Pantheon Report

Data path: GCE London Ethernet (local) → GCE Iowa Ethernet (remote).
Repeated the test of 16 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 @ 0088822873ea99180f63545a341ef069f40efe59
third_party/fillp @ d47f4fa1b454a5e3c0357115c5a28436dbd4b834
third_party/genericcCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edc6f90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaaab4a906ce6bb7cfc3f
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b2be8f464b1b39
third_party/pcc @ 1a9c958fa0d66d18b623c091a55feca872b498e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acc08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1be8143ebc978f3cfc2
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3b4b2
third_party/sprout @ c838669682f0c19f6ba92af9a596a406d48c1f
third_party/verus @ d4b478a74c6c60a261149af2b2956293f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2bf86211435ae071a32f9b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE London to GCE Iowa, 10 runs of 30s each per scheme 3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>219.64</td>
<td>215.44</td>
<td>204.78</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>134.98</td>
<td>122.10</td>
<td>129.67</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>164.92</td>
<td>132.32</td>
<td>152.46</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>706.54</td>
<td>607.46</td>
<td>544.03</td>
</tr>
<tr>
<td>Indigo</td>
<td>10</td>
<td>210.78</td>
<td>202.68</td>
<td>173.22</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>34.24</td>
<td>22.52</td>
<td>11.19</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>528.17</td>
<td>55.91</td>
<td>40.72</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>235.59</td>
<td>188.86</td>
<td>71.25</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>37.21</td>
<td>30.16</td>
<td>18.29</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>0.22</td>
<td>0.22</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>6.76</td>
<td>6.21</td>
<td>6.37</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>180.92</td>
<td>172.02</td>
<td>136.42</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>98.24</td>
<td>109.41</td>
<td>69.47</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>219.36</td>
<td>164.19</td>
<td>116.60</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>277.51</td>
<td>232.40</td>
<td>117.29</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-05-26 02:46:38
End at: 2018-05-26 02:47:08
Local clock offset: -0.619 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-05-26 06:54:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.16 Mbit/s
95th percentile per-packet one-way delay: 71.566 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 213.75 Mbit/s
95th percentile per-packet one-way delay: 70.290 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 210.10 Mbit/s
95th percentile per-packet one-way delay: 71.687 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 205.48 Mbit/s
95th percentile per-packet one-way delay: 73.612 ms
Loss rate: 0.15%
Run 2: Statistics of TCP BBR

Start at: 2018-05-26 03:09:27
End at: 2018-05-26 03:09:57
Local clock offset: -0.261 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-05-26 06:54:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 442.32 Mbit/s
  95th percentile per-packet one-way delay: 62.444 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 222.95 Mbit/s
  95th percentile per-packet one-way delay: 60.708 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 223.52 Mbit/s
  95th percentile per-packet one-way delay: 63.698 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 212.00 Mbit/s
  95th percentile per-packet one-way delay: 63.133 ms
  Loss rate: 0.02%
Run 2: Report of TCP BBR — Data Link

**Throughput (Mbps):**

- Flow 1 ingress (mean 223.00 Mbps)
- Flow 1 egress (mean 222.95 Mbps)
- Flow 2 ingress (mean 223.55 Mbps)
- Flow 2 egress (mean 223.52 Mbps)
- Flow 3 ingress (mean 212.04 Mbps)
- Flow 3 egress (mean 212.00 Mbps)

**Per-packet rto avg delay (ms):**

- Flow 1 (95th percentile 60.71 ms)
- Flow 2 (95th percentile 63.70 ms)
- Flow 3 (95th percentile 63.13 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-05-26 03:32:19
End at: 2018-05-26 03:32:49
Local clock offset: -0.631 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-05-26 06:54:50
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 433.13 Mbit/s
   95th percentile per-packet one-way delay: 63.247 ms
   Loss rate: 0.05%
-- Flow 1:
   Average throughput: 220.34 Mbit/s
   95th percentile per-packet one-way delay: 61.414 ms
   Loss rate: 0.03%
-- Flow 2:
   Average throughput: 217.51 Mbit/s
   95th percentile per-packet one-way delay: 63.570 ms
   Loss rate: 0.03%
-- Flow 3:
   Average throughput: 203.90 Mbit/s
   95th percentile per-packet one-way delay: 65.326 ms
   Loss rate: 0.14%
Run 3: Report of TCP BBR — Data Link

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

Legend:
- Flow 1 ingress (mean 220.43 Mbit/s)
- Flow 1 egress (mean 220.34 Mbit/s)
- Flow 2 ingress (mean 217.66 Mbit/s)
- Flow 2 egress (mean 217.51 Mbit/s)
- Flow 3 ingress (mean 204.18 Mbit/s)
- Flow 3 egress (mean 203.90 Mbit/s)

Legend for packet delay:
- Flow 1 (95th percentile 61.41 ms)
- Flow 2 (95th percentile 63.57 ms)
- Flow 3 (95th percentile 65.33 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-05-26 03:55:21
End at: 2018-05-26 03:55:51
Local clock offset: 0.205 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-05-26 06:54:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.84 Mbit/s
95th percentile per-packet one-way delay: 78.226 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 216.57 Mbit/s
95th percentile per-packet one-way delay: 76.441 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 202.66 Mbit/s
95th percentile per-packet one-way delay: 78.134 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 190.53 Mbit/s
95th percentile per-packet one-way delay: 80.644 ms
Loss rate: 0.31%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-05-26 04:18:18
End at: 2018-05-26 04:18:48
Local clock offset: -0.181 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-05-26 06:54:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.59 Mbit/s
95th percentile per-packet one-way delay: 66.886 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 217.02 Mbit/s
95th percentile per-packet one-way delay: 65.405 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 212.61 Mbit/s
95th percentile per-packet one-way delay: 67.098 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 207.70 Mbit/s
95th percentile per-packet one-way delay: 68.214 ms
Loss rate: 0.09%
Run 5: Report of TCP BBR — Data Link

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

![Graph 2: Per packet one way delay vs Time (ms)](image2)
Run 6: Statistics of TCP BBR

Start at: 2018-05-26 04:41:12
End at: 2018-05-26 04:41:42
Local clock offset: -0.162 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-05-26 06:54:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.59 Mbit/s
95th percentile per-packet one-way delay: 65.374 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 217.77 Mbit/s
95th percentile per-packet one-way delay: 65.368 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 219.47 Mbit/s
95th percentile per-packet one-way delay: 64.772 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 206.53 Mbit/s
95th percentile per-packet one-way delay: 66.128 ms
Loss rate: 0.07%
Run 6: Report of TCP BBR — Data Link

[Graphs showing throughput and per-packet end-to-end delay for different flows over time]
Run 7: Statistics of TCP BBR

Start at: 2018-05-26 05:04:23
End at: 2018-05-26 05:04:53
Local clock offset: 0.148 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-05-26 06:54:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 446.44 Mbit/s
  95th percentile per-packet one-way delay: 59.979 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 228.32 Mbit/s
  95th percentile per-packet one-way delay: 59.956 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 221.36 Mbit/s
  95th percentile per-packet one-way delay: 58.287 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 212.84 Mbit/s
  95th percentile per-packet one-way delay: 62.577 ms
  Loss rate: 0.17%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-05-26 05:27:22
End at: 2018-05-26 05:27:52
Local clock offset: -0.189 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-05-26 06:54:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.68 Mbit/s
95th percentile per-packet one-way delay: 67.759 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 221.42 Mbit/s
95th percentile per-packet one-way delay: 66.123 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 212.07 Mbit/s
95th percentile per-packet one-way delay: 67.815 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 201.64 Mbit/s
95th percentile per-packet one-way delay: 69.723 ms
Loss rate: 0.09%
Run 8: Report of TCP BBR — Data Link

![Diagram showing throughput and packet delay over time for different flows. The graphs display the throughput (in Mbps) and packet delay (in ms) for flows 1, 2, and 3.]

- **Throughput Graph**:
  - Flow 1 ingress: Mean 221.47 Mbps
  - Flow 1 egress: Mean 221.42 Mbps
  - Flow 2 ingress: Mean 212.12 Mbps
  - Flow 2 egress: Mean 212.07 Mbps
  - Flow 3 ingress: Mean 201.81 Mbps
  - Flow 3 egress: Mean 201.64 Mbps

- **Packet Delay Graph**:
  - Flow 1 (95th percentile 66.12 ms)
  - Flow 2 (95th percentile 67.81 ms)
  - Flow 3 (95th percentile 69.72 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-05-26 05:50:29
End at: 2018-05-26 05:50:59
Local clock offset: -0.174 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-05-26 07:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.96 Mbit/s
95th percentile per-packet one-way delay: 61.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.50 Mbit/s
95th percentile per-packet one-way delay: 60.525 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 217.05 Mbit/s
95th percentile per-packet one-way delay: 61.189 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 204.69 Mbit/s
95th percentile per-packet one-way delay: 63.039 ms
Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-05-26 06:13:35
End at: 2018-05-26 06:14:05
Local clock offset: -0.154 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-05-26 07:00:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.22 Mbit/s
95th percentile per-packet one-way delay: 61.382 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 215.75 Mbit/s
95th percentile per-packet one-way delay: 60.027 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 218.05 Mbit/s
95th percentile per-packet one-way delay: 61.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 202.50 Mbit/s
95th percentile per-packet one-way delay: 63.530 ms
Loss rate: 0.03%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-05-26 02:57:43
End at: 2018-05-26 02:58:13
Local clock offset: -0.23 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-05-26 07:01:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.03 Mbit/s
95th percentile per-packet one-way delay: 62.905 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 110.31 Mbit/s
95th percentile per-packet one-way delay: 56.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 123.82 Mbit/s
95th percentile per-packet one-way delay: 63.573 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 196.29 Mbit/s
95th percentile per-packet one-way delay: 68.509 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-05-26 03:20:42
End at: 2018-05-26 03:21:12
Local clock offset: 0.104 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-05-26 07:01:47
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 181.70 Mbit/s
   95th percentile per-packet one-way delay: 61.076 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 69.52 Mbit/s
   95th percentile per-packet one-way delay: 66.096 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 105.08 Mbit/s
   95th percentile per-packet one-way delay: 62.014 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 127.09 Mbit/s
   95th percentile per-packet one-way delay: 53.548 ms
   Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

Legend:
- Flow 1 ingress (mean 69.52 Mbit/s)
- Flow 1 egress (mean 69.52 Mbit/s)
- Flow 2 ingress (mean 105.11 Mbit/s)
- Flow 2 egress (mean 105.08 Mbit/s)
- Flow 3 ingress (mean 127.09 Mbit/s)
- Flow 3 egress (mean 127.09 Mbit/s)
Run 3: Statistics of Copa

Start at: 2018-05-26 03:43:37
End at: 2018-05-26 03:44:07
Local clock offset: -0.234 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-05-26 07:02:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.29 Mbit/s
95th percentile per-packet one-way delay: 63.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 131.53 Mbit/s
95th percentile per-packet one-way delay: 54.862 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 184.97 Mbit/s
95th percentile per-packet one-way delay: 68.131 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 107.30 Mbit/s
95th percentile per-packet one-way delay: 71.285 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

![Throughput Graph](chart1)

![Per-packet round-trip delay](chart2)

- Flow 1 ingress (mean 131.54 Mbit/s)
- Flow 1 egress (mean 131.53 Mbit/s)
- Flow 2 ingress (mean 184.96 Mbit/s)
- Flow 2 egress (mean 184.97 Mbit/s)
- Flow 3 ingress (mean 107.28 Mbit/s)
- Flow 3 egress (mean 107.30 Mbit/s)
Run 4: Statistics of Copa

Start at: 2018-05-26 04:06:30
End at: 2018-05-26 04:07:00
Local clock offset: 0.114 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-05-26 07:02:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 295.31 Mbit/s
  95th percentile per-packet one-way delay: 55.103 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 197.32 Mbit/s
  95th percentile per-packet one-way delay: 56.396 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 104.73 Mbit/s
  95th percentile per-packet one-way delay: 52.762 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 84.94 Mbit/s
  95th percentile per-packet one-way delay: 50.858 ms
  Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

- **Flow 1 ingress** (mean 197.32 Mbit/s)
- **Flow 1 egress** (mean 197.32 Mbit/s)
- **Flow 2 ingress** (mean 104.73 Mbit/s)
- **Flow 2 egress** (mean 104.73 Mbit/s)
- **Flow 3 ingress** (mean 64.05 Mbit/s)
- **Flow 3 egress** (mean 64.94 Mbit/s)

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

- **Flow 1** (95th percentile 56.40 ms)
- **Flow 2** (95th percentile 52.76 ms)
- **Flow 3** (95th percentile 50.66 ms)
Run 5: Statistics of Copa

Start at: 2018-05-26 04:29:30
End at: 2018-05-26 04:30:00
Local clock offset: -0.265 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2018-05-26 07:02:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.95 Mbit/s
95th percentile per-packet one-way delay: 56.523 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 121.68 Mbit/s
95th percentile per-packet one-way delay: 52.974 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 147.36 Mbit/s
95th percentile per-packet one-way delay: 57.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 162.85 Mbit/s
95th percentile per-packet one-way delay: 62.175 ms
Loss rate: 0.03%
Run 5: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 121.68 Mbps)
Flow 1 egress (mean 121.68 Mbps)
Flow 2 ingress (mean 147.35 Mbps)
Flow 2 egress (mean 147.36 Mbps)
Flow 3 ingress (mean 162.88 Mbps)
Flow 3 egress (mean 162.85 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 52.97 ms)
Flow 2 (95th percentile 57.94 ms)
Flow 3 (95th percentile 62.17 ms)
Run 6: Statistics of Copa

Start at: 2018-05-26 04:52:26
End at: 2018-05-26 04:52:56
Local clock offset: -0.189 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-05-26 07:02:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.44 Mbit/s
95th percentile per-packet one-way delay: 64.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 155.65 Mbit/s
95th percentile per-packet one-way delay: 79.614 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 135.12 Mbit/s
95th percentile per-packet one-way delay: 56.740 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 101.72 Mbit/s
95th percentile per-packet one-way delay: 60.044 ms
Loss rate: 0.00%
Run 6: Report of Copa — Data Link

---

**Throughput vs. Time**

- **Flow 1 ingress** (mean 155.65 Mbit/s)
- **Flow 1 egress** (mean 155.65 Mbit/s)
- **Flow 2 ingress** (mean 135.12 Mbit/s)
- **Flow 2 egress** (mean 135.12 Mbit/s)
- **Flow 3 ingress** (mean 101.71 Mbit/s)
- **Flow 3 egress** (mean 101.72 Mbit/s)

**Per-packet one-way delay vs. Time**

- **Flow 1** (95th percentile 79.61 ms)
- **Flow 2** (95th percentile 56.74 ms)
- **Flow 3** (95th percentile 60.04 ms)
Run 7: Statistics of Copa

Start at: 2018-05-26 05:15:40
End at: 2018-05-26 05:16:10
Local clock offset: -0.184 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2018-05-26 07:05:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 219.32 Mbit/s
95th percentile per-packet one-way delay: 52.706 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 112.40 Mbit/s
95th percentile per-packet one-way delay: 51.973 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: 53.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.98 Mbit/s
95th percentile per-packet one-way delay: 54.609 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-05-26 05:38:44
End at: 2018-05-26 05:39:14
Local clock offset: -0.23 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-05-26 07:08:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.50 Mbit/s
95th percentile per-packet one-way delay: 53.544 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 169.65 Mbit/s
95th percentile per-packet one-way delay: 53.585 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 94.30 Mbit/s
95th percentile per-packet one-way delay: 51.632 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 114.42 Mbit/s
95th percentile per-packet one-way delay: 56.120 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

[Graph showing throughput and per-packet one-way delay over time for Flow 1, Flow 2, and Flow 3.]
Run 9: Statistics of Copa

Start at: 2018-05-26 06:01:46
End at: 2018-05-26 06:02:16
Local clock offset: -0.533 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-05-26 07:09:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.76 Mbit/s
95th percentile per-packet one-way delay: 56.013 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 146.29 Mbit/s
95th percentile per-packet one-way delay: 56.969 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 148.51 Mbit/s
95th percentile per-packet one-way delay: 56.589 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 110.03 Mbit/s
95th percentile per-packet one-way delay: 53.126 ms
Loss rate: 0.01%
Run 9: Report of Copa — Data Link

[Graphs showing throughput and packet delay over time for different flows, with annotations for mean throughput and 95th percentile delay.]
Run 10: Statistics of Copa

Start at: 2018-05-26 06:24:54
End at: 2018-05-26 06:25:24
Local clock offset: -0.5 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-05-26 07:09:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.50 Mbit/s
95th percentile per-packet one-way delay: 59.604 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.46 Mbit/s
95th percentile per-packet one-way delay: 60.554 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 56.829 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 156.06 Mbit/s
95th percentile per-packet one-way delay: 59.590 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

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

- Flow 1 ingress (mean 135.45 Mbit/s)
- Flow 1 egress (mean 135.46 Mbit/s)
- Flow 2 ingress (mean 84.42 Mbit/s)
- Flow 2 egress (mean 84.41 Mbit/s)
- Flow 3 ingress (mean 156.05 Mbit/s)
- Flow 3 egress (mean 156.06 Mbit/s)
Run 1: Statistics of TCP Cubic

Start at: 2018-05-26 02:43:38
End at: 2018-05-26 02:44:08
Local clock offset: -0.29 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-05-26 07:09:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.54 Mbit/s
95th percentile per-packet one-way delay: 65.968 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 184.80 Mbit/s
95th percentile per-packet one-way delay: 62.836 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 199.16 Mbit/s
95th percentile per-packet one-way delay: 66.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 157.05 Mbit/s
95th percentile per-packet one-way delay: 68.776 ms
Loss rate: 0.01%
Run 1: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet delay over time for different flows.](image-url)
Run 2: Statistics of TCP Cubic

Start at: 2018-05-26 03:06:34
End at: 2018-05-26 03:07:04
Local clock offset: -0.257 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-05-26 07:09:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.57 Mbit/s
95th percentile per-packet one-way delay: 58.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 161.87 Mbit/s
95th percentile per-packet one-way delay: 58.363 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.47 Mbit/s
95th percentile per-packet one-way delay: 58.633 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 54.485 ms
Loss rate: 0.07%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-05-26 03:29:28
End at: 2018-05-26 03:29:58
Local clock offset: -0.243 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-05-26 07:09:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 249.05 Mbit/s
  95th percentile per-packet one-way delay: 59.184 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 95.70 Mbit/s
  95th percentile per-packet one-way delay: 57.480 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 227.65 Mbit/s
  95th percentile per-packet one-way delay: 60.090 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 5.35 Mbit/s
  95th percentile per-packet one-way delay: 52.766 ms
  Loss rate: 0.18%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-05-26 03:52:27
End at: 2018-05-26 03:52:57
Local clock offset: -0.224 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-05-26 07:09:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 316.29 Mbit/s
  95th percentile per-packet one-way delay: 60.547 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 217.36 Mbit/s
  95th percentile per-packet one-way delay: 60.653 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 46.75 Mbit/s
  95th percentile per-packet one-way delay: 58.103 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 203.90 Mbit/s
  95th percentile per-packet one-way delay: 60.698 ms
  Loss rate: 0.00%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 217.36 Mb/s)
- Flow 1 egress (mean 217.36 Mb/s)
- Flow 2 ingress (mean 46.76 Mb/s)
- Flow 2 egress (mean 46.75 Mb/s)
- Flow 3 ingress (mean 203.89 Mb/s)
- Flow 3 egress (mean 203.90 Mb/s)

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

- Flow 1 (95th percentile 60.65 ms)
- Flow 2 (95th percentile 58.10 ms)
- Flow 3 (95th percentile 60.70 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-05-26 04:15:20
End at: 2018-05-26 04:15:50
Local clock offset: 0.155 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-05-26 07:12:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.85 Mbit/s
95th percentile per-packet one-way delay: 59.759 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 226.50 Mbit/s
95th percentile per-packet one-way delay: 59.021 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 106.82 Mbit/s
95th percentile per-packet one-way delay: 58.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 208.67 Mbit/s
95th percentile per-packet one-way delay: 62.381 ms
Loss rate: 0.16%
Run 5: Report of TCP Cubic — Data Link

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

Flow 1 ingress (mean 226.64 Mbit/s)
Flow 1 egress (mean 226.50 Mbit/s)
Flow 2 ingress (mean 106.56 Mbit/s)
Flow 2 egress (mean 106.82 Mbit/s)
Flow 3 ingress (mean 209.02 Mbit/s)
Flow 3 egress (mean 208.67 Mbit/s)
Run 6: Statistics of TCP Cubic

Start at: 2018-05-26 04:38:17
End at: 2018-05-26 04:38:47
Local clock offset: 0.176 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2018-05-26 07:12:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.03 Mbit/s
95th percentile per-packet one-way delay: 59.012 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 133.69 Mbit/s
95th percentile per-packet one-way delay: 57.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.70 Mbit/s
95th percentile per-packet one-way delay: 56.764 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 218.66 Mbit/s
95th percentile per-packet one-way delay: 61.542 ms
Loss rate: 0.05%
Run 6: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 133.75 Mbit/s)
- Flow 1 egress (mean 133.69 Mbit/s)
- Flow 2 ingress (mean 146.72 Mbit/s)
- Flow 2 egress (mean 146.70 Mbit/s)
- Flow 3 ingress (mean 218.73 Mbit/s)
- Flow 3 egress (mean 218.66 Mbit/s)

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

- Flow 1 (95th percentile 57.78 ms)
- Flow 2 (95th percentile 56.76 ms)
- Flow 3 (95th percentile 61.54 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-05-26 05:01:34
End at: 2018-05-26 05:02:04
Local clock offset: -0.216 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-05-26 07:12:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.63 Mbit/s
95th percentile per-packet one-way delay: 59.257 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.64 Mbit/s
95th percentile per-packet one-way delay: 56.791 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 57.384 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 207.72 Mbit/s
95th percentile per-packet one-way delay: 61.677 ms
Loss rate: 0.00%
Run 7: Report of TCP Cubic — Data Link

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

- **Flow 1**: Ingress (mean 144.64 Mbit/s), Egress (mean 144.64 Mbit/s)
- **Flow 2**: Ingress (mean 35.97 Mbit/s), Egress (mean 35.96 Mbit/s)
- **Flow 3**: Ingress (mean 207.73 Mbit/s), Egress (mean 207.72 Mbit/s)

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

- **Flow 1**: 95th percentile 56.79 ms
- **Flow 2**: 95th percentile 57.38 ms
- **Flow 3**: 95th percentile 61.68 ms
Run 8: Statistics of TCP Cubic

Start at: 2018-05-26 05:24:25
End at: 2018-05-26 05:24:55
Local clock offset: -0.564 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-05-26 07:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.27 Mbit/s
95th percentile per-packet one-way delay: 61.494 ms
Loss rate: 0.06%

-- Flow 1:
Average throughput: 155.33 Mbit/s
95th percentile per-packet one-way delay: 60.716 ms
Loss rate: 0.07%

-- Flow 2:
Average throughput: 119.82 Mbit/s
95th percentile per-packet one-way delay: 57.778 ms
Loss rate: 0.08%

-- Flow 3:
Average throughput: 211.22 Mbit/s
95th percentile per-packet one-way delay: 63.620 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-05-26 05:47:37
End at: 2018-05-26 05:48:07
Local clock offset: -0.193 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-05-26 07:12:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.69 Mbit/s
95th percentile per-packet one-way delay: 57.914 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 141.78 Mbit/s
95th percentile per-packet one-way delay: 58.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.90 Mbit/s
95th percentile per-packet one-way delay: 56.724 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.98 Mbit/s
95th percentile per-packet one-way delay: 56.431 ms
Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link

![Graph of throughput and packet delay over time for TCP Cubic with data link.](image-url)
Run 10: Statistics of TCP Cubic

Start at: 2018-05-26 06:10:39
End at: 2018-05-26 06:11:09
Local clock offset: 0.247 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2018-05-26 07:13:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.52 Mbit/s
95th percentile per-packet one-way delay: 60.099 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 187.49 Mbit/s
95th percentile per-packet one-way delay: 58.853 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 126.95 Mbit/s
95th percentile per-packet one-way delay: 58.569 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 179.58 Mbit/s
95th percentile per-packet one-way delay: 63.038 ms
Loss rate: 0.01%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2018-05-26 03:00:23
End at: 2018-05-26 03:00:53
Local clock offset: -0.258 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-05-26 07:33:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1309.94 Mbit/s
  95th percentile per-packet one-way delay: 154.670 ms
  Loss rate: 5.81%
-- Flow 1:
  Average throughput: 702.81 Mbit/s
  95th percentile per-packet one-way delay: 165.373 ms
  Loss rate: 7.22%
-- Flow 2:
  Average throughput: 635.70 Mbit/s
  95th percentile per-packet one-way delay: 149.457 ms
  Loss rate: 4.95%
-- Flow 3:
  Average throughput: 551.01 Mbit/s
  95th percentile per-packet one-way delay: 134.928 ms
  Loss rate: 2.20%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-05-26 03:23:17
End at: 2018-05-26 03:23:47
Local clock offset: -0.294 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-05-26 07:34:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1334.97 Mbit/s
95th percentile per-packet one-way delay: 193.292 ms
Loss rate: 4.70%
-- Flow 1:
Average throughput: 713.63 Mbit/s
95th percentile per-packet one-way delay: 215.317 ms
Loss rate: 4.44%
-- Flow 2:
Average throughput: 662.25 Mbit/s
95th percentile per-packet one-way delay: 141.043 ms
Loss rate: 4.77%
-- Flow 3:
Average throughput: 543.59 Mbit/s
95th percentile per-packet one-way delay: 149.785 ms
Loss rate: 5.56%
Run 2: Report of FillP — Data Link

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

### Throughput (Mbps)
- **Flow 1 Ingress** (mean 746.78 Mbps)
- **Flow 1 Egress** (mean 713.63 Mbps)
- **Flow 2 Ingress** (mean 695.37 Mbps)
- **Flow 2 Egress** (mean 662.25 Mbps)
- **Flow 3 Ingress** (mean 575.56 Mbps)
- **Flow 3 Egress** (mean 543.59 Mbps)

### Packet size and delay (ms)
- **Flow 1 (95th percentile 215.32 ms)**
- **Flow 2 (95th percentile 141.04 ms)**
- **Flow 3 (95th percentile 149.78 ms)**
Run 3: Statistics of FillP

Start at: 2018-05-26 03:46:21
End at: 2018-05-26 03:46:51
Local clock offset: -0.189 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-05-26 07:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1331.70 Mbit/s
95th percentile per-packet one-way delay: 150.227 ms
Loss rate: 4.39%
-- Flow 1:
Average throughput: 713.99 Mbit/s
95th percentile per-packet one-way delay: 142.265 ms
Loss rate: 4.82%
-- Flow 2:
Average throughput: 670.92 Mbit/s
95th percentile per-packet one-way delay: 148.307 ms
Loss rate: 2.50%
-- Flow 3:
Average throughput: 515.57 Mbit/s
95th percentile per-packet one-way delay: 162.646 ms
Loss rate: 7.35%
Run 3: Report of FillP — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per-packet delay vs Time](image2)
Run 4: Statistics of FillP

Start at: 2018-05-26 04:09:12  
End at: 2018-05-26 04:09:42  
Local clock offset: -0.203 ms  
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-05-26 07:36:52  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 1312.90 Mbit/s  
  95th percentile per-packet one-way delay: 184.915 ms  
  Loss rate: 5.40%  
-- Flow 1:  
  Average throughput: 766.30 Mbit/s  
  95th percentile per-packet one-way delay: 138.448 ms  
  Loss rate: 4.78%  
-- Flow 2:  
  Average throughput: 459.08 Mbit/s  
  95th percentile per-packet one-way delay: 205.847 ms  
  Loss rate: 9.50%  
-- Flow 3:  
  Average throughput: 725.41 Mbit/s  
  95th percentile per-packet one-way delay: 121.910 ms  
  Loss rate: 1.75%
Run 4: Report of FillP — Data Link

![Graph of Throughput (Mbps/s) over Time (s) with different flow rates indicated.](image1)

![Graph of Percentile Delay (ms) over Time (s) with different flow rates indicated.](image2)
Run 5: Statistics of FillP

End at: 2018-05-26 04:32:43
Local clock offset: 0.15 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-05-26 07:37:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1305.12 Mbit/s
95th percentile per-packet one-way delay: 208.053 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 726.59 Mbit/s
95th percentile per-packet one-way delay: 190.340 ms
Loss rate: 3.85%
-- Flow 2:
Average throughput: 631.79 Mbit/s
95th percentile per-packet one-way delay: 151.737 ms
Loss rate: 8.41%
-- Flow 3:
Average throughput: 476.46 Mbit/s
95th percentile per-packet one-way delay: 237.844 ms
Loss rate: 1.86%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-05-26 04:55:09
Local clock offset: -0.198 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-05-26 07:39:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1403.65 Mbit/s
95th percentile per-packet one-way delay: 143.457 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 793.16 Mbit/s
95th percentile per-packet one-way delay: 117.476 ms
Loss rate: 1.46%
-- Flow 2:
Average throughput: 662.17 Mbit/s
95th percentile per-packet one-way delay: 145.622 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 512.82 Mbit/s
95th percentile per-packet one-way delay: 153.783 ms
Loss rate: 5.06%
Run 6: Report of FillP — Data Link

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

**Throughput (Mbps)**

0, 500, 1000

Time (s)

0, 5, 10, 15, 20, 25, 30

- **Flow 1 Ingress (mean 805.01 Mbps)**
- **Flow 1 Egress (mean 793.16 Mbps)**
- **Flow 2 Ingress (mean 672.71 Mbps)**
- **Flow 2 Egress (mean 662.12 Mbps)**
- **Flow 3 Ingress (mean 540.16 Mbps)**
- **Flow 3 Egress (mean 512.82 Mbps)**

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

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

- **Flow 1 (95th percentile 117.48 ms)**
- **Flow 2 (95th percentile 145.62 ms)**
- **Flow 3 (95th percentile 153.78 ms)**
Run 7: Statistics of FillP

Start at: 2018-05-26 05:18:18
End at: 2018-05-26 05:18:48
Local clock offset: -0.558 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-05-26 07:39:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1193.83 Mbit/s
95th percentile per-packet one-way delay: 167.360 ms
Loss rate: 7.12%
-- Flow 1:
Average throughput: 625.17 Mbit/s
95th percentile per-packet one-way delay: 165.860 ms
Loss rate: 7.13%
-- Flow 2:
Average throughput: 607.69 Mbit/s
95th percentile per-packet one-way delay: 167.511 ms
Loss rate: 6.73%
-- Flow 3:
Average throughput: 496.66 Mbit/s
95th percentile per-packet one-way delay: 171.236 ms
Loss rate: 8.04%
Run 7: Report of FillP — Data Link

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

- Flow 1 ingress (mean 673.24 Mbps)
- Flow 1 egress (mean 625.17 Mbps)
- Flow 2 ingress (mean 651.53 Mbps)
- Flow 2 egress (mean 607.69 Mbps)
- Flow 3 ingress (mean 539.99 Mbps)
- Flow 3 egress (mean 496.66 Mbps)

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

- Flow 1 (95th percentile 165.86 ms)
- Flow 2 (95th percentile 167.51 ms)
- Flow 3 (95th percentile 171.24 ms)
Run 8: Statistics of FillP

Start at: 2018-05-26 05:41:27
End at: 2018-05-26 05:41:57
Local clock offset: -0.218 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-05-26 07:39:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1191.90 Mbit/s
95th percentile per-packet one-way delay: 217.983 ms
Loss rate: 3.13%
-- Flow 1:
Average throughput: 624.96 Mbit/s
95th percentile per-packet one-way delay: 217.633 ms
Loss rate: 3.31%
-- Flow 2:
Average throughput: 543.78 Mbit/s
95th percentile per-packet one-way delay: 233.375 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 618.92 Mbit/s
95th percentile per-packet one-way delay: 136.456 ms
Loss rate: 4.75%
Run 9: Statistics of FillP

Start at: 2018-05-26 06:04:30
End at: 2018-05-26 06:05:00
Local clock offset: 0.223 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-05-26 08:00:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1305.25 Mbit/s
  95th percentile per-packet one-way delay: 156.331 ms
  Loss rate: 4.12%
-- Flow 1:
  Average throughput: 704.12 Mbit/s
  95th percentile per-packet one-way delay: 160.472 ms
  Loss rate: 4.48%
-- Flow 2:
  Average throughput: 634.84 Mbit/s
  95th percentile per-packet one-way delay: 136.497 ms
  Loss rate: 2.70%
-- Flow 3:
  Average throughput: 538.24 Mbit/s
  95th percentile per-packet one-way delay: 153.980 ms
  Loss rate: 5.98%
Run 9: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 737.11 Mb/s)**
- **Flow 1 Egress (mean 704.12 Mb/s)**
- **Flow 2 Ingress (mean 652.44 Mb/s)**
- **Flow 2 Egress (mean 634.84 Mb/s)**
- **Flow 3 Ingress (mean 572.38 Mb/s)**
- **Flow 3 Egress (mean 538.24 Mb/s)**

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

- **Flow 1 95th percentile 160.47 ms**
- **Flow 2 95th percentile 136.50 ms**
- **Flow 3 95th percentile 153.90 ms**
Run 10: Statistics of FillP

Start at: 2018-05-26 06:27:36
End at: 2018-05-26 06:28:06
Local clock offset: -0.128 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-05-26 08:00:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1225.08 Mbit/s
95th percentile per-packet one-way delay: 195.522 ms
Loss rate: 6.15%
-- Flow 1:
Average throughput: 694.64 Mbit/s
95th percentile per-packet one-way delay: 135.190 ms
Loss rate: 5.22%
-- Flow 2:
Average throughput: 566.33 Mbit/s
95th percentile per-packet one-way delay: 208.025 ms
Loss rate: 7.29%
-- Flow 3:
Average throughput: 461.67 Mbit/s
95th percentile per-packet one-way delay: 208.885 ms
Loss rate: 7.47%
Run 10: Report of FillIP — Data Link

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

- Flow 1 Ingress (mean 732.89 Mbit/s)
- Flow 1 Egress (mean 694.64 Mbit/s)
- Flow 2 Ingress (mean 610.78 Mbit/s)
- Flow 2 Egress (mean 566.33 Mbit/s)
- Flow 3 Ingress (mean 498.97 Mbit/s)
- Flow 3 Egress (mean 461.67 Mbit/s)

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

- Flow 1 (95th percentile 135.19 ms)
- Flow 2 (95th percentile 208.03 ms)
- Flow 3 (95th percentile 208.88 ms)
Run 1: Statistics of Indigo

Start at: 2018-05-26 02:55:04  
End at: 2018-05-26 02:55:34  
Local clock offset: -0.27 ms  
Remote clock offset: -0.018 ms  

# Below is generated by plot.py at 2018-05-26 08:00:25  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 350.98 Mbit/s  
95th percentile per-packet one-way delay: 63.395 ms  
Loss rate: 0.03%  
-- Flow 1:  
Average throughput: 157.05 Mbit/s  
95th percentile per-packet one-way delay: 63.604 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 193.68 Mbit/s  
95th percentile per-packet one-way delay: 62.359 ms  
Loss rate: 0.05%  
-- Flow 3:  
Average throughput: 201.31 Mbit/s  
95th percentile per-packet one-way delay: 64.842 ms  
Loss rate: 0.03%
Run 1: Report of Indigo — Data Link

![Graph representing data link throughput and per-packet one-way delay.](image)

**Throughput (Mbps)**
- **Flow 1 ingress** (mean 157.07 Mbps)
- **Flow 1 egress** (mean 157.05 Mbps)
- **Flow 2 ingress** (mean 193.75 Mbps)
- **Flow 2 egress** (mean 193.68 Mbps)
- **Flow 3 ingress** (mean 201.33 Mbps)
- **Flow 3 egress** (mean 201.31 Mbps)

**Per-packet one-way delay (ms)**
- **Flow 1** (95th percentile 63.60 ms)
- **Flow 2** (95th percentile 62.36 ms)
- **Flow 3** (95th percentile 64.84 ms)
Run 2: Statistics of Indigo

Start at: 2018-05-26 03:18:01
End at: 2018-05-26 03:18:31
Local clock offset: 0.087 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 368.01 Mbit/s
95th percentile per-packet one-way delay: 59.509 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 204.03 Mbit/s
95th percentile per-packet one-way delay: 59.001 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 174.72 Mbit/s
95th percentile per-packet one-way delay: 59.963 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 147.59 Mbit/s
95th percentile per-packet one-way delay: 59.926 ms
Loss rate: 0.15%
Run 2: Report of Indigo — Data Link

The graphs depict the throughput and packet loss over time for different flows.

- **Throughput Graph**:
  - Y-axis: Throughput (Mbit/s)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 ingress (mean 204.15 Mbit/s)
    - Flow 1 egress (mean 204.03 Mbit/s)
    - Flow 2 ingress (mean 174.76 Mbit/s)
    - Flow 2 egress (mean 174.72 Mbit/s)
    - Flow 3 ingress (mean 147.85 Mbit/s)
    - Flow 3 egress (mean 147.59 Mbit/s)

- **Packet Loss Graph**:
  - Y-axis: Per packet loss (ms)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 (95th percentile 59.00 ms)
    - Flow 2 (95th percentile 59.96 ms)
    - Flow 3 (95th percentile 59.93 ms)
Run 3: Statistics of Indigo

Start at: 2018-05-26 03:40:54
End at: 2018-05-26 03:41:24
Local clock offset: -0.204 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 418.55 Mbit/s
  95th percentile per-packet one-way delay: 58.939 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 222.23 Mbit/s
  95th percentile per-packet one-way delay: 58.011 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 215.65 Mbit/s
  95th percentile per-packet one-way delay: 59.973 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 168.46 Mbit/s
  95th percentile per-packet one-way delay: 59.732 ms
  Loss rate: 0.00%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-05-26 04:03:47
End at: 2018-05-26 04:04:17
Local clock offset: -0.22 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.22 Mbit/s
95th percentile per-packet one-way delay: 54.946 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 228.64 Mbit/s
95th percentile per-packet one-way delay: 54.123 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 201.55 Mbit/s
95th percentile per-packet one-way delay: 55.625 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 175.22 Mbit/s
95th percentile per-packet one-way delay: 55.642 ms
Loss rate: 0.00%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2018-05-26 04:26:49
End at: 2018-05-26 04:27:19
Local clock offset: -0.251 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 388.67 Mbit/s
95th percentile per-packet one-way delay: 53.896 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.92 Mbit/s
95th percentile per-packet one-way delay: 52.814 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.53 Mbit/s
95th percentile per-packet one-way delay: 54.426 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 179.44 Mbit/s
95th percentile per-packet one-way delay: 56.485 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link
Run 6: Statistics of Indigo

Start at: 2018-05-26 04:49:44
End at: 2018-05-26 04:50:14
Local clock offset: -0.587 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.24 Mbit/s
95th percentile per-packet one-way delay: 56.081 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 230.96 Mbit/s
95th percentile per-packet one-way delay: 55.355 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 197.50 Mbit/s
95th percentile per-packet one-way delay: 55.885 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 170.14 Mbit/s
95th percentile per-packet one-way delay: 58.395 ms
Loss rate: 0.02%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

Start at: 2018-05-26 05:12:58
End at: 2018-05-26 05:13:28
Local clock offset: -0.237 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics

-- Total of 3 flows:
Average throughput: 398.93 Mbit/s
95th percentile per-packet one-way delay: 57.108 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 205.97 Mbit/s
95th percentile per-packet one-way delay: 54.395 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 208.89 Mbit/s
95th percentile per-packet one-way delay: 60.682 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 168.44 Mbit/s
95th percentile per-packet one-way delay: 55.219 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-05-26 05:36:02
End at: 2018-05-26 05:36:32
Local clock offset: -0.583 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.62 Mbit/s
95th percentile per-packet one-way delay: 54.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.39 Mbit/s
95th percentile per-packet one-way delay: 53.699 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 194.52 Mbit/s
95th percentile per-packet one-way delay: 53.943 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.65 Mbit/s
95th percentile per-packet one-way delay: 55.680 ms
Loss rate: 0.00%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Start at: 2018-05-26 05:59:02
End at: 2018-05-26 05:59:32
Local clock offset: -0.174 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.87 Mbit/s
95th percentile per-packet one-way delay: 54.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.26 Mbit/s
95th percentile per-packet one-way delay: 53.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.40 Mbit/s
95th percentile per-packet one-way delay: 55.883 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 176.39 Mbit/s
95th percentile per-packet one-way delay: 54.625 ms
Loss rate: 0.00%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-05-26 06:22:10
End at: 2018-05-26 06:22:40
Local clock offset: -0.128 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 420.62 Mbit/s
95th percentile per-packet one-way delay: 54.023 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.39 Mbit/s
95th percentile per-packet one-way delay: 53.701 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 225.38 Mbit/s
95th percentile per-packet one-way delay: 54.445 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 172.56 Mbit/s
95th percentile per-packet one-way delay: 53.945 ms
Loss rate: 0.00%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-05-26 03:02:22
End at: 2018-05-26 03:02:52
Local clock offset: 0.135 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.53 Mbit/s
95th percentile per-packet one-way delay: 51.485 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.19 Mbit/s
95th percentile per-packet one-way delay: 51.524 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 51.381 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 51.463 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

---

**Graph 1:**
- **Throughput (Mbps):**
- **Time (s):**
  - Flow 1 ingress (mean 34.19 Mbps)
  - Flow 1 egress (mean 34.19 Mbps)
  - Flow 2 ingress (mean 23.42 Mbps)
  - Flow 2 egress (mean 23.42 Mbps)
  - Flow 3 ingress (mean 11.42 Mbps)
  - Flow 3 egress (mean 11.42 Mbps)

**Graph 2:**
- **Per packet one way delay (ms):**
- **Time (s):**
  - Flow 1 (95th percentile 51.52 ms)
  - Flow 2 (95th percentile 51.38 ms)
  - Flow 3 (95th percentile 51.46 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-05-26 03:25:17
End at: 2018-05-26 03:25:47
Local clock offset: 0.167 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.85 Mbit/s
  95th percentile per-packet one-way delay: 51.088 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.78 Mbit/s
  95th percentile per-packet one-way delay: 51.077 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.50 Mbit/s
  95th percentile per-packet one-way delay: 51.221 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.42 Mbit/s
  95th percentile per-packet one-way delay: 50.705 ms
  Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

![Graphs showing data link performance metrics over time, including throughput and per-packet one-way delay for different flows.]
Run 3: Statistics of LEDBAT

Start at: 2018-05-26 03:48:21
End at: 2018-05-26 03:48:51
Local clock offset: -0.596 ms
Remote clock offset: -0.135 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.71 Mbit/s
95th percentile per-packet one-way delay: 51.950 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.09 Mbit/s
95th percentile per-packet one-way delay: 52.059 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.58 Mbit/s
95th percentile per-packet one-way delay: 51.767 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.95 Mbit/s
95th percentile per-packet one-way delay: 50.938 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

---

Graph 1: Throughput over Time

- **Flow 1**: Ingress (mean 36.09 Mbit/s), Egress (mean 36.09 Mbit/s)
- **Flow 2**: Ingress (mean 23.38 Mbit/s), Egress (mean 23.38 Mbit/s)
- **Flow 3**: Ingress (mean 11.95 Mbit/s), Egress (mean 11.95 Mbit/s)

Graph 2: Per-packet one-way delay over Time

- **Flow 1**: 95th percentile 52.06 ms
- **Flow 2**: 95th percentile 51.77 ms
- **Flow 3**: 95th percentile 50.94 ms
Run 4: Statistics of LEDBAT

Start at: 2018-05-26 04:11:13
End at: 2018-05-26 04:11:43
Local clock offset: -0.602 ms
Remote clock offset: -0.186 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.05 Mbit/s
95th percentile per-packet one-way delay: 52.271 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.39 Mbit/s
95th percentile per-packet one-way delay: 52.233 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 52.226 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.74 Mbit/s
95th percentile per-packet one-way delay: 53.082 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

- **Throughput**
  - Flow 1 ingress (mean 35.39 Mbit/s)
  - Flow 1 egress (mean 35.39 Mbit/s)
  - Flow 2 ingress (mean 23.71 Mbit/s)
  - Flow 2 egress (mean 23.70 Mbit/s)
  - Flow 3 ingress (mean 11.74 Mbit/s)
  - Flow 3 egress (mean 11.74 Mbit/s)

- **Delay**
  - Flow 1 (95th percentile 52.23 ms)
  - Flow 2 (95th percentile 52.23 ms)
  - Flow 3 (95th percentile 53.08 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-05-26 04:34:13
End at: 2018-05-26 04:34:43
Local clock offset: -0.25 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.99 Mbit/s
95th percentile per-packet one-way delay: 51.534 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 33.15 Mbit/s
95th percentile per-packet one-way delay: 51.517 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 51.515 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 51.711 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

![Throughput Graph](image1)

- **Flow 1 ingress (mean 33.15 Mbit/s)**
- **Flow 1 egress (mean 33.15 Mbit/s)**
- **Flow 2 ingress (mean 15.25 Mbit/s)**
- **Flow 2 egress (mean 15.24 Mbit/s)**
- **Flow 3 ingress (mean 11.13 Mbit/s)**
- **Flow 3 egress (mean 11.13 Mbit/s)**

![Delay Graph](image2)

- **Flow 1 (95th percentile 51.52 ms)**
- **Flow 2 (95th percentile 51.52 ms)**
- **Flow 3 (95th percentile 51.71 ms)**
Run 6: Statistics of LEDBAT

Start at: 2018-05-26 04:57:12
End at: 2018-05-26 04:57:42
Local clock offset: -0.193 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.68 Mbit/s
  95th percentile per-packet one-way delay: 51.699 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 35.45 Mbit/s
  95th percentile per-packet one-way delay: 51.793 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 22.83 Mbit/s
  95th percentile per-packet one-way delay: 51.494 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 9.32 Mbit/s
  95th percentile per-packet one-way delay: 51.058 ms
  Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-05-26 05:20:14
End at: 2018-05-26 05:20:44
Local clock offset: -0.19 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 47.56 Mbit/s
  95th percentile per-packet one-way delay: 51.764 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 28.21 Mbit/s
  95th percentile per-packet one-way delay: 51.819 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.37 Mbit/s
  95th percentile per-packet one-way delay: 51.724 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.51 Mbit/s
  95th percentile per-packet one-way delay: 51.700 ms
  Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

[Graph showing throughput (Mbps) over time for different flows with their ingress and egress mean throughputs labeled.]
Run 8: Statistics of LEDBAT

Start at: 2018-05-26 05:43:23
End at: 2018-05-26 05:43:53
Local clock offset: -0.198 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.52 Mbit/s
95th percentile per-packet one-way delay: 52.432 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.02 Mbit/s
95th percentile per-packet one-way delay: 52.721 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 52.237 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 51.956 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

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

![Graph 2: Per Packet One Way Delay vs Time](image2)
Run 9: Statistics of LEDBAT

Start at: 2018-05-26 06:06:30
End at: 2018-05-26 06:07:00
Local clock offset: -0.152 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.15 Mbit/s
  95th percentile per-packet one-way delay: 51.985 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 35.23 Mbit/s
  95th percentile per-packet one-way delay: 52.024 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 22.70 Mbit/s
  95th percentile per-packet one-way delay: 52.025 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.58 Mbit/s
  95th percentile per-packet one-way delay: 51.370 ms
  Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

**Graph 1:**
- Y-axis: Throughput (Mbps)
- X-axis: Time (s)
- Legend:
  - Flow 1 ingress (mean 35.23 Mbps)
  - Flow 1 egress (mean 35.23 Mbps)
  - Flow 2 ingress (mean 22.70 Mbps)
  - Flow 2 egress (mean 22.70 Mbps)
  - Flow 3 ingress (mean 11.58 Mbps)
  - Flow 3 egress (mean 11.58 Mbps)

**Graph 2:**
- Y-axis: Per-packet one-way delay (ms)
- X-axis: Time (s)
- Legend:
  - Flow 1 (95th percentile 52.02 ms)
  - Flow 2 (95th percentile 52.02 ms)
  - Flow 3 (95th percentile 51.37 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-05-26 06:29:33
End at: 2018-05-26 06:30:03
Local clock offset: -0.159 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.06 Mbit/s
95th percentile per-packet one-way delay: 51.677 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.87 Mbit/s
95th percentile per-packet one-way delay: 51.734 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.36 Mbit/s
95th percentile per-packet one-way delay: 51.526 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.20 Mbit/s
95th percentile per-packet one-way delay: 51.181 ms
Loss rate: 0.03%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-26 02:51:59
End at: 2018-05-26 02:52:29
Local clock offset: -0.241 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 598.10 Mbit/s
95th percentile per-packet one-way delay: 111.517 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 549.94 Mbit/s
95th percentile per-packet one-way delay: 113.193 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 67.57 Mbit/s
95th percentile per-packet one-way delay: 107.315 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 105.930 ms
Loss rate: 0.00%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-26 03:14:56
End at: 2018-05-26 03:15:26
Local clock offset: -0.219 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 555.51 Mbit/s
  95th percentile per-packet one-way delay: 181.942 ms
  Loss rate: 4.06%
-- Flow 1:
  Average throughput: 476.39 Mbit/s
  95th percentile per-packet one-way delay: 184.836 ms
  Loss rate: 3.70%
-- Flow 2:
  Average throughput: 65.24 Mbit/s
  95th percentile per-packet one-way delay: 162.708 ms
  Loss rate: 3.87%
-- Flow 3:
  Average throughput: 109.03 Mbit/s
  95th percentile per-packet one-way delay: 163.908 ms
  Loss rate: 8.80%
Run 2: Report of PCC-Allegro — Data Link

---

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

---

Flow 1 ingress (mean 494.67 Mbit/s)  
Flow 1 egress (mean 476.39 Mbit/s)  
Flow 2 ingress (mean 67.99 Mbit/s)  
Flow 2 egress (mean 65.24 Mbit/s)  
Flow 3 ingress (mean 119.30 Mbit/s)  
Flow 3 egress (mean 109.03 Mbit/s)
Run 3: Statistics of PCC-Allegro

Start at: 2018-05-26 03:37:48
End at: 2018-05-26 03:38:18
Local clock offset: -0.228 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 578.24 Mbit/s
95th percentile per-packet one-way delay: 226.991 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 517.51 Mbit/s
95th percentile per-packet one-way delay: 230.088 ms
Loss rate: 2.43%
-- Flow 2:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 158.180 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 60.01 Mbit/s
95th percentile per-packet one-way delay: 157.997 ms
Loss rate: 1.48%
Run 3: Report of PCC-Allegro — Data Link

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

Start at: 2018-05-26 04:00:50
End at: 2018-05-26 04:01:20
Local clock offset: 0.151 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 570.86 Mbit/s
95th percentile per-packet one-way delay: 165.345 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 524.42 Mbit/s
95th percentile per-packet one-way delay: 165.391 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 67.65 Mbit/s
95th percentile per-packet one-way delay: 165.018 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 128.770 ms
Loss rate: 0.00%
Run 4: Report of PCC-Allegro — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 528.27 Mbps)
- Flow 1 egress (mean 524.42 Mbps)
- Flow 2 ingress (mean 67.79 Mbps)
- Flow 2 egress (mean 67.65 Mbps)
- Flow 3 ingress (mean 4.45 Mbps)
- Flow 3 egress (mean 4.45 Mbps)

Latency (ms):
- Flow 1 (95th percentile 165.39 ms)
- Flow 2 (95th percentile 165.02 ms)
- Flow 3 (95th percentile 128.77 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-26 04:23:45
End at: 2018-05-26 04:24:15
Local clock offset: -0.201 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-05-26 08:00:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.26 Mbit/s
95th percentile per-packet one-way delay: 70.669 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 544.08 Mbit/s
95th percentile per-packet one-way delay: 70.636 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 68.411 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 76.198 ms
Loss rate: 0.00%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-05-26 04:46:38
End at: 2018-05-26 04:47:08
Local clock offset: -0.605 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-05-26 08:00:40
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 602.07 Mbit/s
   95th percentile per-packet one-way delay: 180.145 ms
   Loss rate: 2.72%
-- Flow 1:
   Average throughput: 521.66 Mbit/s
   95th percentile per-packet one-way delay: 185.207 ms
   Loss rate: 2.76%
-- Flow 2:
   Average throughput: 89.75 Mbit/s
   95th percentile per-packet one-way delay: 161.380 ms
   Loss rate: 1.92%
-- Flow 3:
   Average throughput: 62.99 Mbit/s
   95th percentile per-packet one-way delay: 163.624 ms
   Loss rate: 4.03%
Run 6: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 536.45 Mbps)**
- **Flow 1 egress (mean 521.66 Mbps)**
- **Flow 2 ingress (mean 91.50 Mbps)**
- **Flow 2 egress (mean 89.75 Mbps)**
- **Flow 3 ingress (mean 65.56 Mbps)**
- **Flow 3 egress (mean 62.99 Mbps)**

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

- **Flow 1 (95th percentile 185.21 ms)**
- **Flow 2 (95th percentile 161.38 ms)**
- **Flow 3 (95th percentile 163.62 ms)**

135
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-26 05:09:49
End at: 2018-05-26 05:10:19
Local clock offset: -0.192 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-05-26 08:06:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 569.36 Mbit/s
95th percentile per-packet one-way delay: 188.135 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 524.96 Mbit/s
95th percentile per-packet one-way delay: 188.724 ms
Loss rate: 7.33%
-- Flow 2:
Average throughput: 65.72 Mbit/s
95th percentile per-packet one-way delay: 181.584 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 2.14 Mbit/s
95th percentile per-packet one-way delay: 178.681 ms
Loss rate: 4.47%
Run 7: Report of PCC-Allegro — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.]
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-26 05:32:48
End at: 2018-05-26 05:33:18
Local clock offset: -0.214 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-05-26 08:06:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 585.90 Mbit/s
  95th percentile per-packet one-way delay: 144.514 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 556.43 Mbit/s
  95th percentile per-packet one-way delay: 146.921 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 28.65 Mbit/s
  95th percentile per-packet one-way delay: 129.475 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 31.69 Mbit/s
  95th percentile per-packet one-way delay: 78.638 ms
  Loss rate: 0.01%
Run 8: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-26 05:55:51
End at: 2018-05-26 05:56:21
Local clock offset: -0.563 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-05-26 08:06:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.54 Mbit/s
95th percentile per-packet one-way delay: 174.818 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 547.46 Mbit/s
95th percentile per-packet one-way delay: 175.016 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 169.246 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 132.354 ms
Loss rate: 0.00%
Run 9: Report of PCC-Allegro — Data Link
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-26 06:19:06
End at: 2018-05-26 06:19:36
Local clock offset: -0.102 ms
Remote clock offset: -0.21 ms

# Below is generated by plot.py at 2018-05-26 08:07:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.51 Mbit/s
95th percentile per-packet one-way delay: 173.451 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 518.85 Mbit/s
95th percentile per-packet one-way delay: 176.495 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 72.41 Mbit/s
95th percentile per-packet one-way delay: 160.287 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 62.37 Mbit/s
95th percentile per-packet one-way delay: 161.340 ms
Loss rate: 1.03%
Run 10: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 523.75 Mbit/s)
- Flow 1 egress (mean 518.85 Mbit/s)
- Flow 2 ingress (mean 72.80 Mbit/s)
- Flow 2 egress (mean 72.41 Mbit/s)
- Flow 3 ingress (mean 63.00 Mbit/s)
- Flow 3 egress (mean 62.37 Mbit/s)
Run 1: Statistics of PCC-Expr

Start at: 2018-05-26 02:40:49
End at: 2018-05-26 02:41:19
Local clock offset: -0.213 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-05-26 08:11:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 383.31 Mbit/s
95th percentile per-packet one-way delay: 293.945 ms
Loss rate: 6.81%
-- Flow 1:
Average throughput: 284.72 Mbit/s
95th percentile per-packet one-way delay: 317.613 ms
Loss rate: 8.27%
-- Flow 2:
Average throughput: 136.41 Mbit/s
95th percentile per-packet one-way delay: 164.044 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 22.91 Mbit/s
95th percentile per-packet one-way delay: 164.855 ms
Loss rate: 3.27%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2018-05-26 03:03:34
End at: 2018-05-26 03:04:04
Local clock offset: -0.231 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-05-26 08:12:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.91 Mbit/s
95th percentile per-packet one-way delay: 241.669 ms
Loss rate: 6.06%
-- Flow 1:
Average throughput: 253.04 Mbit/s
95th percentile per-packet one-way delay: 255.747 ms
Loss rate: 7.22%
-- Flow 2:
Average throughput: 183.13 Mbit/s
95th percentile per-packet one-way delay: 238.334 ms
Loss rate: 3.69%
-- Flow 3:
Average throughput: 88.20 Mbit/s
95th percentile per-packet one-way delay: 176.973 ms
Loss rate: 5.63%
Run 2: Report of PCC-Expr — Data Link

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

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

Legend:
- Flow 1 ingress (mean 272.75 Mbps)
- Flow 1 egress (mean 253.04 Mbps)
- Flow 2 ingress (mean 196.15 Mbps)
- Flow 2 egress (mean 185.33 Mbps)
- Flow 3 ingress (mean 93.49 Mbps)
- Flow 3 egress (mean 88.20 Mbps)
Run 3: Statistics of PCC-Expr

Start at: 2018-05-26 03:26:28
End at: 2018-05-26 03:26:58
Local clock offset: -0.236 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-05-26 08:12:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.65 Mbit/s
95th percentile per-packet one-way delay: 290.904 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 235.30 Mbit/s
95th percentile per-packet one-way delay: 308.739 ms
Loss rate: 5.33%
-- Flow 2:
Average throughput: 200.22 Mbit/s
95th percentile per-packet one-way delay: 154.757 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 157.168 ms
Loss rate: 0.67%
Run 3: Report of PCC-Expr — Data Link

---

**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 248.53 Mbit/s)
- **Flow 1 egress** (mean 235.30 Mbit/s)
- **Flow 2 ingress** (mean 200.92 Mbit/s)
- **Flow 2 egress** (mean 200.22 Mbit/s)
- **Flow 3 ingress** (mean 12.76 Mbit/s)
- **Flow 3 egress** (mean 12.66 Mbit/s)

---

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

- **Flow 1** (95th percentile 308.74 ms)
- **Flow 2** (95th percentile 154.76 ms)
- **Flow 3** (95th percentile 157.17 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-05-26 03:49:33
End at: 2018-05-26 03:50:03
Local clock offset: 0.199 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-05-26 08:12:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.67 Mbit/s
95th percentile per-packet one-way delay: 196.833 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 196.65 Mbit/s
95th percentile per-packet one-way delay: 157.161 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 212.86 Mbit/s
95th percentile per-packet one-way delay: 225.574 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 62.04 Mbit/s
95th percentile per-packet one-way delay: 50.765 ms
Loss rate: 0.00%
Run 4: Report of PCC-Expr — Data Link

![Graphs showing data link performance metrics including throughput and packet delay over time.](image1)

*Throughput (Mbps)*

- Flow 1 ingress (mean 198.69 Mbps)
- Flow 1 egress (mean 196.65 Mbps)
- Flow 2 ingress (mean 217.00 Mbps)
- Flow 2 egress (mean 212.86 Mbps)
- Flow 3 ingress (mean 62.04 Mbps)
- Flow 3 egress (mean 62.04 Mbps)

*Packet delay (ms)*

- Flow 1 (95th percentile 157.16 ms)
- Flow 2 (95th percentile 225.57 ms)
- Flow 3 (95th percentile 50.77 ms)
Run 5: Statistics of PCC-Expr

Start at: 2018-05-26 04:12:24
End at: 2018-05-26 04:12:54
Local clock offset: -0.229 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-05-26 08:19:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 388.21 Mbit/s
  95th percentile per-packet one-way delay: 140.617 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 230.61 Mbit/s
  95th percentile per-packet one-way delay: 144.290 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 200.85 Mbit/s
  95th percentile per-packet one-way delay: 59.101 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 72.81 Mbit/s
  95th percentile per-packet one-way delay: 57.950 ms
  Loss rate: 0.19%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Start at: 2018-05-26 04:35:24
End at: 2018-05-26 04:35:54
Local clock offset: -0.242 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2018-05-26 08:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.18 Mbit/s
95th percentile per-packet one-way delay: 158.392 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 215.06 Mbit/s
95th percentile per-packet one-way delay: 215.822 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 177.51 Mbit/s
95th percentile per-packet one-way delay: 63.701 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 60.64 Mbit/s
95th percentile per-packet one-way delay: 51.647 ms
Loss rate: 0.01%
Run 6: Report of PCC-Expr — Data Link

![Graph showing network performance metrics over time. The graph includes two plots: one for throughput and one for per-packet one-way delay. The throughput plot shows three different flows with distinct lines, each indicating different rates (217.83, 177.48, and 60.63 Mbps). The per-packet delay plot includes dots for each flow, marking the 95th percentile delays (215.82, 63.70, and 51.65 ms) respectively.](image-url)
Run 7: Statistics of PCC-Expr

Start at: 2018-05-26 04:58:24
End at: 2018-05-26 04:58:54
Local clock offset: -0.202 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-05-26 08:21:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.16 Mbit/s
95th percentile per-packet one-way delay: 242.113 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 262.49 Mbit/s
95th percentile per-packet one-way delay: 235.329 ms
Loss rate: 5.46%
-- Flow 2:
Average throughput: 208.88 Mbit/s
95th percentile per-packet one-way delay: 266.592 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 93.16 Mbit/s
95th percentile per-packet one-way delay: 68.906 ms
Loss rate: 0.02%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-05-26 05:21:25
End at: 2018-05-26 05:21:55
Local clock offset: -0.614 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-05-26 08:21:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 434.74 Mbit/s
95th percentile per-packet one-way delay: 218.508 ms
Loss rate: 6.46%
-- Flow 1:
Average throughput: 256.49 Mbit/s
95th percentile per-packet one-way delay: 181.365 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 223.72 Mbit/s
95th percentile per-packet one-way delay: 230.334 ms
Loss rate: 13.68%
-- Flow 3:
Average throughput: 89.40 Mbit/s
95th percentile per-packet one-way delay: 53.616 ms
Loss rate: 0.00%
Run 8: Report of PCC-Expr — Data Link
Run 9: Statistics of PCC-Expr

Start at: 2018-05-26 05:44:35
End at: 2018-05-26 05:45:05
Local clock offset: 0.158 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 365.38 Mbit/s
  95th percentile per-packet one-way delay: 122.759 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 215.36 Mbit/s
  95th percentile per-packet one-way delay: 128.411 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 174.97 Mbit/s
  95th percentile per-packet one-way delay: 86.973 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 102.09 Mbit/s
  95th percentile per-packet one-way delay: 52.989 ms
  Loss rate: 0.00%
Run 9: Report of PCC-Expr — Data Link

![Graph of Throughput and Delay](image)

**Throughput**: Blue line represents Flow 1 ingress (mean 215.44 Mbit/s), dashed blue line represents Flow 1 egress (mean 215.36 Mbit/s). Green line represents Flow 2 ingress (mean 174.97 Mbit/s), dashed green line represents Flow 2 egress (mean 174.97 Mbit/s). Dash-dotted line represents Flow 3 ingress (mean 102.09 Mbit/s), dashed purple line represents Flow 3 egress (mean 102.09 Mbit/s).

**Per-packet one-way delay**: Blue line represents Flow 1 (95th percentile 128.41 ms), green line represents Flow 2 (95th percentile 86.97 ms), purple line represents Flow 3 (95th percentile 52.99 ms).
Run 10: Statistics of PCC-Expr

Start at: 2018-05-26 06:07:41
End at: 2018-05-26 06:08:11
Local clock offset: 0.276 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.10 Mbit/s
95th percentile per-packet one-way delay: 150.073 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 206.16 Mbit/s
95th percentile per-packet one-way delay: 117.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.10 Mbit/s
95th percentile per-packet one-way delay: 182.643 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 108.62 Mbit/s
95th percentile per-packet one-way delay: 91.132 ms
Loss rate: 0.00%
Run 10: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 206.18 Mbps)
  - Flow 2 ingress (mean 172.33 Mbps)
  - Flow 3 ingress (mean 108.60 Mbps)
  - Flow 1 egress (mean 206.16 Mbps)
  - Flow 2 egress (mean 170.10 Mbps)
  - Flow 3 egress (mean 108.62 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 117.75 ms)
  - Flow 2 (95th percentile 182.64 ms)
  - Flow 3 (95th percentile 91.13 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-26 02:59:13
End at: 2018-05-26 02:59:43
Local clock offset: -0.63 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 26.29 Mbit/s
  95th percentile per-packet one-way delay: 51.112 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 51.146 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: 51.035 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 21.79 Mbit/s
  95th percentile per-packet one-way delay: 51.166 ms
  Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps)**

**Time (s)**

**Packet Loss**

**Time (s)**

Legend:
- Flow 1 ingress (mean 0.06 Mbps)
- Flow 1 egress (mean 0.06 Mbps)
- Flow 2 ingress (mean 28.79 Mbps)
- Flow 2 egress (mean 28.80 Mbps)
- Flow 3 ingress (mean 21.78 Mbps)
- Flow 3 egress (mean 21.79 Mbps)

Legend for Packet Loss:
- Flow 1 (95th percentile 51.15 ms)
- Flow 2 (95th percentile 51.03 ms)
- Flow 3 (95th percentile 51.17 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-26 03:22:05
End at: 2018-05-26 03:22:35
Local clock offset: -0.196 ms
Remote clock offset: -0.092 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.08 Mbit/s
  95th percentile per-packet one-way delay: 50.678 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 51.23 Mbit/s
  95th percentile per-packet one-way delay: 50.175 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 25.47 Mbit/s
  95th percentile per-packet one-way delay: 50.741 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 21.10 Mbit/s
  95th percentile per-packet one-way delay: 50.601 ms
  Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link

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

Detailed analysis of network performance and throughput observed in Run 2.
Run 3: Statistics of QUIC Cubic

Start at: 2018-05-26 03:45:10
End at: 2018-05-26 03:45:40
Local clock offset: -0.281 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.37 Mbit/s
95th percentile per-packet one-way delay: 50.866 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 43.88 Mbit/s
95th percentile per-packet one-way delay: 50.352 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.77 Mbit/s
95th percentile per-packet one-way delay: 50.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 21.41 Mbit/s
95th percentile per-packet one-way delay: 50.853 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-26 04:08:03
End at: 2018-05-26 04:08:33
Local clock offset: -0.168 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 28.91 Mbit/s
  95th percentile per-packet one-way delay: 50.576 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 49.636 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 35.32 Mbit/s
  95th percentile per-packet one-way delay: 50.586 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 16.60 Mbit/s
  95th percentile per-packet one-way delay: 50.317 ms
  Loss rate: 0.00%
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-26 04:31:02
End at: 2018-05-26 04:31:32
Local clock offset: -0.203 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.44 Mbit/s
  95th percentile per-packet one-way delay: 50.661 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 42.60 Mbit/s
  95th percentile per-packet one-way delay: 50.705 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 26.78 Mbit/s
  95th percentile per-packet one-way delay: 50.279 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.38 Mbit/s
  95th percentile per-packet one-way delay: 49.773 ms
  Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 42.60 Mbit/s)
- Flow 1 egress (mean 42.60 Mbit/s)
- Flow 2 ingress (mean 26.78 Mbit/s)
- Flow 2 egress (mean 26.78 Mbit/s)
- Flow 3 ingress (mean 15.38 Mbit/s)
- Flow 3 egress (mean 15.38 Mbit/s)

- Flow 1 (95th percentile 50.70 ms)
- Flow 2 (95th percentile 50.28 ms)
- Flow 3 (95th percentile 49.77 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-26 04:53:58
End at: 2018-05-26 04:54:28
Local clock offset: -0.212 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.88 Mbit/s
95th percentile per-packet one-way delay: 50.747 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.85 Mbit/s
95th percentile per-packet one-way delay: 50.763 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.55 Mbit/s
95th percentile per-packet one-way delay: 50.730 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.44 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps):**
- **Flow 1** (mean 38.85 Mbps)
- **Flow 2** (mean 29.55 Mbps)
- **Flow 3** (mean 16.44 Mbps)

**Packet Round Trip Time (ms):**
- **Flow 1** (95th percentile 50.76 ms)
- **Flow 2** (95th percentile 50.73 ms)
- **Flow 3** (95th percentile 50.42 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-26 05:17:06
End at: 2018-05-26 05:17:36
Local clock offset: 0.179 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.07 Mbit/s
  95th percentile per-packet one-way delay: 50.655 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 48.62 Mbit/s
  95th percentile per-packet one-way delay: 50.693 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 28.41 Mbit/s
  95th percentile per-packet one-way delay: 49.371 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 20.07 Mbit/s
  95th percentile per-packet one-way delay: 49.929 ms
  Loss rate: 0.00%
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-26 05:40:15
End at: 2018-05-26 05:40:45
Local clock offset: -0.598 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.06 Mbit/s
95th percentile per-packet one-way delay: 51.221 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.79 Mbit/s
95th percentile per-packet one-way delay: 50.873 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.55 Mbit/s
95th percentile per-packet one-way delay: 50.973 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 51.422 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-26 06:03:18
End at: 2018-05-26 06:03:48
Local clock offset: -0.148 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.95 Mbit/s
95th percentile per-packet one-way delay: 50.987 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 50.744 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 51.059 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.62 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-26 06:26:23
End at: 2018-05-26 06:26:53
Local clock offset: -0.15 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.38 Mbit/s
  95th percentile per-packet one-way delay: 50.665 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 64.07 Mbit/s
  95th percentile per-packet one-way delay: 50.657 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.50 Mbit/s
  95th percentile per-packet one-way delay: 50.690 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 18.36 Mbit/s
  95th percentile per-packet one-way delay: 50.009 ms
  Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-05-26 02:49:44
End at: 2018-05-26 02:50:14
Local clock offset: -0.227 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.874 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.788 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.931 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.418 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

Start at: 2018-05-26 03:12:41
End at: 2018-05-26 03:13:11
Local clock offset: -0.215 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.728 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.787 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.373 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 50.75 ms) — Flow 2 (95th percentile 49.79 ms) — Flow 3 (95th percentile 50.37 ms)
Run 3: Statistics of SCReAM

Start at: 2018-05-26 03:35:32
End at: 2018-05-26 03:36:02
Local clock offset: 0.163 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.417 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.439 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.393 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.618 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

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

Throughput (Mb/s)

Time (s)

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

Packet per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 50.44 ms)
Flow 2 (95th percentile 50.39 ms)
Flow 3 (95th percentile 49.62 ms)
Run 4: Statistics of SCReAM

Start at: 2018-05-26 03:58:34
End at: 2018-05-26 03:59:04
Local clock offset: -0.151 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.740 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.832 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 50.74 ms)
- Flow 2 (95th percentile 50.51 ms)
- Flow 3 (95th percentile 49.83 ms)
Run 5: Statistics of SCReAM

Start at: 2018-05-26 04:21:30
End at: 2018-05-26 04:22:00
Local clock offset: 0.179 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 50.242 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.073 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.229 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.474 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

![Graph showing network performance metrics over time for different flows.](image-url)
Run 6: Statistics of SCReAM

Start at: 2018-05-26 04:44:22
End at: 2018-05-26 04:44:52
Local clock offset: -0.181 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.759 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.802 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.822 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.421 ms
Loss rate: 0.00%
Run 7: Statistics of SCReAM

Start at: 2018-05-26 05:07:33
End at: 2018-05-26 05:08:03
Local clock offset: -0.176 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 50.864 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.864 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.829 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.931 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

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

- **Flow 1 ingress** (mean 0.22 Mbit/s)
- **Flow 1 egress** (mean 0.22 Mbit/s)
- **Flow 2 ingress** (mean 0.22 Mbit/s)
- **Flow 2 egress** (mean 0.22 Mbit/s)
- **Flow 3 ingress** (mean 0.22 Mbit/s)
- **Flow 3 egress** (mean 0.22 Mbit/s)
Run 8: Statistics of SCReAM

Start at: 2018-05-26 05:30:32
End at: 2018-05-26 05:31:02
Local clock offset: 0.172 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.526 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.810 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.565 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.438 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

- Blue dashed line: Flow 1 ingress (mean 0.22 Mbps)
- Green dashed line: Flow 2 ingress (mean 0.22 Mbps)
- Red dashed line: Flow 3 ingress (mean 0.22 Mbps)
- Blue solid line: Flow 1 egress (mean 0.22 Mbps)
- Green solid line: Flow 2 egress (mean 0.22 Mbps)
- Red solid line: Flow 3 egress (mean 0.22 Mbps)

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

- Blue circle: Flow 1 (95th percentile 49.81 ms)
- Yellow circle: Flow 2 (95th percentile 50.56 ms)
- Green circle: Flow 3 (95th percentile 50.44 ms)
Run 9: Statistics of SCReAM

Start at: 2018-05-26 05:53:35
End at: 2018-05-26 05:54:05
Local clock offset: -0.546 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 51.047 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.027 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.108 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.859 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Graph of Throughput and Delay Over Time]

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

- **Delay** (ms):
  - Flow 1 (95th percentile 51.03 ms)
  - Flow 2 (95th percentile 51.11 ms)
  - Flow 3 (95th percentile 50.86 ms)
Run 10: Statistics of SCReAM

Start at: 2018-05-26 06:16:50
End at: 2018-05-26 06:17:20
Local clock offset: 0.251 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-05-26 08:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.479 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.489 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.153 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-05-26 02:56:34
End at: 2018-05-26 02:57:04
Local clock offset: -0.264 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 14.52 Mbit/s
  95th percentile per-packet one-way delay: 51.642 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.78 Mbit/s
  95th percentile per-packet one-way delay: 51.666 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 6.73 Mbit/s
  95th percentile per-packet one-way delay: 51.571 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.76 Mbit/s
  95th percentile per-packet one-way delay: 51.650 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-05-26 03:19:33
End at: 2018-05-26 03:20:03
Local clock offset: -0.269 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.13 Mbit/s
  95th percentile per-packet one-way delay: 50.731 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 6.85 Mbit/s
  95th percentile per-packet one-way delay: 50.653 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 6.31 Mbit/s
  95th percentile per-packet one-way delay: 50.741 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.30 Mbit/s
  95th percentile per-packet one-way delay: 50.867 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

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

Flow 1 ingress (mean 6.85 Mbit/s)
Flow 1 egress (mean 6.85 Mbit/s)
Flow 2 ingress (mean 6.31 Mbit/s)
Flow 2 egress (mean 6.31 Mbit/s)
Flow 3 ingress (mean 6.30 Mbit/s)
Flow 3 egress (mean 6.30 Mbit/s)

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

Flow 1 (95th percentile 50.65 ms)
Flow 2 (95th percentile 50.74 ms)
Flow 3 (95th percentile 50.87 ms)

207
Run 3: Statistics of Sprout

Start at: 2018-05-26 03:42:28
End at: 2018-05-26 03:42:58
Local clock offset: -0.263 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 51.287 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.24 Mbit/s
95th percentile per-packet one-way delay: 51.351 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 51.179 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.40 Mbit/s
95th percentile per-packet one-way delay: 51.345 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

![Graph showing throughput and latency over time for different flows.]
Run 4: Statistics of Sprout

Start at: 2018-05-26 04:05:21
End at: 2018-05-26 04:05:51
Local clock offset: -0.595 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.97 Mbit/s
95th percentile per-packet one-way delay: 51.795 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.55 Mbit/s
95th percentile per-packet one-way delay: 51.807 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 51.883 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 50.420 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-05-26 04:28:21
End at: 2018-05-26 04:28:51
Local clock offset: -0.238 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 51.524 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.35 Mbit/s
95th percentile per-packet one-way delay: 51.469 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 51.560 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 51.667 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 7.35 Mbps/s)
Flow 1 egress (mean 7.35 Mbps/s)
Flow 2 ingress (mean 4.90 Mbps/s)
Flow 2 egress (mean 4.90 Mbps/s)
Flow 3 ingress (mean 3.80 Mbps/s)
Flow 3 egress (mean 3.80 Mbps/s)

Per packet one way latency (ms)

Time (s)

Flow 1 (95th percentile 51.47 ms)
Flow 2 (95th percentile 51.56 ms)
Flow 3 (95th percentile 51.67 ms)
Run 6: Statistics of Sprout

Start at: 2018-05-26 04:51:17
End at: 2018-05-26 04:51:47
Local clock offset: -0.176 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 51.080 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.93 Mbit/s
95th percentile per-packet one-way delay: 51.055 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.38 Mbit/s
95th percentile per-packet one-way delay: 51.085 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 51.174 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph](image1)

![Graph](image2)
Run 7: Statistics of Sprout

Start at: 2018-05-26 05:14:31  
End at: 2018-05-26 05:15:01  
Local clock offset: -0.561 ms  
Remote clock offset: 0.071 ms  

# Below is generated by plot.py at 2018-05-26 08:22:38  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 13.00 Mbit/s  
95th percentile per-packet one-way delay: 51.884 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 6.64 Mbit/s  
95th percentile per-packet one-way delay: 51.791 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 6.30 Mbit/s  
95th percentile per-packet one-way delay: 51.913 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 6.59 Mbit/s  
95th percentile per-packet one-way delay: 51.988 ms  
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-05-26 05:37:36
End at: 2018-05-26 05:38:06
Local clock offset: ~0.21 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 51.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 51.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.02 Mbit/s
95th percentile per-packet one-way delay: 51.410 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.42 Mbit/s
95th percentile per-packet one-way delay: 51.488 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- Flow 1 ingress: mean 5.97 Mbit/s
- Flow 1 egress: mean 5.97 Mbit/s
- Flow 2 ingress: mean 3.02 Mbit/s
- Flow 2 egress: mean 3.02 Mbit/s
- Flow 3 ingress: mean 6.42 Mbit/s
- Flow 3 egress: mean 6.42 Mbit/s

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

- Flow 1 95th percentile: 51.30 ms
- Flow 2 95th percentile: 51.41 ms
- Flow 3 95th percentile: 51.49 ms
Run 9: Statistics of Sprout

Start at: 2018-05-26 06:00:37
End at: 2018-05-26 06:01:07
Local clock offset: 0.195 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 51.090 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: 51.047 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 51.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.41 Mbit/s
95th percentile per-packet one-way delay: 50.950 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-05-26 06:23:45
End at: 2018-05-26 06:24:15
Local clock offset: -0.153 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-05-26 08:22:38
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 13.70 Mbit/s
 95th percentile per-packet one-way delay: 51.270 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 7.01 Mbit/s
 95th percentile per-packet one-way delay: 51.259 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 6.68 Mbit/s
 95th percentile per-packet one-way delay: 51.295 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 6.81 Mbit/s
 95th percentile per-packet one-way delay: 51.229 ms
 Loss rate: 0.00%
Run 1: Statistics of TaoVA-100x

Start at: 2018-05-26 02:53:28
End at: 2018-05-26 02:53:58
Local clock offset: -0.245 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-05-26 08:28:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 322.10 Mbit/s
  95th percentile per-packet one-way delay: 53.809 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 162.82 Mbit/s
  95th percentile per-packet one-way delay: 50.868 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 189.30 Mbit/s
  95th percentile per-packet one-way delay: 56.894 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 97.04 Mbit/s
  95th percentile per-packet one-way delay: 51.663 ms
  Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-05-26 03:16:24
End at: 2018-05-26 03:16:54
Local clock offset: 0.147 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2018-05-26 08:29:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 346.44 Mbit/s
  95th percentile per-packet one-way delay: 61.603 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 178.26 Mbit/s
  95th percentile per-packet one-way delay: 52.424 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 189.11 Mbit/s
  95th percentile per-packet one-way delay: 64.969 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 127.04 Mbit/s
  95th percentile per-packet one-way delay: 66.964 ms
  Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

![Data Link Graph]

- Flow 1 ingress (mean 178.26 Mbit/s)
- Flow 1 egress (mean 178.26 Mbit/s)
- Flow 2 ingress (mean 189.12 Mbit/s)
- Flow 2 egress (mean 189.11 Mbit/s)
- Flow 3 ingress (mean 127.04 Mbit/s)
- Flow 3 egress (mean 127.04 Mbit/s)

![Packet Delay Graph]

- Flow 1 (95th percentile 52.42 ms)
- Flow 2 (95th percentile 64.97 ms)
- Flow 3 (95th percentile 66.96 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-05-26 03:39:16
End at: 2018-05-26 03:39:46
Local clock offset: 0.176 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-05-26 08:29:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.31 Mbit/s
95th percentile per-packet one-way delay: 65.519 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.60 Mbit/s
95th percentile per-packet one-way delay: 62.427 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.57 Mbit/s
95th percentile per-packet one-way delay: 65.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.78 Mbit/s
95th percentile per-packet one-way delay: 71.548 ms
Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 179.60 Mbps)
- Flow 1 egress (mean 179.60 Mbps)
- Flow 2 ingress (mean 161.57 Mbps)
- Flow 2 egress (mean 161.57 Mbps)
- Flow 3 ingress (mean 159.79 Mbps)
- Flow 3 egress (mean 159.79 Mbps)

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

- Flow 1 (95th percentile 62.43 ms)
- Flow 2 (95th percentile 65.55 ms)
- Flow 3 (95th percentile 71.55 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-05-26 04:02:17
End at: 2018-05-26 04:02:47
Local clock offset: -0.201 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2018-05-26 08:29:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 247.08 Mbit/s
  95th percentile per-packet one-way delay: 54.340 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 124.63 Mbit/s
  95th percentile per-packet one-way delay: 55.867 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 132.41 Mbit/s
  95th percentile per-packet one-way delay: 52.566 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 103.09 Mbit/s
  95th percentile per-packet one-way delay: 50.853 ms
  Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

End at: 2018-05-26 04:25:43
Local clock offset: -0.201 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-05-26 08:30:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 325.19 Mbit/s
  95th percentile per-packet one-way delay: 60.220 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 193.14 Mbit/s
  95th percentile per-packet one-way delay: 57.595 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 118.61 Mbit/s
  95th percentile per-packet one-way delay: 54.742 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 159.65 Mbit/s
  95th percentile per-packet one-way delay: 68.735 ms
  Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 193.33 Mbit/s)  
Flow 1 egress (mean 193.14 Mbit/s)  
Flow 2 ingress (mean 118.61 Mbit/s)  
Flow 2 egress (mean 118.61 Mbit/s)  
Flow 3 ingress (mean 159.62 Mbit/s)  
Flow 3 egress (mean 159.65 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 57.59 ms)  
Flow 2 (95th percentile 54.74 ms)  
Flow 3 (95th percentile 68.73 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-05-26 04:48:07
End at: 2018-05-26 04:48:37
Local clock offset: -0.591 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-05-26 08:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.24 Mbit/s
95th percentile per-packet one-way delay: 66.243 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 175.04 Mbit/s
95th percentile per-packet one-way delay: 63.359 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 165.06 Mbit/s
95th percentile per-packet one-way delay: 63.287 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 133.17 Mbit/s
95th percentile per-packet one-way delay: 79.252 ms
Loss rate: 0.16%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-26 05:11:17
End at: 2018-05-26 05:11:47
Local clock offset: 0.189 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-26 08:34:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.88 Mbit/s
95th percentile per-packet one-way delay: 53.906 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 209.38 Mbit/s
95th percentile per-packet one-way delay: 51.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.55 Mbit/s
95th percentile per-packet one-way delay: 54.092 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 118.19 Mbit/s
95th percentile per-packet one-way delay: 61.378 ms
Loss rate: 0.09%
Run 7: Report of TaoVA-100x — Data Link

Graph 1: Throughput vs Time
- Flow 1 ingress (mean 209.38 Mbit/s)
- Flow 1 egress (mean 209.38 Mbit/s)
- Flow 2 ingress (mean 192.55 Mbit/s)
- Flow 2 egress (mean 192.55 Mbit/s)
- Flow 3 ingress (mean 118.29 Mbit/s)
- Flow 3 egress (mean 118.39 Mbit/s)

Graph 2: Per-packet one-way delay vs Time
- Flow 1 (95th percentile 51.55 ms)
- Flow 2 (95th percentile 54.09 ms)
- Flow 3 (95th percentile 61.38 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-05-26 05:34:16
End at: 2018-05-26 05:34:46
Local clock offset: 0.185 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-05-26 08:35:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 409.54 Mbit/s
95th percentile per-packet one-way delay: 63.553 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.16 Mbit/s
95th percentile per-packet one-way delay: 57.621 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 192.18 Mbit/s
95th percentile per-packet one-way delay: 66.180 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 179.35 Mbit/s
95th percentile per-packet one-way delay: 68.236 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-05-26 05:57:18
End at: 2018-05-26 05:57:48
Local clock offset: -0.182 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.15 Mbit/s
95th percentile per-packet one-way delay: 54.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.32 Mbit/s
95th percentile per-packet one-way delay: 52.685 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 215.52 Mbit/s
95th percentile per-packet one-way delay: 55.786 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.43 Mbit/s
95th percentile per-packet one-way delay: 54.983 ms
Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 211.31 Mbit/s)**
- **Flow 1 egress (mean 211.32 Mbit/s)**
- **Flow 2 ingress (mean 215.51 Mbit/s)**
- **Flow 2 egress (mean 215.52 Mbit/s)**
- **Flow 3 ingress (mean 154.40 Mbit/s)**
- **Flow 3 egress (mean 154.43 Mbit/s)**

![Graph 2: Per-packet loss rate vs Time]

- **Flow 1 (95th percentile 52.69 ms)**
- **Flow 2 (95th percentile 55.79 ms)**
- **Flow 3 (95th percentile 54.98 ms)**

241
Run 10: Statistics of TaoVA-100x

Start at: 2018-05-26 06:20:34
End at: 2018-05-26 06:21:04
Local clock offset: -0.103 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.11 Mbit/s
95th percentile per-packet one-way delay: 65.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 152.90 Mbit/s
95th percentile per-packet one-way delay: 63.979 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 163.91 Mbit/s
95th percentile per-packet one-way delay: 61.771 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 132.46 Mbit/s
95th percentile per-packet one-way delay: 71.821 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 152.90 Mbps)
  - Flow 1 egress (mean 152.90 Mbps)
  - Flow 2 ingress (mean 163.91 Mbps)
  - Flow 2 egress (mean 163.91 Mbps)
  - Flow 3 ingress (mean 132.45 Mbps)
  - Flow 3 egress (mean 132.46 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 63.98 ms)
  - Flow 2 (95th percentile 61.77 ms)
  - Flow 3 (95th percentile 71.82 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-05-26 02:42:27
End at: 2018-05-26 02:42:57
Local clock offset: -0.633 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.22 Mbit/s
95th percentile per-packet one-way delay: 51.977 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.31 Mbit/s
95th percentile per-packet one-way delay: 52.085 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.24 Mbit/s
95th percentile per-packet one-way delay: 51.859 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 65.48 Mbit/s
95th percentile per-packet one-way delay: 51.948 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 24.31 Mbit/s)
- Flow 1 egress (mean 24.31 Mbit/s)
- Flow 2 ingress (mean 12.24 Mbit/s)
- Flow 2 egress (mean 12.24 Mbit/s)
- Flow 3 ingress (mean 65.48 Mbit/s)
- Flow 3 egress (mean 65.48 Mbit/s)
Run 2: Statistics of TCP Vegas

Start at: 2018-05-26 03:05:13
End at: 2018-05-26 03:05:43
Local clock offset: -0.301 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.15 Mbit/s
95th percentile per-packet one-way delay: 58.283 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 89.18 Mbit/s
95th percentile per-packet one-way delay: 54.411 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 229.71 Mbit/s
95th percentile per-packet one-way delay: 60.109 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 120.39 Mbit/s
95th percentile per-packet one-way delay: 53.778 ms
Loss rate: 0.04%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-05-26 03:28:07
End at: 2018-05-26 03:28:37
Local clock offset: -0.248 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.78 Mbit/s
95th percentile per-packet one-way delay: 59.231 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 77.45 Mbit/s
95th percentile per-packet one-way delay: 60.559 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.34 Mbit/s
95th percentile per-packet one-way delay: 59.063 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 55.609 ms
Loss rate: 0.00%
Run 4: Statistics of TCP Vegas

Start at: 2018-05-26 03:51:12
End at: 2018-05-26 03:51:42
Local clock offset: 0.173 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 151.30 Mbit/s
  95th percentile per-packet one-way delay: 51.444 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 69.31 Mbit/s
  95th percentile per-packet one-way delay: 51.240 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 91.89 Mbit/s
  95th percentile per-packet one-way delay: 51.524 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 62.74 Mbit/s
  95th percentile per-packet one-way delay: 52.006 ms
  Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-05-26 04:14:05
End at: 2018-05-26 04:14:35
Local clock offset: -0.235 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.25 Mbit/s
95th percentile per-packet one-way delay: 52.583 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 112.14 Mbit/s
95th percentile per-packet one-way delay: 53.033 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 51.913 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 51.334 ms
Loss rate: 0.12%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-05-26 04:37:02
End at: 2018-05-26 04:37:32
Local clock offset: -0.229 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-05-26 08:39:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.85 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 100.61 Mbit/s
95th percentile per-packet one-way delay: 51.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 104.36 Mbit/s
95th percentile per-packet one-way delay: 53.549 ms
Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link

![Graph showing TCP Vegas data link performance](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 100.61 Mbps)
  - Flow 1 egress (mean 100.61 Mbps)
  - Flow 2 ingress (mean 8.48 Mbps)
  - Flow 2 egress (mean 8.47 Mbps)
  - Flow 3 ingress (mean 104.33 Mbps)
  - Flow 3 egress (mean 104.36 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 51.33 ms)
  - Flow 2 (95th percentile 51.33 ms)
  - Flow 3 (95th percentile 53.55 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-05-26 05:00:09
End at: 2018-05-26 05:00:39
Local clock offset: -0.194 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-05-26 08:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.46 Mbit/s
95th percentile per-packet one-way delay: 60.570 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 229.89 Mbit/s
95th percentile per-packet one-way delay: 61.318 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 161.87 Mbit/s
95th percentile per-packet one-way delay: 57.173 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 38.33 Mbit/s
95th percentile per-packet one-way delay: 56.020 ms
Loss rate: 0.14%
Run 7: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**
  - **Flow 1 ingress (mean 230.04 Mbps)**
  - **Flow 1 egress (mean 229.89 Mbps)**
  - **Flow 2 ingress (mean 161.87 Mbps)**
  - **Flow 2 egress (mean 161.87 Mbps)**
  - **Flow 3 ingress (mean 38.39 Mbps)**
  - **Flow 3 egress (mean 38.33 Mbps)**

- **Per packet one way delay (ms)**
  - **Flow 1 (95th percentile 61.32 ms)**
  - **Flow 2 (95th percentile 57.17 ms)**
  - **Flow 3 (95th percentile 56.02 ms)**
Run 8: Statistics of TCP Vegas

Start at: 2018-05-26 05:23:11
End at: 2018-05-26 05:23:41
Local clock offset: 0.169 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-05-26 08:39:55
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 51.001 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 51.066 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 80.35 Mbit/s
95th percentile per-packet one-way delay: 51.033 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 91.25 Mbit/s
95th percentile per-packet one-way delay: 50.634 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 25.16 Mbit/s)
- Flow 1 egress (mean 25.16 Mbit/s)
- Flow 2 ingress (mean 80.34 Mbit/s)
- Flow 2 egress (mean 80.35 Mbit/s)
- Flow 3 ingress (mean 91.25 Mbit/s)
- Flow 3 egress (mean 91.25 Mbit/s)

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

- Flow 1 (95th percentile 51.07 ms)
- Flow 2 (95th percentile 51.03 ms)
- Flow 3 (95th percentile 50.63 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-05-26 05:46:16
End at: 2018-05-26 05:46:46
Local clock offset: 0.155 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-05-26 08:39:55
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 279.74 Mbit/s
   95th percentile per-packet one-way delay: 58.124 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 184.20 Mbit/s
   95th percentile per-packet one-way delay: 58.477 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 107.62 Mbit/s
   95th percentile per-packet one-way delay: 54.722 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 71.72 Mbit/s
   95th percentile per-packet one-way delay: 57.890 ms
   Loss rate: 0.01%
Run 9: Report of TCP Vegas — Data Link

![Graph](image)

- **Flow 1 ingress (mean 184.20 Mbit/s)**
- **Flow 1 egress (mean 184.20 Mbit/s)**
- **Flow 2 ingress (mean 107.63 Mbit/s)**
- **Flow 2 egress (mean 107.62 Mbit/s)**
- **Flow 3 ingress (mean 71.73 Mbit/s)**
- **Flow 3 egress (mean 71.72 Mbit/s)**

![Graph](image)

- **Flow 1 (95th percentile 58.48 ms)**
- **Flow 2 (95th percentile 54.72 ms)**
- **Flow 3 (95th percentile 57.89 ms)**
Run 10: Statistics of TCP Vegas

Start at: 2018-05-26 06:09:22
End at: 2018-05-26 06:09:52
Local clock offset: -0.155 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-05-26 08:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.07 Mbit/s
95th percentile per-packet one-way delay: 51.243 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.11 Mbit/s
95th percentile per-packet one-way delay: 51.523 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 120.97 Mbit/s
95th percentile per-packet one-way delay: 50.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.39 Mbit/s
95th percentile per-packet one-way delay: 51.005 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-05-26 02:45:04
End at: 2018-05-26 02:45:34
Local clock offset: -0.271 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-05-26 08:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.81 Mbit/s
95th percentile per-packet one-way delay: 115.410 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 229.21 Mbit/s
95th percentile per-packet one-way delay: 107.627 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 186.35 Mbit/s
95th percentile per-packet one-way delay: 117.886 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 127.77 Mbit/s
95th percentile per-packet one-way delay: 187.636 ms
Loss rate: 0.67%
Run 1: Report of Verus — Data Link

![Throughput and Delay Graphs]

- **Throughput Graph**
  - Flow 1 ingress (mean 229.70 Mbit/s)
  - Flow 1 egress (mean 229.21 Mbit/s)
  - Flow 2 ingress (mean 186.49 Mbit/s)
  - Flow 2 egress (mean 186.35 Mbit/s)
  - Flow 3 ingress (mean 128.55 Mbit/s)
  - Flow 3 egress (mean 127.77 Mbit/s)

- **Delay Graph**
  - Flow 1 (95th percentile 107.63 ms)
  - Flow 2 (95th percentile 117.89 ms)
  - Flow 3 (95th percentile 187.64 ms)
Run 2: Statistics of Verus

Start at: 2018-05-26 03:07:56
End at: 2018-05-26 03:08:26
Local clock offset: -0.215 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-05-26 08:42:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.30 Mbit/s
95th percentile per-packet one-way delay: 100.851 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.71 Mbit/s
95th percentile per-packet one-way delay: 99.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 161.06 Mbit/s
95th percentile per-packet one-way delay: 111.286 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 138.42 Mbit/s
95th percentile per-packet one-way delay: 99.661 ms
Loss rate: 0.00%
Run 2: Report of Verus — Data Link

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

Flow 1 ingress (mean 209.76 Mbit/s)
Flow 1 egress (mean 209.71 Mbit/s)
Flow 2 ingress (mean 161.16 Mbit/s)
Flow 2 egress (mean 161.06 Mbit/s)
Flow 3 ingress (mean 138.42 Mbit/s)
Flow 3 egress (mean 138.42 Mbit/s)

Flow 1 (95th percentile 99.38 ms)
Flow 2 (95th percentile 111.29 ms)
Flow 3 (95th percentile 99.66 ms)
Run 3: Statistics of Verus

Start at: 2018-05-26 03:30:48
End at: 2018-05-26 03:31:18
Local clock offset: -0.188 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2018-05-26 08:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.39 Mbit/s
95th percentile per-packet one-way delay: 108.801 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.37 Mbit/s
95th percentile per-packet one-way delay: 99.306 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 160.00 Mbit/s
95th percentile per-packet one-way delay: 112.158 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.60 Mbit/s
95th percentile per-packet one-way delay: 139.091 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 217.41 Mbit/s) - Blue dashed line
- Flow 1 egress (mean 217.37 Mbit/s) - Blue solid line
- Flow 2 ingress (mean 160.22 Mbit/s) - Green dashed line
- Flow 2 egress (mean 160.00 Mbit/s) - Green solid line
- Flow 3 ingress (mean 148.58 Mbit/s) - Red dashed line
- Flow 3 egress (mean 148.69 Mbit/s) - Red solid line

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 99.31 ms) - Blue dashed line
- Flow 2 (95th percentile 112.16 ms) - Green dashed line
- Flow 3 (95th percentile 139.09 ms) - Red dashed line]
Run 4: Statistics of Verus

Start at: 2018-05-26 03:53:51
End at: 2018-05-26 03:54:21
Local clock offset: -0.214 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-05-26 08:43:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.20 Mbit/s
95th percentile per-packet one-way delay: 103.512 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.20 Mbit/s
95th percentile per-packet one-way delay: 99.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 171.07 Mbit/s
95th percentile per-packet one-way delay: 136.974 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 104.07 Mbit/s
95th percentile per-packet one-way delay: 88.574 ms
Loss rate: 0.00%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-05-26 04:16:46
End at: 2018-05-26 04:17:16
Local clock offset: 0.13 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-05-26 08:44:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 364.12 Mbit/s
  95th percentile per-packet one-way delay: 132.801 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 216.68 Mbit/s
  95th percentile per-packet one-way delay: 130.566 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 169.92 Mbit/s
  95th percentile per-packet one-way delay: 120.347 ms
  Loss rate: 0.89%
-- Flow 3:
  Average throughput: 104.75 Mbit/s
  95th percentile per-packet one-way delay: 222.198 ms
  Loss rate: 0.70%
Run 5: Report of Verus — Data Link

![Graph showing network performance metrics](image)

- Flow 1 ingress (mean 217.04 Mbit/s)
- Flow 2 ingress (mean 171.50 Mbit/s)
- Flow 3 ingress (mean 105.49 Mbit/s)
- Flow 1 egress (mean 216.68 Mbit/s)
- Flow 2 egress (mean 169.92 Mbit/s)
- Flow 3 egress (mean 104.75 Mbit/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 130.57 ms)
- Flow 2 (95th percentile 120.35 ms)
- Flow 3 (95th percentile 222.20 ms)
Run 6: Statistics of Verus

Start at: 2018-05-26 04:39:40
End at: 2018-05-26 04:40:10
Local clock offset: -0.245 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-05-26 08:45:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.66 Mbit/s
95th percentile per-packet one-way delay: 115.490 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 209.04 Mbit/s
95th percentile per-packet one-way delay: 99.523 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 181.58 Mbit/s
95th percentile per-packet one-way delay: 117.445 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 141.98 Mbit/s
95th percentile per-packet one-way delay: 146.082 ms
Loss rate: 1.41%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-05-26 05:02:54
End at: 2018-05-26 05:03:24
Local clock offset: 0.199 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2018-05-26 08:45:21
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 328.19 Mbit/s
   95th percentile per-packet one-way delay: 240.584 ms
   Loss rate: 2.24%
-- Flow 1:
   Average throughput: 238.73 Mbit/s
   95th percentile per-packet one-way delay: 249.483 ms
   Loss rate: 2.98%
-- Flow 2:
   Average throughput: 93.81 Mbit/s
   95th percentile per-packet one-way delay: 147.907 ms
   Loss rate: 0.25%
-- Flow 3:
   Average throughput: 83.36 Mbit/s
   95th percentile per-packet one-way delay: 147.372 ms
   Loss rate: 0.13%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 246.18 Mbit/s)
- Flow 1 egress (mean 238.73 Mbit/s)
- Flow 2 ingress (mean 94.05 Mbit/s)
- Flow 2 egress (mean 93.81 Mbit/s)
- Flow 3 ingress (mean 83.35 Mbit/s)
- Flow 3 egress (mean 83.36 Mbit/s)

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

- Flow 1 (95th percentile 249.48 ms)
- Flow 2 (95th percentile 147.91 ms)
- Flow 3 (95th percentile 147.37 ms)
Run 8: Statistics of Verus

Start at: 2018-05-26 05:25:48
End at: 2018-05-26 05:26:18
Local clock offset: -0.584 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-05-26 08:46:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.98 Mbit/s
95th percentile per-packet one-way delay: 134.607 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 232.02 Mbit/s
95th percentile per-packet one-way delay: 145.656 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 190.48 Mbit/s
95th percentile per-packet one-way delay: 126.339 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 122.78 Mbit/s
95th percentile per-packet one-way delay: 132.163 ms
Loss rate: 0.10%
Run 8: Report of Verus — Data Link

---

[Graphs showing throughput and packet delay over time for different flows, with annotations for mean throughput and 95th percentile delay values for each flow.]
Run 9: Statistics of Verus

Start at: 2018-05-26 05:49:00
End at: 2018-05-26 05:49:30
Local clock offset: 0.188 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-05-26 08:47:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.88 Mbit/s
95th percentile per-packet one-way delay: 152.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.26 Mbit/s
95th percentile per-packet one-way delay: 139.639 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 135.11 Mbit/s
95th percentile per-packet one-way delay: 163.543 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 98.86 Mbit/s
95th percentile per-packet one-way delay: 226.467 ms
Loss rate: 0.01%
Run 9: Report of Verus — Data Link

![Graph of network traffic](image1)

Flow 1 (mean 216.25 Mbit/s)  
Flow 1 ingress (mean 216.25 Mbit/s)  
Flow 1 egress (mean 216.26 Mbit/s)

Flow 2 (mean 135.96 Mbit/s)  
Flow 2 ingress (mean 135.96 Mbit/s)  
Flow 2 egress (mean 135.11 Mbit/s)

Flow 3 (mean 98.96 Mbit/s)  
Flow 3 ingress (mean 98.96 Mbit/s)  
Flow 3 egress (mean 98.86 Mbit/s)

![Graph of packet delay](image2)

Flow 1 (95th percentile 139.64 ms)  
Flow 2 (95th percentile 163.54 ms)  
Flow 3 (95th percentile 226.47 ms)
Run 10: Statistics of Verus

Start at: 2018-05-26 06:12:03
End at: 2018-05-26 06:12:33
Local clock offset: 0.265 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-05-26 08:48:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 374.46 Mbit/s
95th percentile per-packet one-way delay: 216.466 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 215.41 Mbit/s
95th percentile per-packet one-way delay: 130.214 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 192.54 Mbit/s
95th percentile per-packet one-way delay: 256.373 ms
Loss rate: 3.79%
-- Flow 3:
Average throughput: 95.45 Mbit/s
95th percentile per-packet one-way delay: 226.254 ms
Loss rate: 1.61%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)](chart1)
Flow 1 ingress (mean 216.82 Mbps) - Flow 1 egress (mean 213.41 Mbps)
Flow 2 ingress (mean 201.15 Mbps) - Flow 2 egress (mean 192.54 Mbps)
Flow 3 ingress (mean 96.82 Mbps) - Flow 3 egress (mean 95.45 Mbps)

![Graph 2: Per-packet one-way delay (ms)](chart2)
Flow 1 (95th percentile 130.21 ms) - Flow 2 (95th percentile 256.37 ms) - Flow 3 (95th percentile 226.25 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-05-26 02:48:06
End at: 2018-05-26 02:48:36
Local clock offset: -0.273 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-05-26 08:49:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.82 Mbit/s
95th percentile per-packet one-way delay: 106.169 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 319.42 Mbit/s
95th percentile per-packet one-way delay: 131.150 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 173.49 Mbit/s
95th percentile per-packet one-way delay: 51.370 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 44.87 Mbit/s
95th percentile per-packet one-way delay: 51.311 ms
Loss rate: 0.03%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-26 03:10:57
End at: 2018-05-26 03:11:27
Local clock offset: -0.246 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-05-26 08:51:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 501.31 Mbit/s
  95th percentile per-packet one-way delay: 59.506 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 269.78 Mbit/s
  95th percentile per-packet one-way delay: 71.674 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 266.20 Mbit/s
  95th percentile per-packet one-way delay: 53.732 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 165.94 Mbit/s
  95th percentile per-packet one-way delay: 62.166 ms
  Loss rate: 0.00%
Run 2: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 269.79 Mbps)  
Flow 1 egress (mean 269.78 Mbps)

Flow 2 ingress (mean 267.09 Mbps)  
Flow 2 egress (mean 266.20 Mbps)

Flow 3 ingress (mean 165.92 Mbps)  
Flow 3 egress (mean 165.94 Mbps)

Packet size (ms)

Time (s)

Flow 1 (95th percentile 71.67 ms)  
Flow 2 (95th percentile 53.73 ms)  
Flow 3 (95th percentile 62.17 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-05-26 03:33:50
End at: 2018-05-26 03:34:20
Local clock offset: -0.225 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-05-26 08:53:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.25 Mbit/s
95th percentile per-packet one-way delay: 132.406 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 290.07 Mbit/s
95th percentile per-packet one-way delay: 104.121 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 243.74 Mbit/s
95th percentile per-packet one-way delay: 205.811 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 185.15 Mbit/s
95th percentile per-packet one-way delay: 62.408 ms
Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 292.06 Mbps)
- Flow 1 egress (mean 290.07 Mbps)
- Flow 2 ingress (mean 243.91 Mbps)
- Flow 2 egress (mean 243.76 Mbps)
- Flow 3 ingress (mean 185.16 Mbps)
- Flow 3 egress (mean 185.15 Mbps)

**Delay (ms):**
- Flow 1 (95th percentile 104.12 ms)
- Flow 2 (95th percentile 205.81 ms)
- Flow 3 (95th percentile 62.41 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-05-26 03:56:54
End at: 2018-05-26 03:57:24
Local clock offset: 0.193 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-05-26 08:53:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.07 Mbit/s
95th percentile per-packet one-way delay: 289.242 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 270.68 Mbit/s
95th percentile per-packet one-way delay: 267.380 ms
Loss rate: 2.14%
-- Flow 2:
Average throughput: 238.17 Mbit/s
95th percentile per-packet one-way delay: 300.271 ms
Loss rate: 10.79%
-- Flow 3:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 49.325 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-05-26 04:19:47
End at: 2018-05-26 04:20:17
Local clock offset: -0.286 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-05-26 08:53:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 468.11 Mbit/s
95th percentile per-packet one-way delay: 260.574 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 297.95 Mbit/s
95th percentile per-packet one-way delay: 269.375 ms
Loss rate: 3.62%
-- Flow 2:
Average throughput: 168.61 Mbit/s
95th percentile per-packet one-way delay: 51.482 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 175.61 Mbit/s
95th percentile per-packet one-way delay: 70.192 ms
Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

[Graph showing throughput over time with different data rates and delays for Flow 1, Flow 2, and Flow 3]
Run 6: Statistics of PCC-Vivace

Start at: 2018-05-26 04:42:40
End at: 2018-05-26 04:43:10
Local clock offset: -0.135 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-05-26 08:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 510.01 Mbit/s
95th percentile per-packet one-way delay: 72.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 282.95 Mbit/s
95th percentile per-packet one-way delay: 56.746 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.99 Mbit/s
95th percentile per-packet one-way delay: 94.053 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 166.12 Mbit/s
95th percentile per-packet one-way delay: 72.023 ms
Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

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

- **Flow 1** (ingress mean 282.96 Mbit/s, egress mean 282.95 Mbit/s)
- **Flow 2** (ingress mean 258.98 Mbit/s, egress mean 258.99 Mbit/s)
- **Flow 3** (ingress mean 166.12 Mbit/s, egress mean 166.12 Mbit/s)
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-26 05:05:54  
End at: 2018-05-26 05:06:25  
Local clock offset: -0.21 ms  
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-05-26 08:55:07  
# Datalink statistics
  -- Total of 3 flows:  
  Average throughput: 463.92 Mbit/s  
  95th percentile per-packet one-way delay: 67.204 ms  
  Loss rate: 0.00%  
  -- Flow 1:  
  Average throughput: 245.37 Mbit/s  
  95th percentile per-packet one-way delay: 71.877 ms  
  Loss rate: 0.00%  
  -- Flow 2:  
  Average throughput: 249.95 Mbit/s  
  95th percentile per-packet one-way delay: 54.513 ms  
  Loss rate: 0.00%  
  -- Flow 3:  
  Average throughput: 157.89 Mbit/s  
  95th percentile per-packet one-way delay: 123.203 ms  
  Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

[Graph showing throughput and packet delay for different flows]

Flow 1 (95th percentile 71.88 ms)  Flow 2 (95th percentile 54.51 ms)  Flow 3 (95th percentile 123.20 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-26 05:28:51
End at: 2018-05-26 05:29:21
Local clock offset: -0.58 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-05-26 08:55:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 477.59 Mbit/s
95th percentile per-packet one-way delay: 161.362 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 272.46 Mbit/s
95th percentile per-packet one-way delay: 186.620 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 282.09 Mbit/s
95th percentile per-packet one-way delay: 145.236 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 51.573 ms
Loss rate: 0.06%
Run 8: Report of PCC-Vivace — Data Link

![Graph showing throughput and round-trip packet delivery delays over time for different flows.](image-url)
Start at: 2018-05-26 05:51:58
End at: 2018-05-26 05:52:28
Local clock offset: -0.134 ms
Remote clock offset: -0.04 ms

Datalink statistics
-- Total of 3 flows:
  Average throughput: 386.33 Mbit/s
  95th percentile per-packet one-way delay: 171.766 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 207.39 Mbit/s
  95th percentile per-packet one-way delay: 165.959 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 216.49 Mbit/s
  95th percentile per-packet one-way delay: 201.434 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 105.89 Mbit/s
  95th percentile per-packet one-way delay: 51.163 ms
  Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link

Throughput (Mb/s)

0 5 10 15 20 25 30
0 50 100 150 200 250 300
Flow 1 ingress (mean 207.85 Mb/s)  Flow 1 egress (mean 207.39 Mb/s)
Flow 2 ingress (mean 216.53 Mb/s)  Flow 2 egress (mean 216.49 Mb/s)
Flow 3 ingress (mean 105.89 Mb/s)  Flow 3 egress (mean 105.89 Mb/s)

Round-trip one-way delay (ms)

0 5 10 15 20 25 30
50 100 150 200 250 300
• Flow 1 (95th percentile 165.96 ms) • Flow 2 (95th percentile 201.43 ms) • Flow 3 (95th percentile 51.16 ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-26 06:15:06
End at: 2018-05-26 06:15:36
Local clock offset: -0.118 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 497.51 Mbit/s
95th percentile per-packet one-way delay: 106.997 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 319.04 Mbit/s
95th percentile per-packet one-way delay: 135.263 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 226.31 Mbit/s
95th percentile per-packet one-way delay: 53.677 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.91 Mbit/s
95th percentile per-packet one-way delay: 50.881 ms
Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

![Graph showing network performance metrics over time]
Run 1: Statistics of WebRTC media

Start at: 2018-05-26 02:50:52
End at: 2018-05-26 02:51:22
Local clock offset: -0.276 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 51.122 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.144 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 51.376 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

[Two graphs showing throughput and delay distribution over time for different flows.

Throughput (Mbps):
- Flow 1 ingress (mean 0.05 Mbps)
- Flow 1 egress (mean 0.05 Mbps)
- Flow 2 ingress (mean 0.06 Mbps)
- Flow 2 egress (mean 0.06 Mbps)
- Flow 3 ingress (mean 0.06 Mbps)
- Flow 3 egress (mean 0.06 Mbps)

Delay (ms):
- Flow 1 (95th percentile 51.14 ms)
- Flow 2 (95th percentile 50.70 ms)
- Flow 3 (95th percentile 51.38 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-05-26 03:13:48
End at: 2018-05-26 03:14:18
Local clock offset: -0.269 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.712 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.703 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-05-26 03:36:40
End at: 2018-05-26 03:37:10
Local clock offset: 0.129 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 50.620 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.540 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.545 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.763 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.05 Mbit/s)
- Flow 2 egress (mean 0.05 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 4: Statistics of WebRTC media

Start at: 2018-05-26 03:59:42
End at: 2018-05-26 04:00:12
Local clock offset: -0.216 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 51.102 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.212 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.090 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.055 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

End at: 2018-05-26 04:23:07
Local clock offset: -0.228 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 51.363 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 51.143 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 51.456 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 51.235 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

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

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

- Flow 1 (95th percentile 51.14 ms)
- Flow 2 (95th percentile 51.46 ms)
- Flow 3 (95th percentile 51.23 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-05-26 04:45:30
End at: 2018-05-26 04:46:00
Local clock offset: 0.158 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 50.556 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.749 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.108 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.107 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-05-26 05:08:41
End at: 2018-05-26 05:09:11
Local clock offset: -0.205 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 50.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 49.920 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.210 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.721 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-05-26 05:31:40
End at: 2018-05-26 05:32:10
Local clock offset: -0.21 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 51.372 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.760 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.448 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-05-26 05:54:43
Local clock offset: 0.2 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 51.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.274 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-05-26 06:17:58
End at: 2018-05-26 06:18:28
Local clock offset: -0.147 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-05-26 08:55:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.149 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.858 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

---

**Graph 1:**
Throughput (Mbit/s)
- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.05 Mbit/s)
- Flow 2 egress (mean 0.05 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)

**Graph 2:**
Per-packet one-way delay (ms)
- Flow 1 (95th percentile 50.84 ms)
- Flow 2 (95th percentile 51.15 ms)
- Flow 3 (95th percentile 50.86 ms)

---

323