Pantheon Report

Data path: GCE Tokyo Ethernet (remote) → GCE Sydney Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 640164b5b17c7c6561fff577729b3b5935d8596ce
third_party/fillp @ d47f4fa1b45a45e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e562f4
third_party/indigo @ 2601c92e4a9d58d38dc4fde0edbf90c077e64d
third_party/libutp @ b3465b942e2b2f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d6d6d263c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fa2b92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c9f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3db2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 36e33e5c6178b01e31d4a46ad8c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af26295e2539f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f55d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dee4735770d143a1fa2851
test from GCE Tokyo to GCE Sydney, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

Average throughput (Mbit/s) vs 95th percentile one-way delay (ms)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>215.10 214.57 209.45</td>
<td>59.21 60.65 62.05</td>
<td>0.36 0.55 1.14</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>136.48 133.82 106.06</td>
<td>59.76 65.81 64.46</td>
<td>0.29 0.29 1.98</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>198.08 119.60 72.87</td>
<td>59.13 55.88 55.13</td>
<td>0.35 0.84 2.38</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>815.70 756.17 659.96</td>
<td>119.04 128.10 120.30</td>
<td>2.42 3.93 3.57</td>
</tr>
<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>804.59 722.23 577.74</td>
<td>101.67 106.39 102.50</td>
<td>0.47 1.05 1.54</td>
</tr>
<tr>
<td>Indigo</td>
<td>10</td>
<td>215.68 234.16 182.31</td>
<td>54.86 55.73 56.92</td>
<td>0.36 0.46 1.22</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>30.65 21.12 10.16</td>
<td>54.45 53.89 53.27</td>
<td>0.73 1.06 2.18</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>592.29 97.80 50.16</td>
<td>160.86 136.33 137.90</td>
<td>3.05 2.46 3.74</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>220.52 200.56 78.88</td>
<td>118.42 123.07 96.36</td>
<td>4.55 2.88 4.37</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>68.56 48.96 20.27</td>
<td>52.26 51.61 52.13</td>
<td>0.49 0.89 2.33</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.21 0.21 0.22</td>
<td>52.53 52.94 50.97</td>
<td>0.32 0.62 1.09</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>6.45 6.18 5.48</td>
<td>54.08 54.35 53.61</td>
<td>0.33 0.69 1.62</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>81.55 122.83 148.34</td>
<td>54.24 53.60 53.53</td>
<td>0.21 0.62 0.75</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>88.53 129.85 102.98</td>
<td>55.56 57.01 55.98</td>
<td>0.34 0.49 1.34</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>245.54 186.55 151.39</td>
<td>130.38 125.63 139.16</td>
<td>1.17 1.33 2.94</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>349.58 320.32 130.29</td>
<td>77.61 59.58 52.72</td>
<td>0.46 0.44 1.39</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.91 1.22 0.49</td>
<td>53.03 52.03 53.04</td>
<td>0.37 0.72 0.75</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-08-04 00:40:00
End at: 2018-08-04 00:40:30
Local clock offset: ~0.051 ms
Remote clock offset: 1.132 ms

# Below is generated by plot.py at 2018-08-04 05:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.16 Mbit/s
95th percentile per-packet one-way delay: 61.888 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 210.88 Mbit/s
95th percentile per-packet one-way delay: 61.388 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 209.87 Mbit/s
95th percentile per-packet one-way delay: 60.672 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 208.57 Mbit/s
95th percentile per-packet one-way delay: 63.530 ms
Loss rate: 1.18%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-08-04 01:05:28
End at: 2018-08-04 01:05:58
Local clock offset: 0.019 ms
Remote clock offset: 1.12 ms

# Below is generated by plot.py at 2018-08-04 05:10:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.64 Mbit/s
95th percentile per-packet one-way delay: 65.777 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 219.59 Mbit/s
95th percentile per-packet one-way delay: 59.627 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 212.37 Mbit/s
95th percentile per-packet one-way delay: 67.645 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 211.38 Mbit/s
95th percentile per-packet one-way delay: 68.415 ms
Loss rate: 1.06%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 219.58 Mbps)
- Flow 1 egress (mean 219.59 Mbps)
- Flow 2 ingress (mean 212.43 Mbps)
- Flow 2 egress (mean 212.37 Mbps)
- Flow 3 ingress (mean 211.42 Mbps)
- Flow 3 egress (mean 211.38 Mbps)

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

- Flow 1 (95th percentile 59.63 ms)
- Flow 2 (95th percentile 67.64 ms)
- Flow 3 (95th percentile 68.42 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-08-04 01:30:59
End at: 2018-08-04 01:31:29
Local clock offset: 0.021 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2018-08-04 05:10:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 433.60 Mbit/s
  95th percentile per-packet one-way delay: 59.611 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 215.45 Mbit/s
  95th percentile per-packet one-way delay: 58.116 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 222.46 Mbit/s
  95th percentile per-packet one-way delay: 60.066 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 213.67 Mbit/s
  95th percentile per-packet one-way delay: 60.749 ms
  Loss rate: 1.15%
Run 3: Report of TCP BBR — Data Link

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

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

Legend:
- Flow 1 Ingress (mean 215.45 Mbit/s)
- Flow 1 Egress (mean 215.45 Mbit/s)
- Flow 2 Ingress (mean 222.56 Mbit/s)
- Flow 2 Egress (mean 222.46 Mbit/s)
- Flow 3 Ingress (mean 214.04 Mbit/s)
- Flow 3 Egress (mean 213.67 Mbit/s)

Legend:
- Flow 1 (95th percentile 58.12 ms)
- Flow 2 (95th percentile 60.07 ms)
- Flow 3 (95th percentile 60.75 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-08-04 01:56:35
End at: 2018-08-04 01:57:05
Local clock offset: 0.088 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-08-04 05:10:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.25 Mbit/s
95th percentile per-packet one-way delay: 59.676 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 217.89 Mbit/s
95th percentile per-packet one-way delay: 59.005 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 219.30 Mbit/s
95th percentile per-packet one-way delay: 60.283 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 210.95 Mbit/s
95th percentile per-packet one-way delay: 59.891 ms
Loss rate: 1.11%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-08-04 02:21:58
End at: 2018-08-04 02:22:28
Local clock offset: -0.047 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2018-08-04 05:10:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.80 Mbit/s
95th percentile per-packet one-way delay: 57.611 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 216.54 Mbit/s
95th percentile per-packet one-way delay: 56.424 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 214.16 Mbit/s
95th percentile per-packet one-way delay: 57.573 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 218.31 Mbit/s
95th percentile per-packet one-way delay: 58.655 ms
Loss rate: 1.13%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-08-04 02:47:23
End at: 2018-08-04 02:47:53
Local clock offset: 0.049 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-08-04 05:10:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.93 Mbit/s
95th percentile per-packet one-way delay: 59.037 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 214.14 Mbit/s
95th percentile per-packet one-way delay: 58.125 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 216.96 Mbit/s
95th percentile per-packet one-way delay: 59.602 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 202.19 Mbit/s
95th percentile per-packet one-way delay: 64.291 ms
Loss rate: 1.16%
Run 6: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay](image_url)
Run 7: Statistics of TCP BBR

Start at: 2018-08-04 03:12:38
End at: 2018-08-04 03:13:08
Local clock offset: 0.198 ms
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2018-08-04 05:10:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.66 Mbit/s
95th percentile per-packet one-way delay: 61.776 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 211.00 Mbit/s
95th percentile per-packet one-way delay: 61.944 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 211.35 Mbit/s
95th percentile per-packet one-way delay: 60.756 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 209.98 Mbit/s
95th percentile per-packet one-way delay: 62.711 ms
Loss rate: 1.15%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-08-04 03:38:01
End at: 2018-08-04 03:38:31
Local clock offset: 0.026 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2018-08-04 05:10:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 418.14 Mbit/s
95th percentile per-packet one-way delay: 61.946 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 211.02 Mbit/s
95th percentile per-packet one-way delay: 60.349 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 209.13 Mbit/s
95th percentile per-packet one-way delay: 61.957 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 206.29 Mbit/s
95th percentile per-packet one-way delay: 63.369 ms
Loss rate: 1.13%
Run 8: Report of TCP BBR — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 211.05 Mbit/s)
Flow 1 egress (mean 211.02 Mbit/s)
Flow 2 ingress (mean 209.19 Mbit/s)
Flow 2 egress (mean 209.13 Mbit/s)
Flow 3 ingress (mean 206.45 Mbit/s)
Flow 3 egress (mean 206.29 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 60.35 ms)
Flow 2 (95th percentile 61.96 ms)
Flow 3 (95th percentile 63.37 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-08-04 04:02:54
End at: 2018-08-04 04:03:24
Local clock offset: 0.01 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-08-04 05:16:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.55 Mbit/s
95th percentile per-packet one-way delay: 58.706 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 215.23 Mbit/s
95th percentile per-packet one-way delay: 57.973 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 216.82 Mbit/s
95th percentile per-packet one-way delay: 59.387 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 206.27 Mbit/s
95th percentile per-packet one-way delay: 58.557 ms
Loss rate: 1.10%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-08-04 04:28:27
End at: 2018-08-04 04:28:57
Local clock offset: -0.134 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2018-08-04 05:16:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 429.39 Mbit/s
  95th percentile per-packet one-way delay: 59.339 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 219.27 Mbit/s
  95th percentile per-packet one-way delay: 59.170 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 213.32 Mbit/s
  95th percentile per-packet one-way delay: 58.531 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 206.87 Mbit/s
  95th percentile per-packet one-way delay: 60.298 ms
  Loss rate: 1.18%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-08-04 00:38:33
End at: 2018-08-04 00:39:03
Local clock offset: 0.006 ms
Remote clock offset: 1.139 ms

# Below is generated by plot.py at 2018-08-04 05:16:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.71 Mbit/s
95th percentile per-packet one-way delay: 61.712 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 80.47 Mbit/s
95th percentile per-packet one-way delay: 52.927 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 156.82 Mbit/s
95th percentile per-packet one-way delay: 66.223 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 78.63 Mbit/s
95th percentile per-packet one-way delay: 79.940 ms
Loss rate: 4.20%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-08-04 01:04:05
End at: 2018-08-04 01:04:35
Local clock offset: -0.015 ms
Remote clock offset: 0.204 ms

# Below is generated by plot.py at 2018-08-04 05:16:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.92 Mbit/s
95th percentile per-packet one-way delay: 64.508 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 72.06 Mbit/s
95th percentile per-packet one-way delay: 53.641 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 142.79 Mbit/s
95th percentile per-packet one-way delay: 68.435 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 40.13 Mbit/s
95th percentile per-packet one-way delay: 53.525 ms
Loss rate: 1.96%
Run 2: Report of Copa — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 71.94 Mbps)
- Flow 1 egress (mean 72.06 Mbps)
- Flow 2 ingress (mean 142.13 Mbps)
- Flow 2 egress (mean 142.79 Mbps)
- Flow 3 ingress (mean 40.53 Mbps)
- Flow 3 egress (mean 40.13 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 53.64 ms)
- Flow 2 (95th percentile 68.44 ms)
- Flow 3 (95th percentile 53.52 ms)
Run 3: Statistics of Copa

Start at: 2018-08-04 01:29:30
End at: 2018-08-04 01:30:00
Local clock offset: -0.074 ms
Remote clock offset: -0.447 ms

# Below is generated by plot.py at 2018-08-04 05:17:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 255.80 Mbit/s
  95th percentile per-packet one-way delay: 65.484 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 156.54 Mbit/s
  95th percentile per-packet one-way delay: 63.499 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 127.41 Mbit/s
  95th percentile per-packet one-way delay: 67.911 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 60.76 Mbit/s
  95th percentile per-packet one-way delay: 70.219 ms
  Loss rate: 4.60%
Run 3: Report of Copa — Data Link

![Graph showing throughput and per-packet one-way delay for flows 1, 2, and 3.](image1)

- **Flow 1 ingress (mean 156.27 Mbit/s)**
- **Flow 1 egress (mean 156.54 Mbit/s)**
- **Flow 2 ingress (mean 127.56 Mbit/s)**
- **Flow 2 egress (mean 127.41 Mbit/s)**
- **Flow 3 ingress (mean 63.02 Mbit/s)**
- **Flow 3 egress (mean 60.76 Mbit/s)**

![Graph showing per-packet one-way delay for flows 1, 2, and 3.](image2)

- **Flow 1 (95th percentile 63.50 ms)**
- **Flow 2 (95th percentile 67.91 ms)**
- **Flow 3 (95th percentile 70.22 ms)**
Run 4: Statistics of Copa

Start at: 2018-08-04 01:54:56
End at: 2018-08-04 01:55:26
Local clock offset: -0.162 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-08-04 05:20:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 352.90 Mbit/s
  95th percentile per-packet one-way delay: 65.152 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 206.57 Mbit/s
  95th percentile per-packet one-way delay: 66.293 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 195.62 Mbit/s
  95th percentile per-packet one-way delay: 64.568 ms
  Loss rate: 0.75%
-- Flow 3:
  Average throughput: 49.25 Mbit/s
  95th percentile per-packet one-way delay: 53.437 ms
  Loss rate: 0.87%
Run 4: Report of Copa — Data Link

The graphs show the throughput and per-packet round-trip delay for three flows labeled as Flow 1, Flow 2, and Flow 3. The throughput graph indicates the amount of data transferred over time, while the per-packet round-trip delay graph shows the latency experienced for each packet.

Throughput (Mbps):
- Flow 1 ingress (mean 206.44 Mbit/s)
- Flow 1 egress (mean 206.57 Mbit/s)
- Flow 2 ingress (mean 196.07 Mbit/s)
- Flow 2 egress (mean 195.62 Mbit/s)
- Flow 3 ingress (mean 49.22 Mbit/s)
- Flow 3 egress (mean 49.25 Mbit/s)

Per-packet round-trip delay (ms):
- Flow 1 95th percentile 66.29 ms
- Flow 2 95th percentile 64.57 ms
- Flow 3 95th percentile 53.44 ms
Run 5: Statistics of Copa

Start at: 2018-08-04 02:20:30
End at: 2018-08-04 02:21:00
Local clock offset: 0.043 ms
Remote clock offset: -0.543 ms

# Below is generated by plot.py at 2018-08-04 05:20:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.41 Mbit/s
95th percentile per-packet one-way delay: 54.808 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 90.58 Mbit/s
95th percentile per-packet one-way delay: 55.855 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 183.82 Mbit/s
95th percentile per-packet one-way delay: 54.043 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 44.66 Mbit/s
95th percentile per-packet one-way delay: 60.469 ms
Loss rate: 0.83%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-08-04 02:45:42
End at: 2018-08-04 02:46:12
Local clock offset: 0.128 ms
Remote clock offset: -0.372 ms

# Below is generated by plot.py at 2018-08-04 05:21:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 382.04 Mbit/s
95th percentile per-packet one-way delay: 71.064 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 208.08 Mbit/s
95th percentile per-packet one-way delay: 57.443 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 163.80 Mbit/s
95th percentile per-packet one-way delay: 111.524 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 197.10 Mbit/s
95th percentile per-packet one-way delay: 62.497 ms
Loss rate: 1.62%
Run 6: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 208.30 Mbps)
- Flow 1 egress (mean 208.08 Mbps)
- Flow 2 ingress (mean 163.14 Mbps)
- Flow 2 egress (mean 163.80 Mbps)
- Flow 3 ingress (mean 196.30 Mbps)
- Flow 3 egress (mean 197.10 Mbps)

Per-packet one-way delay (ms)

Time (s)

- Flow 1 (95th percentile 57.44 ms)
- Flow 2 (95th percentile 111.52 ms)
- Flow 3 (95th percentile 62.50 ms)
Run 7: Statistics of Copa

Start at: 2018-08-04 03:11:12
End at: 2018-08-04 03:11:42
Local clock offset: 0.086 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-08-04 05:21:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.10 Mbit/s
95th percentile per-packet one-way delay: 62.288 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 137.44 Mbit/s
95th percentile per-packet one-way delay: 62.772 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 53.696 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 130.31 Mbit/s
95th percentile per-packet one-way delay: 64.029 ms
Loss rate: 1.92%
Run 7: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 137.14 Mbit/s)**
- **Flow 1 egress (mean 137.44 Mbit/s)**
- **Flow 2 ingress (mean 56.71 Mbit/s)**
- **Flow 2 egress (mean 56.67 Mbit/s)**
- **Flow 3 ingress (mean 131.47 Mbit/s)**
- **Flow 3 egress (mean 130.31 Mbit/s)**
Run 8: Statistics of Copa

Start at: 2018-08-04 03:36:39
End at: 2018-08-04 03:37:09
Local clock offset: -0.102 ms
Remote clock offset: -1.528 ms

# Below is generated by plot.py at 2018-08-04 05:21:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.87 Mbit/s
95th percentile per-packet one-way delay: 61.619 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 109.42 Mbit/s
95th percentile per-packet one-way delay: 63.839 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 54.950 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 54.948 ms
Loss rate: 1.91%
Run 9: Statistics of Copa

Start at: 2018-08-04 04:01:21
End at: 2018-08-04 04:01:51
Local clock offset: -0.012 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-08-04 05:25:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 295.98 Mbit/s
95th percentile per-packet one-way delay: 63.803 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 135.85 Mbit/s
95th percentile per-packet one-way delay: 62.548 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 107.61 Mbit/s
95th percentile per-packet one-way delay: 59.092 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 268.70 Mbit/s
95th percentile per-packet one-way delay: 68.399 ms
Loss rate: 1.38%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 135.69 Mbit/s)
- Flow 1 egress (mean 135.85 Mbit/s)
- Flow 2 ingress (mean 107.14 Mbit/s)
- Flow 2 egress (mean 107.61 Mbit/s)
- Flow 3 ingress (mean 249.59 Mbit/s)
- Flow 3 egress (mean 248.70 Mbit/s)
Run 10: Statistics of Copa

Start at: 2018-08-04 04:26:51
End at: 2018-08-04 04:27:21
Local clock offset: 0.125 ms
Remote clock offset: -0.222 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.55 Mbit/s
95th percentile per-packet one-way delay: 69.195 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 167.79 Mbit/s
95th percentile per-packet one-way delay: 58.785 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 146.56 Mbit/s
95th percentile per-packet one-way delay: 57.708 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 167.94 Mbit/s
95th percentile per-packet one-way delay: 77.174 ms
Loss rate: 0.51%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-08-04 00:41:28
End at: 2018-08-04 00:41:58
Local clock offset: -0.013 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 304.84 Mbit/s
  95th percentile per-packet one-way delay: 58.625 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 226.04 Mbit/s
  95th percentile per-packet one-way delay: 58.820 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 52.69 Mbit/s
  95th percentile per-packet one-way delay: 53.498 ms
  Loss rate: 2.05%
-- Flow 3:
  Average throughput: 132.61 Mbit/s
  95th percentile per-packet one-way delay: 54.802 ms
  Loss rate: 1.25%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-08-04 01:06:57
End at: 2018-08-04 01:07:27
Local clock offset: 0.043 ms
Remote clock offset: 1.241 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 355.67 Mbit/s
  95th percentile per-packet one-way delay: 57.582 ms
  Loss rate: 0.28%
  -- Flow 1:
    Average throughput: 215.80 Mbit/s
    95th percentile per-packet one-way delay: 57.989 ms
    Loss rate: 0.22%
    -- Flow 2:
      Average throughput: 207.92 Mbit/s
      95th percentile per-packet one-way delay: 55.392 ms
      Loss rate: 0.34%
    -- Flow 3:
      Average throughput: 5.01 Mbit/s
      95th percentile per-packet one-way delay: 50.871 ms
      Loss rate: 3.97%
Run 2: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 215.55 Mbps)
  - Flow 1 egress (mean 215.80 Mbps)
  - Flow 2 ingress (mean 207.53 Mbps)
  - Flow 2 egress (mean 207.92 Mbps)
  - Flow 3 ingress (mean 5.16 Mbps)
  - Flow 3 egress (mean 5.01 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 57.99 ms)
  - Flow 2 (95th percentile 55.39 ms)
  - Flow 3 (95th percentile 50.87 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-08-04 01:32:28
End at: 2018-08-04 01:32:58
Local clock offset: 0.003 ms
Remote clock offset: -0.382 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 331.68 Mbit/s
  95th percentile per-packet one-way delay: 59.999 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 220.26 Mbit/s
  95th percentile per-packet one-way delay: 60.367 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 104.02 Mbit/s
  95th percentile per-packet one-way delay: 58.837 ms
  Loss rate: 0.80%
-- Flow 3:
  Average throughput: 128.44 Mbit/s
  95th percentile per-packet one-way delay: 57.881 ms
  Loss rate: 1.24%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 220.34 Mbit/s)
- Flow 1 egress (mean 220.26 Mbit/s)
- Flow 2 ingress (mean 104.32 Mbit/s)
- Flow 2 egress (mean 104.02 Mbit/s)
- Flow 3 ingress (mean 126.69 Mbit/s)
- Flow 3 egress (mean 126.44 Mbit/s)

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

- Flow 1 (99th percentile 60.37 ms)
- Flow 2 (99th percentile 58.84 ms)
- Flow 3 (99th percentile 57.88 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-08-04 01:58:03
End at: 2018-08-04 01:58:33
Local clock offset: 0.009 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.72 Mbit/s
95th percentile per-packet one-way delay: 58.986 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 214.87 Mbit/s
95th percentile per-packet one-way delay: 59.332 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 124.91 Mbit/s
95th percentile per-packet one-way delay: 55.336 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 105.52 Mbit/s
95th percentile per-packet one-way delay: 55.630 ms
Loss rate: 1.25%
Run 4: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 214.57 Mbit/s)
- Flow 1 egress (mean 214.57 Mbit/s)
- Flow 2 ingress (mean 125.15 Mbit/s)
- Flow 2 egress (mean 124.91 Mbit/s)
- Flow 3 ingress (mean 105.70 Mbit/s)
- Flow 3 egress (mean 105.52 Mbit/s)

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

- Flow 1 (95th percentile 59.33 ms)
- Flow 2 (95th percentile 55.34 ms)
- Flow 3 (95th percentile 55.63 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-08-04 02:23:27
End at: 2018-08-04 02:23:57
Local clock offset: -0.159 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2018-08-04 05:26:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.70 Mbit/s
95th percentile per-packet one-way delay: 59.730 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 223.56 Mbit/s
95th percentile per-packet one-way delay: 59.947 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 102.25 Mbit/s
95th percentile per-packet one-way delay: 56.204 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 55.825 ms
Loss rate: 4.42%
Run 5: Report of TCP Cubic — Data Link

![Graph 1: Throughput vs Time](image)
- **Flow 1** ingress (mean 223.65 Mbit/s)
- **Flow 1** egress (mean 223.56 Mbit/s)
- **Flow 2** ingress (mean 102.50 Mbit/s)
- **Flow 2** egress (mean 102.25 Mbit/s)
- **Flow 3** ingress (mean 4.64 Mbit/s)
- **Flow 3** egress (mean 4.48 Mbit/s)

![Graph 2: Per packet one way delay vs Time](image)
- **Flow 1** (95th percentile 59.95 ms)
- **Flow 2** (95th percentile 56.20 ms)
- **Flow 3** (95th percentile 55.83 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-08-04 02:48:52
End at: 2018-08-04 02:49:22
Local clock offset: 0.051 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-08-04 05:27:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.64 Mbit/s
95th percentile per-packet one-way delay: 60.191 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 224.57 Mbit/s
95th percentile per-packet one-way delay: 60.797 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 105.30 Mbit/s
95th percentile per-packet one-way delay: 54.016 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 115.32 Mbit/s
95th percentile per-packet one-way delay: 55.580 ms
Loss rate: 1.16%
Run 6: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 224.70 Mbit/s)
- Flow 1 egress (mean 224.57 Mbit/s)
- Flow 2 ingress (mean 105.55 Mbit/s)
- Flow 2 egress (mean 105.30 Mbit/s)
- Flow 3 ingress (mean 115.50 Mbit/s)
- Flow 3 egress (mean 115.32 Mbit/s)

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 60.80 ms)
- Flow 2 (95th percentile 54.02 ms)
- Flow 3 (95th percentile 55.58 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-08-04 03:14:06
End at: 2018-08-04 03:14:36
Local clock offset: 0.075 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-08-04 05:27:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.18 Mbit/s
95th percentile per-packet one-way delay: 60.396 ms
Loss rate: 0.38%

-- Flow 1:
Average throughput: 214.13 Mbit/s
95th percentile per-packet one-way delay: 60.526 ms
Loss rate: 0.22%

-- Flow 2:
Average throughput: 142.35 Mbit/s
95th percentile per-packet one-way delay: 58.596 ms
Loss rate: 0.69%

-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 54.580 ms
Loss rate: 4.54%
Run 7: Report of TCP Cubic — Data Link

![Graph of TCP Cubic data link throughput and per-packet round-trip delay](image)

- Flow 1 ingress (mean 213.86 Mbps)
- Flow 1 egress (mean 214.13 Mbps)
- Flow 2 ingress (mean 142.62 Mbps)
- Flow 2 egress (mean 142.35 Mbps)
- Flow 3 ingress (mean 4.46 Mbps)
- Flow 3 egress (mean 4.30 Mbps)

![Graph of TCP Cubic data link per-packet round-trip delay](image)

- Flow 1 (95th percentile 60.53 ms)
- Flow 2 (95th percentile 58.60 ms)
- Flow 3 (95th percentile 54.58 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-08-04 03:39:29
End at: 2018-08-04 03:39:59
Local clock offset: 0.145 ms
Remote clock offset: -0.209 ms

# Below is generated by plot.py at 2018-08-04 05:28:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.41 Mbit/s
95th percentile per-packet one-way delay: 59.739 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 158.86 Mbit/s
95th percentile per-packet one-way delay: 60.534 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 107.19 Mbit/s
95th percentile per-packet one-way delay: 58.185 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 113.14 Mbit/s
95th percentile per-packet one-way delay: 58.580 ms
Loss rate: 1.21%
Run 8: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 159.13 Mbps)
Flow 1 egress (mean 158.86 Mbps)
Flow 2 ingress (mean 107.47 Mbps)
Flow 2 egress (mean 107.19 Mbps)
Flow 3 ingress (mean 113.33 Mbps)
Flow 3 egress (mean 113.14 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 60.53 ms)
Flow 2 (95th percentile 58.19 ms)
Flow 3 (95th percentile 58.58 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-08-04 04:04:23
End at: 2018-08-04 04:04:53
Local clock offset: 0.07 ms
Remote clock offset: -0.495 ms

# Below is generated by plot.py at 2018-08-04 05:29:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.07 Mbit/s
95th percentile per-packet one-way delay: 57.998 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 148.05 Mbit/s
95th percentile per-packet one-way delay: 58.835 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 137.29 Mbit/s
95th percentile per-packet one-way delay: 57.431 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 114.48 Mbit/s
95th percentile per-packet one-way delay: 56.835 ms
Loss rate: 1.19%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-08-04 04:29:57
End at: 2018-08-04 04:30:27
Local clock offset: 0.114 ms
Remote clock offset: 1.222 ms

# Below is generated by plot.py at 2018-08-04 05:29:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 210.85 Mbit/s
95th percentile per-packet one-way delay: 53.043 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 134.70 Mbit/s
95th percentile per-packet one-way delay: 54.194 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 112.09 Mbit/s
95th percentile per-packet one-way delay: 51.313 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 3.52%
Run 10: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet delay for three flows.]

Flow 1 ingress (mean 134.60 Mbit/s), Flow 1 egress (mean 134.70 Mbit/s), Flow 2 ingress (mean 112.35 Mbit/s), Flow 2 egress (mean 112.09 Mbit/s), Flow 3 ingress (mean 5.56 Mbit/s), Flow 3 egress (mean 5.42 Mbit/s)

Flow 1 (95th percentile 54.19 ms), Flow 2 (95th percentile 51.31 ms), Flow 3 (95th percentile 58.73 ms)
Run 1: Statistics of FillP

Start at: 2018-08-04 00:53:13
End at: 2018-08-04 00:53:43
Local clock offset: 0.065 ms
Remote clock offset: -0.524 ms

# Below is generated by plot.py at 2018-08-04 05:56:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1548.59 Mbit/s
  95th percentile per-packet one-way delay: 131.306 ms
  Loss rate: 3.90%
-- Flow 1:
  Average throughput: 838.94 Mbit/s
  95th percentile per-packet one-way delay: 116.667 ms
  Loss rate: 2.00%
-- Flow 2:
  Average throughput: 717.54 Mbit/s
  95th percentile per-packet one-way delay: 149.652 ms
  Loss rate: 6.23%
-- Flow 3:
  Average throughput: 706.11 Mbit/s
  95th percentile per-packet one-way delay: 133.484 ms
  Loss rate: 5.70%
Run 1: Report of FillP — Data Link

[Graph showing throughput over time with legend for different flows]

[Graph showing per-packet delay over time with legend for different flows]
Run 2: Statistics of FillP

Start at: 2018-08-04 01:18:38
End at: 2018-08-04 01:19:08
Local clock offset: 0.045 ms
Remote clock offset: 0.237 ms

# Below is generated by plot.py at 2018-08-04 05:57:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1625.56 Mbit/s
  95th percentile per-packet one-way delay: 77.626 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 861.18 Mbit/s
  95th percentile per-packet one-way delay: 66.169 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 824.38 Mbit/s
  95th percentile per-packet one-way delay: 66.356 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 657.13 Mbit/s
  95th percentile per-packet one-way delay: 118.232 ms
  Loss rate: 2.52%
Run 2: Report of FillP — Data Link

![Throughput Graph]

- Flow 1 Ingress (mean 859.77 Mbit/s)
- Flow 1 Egress (mean 861.18 Mbit/s)
- Flow 2 Ingress (mean 823.57 Mbit/s)
- Flow 2 Egress (mean 824.38 Mbit/s)
- Flow 3 Ingress (mean 667.05 Mbit/s)
- Flow 3 Egress (mean 657.13 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 66.17 ms)
- Flow 2 (95th percentile 66.36 ms)
- Flow 3 (95th percentile 118.23 ms)
Run 3: Statistics of FillP

Start at: 2018-08-04 01:44:17
End at: 2018-08-04 01:44:47
Local clock offset: 0.099 ms
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2018-08-04 05:57:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1594.43 Mbit/s
95th percentile per-packet one-way delay: 115.097 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 855.33 Mbit/s
95th percentile per-packet one-way delay: 131.012 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 828.46 Mbit/s
95th percentile per-packet one-way delay: 109.705 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 573.10 Mbit/s
95th percentile per-packet one-way delay: 121.590 ms
Loss rate: 3.00%
Run 3: Report of FillP — Data Link

![Graph of Throughput (Mb/s) over time](image1)

- Flow 1 Ingress (mean 859.06 Mb/s)
- Flow 1 Egress (mean 855.33 Mb/s)
- Flow 2 Ingress (mean 834.77 Mb/s)
- Flow 2 Egress (mean 828.46 Mb/s)
- Flow 3 Ingress (mean 584.90 Mb/s)
- Flow 3 Egress (mean 573.10 Mb/s)

![Graph of Per-packet one-way delay (ms) over time](image2)

- Flow 1 95th percentile 131.01 ms
- Flow 2 95th percentile 109.70 ms
- Flow 3 95th percentile 121.59 ms
Run 4: Statistics of FillP

Start at: 2018-08-04 02:09:47
End at: 2018-08-04 02:10:17
Local clock offset: -0.129 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-08-04 05:58:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1618.13 Mbit/s
  95th percentile per-packet one-way delay: 117.265 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 863.12 Mbit/s
  95th percentile per-packet one-way delay: 85.373 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 805.14 Mbit/s
  95th percentile per-packet one-way delay: 119.259 ms
  Loss rate: 1.44%
-- Flow 3:
  Average throughput: 668.69 Mbit/s
  95th percentile per-packet one-way delay: 128.014 ms
  Loss rate: 4.62%
Run 4: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 862.34 Mb/s)**
- **Flow 1 Egress (mean 863.12 Mb/s)**
- **Flow 2 Ingress (mean 812.48 Mb/s)**
- **Flow 2 Egress (mean 805.14 Mb/s)**
- **Flow 3 Ingress (mean 693.50 Mb/s)**
- **Flow 3 Egress (mean 668.69 Mb/s)**

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

- **Flow 1 (95th percentile 85.37 ms)**
- **Flow 2 (95th percentile 119.26 ms)**
- **Flow 3 (95th percentile 128.01 ms)**
Run 5: Statistics of FillP

Start at: 2018-08-04 02:35:00  
End at: 2018-08-04 02:35:30  
Local clock offset: 0.145 ms  
Remote clock offset: 1.099 ms

# Below is generated by plot.py at 2018-08-04 05:58:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1582.88 Mbit/s
  95th percentile per-packet one-way delay: 123.897 ms
  Loss rate: 2.80%
-- Flow 1:
  Average throughput: 857.56 Mbit/s
  95th percentile per-packet one-way delay: 112.628 ms
  Loss rate: 1.85%
-- Flow 2:
  Average throughput: 755.96 Mbit/s
  95th percentile per-packet one-way delay: 130.878 ms
  Loss rate: 4.86%
-- Flow 3:
  Average throughput: 678.50 Mbit/s
  95th percentile per-packet one-way delay: 112.099 ms
  Loss rate: 1.69%
Run 5: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 Ingress (mean 870.65 Mbps)
Flow 1 Egress (mean 857.56 Mbps)
Flow 2 Ingress (mean 790.51 Mbps)
Flow 2 Egress (mean 755.96 Mbps)
Flow 3 Ingress (mean 683.35 Mbps)
Flow 3 Egress (mean 678.50 Mbps)

Packet per second (packets/sec)

Time (s)

Flow 1 (95th percentile 112.63 ms)
Flow 2 (95th percentile 130.88 ms)
Flow 3 (95th percentile 112.10 ms)
Run 6: Statistics of FillIP

Start at: 2018-08-04 03:00:29
End at: 2018-08-04 03:00:59
Local clock offset: 0.193 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-08-04 05:58:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1459.75 Mbit/s
95th percentile per-packet one-way delay: 147.240 ms
Loss rate: 4.72%
-- Flow 1:
Average throughput: 725.11 Mbit/s
95th percentile per-packet one-way delay: 151.723 ms
Loss rate: 5.02%
-- Flow 2:
Average throughput: 772.75 Mbit/s
95th percentile per-packet one-way delay: 139.859 ms
Loss rate: 4.54%
-- Flow 3:
Average throughput: 673.36 Mbit/s
95th percentile per-packet one-way delay: 123.630 ms
Loss rate: 4.13%
Run 6: Report of FillP — Data Link

![Graph of Throughput](image1)

- **Flow 1 Ingress (mean 760.76 Mbit/s)**
- **Flow 1 Egress (mean 725.11 Mbit/s)**
- **Flow 2 Ingress (mean 805.26 Mbit/s)**
- **Flow 2 Egress (mean 772.75 Mbit/s)**
- **Flow 3 Ingress (mean 695.58 Mbit/s)**
- **Flow 3 Egress (mean 673.36 Mbit/s)**

![Graph of Packet Delays](image2)

- **Flow 1 (95th percentile 151.72 ms)**
- **Flow 2 (95th percentile 139.86 ms)**
- **Flow 3 (95th percentile 123.63 ms)**
Run 7: Statistics of FillP

Start at: 2018-08-04 03:25:56
End at: 2018-08-04 03:26:26
Local clock offset: 0.168 ms
Remote clock offset: -1.569 ms

# Below is generated by plot.py at 2018-08-04 05:58:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1517.46 Mbit/s
95th percentile per-packet one-way delay: 133.701 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 798.60 Mbit/s
95th percentile per-packet one-way delay: 134.623 ms
Loss rate: 3.75%
-- Flow 2:
Average throughput: 753.90 Mbit/s
95th percentile per-packet one-way delay: 132.040 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 661.98 Mbit/s
95th percentile per-packet one-way delay: 134.817 ms
Loss rate: 4.71%
Run 7: Report of FillP — Data Link
Run 8: Statistics of FillP

Start at: 2018-08-04 03:50:53
End at: 2018-08-04 03:51:23
Local clock offset: -0.025 ms
Remote clock offset: -0.17 ms

# Below is generated by plot.py at 2018-08-04 05:59:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1489.42 Mbit/s
  95th percentile per-packet one-way delay: 139.718 ms
  Loss rate: 4.36%
-- Flow 1:
  Average throughput: 782.54 Mbit/s
  95th percentile per-packet one-way delay: 136.579 ms
  Loss rate: 4.21%
-- Flow 2:
  Average throughput: 743.44 Mbit/s
  95th percentile per-packet one-way delay: 138.922 ms
  Loss rate: 4.17%
-- Flow 3:
  Average throughput: 647.21 Mbit/s
  95th percentile per-packet one-way delay: 151.476 ms
  Loss rate: 5.31%
Run 8: Report of FillP — Data Link
Run 9: Statistics of FillP

Start at: 2018-08-04 04:16:08  
End at: 2018-08-04 04:16:38  
Local clock offset: 0.005 ms  
Remote clock offset: 1.323 ms

# Below is generated by plot.py at 2018-08-04 06:24:20
# Datalink statistics
  -- Total of 3 flows:
    Average throughput: 1430.39 Mbit/s
    95th percentile per-packet one-way delay: 159.030 ms
    Loss rate: 5.81%
  -- Flow 1:
    Average throughput: 778.72 Mbit/s
    95th percentile per-packet one-way delay: 134.320 ms
    Loss rate: 4.15%
  -- Flow 2:
    Average throughput: 626.31 Mbit/s
    95th percentile per-packet one-way delay: 171.258 ms
    Loss rate: 10.25%
  -- Flow 3:
    Average throughput: 715.23 Mbit/s
    95th percentile per-packet one-way delay: 119.726 ms
    Loss rate: 2.89%
Run 9: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 809.56 Mbit/s)
- Flow 1 Egress (mean 778.72 Mbit/s)
- Flow 2 Ingress (mean 694.13 Mbit/s)
- Flow 2 Egress (mean 626.31 Mbit/s)
- Flow 3 Ingress (mean 728.43 Mbit/s)
- Flow 3 Egress (mean 715.23 Mbit/s)
Run 10: Statistics of FillP

Start at: 2018-08-04 04:41:25
End at: 2018-08-04 04:41:55
Local clock offset: -0.005 ms
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2018-08-04 06:25:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1486.81 Mbit/s
95th percentile per-packet one-way delay: 120.903 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 795.88 Mbit/s
95th percentile per-packet one-way delay: 121.343 ms
Loss rate: 1.97%
-- Flow 2:
Average throughput: 733.79 Mbit/s
95th percentile per-packet one-way delay: 123.057 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 618.32 Mbit/s
95th percentile per-packet one-way delay: 59.919 ms
Loss rate: 1.14%
Run 10: Report of FillIP — Data Link

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

Throughput (Mbps):
- Flow 1 Ingress (mean 808.84 Mbps)
- Flow 1 Egress (mean 795.88 Mbps)
- Flow 2 Ingress (mean 753.21 Mbps)
- Flow 2 Egress (mean 733.79 Mbps)
- Flow 3 Ingress (mean 619.04 Mbps)
- Flow 3 Egress (mean 618.32 Mbps)

Packet Delay (ms):
- Flow 1 (95th percentile 121.34 ms)
- Flow 2 (95th percentile 123.06 ms)
- Flow 3 (95th percentile 59.92 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-08-04 00:34:51
End at: 2018-08-04 00:35:21
Local clock offset: 0.061 ms
Remote clock offset: -0.357 ms

# Below is generated by plot.py at 2018-08-04 06:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1498.68 Mbit/s
95th percentile per-packet one-way delay: 140.214 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 820.15 Mbit/s
95th percentile per-packet one-way delay: 119.200 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 732.95 Mbit/s
95th percentile per-packet one-way delay: 136.630 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 581.76 Mbit/s
95th percentile per-packet one-way delay: 196.270 ms
Loss rate: 3.35%
Run 1: Report of FillP-Sheep — Data Link
Run 2: Statistics of FillP-Sheep

Start at: 2018-08-04 01:00:27
End at: 2018-08-04 01:00:57
Local clock offset: -0.035 ms
Remote clock offset: -1.576 ms

# Below is generated by plot.py at 2018-08-04 06:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1432.63 Mbit/s
95th percentile per-packet one-way delay: 134.361 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 747.35 Mbit/s
95th percentile per-packet one-way delay: 134.812 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 767.68 Mbit/s
95th percentile per-packet one-way delay: 115.949 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 531.38 Mbit/s
95th percentile per-packet one-way delay: 143.873 ms
Loss rate: 1.53%
Run 2: Report of FillP-Sheep — Data Link

---

**Throughput (Mbps)**

```
Flow 1 Ingress (mean 749.12 Mbps)  Flow 1 Egress (mean 747.95 Mbps)
Flow 2 Ingress (mean 771.40 Mbps)  Flow 2 Egress (mean 767.68 Mbps)
Flow 3 Ingress (mean 533.19 Mbps)  Flow 3 Egress (mean 531.38 Mbps)
```

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

```
Flow 1 (95th percentile 134.81 ms)  Flow 2 (95th percentile 115.95 ms)  Flow 3 (95th percentile 143.87 ms)
```
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-04 01:25:53
End at: 2018-08-04 01:26:23
Local clock offset: 0.212 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-08-04 06:25:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1414.11 Mbit/s
  95th percentile per-packet one-way delay: 103.719 ms
  Loss rate: 0.79%
-- Flow 1:
  Average throughput: 774.30 Mbit/s
  95th percentile per-packet one-way delay: 101.475 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 693.95 Mbit/s
  95th percentile per-packet one-way delay: 113.784 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 542.87 Mbit/s
  95th percentile per-packet one-way delay: 68.852 ms
  Loss rate: 1.78%
Run 3: Report of FillP-Sheep — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 Ingress** (mean 774.43 Mbits/s)
- **Flow 1 Egress** (mean 774.30 Mbits/s)
- **Flow 2 Ingress** (mean 697.94 Mbits/s)
- **Flow 2 Egress** (mean 693.95 Mbits/s)
- **Flow 3 Ingress** (mean 546.90 Mbits/s)
- **Flow 3 Egress** (mean 542.87 Mbits/s)

![Graph 2: Packet Delay](image2)

- **Flow 1** (95th percentile 101.47 ms)
- **Flow 2** (95th percentile 113.78 ms)
- **Flow 3** (95th percentile 68.85 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2018-08-04 01:51:16
End at: 2018-08-04 01:51:46
Local clock offset: -0.028 ms
Remote clock offset: -0.258 ms

# Below is generated by plot.py at 2018-08-04 06:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1410.14 Mbit/s
95th percentile per-packet one-way delay: 110.406 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 776.65 Mbit/s
95th percentile per-packet one-way delay: 106.926 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 691.87 Mbit/s
95th percentile per-packet one-way delay: 116.223 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 528.52 Mbit/s
95th percentile per-packet one-way delay: 76.771 ms
Loss rate: 1.02%
Run 4: Report of FillP-Sheep — Data Link

![Graph of data link throughput and packet delay](image)

Legend:
- Flow 1 Ingress (mean 778.87 Mbit/s)
- Flow 1 Egress (mean 776.65 Mbit/s)
- Flow 2 Ingress (mean 693.17 Mbit/s)
- Flow 2 Egress (mean 692.87 Mbit/s)
- Flow 3 Ingress (mean 528.25 Mbit/s)
- Flow 3 Egress (mean 528.52 Mbit/s)

Legend for packet delay:
- Flow 1 (95th percentile 106.93 ms)
- Flow 2 (95th percentile 116.22 ms)
- Flow 3 (95th percentile 76.77 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2018-08-04 02:16:49
End at: 2018-08-04 02:17:19
Local clock offset: 0.198 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-08-04 06:27:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1454.14 Mbit/s
  95th percentile per-packet one-way delay: 88.218 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 793.30 Mbit/s
  95th percentile per-packet one-way delay: 88.688 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 710.87 Mbit/s
  95th percentile per-packet one-way delay: 91.356 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 574.48 Mbit/s
  95th percentile per-packet one-way delay: 70.401 ms
  Loss rate: 0.95%
Run 5: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 791.91 Mbit/s)
- Flow 1 egress (mean 793.30 Mbit/s)
- Flow 2 ingress (mean 710.24 Mbit/s)
- Flow 2 egress (mean 710.87 Mbit/s)
- Flow 3 ingress (mean 574.50 Mbit/s)
- Flow 3 egress (mean 574.48 Mbit/s)
Run 6: Statistics of FillP-Sheep

Start at: 2018-08-04 02:41:58
End at: 2018-08-04 02:42:28
Local clock offset: 0.134 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-08-04 06:30:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1545.69 Mbit/s
95th percentile per-packet one-way delay: 93.521 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 844.44 Mbit/s
95th percentile per-packet one-way delay: 89.237 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 739.43 Mbit/s
95th percentile per-packet one-way delay: 99.066 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 637.97 Mbit/s
95th percentile per-packet one-way delay: 97.151 ms
Loss rate: 1.37%
Run 7: Statistics of FillP-Sheep

Start at: 2018-08-04 03:07:27
End at: 2018-08-04 03:07:57
Local clock offset: 0.114 ms
Remote clock offset: -1.429 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1542.03 Mbit/s
  95th percentile per-packet one-way delay: 105.066 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 820.65 Mbit/s
  95th percentile per-packet one-way delay: 111.381 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 762.19 Mbit/s
  95th percentile per-packet one-way delay: 93.883 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 652.57 Mbit/s
  95th percentile per-packet one-way delay: 84.408 ms
  Loss rate: 1.48%
Run 7: Report of FillP-Sheep — Data Link

![Graph of throughput and round-trip delay over time for Flows 1, 2, and 3.]

- Flow 1 Ingress (mean 822.85 Mbit/s)
- Flow 1 Egress (mean 820.65 Mbit/s)
- Flow 2 Ingress (mean 762.86 Mbit/s)
- Flow 2 Egress (mean 762.19 Mbit/s)
- Flow 3 Ingress (mean 655.11 Mbit/s)
- Flow 3 Egress (mean 652.57 Mbit/s)

![Graph of per-packet one-way delay over time for Flows 1, 2, and 3.]

- Flow 1 (95th percentile 111.38 ms)
- Flow 2 (95th percentile 93.88 ms)
- Flow 3 (95th percentile 84.41 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-08-04 03:32:59  
End at: 2018-08-04 03:33:29  
Local clock offset: 0.303 ms  
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-08-04 06:54:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1504.94 Mbit/s  
95th percentile per-packet one-way delay: 86.354 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 839.33 Mbit/s  
95th percentile per-packet one-way delay: 83.111 ms  
Loss rate: 0.49%  
-- Flow 2:  
Average throughput: 709.51 Mbit/s  
95th percentile per-packet one-way delay: 86.941 ms  
Loss rate: 0.64%  
-- Flow 3:  
Average throughput: 589.83 Mbit/s  
95th percentile per-packet one-way delay: 90.463 ms  
Loss rate: 1.09%
Run 8: Report of FillP-Sheep — Data Link
Run 9: Statistics of FillP-Sheep

Start at: 2018-08-04 03:57:39
End at: 2018-08-04 03:58:09
Local clock offset: -0.078 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1454.76 Mbit/s
  95th percentile per-packet one-way delay: 90.881 ms
  Loss rate: 0.43%
  -- Flow 1:
    Average throughput: 807.64 Mbit/s
    95th percentile per-packet one-way delay: 84.047 ms
    Loss rate: 0.26%
  -- Flow 2:
    Average throughput: 680.24 Mbit/s
    95th percentile per-packet one-way delay: 103.041 ms
    Loss rate: 0.51%
  -- Flow 3:
    Average throughput: 594.16 Mbit/s
    95th percentile per-packet one-way delay: 60.594 ms
    Loss rate: 0.98%
Run 9: Report of FillP-Sheep — Data Link
Run 10: Statistics of FillP-Sheep

Start at: 2018-08-04 04:23:11
End at: 2018-08-04 04:23:41
Local clock offset: 0.123 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1483.71 Mbit/s
  95th percentile per-packet one-way delay: 114.534 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 822.06 Mbit/s
  95th percentile per-packet one-way delay: 97.842 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 733.60 Mbit/s
  95th percentile per-packet one-way delay: 107.033 ms
  Loss rate: 1.90%
-- Flow 3:
  Average throughput: 543.84 Mbit/s
  95th percentile per-packet one-way delay: 136.213 ms
  Loss rate: 1.89%
Run 10: Report of FillIP-Sheep — Data Link

Throughput (Mbit/s)

Flow 1 Ingress (mean 817.53 Mbit/s)  Flow 1 Egress (mean 822.06 Mbit/s)
Flow 2 Ingress (mean 743.89 Mbit/s)  Flow 2 Egress (mean 733.60 Mbit/s)
Flow 3 Ingress (mean 548.29 Mbit/s)  Flow 3 Egress (mean 543.84 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 97.84 ms)  Flow 2 (95th percentile 107.03 ms)  Flow 3 (95th percentile 136.21 ms)
Run 1: Statistics of Indigo

Start at: 2018-08-04 00:50:30
End at: 2018-08-04 00:51:00
Local clock offset: -0.014 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.64 Mbit/s
95th percentile per-packet one-way delay: 54.377 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 187.23 Mbit/s
95th percentile per-packet one-way delay: 54.420 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 241.76 Mbit/s
95th percentile per-packet one-way delay: 54.340 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 191.78 Mbit/s
95th percentile per-packet one-way delay: 54.287 ms
Loss rate: 1.20%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-08-04 01:15:53
End at: 2018-08-04 01:16:23
Local clock offset: -0.12 ms
Remote clock offset: 1.139 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.82 Mbit/s
95th percentile per-packet one-way delay: 54.082 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 218.16 Mbit/s
95th percentile per-packet one-way delay: 53.624 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 231.10 Mbit/s
95th percentile per-packet one-way delay: 53.980 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 189.60 Mbit/s
95th percentile per-packet one-way delay: 59.981 ms
Loss rate: 1.24%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-08-04 01:41:32
End at: 2018-08-04 01:42:02
Local clock offset: 0.26 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.39 Mbit/s
95th percentile per-packet one-way delay: 55.919 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 55.648 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 241.26 Mbit/s
95th percentile per-packet one-way delay: 55.974 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 188.73 Mbit/s
95th percentile per-packet one-way delay: 56.435 ms
Loss rate: 1.28%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-08-04 02:07:02
End at: 2018-08-04 02:07:32
Local clock offset: 0.255 ms
Remote clock offset: 0.873 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.11 Mbit/s
95th percentile per-packet one-way delay: 53.788 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 228.62 Mbit/s
95th percentile per-packet one-way delay: 53.537 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 244.46 Mbit/s
95th percentile per-packet one-way delay: 53.795 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 162.75 Mbit/s
95th percentile per-packet one-way delay: 54.259 ms
Loss rate: 1.25%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2018-08-04 02:32:16
End at: 2018-08-04 02:32:46
Local clock offset: -0.141 ms
Remote clock offset: -0.417 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.23 Mbit/s
95th percentile per-packet one-way delay: 56.578 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 213.84 Mbit/s
95th percentile per-packet one-way delay: 56.192 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 236.15 Mbit/s
95th percentile per-packet one-way delay: 56.777 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 186.19 Mbit/s
95th percentile per-packet one-way delay: 57.141 ms
Loss rate: 1.28%
Run 5: Report of Indigo — Data Link

![Graph of throughput over time](image1)

- **Flow 1 ingress (mean 213.85 Mbit/s)**
- **Flow 1 egress (mean 213.84 Mbit/s)**
- **Flow 2 ingress (mean 236.14 Mbit/s)**
- **Flow 2 egress (mean 236.15 Mbit/s)**
- **Flow 3 ingress (mean 186.58 Mbit/s)**
- **Flow 3 egress (mean 186.19 Mbit/s)**

![Graph of packet delay over time](image2)

- **Flow 1 (95th percentile 56.19 ms)**
- **Flow 2 (95th percentile 56.78 ms)**
- **Flow 3 (95th percentile 57.14 ms)**

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Run 6: Statistics of Indigo

Start at: 2018-08-04 02:57:43
End at: 2018-08-04 02:58:13
Local clock offset: 0.239 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 457.38 Mbit/s
95th percentile per-packet one-way delay: 53.934 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 232.46 Mbit/s
95th percentile per-packet one-way delay: 53.849 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 235.93 Mbit/s
95th percentile per-packet one-way delay: 53.985 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 209.81 Mbit/s
95th percentile per-packet one-way delay: 54.400 ms
Loss rate: 1.06%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

Start at: 2018-08-04 03:23:12
End at: 2018-08-04 03:23:42
Local clock offset: 0.013 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.44 Mbit/s
95th percentile per-packet one-way delay: 55.739 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 212.48 Mbit/s
95th percentile per-packet one-way delay: 55.347 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 242.40 Mbit/s
95th percentile per-packet one-way delay: 55.792 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 186.75 Mbit/s
95th percentile per-packet one-way delay: 56.294 ms
Loss rate: 1.38%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-08-04 03:48:11
End at: 2018-08-04 03:48:41
Local clock offset: -0.145 ms
Remote clock offset: -0.366 ms

# Below is generated by plot.py at 2018-08-04 06:54:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.53 Mbit/s
95th percentile per-packet one-way delay: 55.227 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 202.83 Mbit/s
95th percentile per-packet one-way delay: 54.679 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 187.83 Mbit/s
95th percentile per-packet one-way delay: 55.394 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 146.89 Mbit/s
95th percentile per-packet one-way delay: 56.022 ms
Loss rate: 1.16%
Run 8: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 202.90 Mbit/s)
- Flow 1 egress (mean 202.83 Mbit/s)
- Flow 2 ingress (mean 187.30 Mbit/s)
- Flow 2 egress (mean 187.83 Mbit/s)
- Flow 3 ingress (mean 147.09 Mbit/s)
- Flow 3 egress (mean 146.89 Mbit/s)
Run 9: Statistics of Indigo

Start at: 2018-08-04 04:13:22
End at: 2018-08-04 04:13:52
Local clock offset: 0.002 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 456.73 Mbit/s
  95th percentile per-packet one-way delay: 63.048 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 235.46 Mbit/s
  95th percentile per-packet one-way delay: 56.886 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 234.02 Mbit/s
  95th percentile per-packet one-way delay: 62.697 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 204.66 Mbit/s
  95th percentile per-packet one-way delay: 65.336 ms
  Loss rate: 1.10%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-08-04 04:38:41
End at: 2018-08-04 04:39:11
Local clock offset: -0.026 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.41 Mbit/s
95th percentile per-packet one-way delay: 54.624 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 199.94 Mbit/s
95th percentile per-packet one-way delay: 54.457 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 246.65 Mbit/s
95th percentile per-packet one-way delay: 54.581 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 155.98 Mbit/s
95th percentile per-packet one-way delay: 55.014 ms
Loss rate: 1.20%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-08-04 00:31:23
End at: 2018-08-04 00:31:53
Local clock offset: 0.037 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 55.222 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 55.303 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 20.68 Mbit/s
95th percentile per-packet one-way delay: 55.164 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 54.910 ms
Loss rate: 2.18%
Run 1: Report of LEDBAT — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 29.11 Mbps)
  - Flow 1 egress (mean 29.00 Mbps)
  - Flow 2 ingress (mean 20.79 Mbps)
  - Flow 2 egress (mean 20.68 Mbps)
  - Flow 3 ingress (mean 10.29 Mbps)
  - Flow 3 egress (mean 10.17 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 55.30 ms)
  - Flow 2 (95th percentile 55.16 ms)
  - Flow 3 (95th percentile 54.91 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-08-04 00:56:58
End at: 2018-08-04 00:57:28
Local clock offset: -0.002 ms
Remote clock offset: 1.203 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.11 Mbit/s
95th percentile per-packet one-way delay: 54.429 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 33.62 Mbit/s
95th percentile per-packet one-way delay: 54.667 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 20.02 Mbit/s
95th percentile per-packet one-way delay: 53.931 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 9.85 Mbit/s
95th percentile per-packet one-way delay: 53.759 ms
Loss rate: 2.18%
Run 2: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per-packet one-way delay vs Time](image2)
Run 3: Statistics of LEDBAT

Start at: 2018-08-04 01:22:26
End at: 2018-08-04 01:22:56
Local clock offset: 0.026 ms
Remote clock offset: -0.187 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 51.629 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 51.832 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 51.482 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 51.704 ms
Loss rate: 2.02%
Run 3: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 12.18 Mbit/s)**
- **Flow 1 egress (mean 12.09 Mbit/s)**
- **Flow 2 ingress (mean 21.77 Mbit/s)**
- **Flow 2 egress (mean 21.66 Mbit/s)**
- **Flow 3 ingress (mean 11.69 Mbit/s)**
- **Flow 3 egress (mean 11.57 Mbit/s)**

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

- **Flow 1 (95th percentile 51.83 ms)**
- **Flow 2 (95th percentile 51.48 ms)**
- **Flow 3 (95th percentile 51.70 ms)**
Run 4: Statistics of LEDBAT

Start at: 2018-08-04 01:47:48
End at: 2018-08-04 01:48:18
Local clock offset: 0.187 ms
Remote clock offset: -0.326 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.42 Mbit/s
95th percentile per-packet one-way delay: 55.354 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 33.17 Mbit/s
95th percentile per-packet one-way delay: 55.661 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 21.07 Mbit/s
95th percentile per-packet one-way delay: 55.106 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 10.02 Mbit/s
95th percentile per-packet one-way delay: 54.805 ms
Loss rate: 2.20%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-08-04 02:13:21
End at: 2018-08-04 02:13:51
Local clock offset: 0.042 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.46 Mbit/s
95th percentile per-packet one-way delay: 54.849 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 32.90 Mbit/s
95th percentile per-packet one-way delay: 55.014 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 19.88 Mbit/s
95th percentile per-packet one-way delay: 54.636 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 10.24 Mbit/s
95th percentile per-packet one-way delay: 54.426 ms
Loss rate: 2.18%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-08-04 02:38:30
End at: 2018-08-04 02:39:00
Local clock offset: 0.102 ms
Remote clock offset: 1.243 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 52.33 Mbit/s
  95th percentile per-packet one-way delay: 53.288 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 34.56 Mbit/s
  95th percentile per-packet one-way delay: 53.333 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 22.02 Mbit/s
  95th percentile per-packet one-way delay: 52.971 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 9.61 Mbit/s
  95th percentile per-packet one-way delay: 53.936 ms
  Loss rate: 2.19%
Run 6: Report of LEDBAT — Data Link

![Data Link Throughput Graph](image1)

![Data Link Latency Graph](image2)
Run 7: Statistics of LEDBAT

Start at: 2018-08-04 03:03:59
End at: 2018-08-04 03:04:29
Local clock offset: 0.251 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.78 Mbit/s
95th percentile per-packet one-way delay: 54.241 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 33.91 Mbit/s
95th percentile per-packet one-way delay: 54.351 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 51.672 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 50.884 ms
Loss rate: 2.63%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-08-04 03:29:31
End at: 2018-08-04 03:30:01
Local clock offset: 0.036 ms
Remote clock offset: -0.21 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.92 Mbit/s
95th percentile per-packet one-way delay: 54.432 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 32.67 Mbit/s
95th percentile per-packet one-way delay: 54.524 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 21.75 Mbit/s
95th percentile per-packet one-way delay: 54.326 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 11.60 Mbit/s
95th percentile per-packet one-way delay: 51.708 ms
Loss rate: 2.04%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-08-04 03:54:11
End at: 2018-08-04 03:54:41
Local clock offset: 0.053 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.80 Mbit/s
95th percentile per-packet one-way delay: 54.335 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 32.27 Mbit/s
95th percentile per-packet one-way delay: 54.427 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 20.91 Mbit/s
95th percentile per-packet one-way delay: 54.092 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 51.648 ms
Loss rate: 2.08%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-08-04 04:19:43
End at: 2018-08-04 04:20:13
Local clock offset: 0.144 ms
Remote clock offset: -0.327 ms

# Below is generated by plot.py at 2018-08-04 06:54:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.82 Mbit/s
  95th percentile per-packet one-way delay: 55.398 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 32.34 Mbit/s
  95th percentile per-packet one-way delay: 55.395 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 21.19 Mbit/s
  95th percentile per-packet one-way delay: 55.503 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 10.59 Mbit/s
  95th percentile per-packet one-way delay: 54.969 ms
  Loss rate: 2.10%
Run 10: Report of LEDBAT — Data Link

![Graph showing network performance metrics](image)

**Throughput (Mbps)**
- Flow 1 ingress (mean 32.46 Mbps)
- Flow 1 egress (mean 32.34 Mbps)
- Flow 2 ingress (mean 21.30 Mbps)
- Flow 2 egress (mean 21.19 Mbps)
- Flow 3 ingress (mean 10.81 Mbps)
- Flow 3 egress (mean 10.59 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 55.40 ms)
- Flow 2 (95th percentile 55.50 ms)
- Flow 3 (95th percentile 54.97 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-08-04 00:48:57
End at: 2018-08-04 00:49:27
Local clock offset: 0.114 ms
Remote clock offset: 1.148 ms

# Below is generated by plot.py at 2018-08-04 06:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 715.28 Mbit/s
  95th percentile per-packet one-way delay: 181.087 ms
  Loss rate: 2.97%
-- Flow 1:
  Average throughput: 650.24 Mbit/s
  95th percentile per-packet one-way delay: 184.947 ms
  Loss rate: 2.97%
-- Flow 2:
  Average throughput: 68.15 Mbit/s
  95th percentile per-packet one-way delay: 135.524 ms
  Loss rate: 2.44%
-- Flow 3:
  Average throughput: 60.70 Mbit/s
  95th percentile per-packet one-way delay: 136.219 ms
  Loss rate: 4.23%
Run 1: Report of PCC-Allegro — Data Link

![Graph of Throughput vs Time](Image)

- **Flow 1 ingress (mean 667.88 Mbit/s)**
- **Flow 1 egress (mean 650.24 Mbit/s)**
- **Flow 2 ingress (mean 69.50 Mbit/s)**
- **Flow 2 egress (mean 68.15 Mbit/s)**
- **Flow 3 ingress (mean 62.71 Mbit/s)**
- **Flow 3 egress (mean 60.70 Mbit/s)**

![Graph of Per-packet One-Way Delay vs Time](Image)

- **Flow 1 (95th percentile 184.95 ms)**
- **Flow 2 (95th percentile 135.52 ms)**
- **Flow 3 (95th percentile 136.22 ms)**
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-04 01:14:22
End at: 2018-08-04 01:14:52
Local clock offset: 0.298 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-08-04 06:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 660.70 Mbit/s
  95th percentile per-packet one-way delay: 130.238 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 565.41 Mbit/s
  95th percentile per-packet one-way delay: 129.328 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 127.43 Mbit/s
  95th percentile per-packet one-way delay: 131.103 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 32.74 Mbit/s
  95th percentile per-packet one-way delay: 139.194 ms
  Loss rate: 1.33%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-08-04 01:40:00
End at: 2018-08-04 01:40:30
Local clock offset: 0.063 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2018-08-04 06:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 669.43 Mbit/s
95th percentile per-packet one-way delay: 172.940 ms
Loss rate: 7.54%
-- Flow 1:
Average throughput: 592.99 Mbit/s
95th percentile per-packet one-way delay: 174.720 ms
Loss rate: 7.80%
-- Flow 2:
Average throughput: 114.26 Mbit/s
95th percentile per-packet one-way delay: 155.146 ms
Loss rate: 5.46%
-- Flow 3:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 157.642 ms
Loss rate: 9.03%
Run 4: Statistics of PCC-Allegro

Start at: 2018-08-04 02:05:30
End at: 2018-08-04 02:06:00
Local clock offset: 0.01 ms
Remote clock offset: 0.98 ms

# Below is generated by plot.py at 2018-08-04 06:58:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 685.20 Mbit/s
  95th percentile per-packet one-way delay: 139.649 ms
  Loss rate: 2.36%
-- Flow 1:
  Average throughput: 642.03 Mbit/s
  95th percentile per-packet one-way delay: 141.749 ms
  Loss rate: 2.44%
-- Flow 2:
  Average throughput: 33.82 Mbit/s
  95th percentile per-packet one-way delay: 113.090 ms
  Loss rate: 0.95%
-- Flow 3:
  Average throughput: 63.41 Mbit/s
  95th percentile per-packet one-way delay: 100.952 ms
  Loss rate: 1.15%
Run 4: Report of PCC-Allegro — Data Link

![Graph of Throughput (Mbps) over time for different traffic flows]

- **Flow 1 ingress (mean 655.87 Mbps)**
- **Flow 1 egress (mean 642.03 Mbps)**
- **Flow 2 ingress (mean 33.97 Mbps)**
- **Flow 2 egress (mean 33.82 Mbps)**
- **Flow 3 ingress (mean 63.46 Mbps)**
- **Flow 3 egress (mean 63.41 Mbps)**

![Graph of Per-packet round-trip delay (ms) over time for different traffic flows]

- **Flow 1 (95th percentile 141.75 ms)**
- **Flow 2 (95th percentile 113.09 ms)**
- **Flow 3 (95th percentile 100.95 ms)**
Run 5: Statistics of PCC-Allegro

Start at: 2018-08-04 02:30:44
End at: 2018-08-04 02:31:14
Local clock offset: 0.073 ms
Remote clock offset: 1.17 ms

# Below is generated by plot.py at 2018-08-04 07:04:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 670.27 Mbit/s
95th percentile per-packet one-way delay: 159.852 ms
Loss rate: 3.20%
-- Flow 1:
Average throughput: 602.78 Mbit/s
95th percentile per-packet one-way delay: 165.393 ms
Loss rate: 3.13%
-- Flow 2:
Average throughput: 100.76 Mbit/s
95th percentile per-packet one-way delay: 142.523 ms
Loss rate: 3.78%
-- Flow 3:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 142.205 ms
Loss rate: 6.43%
Run 5: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 620.16 Mbps)
- Flow 1 egress (mean 602.78 Mbps)
- Flow 2 ingress (mean 104.20 Mbps)
- Flow 2 egress (mean 100.76 Mbps)
- Flow 3 ingress (mean 2.31 Mbps)
- Flow 3 egress (mean 2.18 Mbps)

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

- Flow 1 (95th percentile 165.39 ms)
- Flow 2 (95th percentile 142.52 ms)
- Flow 3 (95th percentile 142.21 ms)
Run 6: Statistics of PCC-Allegro

Start at: 2018-08-04 02:56:10
End at: 2018-08-04 02:56:40
Local clock offset: 0.167 ms
Remote clock offset: -0.362 ms

# Below is generated by plot.py at 2018-08-04 07:04:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 679.45 Mbit/s
  95th percentile per-packet one-way delay: 201.602 ms
  Loss rate: 1.80%
-- Flow 1:
  Average throughput: 656.60 Mbit/s
  95th percentile per-packet one-way delay: 204.316 ms
  Loss rate: 1.82%
-- Flow 2:
  Average throughput: 18.62 Mbit/s
  95th percentile per-packet one-way delay: 140.419 ms
  Loss rate: 0.94%
-- Flow 3:
  Average throughput: 32.32 Mbit/s
  95th percentile per-packet one-way delay: 139.819 ms
  Loss rate: 1.70%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-08-04 03:21:40
End at: 2018-08-04 03:22:10
Local clock offset: -0.1 ms
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2018-08-04 07:05:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 688.00 Mbit/s
95th percentile per-packet one-way delay: 130.343 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 644.32 Mbit/s
95th percentile per-packet one-way delay: 132.497 ms
Loss rate: 0.96%
-- Flow 2:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 109.221 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 121.18 Mbit/s
95th percentile per-packet one-way delay: 125.417 ms
Loss rate: 1.00%
Run 7: Report of PCC-Allegro — Data Link

[Graphs showing throughput and per-packet one-way delay]
Run 8: Statistics of PCC-Allegro

Start at: 2018-08-04 03:46:40
End at: 2018-08-04 03:47:10
Local clock offset: -0.134 ms
Remote clock offset: 1.389 ms

# Below is generated by plot.py at 2018-08-04 07:05:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 660.02 Mbit/s
95th percentile per-packet one-way delay: 153.919 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 520.44 Mbit/s
95th percentile per-packet one-way delay: 155.026 ms
Loss rate: 5.24%
-- Flow 2:
Average throughput: 209.21 Mbit/s
95th percentile per-packet one-way delay: 150.953 ms
Loss rate: 6.61%
-- Flow 3:
Average throughput: 2.28 Mbit/s
95th percentile per-packet one-way delay: 150.514 ms
Loss rate: 7.41%
Run 8: Report of PCC-Allegro — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 547.32 Mbps)
- Flow 1 egress (mean 520.44 Mbps)
- Flow 2 ingress (mean 222.88 Mbps)
- Flow 2 egress (mean 209.21 Mbps)
- Flow 3 ingress (mean 2.44 Mbps)
- Flow 3 egress (mean 2.28 Mbps)

Delay (ms):

- Flow 1 (95th percentile 155.03 ms)
- Flow 2 (95th percentile 150.95 ms)
- Flow 3 (95th percentile 150.51 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-08-04 04:11:50
End at: 2018-08-04 04:12:20
Local clock offset: -0.013 ms
Remote clock offset: 1.24 ms

# Below is generated by plot.py at 2018-08-04 07:08:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 655.91 Mbit/s
  95th percentile per-packet one-way delay: 160.878 ms
  Loss rate: 2.95%
-- Flow 1:
  Average throughput: 513.13 Mbit/s
  95th percentile per-packet one-way delay: 169.915 ms
  Loss rate: 3.42%
-- Flow 2:
  Average throughput: 159.56 Mbit/s
  95th percentile per-packet one-way delay: 140.871 ms
  Loss rate: 1.23%
-- Flow 3:
  Average throughput: 112.60 Mbit/s
  95th percentile per-packet one-way delay: 141.744 ms
  Loss rate: 1.20%
Run 10: Statistics of PCC-Allegro

Start at: 2018-08-04 04:37:10
End at: 2018-08-04 04:37:40
Local clock offset: 0.077 ms
Remote clock offset: -0.27 ms

# Below is generated by plot.py at 2018-08-04 07:09:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 651.52 Mbit/s
95th percentile per-packet one-way delay: 149.038 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 534.97 Mbit/s
95th percentile per-packet one-way delay: 150.734 ms
Loss rate: 2.08%
-- Flow 2:
Average throughput: 139.99 Mbit/s
95th percentile per-packet one-way delay: 144.498 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 72.23 Mbit/s
95th percentile per-packet one-way delay: 145.289 ms
Loss rate: 3.92%
Run 10: Report of PCC-Allegro — Data Link

---

**Diagram 1:**
Throughput (Mbps)

- **Flow 1 ingress** (mean 544.37 Mbps)
- **Flow 1 egress** (mean 534.97 Mbps)
- **Flow 2 ingress** (mean 142.02 Mbps)
- **Flow 2 egress** (mean 139.99 Mbps)
- **Flow 3 ingress** (mean 74.39 Mbps)
- **Flow 3 egress** (mean 72.23 Mbps)

**Diagram 2:**
Per-packet one-way delay (ms)

- **Flow 1** (95th percentile 150.73 ms)
- **Flow 2** (95th percentile 144.50 ms)
- **Flow 3** (95th percentile 145.29 ms)

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Run 1: Statistics of PCC-Expr

Start at: 2018-08-04 00:45:55
End at: 2018-08-04 00:46:25
Local clock offset: 0.084 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2018-08-04 07:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 559.39 Mbit/s
95th percentile per-packet one-way delay: 155.980 ms
Loss rate: 7.77%
-- Flow 1:
Average throughput: 423.83 Mbit/s
95th percentile per-packet one-way delay: 159.507 ms
Loss rate: 9.59%
-- Flow 2:
Average throughput: 179.21 Mbit/s
95th percentile per-packet one-way delay: 66.117 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 76.269 ms
Loss rate: 2.71%
Run 1: Report of PCC-Expr — Data Link

![Graph of network performance over time](image)

**Throughput (Mbps)**

- **Flow 1 Ingress (mean 467.07 Mbps)**
- **Flow 1 Egress (mean 423.83 Mbps)**
- **Flow 2 Ingress (mean 180.82 Mbps)**
- **Flow 2 Egress (mean 179.21 Mbps)**
- **Flow 3 Ingress (mean 51.45 Mbps)**
- **Flow 3 Egress (mean 50.61 Mbps)**

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

- **Flow 1 (95th percentile 159.51 ms)**
- **Flow 2 (95th percentile 66.12 ms)**
- **Flow 3 (95th percentile 76.27 ms)**

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Run 2: Statistics of PCC-Expr

Start at: 2018-08-04 01:11:30
End at: 2018-08-04 01:12:00
Local clock offset: 0.173 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-08-04 07:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 344.06 Mbit/s
95th percentile per-packet one-way delay: 155.144 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 109.58 Mbit/s
95th percentile per-packet one-way delay: 54.227 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 270.17 Mbit/s
95th percentile per-packet one-way delay: 161.560 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 168.00 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 1.12%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-08-04 01:37:00
End at: 2018-08-04 01:37:30
Local clock offset: 0.114 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-08-04 07:17:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.42 Mbit/s
95th percentile per-packet one-way delay: 135.026 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 319.46 Mbit/s
95th percentile per-packet one-way delay: 139.814 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 139.12 Mbit/s
95th percentile per-packet one-way delay: 71.565 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 65.93 Mbit/s
95th percentile per-packet one-way delay: 53.782 ms
Loss rate: 1.37%
Run 3: Report of PCC-Expr — Data Link

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

- **Flow 1**: Ingress (mean 319.21 Mb/s) and Egress (mean 319.46 Mb/s)
- **Flow 2**: Ingress (mean 140.30 Mb/s) and Egress (mean 139.12 Mb/s)
- **Flow 3**: Ingress (mean 66.15 Mb/s) and Egress (mean 65.93 Mb/s)

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

- **Flow 1**: 95th percentile 139.81 ms
- **Flow 2**: 95th percentile 71.56 ms
- **Flow 3**: 95th percentile 53.78 ms
Run 4: Statistics of PCC-Expr

Start at: 2018-08-04 02:02:35
End at: 2018-08-04 02:03:05
Local clock offset: 0.05 ms
Remote clock offset: 1.017 ms

# Below is generated by plot.py at 2018-08-04 07:17:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.32 Mbit/s
95th percentile per-packet one-way delay: 173.194 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 161.60 Mbit/s
95th percentile per-packet one-way delay: 147.816 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 293.21 Mbit/s
95th percentile per-packet one-way delay: 179.594 ms
Loss rate: 1.84%
-- Flow 3:
Average throughput: 36.60 Mbit/s
95th percentile per-packet one-way delay: 52.584 ms
Loss rate: 2.20%
Run 4: Report of PCC-Expr — Data Link

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

Start at: 2018-08-04 02:28:01
End at: 2018-08-04 02:28:31
Local clock offset: 0.077 ms
Remote clock offset: 1.172 ms

# Below is generated by plot.py at 2018-08-04 07:17:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.95 Mbit/s
95th percentile per-packet one-way delay: 218.269 ms
Loss rate: 3.77%
-- Flow 1:
Average throughput: 88.47 Mbit/s
95th percentile per-packet one-way delay: 52.384 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 87.45 Mbit/s
95th percentile per-packet one-way delay: 52.405 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 257.58 Mbit/s
95th percentile per-packet one-way delay: 261.755 ms
Loss rate: 9.36%
Run 6: Statistics of PCC-Expr

Start at: 2018-08-04 02:53:22
End at: 2018-08-04 02:53:52
Local clock offset: 0.033 ms
Remote clock offset: -0.183 ms

# Below is generated by plot.py at 2018-08-04 07:17:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 305.66 Mbit/s
  95th percentile per-packet one-way delay: 217.156 ms
  Loss rate: 5.30%
-- Flow 1:
  Average throughput: 102.63 Mbit/s
  95th percentile per-packet one-way delay: 53.681 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 280.58 Mbit/s
  95th percentile per-packet one-way delay: 220.597 ms
  Loss rate: 8.12%
-- Flow 3:
  Average throughput: 51.13 Mbit/s
  95th percentile per-packet one-way delay: 53.725 ms
  Loss rate: 1.33%
Run 6: Report of PCC-Expr — Data Link

![Graph showing data link throughput and packet interarrival delay over time]

- Flow 1 ingress (mean 102.67 Mbit/s)
- Flow 1 egress (mean 102.63 Mbit/s)
- Flow 2 ingress (mean 303.83 Mbit/s)
- Flow 2 egress (mean 280.58 Mbit/s)
- Flow 3 ingress (mean 51.28 Mbit/s)
- Flow 3 egress (mean 51.13 Mbit/s)

![Graph showing packet interarrival delay over time]

- Flow 1 (95th percentile 53.68 ms)
- Flow 2 (95th percentile 220.60 ms)
- Flow 3 (95th percentile 53.73 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-08-04 03:18:38
End at: 2018-08-04 03:19:08
Local clock offset: 0.304 ms
Remote clock offset: 0.148 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.39 Mbit/s
95th percentile per-packet one-way delay: 210.413 ms
Loss rate: 8.50%
-- Flow 1:
Average throughput: 402.33 Mbit/s
95th percentile per-packet one-way delay: 218.206 ms
Loss rate: 8.97%
-- Flow 2:
Average throughput: 202.41 Mbit/s
95th percentile per-packet one-way delay: 146.856 ms
Loss rate: 7.00%
-- Flow 3:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 146.004 ms
Loss rate: 11.46%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-08-04 03:43:58
End at: 2018-08-04 03:44:28
Local clock offset: 0.02 ms
Remote clock offset: -0.24 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 216.52 Mbit/s
95th percentile per-packet one-way delay: 53.855 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 112.22 Mbit/s
95th percentile per-packet one-way delay: 63.530 ms
Loss rate: 1.14%
-- Flow 2:
Average throughput: 108.96 Mbit/s
95th percentile per-packet one-way delay: 53.770 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 97.53 Mbit/s
95th percentile per-packet one-way delay: 53.779 ms
Loss rate: 1.32%
Run 8: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay]
Run 9: Statistics of PCC-Expr

Start at: 2018-08-04 04:08:50
End at: 2018-08-04 04:09:20
Local clock offset: -0.111 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.44 Mbit/s
95th percentile per-packet one-way delay: 240.354 ms
Loss rate: 20.99%
-- Flow 1:
Average throughput: 386.65 Mbit/s
95th percentile per-packet one-way delay: 241.485 ms
Loss rate: 23.82%
-- Flow 2:
Average throughput: 134.43 Mbit/s
95th percentile per-packet one-way delay: 156.784 ms
Loss rate: 6.03%
-- Flow 3:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 146.098 ms
Loss rate: 11.66%
Run 9: Report of PCC-Expr — Data Link

![Graph of throughput over time for different flows]

- Flow 1 ingress (mean 505.76 Mbit/s)
- Flow 1 egress (mean 386.65 Mbit/s)
- Flow 2 ingress (mean 142.28 Mbit/s)
- Flow 2 egress (mean 134.43 Mbit/s)
- Flow 3 ingress (mean 5.31 Mbit/s)
- Flow 3 egress (mean 4.74 Mbit/s)

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

- Flow 1 (95th percentile 241.49 ms)
- Flow 2 (95th percentile 156.78 ms)
- Flow 3 (95th percentile 146.10 ms)
Run 10: Statistics of PCC-Expr

Start at: 2018-08-04 04:34:19
End at: 2018-08-04 04:34:49
Local clock offset: 0.078 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.13 Mbit/s
95th percentile per-packet one-way delay: 96.491 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 98.42 Mbit/s
95th percentile per-packet one-way delay: 53.532 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 310.05 Mbit/s
95th percentile per-packet one-way delay: 121.452 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 51.54 Mbit/s
95th percentile per-packet one-way delay: 53.542 ms
Loss rate: 1.17%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 98.28 Mbit/s)
- Flow 1 egress (mean 98.42 Mbit/s)
- Flow 2 ingress (mean 310.96 Mbit/s)
- Flow 2 egress (mean 310.05 Mbit/s)
- Flow 3 ingress (mean 51.60 Mbit/s)
- Flow 3 egress (mean 51.54 Mbit/s)

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

- Flow 1 (95th percentile 33.53 ms)
- Flow 2 (95th percentile 121.45 ms)
- Flow 3 (95th percentile 53.54 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-08-04 00:47:43
End at: 2018-08-04 00:48:13
Local clock offset: -0.194 ms
Remote clock offset: -1.37 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 109.75 Mbit/s
  95th percentile per-packet one-way delay: 54.420 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 59.38 Mbit/s
  95th percentile per-packet one-way delay: 51.125 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 63.14 Mbit/s
  95th percentile per-packet one-way delay: 54.451 ms
  Loss rate: 0.97%
-- Flow 3:
  Average throughput: 19.87 Mbit/s
  95th percentile per-packet one-way delay: 51.327 ms
  Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-08-04 01:13:08
End at: 2018-08-04 01:13:38
Local clock offset: 0.093 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 109.14 Mbit/s
  95th percentile per-packet one-way delay: 53.865 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 72.70 Mbit/s
  95th percentile per-packet one-way delay: 53.880 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 46.15 Mbit/s
  95th percentile per-packet one-way delay: 50.151 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 17.70 Mbit/s
  95th percentile per-packet one-way delay: 53.175 ms
  Loss rate: 0.43%
Run 2: Report of QUIC Cubic — Data Link

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

Flow 1 ingress (mean 72.83 Mbit/s)  Flow 1 egress (mean 72.70 Mbit/s)
Flow 2 ingress (mean 46.29 Mbit/s)  Flow 2 egress (mean 46.15 Mbit/s)
Flow 3 ingress (mean 17.60 Mbit/s)  Flow 3 egress (mean 17.70 Mbit/s)
Run 3: Statistics of QUIC Cubic

Start at: 2018-08-04 01:38:46
End at: 2018-08-04 01:39:16
Local clock offset: 0.136 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.35 Mbit/s
95th percentile per-packet one-way delay: 53.481 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 68.44 Mbit/s
95th percentile per-packet one-way delay: 53.491 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 50.602 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 20.09 Mbit/s
95th percentile per-packet one-way delay: 49.825 ms
Loss rate: 4.70%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-08-04 02:04:16
End at: 2018-08-04 02:04:46
Local clock offset: -0.138 ms
Remote clock offset: 0.799 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.61 Mbit/s
95th percentile per-packet one-way delay: 52.540 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 58.98 Mbit/s
95th percentile per-packet one-way delay: 49.045 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 56.22 Mbit/s
95th percentile per-packet one-way delay: 52.411 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 21.91 Mbit/s
95th percentile per-packet one-way delay: 52.628 ms
Loss rate: 3.91%
Run 4: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 59.14 Mbit/s)**
- **Flow 1 egress (mean 58.98 Mbit/s)**
- **Flow 2 ingress (mean 56.37 Mbit/s)**
- **Flow 2 egress (mean 56.22 Mbit/s)**
- **Flow 3 ingress (mean 22.56 Mbit/s)**
- **Flow 3 egress (mean 21.91 Mbit/s)**

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

- **Flow 1 (95th percentile 49.05 ms)**
- **Flow 2 (95th percentile 52.41 ms)**
- **Flow 3 (95th percentile 52.63 ms)**
Run 5: Statistics of QUIC Cubic

Start at: 2018-08-04 02:29:30
End at: 2018-08-04 02:30:00
Local clock offset: -0.073 ms
Remote clock offset: 0.239 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 109.90 Mbit/s
  95th percentile per-packet one-way delay: 53.078 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 71.54 Mbit/s
  95th percentile per-packet one-way delay: 53.087 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 48.24 Mbit/s
  95th percentile per-packet one-way delay: 50.022 ms
  Loss rate: 0.84%
-- Flow 3:
  Average throughput: 19.10 Mbit/s
  95th percentile per-packet one-way delay: 49.471 ms
  Loss rate: 4.67%
Run 5: Report of QUIC Cubic — Data Link

![Graph 1: Throughput over time for different flows.](image1)

![Graph 2: Per-packet one-way delay for different flows.](image2)
Run 6: Statistics of QUIC Cubic

Start at: 2018-08-04 02:54:56
End at: 2018-08-04 02:55:26
Local clock offset: 0.169 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 102.95 Mbit/s
95th percentile per-packet one-way delay: 53.553 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 66.68 Mbit/s
95th percentile per-packet one-way delay: 53.563 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 45.45 Mbit/s
95th percentile per-packet one-way delay: 50.095 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 18.50 Mbit/s
95th percentile per-packet one-way delay: 53.564 ms
Loss rate: 4.88%
Run 6: Report of QUIC Cubic — Data Link

[Graph showing throughput over time for different flows, with labels indicating mean rates for ingress and egress for each flow.

[Graph showing per-packet one-way delay over time for different flows, with labels indicating 95th percentile delay.]
Run 7: Statistics of QUIC Cubic

Start at: 2018-08-04 03:20:25
End at: 2018-08-04 03:20:55
Local clock offset: 0.14 ms
Remote clock offset: -1.552 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 105.78 Mbit/s
  95th percentile per-packet one-way delay: 55.071 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 71.51 Mbit/s
  95th percentile per-packet one-way delay: 51.740 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 41.45 Mbit/s
  95th percentile per-packet one-way delay: 55.093 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 19.58 Mbit/s
  95th percentile per-packet one-way delay: 55.128 ms
  Loss rate: 0.58%
Run 7: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps)**

- **Flow 1 ingress (mean 71.64 Mbps)**
- **Flow 1 egress (mean 71.51 Mbps)**
- **Flow 2 ingress (mean 41.67 Mbps)**
- **Flow 2 egress (mean 41.45 Mbps)**
- **Flow 3 ingress (mean 19.49 Mbps)**
- **Flow 3 egress (mean 19.58 Mbps)**

**Packet one-way delay (ms)**

- **Flow 1 (95th percentile 51.74 ms)**
- **Flow 2 (95th percentile 55.09 ms)**
- **Flow 3 (95th percentile 55.13 ms)**
Run 8: Statistics of QUIC Cubic

Start at: 2018-08-04 03:45:25
End at: 2018-08-04 03:45:55
Local clock offset: 0.053 ms
Remote clock offset: 0.961 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 114.86 Mbit/s
  95th percentile per-packet one-way delay: 52.533 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 71.02 Mbit/s
  95th percentile per-packet one-way delay: 52.526 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 53.84 Mbit/s
  95th percentile per-packet one-way delay: 52.546 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 24.73 Mbit/s
  95th percentile per-packet one-way delay: 52.467 ms
  Loss rate: 0.40%
Run 8: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet one-way delay over time for flows 1, 2, and 3 with their respective ingress and egress rates.]

- Flow 1 ingress (mean 71.14 Mbit/s)
- Flow 1 egress (mean 71.02 Mbit/s)
- Flow 2 ingress (mean 54.02 Mbit/s)
- Flow 2 egress (mean 53.84 Mbit/s)
- Flow 3 ingress (mean 24.56 Mbit/s)
- Flow 3 egress (mean 24.73 Mbit/s)
Run 9: Statistics of QUIC Cubic

Start at: 2018-08-04 04:10:36
End at: 2018-08-04 04:11:06
Local clock offset: 0.062 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 110.41 Mbit/s
  95th percentile per-packet one-way delay: 50.611 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 73.48 Mbit/s
  95th percentile per-packet one-way delay: 50.473 ms
  Loss rate: 0.50%
-- Flow 2:
  Average throughput: 47.56 Mbit/s
  95th percentile per-packet one-way delay: 50.630 ms
  Loss rate: 0.85%
-- Flow 3:
  Average throughput: 16.16 Mbit/s
  95th percentile per-packet one-way delay: 50.654 ms
  Loss rate: 0.56%
Run 9: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.
Flow 1 ingress (mean 73.60 Mbit/s)
Flow 1 egress (mean 73.48 Mbit/s)
Flow 2 ingress (mean 47.72 Mbit/s)
Flow 2 egress (mean 47.56 Mbit/s)
Flow 3 ingress (mean 16.89 Mbit/s)
Flow 3 egress (mean 16.16 Mbit/s)
Run 10: Statistics of QUIC Cubic

Start at: 2018-08-04 04:35:55
End at: 2018-08-04 04:36:25
Local clock offset: -0.01 ms
Remote clock offset: -0.182 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.95 Mbit/s
95th percentile per-packet one-way delay: 53.619 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 71.88 Mbit/s
95th percentile per-packet one-way delay: 53.628 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 40.43 Mbit/s
95th percentile per-packet one-way delay: 50.050 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 25.05 Mbit/s
95th percentile per-packet one-way delay: 53.090 ms
Loss rate: 3.12%
Run 10: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 71.96 Mbit/s)
- Flow 1 egress (mean 71.88 Mbit/s)
- Flow 2 ingress (mean 40.64 Mbit/s)
- Flow 2 egress (mean 40.43 Mbit/s)
- Flow 3 ingress (mean 25.59 Mbit/s)
- Flow 3 egress (mean 25.05 Mbit/s)
Run 1: Statistics of SCReAM

Start at: 2018-08-04 00:32:34
End at: 2018-08-04 00:33:04
Local clock offset: -0.003 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.878 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.880 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.882 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.069 ms
  Loss rate: 1.10%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-08-04 00:58:10
End at: 2018-08-04 00:58:40
Local clock offset: -0.039 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.600 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.558 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.618 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.918 ms
Loss rate: 1.09%
Run 2: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mb/s)
- Flow 1 egress (mean 0.21 Mb/s)
- Flow 2 ingress (mean 0.21 Mb/s)
- Flow 2 egress (mean 0.21 Mb/s)
- Flow 3 ingress (mean 0.22 Mb/s)
- Flow 3 egress (mean 0.22 Mb/s)

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

- Flow 1 (95th percentile 53.56 ms)
- Flow 2 (95th percentile 53.62 ms)
- Flow 3 (95th percentile 49.92 ms)
Run 3: Statistics of SCReAM

Start at: 2018-08-04 01:23:37  
End at: 2018-08-04 01:24:07  
Local clock offset: -0.183 ms  
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s  
  95th percentile per-packet one-way delay: 50.559 ms  
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s  
  95th percentile per-packet one-way delay: 50.574 ms  
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.21 Mbit/s  
  95th percentile per-packet one-way delay: 50.332 ms  
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s  
  95th percentile per-packet one-way delay: 49.693 ms  
  Loss rate: 1.09%
Run 3: Report of SCReAM — Data Link

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

<table>
<thead>
<tr>
<th>Flow</th>
<th>Ingress (mean)</th>
<th>Egress (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.22 Mbit/s</td>
<td>0.22 Mbit/s</td>
</tr>
<tr>
<td>2</td>
<td>0.21 Mbit/s</td>
<td>0.21 Mbit/s</td>
</tr>
<tr>
<td>3</td>
<td>0.22 Mbit/s</td>
<td>0.22 Mbit/s</td>
</tr>
</tbody>
</table>

Flow 1 (95th percentile 50.57 ms)  Flow 2 (95th percentile 50.33 ms)  Flow 3 (95th percentile 49.69 ms)
Run 4: Statistics of SCReAM

Start at: 2018-08-04 01:49:00
End at: 2018-08-04 01:49:30
Local clock offset: 0.18 ms
Remote clock offset: -0.228 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.848 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.247 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.872 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.174 ms
Loss rate: 1.09%
Run 4: Report of SCReAM — Data Link

![Graph 1](Image1)

![Graph 2](Image2)
Run 5: Statistics of SCReAM

Start at: 2018-08-04 02:14:33
End at: 2018-08-04 02:15:03
Local clock offset: -0.024 ms
Remote clock offset: -0.244 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
--- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.746 ms
Loss rate: 0.58%
--- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.585 ms
Loss rate: 0.38%
--- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.765 ms
Loss rate: 0.61%
--- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.024 ms
Loss rate: 1.09%
Run 5: Report of SCReAM — Data Link

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

![Graph 2: Per-packet core vs. delay (ms)](image2)
Run 6: Statistics of SCReAM

Start at: 2018-08-04 02:39:41
End at: 2018-08-04 02:40:11
Local clock offset: -0.071 ms
Remote clock offset: -0.351 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.898 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.912 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.851 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.766 ms
  Loss rate: 1.09%
Run 7: Statistics of SCReAM

Start at: 2018-08-04 03:05:11
End at: 2018-08-04 03:05:41
Local clock offset: 0.163 ms
Remote clock offset: 1.379 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 52.364 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 52.246 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 52.379 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 48.599 ms
Loss rate: 1.08%
Run 7: Report of SCReAM — Data Link

Throughput (Mbps/s) vs Time (s)

- Flow 1 ingress (mean 0.21 Mbps/s)
- Flow 1 egress (mean 0.21 Mbps/s)
- Flow 2 ingress (mean 0.21 Mbps/s)
- Flow 2 egress (mean 0.21 Mbps/s)
- Flow 3 ingress (mean 0.22 Mbps/s)
- Flow 3 egress (mean 0.22 Mbps/s)

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

- Flow 1 (95th percentile 52.25 ms)
- Flow 2 (95th percentile 52.38 ms)
- Flow 3 (95th percentile 48.60 ms)
Run 8: Statistics of SCReAM

Start at: 2018-08-04 03:30:43
End at: 2018-08-04 03:31:13
Local clock offset: 0.107 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.620 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.640 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.559 ms
Loss rate: 1.09%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-08-04 03:55:22
End at: 2018-08-04 03:55:52
Local clock offset: 0.235 ms
Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.603 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.325 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.596 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.717 ms
  Loss rate: 1.08%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-08-04 04:20:55
End at: 2018-08-04 04:21:25
Local clock offset: 0.035 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.556 ms
Loss rate: 0.52%

-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.568 ms
Loss rate: 0.26%

-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.497 ms
Loss rate: 0.62%

-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.186 ms
Loss rate: 1.09%
Run 10: Report of SCReAM — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 1: Statistics of Sprout

Start at: 2018-08-04 00:52:04
End at: 2018-08-04 00:52:34
Local clock offset: 0.193 ms
Remote clock offset: -1.473 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 52.273 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 7.62 Mbit/s
95th percentile per-packet one-way delay: 52.178 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 6.59 Mbit/s
95th percentile per-packet one-way delay: 55.282 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 52.086 ms
Loss rate: 1.08%
Run 1: Report of Sprout — Data Link

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

- **Throughput (Mbps/s):**
  - Flow 1 ingress (mean 7.59 Mbps/s)
  - Flow 1 egress (mean 7.62 Mbps/s)
  - Flow 2 ingress (mean 6.62 Mbps/s)
  - Flow 2 egress (mean 6.59 Mbps/s)
  - Flow 3 ingress (mean 5.66 Mbps/s)
  - Flow 3 egress (mean 5.66 Mbps/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 52.18 ms)
  - Flow 2 (95th percentile 55.28 ms)
  - Flow 3 (95th percentile 52.09 ms)
Run 2: Statistics of Sprout

Start at: 2018-08-04 01:17:29
End at: 2018-08-04 01:17:59
Local clock offset: -0.138 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.53 Mbit/s
95th percentile per-packet one-way delay: 54.008 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 53.999 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 54.056 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 53.895 ms
Loss rate: 1.68%
Run 2: Report of Sprout — Data Link

Throughput plot:

- Flow 1 ingress (mean 4.56 Mbit/s)
- Flow 1 egress (mean 4.56 Mbit/s)
- Flow 2 ingress (mean 7.18 Mbit/s)
- Flow 2 egress (mean 7.16 Mbit/s)
- Flow 3 ingress (mean 6.85 Mbit/s)
- Flow 3 egress (mean 6.80 Mbit/s)

Delay plot:

- Flow 1 (95th percentile 54.00 ms)
- Flow 2 (95th percentile 54.06 ms)
- Flow 3 (95th percentile 53.90 ms)
Run 3: Statistics of Sprout

Start at: 2018-08-04 01:43:09
End at: 2018-08-04 01:43:39
Local clock offset: 0.059 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.20 Mbit/s
95th percentile per-packet one-way delay: 54.089 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 54.150 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 1.83 Mbit/s
95th percentile per-packet one-way delay: 53.740 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 50.748 ms
Loss rate: 1.15%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-08-04 02:08:37
End at: 2018-08-04 02:09:07
Local clock offset: 0.029 ms
Remote clock offset: -1.449 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 55.596 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 5.71 Mbit/s
95th percentile per-packet one-way delay: 55.575 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 55.669 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 4.62 Mbit/s
95th percentile per-packet one-way delay: 55.495 ms
Loss rate: 1.80%
Run 4: Report of Sprout — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 5.72 Mbps)
- Flow 1 egress (mean 5.71 Mbps)
- Flow 2 ingress (mean 7.25 Mbps)
- Flow 2 egress (mean 7.23 Mbps)
- Flow 3 ingress (mean 4.65 Mbps)
- Flow 3 egress (mean 4.62 Mbps)

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

- Flow 1 (95th percentile 55.56 ms)
- Flow 2 (95th percentile 55.67 ms)
- Flow 3 (95th percentile 55.49 ms)
Run 5: Statistics of Sprout

Start at: 2018-08-04 02:33:51
End at: 2018-08-04 02:34:21
Local clock offset: -0.142 ms
Remote clock offset: -0.43 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.99 Mbit/s
95th percentile per-packet one-way delay: 54.510 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 54.554 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 5.16 Mbit/s
95th percentile per-packet one-way delay: 54.476 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 54.373 ms
Loss rate: 1.33%
Run 5: Report of Sprout — Data Link

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**Graph 1:**
Throughput vs. Time (s) for
- **Flow 1 ingress** (mean 7.35 Mbit/s)
- **Flow 1 egress** (mean 7.37 Mbit/s)
- **Flow 2 ingress** (mean 5.16 Mbit/s)
- **Flow 2 egress** (mean 5.16 Mbit/s)
- **Flow 3 ingress** (mean 6.74 Mbit/s)
- **Flow 3 egress** (mean 6.70 Mbit/s)

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**Graph 2:**
Packet delay vs. Time (s) for
- **Flow 1** (95th percentile 54.55 ms)
- **Flow 2** (95th percentile 54.48 ms)
- **Flow 3** (95th percentile 54.37 ms)
Run 6: Statistics of Sprout

Start at: 2018-08-04 02:59:19
End at: 2018-08-04 02:59:49
Local clock offset: 0.296 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 54.550 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 5.33 Mbit/s
95th percentile per-packet one-way delay: 54.686 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 54.415 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 54.458 ms
Loss rate: 0.61%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-08-04 03:24:47
End at: 2018-08-04 03:25:17
Local clock offset: 0.137 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 54.372 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 54.385 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 54.425 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 6.16 Mbit/s
95th percentile per-packet one-way delay: 54.126 ms
Loss rate: 0.86%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.24 Mbps/s)
- Flow 1 egress (mean 7.24 Mbps/s)
- Flow 2 ingress (mean 6.91 Mbps/s)
- Flow 2 egress (mean 6.90 Mbps/s)
- Flow 3 ingress (mean 6.16 Mbps/s)
- Flow 3 egress (mean 6.16 Mbps/s)

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

- Flow 1 (95th percentile 54.30 ms)
- Flow 2 (95th percentile 54.42 ms)
- Flow 3 (95th percentile 54.13 ms)
Run 8: Statistics of Sprout

Start at: 2018-08-04 03:49:43
End at: 2018-08-04 03:50:13
Local clock offset: 0.118 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.33 Mbit/s
95th percentile per-packet one-way delay: 54.288 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 54.304 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 54.287 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 53.900 ms
Loss rate: 1.98%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-08-04 04:14:59
End at: 2018-08-04 04:15:29
Local clock offset: -0.069 ms
Remote clock offset: 0.251 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.57 Mbit/s
95th percentile per-packet one-way delay: 53.897 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 53.801 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 53.944 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 53.958 ms
Loss rate: 1.53%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-08-04 04:40:15
End at: 2018-08-04 04:40:45
Local clock offset: -0.063 ms
Remote clock offset: 1.063 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.19 Mbit/s
95th percentile per-packet one-way delay: 53.182 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 53.165 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 6.15 Mbit/s
95th percentile per-packet one-way delay: 53.232 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 2.73 Mbit/s
95th percentile per-packet one-way delay: 53.085 ms
Loss rate: 4.16%
Run 10: Report of Sprout — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 7.21 Mbps)
- Flow 1 egress (mean 7.21 Mbps)
- Flow 2 ingress (mean 6.15 Mbps)
- Flow 2 egress (mean 6.15 Mbps)
- Flow 3 ingress (mean 2.82 Mbps)
- Flow 3 egress (mean 2.73 Mbps)

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Run 1: Statistics of TaoVA-100x

Start at: 2018-08-04 00:30:01
End at: 2018-08-04 00:30:31
Local clock offset: 0.027 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-08-04 07:26:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 170.81 Mbit/s
  95th percentile per-packet one-way delay: 53.589 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 94.50 Mbit/s
  95th percentile per-packet one-way delay: 53.607 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 194.39 Mbit/s
  95th percentile per-packet one-way delay: 53.580 ms
  Loss rate: 0.80%
-- Flow 3:
  Average throughput: 36.88 Mbit/s
  95th percentile per-packet one-way delay: 53.600 ms
  Loss rate: 0.17%
Run 1: Report of TaoVA-100x — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 94.50 Mbps)
- Flow 1 egress (mean 94.50 Mbps)
- Flow 2 ingress (mean 194.93 Mbps)
- Flow 2 egress (mean 194.39 Mbps)
- Flow 3 ingress (mean 36.56 Mbps)
- Flow 3 egress (mean 36.88 Mbps)

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

- Flow 1 (95th percentile 53.61 ms)
- Flow 2 (95th percentile 53.58 ms)
- Flow 3 (95th percentile 53.60 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-08-04 00:55:22
End at: 2018-08-04 00:55:52
Local clock offset: 0.026 ms
Remote clock offset: -0.306 ms

# Below is generated by plot.py at 2018-08-04 07:31:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 331.28 Mbit/s
  95th percentile per-packet one-way delay: 53.998 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 178.01 Mbit/s
  95th percentile per-packet one-way delay: 51.344 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 234.06 Mbit/s
  95th percentile per-packet one-way delay: 54.038 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 229.37 Mbit/s
  95th percentile per-packet one-way delay: 50.205 ms
  Loss rate: 0.98%
Run 2: Report of TaoVA-100x — Data Link

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**Throughput vs Time**

- Flow 1 ingress (mean 178.35 Mbit/s)
- Flow 1 egress (mean 178.01 Mbit/s)
- Flow 2 ingress (mean 234.11 Mbit/s)
- Flow 2 egress (mean 234.06 Mbit/s)
- Flow 3 ingress (mean 229.29 Mbit/s)
- Flow 3 egress (mean 229.37 Mbit/s)

**Packet Latency**

- Flow 1 (95th percentile 51.34 ms)
- Flow 2 (95th percentile 54.04 ms)
- Flow 3 (95th percentile 56.20 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-08-04 01:20:48
End at: 2018-08-04 01:21:18
Local clock offset: 0.164 ms
Remote clock offset: -1.382 ms

# Below is generated by plot.py at 2018-08-04 07:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 348.71 Mbit/s
95th percentile per-packet one-way delay: 55.164 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 140.86 Mbit/s
95th percentile per-packet one-way delay: 55.202 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 182.62 Mbit/s
95th percentile per-packet one-way delay: 51.641 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 261.52 Mbit/s
95th percentile per-packet one-way delay: 51.522 ms
Loss rate: 1.07%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-08-04 01:46:27
End at: 2018-08-04 01:46:57
Local clock offset: -0.035 ms
Remote clock offset: -0.672 ms

# Below is generated by plot.py at 2018-08-04 07:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.30 Mbit/s
95th percentile per-packet one-way delay: 54.056 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 8.58 Mbit/s
95th percentile per-packet one-way delay: 54.102 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.47 Mbit/s
95th percentile per-packet one-way delay: 54.055 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 143.50 Mbit/s
95th percentile per-packet one-way delay: 54.036 ms
Loss rate: 0.04%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-08-04 02:11:59
End at: 2018-08-04 02:12:29
Local clock offset: 0.034 ms
Remote clock offset: -1.698 ms

# Below is generated by plot.py at 2018-08-04 07:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.70 Mbit/s
95th percentile per-packet one-way delay: 59.476 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 18.65 Mbit/s
95th percentile per-packet one-way delay: 55.038 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 107.58 Mbit/s
95th percentile per-packet one-way delay: 55.109 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 210.60 Mbit/s
95th percentile per-packet one-way delay: 62.037 ms
Loss rate: 1.37%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-08-04 02:37:11
End at: 2018-08-04 02:37:41
Local clock offset: 0.056 ms
Remote clock offset: -0.457 ms

# Below is generated by plot.py at 2018-08-04 07:31:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.02 Mbit/s
95th percentile per-packet one-way delay: 54.047 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 13.52 Mbit/s
95th percentile per-packet one-way delay: 53.975 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 127.59 Mbit/s
95th percentile per-packet one-way delay: 54.056 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 98.66 Mbit/s
95th percentile per-packet one-way delay: 54.035 ms
Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 13.51 Mb/s)
- Flow 1 egress (mean 13.52 Mb/s)
- Flow 2 ingress (mean 128.35 Mb/s)
- Flow 2 egress (mean 127.59 Mb/s)
- Flow 3 ingress (mean 98.69 Mb/s)
- Flow 3 egress (mean 98.66 Mb/s)

Packet delay (ms):
- Flow 1 (95th percentile 53.98 ms)
- Flow 2 (95th percentile 54.06 ms)
- Flow 3 (95th percentile 54.03 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-08-04 03:02:36
End at: 2018-08-04 03:03:06
Local clock offset: 0.279 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-08-04 07:31:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 173.87 Mbit/s
  95th percentile per-packet one-way delay: 53.801 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 48.52 Mbit/s
  95th percentile per-packet one-way delay: 53.616 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 66.08 Mbit/s
  95th percentile per-packet one-way delay: 53.906 ms
  Loss rate: 2.15%
-- Flow 3:
  Average throughput: 246.59 Mbit/s
  95th percentile per-packet one-way delay: 53.772 ms
  Loss rate: 0.97%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-08-04 03:28:04
End at: 2018-08-04 03:28:34
Local clock offset: -0.017 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-08-04 07:32:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.82 Mbit/s
95th percentile per-packet one-way delay: 53.454 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 196.50 Mbit/s
95th percentile per-packet one-way delay: 53.453 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 25.64 Mbit/s
95th percentile per-packet one-way delay: 53.459 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 53.468 ms
Loss rate: 0.93%
Run 8: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 196.72 Mbit/s)
- Flow 1 egress (mean 196.50 Mbit/s)
- Flow 2 ingress (mean 25.58 Mbit/s)
- Flow 2 egress (mean 25.64 Mbit/s)
- Flow 3 ingress (mean 6.84 Mbit/s)
- Flow 3 egress (mean 6.85 Mbit/s)
Run 9: Statistics of TaoVA-100x

Start at: 2018-08-04 03:53:00
End at: 2018-08-04 03:53:30
Local clock offset: 0.003 ms
Remote clock offset: 1.145 ms

# Below is generated by plot.py at 2018-08-04 07:32:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.80 Mbit/s
95th percentile per-packet one-way delay: 53.500 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 23.28 Mbit/s
95th percentile per-packet one-way delay: 61.494 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 13.83 Mbit/s
95th percentile per-packet one-way delay: 52.450 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.47 Mbit/s
95th percentile per-packet one-way delay: 52.458 ms
Loss rate: 0.78%
Run 9: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 23.24 Mbps)
  - Flow 1 egress (mean 23.28 Mbps)
  - Flow 2 ingress (mean 14.03 Mbps)
  - Flow 2 egress (mean 13.83 Mbps)
  - Flow 3 ingress (mean 19.42 Mbps)
  - Flow 3 egress (mean 19.47 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 61.49 ms)
  - Flow 2 (95th percentile 52.45 ms)
  - Flow 3 (95th percentile 52.46 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-08-04 04:18:13
End at: 2018-08-04 04:18:43
Local clock offset: -0.106 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-08-04 07:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 245.42 Mbit/s
95th percentile per-packet one-way delay: 53.627 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 93.07 Mbit/s
95th percentile per-packet one-way delay: 50.557 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 115.01 Mbit/s
95th percentile per-packet one-way delay: 53.657 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 229.95 Mbit/s
95th percentile per-packet one-way delay: 50.140 ms
Loss rate: 1.22%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-08-04 00:44:39
End at: 2018-08-04 00:45:09
Local clock offset: 0.006 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2018-08-04 07:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.56 Mbit/s
95th percentile per-packet one-way delay: 59.857 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 48.34 Mbit/s
95th percentile per-packet one-way delay: 56.691 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 83.40 Mbit/s
95th percentile per-packet one-way delay: 57.322 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 205.36 Mbit/s
95th percentile per-packet one-way delay: 60.685 ms
Loss rate: 1.23%
Run 1: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):** The top graph displays the throughput over time for different flows, with peaks and valleys indicating variance.
  - Flow 1 ingress (mean 48.33 Mbps)
  - Flow 1 egress (mean 48.34 Mbps)
  - Flow 2 ingress (mean 83.39 Mbps)
  - Flow 2 egress (mean 83.40 Mbps)
  - Flow 3 ingress (mean 205.74 Mbps)
  - Flow 3 egress (mean 205.36 Mbps)

- **Per-packet one-way delay (ms):** The bottom graph shows the per-packet one-way delay for each flow, with spikes indicating latency.
  - Flow 1 (95th percentile 56.69 ms)
  - Flow 2 (95th percentile 57.32 ms)
  - Flow 3 (95th percentile 60.69 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-08-04 01:10:11
End at: 2018-08-04 01:10:41
Local clock offset: 0.106 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-08-04 07:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.30 Mbit/s
95th percentile per-packet one-way delay: 57.616 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 21.35 Mbit/s
95th percentile per-packet one-way delay: 54.704 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 222.61 Mbit/s
95th percentile per-packet one-way delay: 57.920 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 139.45 Mbit/s
95th percentile per-packet one-way delay: 56.089 ms
Loss rate: 1.15%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 21.35 Mb/s)
- Flow 1 egress (mean 21.35 Mb/s)
- Flow 2 ingress (mean 222.73 Mb/s)
- Flow 2 egress (mean 222.61 Mb/s)
- Flow 3 ingress (mean 139.65 Mb/s)
- Flow 3 egress (mean 139.45 Mb/s)
Run 3: Statistics of TCP Vegas

Start at: 2018-08-04 01:35:39
End at: 2018-08-04 01:36:09
Local clock offset: 0.059 ms
Remote clock offset: 1.03 ms

# Below is generated by plot.py at 2018-08-04 07:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.25 Mbit/s
95th percentile per-packet one-way delay: 59.642 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 215.55 Mbit/s
95th percentile per-packet one-way delay: 59.812 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 31.14 Mbit/s
95th percentile per-packet one-way delay: 57.255 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 57.55 Mbit/s
95th percentile per-packet one-way delay: 56.541 ms
Loss rate: 1.03%
Run 3: Report of TCP Vegas — Data Link

![Data Link Throughput Graph](image1)

![Data Link Delay Graph](image2)

Flow 1 ingress (mean 215.62 Mbit/s)  
Flow 1 egress (mean 215.55 Mbit/s)  
Flow 2 ingress (mean 31.10 Mbit/s)  
Flow 2 egress (mean 31.14 Mbit/s)  
Flow 3 ingress (mean 57.52 Mbit/s)  
Flow 3 egress (mean 57.55 Mbit/s)

Flow 1 (95th percentile 59.81 ms)  
Flow 2 (95th percentile 57.26 ms)  
Flow 3 (95th percentile 56.54 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-08-04 02:01:16
End at: 2018-08-04 02:01:46
Local clock offset: 0.014 ms
Remote clock offset: 1.212 ms

# Below is generated by plot.py at 2018-08-04 07:34:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.93 Mbit/s
95th percentile per-packet one-way delay: 53.353 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 141.76 Mbit/s
95th percentile per-packet one-way delay: 53.183 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 89.11 Mbit/s
95th percentile per-packet one-way delay: 53.194 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 103.17 Mbit/s
95th percentile per-packet one-way delay: 54.790 ms
Loss rate: 1.12%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-08-04 02:26:41
End at: 2018-08-04 02:27:11
Local clock offset: -0.047 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-08-04 07:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.68 Mbit/s
95th percentile per-packet one-way delay: 57.351 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 54.435 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 225.25 Mbit/s
95th percentile per-packet one-way delay: 57.816 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 5.72 Mbit/s
95th percentile per-packet one-way delay: 53.288 ms
Loss rate: 2.13%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-08-04 02:52:06
End at: 2018-08-04 02:52:36
Local clock offset: 0.285 ms
Remote clock offset: -0.557 ms

# Below is generated by plot.py at 2018-08-04 07:35:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 148.57 Mbit/s
95th percentile per-packet one-way delay: 60.946 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 18.37 Mbit/s
95th percentile per-packet one-way delay: 56.003 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 193.45 Mbit/s
95th percentile per-packet one-way delay: 61.070 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 54.442 ms
Loss rate: 2.23%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 18.38 Mbit/s)
- Flow 1 egress (mean 18.37 Mbit/s)
- Flow 2 ingress (mean 192.96 Mbit/s)
- Flow 2 egress (mean 193.45 Mbit/s)
- Flow 3 ingress (mean 5.45 Mbit/s)
- Flow 3 egress (mean 5.39 Mbit/s)

![Graph showing packet delay over time.]

- Flow 1 (95th percentile 56.00 ms)
- Flow 2 (95th percentile 61.07 ms)
- Flow 3 (95th percentile 54.44 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-08-04 03:17:17
End at: 2018-08-04 03:17:47
Local clock offset: 0.106 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2018-08-04 07:35:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 250.69 Mbit/s
  95th percentile per-packet one-way delay: 61.076 ms
  Loss rate: 0.68%
 -- Flow 1:
  Average throughput: 39.73 Mbit/s
  95th percentile per-packet one-way delay: 56.638 ms
  Loss rate: 0.26%
 -- Flow 2:
  Average throughput: 216.86 Mbit/s
  95th percentile per-packet one-way delay: 60.942 ms
  Loss rate: 0.55%
 -- Flow 3:
  Average throughput: 202.42 Mbit/s
  95th percentile per-packet one-way delay: 61.874 ms
  Loss rate: 1.19%
Run 7: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-08-04 03:42:40
End at: 2018-08-04 03:43:10
Local clock offset: -0.023 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-08-04 07:35:25
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 183.05 Mbit/s
   95th percentile per-packet one-way delay: 54.289 ms
   Loss rate: 0.49%
-- Flow 1:
   Average throughput: 110.57 Mbit/s
   95th percentile per-packet one-way delay: 54.233 ms
   Loss rate: 0.31%
-- Flow 2:
   Average throughput: 53.53 Mbit/s
   95th percentile per-packet one-way delay: 54.063 ms
   Loss rate: 0.42%
-- Flow 3:
   Average throughput: 111.76 Mbit/s
   95th percentile per-packet one-way delay: 54.590 ms
   Loss rate: 1.08%
Run 8: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 110.53 Mbit/s) vs. egress (mean 110.57 Mbit/s)
- Flow 2 ingress (mean 53.47 Mbit/s) vs. egress (mean 53.55 Mbit/s)
- Flow 3 ingress (mean 111.83 Mbit/s) vs. egress (mean 111.76 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-08-04 04:07:31
End at: 2018-08-04 04:08:01
Local clock offset: 0.044 ms
Remote clock offset: -0.5 ms

# Below is generated by plot.py at 2018-08-04 07:35:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.65 Mbit/s
95th percentile per-packet one-way delay: 54.764 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 90.68 Mbit/s
95th percentile per-packet one-way delay: 54.492 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 116.39 Mbit/s
95th percentile per-packet one-way delay: 54.964 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 123.04 Mbit/s
95th percentile per-packet one-way delay: 55.135 ms
Loss rate: 1.12%
Run 9: Report of TCP Vegas — Data Link

![Graph: Throughput vs Time](image1)

- Flow 1 ingress (mean 90.68 Mbit/s)
- Flow 1 egress (mean 90.68 Mbit/s)
- Flow 2 ingress (mean 116.37 Mbit/s)
- Flow 2 egress (mean 116.39 Mbit/s)
- Flow 3 ingress (mean 123.50 Mbit/s)
- Flow 3 egress (mean 123.04 Mbit/s)

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

- Flow 1 (95th percentile 54.49 ms)
- Flow 2 (95th percentile 54.96 ms)
- Flow 3 (95th percentile 55.13 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-08-04 04:33:03
End at: 2018-08-04 04:33:33
Local clock offset: 0.055 ms
Remote clock offset: -1.413 ms

# Below is generated by plot.py at 2018-08-04 07:35:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.11 Mbit/s
95th percentile per-packet one-way delay: 55.383 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 101.78 Mbit/s
95th percentile per-packet one-way delay: 55.409 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 55.520 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 75.93 Mbit/s
95th percentile per-packet one-way delay: 52.388 ms
Loss rate: 1.13%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 101.73 Mbit/s)
- Flow 1 egress (mean 101.78 Mbit/s)
- Flow 2 ingress (mean 66.78 Mbit/s)
- Flow 2 egress (mean 66.72 Mbit/s)
- Flow 3 ingress (mean 76.02 Mbit/s)
- Flow 3 egress (mean 75.99 Mbit/s)

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

- Flow 1 (95th percentile 55.41 ms)
- Flow 2 (95th percentile 55.52 ms)
- Flow 3 (95th percentile 52.39 ms)
Run 1: Statistics of Verus

Start at: 2018-08-04 00:36:57
End at: 2018-08-04 00:37:27
Local clock offset: -0.012 ms
Remote clock offset: -1.566 ms

# Below is generated by plot.py at 2018-08-04 07:40:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.37 Mbit/s
95th percentile per-packet one-way delay: 105.707 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 242.17 Mbit/s
95th percentile per-packet one-way delay: 103.072 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 216.68 Mbit/s
95th percentile per-packet one-way delay: 109.808 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 149.51 Mbit/s
95th percentile per-packet one-way delay: 100.800 ms
Loss rate: 1.47%
Run 1: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 244.52 Mbps)  Flow 1 egress (mean 242.17 Mbps)
Flow 2 ingress (mean 217.00 Mbps)  Flow 2 egress (mean 216.68 Mbps)
Flow 3 ingress (mean 151.64 Mbps)  Flow 3 egress (mean 149.51 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 103.07 ms)  Flow 2 (95th percentile 109.81 ms)  Flow 3 (95th percentile 100.80 ms)
Run 2: Statistics of Verus

Start at: 2018-08-04 01:02:30
End at: 2018-08-04 01:03:00
Local clock offset: -0.015 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-08-04 07:40:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 405.52 Mbit/s
95th percentile per-packet one-way delay: 133.963 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 265.87 Mbit/s
95th percentile per-packet one-way delay: 139.399 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 158.22 Mbit/s
95th percentile per-packet one-way delay: 122.844 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 105.62 Mbit/s
95th percentile per-packet one-way delay: 138.163 ms
Loss rate: 2.86%
Run 2: Report of Verus — Data Link

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

- **Flow 1 ingress** (mean 267.80 Mbit/s)
- **Flow 1 egress** (mean 265.87 Mbit/s)
- **Flow 2 ingress** (mean 159.64 Mbit/s)
- **Flow 2 egress** (mean 158.22 Mbit/s)
- **Flow 3 ingress** (mean 107.46 Mbit/s)
- **Flow 3 egress** (mean 105.62 Mbit/s)
Run 3: Statistics of Verus

Start at: 2018-08-04 01:27:56
End at: 2018-08-04 01:28:26
Local clock offset: 0.135 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-08-04 07:40:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.52 Mbit/s
95th percentile per-packet one-way delay: 115.352 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 224.16 Mbit/s
95th percentile per-packet one-way delay: 103.799 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 179.77 Mbit/s
95th percentile per-packet one-way delay: 106.540 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 134.91 Mbit/s
95th percentile per-packet one-way delay: 144.093 ms
Loss rate: 2.74%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-08-04 01:53:20
End at: 2018-08-04 01:53:50
Local clock offset: 0.025 ms
Remote clock offset: 1.163 ms

# Below is generated by plot.py at 2018-08-04 07:41:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.72 Mbit/s
95th percentile per-packet one-way delay: 103.137 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 256.92 Mbit/s
95th percentile per-packet one-way delay: 92.303 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 213.10 Mbit/s
95th percentile per-packet one-way delay: 120.798 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 127.73 Mbit/s
95th percentile per-packet one-way delay: 96.391 ms
Loss rate: 2.07%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-08-04 02:18:54
End at: 2018-08-04 02:19:24
Local clock offset: 0.016 ms
Remote clock offset: -0.363 ms

# Below is generated by plot.py at 2018-08-04 07:42:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 446.27 Mbit/s
95th percentile per-packet one-way delay: 120.472 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 257.76 Mbit/s
95th percentile per-packet one-way delay: 109.089 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 179.96 Mbit/s
95th percentile per-packet one-way delay: 107.520 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 213.65 Mbit/s
95th percentile per-packet one-way delay: 166.249 ms
Loss rate: 4.07%
Run 5: Report of Verus — Data Link

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

![Graph 2: One-way delay (ms)](image2)
Run 6: Statistics of Verus

Start at: 2018-08-04 02:44:07
End at: 2018-08-04 02:44:37
Local clock offset: -0.096 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-08-04 07:42:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 412.08 Mbit/s
95th percentile per-packet one-way delay: 155.747 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 226.70 Mbit/s
95th percentile per-packet one-way delay: 176.247 ms
Loss rate: 2.97%
-- Flow 2:
Average throughput: 213.90 Mbit/s
95th percentile per-packet one-way delay: 140.649 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 132.80 Mbit/s
95th percentile per-packet one-way delay: 140.727 ms
Loss rate: 2.94%
Run 6: Report of Verus — Data Link

![Graph of Throughput and Packet Delay]

Legend:
- Flow 1 ingress (mean 233.29 Mbit/s)
- Flow 1 egress (mean 226.70 Mbit/s)
- Flow 2 ingress (mean 218.30 Mbit/s)
- Flow 2 egress (mean 213.90 Mbit/s)
- Flow 3 ingress (mean 134.83 Mbit/s)
- Flow 3 egress (mean 132.89 Mbit/s)

Legend for Packet Delay:
- Flow 1 (95th percentile 176.25 ms)
- Flow 2 (95th percentile 140.65 ms)
- Flow 3 (95th percentile 140.73 ms)
Run 7: Statistics of Verus

Start at: 2018-08-04 03:09:36
End at: 2018-08-04 03:10:06
Local clock offset: 0.18 ms
Remote clock offset: -0.374 ms

# Below is generated by plot.py at 2018-08-04 07:42:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.45 Mbit/s
95th percentile per-packet one-way delay: 150.131 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 284.12 Mbit/s
95th percentile per-packet one-way delay: 166.557 ms
Loss rate: 2.27%
-- Flow 2:
Average throughput: 165.64 Mbit/s
95th percentile per-packet one-way delay: 105.991 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 121.66 Mbit/s
95th percentile per-packet one-way delay: 117.939 ms
Loss rate: 1.75%
Run 7: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 290.56 Mbit/s) [Blue dashed]
- Flow 1 egress (mean 284.12 Mbit/s) [Blue solid]
- Flow 2 ingress (mean 164.79 Mbit/s) [Green dashed]
- Flow 2 egress (mean 165.66 Mbit/s) [Green solid]
- Flow 3 ingress (mean 122.51 Mbit/s) [Red dashed]
- Flow 3 egress (mean 121.66 Mbit/s) [Red solid]
Run 8: Statistics of Verus

Start at: 2018-08-04 03:35:06
End at: 2018-08-04 03:35:36
Local clock offset: 0.194 ms
Remote clock offset: 1.117 ms

# Below is generated by plot.py at 2018-08-04 07:42:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.48 Mbit/s
95th percentile per-packet one-way delay: 191.148 ms
Loss rate: 2.19%
-- Flow 1:
Average throughput: 248.01 Mbit/s
95th percentile per-packet one-way delay: 205.838 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 128.09 Mbit/s
95th percentile per-packet one-way delay: 120.595 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 153.25 Mbit/s
95th percentile per-packet one-way delay: 140.715 ms
Loss rate: 0.67%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 254.34 Mbit/s)
- Flow 1 egress (mean 248.01 Mbit/s)
- Flow 2 ingress (mean 128.86 Mbit/s)
- Flow 2 egress (mean 128.09 Mbit/s)
- Flow 3 ingress (mean 154.36 Mbit/s)
- Flow 3 egress (mean 153.25 Mbit/s)

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

- Flow 1 (95th percentile 205.84 ms)
- Flow 2 (95th percentile 120.59 ms)
- Flow 3 (95th percentile 140.72 ms)
Run 9: Statistics of Verus

Start at: 2018-08-04 03:59:44
End at: 2018-08-04 04:00:14
Local clock offset: 0.123 ms
Remote clock offset: 1.19 ms

# Below is generated by plot.py at 2018-08-04 07:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 445.64 Mbit/s
95th percentile per-packet one-way delay: 103.710 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 250.66 Mbit/s
95th percentile per-packet one-way delay: 94.485 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 179.71 Mbit/s
95th percentile per-packet one-way delay: 124.330 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 229.46 Mbit/s
95th percentile per-packet one-way delay: 98.156 ms
Loss rate: 0.76%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-08-04 04:25:17
End at: 2018-08-04 04:25:47
Local clock offset: 0.02 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-08-04 07:46:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.12 Mbit/s
95th percentile per-packet one-way delay: 186.224 ms
Loss rate: 2.91%
-- Flow 1:
Average throughput: 199.08 Mbit/s
95th percentile per-packet one-way delay: 112.961 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 230.38 Mbit/s
95th percentile per-packet one-way delay: 197.268 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 145.28 Mbit/s
95th percentile per-packet one-way delay: 248.341 ms
Loss rate: 10.07%
Run 10: Report of Verus — Data Link

![Graph showing throughput and per-packet one-way delay over time for flows 1, 2, and 3.]
Run 1: Statistics of PCC-Vivace

Start at: 2018-08-04 00:42:51
End at: 2018-08-04 00:43:21
Local clock offset: 0.095 ms
Remote clock offset: -0.342 ms

# Below is generated by plot.py at 2018-08-04 07:50:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 602.62 Mbit/s
95th percentile per-packet one-way delay: 57.663 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 330.96 Mbit/s
95th percentile per-packet one-way delay: 59.311 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 331.78 Mbit/s
95th percentile per-packet one-way delay: 54.577 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 156.80 Mbit/s
95th percentile per-packet one-way delay: 51.680 ms
Loss rate: 1.14%
Run 1: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress** (mean 331.37 Mbit/s)
- **Flow 1 egress** (mean 330.96 Mbit/s)
- **Flow 2 ingress** (mean 332.16 Mbit/s)
- **Flow 2 egress** (mean 331.78 Mbit/s)
- **Flow 3 ingress** (mean 156.92 Mbit/s)
- **Flow 3 egress** (mean 156.89 Mbit/s)

- **Flow 1 (95th percentile 59.31 ms)**
- **Flow 2 (95th percentile 54.58 ms)**
- **Flow 3 (95th percentile 51.68 ms)**
Run 2: Statistics of PCC-Vivace

Start at: 2018-08-04 01:08:23
End at: 2018-08-04 01:08:53
Local clock offset: 0.007 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-08-04 07:52:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 611.09 Mbit/s
  95th percentile per-packet one-way delay: 55.544 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 342.69 Mbit/s
  95th percentile per-packet one-way delay: 54.804 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 327.19 Mbit/s
  95th percentile per-packet one-way delay: 63.020 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 156.62 Mbit/s
  95th percentile per-packet one-way delay: 53.354 ms
  Loss rate: 1.28%
Run 2: Report of PCC-Vivace — Data Link

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

**Throughput (Mbps)**

- Flow 1 ingress (mean 342.38 Mbps)
- Flow 1 egress (mean 342.69 Mbps)
- Flow 2 ingress (mean 327.31 Mbps)
- Flow 2 egress (mean 327.19 Mbps)
- Flow 3 ingress (mean 156.97 Mbps)
- Flow 3 egress (mean 156.62 Mbps)

**Packet Loss (50th percentile delay in ms)**

- Flow 1 (95th percentile 54.80 ms)
- Flow 2 (95th percentile 63.02 ms)
- Flow 3 (95th percentile 53.35 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-08-04 01:33:52  
End at: 2018-08-04 01:34:22  
Local clock offset: -0.031 ms  
Remote clock offset: -0.503 ms  

# Below is generated by plot.py at 2018-08-04 07:52:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.54 Mbit/s  
95th percentile per-packet one-way delay: 56.532 ms  
Loss rate: 0.32%  
-- Flow 1:
Average throughput: 376.01 Mbit/s  
95th percentile per-packet one-way delay: 54.133 ms  
Loss rate: 0.35%  
-- Flow 2:
Average throughput: 304.99 Mbit/s  
95th percentile per-packet one-way delay: 82.658 ms  
Loss rate: 0.22%  
-- Flow 3:
Average throughput: 27.55 Mbit/s  
95th percentile per-packet one-way delay: 50.239 ms  
Loss rate: 1.69%
Run 3: Report of PCC-Vivace — Data Link

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

- **Flow 1** (mean 375.99 Mbit/s, 95th percentile 54.13 ms)
- **Flow 2** (mean 304.00 Mbit/s, 95th percentile 82.66 ms)
- **Flow 3** (mean 27.72 Mbit/s, 95th percentile 50.24 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-08-04 01:59:28
End at: 2018-08-04 01:59:58
Local clock offset: 0.133 ms
Remote clock offset: -0.313 ms

# Below is generated by plot.py at 2018-08-04 07:52:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 603.29 Mbit/s
95th percentile per-packet one-way delay: 88.610 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 357.50 Mbit/s
95th percentile per-packet one-way delay: 140.221 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 350.58 Mbit/s
95th percentile per-packet one-way delay: 51.921 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 50.553 ms
Loss rate: 1.70%
Run 4: Report of PCC-Vivace — Data Link

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

- **Flow 1** (ingress mean 358.19 Mbps, egress mean 357.50 Mbps)
- **Flow 2** (ingress mean 349.76 Mbps, egress mean 350.58 Mbps)
- **Flow 3** (ingress mean 39.95 Mbps, egress mean 39.69 Mbps)

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

- **Flow 1** (95th percentile 140.22 ms)
- **Flow 2** (95th percentile 51.92 ms)
- **Flow 3** (95th percentile 50.55 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-08-04 02:24:50
End at: 2018-08-04 02:25:20
Local clock offset: 0.122 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2018-08-04 07:52:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 657.96 Mbit/s
  95th percentile per-packet one-way delay: 89.340 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 379.18 Mbit/s
  95th percentile per-packet one-way delay: 152.016 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 342.23 Mbit/s
  95th percentile per-packet one-way delay: 54.282 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 162.09 Mbit/s
  95th percentile per-packet one-way delay: 55.491 ms
  Loss rate: 1.35%
Run 5: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 381.16 Mbit/s)
- Flow 1 egress (mean 379.18 Mbit/s)
- Flow 2 ingress (mean 341.80 Mbit/s)
- Flow 2 egress (mean 342.23 Mbit/s)
- Flow 3 ingress (mean 162.51 Mbit/s)
- Flow 3 egress (mean 162.09 Mbit/s)

Legend for per-packet round-trip delay:
- Flow 1 (95th percentile 152.02 ms)
- Flow 2 (95th percentile 54.28 ms)
- Flow 3 (95th percentile 55.49 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-08-04 02:50:17
End at: 2018-08-04 02:50:47
Local clock offset: -0.156 ms
Remote clock offset: -1.673 ms

# Below is generated by plot.py at 2018-08-04 07:52:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 624.21 Mbit/s
95th percentile per-packet one-way delay: 58.032 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 327.53 Mbit/s
95th percentile per-packet one-way delay: 53.645 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 310.99 Mbit/s
95th percentile per-packet one-way delay: 74.610 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 275.58 Mbit/s
95th percentile per-packet one-way delay: 59.019 ms
Loss rate: 0.68%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-08-04 03:15:30
End at: 2018-08-04 03:16:00
Local clock offset: 0.231 ms
Remote clock offset: 1.137 ms

# Below is generated by plot.py at 2018-08-04 07:54:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 591.71 Mbit/s
95th percentile per-packet one-way delay: 52.925 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 336.87 Mbit/s
95th percentile per-packet one-way delay: 53.421 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 340.53 Mbit/s
95th percentile per-packet one-way delay: 50.709 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 87.84 Mbit/s
95th percentile per-packet one-way delay: 49.650 ms
Loss rate: 1.35%
Run 7: Report of PCC-Vivace — Data Link

![Graph of throughput and packet delay over time for different flows.]
Run 8: Statistics of PCC-Vivace

Start at: 2018-08-04 03:40:51
End at: 2018-08-04 03:41:21
Local clock offset: 0.095 ms
Remote clock offset: -1.271 ms

# Below is generated by plot.py at 2018-08-04 07:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 623.66 Mbit/s
95th percentile per-packet one-way delay: 65.535 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 335.64 Mbit/s
95th percentile per-packet one-way delay: 101.172 ms
Loss rate: 1.22%
-- Flow 2:
Average throughput: 334.86 Mbit/s
95th percentile per-packet one-way delay: 60.264 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 201.03 Mbit/s
95th percentile per-packet one-way delay: 55.624 ms
Loss rate: 1.94%
Run 8: Report of PCC-Vivace — Data Link

![Graph showing data link performance](image)

- **Flow 1** ingress (mean 338.60 Mbit/s)
- **Flow 1** egress (mean 335.64 Mbit/s)
- **Flow 2** ingress (mean 334.33 Mbit/s)
- **Flow 2** egress (mean 334.86 Mbit/s)
- **Flow 3** ingress (mean 202.78 Mbit/s)
- **Flow 3** egress (mean 201.03 Mbit/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 101.17 ms)
- Flow 2 (95th percentile 60.26 ms)
- Flow 3 (95th percentile 55.62 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-08-04 04:05:46
End at: 2018-08-04 04:06:16
Local clock offset: 0.103 ms
Remote clock offset: -1.236 ms

# Below is generated by plot.py at 2018-08-04 07:55:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 558.06 Mbit/s
95th percentile per-packet one-way delay: 55.207 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 353.37 Mbit/s
95th percentile per-packet one-way delay: 55.994 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 259.77 Mbit/s
95th percentile per-packet one-way delay: 52.149 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 98.25 Mbit/s
95th percentile per-packet one-way delay: 52.080 ms
Loss rate: 1.37%
Run 9: Report of PCC-Vivace — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 353.39 Mbps)
- **Flow 1 egress** (mean 353.37 Mbps)
- **Flow 2 ingress** (mean 239.80 Mbps)
- **Flow 2 egress** (mean 259.77 Mbps)
- **Flow 3 ingress** (mean 98.57 Mbps)
- **Flow 3 egress** (mean 98.25 Mbps)

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

- **Flow 1** (95th percentile 55.99 ms)
- **Flow 2** (95th percentile 52.15 ms)
- **Flow 3** (95th percentile 52.08 ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-08-04 04:31:16
End at: 2018-08-04 04:31:46
Local clock offset: -0.011 ms
Remote clock offset: 0.912 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.17 Mbit/s
95th percentile per-packet one-way delay: 51.356 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 356.01 Mbit/s
95th percentile per-packet one-way delay: 51.379 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 300.26 Mbit/s
95th percentile per-packet one-way delay: 51.576 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 97.48 Mbit/s
95th percentile per-packet one-way delay: 49.472 ms
Loss rate: 1.39%
Run 10: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 356.06 Mbit/s)
- Flow 1 egress (mean 356.01 Mbit/s)
- Flow 2 ingress (mean 298.15 Mbit/s)
- Flow 2 egress (mean 300.26 Mbit/s)
- Flow 3 ingress (mean 97.04 Mbit/s)
- Flow 3 egress (mean 97.48 Mbit/s)
Run 1: Statistics of WebRTC media

Start at: 2018-08-04 00:33:42
End at: 2018-08-04 00:34:12
Local clock offset: 0.126 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.38 Mbit/s
95th percentile per-packet one-way delay: 53.701 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 50.628 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 1.27 Mbit/s
95th percentile per-packet one-way delay: 53.722 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 53.823 ms
Loss rate: 0.34%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-08-04 00:59:18
End at: 2018-08-04 00:59:48
Local clock offset: -0.019 ms
Remote clock offset: -0.208 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 53.685 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.874 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 1.23 Mbit/s
95th percentile per-packet one-way delay: 53.720 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 53.898 ms
Loss rate: 0.62%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-08-04 01:24:45
End at: 2018-08-04 01:25:15
Local clock offset: 0.212 ms
Remote clock offset: -0.252 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 54.093 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.103 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 54.093 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 53.972 ms
Loss rate: 0.45%
Run 3: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.97 Mbit/s)
- Flow 1 egress (mean 1.96 Mbit/s)
- Flow 2 ingress (mean 1.23 Mbit/s)
- Flow 2 egress (mean 1.22 Mbit/s)
- Flow 3 ingress (mean 0.50 Mbit/s)
- Flow 3 egress (mean 0.49 Mbit/s)

![Graph 2: Per-packet round-trip delay vs Time](image2.png)

- Flow 1 (95th percentile 54.10 ms)
- Flow 2 (95th percentile 54.09 ms)
- Flow 3 (95th percentile 53.97 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-08-04 01:50:08
End at: 2018-08-04 01:50:38
Local clock offset: 0.104 ms
Remote clock offset: 0.929 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.62 Mbit/s
  95th percentile per-packet one-way delay: 52.850 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 1.95 Mbit/s
  95th percentile per-packet one-way delay: 52.867 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 1.19 Mbit/s
  95th percentile per-packet one-way delay: 49.821 ms
  Loss rate: 0.89%
-- Flow 3:
  Average throughput: 0.50 Mbit/s
  95th percentile per-packet one-way delay: 52.642 ms
  Loss rate: 0.44%
Run 4: Report of WebRTC media — Data Link

![Graph of throughput](image1)

![Graph of packet delay](image2)

- Flow 1 ingress (mean 1.95 Mbit/s)
- Flow 1 egress (mean 1.95 Mbit/s)
- Flow 2 ingress (mean 1.20 Mbit/s)
- Flow 2 egress (mean 1.19 Mbit/s)
- Flow 3 ingress (mean 0.50 Mbit/s)
- Flow 3 egress (mean 0.50 Mbit/s)

<table>
<thead>
<tr>
<th>Flow 1</th>
<th>Flow 2</th>
<th>Flow 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>95th percentile: 52.87 ms</td>
<td>95th percentile: 49.62 ms</td>
<td>95th percentile: 52.64 ms</td>
</tr>
</tbody>
</table>

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Run 5: Statistics of WebRTC media

Start at: 2018-08-04 02:15:41
End at: 2018-08-04 02:16:11
Local clock offset: -0.07 ms
Remote clock offset: -1.286 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.59 Mbit/s
95th percentile per-packet one-way delay: 54.690 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 54.692 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 51.181 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 54.706 ms
Loss rate: 0.88%
Run 5: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 1.91 Mbps)
  - Flow 1 egress (mean 1.91 Mbps)
  - Flow 2 ingress (mean 1.22 Mbps)
  - Flow 2 egress (mean 1.21 Mbps)
  - Flow 3 ingress (mean 0.49 Mbps)
  - Flow 3 egress (mean 0.48 Mbps)

- **End-to-end delay (ms):**
  - Flow 1 (95th percentile 54.69 ms)
  - Flow 2 (95th percentile 51.18 ms)
  - Flow 3 (95th percentile 54.71 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-08-04 02:40:49
End at: 2018-08-04 02:41:19
Local clock offset: -0.042 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.64 Mbit/s
  95th percentile per-packet one-way delay: 53.011 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 1.95 Mbit/s
  95th percentile per-packet one-way delay: 53.022 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 1.20 Mbit/s
  95th percentile per-packet one-way delay: 50.243 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 0.50 Mbit/s
  95th percentile per-packet one-way delay: 50.090 ms
  Loss rate: 0.62%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.96 Mbit/s)
- Flow 1 egress (mean 1.95 Mbit/s)
- Flow 2 ingress (mean 1.21 Mbit/s)
- Flow 2 egress (mean 1.20 Mbit/s)
- Flow 3 ingress (mean 0.50 Mbit/s)
- Flow 3 egress (mean 0.50 Mbit/s)
Run 7: Statistics of WebRTC media

Start at: 2018-08-04 03:06:19
End at: 2018-08-04 03:06:49
Local clock offset: 0.29 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 54.035 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 53.942 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 1.21 Mbit/s
95th percentile per-packet one-way delay: 54.067 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 53.949 ms
Loss rate: 2.49%
Run 7: Report of WebRTC media — Data Link

[Graph showing throughput and packet round trip time over time for different flows.]
Run 8: Statistics of WebRTC media

Start at: 2018-08-04 03:31:51
End at: 2018-08-04 03:32:21
Local clock offset: 0.043 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.66 Mbit/s
  95th percentile per-packet one-way delay: 53.580 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 1.95 Mbit/s
  95th percentile per-packet one-way delay: 53.466 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 1.24 Mbit/s
  95th percentile per-packet one-way delay: 53.326 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 53.676 ms
  Loss rate: 0.55%
Run 8: Report of WebRTC media — Data Link

The diagram shows the throughput (Mbps) over time for different flows, with the following details:

- **Throughput (Mbps)**
  - Y-axis: 0.0 to 3.0
  - X-axis: 0 to 30 seconds

- **Flow 1**
  - Ingress: Mean 1.95 Mbps
  - Egress: Mean 1.95 Mbps

- **Flow 2**
  - Ingress: Mean 1.24 Mbps
  - Egress: Mean 1.24 Mbps

- **Flow 3**
  - Ingress: Mean 0.49 Mbps
  - Egress: Mean 0.49 Mbps

The second diagram illustrates the per-packet round-trip delay (ms) over time:

- **Per-packet round-trip delay (ms)**
  - Y-axis: 50 to 64 ms
  - X-axis: 0 to 30 seconds

- **Flow 1** (95th percentile: 53.47 ms)
- **Flow 2** (95th percentile: 53.33 ms)
- **Flow 3** (95th percentile: 53.68 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-08-04 03:56:30
End at: 2018-08-04 03:57:00
Local clock offset: 0.026 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 53.647 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.662 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 50.026 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 53.675 ms
Loss rate: 0.79%
Run 9: Report of WebRTC media — Data Link

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

Throughput in Mbps:

- Flow 1 ingress (mean 1.95 Mbps)
- Flow 1 egress (mean 1.95 Mbps)
- Flow 2 ingress (mean 1.22 Mbps)
- Flow 2 egress (mean 1.22 Mbps)
- Flow 3 ingress (mean 0.49 Mbps)
- Flow 3 egress (mean 0.49 Mbps)

Per packet one way delay in ms:

- Flow 1 (95th percentile 53.66 ms)
- Flow 2 (95th percentile 50.03 ms)
- Flow 3 (95th percentile 53.67 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-08-04 04:22:03
End at: 2018-08-04 04:22:33
Local clock offset: 0.061 ms
Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2018-08-04 07:55:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.64 Mbit/s
  95th percentile per-packet one-way delay: 52.985 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 1.94 Mbit/s
  95th percentile per-packet one-way delay: 53.003 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 1.22 Mbit/s
  95th percentile per-packet one-way delay: 50.138 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 0.50 Mbit/s
  95th percentile per-packet one-way delay: 49.935 ms
  Loss rate: 0.35%
Run 10: Report of WebRTC media — Data Link

![Throughput graph](image1)

![Delay graph](image2)

Flow 1 ingress (mean 1.94 Mbit/s) — Flow 1 egress (mean 1.94 Mbit/s)
Flow 2 ingress (mean 1.22 Mbit/s) — Flow 2 egress (mean 1.22 Mbit/s)
Flow 3 ingress (mean 0.50 Mbit/s) — Flow 3 egress (mean 0.50 Mbit/s)