/s)
Run 6: Statistics of TCP BBR

Start at: 2018-02-03 03:13:12
End at: 2018-02-03 03:13:42
Local clock offset: -0.086 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.46 Mbit/s
  95th percentile per-packet one-way delay: 17.605 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 67.38 Mbit/s
  95th percentile per-packet one-way delay: 17.564 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 37.40 Mbit/s
  95th percentile per-packet one-way delay: 17.083 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.59 Mbit/s
  95th percentile per-packet one-way delay: 19.753 ms
  Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link

![Graph showing network throughput and latency](image-url)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 67.41 Mbps)
  - Flow 1 egress (mean 67.38 Mbps)
  - Flow 2 ingress (mean 37.42 Mbps)
  - Flow 2 egress (mean 37.40 Mbps)
  - Flow 3 ingress (mean 15.60 Mbps)
  - Flow 3 egress (mean 15.59 Mbps)

- **Latency (ms)**
  - Flow 1 (95th percentile 17.56 ms)
  - Flow 2 (95th percentile 17.08 ms)
  - Flow 3 (95th percentile 19.75 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-02-03 03:33:45
End at: 2018-02-03 03:34:15
Local clock offset: -0.039 ms
Remote clock offset: 0.654 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: 24.750 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 69.99 Mbit/s
  95th percentile per-packet one-way delay: 24.558 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 31.40 Mbit/s
  95th percentile per-packet one-way delay: 24.349 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 19.80 Mbit/s
  95th percentile per-packet one-way delay: 30.478 ms
  Loss rate: 0.21%
Run 7: Report of TCP BBR — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 70.05 Mbit/s)
Flow 1 egress (mean 69.99 Mbit/s)
Flow 2 ingress (mean 31.43 Mbit/s)
Flow 2 egress (mean 31.40 Mbit/s)
Flow 3 ingress (mean 19.87 Mbit/s)
Flow 3 egress (mean 19.80 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 24.56 ms)
Flow 2 (95th percentile 24.35 ms)
Flow 3 (95th percentile 30.48 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-02-03 03:54:15
End at: 2018-02-03 03:54:45
Local clock offset: -0.056 ms
Remote clock offset: 2.017 ms

# Below is generated by plot.py at 2018-02-03 05:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 17.594 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.08 Mbit/s
95th percentile per-packet one-way delay: 17.578 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.48 Mbit/s
95th percentile per-packet one-way delay: 16.777 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 18.975 ms
Loss rate: 0.00%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-02-03 04:14:49
End at: 2018-02-03 04:15:19
Local clock offset: 0.0 ms
Remote clock offset: 2.114 ms

# Below is generated by plot.py at 2018-02-03 05:25:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.39 Mbit/s
95th percentile per-packet one-way delay: 25.025 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 69.40 Mbit/s
95th percentile per-packet one-way delay: 24.602 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 24.948 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 25.02 Mbit/s
95th percentile per-packet one-way delay: 32.055 ms
Loss rate: 0.43%
Run 9: Report of TCP BBR — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 10: Statistics of TCP BBR

Start at: 2018-02-03 04:35:23
End at: 2018-02-03 04:35:53
Local clock offset: 0.031 ms
Remote clock offset: 2.128 ms

# Below is generated by plot.py at 2018-02-03 05:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 18.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.93 Mbit/s
95th percentile per-packet one-way delay: 18.290 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.54 Mbit/s
95th percentile per-packet one-way delay: 17.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.63 Mbit/s
95th percentile per-packet one-way delay: 23.342 ms
Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link

![Throughput and Delay Graphs]

- **Throughput Graph**:
  - Flow 1 ingress (mean 67.97 Mbit/s)
  - Flow 1 egress (mean 67.93 Mbit/s)
  - Flow 2 ingress (mean 36.58 Mbit/s)
  - Flow 2 egress (mean 36.54 Mbit/s)
  - Flow 3 ingress (mean 15.64 Mbit/s)
  - Flow 3 egress (mean 15.63 Mbit/s)

- **Delay Graph**:
  - Flow 1 (95th percentile 18.29 ms)
  - Flow 2 (95th percentile 17.84 ms)
  - Flow 3 (95th percentile 23.34 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-02-03 01:42:59
End at: 2018-02-03 01:43:29
Local clock offset: 0.107 ms
Remote clock offset: 0.743 ms

# Below is generated by plot.py at 2018-02-03 05:25:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.704 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 32.591 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 32.885 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 32.753 ms
Loss rate: 0.07%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-02-03 02:03:34
End at: 2018-02-03 02:04:04
Local clock offset: -0.055 ms
Remote clock offset: 0.435 ms

# Below is generated by plot.py at 2018-02-03 05:25:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: 32.793 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 65.90 Mbit/s
  95th percentile per-packet one-way delay: 32.757 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 35.56 Mbit/s
  95th percentile per-packet one-way delay: 32.840 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 23.85 Mbit/s
  95th percentile per-packet one-way delay: 32.852 ms
  Loss rate: 0.14%
Run 2: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 65.98 Mbit/s)
- Flow 1 egress (mean 65.90 Mbit/s)
- Flow 2 ingress (mean 35.59 Mbit/s)
- Flow 2 egress (mean 35.56 Mbit/s)
- Flow 3 ingress (mean 23.88 Mbit/s)
- Flow 3 egress (mean 23.85 Mbit/s)
Run 3: Statistics of TCP Cubic

Start at: 2018-02-03 02:24:09  
End at: 2018-02-03 02:24:39  
Local clock offset: 0.018 ms  
Remote clock offset: 0.185 ms

# Below is generated by plot.py at 2018-02-03 05:25:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.43 Mbit/s
  95th percentile per-packet one-way delay: 32.709 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 62.23 Mbit/s
  95th percentile per-packet one-way delay: 32.615 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 36.58 Mbit/s
  95th percentile per-packet one-way delay: 32.751 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 32.84 Mbit/s
  95th percentile per-packet one-way delay: 32.905 ms
  Loss rate: 0.11%
Run 3: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows with specific mean and 95th percentile values for each.]
Run 4: Statistics of TCP Cubic

Start at: 2018-02-03 02:44:42
End at: 2018-02-03 02:45:12
Local clock offset: -0.039 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-02-03 05:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 32.534 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 32.394 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 71.624 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 44.74 Mbit/s
95th percentile per-packet one-way delay: 32.609 ms
Loss rate: 0.23%
Run 4: Report of TCP Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

- Blue dotted line: Flow 1 ingress (mean 81.45 Mbit/s)
- Blue solid line: Flow 1 egress (mean 81.35 Mbit/s)
- Green dotted line: Flow 2 ingress (mean 1.97 Mbit/s)
- Green solid line: Flow 2 egress (mean 1.94 Mbit/s)
- Red dotted line: Flow 3 ingress (mean 44.85 Mbit/s)
- Red solid line: Flow 3 egress (mean 44.74 Mbit/s)

Packet one way delay (ms) vs Time (s)

- Blue dots: Flow 1 (95th percentile 32.39 ms)
- Green dots: Flow 2 (95th percentile 71.62 ms)
- Red dots: Flow 3 (95th percentile 32.61 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-02-03 03:05:15
End at: 2018-02-03 03:05:45
Local clock offset: -0.027 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2018-02-03 05:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.619 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 66.79 Mbit/s
95th percentile per-packet one-way delay: 32.579 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 32.656 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 29.44 Mbit/s
95th percentile per-packet one-way delay: 32.668 ms
Loss rate: 0.13%
Run 5: Report of TCP Cubic — Data Link

\[\text{Throughput (Mbps)}\]

Time (s)

- **Flow 1 ingress (mean 66.87 Mbps)**
- **Flow 1 egress (mean 66.79 Mbps)**
- **Flow 2 ingress (mean 31.48 Mbps)**
- **Flow 2 egress (mean 31.45 Mbps)**
- **Flow 3 ingress (mean 29.49 Mbps)**
- **Flow 3 egress (mean 29.44 Mbps)**

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

Time (s)

- **Flow 1 (95th percentile 32.58 ms)**
- **Flow 2 (95th percentile 32.66 ms)**
- **Flow 3 (95th percentile 32.67 ms)**
Run 6: Statistics of TCP Cubic

Start at: 2018-02-03 03:25:51
End at: 2018-02-03 03:26:21
Local clock offset: -0.101 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-02-03 05:25:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 32.713 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 66.00 Mbit/s
95th percentile per-packet one-way delay: 32.623 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 32.760 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 32.798 ms
Loss rate: 0.04%
Run 6: Report of TCP Cubic — Data Link

![Graph: Throughput vs Time]

- Flow 1 ingress (mean 66.08 Mbit/s)
- Flow 1 egress (mean 66.00 Mbit/s)
- Flow 2 ingress (mean 31.06 Mbit/s)
- Flow 2 egress (mean 31.03 Mbit/s)
- Flow 3 ingress (mean 32.68 Mbit/s)
- Flow 3 egress (mean 32.67 Mbit/s)

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

- Flow 1 (95th percentile 32.62 ms)
- Flow 2 (95th percentile 32.76 ms)
- Flow 3 (95th percentile 32.80 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-02-03 03:46:21
End at: 2018-02-03 03:46:51
Local clock offset: -0.03 ms
Remote clock offset: 1.484 ms

# Below is generated by plot.py at 2018-02-03 05:27:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.33 Mbit/s
95th percentile per-packet one-way delay: 46.381 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 58.71 Mbit/s
95th percentile per-packet one-way delay: 48.606 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 40.60 Mbit/s
95th percentile per-packet one-way delay: 32.089 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 34.91 Mbit/s
95th percentile per-packet one-way delay: 32.366 ms
Loss rate: 0.11%
Run 7: Report of TCP Cubic — Data Link

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

Flow 1 ingress (mean 58.81 Mbit/s)  Flow 1 egress (mean 58.71 Mbit/s)  Flow 2 ingress (mean 40.66 Mbit/s)  Flow 2 egress (mean 40.60 Mbit/s)  Flow 3 ingress (mean 34.97 Mbit/s)  Flow 3 egress (mean 34.91 Mbit/s)

Flow 1 (95th percentile 48.61 ms)  Flow 2 (95th percentile 32.09 ms)  Flow 3 (95th percentile 32.37 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-02-03 04:06:54
End at: 2018-02-03 04:07:24
Local clock offset: -0.063 ms
Remote clock offset: 2.096 ms

# Below is generated by plot.py at 2018-02-03 05:27:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 32.810 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 32.744 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.11 Mbit/s
95th percentile per-packet one-way delay: 32.854 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 33.034 ms
Loss rate: 0.12%
Run 8: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 62.84 Mbps)
  - Flow 1 egress (mean 62.76 Mbps)
  - Flow 2 ingress (mean 36.15 Mbps)
  - Flow 2 egress (mean 36.11 Mbps)
  - Flow 3 ingress (mean 32.26 Mbps)
  - Flow 3 egress (mean 32.16 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 32.74 ms)
  - Flow 2 (95th percentile 32.85 ms)
  - Flow 3 (95th percentile 33.03 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-02-03 04:27:27
End at: 2018-02-03 04:27:57
Local clock offset: 0.023 ms
Remote clock offset: 2.213 ms

# Below is generated by plot.py at 2018-02-03 05:27:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 32.672 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 63.51 Mbit/s
95th percentile per-packet one-way delay: 32.500 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 35.59 Mbit/s
95th percentile per-packet one-way delay: 32.744 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 31.07 Mbit/s
95th percentile per-packet one-way delay: 32.844 ms
Loss rate: 0.16%
Run 9: Report of TCP Cubic — Data Link

![Graph of Throughput](image1)

![Graph of Per Pack one way delay](image2)

- Flow 1 ingress (mean 63.57 Mbit/s)
- Flow 1 egress (mean 63.51 Mbit/s)
- Flow 2 ingress (mean 35.61 Mbit/s)
- Flow 2 egress (mean 35.59 Mbit/s)
- Flow 3 ingress (mean 31.12 Mbit/s)
- Flow 3 egress (mean 31.07 Mbit/s)
Run 10: Statistics of TCP Cubic

Start at: 2018-02-03 04:48:02
End at: 2018-02-03 04:48:32
Local clock offset: 0.039 ms
Remote clock offset: 2.098 ms

# Below is generated by plot.py at 2018-02-03 05:27:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.48 Mbit/s
  95th percentile per-packet one-way delay: 32.625 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 64.56 Mbit/s
  95th percentile per-packet one-way delay: 32.543 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 36.53 Mbit/s
  95th percentile per-packet one-way delay: 32.654 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 25.97 Mbit/s
  95th percentile per-packet one-way delay: 32.825 ms
  Loss rate: 0.19%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-02-03 01:41:51
End at: 2018-02-03 01:42:21
Local clock offset: 0.077 ms
Remote clock offset: 0.753 ms
Run 1: Report of LEDBAT — Data Link

![Graphs showing throughput and per-packet one-way delay with flow details]
Run 2: Statistics of LEDBAT

Start at: 2018-02-03 02:02:25
End at: 2018-02-03 02:02:55
Local clock offset: 0.052 ms
Remote clock offset: 0.459 ms

# Below is generated by plot.py at 2018-02-03 05:27:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.17 Mbit/s
95th percentile per-packet one-way delay: 32.224 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.03 Mbit/s
95th percentile per-packet one-way delay: 32.181 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.53 Mbit/s
95th percentile per-packet one-way delay: 32.383 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 32.404 ms
Loss rate: 0.06%
Run 2: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 62.10 Mbit/s)
- Flow 1 egress (mean 62.03 Mbit/s)
- Flow 2 ingress (mean 37.55 Mbit/s)
- Flow 2 egress (mean 37.53 Mbit/s)
- Flow 3 ingress (mean 30.67 Mbit/s)
- Flow 3 egress (mean 30.66 Mbit/s)

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

- Flow 1 (95th percentile 32.18 ms)
- Flow 2 (95th percentile 32.38 ms)
- Flow 3 (95th percentile 32.40 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-02-03 02:22:59
End at: 2018-02-03 02:23:29
Local clock offset: -0.019 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2018-02-03 05:27:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 32.260 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 62.45 Mbit/s
95th percentile per-packet one-way delay: 32.230 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.31 Mbit/s
95th percentile per-packet one-way delay: 32.431 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 32.458 ms
Loss rate: 0.08%
Run 3: Report of LEDBAT — Data Link

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

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

Start at: 2018-02-03 02:43:33
End at: 2018-02-03 02:44:03
Local clock offset: -0.039 ms
Remote clock offset: -17.602 ms

# Below is generated by plot.py at 2018-02-03 05:27:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.18 Mbit/s
  95th percentile per-packet one-way delay: 14.735 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 64.02 Mbit/s
  95th percentile per-packet one-way delay: 14.695 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 35.66 Mbit/s
  95th percentile per-packet one-way delay: 14.905 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 28.54 Mbit/s
  95th percentile per-packet one-way delay: 14.924 ms
  Loss rate: 0.11%
Run 4: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet one way delay vs Time](image2)
Run 5: Statistics of LEDBAT

Start at: 2018-02-03 03:04:07
End at: 2018-02-03 03:04:37
Local clock offset: -0.015 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-02-03 05:27:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.04 Mbit/s
  95th percentile per-packet one-way delay: 55.672 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 3.13 Mbit/s
  95th percentile per-packet one-way delay: 70.151 ms
  Loss rate: 1.80%
-- Flow 2:
  Average throughput: 91.10 Mbit/s
  95th percentile per-packet one-way delay: 31.244 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 6.48 Mbit/s
  95th percentile per-packet one-way delay: 68.584 ms
  Loss rate: 0.94%
Run 5: Report of LEDBAT — Data Link

![Graph](image)

- Flow 1 ingress (mean 3.19 Mbit/s)
- Flow 1 egress (mean 3.13 Mbit/s)
- Flow 2 ingress (mean 91.18 Mbit/s)
- Flow 2 egress (mean 91.10 Mbit/s)
- Flow 3 ingress (mean 6.53 Mbit/s)
- Flow 3 egress (mean 6.48 Mbit/s)

- Flow 1 (95th percentile 70.15 ms)
- Flow 2 (95th percentile 31.24 ms)
- Flow 3 (95th percentile 68.58 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-02-03 03:24:41
End at: 2018-02-03 03:25:11
Local clock offset: -0.039 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-02-03 05:28:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.10 Mbit/s
95th percentile per-packet one-way delay: 32.209 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 56.60 Mbit/s
95th percentile per-packet one-way delay: 32.182 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 46.62 Mbit/s
95th percentile per-packet one-way delay: 32.345 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.68 Mbit/s
95th percentile per-packet one-way delay: 32.386 ms
Loss rate: 0.08%
Run 6: Report of LEDBAT — Data Link

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

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

- Flow 1 ingress (mean 56.67 Mbit/s)
- Flow 1 egress (mean 56.60 Mbit/s)
- Flow 2 ingress (mean 46.64 Mbit/s)
- Flow 2 egress (mean 46.62 Mbit/s)
- Flow 3 ingress (mean 26.73 Mbit/s)
- Flow 3 egress (mean 28.68 Mbit/s)

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

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

- Flow 1 (95th percentile 32.18 ms)
- Flow 2 (95th percentile 32.34 ms)
- Flow 3 (95th percentile 32.39 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-02-03 03:45:11
End at: 2018-02-03 03:45:41
Local clock offset: -0.037 ms
Remote clock offset: 1.482 ms

# Below is generated by plot.py at 2018-02-03 05:28:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.21 Mbit/s
95th percentile per-packet one-way delay: 32.226 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.25 Mbit/s
95th percentile per-packet one-way delay: 32.195 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 32.377 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 32.400 ms
Loss rate: 0.08%
Run 7: Report of LEDBAT — Data Link

![Graphs showing throughput and per-packet one-way delay for flows 1, 2, and 3.]

Flow 1 ingress (mean 63.32 Mbit/s)
Flow 2 ingress (mean 36.69 Mbit/s)
Flow 3 ingress (mean 28.88 Mbit/s)
Flow 1 egress (mean 63.25 Mbit/s)
Flow 2 egress (mean 36.68 Mbit/s)
Flow 3 egress (mean 28.83 Mbit/s)

Flow 1 (95th percentile 32.20 ms)
Flow 2 (95th percentile 32.38 ms)
Flow 3 (95th percentile 32.40 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-02-03 04:05:44
End at: 2018-02-03 04:06:14
Local clock offset: 0.003 ms
Remote clock offset: 2.015 ms

# Below is generated by plot.py at 2018-02-03 05:28:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.18 Mbit/s
  95th percentile per-packet one-way delay: 32.199 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 64.28 Mbit/s
  95th percentile per-packet one-way delay: 32.155 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 35.14 Mbit/s
  95th percentile per-packet one-way delay: 32.364 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: 32.369 ms
  Loss rate: 0.08%
Run 8: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 64.33 Mbit/s)
- Flow 1 egress (mean 64.28 Mbit/s)
- Flow 2 ingress (mean 35.15 Mbit/s)
- Flow 2 egress (mean 35.14 Mbit/s)
- Flow 3 ingress (mean 26.81 Mbit/s)
- Flow 3 egress (mean 28.80 Mbit/s)
Run 9: Statistics of LEDBAT

Start at: 2018-02-03 04:26:18
End at: 2018-02-03 04:26:48
Local clock offset: 0.007 ms
Remote clock offset: 2.213 ms

# Below is generated by plot.py at 2018-02-03 05:28:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.22 Mbit/s
  95th percentile per-packet one-way delay: 32.287 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 63.02 Mbit/s
  95th percentile per-packet one-way delay: 32.247 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 36.90 Mbit/s
  95th percentile per-packet one-way delay: 32.452 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 29.09 Mbit/s
  95th percentile per-packet one-way delay: 32.473 ms
  Loss rate: 0.09%
Run 10: Statistics of LEDBAT

Start at: 2018-02-03 04:46:52
End at: 2018-02-03 04:47:22
Local clock offset: 0.025 ms
Remote clock offset: 2.178 ms

# Below is generated by plot.py at 2018-02-03 05:28:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.21 Mbit/s
  95th percentile per-packet one-way delay: 32.265 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 62.36 Mbit/s
  95th percentile per-packet one-way delay: 32.237 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 38.28 Mbit/s
  95th percentile per-packet one-way delay: 32.424 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 28.40 Mbit/s
  95th percentile per-packet one-way delay: 32.438 ms
  Loss rate: 0.08%
Run 10: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 62.43 Mbps)
- **Flow 1 egress** (mean 62.36 Mbps)
- **Flow 2 ingress** (mean 38.30 Mbps)
- **Flow 2 egress** (mean 38.28 Mbps)
- **Flow 3 ingress** (mean 28.45 Mbps)
- **Flow 3 egress** (mean 28.40 Mbps)

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

- **Flow 1** (95th percentile 32.24 ms)
- **Flow 2** (95th percentile 32.42 ms)
- **Flow 3** (95th percentile 32.44 ms)
Run 1: Statistics of PCC

Start at: 2018-02-03 01:34:56
End at: 2018-02-03 01:35:26
Local clock offset: 0.126 ms
Remote clock offset: 0.856 ms

# Below is generated by plot.py at 2018-02-03 05:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.12 Mbit/s
95th percentile per-packet one-way delay: 6.507 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 4.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 44.435 ms
Loss rate: 6.49%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 4.708 ms
Loss rate: 0.00%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-02-03 01:55:29
End at: 2018-02-03 01:55:59
Local clock offset: 0.063 ms
Remote clock offset: -19.82 ms

# Below is generated by plot.py at 2018-02-03 05:28:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.61 Mbit/s
  95th percentile per-packet one-way delay: -16.983 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 80.02 Mbit/s
  95th percentile per-packet one-way delay: -17.084 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 6.13 Mbit/s
  95th percentile per-packet one-way delay: -15.984 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 13.68 Mbit/s
  95th percentile per-packet one-way delay: -14.779 ms
  Loss rate: 0.00%
Run 2: Report of PCC — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image)
Run 3: Statistics of PCC

Start at: 2018-02-03 02:16:04
End at: 2018-02-03 02:16:34
Local clock offset: -0.045 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-02-03 05:28:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.83 Mbit/s
95th percentile per-packet one-way delay: 43.353 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 77.43 Mbit/s
95th percentile per-packet one-way delay: 24.169 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 70.641 ms
Loss rate: 6.56%
-- Flow 3:
Average throughput: 21.77 Mbit/s
95th percentile per-packet one-way delay: 26.319 ms
Loss rate: 0.00%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-02-03 02:36:37
End at: 2018-02-03 02:37:07
Local clock offset: -0.09 ms
Remote clock offset: -19.125 ms

# Below is generated by plot.py at 2018-02-03 05:29:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.81 Mbit/s
95th percentile per-packet one-way delay: -15.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.29 Mbit/s
95th percentile per-packet one-way delay: -15.152 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.65 Mbit/s
95th percentile per-packet one-way delay: -15.795 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: -16.047 ms
Loss rate: 0.00%
Run 4: Report of PCC — Data Link

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

Start at: 2018-02-03 02:57:13
End at: 2018-02-03 02:57:43
Local clock offset: -0.053 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-02-03 05:29:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 43.355 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 72.12 Mbit/s
95th percentile per-packet one-way delay: 33.151 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 72.905 ms
Loss rate: 4.59%
-- Flow 3:
Average throughput: 24.34 Mbit/s
95th percentile per-packet one-way delay: 9.885 ms
Loss rate: 0.00%
Run 5: Report of PCC — Data Link

![Graph showing throughput over time for different flows with various mean speeds and delays.](image-url)
Run 6: Statistics of PCC

Start at: 2018-02-03 03:17:45
End at: 2018-02-03 03:18:15
Local clock offset: -0.051 ms
Remote clock offset: -0.181 ms

# Below is generated by plot.py at 2018-02-03 05:29:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.13 Mbit/s
95th percentile per-packet one-way delay: 12.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 68.68 Mbit/s
95th percentile per-packet one-way delay: 9.439 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.32 Mbit/s
95th percentile per-packet one-way delay: 15.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 16.347 ms
Loss rate: 0.00%
Run 6: Report of PCC — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 68.68 Mb/s)
Flow 1 egress (mean 68.68 Mb/s)
Flow 2 ingress (mean 21.33 Mb/s)
Flow 2 egress (mean 21.32 Mb/s)
Flow 3 ingress (mean 22.11 Mb/s)
Flow 3 egress (mean 22.11 Mb/s)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 3.44 ms)
Flow 2 (95th percentile 15.09 ms)
Flow 3 (95th percentile 16.35 ms)
Run 7: Statistics of PCC

Start at: 2018-02-03 03:38:18
End at: 2018-02-03 03:38:48
Local clock offset: -0.053 ms
Remote clock offset: 0.996 ms

# Below is generated by plot.py at 2018-02-03 05:29:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.87 Mbit/s
  95th percentile per-packet one-way delay: 11.339 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 70.01 Mbit/s
  95th percentile per-packet one-way delay: 8.047 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 26.41 Mbit/s
  95th percentile per-packet one-way delay: 17.568 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 13.03 Mbit/s
  95th percentile per-packet one-way delay: 22.090 ms
  Loss rate: 0.00%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-02-03 03:58:49
End at: 2018-02-03 03:59:19
Local clock offset: -0.023 ms
Remote clock offset: 2.071 ms

# Below is generated by plot.py at 2018-02-03 05:29:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.45 Mbit/s
  95th percentile per-packet one-way delay: 9.418 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 74.36 Mbit/s
  95th percentile per-packet one-way delay: 8.220 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 16.74 Mbit/s
  95th percentile per-packet one-way delay: 15.133 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 8.95 Mbit/s
  95th percentile per-packet one-way delay: 19.801 ms
  Loss rate: 0.00%
Run 8: Report of PCC — Data Link

![Graph of throughputs and delays for different flows.](image_url)
Run 9: Statistics of PCC

Start at: 2018-02-03 04:19:22
End at: 2018-02-03 04:19:52
Local clock offset: 0.011 ms
Remote clock offset: 2.144 ms

# Below is generated by plot.py at 2018-02-03 05:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 33.067 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 65.17 Mbit/s
95th percentile per-packet one-way delay: 23.656 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 33.68 Mbit/s
95th percentile per-packet one-way delay: 33.198 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 33.208 ms
Loss rate: 1.00%
Run 10: Statistics of PCC

Start at: 2018-02-03 04:39:56
End at: 2018-02-03 04:40:26
Local clock offset: 0.029 ms
Remote clock offset: 2.142 ms

# Below is generated by plot.py at 2018-02-03 05:30:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.47 Mbit/s
95th percentile per-packet one-way delay: 9.140 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.50 Mbit/s
95th percentile per-packet one-way delay: 8.087 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 13.010 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.44 Mbit/s
95th percentile per-packet one-way delay: 21.683 ms
Loss rate: 0.00%
Run 10: Report of PCC — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-03 01:47:30
End at: 2018-02-03 01:48:00
Local clock offset: 0.118 ms
Remote clock offset: 0.68 ms

# Below is generated by plot.py at 2018-02-03 05:30:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.68 Mbit/s
  95th percentile per-packet one-way delay: 33.576 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 2.49 Mbit/s
  95th percentile per-packet one-way delay: 69.017 ms
  Loss rate: 5.28%
-- Flow 2:
  Average throughput: 64.06 Mbit/s
  95th percentile per-packet one-way delay: 30.098 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 41.06 Mbit/s
  95th percentile per-packet one-way delay: 31.390 ms
  Loss rate: 0.18%
Run 1: Report of QUIC Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 2.63 Mbit/s)
Flow 1 egress (mean 2.49 Mbit/s)
Flow 2 ingress (mean 64.21 Mbit/s)
Flow 2 egress (mean 64.06 Mbit/s)
Flow 3 ingress (mean 41.25 Mbit/s)
Flow 3 egress (mean 41.06 Mbit/s)

Per packet round trip delay (ms)

Time (s)

Flow 1 (95th percentile 69.02 ms)
Flow 2 (95th percentile 30.10 ms)
Flow 3 (95th percentile 31.39 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-03 02:08:05
End at: 2018-02-03 02:08:35
Local clock offset: -0.067 ms
Remote clock offset: 0.368 ms

# Below is generated by plot.py at 2018-02-03 05:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.48 Mbit/s
95th percentile per-packet one-way delay: 31.425 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 31.360 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.31 Mbit/s
95th percentile per-packet one-way delay: 31.473 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 30.17 Mbit/s
95th percentile per-packet one-way delay: 31.491 ms
Loss rate: 0.19%
Run 2: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delay over time]

- Throughput (Mbps):
  - Flow 1 ingress (mean 56.33 Mbps)
  - Flow 1 egress (mean 56.21 Mbps)
  - Flow 2 ingress (mean 35.43 Mbps)
  - Flow 2 egress (mean 35.31 Mbps)
  - Flow 3 ingress (mean 30.24 Mbps)
  - Flow 3 egress (mean 30.17 Mbps)

- Per-packet one-way delay (ms):
  - Flow 1 (95th percentile 31.36 ms)
  - Flow 2 (95th percentile 31.47 ms)
  - Flow 3 (95th percentile 31.49 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-03 02:28:39
End at: 2018-02-03 02:29:09
Local clock offset: -0.028 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-02-03 05:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.27 Mbit/s
95th percentile per-packet one-way delay: 31.012 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 69.31 Mbit/s
95th percentile per-packet one-way delay: 29.712 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 2.54 Mbit/s
95th percentile per-packet one-way delay: 70.522 ms
Loss rate: 5.34%
-- Flow 3:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 31.208 ms
Loss rate: 0.47%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-03 02:49:14
End at: 2018-02-03 02:49:44
Local clock offset: -0.019 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-02-03 05:31:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.72 Mbit/s
  95th percentile per-packet one-way delay: 31.308 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 57.27 Mbit/s
  95th percentile per-packet one-way delay: 31.200 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 34.21 Mbit/s
  95th percentile per-packet one-way delay: 31.358 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 26.77 Mbit/s
  95th percentile per-packet one-way delay: 31.696 ms
  Loss rate: 0.29%
Run 4: Report of QUIC Cubic — Data Link

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

- **Flow 1 Ingress** (mean 57.41 Mbit/s)
- **Flow 1 Egress** (mean 57.27 Mbit/s)
- **Flow 2 Ingress** (mean 34.36 Mbit/s)
- **Flow 2 Egress** (mean 34.21 Mbit/s)
- **Flow 3 Ingress** (mean 26.85 Mbit/s)
- **Flow 3 Egress** (mean 26.77 Mbit/s)

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

- **Flow 1** (95th percentile 31.20 ms)
- **Flow 2** (95th percentile 31.36 ms)
- **Flow 3** (95th percentile 31.70 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-03 03:09:47
End at: 2018-02-03 03:10:17
Local clock offset: -0.053 ms
Remote clock offset: -17.774 ms

# Below is generated by plot.py at 2018-02-03 05:31:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.68 Mbit/s
95th percentile per-packet one-way delay: 13.848 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 59.68 Mbit/s
95th percentile per-packet one-way delay: 13.637 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 39.70 Mbit/s
95th percentile per-packet one-way delay: 13.746 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 52.026 ms
Loss rate: 0.93%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-03 03:30:19
End at: 2018-02-03 03:30:49
Local clock offset: -0.051 ms
Remote clock offset: 0.283 ms

# Below is generated by plot.py at 2018-02-03 05:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.75 Mbit/s
95th percentile per-packet one-way delay: 51.535 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 32.536 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 17.27 Mbit/s
95th percentile per-packet one-way delay: 61.032 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 19.46 Mbit/s
95th percentile per-packet one-way delay: 65.488 ms
Loss rate: 0.95%
Run 6: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 72.11 Mbit/s)
- Flow 1 egress (mean 71.98 Mbit/s)
- Flow 2 ingress (mean 17.39 Mbit/s)
- Flow 2 egress (mean 17.27 Mbit/s)
- Flow 3 ingress (mean 19.61 Mbit/s)
- Flow 3 egress (mean 19.46 Mbit/s)

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

- Flow 1 (95th percentile 32.54 ms)
- Flow 2 (95th percentile 61.03 ms)
- Flow 3 (95th percentile 65.49 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-03 03:50:50
End at: 2018-02-03 03:51:20
Local clock offset: -0.01 ms
Remote clock offset: 1.883 ms

# Below is generated by plot.py at 2018-02-03 05:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.15 Mbit/s
95th percentile per-packet one-way delay: 31.346 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 31.235 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 31.399 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 31.610 ms
Loss rate: 0.26%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-03 04:11:24
End at: 2018-02-03 04:11:54
Local clock offset: -0.069 ms
Remote clock offset: 2.033 ms

# Below is generated by plot.py at 2018-02-03 05:31:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.05 Mbit/s
95th percentile per-packet one-way delay: 31.359 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.18 Mbit/s
95th percentile per-packet one-way delay: 31.232 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 31.414 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 26.82 Mbit/s
95th percentile per-packet one-way delay: 32.874 ms
Loss rate: 0.19%
Run 8: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 58.31 Mbit/s)
- Flow 1 egress (mean 58.18 Mbit/s)
- Flow 2 ingress (mean 34.96 Mbit/s)
- Flow 2 egress (mean 34.84 Mbit/s)
- Flow 3 ingress (mean 26.87 Mbit/s)
- Flow 3 egress (mean 26.62 Mbit/s)

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

- Flow 1 (95th percentile 31.23 ms)
- Flow 2 (95th percentile 31.41 ms)
- Flow 3 (95th percentile 32.87 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-03 04:31:58
End at: 2018-02-03 04:32:28
Local clock offset: -0.039 ms
Remote clock offset: 2.191 ms

# Below is generated by plot.py at 2018-02-03 05:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.27 Mbit/s
95th percentile per-packet one-way delay: 31.433 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 31.343 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 34.83 Mbit/s
95th percentile per-packet one-way delay: 31.502 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 31.536 ms
Loss rate: 0.15%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-03 04:52:32
End at: 2018-02-03 04:53:02
Local clock offset: 0.01 ms
Remote clock offset: 2.18 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.46 Mbit/s
95th percentile per-packet one-way delay: 31.355 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 59.78 Mbit/s
95th percentile per-packet one-way delay: 31.282 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 35.15 Mbit/s
95th percentile per-packet one-way delay: 31.403 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 28.58 Mbit/s
95th percentile per-packet one-way delay: 31.425 ms
Loss rate: 0.21%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-02-03 01:32:42
End at: 2018-02-03 01:33:12
Local clock offset: 0.151 ms
Remote clock offset: -19.324 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: -17.676 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -17.803 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -17.430 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -17.792 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-02-03 01:53:16
End at: 2018-02-03 01:53:46
Local clock offset: 0.049 ms
Remote clock offset: -18.99 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 23.755 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -17.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 23.980 ms
Loss rate: 5.13%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -17.078 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 0.22 Mbps)  
Flow 2 ingress (mean 0.09 Mbps)  
Flow 3 ingress (mean 0.22 Mbps)

Flow 1 egress (mean 0.22 Mbps)  
Flow 2 egress (mean 0.09 Mbps)  
Flow 3 egress (mean 0.22 Mbps)

Per-packet one way delay (ms)

Flow 1 (95th percentile: 17.13 ms)  
Flow 2 (95th percentile: 23.98 ms)  
Flow 3 (95th percentile: 17.08 ms)
Run 3: Statistics of SCReAM

Start at: 2018-02-03 02:13:50
End at: 2018-02-03 02:14:20
Local clock offset: 0.015 ms
Remote clock offset: 0.309 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 43.399 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 43.599 ms
Loss rate: 3.35%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.404 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.410 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

[Graph showing throughput over time for different flows]

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

Start at: 2018-02-03 02:34:24
End at: 2018-02-03 02:34:54
Local clock offset: -0.007 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 2.399 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.395 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.400 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.415 ms
  Loss rate: 0.00%
Run 4: 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

- Flow 1 95th percentile: 2.40 ms
- Flow 2 95th percentile: 2.40 ms
- Flow 3 95th percentile: 2.42 ms
Run 5: Statistics of SCReAM

Start at: 2018-02-03 02:54:59
End at: 2018-02-03 02:55:29
Local clock offset: -0.096 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.447 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

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

Throughput (Mbps/s) vs. Time (s)

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

Packet one-way delay (ms)

- Flow 1 (95th percentile 2.43 ms)
- Flow 2 (95th percentile 2.44 ms)
- Flow 3 (95th percentile 2.45 ms)
Run 6: Statistics of SCReAM

Start at: 2018-02-03 03:15:32
End at: 2018-02-03 03:16:02
Local clock offset: -0.049 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.382 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.391 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-02-03 03:36:04
End at: 2018-02-03 03:36:34
Local clock offset: -0.021 ms
Remote clock offset: 0.808 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 2.324 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.332 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.316 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.318 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graphs showing throughput and per-packet one-way delay](image-url)
Run 8: Statistics of SCReAM

Start at: 2018-02-03 03:56:35
End at: 2018-02-03 03:57:05
Local clock offset: -0.001 ms
Remote clock offset: 2.039 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.966 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.597 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.357 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.373 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-02-03 04:17:09
End at: 2018-02-03 04:17:39
Local clock offset: 0.008 ms
Remote clock offset: 2.137 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 2.539 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.638 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.377 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.393 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-02-03 04:37:43
End at: 2018-02-03 04:38:13
Local clock offset: 0.026 ms
Remote clock offset: 2.112 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 2.335 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.295 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.580 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.315 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-02-03 01:46:25
End at: 2018-02-03 01:46:55
Local clock offset: 0.097 ms
Remote clock offset: 0.673 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 45.136 ms
Loss rate: 3.51%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 5.808 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 45.209 ms
Loss rate: 5.87%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 48.264 ms
Loss rate: 6.75%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-02-03 02:07:01
End at: 2018-02-03 02:07:31
Local clock offset: 0.057 ms
Remote clock offset: 0.384 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 46.741 ms
Loss rate: 3.86%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 5.577 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 47.486 ms
Loss rate: 6.59%
-- Flow 3:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 49.312 ms
Loss rate: 7.28%
Run 2: Report of WebRTC media — Data Link

![Graph showing WebRTC media data]

- **Flow 1 ingress**: mean 2.35 Mbit/s
- **Flow 1 egress**: mean 2.36 Mbit/s
- **Flow 2 ingress**: mean 2.30 Mbit/s
- **Flow 2 egress**: mean 2.15 Mbit/s
- **Flow 3 ingress**: mean 0.81 Mbit/s
- **Flow 3 egress**: mean 0.76 Mbit/s

![Graph showing packet delay]

- **Flow 1 (95th percentile)**: 5.58 ms
- **Flow 2 (95th percentile)**: 47.49 ms
- **Flow 3 (95th percentile)**: 49.31 ms
Run 3: Statistics of WebRTC media

Start at: 2018-02-03 02:27:35
End at: 2018-02-03 02:28:05
Local clock offset: 0.004 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.78 Mbit/s
  95th percentile per-packet one-way delay: 46.432 ms
  Loss rate: 3.79%
-- Flow 1:
  Average throughput: 3.43 Mbit/s
  95th percentile per-packet one-way delay: 47.051 ms
  Loss rate: 4.91%
-- Flow 2:
  Average throughput: 1.79 Mbit/s
  95th percentile per-packet one-way delay: 45.706 ms
  Loss rate: 2.76%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 7.615 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 3.60 Mbit/s)
- Flow 1 egress (mean 3.43 Mbit/s)
- Flow 2 ingress (mean 1.85 Mbit/s)
- Flow 2 egress (mean 1.79 Mbit/s)
- Flow 3 ingress (mean 0.57 Mbit/s)
- Flow 3 egress (mean 0.57 Mbit/s)
Run 4: Statistics of WebRTC media

Start at: 2018-02-03 02:48:10
End at: 2018-02-03 02:48:40
Local clock offset: -0.107 ms
Remote clock offset: -19.141 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.94 Mbit/s
  95th percentile per-packet one-way delay: 25.222 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 2.89 Mbit/s
  95th percentile per-packet one-way delay: 26.167 ms
  Loss rate: 1.41%
-- Flow 2:
  Average throughput: 1.48 Mbit/s
  95th percentile per-packet one-way delay: -13.009 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: -12.512 ms
  Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 2.93 Mbps)
  - Flow 1 egress (mean 2.89 Mbps)
  - Flow 2 ingress (mean 1.48 Mbps)
  - Flow 2 egress (mean 1.48 Mbps)
  - Flow 3 ingress (mean 0.57 Mbps)
  - Flow 3 egress (mean 0.57 Mbps)

- **Packet Delay:**
  
  - Flow 1 (95th percentile 26.17 ms)
  - Flow 2 (95th percentile -13.01 ms)
  - Flow 3 (95th percentile -12.51 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-02-03 03:08:42
End at: 2018-02-03 03:09:12
Local clock offset: -0.068 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.41 Mbit/s
  95th percentile per-packet one-way delay: 5.324 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 2.34 Mbit/s
  95th percentile per-packet one-way delay: 4.808 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 1.51 Mbit/s
  95th percentile per-packet one-way delay: 5.442 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 6.135 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-02-03 03:29:15
End at: 2018-02-03 03:29:45
Local clock offset: -0.038 ms
Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.43 Mbit/s
95th percentile per-packet one-way delay: 6.120 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 5.760 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 6.046 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 8.003 ms
Loss rate: 0.05%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-02-03 03:49:46
End at: 2018-02-03 03:50:16
Local clock offset: -0.024 ms
Remote clock offset: 1.797 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.44 Mbit/s
  95th percentile per-packet one-way delay: 6.164 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.37 Mbit/s
  95th percentile per-packet one-way delay: 5.313 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.51 Mbit/s
  95th percentile per-packet one-way delay: 6.132 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 13.357 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-02-03 04:10:20
End at: 2018-02-03 04:10:50
Local clock offset: -0.057 ms
Remote clock offset: 2.075 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.39 Mbit/s
95th percentile per-packet one-way delay: 6.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 5.617 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 6.458 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 6.883 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Throughput (Mbps) vs Time (s)](image1)

![Per-packet one-way delay (ms)](image2)
Run 9: Statistics of WebRTC media

Start at: 2018-02-03 04:30:54
End at: 2018-02-03 04:31:24
Local clock offset: 0.046 ms
Remote clock offset: 2.197 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.38 Mbit/s
  95th percentile per-packet one-way delay: 5.738 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.36 Mbit/s
  95th percentile per-packet one-way delay: 5.162 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: 5.386 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.53 Mbit/s
  95th percentile per-packet one-way delay: 9.362 ms
  Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-02-03 04:51:28
End at: 2018-02-03 04:51:58
Local clock offset: 0.033 ms
Remote clock offset: 2.178 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.44 Mbit/s
95th percentile per-packet one-way delay: 5.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 5.210 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 5.899 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 7.383 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

Time (s)

Throughput (Mbit/s)

Flow 1 ingress (mean 2.36 Mbit/s)
Flow 1 egress (mean 2.36 Mbit/s)
Flow 2 ingress (mean 1.51 Mbit/s)
Flow 2 egress (mean 1.51 Mbit/s)
Flow 3 ingress (mean 0.58 Mbit/s)
Flow 3 egress (mean 0.58 Mbit/s)

Per-packet round-trip delay (ms)

Flow 1 (95th percentile 5.21 ms)
Flow 2 (95th percentile 5.90 ms)
Flow 3 (95th percentile 7.38 ms)
Run 1: Statistics of Sprout

Start at: 2018-02-03 01:49:48
End at: 2018-02-03 01:50:18
Local clock offset: 0.019 ms
Remote clock offset: 0.639 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.77 Mbit/s
95th percentile per-packet one-way delay: 22.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.56 Mbit/s
95th percentile per-packet one-way delay: 21.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.12 Mbit/s
95th percentile per-packet one-way delay: 23.446 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.81 Mbit/s
95th percentile per-packet one-way delay: 23.138 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

![Graph 1: Overlaid throughput and latency plots for Flow 1, Flow 2, and Flow 3 over time.](image1)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 41.59 Mbps)
  - Flow 1 egress (mean 41.56 Mbps)
  - Flow 2 ingress (mean 36.15 Mbps)
  - Flow 2 egress (mean 36.32 Mbps)
  - Flow 3 ingress (mean 33.82 Mbps)
  - Flow 3 egress (mean 33.81 Mbps)

![Graph 2: Packet round-trip time analysis.](image2)

- **Per-packet round trip delay:**
  - Flow 1 (95th percentile 21.03 ms)
  - Flow 2 (95th percentile 23.45 ms)
  - Flow 3 (95th percentile 23.14 ms)
Run 2: Statistics of Sprout

Start at: 2018-02-03 02:10:24
End at: 2018-02-03 02:10:54
Local clock offset: -0.032 ms
Remote clock offset: 0.371 ms

# Below is generated by plot.py at 2018-02-03 05:32:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.99 Mbit/s
  95th percentile per-packet one-way delay: 22.241 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 40.94 Mbit/s
  95th percentile per-packet one-way delay: 20.878 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 38.64 Mbit/s
  95th percentile per-packet one-way delay: 23.094 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 31.36 Mbit/s
  95th percentile per-packet one-way delay: 23.779 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-02-03 02:30:58
End at: 2018-02-03 02:31:28
Local clock offset: 0.012 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-02-03 05:32:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 21.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.77 Mbit/s
95th percentile per-packet one-way delay: 21.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.30 Mbit/s
95th percentile per-packet one-way delay: 22.044 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 36.77 Mbit/s
95th percentile per-packet one-way delay: 22.797 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-02-03 02:51:33
End at: 2018-02-03 02:52:03
Local clock offset: -0.032 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2018-02-03 05:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 21.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.98 Mbit/s
95th percentile per-packet one-way delay: 19.443 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 23.094 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.90 Mbit/s
95th percentile per-packet one-way delay: 23.095 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

- **Flow 1 ingress** (mean 42.99 Mbit/s)
- **Flow 1 egress** (mean 42.98 Mbit/s)
- **Flow 2 ingress** (mean 35.22 Mbit/s)
- **Flow 2 egress** (mean 35.19 Mbit/s)
- **Flow 3 ingress** (mean 30.91 Mbit/s)
- **Flow 3 egress** (mean 30.90 Mbit/s)

![Graph of Per-Packet Round-Trip Delay vs Time](image2.png)

- **Flow 1** (95th percentile 19.44 ms)
- **Flow 2** (95th percentile 23.09 ms)
- **Flow 3** (95th percentile 23.09 ms)
Run 5: Statistics of Sprout

Start at: 2018-02-03 03:12:06
End at: 2018-02-03 03:12:36
Local clock offset: -0.057 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-02-03 05:33:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.70 Mbit/s
  95th percentile per-packet one-way delay: 44.194 ms
  Loss rate: 0.11%
-- Flow 1:
  Average throughput: 43.47 Mbit/s
  95th percentile per-packet one-way delay: 18.945 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 44.34 Mbit/s
  95th percentile per-packet one-way delay: 17.422 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 14.31 Mbit/s
  95th percentile per-packet one-way delay: 60.602 ms
  Loss rate: 1.80%
Run 5: Report of Sprout — Data Link

![Throughput Graph](image)

![Delay Graph](image)

Legend:
- Flow 1 ingress (mean 43.50 Mbit/s)
- Flow 1 egress (mean 43.47 Mbit/s)
- Flow 2 ingress (mean 44.38 Mbit/s)
- Flow 2 egress (mean 44.34 Mbit/s)
- Flow 3 ingress (mean 14.54 Mbit/s)
- Flow 3 egress (mean 14.31 Mbit/s)
Run 6: Statistics of Sprout

Start at: 2018-02-03 03:32:38
End at: 2018-02-03 03:33:08
Local clock offset: -0.06 ms
Remote clock offset: 0.539 ms

# Below is generated by plot.py at 2018-02-03 05:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.88 Mbit/s
95th percentile per-packet one-way delay: 21.928 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.56 Mbit/s
95th percentile per-packet one-way delay: 21.387 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.89 Mbit/s
95th percentile per-packet one-way delay: 21.171 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 23.540 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

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

![Graph 2: Packet Latency vs Time](image2)
Run 7: Statistics of Sprout

Start at: 2018-02-03 03:53:09
End at: 2018-02-03 03:53:39
Local clock offset: -0.087 ms
Remote clock offset: 1.969 ms

# Below is generated by plot.py at 2018-02-03 05:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 21.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 41.93 Mbit/s
95th percentile per-packet one-way delay: 21.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 21.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 34.28 Mbit/s
95th percentile per-packet one-way delay: 22.132 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-02-03 04:13:43
End at: 2018-02-03 04:14:13
Local clock offset: -0.006 ms
Remote clock offset: 2.094 ms

# Below is generated by plot.py at 2018-02-03 05:33:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.94 Mbit/s
  95th percentile per-packet one-way delay: 21.452 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 42.16 Mbit/s
  95th percentile per-packet one-way delay: 20.210 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 37.22 Mbit/s
  95th percentile per-packet one-way delay: 21.895 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 30.38 Mbit/s
  95th percentile per-packet one-way delay: 23.654 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

---

**Throughput (Mbit/s)**

- Blue line: Flow 1 ingress (mean 42.18 Mbit/s)
- Green line: Flow 2 ingress (mean 37.24 Mbit/s)
- Red line: Flow 3 ingress (mean 30.43 Mbit/s)
- Blue line: Flow 1 egress (mean 42.16 Mbit/s)
- Green line: Flow 2 egress (mean 37.22 Mbit/s)
- Red line: Flow 3 egress (mean 30.38 Mbit/s)

---

**Per-packet round-trip delay (ms)**

- Blue dots: Flow 1 (95th percentile 20.21 ms)
- Green dots: Flow 2 (95th percentile 21.89 ms)
- Red dots: Flow 3 (95th percentile 23.65 ms)
Run 9: Statistics of Sprout

Start at: 2018-02-03 04:34:17
End at: 2018-02-03 04:34:47
Local clock offset: 0.008 ms
Remote clock offset: 2.2 ms

# Below is generated by plot.py at 2018-02-03 05:33:52
# Datalink statistics

-- Total of 3 flows:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 22.301 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 42.53 Mbit/s
95th percentile per-packet one-way delay: 20.322 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 38.09 Mbit/s
95th percentile per-packet one-way delay: 21.263 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 28.47 Mbit/s
95th percentile per-packet one-way delay: 25.823 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

**Graph 1:**
- **Throughput (Mbps):**
- **Time (s):**
- Legend:
  - Blue dashed line: Flow 1 ingress (mean 42.56 Mbps)
  - Blue solid line: Flow 1 egress (mean 42.53 Mbps)
  - Green dashed line: Flow 2 ingress (mean 38.13 Mbps)
  - Green solid line: Flow 2 egress (mean 38.09 Mbps)
  - Red dashed line: Flow 3 ingress (mean 28.52 Mbps)
  - Red solid line: Flow 3 egress (mean 20.47 Mbps)

**Graph 2:**
- **Per packet one-way delay (ms):**
- **Time (s):**
- Legend:
  - Blue markers: Flow 1 (95th percentile 20.32 ms)
  - Green markers: Flow 2 (95th percentile 21.26 ms)
  - Red markers: Flow 3 (95th percentile 25.02 ms)
Run 10: Statistics of Sprout

Start at: 2018-02-03 04:54:51
End at: 2018-02-03 04:55:21
Local clock offset: -0.024 ms
Remote clock offset: 2.181 ms

# Below is generated by plot.py at 2018-02-03 05:33:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 21.538 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.22 Mbit/s
95th percentile per-packet one-way delay: 20.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.57 Mbit/s
95th percentile per-packet one-way delay: 22.594 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.58 Mbit/s
95th percentile per-packet one-way delay: 22.237 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

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

- **Flow 1 ing (mean 42.23 Mbps)**
- **Flow 2 ing (mean 35.61 Mbps)**
- **Flow 3 ing (mean 35.62 Mbps)**
- **Flow 1 egress (mean 42.22 Mbps)**
- **Flow 2 egress (mean 35.57 Mbps)**
- **Flow 3 egress (mean 35.58 Mbps)**

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

- **Flow 1 (95th percentile 20.42 ms)**
- **Flow 2 (95th percentile 22.59 ms)**
- **Flow 3 (95th percentile 22.24 ms)**
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-03 01:31:31
End at: 2018-02-03 01:32:01
Local clock offset: 0.149 ms
Remote clock offset: 0.81 ms

# Below is generated by plot.py at 2018-02-03 05:34:57
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 84.05 Mbit/s
   95th percentile per-packet one-way delay: 11.170 ms
   Loss rate: 0.30%
-- Flow 1:
   Average throughput: 50.39 Mbit/s
   95th percentile per-packet one-way delay: 9.558 ms
   Loss rate: 0.02%
-- Flow 2:
   Average throughput: 47.28 Mbit/s
   95th percentile per-packet one-way delay: 10.159 ms
   Loss rate: 0.01%
-- Flow 3:
   Average throughput: 6.61 Mbit/s
   95th percentile per-packet one-way delay: 65.278 ms
   Loss rate: 9.94%
Run 1: Report of TaoVA-100x — Data Link

---

Throughput (Mbps/s) vs. Time (s)

- Flow 1 ingress (mean 50.40 Mbps/s)
- Flow 1 egress (mean 50.39 Mbps/s)
- Flow 2 ingress (mean 47.29 Mbps/s)
- Flow 2 egress (mean 47.28 Mbps/s)
- Flow 3 ingress (mean 7.31 Mbps/s)
- Flow 3 egress (mean 6.61 Mbps/s)

---

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

- Flow 1 (95th percentile 9.56 ms)
- Flow 2 (95th percentile 10.16 ms)
- Flow 3 (95th percentile 65.28 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-03 01:52:04
End at: 2018-02-03 01:52:34
Local clock offset: 0.077 ms
Remote clock offset: 0.619 ms

# Below is generated by plot.py at 2018-02-03 05:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.15 Mbit/s
95th percentile per-packet one-way delay: 58.294 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 45.41 Mbit/s
95th percentile per-packet one-way delay: 16.479 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 48.65 Mbit/s
95th percentile per-packet one-way delay: 64.788 ms
Loss rate: 5.28%
-- Flow 3:
Average throughput: 43.33 Mbit/s
95th percentile per-packet one-way delay: 22.473 ms
Loss rate: 0.16%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-03 02:12:39
End at: 2018-02-03 02:13:09
Local clock offset: 0.029 ms
Remote clock offset: 0.321 ms

# Below is generated by plot.py at 2018-02-03 05:35:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 53.945 ms
Loss rate: 3.37%
-- Flow 1:
Average throughput: 46.68 Mbit/s
95th percentile per-packet one-way delay: 59.354 ms
Loss rate: 6.31%
-- Flow 2:
Average throughput: 43.22 Mbit/s
95th percentile per-packet one-way delay: 19.969 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 47.18 Mbit/s
95th percentile per-packet one-way delay: 10.412 ms
Loss rate: 0.14%
Run 3: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps/s):**
  - Flow 1 ingress (mean 49.78 Mbps/s)
  - Flow 1 egress (mean 46.68 Mbps/s)
  - Flow 2 ingress (mean 43.25 Mbps/s)
  - Flow 2 egress (mean 43.22 Mbps/s)
  - Flow 3 ingress (mean 47.24 Mbps/s)
  - Flow 3 egress (mean 47.18 Mbps/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 59.35 ms)
  - Flow 2 (95th percentile 19.97 ms)
  - Flow 3 (95th percentile 10.41 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-03 02:33:13
End at: 2018-02-03 02:33:43
Local clock offset: -0.043 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-02-03 05:35:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.20 Mbit/s
  95th percentile per-packet one-way delay: 10.859 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 59.47 Mbit/s
  95th percentile per-packet one-way delay: 10.265 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 46.98 Mbit/s
  95th percentile per-packet one-way delay: 11.384 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 7.37 Mbit/s
  95th percentile per-packet one-way delay: 17.722 ms
  Loss rate: 1.14%
Run 4: Report of TaoVA-100x — Data Link

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

![Graph 2: Per-packet one-way delay (ms)]
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-03 02:53:48
End at: 2018-02-03 02:54:18
Local clock offset: -0.052 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2018-02-03 05:35:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 11.085 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 60.85 Mbit/s
95th percentile per-packet one-way delay: 10.567 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.64 Mbit/s
95th percentile per-packet one-way delay: 11.521 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 20.840 ms
Loss rate: 0.96%
Run 5: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 60.86 Mbit/s)
- Flow 1 egress (mean 60.85 Mbit/s)
- Flow 2 ingress (mean 45.66 Mbit/s)
- Flow 2 egress (mean 45.64 Mbit/s)
- Flow 3 ingress (mean 6.19 Mbit/s)
- Flow 3 egress (mean 6.13 Mbit/s)

![Graph 2: Per-packet One-way Delay](image)

- Flow 1 (95th percentile 10.57 ms)
- Flow 2 (95th percentile 11.52 ms)
- Flow 3 (95th percentile 20.84 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-03 03:14:20
End at: 2018-02-03 03:14:50
Local clock offset: -0.025 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2018-02-03 05:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.24 Mbit/s
95th percentile per-packet one-way delay: 11.188 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 60.17 Mbit/s
95th percentile per-packet one-way delay: 10.708 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 26.22 Mbit/s
95th percentile per-packet one-way delay: 11.915 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 47.07 Mbit/s
95th percentile per-packet one-way delay: 11.123 ms
Loss rate: 0.01%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-03 03:34:53
End at: 2018-02-03 03:35:23
Local clock offset: -0.077 ms
Remote clock offset: 0.718 ms

# Below is generated by plot.py at 2018-02-03 05:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.56 Mbit/s
95th percentile per-packet one-way delay: 10.752 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 48.58 Mbit/s
95th percentile per-packet one-way delay: 10.412 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 11.787 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 60.46 Mbit/s
95th percentile per-packet one-way delay: 6.022 ms
Loss rate: 0.01%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-03 03:55:24
End at: 2018-02-03 03:55:54
Local clock offset: -0.011 ms
Remote clock offset: 2.033 ms

# Below is generated by plot.py at 2018-02-03 05:36:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.23 Mbit/s
95th percentile per-packet one-way delay: 11.171 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 60.10 Mbit/s
95th percentile per-packet one-way delay: 10.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.24 Mbit/s
95th percentile per-packet one-way delay: 11.906 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 47.16 Mbit/s
95th percentile per-packet one-way delay: 11.103 ms
Loss rate: 0.32%
Run 8: Report of TaoVA-100x — Data Link

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

![Graph 2: Packet Delay vs. Time](image2)
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-03 04:15:57
End at: 2018-02-03 04:16:27
Local clock offset: 0.018 ms
Remote clock offset: 2.115 ms

# Below is generated by plot.py at 2018-02-03 05:37:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.16 Mbit/s
95th percentile per-packet one-way delay: 10.937 ms
Loss rate: 0.03%

-- Flow 1:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 10.278 ms
Loss rate: 0.01%

-- Flow 2:
Average throughput: 45.42 Mbit/s
95th percentile per-packet one-way delay: 11.471 ms
Loss rate: 0.01%

-- Flow 3:
Average throughput: 5.76 Mbit/s
95th percentile per-packet one-way delay: 23.655 ms
Loss rate: 1.10%
Run 9: Report of TaoVA-100x — Data Link

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

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

Legend for Graph 1:
- Dotted blue line: Flow 1 ingress (mean 61.02 Mbit/s)
- Solid blue line: Flow 1 egress (mean 61.00 Mbit/s)
- Dotted green line: Flow 2 ingress (mean 45.44 Mbit/s)
- Solid green line: Flow 2 egress (mean 45.42 Mbit/s)
- Dotted red line: Flow 3 ingress (mean 5.82 Mbit/s)
- Solid red line: Flow 3 egress (mean 5.76 Mbit/s)

Legend for Graph 2:
- Blue line: Flow 1 (95th percentile 10.28 ms)
- Green line: Flow 2 (95th percentile 11.47 ms)
- Red line: Flow 3 (95th percentile 23.66 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-03 04:36:31
End at: 2018-02-03 04:37:01
Local clock offset: -0.044 ms
Remote clock offset: 2.182 ms

# Below is generated by plot.py at 2018-02-03 05:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 11.257 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 60.21 Mbit/s
95th percentile per-packet one-way delay: 10.727 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 46.69 Mbit/s
95th percentile per-packet one-way delay: 11.687 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 23.081 ms
Loss rate: 0.23%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-02-03 01:36:02
End at: 2018-02-03 01:36:32
Local clock offset: 0.124 ms
Remote clock offset: 0.791 ms

# Below is generated by plot.py at 2018-02-03 05:37:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.44 Mbit/s
  95th percentile per-packet one-way delay: 5.962 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 41.73 Mbit/s
  95th percentile per-packet one-way delay: 13.178 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 48.47 Mbit/s
  95th percentile per-packet one-way delay: 5.389 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 70.63 Mbit/s
  95th percentile per-packet one-way delay: 5.413 ms
  Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-02-03 01:56:36
End at: 2018-02-03 01:57:06
Local clock offset: 0.042 ms
Remote clock offset: -19.82 ms

# Below is generated by plot.py at 2018-02-03 05:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.30 Mbit/s
95th percentile per-packet one-way delay: -11.115 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 69.18 Mbit/s
95th percentile per-packet one-way delay: -9.509 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: 25.959 ms
Loss rate: 7.86%
-- Flow 3:
Average throughput: 83.11 Mbit/s
95th percentile per-packet one-way delay: -14.763 ms
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

Flow 1 ingress (mean 69.18 Mbit/s)  Flow 1 egress (mean 69.18 Mbit/s)
Flow 2 ingress (mean 0.87 Mbit/s)  Flow 2 egress (mean 0.80 Mbit/s)
Flow 3 ingress (mean 83.12 Mbit/s)  Flow 3 egress (mean 83.11 Mbit/s)

Flow 1 (95th percentile -9.51 ms)  Flow 2 (95th percentile 25.96 ms)  Flow 3 (95th percentile -14.76 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-02-03 02:17:11
End at: 2018-02-03 02:17:41
Local clock offset: 0.007 ms
Remote clock offset: 0.195 ms

# Below is generated by plot.py at 2018-02-03 05:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.35 Mbit/s
95th percentile per-packet one-way delay: 4.613 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.54 Mbit/s
95th percentile per-packet one-way delay: 4.420 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.04 Mbit/s
95th percentile per-packet one-way delay: 4.452 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.75 Mbit/s
95th percentile per-packet one-way delay: 4.672 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

![Graph of throughput over time]

![Graph of per packet one-way delay over time]
Run 4: Statistics of TCP Vegas

Start at: 2018-02-03 02:37:44
End at: 2018-02-03 02:38:14
Local clock offset: −0.023 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-02-03 05:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.45 Mbit/s
95th percentile per-packet one-way delay: 6.202 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.42 Mbit/s
95th percentile per-packet one-way delay: 12.732 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.85 Mbit/s
95th percentile per-packet one-way delay: 4.473 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 4.190 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link

![Graph showing throughput and packet size distribution over time.](image-url)

**Throughput (Mbps):**
- Flow 1 ingress (mean 49.42 Mbps)
- Flow 2 ingress (mean 52.85 Mbps)
- Flow 3 ingress (mean 38.68 Mbps)
- Flow 1 egress (mean 49.42 Mbps)
- Flow 2 egress (mean 52.85 Mbps)
- Flow 3 egress (mean 38.68 Mbps)

**Packet Size Distribution:**
- Flow 1 (95th percentile 12.73 ms)
- Flow 2 (95th percentile 4.47 ms)
- Flow 3 (95th percentile 4.19 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-02-03 02:58:20
End at: 2018-02-03 02:58:50
Local clock offset: -0.046 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2018-02-03 05:37:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: 4.717 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 48.79 Mbit/s
  95th percentile per-packet one-way delay: 6.760 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 39.07 Mbit/s
  95th percentile per-packet one-way delay: 4.642 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 68.27 Mbit/s
  95th percentile per-packet one-way delay: 4.702 ms
  Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-02-03 03:18:52
End at: 2018-02-03 03:19:22
Local clock offset: -0.044 ms
Remote clock offset: -0.183 ms

# Below is generated by plot.py at 2018-02-03 05:37:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.43 Mbit/s
  95th percentile per-packet one-way delay: 4.467 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 55.74 Mbit/s
  95th percentile per-packet one-way delay: 5.482 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.08 Mbit/s
  95th percentile per-packet one-way delay: 4.258 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 45.19 Mbit/s
  95th percentile per-packet one-way delay: 4.471 ms
  Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link

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

Throughput (Mbps)

- Flow 1 ingress (mean 55.74 Mbps)
- Flow 1 egress (mean 55.74 Mbps)
- Flow 2 ingress (mean 40.08 Mbps)
- Flow 2 egress (mean 40.08 Mbps)
- Flow 3 ingress (mean 45.21 Mbps)
- Flow 3 egress (mean 45.19 Mbps)

Packet loss rate (per packet)

- Flow 1 (95th percentile 5.48 ms)
- Flow 2 (95th percentile 4.26 ms)
- Flow 3 (95th percentile 4.47 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-02-03 03:39:25
End at: 2018-02-03 03:39:55
Local clock offset: -0.054 ms
Remote clock offset: -13.407 ms

# Below is generated by plot.py at 2018-02-03 05:38:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.49 Mbit/s
  95th percentile per-packet one-way delay: -9.038 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 40.93 Mbit/s
  95th percentile per-packet one-way delay: -6.615 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 52.91 Mbit/s
  95th percentile per-packet one-way delay: -9.260 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 64.04 Mbit/s
  95th percentile per-packet one-way delay: -9.030 ms
  Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-02-03 03:59:55
End at: 2018-02-03 04:00:25
Local clock offset: 0.007 ms
Remote clock offset: 2.07 ms

# Below is generated by plot.py at 2018-02-03 05:38:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.56 Mbit/s
95th percentile per-packet one-way delay: 4.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.56 Mbit/s
95th percentile per-packet one-way delay: 6.255 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 4.251 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 57.53 Mbit/s
95th percentile per-packet one-way delay: 4.244 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 51.56 Mbit/s)
- Flow 1 egress (mean 51.56 Mbit/s)
- Flow 2 ingress (mean 38.90 Mbit/s)
- Flow 2 egress (mean 38.90 Mbit/s)
- Flow 3 ingress (mean 57.53 Mbit/s)
- Flow 3 egress (mean 57.53 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-02-03 04:20:29
End at: 2018-02-03 04:20:59
Local clock offset: 0.013 ms
Remote clock offset: 2.092 ms

# Below is generated by plot.py at 2018-02-03 05:38:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 4.483 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 48.40 Mbit/s
95th percentile per-packet one-way delay: 8.946 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 48.70 Mbit/s
95th percentile per-packet one-way delay: 4.393 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 50.14 Mbit/s
95th percentile per-packet one-way delay: 4.434 ms
Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

Graph 1: Throughput (Mbps)

- Flow 1 ingress (mean 48.40 Mbps)
- Flow 1 egress (mean 48.40 Mbps)
- Flow 2 ingress (mean 48.71 Mbps)
- Flow 2 egress (mean 48.70 Mbps)
- Flow 3 ingress (mean 50.14 Mbps)
- Flow 3 egress (mean 50.14 Mbps)

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

- Flow 1 (95th percentile 8.95 ms)
- Flow 2 (95th percentile 4.39 ms)
- Flow 3 (95th percentile 4.43 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-02-03 04:41:03
End at: 2018-02-03 04:41:33
Local clock offset: 0.03 ms
Remote clock offset: 2.166 ms

# Below is generated by plot.py at 2018-02-03 05:38:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.49 Mbit/s
  95th percentile per-packet one-way delay: 6.731 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 42.01 Mbit/s
  95th percentile per-packet one-way delay: 14.179 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 51.10 Mbit/s
  95th percentile per-packet one-way delay: 4.775 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 64.55 Mbit/s
  95th percentile per-packet one-way delay: 4.955 ms
  Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 42.01 Mbit/s)
- Flow 1 egress (mean 42.01 Mbit/s)
- Flow 2 ingress (mean 51.10 Mbit/s)
- Flow 2 egress (mean 51.10 Mbit/s)
- Flow 3 ingress (mean 64.56 Mbit/s)
- Flow 3 egress (mean 64.55 Mbit/s)

- Flow 1 (95th percentile 14.18 ms)
- Flow 2 (95th percentile 4.78 ms)
- Flow 3 (95th percentile 4.96 ms)
Run 1: Statistics of Verus

Start at: 2018-02-03 01:44:07
End at: 2018-02-03 01:44:37
Local clock offset: 0.08 ms
Remote clock offset: 0.655 ms

# Below is generated by plot.py at 2018-02-03 05:38:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.23 Mbit/s
  95th percentile per-packet one-way delay: 29.984 ms
  Loss rate: 6.01%
-- Flow 1:
  Average throughput: 46.28 Mbit/s
  95th percentile per-packet one-way delay: 27.130 ms
  Loss rate: 4.39%
-- Flow 2:
  Average throughput: 31.98 Mbit/s
  95th percentile per-packet one-way delay: 31.151 ms
  Loss rate: 8.02%
-- Flow 3:
  Average throughput: 29.38 Mbit/s
  95th percentile per-packet one-way delay: 32.744 ms
  Loss rate: 9.02%
Run 1: Report of Verus — Data Link

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

Flow 1 ingress (mean 48.46 Mbit/s) — Flow 1 egress (mean 46.28 Mbit/s)
Flow 2 ingress (mean 34.81 Mbit/s) — Flow 2 egress (mean 31.98 Mbit/s)
Flow 3 ingress (mean 32.38 Mbit/s) — Flow 3 egress (mean 29.38 Mbit/s)

Flow 1 (95th percentile 27.13 ms) — Flow 2 (95th percentile 31.15 ms) — Flow 3 (95th percentile 32.74 ms)
Run 2: Statistics of Verus

Start at: 2018-02-03 02:04:42
End at: 2018-02-03 02:05:12
Local clock offset: 0.035 ms
Remote clock offset: 0.441 ms

# Below is generated by plot.py at 2018-02-03 05:39:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.24 Mbit/s
  95th percentile per-packet one-way delay: 70.424 ms
  Loss rate: 35.35%
-- Flow 1:
  Average throughput: 42.27 Mbit/s
  95th percentile per-packet one-way delay: 32.838 ms
  Loss rate: 32.34%
-- Flow 2:
  Average throughput: 34.68 Mbit/s
  95th percentile per-packet one-way delay: 72.572 ms
  Loss rate: 44.00%
-- Flow 3:
  Average throughput: 30.01 Mbit/s
  95th percentile per-packet one-way delay: 32.890 ms
  Loss rate: 22.24%
Run 2: Report of Verus — Data Link

![Data Link Diagram]

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Run 3: Statistics of Verus

Start at: 2018-02-03 02:25:17
End at: 2018-02-03 02:25:47
Local clock offset: -0.038 ms
Remote clock offset: 0.155 ms

# Below is generated by plot.py at 2018-02-03 05:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.57 Mbit/s
95th percentile per-packet one-way delay: 29.596 ms
Loss rate: 5.05%
-- Flow 1:
Average throughput: 44.88 Mbit/s
95th percentile per-packet one-way delay: 26.161 ms
Loss rate: 4.13%
-- Flow 2:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 29.351 ms
Loss rate: 4.49%
-- Flow 3:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 32.861 ms
Loss rate: 10.45%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 46.83 Mbit/s)
- Flow 1 egress (mean 44.88 Mbit/s)
- Flow 2 ingress (mean 32.44 Mbit/s)
- Flow 2 egress (mean 30.97 Mbit/s)
- Flow 3 ingress (mean 30.61 Mbit/s)
- Flow 3 egress (mean 27.40 Mbit/s)

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

- Flow 1 (95th percentile 26.16 ms)
- Flow 2 (95th percentile 29.35 ms)
- Flow 3 (95th percentile 32.86 ms)
Run 4: Statistics of Verus

Start at: 2018-02-03 02:45:51
End at: 2018-02-03 02:46:21
Local clock offset: -0.031 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-02-03 05:39:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.83 Mbit/s
95th percentile per-packet one-way delay: 72.963 ms
Loss rate: 44.22%
-- Flow 1:
Average throughput: 44.70 Mbit/s
95th percentile per-packet one-way delay: 32.502 ms
Loss rate: 12.84%
-- Flow 2:
Average throughput: 36.31 Mbit/s
95th percentile per-packet one-way delay: 74.920 ms
Loss rate: 67.11%
-- Flow 3:
Average throughput: 27.45 Mbit/s
95th percentile per-packet one-way delay: 32.910 ms
Loss rate: 39.27%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-02-03 03:06:23
End at: 2018-02-03 03:06:53
Local clock offset: -0.06 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-02-03 05:39:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.92 Mbit/s
  95th percentile per-packet one-way delay: 68.871 ms
  Loss rate: 32.81%
-- Flow 1:
  Average throughput: 44.87 Mbit/s
  95th percentile per-packet one-way delay: 32.727 ms
  Loss rate: 17.64%
-- Flow 2:
  Average throughput: 41.56 Mbit/s
  95th percentile per-packet one-way delay: 71.890 ms
  Loss rate: 50.49%
-- Flow 3:
  Average throughput: 31.79 Mbit/s
  95th percentile per-packet one-way delay: 32.913 ms
  Loss rate: 20.50%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-02-03 03:26:59
End at: 2018-02-03 03:27:29
Local clock offset: -0.025 ms
Remote clock offset: 0.061 ms

# Below is generated by plot.py at 2018-02-03 05:39:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.87 Mbit/s
  95th percentile per-packet one-way delay: 32.654 ms
  Loss rate: 12.33%
-- Flow 1:
  Average throughput: 44.72 Mbit/s
  95th percentile per-packet one-way delay: 30.374 ms
  Loss rate: 9.57%
-- Flow 2:
  Average throughput: 34.06 Mbit/s
  95th percentile per-packet one-way delay: 32.784 ms
  Loss rate: 12.73%
-- Flow 3:
  Average throughput: 25.69 Mbit/s
  95th percentile per-packet one-way delay: 32.813 ms
  Loss rate: 23.66%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-02-03 03:47:29
End at: 2018-02-03 03:47:59
Local clock offset: -0.019 ms
Remote clock offset: -3.202 ms

# Below is generated by plot.py at 2018-02-03 05:39:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 35.480 ms
Loss rate: 33.16%
-- Flow 1:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 28.029 ms
Loss rate: 33.84%
-- Flow 2:
Average throughput: 43.55 Mbit/s
95th percentile per-packet one-way delay: 38.224 ms
Loss rate: 34.61%
-- Flow 3:
Average throughput: 23.27 Mbit/s
95th percentile per-packet one-way delay: 27.984 ms
Loss rate: 22.57%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 60.93 Mbps)
- Flow 1 egress (mean 40.28 Mbps)
- Flow 2 ingress (mean 66.69 Mbps)
- Flow 2 egress (mean 43.55 Mbps)
- Flow 3 ingress (mean 29.99 Mbps)
- Flow 3 egress (mean 23.27 Mbps)

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

- Flow 1 (95th percentile 28.03 ms)
- Flow 2 (95th percentile 38.22 ms)
- Flow 3 (95th percentile 27.98 ms)

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Run 8: Statistics of Verus

Start at: 2018-02-03 04:08:02
End at: 2018-02-03 04:08:32
Local clock offset: 0.006 ms
Remote clock offset: 2.071 ms

# Below is generated by plot.py at 2018-02-03 05:40:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.28 Mbit/s
95th percentile per-packet one-way delay: 31.475 ms
Loss rate: 10.79%
-- Flow 1:
Average throughput: 47.07 Mbit/s
95th percentile per-packet one-way delay: 28.834 ms
Loss rate: 5.68%
-- Flow 2:
Average throughput: 29.02 Mbit/s
95th percentile per-packet one-way delay: 32.656 ms
Loss rate: 18.71%
-- Flow 3:
Average throughput: 30.50 Mbit/s
95th percentile per-packet one-way delay: 32.857 ms
Loss rate: 16.37%
Run 8: Report of Verus — Data Link

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

Flow 1 ingress (mean 49.95 Mbit/s) — Flow 1 egress (mean 47.07 Mbit/s)
Flow 2 ingress (mean 35.75 Mbit/s) — Flow 2 egress (mean 29.02 Mbit/s)
Flow 3 ingress (mean 36.46 Mbit/s) — Flow 3 egress (mean 30.50 Mbit/s)

Flow 1 (95th percentile 20.83 ms) — Flow 2 (95th percentile 32.66 ms) — Flow 3 (95th percentile 32.86 ms)
Run 9: Statistics of Verus

Start at: 2018-02-03 04:28:36
End at: 2018-02-03 04:29:06
Local clock offset: 0.023 ms
Remote clock offset: 2.202 ms

# Below is generated by plot.py at 2018-02-03 05:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 32.501 ms
Loss rate: 15.57%
-- Flow 1:
Average throughput: 45.70 Mbit/s
95th percentile per-packet one-way delay: 31.146 ms
Loss rate: 16.35%
-- Flow 2:
Average throughput: 28.33 Mbit/s
95th percentile per-packet one-way delay: 32.494 ms
Loss rate: 10.06%
-- Flow 3:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 32.872 ms
Loss rate: 21.49%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 54.69 Mbps)
- Flow 1 egress (mean 45.70 Mbps)
- Flow 2 ingress (mean 31.54 Mbps)
- Flow 2 egress (mean 28.33 Mbps)
- Flow 3 ingress (mean 36.88 Mbps)
- Flow 3 egress (mean 28.88 Mbps)

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

- Flow 1 (90th percentile 31.15 ms)
- Flow 2 (90th percentile 32.49 ms)
- Flow 3 (90th percentile 32.87 ms)
Run 10: Statistics of Verus

Start at: 2018-02-03 04:49:10
End at: 2018-02-03 04:49:40
Local clock offset: 0.031 ms
Remote clock offset: 2.103 ms

# Below is generated by plot.py at 2018-02-03 05:40:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.49 Mbit/s
  95th percentile per-packet one-way delay: 32.262 ms
  Loss rate: 13.80%
-- Flow 1:
  Average throughput: 45.05 Mbit/s
  95th percentile per-packet one-way delay: 31.209 ms
  Loss rate: 10.94%
-- Flow 2:
  Average throughput: 33.72 Mbit/s
  95th percentile per-packet one-way delay: 32.348 ms
  Loss rate: 14.14%
-- Flow 3:
  Average throughput: 30.34 Mbit/s
  95th percentile per-packet one-way delay: 32.813 ms
  Loss rate: 24.10%
Run 10: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 50.62 Mbit/s)
Flow 1 egress (mean 45.05 Mbit/s)
Flow 2 ingress (mean 39.34 Mbit/s)
Flow 2 egress (mean 33.72 Mbit/s)
Flow 3 ingress (mean 40.07 Mbit/s)
Flow 3 egress (mean 30.34 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 31.21 ms)
Flow 2 (95th percentile 32.35 ms)
Flow 3 (95th percentile 32.81 ms)
Run 1: Statistics of Copa

Start at: 2018-02-03 01:37:11
End at: 2018-02-03 01:37:41
Local clock offset: 0.131 ms
Remote clock offset: 0.729 ms

# Below is generated by plot.py at 2018-02-03 05:41:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 2.901 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 49.63 Mbit/s
95th percentile per-packet one-way delay: 2.777 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 40.05 Mbit/s
95th percentile per-packet one-way delay: 2.901 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: 3.073 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 49.64 Mbit/s)
Flow 1 egress (mean 49.63 Mbit/s)
Flow 2 ingress (mean 40.05 Mbit/s)
Flow 2 egress (mean 40.05 Mbit/s)
Flow 3 ingress (mean 29.70 Mbit/s)
Flow 3 egress (mean 29.70 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 2.78 ms)  Flow 2 (95th percentile 2.90 ms)  Flow 3 (95th percentile 3.07 ms)
Run 2: Statistics of Copa

Start at: 2018-02-03 01:57:44
End at: 2018-02-03 01:58:14
Local clock offset: 0.042 ms
Remote clock offset: 0.54 ms

# Below is generated by plot.py at 2018-02-03 05:41:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.22 Mbit/s
  95th percentile per-packet one-way delay: 3.020 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 47.33 Mbit/s
  95th percentile per-packet one-way delay: 2.939 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.73 Mbit/s
  95th percentile per-packet one-way delay: 3.022 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 32.46 Mbit/s
  95th percentile per-packet one-way delay: 3.140 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 47.33 Mbps)
- Flow 1 egress (mean 47.33 Mbps)
- Flow 2 ingress (mean 40.73 Mbps)
- Flow 2 egress (mean 40.73 Mbps)
- Flow 3 ingress (mean 32.46 Mbps)
- Flow 3 egress (mean 32.46 Mbps)

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

- Flow 1 (95th percentile 2.94 ms)
- Flow 2 (95th percentile 3.02 ms)
- Flow 3 (95th percentile 3.14 ms)
Run 3: Statistics of Copa

Start at: 2018-02-03 02:18:19
End at: 2018-02-03 02:18:49
Local clock offset: 0.007 ms
Remote clock offset: 0.247 ms

# Below is generated by plot.py at 2018-02-03 05:41:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.11 Mbit/s
95th percentile per-packet one-way delay: 3.028 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 2.922 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.92 Mbit/s
95th percentile per-packet one-way delay: 3.045 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 3.154 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-02-03 02:38:53
End at: 2018-02-03 02:39:23
Local clock offset: -0.005 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-02-03 05:41:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 2.647 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.59 Mbit/s
95th percentile per-packet one-way delay: 2.612 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 42.504 ms
Loss rate: 50.00%
-- Flow 3:
Average throughput: 46.28 Mbit/s
95th percentile per-packet one-way delay: 2.703 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 67.59 Mbit/s)
- Flow 1 egress (mean 67.59 Mbit/s)
- Flow 2 ingress (mean 0.00 Mbit/s)
- Flow 2 egress (mean 0.00 Mbit/s)
- Flow 3 ingress (mean 46.29 Mbit/s)
- Flow 3 egress (mean 46.28 Mbit/s)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 2.61 ms)
- Flow 2 (95th percentile 42.50 ms)
- Flow 3 (95th percentile 2.70 ms)
Run 5: Statistics of Copa

Start at: 2018-02-03 02:59:28
End at: 2018-02-03 02:59:58
Local clock offset: -0.042 ms
Remote clock offset: -15.851 ms

# Below is generated by plot.py at 2018-02-03 05:42:03
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 90.16 Mbit/s
95th percentile per-packet one-way delay: -12.656 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 53.75 Mbit/s
95th percentile per-packet one-way delay: -12.790 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 39.13 Mbit/s
95th percentile per-packet one-way delay: -12.630 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: -12.505 ms
 Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-02-03 03:20:01
End at: 2018-02-03 03:20:31
Local clock offset: -0.04 ms
Remote clock offset: -0.193 ms

# Below is generated by plot.py at 2018-02-03 05:42:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.74 Mbit/s
95th percentile per-packet one-way delay: 2.739 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.25 Mbit/s
95th percentile per-packet one-way delay: 2.695 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.03 Mbit/s
95th percentile per-packet one-way delay: 2.734 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 33.741 ms
Loss rate: 0.17%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-02-03 03:40:33
End at: 2018-02-03 03:41:03
Local clock offset: -0.037 ms
Remote clock offset: 1.154 ms

# Below is generated by plot.py at 2018-02-03 05:42:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.27 Mbit/s
95th percentile per-packet one-way delay: 2.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 31.757 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 65.62 Mbit/s
95th percentile per-packet one-way delay: 2.678 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.27 Mbit/s
95th percentile per-packet one-way delay: 2.774 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-02-03 04:01:04
End at: 2018-02-03 04:01:34
Local clock offset: -0.093 ms
Remote clock offset: 2.075 ms

# Below is generated by plot.py at 2018-02-03 05:42:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.94 Mbit/s
95th percentile per-packet one-way delay: 3.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.92 Mbit/s
95th percentile per-packet one-way delay: 2.985 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 3.143 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 3.262 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

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

![Graph 2: Packet Error Rate (ms)]

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Run 9: Statistics of Copa

Start at: 2018-02-03 04:21:37
End at: 2018-02-03 04:22:07
Local clock offset: 0.021 ms
Remote clock offset: 2.154 ms

# Below is generated by plot.py at 2018-02-03 05:43:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.99 Mbit/s
  95th percentile per-packet one-way delay: 3.017 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 54.62 Mbit/s
  95th percentile per-packet one-way delay: 2.891 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 38.61 Mbit/s
  95th percentile per-packet one-way delay: 3.041 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 32.09 Mbit/s
  95th percentile per-packet one-way delay: 3.160 ms
  Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

Start at: 2018-02-03 04:42:11
End at: 2018-02-03 04:42:41
Local clock offset: 0.042 ms
Remote clock offset: 2.173 ms

# Below is generated by plot.py at 2018-02-03 05:43:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.54 Mbit/s
95th percentile per-packet one-way delay: 2.995 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.82 Mbit/s
95th percentile per-packet one-way delay: 2.857 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 38.50 Mbit/s
95th percentile per-packet one-way delay: 3.040 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: 3.121 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

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

- **Throughput**
  - Flow 1 ingress (mean 53.82 Mbit/s)
  - Flow 1 egress (mean 53.82 Mbit/s)
  - Flow 2 ingress (mean 38.50 Mbit/s)
  - Flow 2 egress (mean 38.50 Mbit/s)
  - Flow 3 ingress (mean 33.38 Mbit/s)
  - Flow 3 egress (mean 33.38 Mbit/s)

- **Per-packet one-way delay** (ms)
  - Flow 1 (95th percentile 2.86 ms)
  - Flow 2 (95th percentile 3.04 ms)
  - Flow 3 (95th percentile 3.12 ms)
Run 1: Statistics of FillP

Start at: 2018-02-03 01:48:36
End at: 2018-02-03 01:49:06
Local clock offset: 0.082 ms
Remote clock offset: -19.688 ms

# Below is generated by plot.py at 2018-02-03 05:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.52 Mbit/s
95th percentile per-packet one-way delay: 50.750 ms
Loss rate: 19.19%
-- Flow 1:
Average throughput: 47.28 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 16.49%
-- Flow 2:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 10.354 ms
Loss rate: 20.50%
-- Flow 3:
Average throughput: 39.82 Mbit/s
95th percentile per-packet one-way delay: 10.384 ms
Loss rate: 25.04%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-02-03 02:09:13
End at: 2018-02-03 02:09:43
Local clock offset: 0.014 ms
Remote clock offset: -20.207 ms

# Below is generated by plot.py at 2018-02-03 05:44:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.38 Mbit/s
  95th percentile per-packet one-way delay: 10.105 ms
  Loss rate: 16.84%
-- Flow 1:
  Average throughput: 55.21 Mbit/s
  95th percentile per-packet one-way delay: 10.048 ms
  Loss rate: 11.30%
-- Flow 2:
  Average throughput: 37.96 Mbit/s
  95th percentile per-packet one-way delay: 10.134 ms
  Loss rate: 21.90%
-- Flow 3:
  Average throughput: 35.86 Mbit/s
  95th percentile per-packet one-way delay: 10.205 ms
  Loss rate: 27.84%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-02-03 02:29:47
End at: 2018-02-03 02:30:17
Local clock offset: -0.019 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-02-03 05:44:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.38 Mbit/s
95th percentile per-packet one-way delay: 30.680 ms
Loss rate: 16.15%
-- Flow 1:
Average throughput: 55.66 Mbit/s
95th percentile per-packet one-way delay: 30.622 ms
Loss rate: 10.40%
-- Flow 2:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 30.710 ms
Loss rate: 21.08%
-- Flow 3:
Average throughput: 37.26 Mbit/s
95th percentile per-packet one-way delay: 30.759 ms
Loss rate: 28.10%
Run 3: Report of FillP — Data Link

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

Start at: 2018-02-03 02:50:22
End at: 2018-02-03 02:50:52
Local clock offset: -0.025 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-02-03 05:44:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.49 Mbit/s
95th percentile per-packet one-way delay: 70.294 ms
Loss rate: 15.69%
-- Flow 1:
Average throughput: 57.09 Mbit/s
95th percentile per-packet one-way delay: 30.593 ms
Loss rate: 10.16%
-- Flow 2:
Average throughput: 34.69 Mbit/s
95th percentile per-packet one-way delay: 71.204 ms
Loss rate: 20.38%
-- Flow 3:
Average throughput: 37.28 Mbit/s
95th percentile per-packet one-way delay: 30.724 ms
Loss rate: 28.23%
Run 4: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 63.59 Mbit/s)
- **Flow 1 egress** (mean 57.09 Mbit/s)
- **Flow 2 ingress** (mean 43.54 Mbit/s)
- **Flow 2 egress** (mean 34.69 Mbit/s)
- **Flow 3 ingress** (mean 51.92 Mbit/s)
- **Flow 3 egress** (mean 37.28 Mbit/s)

![Graphs showing packet delay (ms) over time for different flows.]

- **Flow 1** (95th percentile 30.59 ms)
- **Flow 2** (95th percentile 71.20 ms)
- **Flow 3** (95th percentile 30.72 ms)
Run 5: Statistics of FillP

Start at: 2018-02-03 03:10:55
End at: 2018-02-03 03:11:25
Local clock offset: -0.046 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-02-03 05:45:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.44 Mbit/s
  95th percentile per-packet one-way delay: 30.653 ms
  Loss rate: 15.99%
-- Flow 1:
  Average throughput: 55.17 Mbit/s
  95th percentile per-packet one-way delay: 30.608 ms
  Loss rate: 10.83%
-- Flow 2:
  Average throughput: 38.12 Mbit/s
  95th percentile per-packet one-way delay: 30.678 ms
  Loss rate: 19.99%
-- Flow 3:
  Average throughput: 35.88 Mbit/s
  95th percentile per-packet one-way delay: 30.717 ms
  Loss rate: 27.68%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-02-03 03:31:28  
End at: 2018-02-03 03:31:58  
Local clock offset: -0.037 ms  
Remote clock offset: 0.413 ms

# Below is generated by plot.py at 2018-02-03 05:45:09
# Datalink statistics

-- Total of 3 flows:
Average throughput: 92.44 Mbit/s
95th percentile per-packet one-way delay: 30.580 ms
Loss rate: 15.37%

-- Flow 1:
Average throughput: 55.02 Mbit/s
95th percentile per-packet one-way delay: 30.532 ms
Loss rate: 10.30%

-- Flow 2:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 30.607 ms
Loss rate: 19.07%

-- Flow 3:
Average throughput: 36.25 Mbit/s
95th percentile per-packet one-way delay: 30.639 ms
Loss rate: 27.20%
Run 6: Report of FillP — Data Link

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

- Flow 1 ingress (mean 61.39 Mbit/s)
- Flow 1 egress (mean 55.02 Mbit/s)
- Flow 2 ingress (mean 47.19 Mbit/s)
- Flow 2 egress (mean 38.14 Mbit/s)
- Flow 3 ingress (mean 49.79 Mbit/s)
- Flow 3 egress (mean 36.25 Mbit/s)

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

- Flow 1 (95th percentile 30.53 ms)
- Flow 2 (95th percentile 30.61 ms)
- Flow 3 (95th percentile 30.64 ms)
Run 7: Statistics of FillP

Start at: 2018-02-03 03:51:58
End at: 2018-02-03 03:52:28
Local clock offset: 0.0 ms
Remote clock offset: 1.933 ms

# Below is generated by plot.py at 2018-02-03 05:46:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.44 Mbit/s
  95th percentile per-packet one-way delay: 30.597 ms
  Loss rate: 15.75%
-- Flow 1:
  Average throughput: 55.11 Mbit/s
  95th percentile per-packet one-way delay: 30.551 ms
  Loss rate: 11.57%
-- Flow 2:
  Average throughput: 38.04 Mbit/s
  95th percentile per-packet one-way delay: 30.627 ms
  Loss rate: 19.83%
-- Flow 3:
  Average throughput: 36.17 Mbit/s
  95th percentile per-packet one-way delay: 30.648 ms
  Loss rate: 24.09%
Run 7: Report of FillP — Data Link

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

Legend:
- Flow 1 ingress (mean 62.38 Mbit/s)
- Flow 1 egress (mean 55.11 Mbit/s)
- Flow 2 ingress (mean 47.51 Mbit/s)
- Flow 2 egress (mean 38.04 Mbit/s)
- Flow 3 ingress (mean 47.68 Mbit/s)
- Flow 3 egress (mean 36.17 Mbit/s)
Run 8: Statistics of FillP

Start at: 2018-02-03 04:12:32
End at: 2018-02-03 04:13:02
Local clock offset: -0.01 ms
Remote clock offset: 2.094 ms

# Below is generated by plot.py at 2018-02-03 05:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 30.655 ms
Loss rate: 15.97%
-- Flow 1:
Average throughput: 54.89 Mbit/s
95th percentile per-packet one-way delay: 30.598 ms
Loss rate: 9.99%
-- Flow 2:
Average throughput: 38.16 Mbit/s
95th percentile per-packet one-way delay: 30.672 ms
Loss rate: 18.95%
-- Flow 3:
Average throughput: 36.57 Mbit/s
95th percentile per-packet one-way delay: 30.749 ms
Loss rate: 31.34%
Run 8: Report of FillP — Data Link

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

- Flow 1 ingress (mean 61.02 Mbit/s)
- Flow 1 egress (mean 54.89 Mbit/s)
- Flow 2 ingress (mean 47.14 Mbit/s)
- Flow 2 egress (mean 38.16 Mbit/s)
- Flow 3 ingress (mean 53.23 Mbit/s)
- Flow 3 egress (mean 36.57 Mbit/s)

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

- Flow 1 (95th percentile 30.60 ms)
- Flow 2 (95th percentile 30.67 ms)
- Flow 3 (95th percentile 30.75 ms)
Run 9: Statistics of FillP

Start at: 2018-02-03 04:33:06  
End at: 2018-02-03 04:33:36  
Local clock offset: -0.007 ms  
Remote clock offset: 2.115 ms

# Below is generated by plot.py at 2018-02-03 05:47:06  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.41 Mbit/s  
  95th percentile per-packet one-way delay: 30.609 ms  
  Loss rate: 16.51%
-- Flow 1:
  Average throughput: 53.42 Mbit/s  
  95th percentile per-packet one-way delay: 30.548 ms  
  Loss rate: 10.74%
-- Flow 2:
  Average throughput: 41.34 Mbit/s  
  95th percentile per-packet one-way delay: 30.635 ms  
  Loss rate: 21.20%
-- Flow 3:
  Average throughput: 34.63 Mbit/s  
  95th percentile per-packet one-way delay: 30.683 ms  
  Loss rate: 27.91%
Run 10: Statistics of FillP

Start at: 2018-02-03 04:53:40
End at: 2018-02-03 04:54:10
Local clock offset: 0.042 ms
Remote clock offset: 2.166 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.44 Mbit/s
95th percentile per-packet one-way delay: 30.605 ms
Loss rate: 15.46%
-- Flow 1:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 30.550 ms
Loss rate: 10.43%
-- Flow 2:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 30.640 ms
Loss rate: 21.89%
-- Flow 3:
Average throughput: 31.72 Mbit/s
95th percentile per-packet one-way delay: 30.648 ms
Loss rate: 22.38%
Run 10: Report of FillP — Data Link

---

Graph 1: Throughput over time for different flows.

Graph 2: Per packet one way delay over time for different flows.

Legend:
- Flow 1 ingress (mean 62.00 Mbit/s)
- Flow 1 egress (mean 55.48 Mbit/s)
- Flow 2 ingress (mean 51.22 Mbit/s)
- Flow 2 egress (mean 39.95 Mbit/s)
- Flow 3 ingress (mean 40.28 Mbit/s)
- Flow 3 egress (mean 31.72 Mbit/s)

---

Per packet one way delay (ms):
- Flow 1 (95th percentile 30.55 ms)
- Flow 2 (95th percentile 30.64 ms)
- Flow 3 (95th percentile 30.65 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-03 01:40:41
End at: 2018-02-03 01:41:11
Local clock offset: 0.115 ms
Remote clock offset: 0.78 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 14.016 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.74 Mbit/s
95th percentile per-packet one-way delay: 11.129 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 44.28 Mbit/s
95th percentile per-packet one-way delay: 14.391 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.41 Mbit/s
95th percentile per-packet one-way delay: 14.868 ms
Loss rate: 0.00%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-03 02:01:15
End at: 2018-02-03 02:01:45
Local clock offset: 0.043 ms
Remote clock offset: 0.423 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.35 Mbit/s
  95th percentile per-packet one-way delay: 49.515 ms
  Loss rate: 2.58%
  -- Flow 1:
  Average throughput: 53.94 Mbit/s
  95th percentile per-packet one-way delay: 50.532 ms
  Loss rate: 4.47%
  -- Flow 2:
  Average throughput: 37.64 Mbit/s
  95th percentile per-packet one-way delay: 10.720 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 50.62 Mbit/s
  95th percentile per-packet one-way delay: 11.765 ms
  Loss rate: 0.00%
Run 2: Report of Indigo-1-32 — Data Link

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

Flow 1 ingress (mean 56.40 Mbit/s)  Flow 1 egress (mean 53.94 Mbit/s)
Flow 2 ingress (mean 37.64 Mbit/s)  Flow 2 egress (mean 37.64 Mbit/s)
Flow 3 ingress (mean 50.64 Mbit/s)  Flow 3 egress (mean 50.62 Mbit/s)
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-03 02:21:50
End at: 2018-02-03 02:22:20
Local clock offset: -0.068 ms
Remote clock offset: 0.209 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 49.616 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 50.07 Mbit/s
95th percentile per-packet one-way delay: 10.187 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.76 Mbit/s
95th percentile per-packet one-way delay: 11.230 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.68 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 6.16%
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-03 02:42:23
End at: 2018-02-03 02:42:53
Local clock offset: -0.029 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.44 Mbit/s
  95th percentile per-packet one-way delay: 45.220 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 67.29 Mbit/s
  95th percentile per-packet one-way delay: 9.419 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 14.98 Mbit/s
  95th percentile per-packet one-way delay: 49.366 ms
  Loss rate: 1.56%
-- Flow 3:
  Average throughput: 62.19 Mbit/s
  95th percentile per-packet one-way delay: 10.362 ms
  Loss rate: 0.00%
Run 4: Report of Indigo-1-32 — Data Link
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-03 03:02:59
End at: 2018-02-03 03:03:29
Local clock offset: -0.041 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-02-03 05:47:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.59 Mbit/s
  95th percentile per-packet one-way delay: 45.488 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 22.82 Mbit/s
  95th percentile per-packet one-way delay: 47.850 ms
  Loss rate: 1.65%
-- Flow 2:
  Average throughput: 57.92 Mbit/s
  95th percentile per-packet one-way delay: 10.965 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 56.38 Mbit/s
  95th percentile per-packet one-way delay: 11.338 ms
  Loss rate: 0.00%
Run 5: Report of Indigo-1-32 — Data Link

Graph 1: Throughput (Mbps/s) over time (s)
- Flow 1 ingress (mean 23.20 Mbps/s)
- Flow 1 egress (mean 22.82 Mbps/s)
- Flow 2 ingress (mean 57.94 Mbps/s)
- Flow 2 egress (mean 57.92 Mbps/s)
- Flow 3 ingress (mean 56.41 Mbps/s)
- Flow 3 egress (mean 56.38 Mbps/s)

Graph 2: Per packet time delay (ms) over time (s)
- Flow 1 (95th percentile 47.85 ms)
- Flow 2 (95th percentile 10.96 ms)
- Flow 3 (95th percentile 11.34 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-03 03:23:31
End at: 2018-02-03 03:24:01
Local clock offset: -0.055 ms
Remote clock offset: -0.287 ms

# Below is generated by plot.py at 2018-02-03 05:47:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 33.928 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 83.93 Mbit/s
95th percentile per-packet one-way delay: 6.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.25 Mbit/s
95th percentile per-packet one-way delay: 34.485 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 46.962 ms
Loss rate: 0.78%
Run 6: Report of Indigo-1-32 — Data Link
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-03 03:44:02
End at: 2018-02-03 03:44:32
Local clock offset: -0.124 ms
Remote clock offset: 1.322 ms

# Below is generated by plot.py at 2018-02-03 05:47:51
# Datalink statistics

-- Total of 3 flows:
    Average throughput: 97.45 Mbit/s
    95th percentile per-packet one-way delay: 12.799 ms
    Loss rate: 0.00%

-- Flow 1:
    Average throughput: 46.85 Mbit/s
    95th percentile per-packet one-way delay: 11.114 ms
    Loss rate: 0.00%

-- Flow 2:
    Average throughput: 45.48 Mbit/s
    95th percentile per-packet one-way delay: 13.095 ms
    Loss rate: 0.00%

-- Flow 3:
    Average throughput: 63.00 Mbit/s
    95th percentile per-packet one-way delay: 13.635 ms
    Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 46.87 Mbps)
Flow 1 egress (mean 46.85 Mbps)
Flow 2 ingress (mean 45.50 Mbps)
Flow 2 egress (mean 45.48 Mbps)
Flow 3 ingress (mean 63.02 Mbps)
Flow 3 egress (mean 63.00 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 11.11 ms)
Flow 2 (95th percentile 13.10 ms)
Flow 3 (95th percentile 13.63 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-03 04:04:34
End at: 2018-02-03 04:05:04
Local clock offset: 0.008 ms
Remote clock offset: 2.101 ms

# Below is generated by plot.py at 2018-02-03 05:48:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.39 Mbit/s
  95th percentile per-packet one-way delay: 11.393 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 48.55 Mbit/s
  95th percentile per-packet one-way delay: 10.069 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 39.14 Mbit/s
  95th percentile per-packet one-way delay: 13.300 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 70.36 Mbit/s
  95th percentile per-packet one-way delay: 11.156 ms
  Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 48.56 Mbps)  Flow 1 egress (mean 48.55 Mbps)
Flow 2 ingress (mean 39.16 Mbps)  Flow 2 egress (mean 39.14 Mbps)
Flow 3 ingress (mean 70.37 Mbps)  Flow 3 egress (mean 70.36 Mbps)

Packet Loss (out of 256)

Time (s)

Flow 1 (95th percentile 10.07 ms)  Flow 2 (95th percentile 13.30 ms)  Flow 3 (95th percentile 11.16 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-03 04:25:08
End at: 2018-02-03 04:25:38
Local clock offset: 0.024 ms
Remote clock offset: 2.176 ms

# Below is generated by plot.py at 2018-02-03 05:48:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: 12.825 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.86 Mbit/s
95th percentile per-packet one-way delay: 11.111 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.39 Mbit/s
95th percentile per-packet one-way delay: 13.020 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.85 Mbit/s
95th percentile per-packet one-way delay: 13.629 ms
Loss rate: 0.00%
Run 9: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 46.88 Mbps) — Flow 1 egress (mean 46.86 Mbps)
Flow 2 ingress (mean 45.42 Mbps) — Flow 2 egress (mean 45.39 Mbps)
Flow 3 ingress (mean 62.87 Mbps) — Flow 3 egress (mean 62.85 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 11.11 ms) — Flow 2 (95th percentile 13.02 ms) — Flow 3 (95th percentile 13.63 ms)
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-03 04:45:42
End at: 2018-02-03 04:46:12
Local clock offset: 0.039 ms
Remote clock offset: 2.166 ms

# Below is generated by plot.py at 2018-02-03 05:48:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.42 Mbit/s
  95th percentile per-packet one-way delay: 11.547 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 47.55 Mbit/s
  95th percentile per-packet one-way delay: 10.833 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 37.95 Mbit/s
  95th percentile per-packet one-way delay: 11.540 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 75.89 Mbit/s
  95th percentile per-packet one-way delay: 11.596 ms
  Loss rate: 0.00%
Run 1: Statistics of Vivace-latency

Start at: 2018-02-03 01:45:16
End at: 2018-02-03 01:45:46
Local clock offset: 0.098 ms
Remote clock offset: 0.702 ms

# Below is generated by plot.py at 2018-02-03 05:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.81 Mbit/s
95th percentile per-packet one-way delay: 5.799 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 72.65 Mbit/s
95th percentile per-packet one-way delay: 2.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 42.903 ms
Loss rate: 5.41%
-- Flow 3:
Average throughput: 34.53 Mbit/s
95th percentile per-packet one-way delay: 5.925 ms
Loss rate: 0.00%
Run 1: Report of Vivace-latency — Data Link
Run 2: Statistics of Vivace-latency

Start at: 2018-02-03 02:05:51
End at: 2018-02-03 02:06:21
Local clock offset: -0.043 ms
Remote clock offset: 0.407 ms

# Below is generated by plot.py at 2018-02-03 05:48:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.99 Mbit/s
  95th percentile per-packet one-way delay: 3.772 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 54.69 Mbit/s
  95th percentile per-packet one-way delay: 3.066 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 36.41 Mbit/s
  95th percentile per-packet one-way delay: 4.790 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 24.55 Mbit/s
  95th percentile per-packet one-way delay: 7.808 ms
  Loss rate: 0.00%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

Start at: 2018-02-03 02:26:26
End at: 2018-02-03 02:26:56
Local clock offset: -0.023 ms
Remote clock offset: -19.7 ms

# Below is generated by plot.py at 2018-02-03 05:48:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.34 Mbit/s
95th percentile per-packet one-way delay: -16.649 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.94 Mbit/s
95th percentile per-packet one-way delay: -16.980 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: -16.305 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 26.03 Mbit/s
95th percentile per-packet one-way delay: -15.062 ms
Loss rate: 0.00%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-02-03 02:47:00
End at: 2018-02-03 02:47:30
Local clock offset: -0.106 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2018-02-03 05:48:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.28 Mbit/s
95th percentile per-packet one-way delay: 3.547 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.15 Mbit/s
95th percentile per-packet one-way delay: 3.077 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 33.30 Mbit/s
95th percentile per-packet one-way delay: 4.223 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.27 Mbit/s
95th percentile per-packet one-way delay: 5.508 ms
Loss rate: 0.00%
Run 4: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 58.15 Mbit/s)
- Flow 1 egress (mean 58.15 Mbit/s)
- Flow 2 ingress (mean 33.33 Mbit/s)
- Flow 2 egress (mean 33.33 Mbit/s)
- Flow 3 ingress (mean 24.20 Mbit/s)
- Flow 3 egress (mean 24.27 Mbit/s)
Run 5: Statistics of Vivace-latency

Start at: 2018-02-03 03:07:33
End at: 2018-02-03 03:08:03
Local clock offset: -0.038 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2018-02-03 05:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.39 Mbit/s
95th percentile per-packet one-way delay: 3.045 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.74 Mbit/s
95th percentile per-packet one-way delay: 2.820 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 3.336 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 3.419 ms
Loss rate: 0.00%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-02-03 03:28:08
End at: 2018-02-03 03:28:38
Local clock offset: -0.109 ms
Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-02-03 05:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.64 Mbit/s
95th percentile per-packet one-way delay: 42.240 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 12.34 Mbit/s
95th percentile per-packet one-way delay: 43.592 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 53.62 Mbit/s
95th percentile per-packet one-way delay: 2.841 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.21 Mbit/s
95th percentile per-packet one-way delay: 3.532 ms
Loss rate: 0.00%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-02-03 03:48:38
End at: 2018-02-03 03:49:08
Local clock offset: -0.013 ms
Remote clock offset: 1.72 ms

# Below is generated by plot.py at 2018-02-03 05:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 9.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.43 Mbit/s
95th percentile per-packet one-way delay: 11.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.73 Mbit/s
95th percentile per-packet one-way delay: 3.999 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 5.872 ms
Loss rate: 0.00%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-02-03 04:09:10
End at: 2018-02-03 04:09:40
Local clock offset: 0.019 ms
Remote clock offset: 2.082 ms

# Below is generated by plot.py at 2018-02-03 05:49:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.98 Mbit/s
95th percentile per-packet one-way delay: 3.723 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.47 Mbit/s
95th percentile per-packet one-way delay: 3.270 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.26 Mbit/s
95th percentile per-packet one-way delay: 4.731 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.43 Mbit/s
95th percentile per-packet one-way delay: 3.635 ms
Loss rate: 0.00%
Run 8: Report of Vivace-latency — Data Link

[Graph showing throughput and delay over time with key]

- Flow 1 ingress (mean 63.46 Mbit/s)
- Flow 1 egress (mean 63.47 Mbit/s)
- Flow 2 ingress (mean 23.26 Mbit/s)
- Flow 2 egress (mean 23.26 Mbit/s)
- Flow 3 ingress (mean 24.44 Mbit/s)
- Flow 3 egress (mean 24.43 Mbit/s)
Run 9: Statistics of Vivace-latency

Start at: 2018-02-03 04:29:44
End at: 2018-02-03 04:30:14
Local clock offset: 0.033 ms
Remote clock offset: 2.148 ms

# Below is generated by plot.py at 2018-02-03 05:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.05 Mbit/s
  95th percentile per-packet one-way delay: 2.999 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 61.54 Mbit/s
  95th percentile per-packet one-way delay: 2.688 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 29.80 Mbit/s
  95th percentile per-packet one-way delay: 3.476 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 23.37 Mbit/s
  95th percentile per-packet one-way delay: 3.642 ms
  Loss rate: 0.00%
Run 9: Report of Vivace-latency — Data Link

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**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 61.54 Mbit/s)
- **Flow 1 egress** (mean 61.54 Mbit/s)
- **Flow 2 ingress** (mean 29.80 Mbit/s)
- **Flow 2 egress** (mean 29.80 Mbit/s)
- **Flow 3 ingress** (mean 23.37 Mbit/s)
- **Flow 3 egress** (mean 23.37 Mbit/s)

---

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

- **Flow 1** (95th percentile 2.69 ms)
- **Flow 2** (95th percentile 3.48 ms)
- **Flow 3** (95th percentile 3.64 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-02-03 04:50:18
End at: 2018-02-03 04:50:48
Local clock offset: 0.038 ms
Remote clock offset: 2.097 ms

# Below is generated by plot.py at 2018-02-03 05:49:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.98 Mbit/s
95th percentile per-packet one-way delay: 2.838 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.78 Mbit/s
95th percentile per-packet one-way delay: 2.657 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 2.866 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 3.912 ms
Loss rate: 0.00%
Run 10: Report of Vivace-latency — Data Link

![Graph showing throughput (Mbps) over time for different flows with latency measurements.]

- Flow 1 ingress (mean 53.78 Mbps)
- Flow 1 egress (mean 53.78 Mbps)
- Flow 2 ingress (mean 37.67 Mbps)
- Flow 2 egress (mean 37.68 Mbps)
- Flow 3 ingress (mean 30.78 Mbps)
- Flow 3 egress (mean 30.78 Mbps)

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

- Flow 1 (95th percentile 2.66 ms)
- Flow 2 (95th percentile 2.87 ms)
- Flow 3 (95th percentile 3.91 ms)
Run 1: Statistics of Vivace-loss

Start at: 2018-02-03 01:39:31
End at: 2018-02-03 01:40:01
Local clock offset: 0.105 ms
Remote clock offset: 0.795 ms

# Below is generated by plot.py at 2018-02-03 05:50:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.73 Mbit/s
  95th percentile per-packet one-way delay: 32.127 ms
  Loss rate: 3.31%
-- Flow 1:
  Average throughput: 70.29 Mbit/s
  95th percentile per-packet one-way delay: 32.117 ms
  Loss rate: 3.77%
-- Flow 2:
  Average throughput: 28.07 Mbit/s
  95th percentile per-packet one-way delay: 32.146 ms
  Loss rate: 1.96%
-- Flow 3:
  Average throughput: 17.58 Mbit/s
  95th percentile per-packet one-way delay: 32.386 ms
  Loss rate: 2.00%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-02-03 02:00:05
End at: 2018-02-03 02:00:35
Local clock offset: 0.026 ms
Remote clock offset: -19.614 ms

# Below is generated by plot.py at 2018-02-03 05:50:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.02 Mbit/s
95th percentile per-packet one-way delay: 12.010 ms
Loss rate: 2.65%
-- Flow 1:
Average throughput: 79.89 Mbit/s
95th percentile per-packet one-way delay: 12.000 ms
Loss rate: 2.72%
-- Flow 2:
Average throughput: 17.37 Mbit/s
95th percentile per-packet one-way delay: 12.642 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 10.89 Mbit/s
95th percentile per-packet one-way delay: 11.928 ms
Loss rate: 1.89%
Run 2: Report of Vivace-loss — Data Link
Run 3: Statistics of Vivace-loss

Start at: 2018-02-03 02:20:40
End at: 2018-02-03 02:21:10
Local clock offset: 0.019 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2018-02-03 05:50:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.68 Mbit/s
95th percentile per-packet one-way delay: 32.012 ms
Loss rate: 3.32%
-- Flow 1:
Average throughput: 72.86 Mbit/s
95th percentile per-packet one-way delay: 32.021 ms
Loss rate: 3.73%
-- Flow 2:
Average throughput: 28.83 Mbit/s
95th percentile per-packet one-way delay: 31.975 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 31.972 ms
Loss rate: 2.16%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-02-03 02:41:13
End at: 2018-02-03 02:41:43
Local clock offset: -0.009 ms
Remote clock offset: -18.956 ms

# Below is generated by plot.py at 2018-02-03 05:50:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 13.144 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 67.05 Mbit/s
95th percentile per-packet one-way delay: 13.155 ms
Loss rate: 2.40%
-- Flow 2:
Average throughput: 35.66 Mbit/s
95th percentile per-packet one-way delay: 13.110 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 13.04 Mbit/s
95th percentile per-packet one-way delay: 13.108 ms
Loss rate: 2.24%
Run 4: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 68.76 Mbit/s)
- Flow 1 egress (mean 67.05 Mbit/s)
- Flow 2 ingress (mean 36.23 Mbit/s)
- Flow 2 egress (mean 35.66 Mbit/s)
- Flow 3 ingress (mean 13.35 Mbit/s)
- Flow 3 egress (mean 13.04 Mbit/s)
Run 5: Statistics of Vivace-loss

Start at: 2018-02-03 03:01:49
End at: 2018-02-03 03:02:19
Local clock offset: -0.051 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-02-03 05:50:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 32.002 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 69.13 Mbit/s
95th percentile per-packet one-way delay: 32.014 ms
Loss rate: 2.60%
-- Flow 2:
Average throughput: 29.40 Mbit/s
95th percentile per-packet one-way delay: 31.956 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 31.960 ms
Loss rate: 1.72%
Run 5: Report of Vivace-loss — Data Link

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**Throughput (Mbit/s)**

- Flow 1 ingress (mean 71.07 Mbit/s)
- Flow 1 egress (mean 69.13 Mbit/s)
- Flow 2 ingress (mean 29.86 Mbit/s)
- Flow 2 egress (mean 29.40 Mbit/s)
- Flow 3 ingress (mean 19.63 Mbit/s)
- Flow 3 egress (mean 19.28 Mbit/s)

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

- Flow 1 (95th percentile 32.01 ms)
- Flow 2 (95th percentile 31.96 ms)
- Flow 3 (95th percentile 31.96 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-02-03 03:22:21
End at: 2018-02-03 03:22:51
Local clock offset: -0.123 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2018-02-03 05:50:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 32.149 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 69.20 Mbit/s
95th percentile per-packet one-way delay: 32.091 ms
Loss rate: 2.13%
-- Flow 2:
Average throughput: 33.88 Mbit/s
95th percentile per-packet one-way delay: 32.053 ms
Loss rate: 1.62%
-- Flow 3:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 66.616 ms
Loss rate: 2.22%
Run 6: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 70.78 Mbit/s)
- Flow 1 egress (mean 69.20 Mbit/s)
- Flow 2 ingress (mean 34.44 Mbit/s)
- Flow 2 egress (mean 33.85 Mbit/s)
- Flow 3 ingress (mean 10.35 Mbit/s)
- Flow 3 egress (mean 10.14 Mbit/s)
Run 7: Statistics of Vivace-loss

Start at: 2018-02-03 03:42:52
End at: 2018-02-03 03:43:22
Local clock offset: -0.093 ms
Remote clock offset: 1.333 ms

# Below is generated by plot.py at 2018-02-03 05:51:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 52.771 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 58.93 Mbit/s
95th percentile per-packet one-way delay: 53.597 ms
Loss rate: 3.98%
-- Flow 2:
Average throughput: 47.74 Mbit/s
95th percentile per-packet one-way delay: 32.083 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 12.22 Mbit/s
95th percentile per-packet one-way delay: 32.078 ms
Loss rate: 2.78%
Run 7: Report of Vivace-loss — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per packet one way delay (ms)]
Run 8: Statistics of Vivace-loss

Start at: 2018-02-03 04:03:25
End at: 2018-02-03 04:03:55
Local clock offset: -0.023 ms
Remote clock offset: 2.076 ms

# Below is generated by plot.py at 2018-02-03 05:51:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.03 Mbit/s
  95th percentile per-packet one-way delay: 32.090 ms
  Loss rate: 2.14%
-- Flow 1:
  Average throughput: 73.85 Mbit/s
  95th percentile per-packet one-way delay: 32.101 ms
  Loss rate: 2.28%
-- Flow 2:
  Average throughput: 25.02 Mbit/s
  95th percentile per-packet one-way delay: 32.041 ms
  Loss rate: 1.61%
-- Flow 3:
  Average throughput: 14.91 Mbit/s
  95th percentile per-packet one-way delay: 32.043 ms
  Loss rate: 1.87%
Run 8: Report of Vivace-loss — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 75.64 Mbps)
  - Flow 1 egress (mean 73.85 Mbps)
  - Flow 2 ingress (mean 25.10 Mbps)
  - Flow 2 egress (mean 25.02 Mbps)
  - Flow 3 ingress (mean 14.80 Mbps)
  - Flow 3 egress (mean 14.91 Mbps)

- Per packet one way delay (ms):
  - Flow 1 (95th percentile 32.10 ms)
  - Flow 2 (95th percentile 32.04 ms)
  - Flow 3 (95th percentile 32.04 ms)
Run 9: Statistics of Vivace-loss

Start at: 2018-02-03 04:23:58
End at: 2018-02-03 04:24:28
Local clock offset: -0.022 ms
Remote clock offset: 2.1 ms

# Below is generated by plot.py at 2018-02-03 05:51:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 32.034 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 70.08 Mbit/s
95th percentile per-packet one-way delay: 32.041 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 32.002 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 16.90 Mbit/s
95th percentile per-packet one-way delay: 32.034 ms
Loss rate: 3.48%
Run 9: Report of Vivace-loss — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 72.04 Mbps)
  - Flow 1 egress (mean 70.08 Mbps)
  - Flow 2 ingress (mean 29.79 Mbps)
  - Flow 2 egress (mean 29.19 Mbps)
  - Flow 3 ingress (mean 17.51 Mbps)
  - Flow 3 egress (mean 16.90 Mbps)

- **Per packet one-way delay (ms)**
  - Flow 1 (95th percentile 32.04 ms)
  - Flow 2 (95th percentile 32.00 ms)
  - Flow 3 (95th percentile 32.03 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-02-03 04:44:32
End at: 2018-02-03 04:45:02
Local clock offset: 0.012 ms
Remote clock offset: 2.188 ms

# Below is generated by plot.py at 2018-02-03 05:51:53
# Datalink statistics

-- Total of 3 flows:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 32.118 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 70.50 Mbit/s
95th percentile per-packet one-way delay: 32.131 ms
Loss rate: 4.25%
-- Flow 2:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 32.055 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 14.25 Mbit/s
95th percentile per-packet one-way delay: 32.049 ms
Loss rate: 1.78%
Run 10: Report of Vivace-loss — Data Link
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-03 01:38:22
End at: 2018-02-03 01:38:52
Local clock offset: 0.136 ms
Remote clock offset: 0.785 ms

# Below is generated by plot.py at 2018-02-03 05:52:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 31.806 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 63.82 Mbit/s
95th percentile per-packet one-way delay: 31.326 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 44.14 Mbit/s
95th percentile per-packet one-way delay: 31.837 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 72.209 ms
Loss rate: 10.50%
Run 1: Report of Vivace-LTE — Data Link
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-03 01:58:55
End at: 2018-02-03 01:59:25
Local clock offset: 0.051 ms
Remote clock offset: 0.468 ms

# Below is generated by plot.py at 2018-02-03 05:52:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.72 Mbit/s
  95th percentile per-packet one-way delay: 31.865 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 59.51 Mbit/s
  95th percentile per-packet one-way delay: 31.802 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 41.29 Mbit/s
  95th percentile per-packet one-way delay: 31.892 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 20.50 Mbit/s
  95th percentile per-packet one-way delay: 31.945 ms
  Loss rate: 0.88%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-03 02:19:30
End at: 2018-02-03 02:20:00
Local clock offset: 0.002 ms
Remote clock offset: 0.236 ms

# Below is generated by plot.py at 2018-02-03 05:52:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.05 Mbit/s
  95th percentile per-packet one-way delay: 31.983 ms
  Loss rate: 0.80%
-- Flow 1:
  Average throughput: 61.39 Mbit/s
  95th percentile per-packet one-way delay: 31.959 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 36.81 Mbit/s
  95th percentile per-packet one-way delay: 32.007 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 24.85 Mbit/s
  95th percentile per-packet one-way delay: 32.012 ms
  Loss rate: 1.18%
Run 3: Report of Vivace-LTE — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 61.84 Mbps)
  - Flow 1 egress (mean 61.39 Mbps)
  - Flow 2 ingress (mean 37.24 Mbps)
  - Flow 2 egress (mean 36.81 Mbps)
  - Flow 3 ingress (mean 25.15 Mbps)
  - Flow 3 egress (mean 24.85 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 31.96 ms)
  - Flow 2 (95th percentile 32.01 ms)
  - Flow 3 (95th percentile 32.01 ms)
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-03 02:40:03
End at: 2018-02-03 02:40:33
Local clock offset: -0.04 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-02-03 05:52:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.11 Mbit/s
95th percentile per-packet one-way delay: 31.941 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 61.73 Mbit/s
95th percentile per-packet one-way delay: 31.935 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 31.946 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 16.29 Mbit/s
95th percentile per-packet one-way delay: 31.951 ms
Loss rate: 0.70%
Run 4: Report of Vivace-LTE — Data Link

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

Flow 1 ingress (mean 62.11 Mbit/s)  
Flow 1 egress (mean 61.73 Mbit/s)  
Flow 2 ingress (mean 41.02 Mbit/s)  
Flow 2 egress (mean 40.63 Mbit/s)  
Flow 3 ingress (mean 16.38 Mbit/s)  
Flow 3 egress (mean 16.29 Mbit/s)
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-03 03:00:39
End at: 2018-02-03 03:01:09
Local clock offset: -0.112 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-02-03 05:52:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.19 Mbit/s
  95th percentile per-packet one-way delay: 31.892 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 61.63 Mbit/s
  95th percentile per-packet one-way delay: 31.877 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 42.93 Mbit/s
  95th percentile per-packet one-way delay: 31.903 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 12.14 Mbit/s
  95th percentile per-packet one-way delay: 31.935 ms
  Loss rate: 0.91%
Run 5: Report of Vivace-LTE — Data Link
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-03 03:21:12
End at: 2018-02-03 03:21:42
Local clock offset: -0.055 ms
Remote clock offset: -18.362 ms

# Below is generated by plot.py at 2018-02-03 05:52:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 13.779 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 62.07 Mbit/s
95th percentile per-packet one-way delay: 13.748 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 37.99 Mbit/s
95th percentile per-packet one-way delay: 13.796 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 21.05 Mbit/s
95th percentile per-packet one-way delay: 13.833 ms
Loss rate: 0.85%
Run 6: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 62.33 Mbit/s)
- Flow 1 egress (mean 62.07 Mbit/s)
- Flow 2 ingress (mean 38.22 Mbit/s)
- Flow 2 egress (mean 37.99 Mbit/s)
- Flow 3 ingress (mean 21.25 Mbit/s)
- Flow 3 egress (mean 21.05 Mbit/s)

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

- Flow 1 (95th percentile 13.75 ms)
- Flow 2 (95th percentile 13.80 ms)
- Flow 3 (95th percentile 13.83 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-03 03:41:42
End at: 2018-02-03 03:42:12
Local clock offset: -0.031 ms
Remote clock offset: 1.226 ms

# Below is generated by plot.py at 2018-02-03 05:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.23 Mbit/s
95th percentile per-packet one-way delay: 32.027 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 61.77 Mbit/s
95th percentile per-packet one-way delay: 31.766 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 41.17 Mbit/s
95th percentile per-packet one-way delay: 31.833 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 53.960 ms
Loss rate: 1.19%
Run 7: Report of Vivace-LTE — Data Link

![Graphs showing data transfer and packet delay](image-url)
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-03 04:02:15
End at: 2018-02-03 04:02:45
Local clock offset: -0.017 ms
Remote clock offset: 2.059 ms

# Below is generated by plot.py at 2018-02-03 05:52:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.14 Mbit/s
  95th percentile per-packet one-way delay: 32.002 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 62.08 Mbit/s
  95th percentile per-packet one-way delay: 31.891 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 40.69 Mbit/s
  95th percentile per-packet one-way delay: 31.924 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 15.17 Mbit/s
  95th percentile per-packet one-way delay: 45.174 ms
  Loss rate: 0.84%
Run 8: Report of Vivace-LTE — Data Link

The first graph shows the throughput (Mbps) over time (s) for different flows:
- Flow 1 ingress (mean 62.34 Mbps)
- Flow 1 egress (mean 62.08 Mbps)
- Flow 2 ingress (mean 40.92 Mbps)
- Flow 2 egress (mean 40.69 Mbps)
- Flow 3 ingress (mean 15.31 Mbps)
- Flow 3 egress (mean 15.17 Mbps)

The second graph displays the per-packet one-way delay (ms) over time (s) for different flows:
- Flow 1 (95th percentile 31.89 ms)
- Flow 2 (95th percentile 31.92 ms)
- Flow 3 (95th percentile 45.17 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-03 04:22:49
End at: 2018-02-03 04:23:19
Local clock offset: 0.001 ms
Remote clock offset: 2.175 ms

# Below is generated by plot.py at 2018-02-03 05:53:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 31.972 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 61.94 Mbit/s
95th percentile per-packet one-way delay: 31.905 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 39.43 Mbit/s
95th percentile per-packet one-way delay: 32.005 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 17.97 Mbit/s
95th percentile per-packet one-way delay: 32.075 ms
Loss rate: 2.72%
Run 9: Report of Vivace-LTE — Data Link
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-03 04:43:23
End at: 2018-02-03 04:43:53
Local clock offset: -0.023 ms
Remote clock offset: 2.169 ms

# Below is generated by plot.py at 2018-02-03 05:53:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 31.963 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 31.927 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 36.25 Mbit/s
95th percentile per-packet one-way delay: 31.974 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 19.77 Mbit/s
95th percentile per-packet one-way delay: 32.046 ms
Loss rate: 1.34%
Run 10: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 63.79 Mbps)
- Flow 1 egress (mean 63.54 Mbps)
- Flow 2 ingress (mean 36.47 Mbps)
- Flow 2 egress (mean 36.25 Mbps)
- Flow 3 ingress (mean 20.06 Mbps)
- Flow 3 egress (mean 19.77 Mbps)

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

- Flow 1 (95th percentile 31.93 ms)
- Flow 2 (95th percentile 31.97 ms)
- Flow 3 (95th percentile 32.05 ms)