Pantheon Report

Generated at 2018-05-26 02:37:49 (UTC).
Data path: GCE Sydney Ethernet (local) → GCE Tokyo Ethernet (remote).
Repeated the test of 16 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
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 @ 0088822873ea99180f63545a341ef069f40e9e59
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4bb34
third_party/genericCC @ c7966e494a929986ea5a9169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4a9d58d38dc4dfe0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed312594d366f9840f65b82cbe8f46d4b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55f9c872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ c43e34e3f5f5613e8ad08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a827343a86b42f1b0c8143ecb97f3c9f42
third_party/scream-reproduce @ f099118d1421aa313bf11ff1964974e1da3dbb2
third_party/sprout @ c8386698b80f0c19f6ba892afca9a596a406d48c1f
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a594
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9de4735770d143a1fa2851
test from GCE Sydney to GCE Tokyo, 10 runs of 30s each per scheme (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>flow 1 mean avg tput (Mbit/s)</th>
<th>flow 1 mean 95th-%ile delay (ms)</th>
<th>flow 1 mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>214.39</td>
<td>56.05</td>
<td>0.01</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>162.94</td>
<td>56.91</td>
<td>0.01</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>191.44</td>
<td>59.29</td>
<td>0.01</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>872.40</td>
<td>122.47</td>
<td>1.54</td>
</tr>
<tr>
<td>Indigo</td>
<td>10</td>
<td>218.51</td>
<td>53.72</td>
<td>0.01</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>32.46</td>
<td>54.12</td>
<td>0.00</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>597.28</td>
<td>136.31</td>
<td>0.49</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>271.23</td>
<td>134.13</td>
<td>1.41</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>3</td>
<td>70.12</td>
<td>51.65</td>
<td>0.00</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>52.95</td>
<td>0.01</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>6.58</td>
<td>54.29</td>
<td>0.00</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>8</td>
<td>124.97</td>
<td>53.55</td>
<td>0.01</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>135.31</td>
<td>56.74</td>
<td>0.03</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>270.72</td>
<td>119.28</td>
<td>0.17</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>397.27</td>
<td>54.73</td>
<td>0.00</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>0.05</td>
<td>54.01</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

End at: 2018-05-25 21:44:52
Local clock offset: -0.34 ms
Remote clock offset: 0.26 ms

# Below is generated by plot.py at 2018-05-26 01:11:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.86 Mbit/s
95th percentile per-packet one-way delay: 57.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.86 Mbit/s
95th percentile per-packet one-way delay: 57.262 ms
Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Local clock offset: 0.063 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2018-05-26 01:11:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.00 Mbit/s
95th percentile per-packet one-way delay: 58.688 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 213.00 Mbit/s
95th percentile per-packet one-way delay: 58.688 ms
Loss rate: 0.01%
Run 2: Report of TCP BBR — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress (mean 213.03 Mbit/s)**
- **Flow 1 egress (mean 213.00 Mbit/s)**

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

- **Flow 1 (95th percentile 58.69 ms)**
Run 3: Statistics of TCP BBR

Local clock offset: -0.001 ms
Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.51 Mbit/s
95th percentile per-packet one-way delay: 54.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.51 Mbit/s
95th percentile per-packet one-way delay: 54.318 ms
Loss rate: 0.00%
Run 3: Report of TCP BBR — Data Link

![Graph showing throughput and delay metrics over time for TCP BBR.]
Run 4: Statistics of TCP BBR

Local clock offset: 0.1 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.98 Mbit/s
95th percentile per-packet one-way delay: 58.920 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 215.98 Mbit/s
95th percentile per-packet one-way delay: 58.920 ms
Loss rate: 0.01%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

End at: 2018-05-25 23:06:16
Local clock offset: 0.102 ms
Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.32 Mbit/s
95th percentile per-packet one-way delay: 53.750 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.32 Mbit/s
95th percentile per-packet one-way delay: 53.750 ms
Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link

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Throughput (Mbps)

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Flow 1 ingress (mean 211.30 Mbit/s)</th>
<th>Flow 1 egress (mean 211.32 Mbit/s)</th>
</tr>
</thead>
</table>

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End-to-end one-way delay (ms)

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Flow 1 (95th percentile 53.75 ms)</th>
</tr>
</thead>
</table>
Run 6: Statistics of TCP BBR

End at: 2018-05-25 23:26:49
Local clock offset: 0.15 ms
Remote clock offset: 0.478 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.29 Mbit/s
95th percentile per-packet one-way delay: 53.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.29 Mbit/s
95th percentile per-packet one-way delay: 53.961 ms
Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 211.26 Mbit/s)
- Flow 1 egress (mean 211.29 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 53.96 ms)
Run 7: Statistics of TCP BBR

Local clock offset: 0.029 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.81 Mbit/s
95th percentile per-packet one-way delay: 57.205 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.81 Mbit/s
95th percentile per-packet one-way delay: 57.205 ms
Loss rate: 0.00%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-05-26 00:07:30
End at: 2018-05-26 00:08:00
Local clock offset: 0.129 ms
Remote clock offset: 0.407 ms

# Below is generated by plot.py at 2018-05-26 01:11:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.97 Mbit/s
95th percentile per-packet one-way delay: 54.251 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 215.97 Mbit/s
95th percentile per-packet one-way delay: 54.251 ms
Loss rate: 0.01%
Run 8: Report of TCP BBR — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 9: Statistics of TCP BBR

Start at: 2018-05-26 00:28:28
End at: 2018-05-26 00:28:58
Local clock offset: -0.464 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-05-26 01:15:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.95 Mbit/s
95th percentile per-packet one-way delay: 58.358 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 220.95 Mbit/s
95th percentile per-packet one-way delay: 58.358 ms
Loss rate: 0.01%
Run 9: Report of TCP BBR — Data Link

![Graph showing throughput and round trip time](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 220.95 Mbps)
  - Flow 1 egress (mean 220.95 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 58.36 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-05-26 00:49:12
End at: 2018-05-26 00:49:42
Local clock offset: 0.058 ms
Remote clock offset: 0.261 ms

# Below is generated by plot.py at 2018-05-26 01:15:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.24 Mbit/s
95th percentile per-packet one-way delay: 53.806 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 217.24 Mbit/s
95th percentile per-packet one-way delay: 53.806 ms
Loss rate: 0.01%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

End at: 2018-05-25 21:38:01
Local clock offset: 0.541 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-05-26 01:15:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 150.93 Mbit/s
95th percentile per-packet one-way delay: 54.946 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 150.93 Mbit/s
95th percentile per-packet one-way delay: 54.946 ms
Loss rate: 0.02%
Run 1: Report of Copa — Data Link

[Graph showing throughput and per-packet end-to-end delay]
Run 2: Statistics of Copa

Local clock offset: 0.159 ms
Remote clock offset: 0.266 ms

# Below is generated by plot.py at 2018-05-26 01:15:55
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 90.19 Mbit/s
  95th percentile per-packet one-way delay: 59.344 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 90.19 Mbit/s
  95th percentile per-packet one-way delay: 59.344 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 90.19 Mbit/s)**
- **Flow 1 egress (mean 90.19 Mbit/s)**

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

- **Flow 1 (95th percentile 59.34 ms)**
Run 3: Statistics of Copa

Local clock offset: 0.249 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2018-05-26 01:15:55
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 78.82 Mbit/s
  95th percentile per-packet one-way delay: 54.731 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 78.82 Mbit/s
  95th percentile per-packet one-way delay: 54.731 ms
  Loss rate: 0.10%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Local clock offset: 0.211 ms
Remote clock offset: -0.26 ms

# Below is generated by plot.py at 2018-05-26 01:16:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.53 Mbit/s
95th percentile per-packet one-way delay: 57.061 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 165.53 Mbit/s
95th percentile per-packet one-way delay: 57.061 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 165.53 Mbit/s)
- Flow 1 egress (mean 165.53 Mbit/s)

- Flow 1 (95th percentile 57.06 ms)
Run 5: Statistics of Copa

Local clock offset: -0.204 ms
Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2018-05-26 01:17:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 188.50 Mbit/s
  95th percentile per-packet one-way delay: 55.477 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 188.50 Mbit/s
  95th percentile per-packet one-way delay: 55.477 ms
  Loss rate: 0.00%
Run 5: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 188.50 Mbit/s)**
- **Flow 1 egress (mean 188.50 Mbit/s)**

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

- **Flow 1 (95th percentile 55.48 ms)**
Run 6: Statistics of Copa

Local clock offset: 0.038 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-05-26 01:17:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 85.19 Mbit/s
  95th percentile per-packet one-way delay: 53.263 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 85.19 Mbit/s
  95th percentile per-packet one-way delay: 53.263 ms
  Loss rate: 0.00%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

End at: 2018-05-25 23:40:06
Local clock offset: 0.353 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.97 Mbit/s
95th percentile per-packet one-way delay: 54.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 281.97 Mbit/s
95th percentile per-packet one-way delay: 54.490 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-05-26 00:00:34
End at: 2018-05-26 00:01:04
Local clock offset: 0.235 ms
Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.02 Mbit/s
95th percentile per-packet one-way delay: 65.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.02 Mbit/s
95th percentile per-packet one-way delay: 65.971 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

![Graph showing network throughput and packet delay over time.]
Run 9: Statistics of Copa

Start at: 2018-05-26 00:21:08
End at: 2018-05-26 00:21:38
Local clock offset: -0.134 ms
Remote clock offset: 0.227 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 263.25 Mbit/s
95th percentile per-packet one-way delay: 58.374 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 263.25 Mbit/s
95th percentile per-packet one-way delay: 58.374 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 263.25 Mbit/s)**
- **Flow 1 egress (mean 263.25 Mbit/s)**

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

- **Flow 1 (95th percentile 58.37 ms)**
Run 10: Statistics of Copa

Start at: 2018-05-26 00:42:05  
End at: 2018-05-26 00:42:35  
Local clock offset: 0.038 ms  
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-05-26 01:22:42  
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 119.99 Mbit/s
  95th percentile per-packet one-way delay: 55.453 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 119.99 Mbit/s
  95th percentile per-packet one-way delay: 55.453 ms
  Loss rate: 0.01%
Run 10: Report of Copa — Data Link

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

- Flow 1 ingress (mean 120.01 Mbit/s)
- Flow 1 egress (mean 119.99 Mbit/s)

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

- Flow 1 (95th percentile 55.45 ms)
Run 1: Statistics of TCP Cubic

Local clock offset: -0.132 ms
Remote clock offset: 0.22 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.47 Mbit/s
95th percentile per-packet one-way delay: 61.547 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 169.47 Mbit/s
95th percentile per-packet one-way delay: 61.547 ms
Loss rate: 0.12%
Run 1: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress** (mean 169.66 Mbit/s)
- **Flow 1 egress** (mean 169.47 Mbit/s)

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

- **Flow 1 (95th percentile 61.55 ms)**
Run 2: Statistics of TCP Cubic

Local clock offset: -0.081 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 146.28 Mbit/s
95th percentile per-packet one-way delay: 60.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.28 Mbit/s
95th percentile per-packet one-way delay: 60.796 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link

![Graph of throughput and one-way delay]

- Flow 1 ingress (mean 146.32 Mbit/s)
- Flow 1 egress (mean 146.28 Mbit/s)

- Flow 1 95th percentile 60.80 ms
Run 3: Statistics of TCP Cubic

Local clock offset: -0.054 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.74 Mbit/s
95th percentile per-packet one-way delay: 59.356 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.74 Mbit/s
95th percentile per-packet one-way delay: 59.356 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

![Graph of network throughput and packet delay over time](image)

- **Flow 1 ingress (mean 231.77 Mbit/s)**
- **Flow 1 egress (mean 231.74 Mbit/s)**

- **Flow 1 (95th percentile 59.36 ms)**
Run 4: Statistics of TCP Cubic

End at: 2018-05-25 22:34:50
Local clock offset: -0.026 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.06 Mbit/s
95th percentile per-packet one-way delay: 60.923 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 162.06 Mbit/s
95th percentile per-packet one-way delay: 60.923 ms
Loss rate: 0.01%
Run 4: Report of TCP Cubic — Data Link

![Graph of throughput and delay](image-url)
Run 5: Statistics of TCP Cubic

Local clock offset: 0.098 ms
Remote clock offset: 0.354 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.37 Mbit/s
95th percentile per-packet one-way delay: 57.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.37 Mbit/s
95th percentile per-packet one-way delay: 57.474 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

![Graph showing throughput and packet delay over time]

Throughput (Mbps):

- Flow 1 ingress (mean 167.37 Mbps)
- Flow 1 egress (mean 167.37 Mbps)

Packet delay (ms):

- Flow 1 (95th percentile 57.47 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-05-25 23:15:05
Local clock offset: -0.134 ms
Remote clock offset: 0.175 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.48 Mbit/s
95th percentile per-packet one-way delay: 60.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.48 Mbit/s
95th percentile per-packet one-way delay: 60.111 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 222.48 Mbit/s)**
- **Flow 1 egress (mean 222.48 Mbit/s)**

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

- **Flow 1 (95th percentile 60.11 ms)**
Run 7: Statistics of TCP Cubic

End at: 2018-05-25 23:35:52
Local clock offset: 0.019 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-05-26 01:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.18 Mbit/s
95th percentile per-packet one-way delay: 60.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.18 Mbit/s
95th percentile per-packet one-way delay: 60.096 ms
Loss rate: 0.00%
Run 7: Report of TCP Cubic — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 221.18 Mbit/s)
- Flow 1 egress (mean 221.18 Mbit/s)

![Delay Graph]

Flow 1 (95th percentile 60.10 ms)
Run 8: Statistics of TCP Cubic

Local clock offset: 0.04 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-05-26 01:23:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.78 Mbit/s
95th percentile per-packet one-way delay: 58.492 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.78 Mbit/s
95th percentile per-packet one-way delay: 58.492 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

![Graph of throughput and delay over time for Flow 1 ingress and egress with mean values of 171.85 Mbps and 171.78 Mbps respectively.]

![Graph of packet delay per second for Flow 1 with 95th percentile of 58.49 ms.]
Run 9: Statistics of TCP Cubic

Start at: 2018-05-26 00:16:51
End at: 2018-05-26 00:17:21
Local clock offset: 0.158 ms
Remote clock offset: 0.156 ms

# Below is generated by plot.py at 2018-05-26 01:24:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.61 Mbit/s
95th percentile per-packet one-way delay: 60.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 227.61 Mbit/s
95th percentile per-packet one-way delay: 60.166 ms
Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link

![Graph of throughput vs. time for Flow 1 ingress and egress with mean 227.64 Mbps and 227.61 Mbps respectively.](image1)

![Graph of packet delay vs. time for Flow 1 with 95th percentile of 60.17 ms.](image2)
Run 10: Statistics of TCP Cubic

Start at: 2018-05-26 00:37:54
End at: 2018-05-26 00:38:24
Local clock offset: -0.031 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2018-05-26 01:24:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 194.43 Mbit/s
95th percentile per-packet one-way delay: 53.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.43 Mbit/s
95th percentile per-packet one-way delay: 53.975 ms
Loss rate: 0.00%
Run 10: Report of TCP Cubic — Data Link

Throughput (Mbps) vs Time (s)

Flow 1 ingress (mean 194.42 Mbit/s) vs Flow 1 egress (mean 194.43 Mbit/s)

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

Flow 1 (95th percentile 53.98 ms)
Run 1: Statistics of FillP

Start at: 2018-05-25 21:35:52
Local clock offset: -0.148 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-26 01:38:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 864.03 Mbit/s
95th percentile per-packet one-way delay: 116.630 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 864.03 Mbit/s
95th percentile per-packet one-way delay: 116.630 ms
Loss rate: 1.06%
Run 1: Report of FillP — Data Link

![Graph of throughput over time](image)

- **Flow 1 ingress (mean 873.32 Mbit/s)**
- **Flow 1 egress (mean 864.03 Mbit/s)**

![Graph of per socket one way delay over time](image)

- **Flow 1 (95th percentile 116.63 ms)**
Run 2: Statistics of FillP

Local clock offset: -0.23 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-05-26 01:39:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 814.77 Mbit/s
95th percentile per-packet one-way delay: 124.163 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 814.77 Mbit/s
95th percentile per-packet one-way delay: 124.163 ms
Loss rate: 3.30%
Run 2: Report of FillP — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 3: Statistics of FillP

Local clock offset: 0.007 ms  
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-05-26 01:40:03  
# Datalink statistics

-- Total of 1 flow:  
Average throughput: 842.88 Mbit/s  
95th percentile per-packet one-way delay: 120.699 ms  
Loss rate: 1.92%

-- Flow 1:  
Average throughput: 842.88 Mbit/s  
95th percentile per-packet one-way delay: 120.699 ms  
Loss rate: 1.92%
Run 3: Report of FillP — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per Socket One-Way Delay vs Time](image2)
Run 4: Statistics of FillP

Start at: 2018-05-25 22:36:54
Local clock offset: 0.09 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-05-26 01:40:30
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 870.30 Mbit/s
  95th percentile per-packet one-way delay: 131.196 ms
  Loss rate: 2.28%
-- Flow 1:
  Average throughput: 870.30 Mbit/s
  95th percentile per-packet one-way delay: 131.196 ms
  Loss rate: 2.28%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Local clock offset: -0.017 ms
Remote clock offset: 0.262 ms

# Below is generated by plot.py at 2018-05-26 01:41:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 901.27 Mbit/s
95th percentile per-packet one-way delay: 116.248 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 901.27 Mbit/s
95th percentile per-packet one-way delay: 116.248 ms
Loss rate: 1.39%
Run 5: Report of FillP — Data Link

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

- Flow 1 ingress (mean 913.96 Mbps)
- Flow 1 egress (mean 901.27 Mbps)

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

- Flow 1 (95th percentile 116.25 ms)
Run 6: Statistics of FillP

Local clock offset: 0.028 ms
Remote clock offset: 0.259 ms

# Below is generated by plot.py at 2018-05-26 01:41:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 882.36 Mbit/s
95th percentile per-packet one-way delay: 115.719 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 882.36 Mbit/s
95th percentile per-packet one-way delay: 115.719 ms
Loss rate: 0.78%
Run 6: Report of FillP — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 889.22 Mbps)
- Flow 1 egress (mean 882.36 Mbps)

Per-packet one-way delay (ms):

- Flow 1 (95th percentile 115.72 ms)
Run 7: Statistics of FillP

Local clock offset: -0.283 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-05-26 01:41:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.20 Mbit/s
95th percentile per-packet one-way delay: 121.851 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 833.20 Mbit/s
95th percentile per-packet one-way delay: 121.851 ms
Loss rate: 2.36%
Run 7: Report of FillP — Data Link

[Graphs showing throughput and one-way delay over time]
Run 8: Statistics of FillP

Local clock offset: -0.156 ms  
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-05-26 01:44:08  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 919.59 Mbit/s  
95th percentile per-packet one-way delay: 114.597 ms  
Loss rate: 0.32%  
-- Flow 1:  
Average throughput: 919.59 Mbit/s  
95th percentile per-packet one-way delay: 114.597 ms  
Loss rate: 0.32%
Run 8: Report of FillP — Data Link

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

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

Flow 1 Ingress (mean 922.45 Mbit/s)  Flow 1 Egress (mean 919.59 Mbit/s)

Flow 1 (95th percentile 114.60 ms)
Run 9: Statistics of FillP

Start at: 2018-05-26 00:19:27
End at: 2018-05-26 00:19:57
Local clock offset: -0.019 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 920.94 Mbit/s
95th percentile per-packet one-way delay: 103.071 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 920.94 Mbit/s
95th percentile per-packet one-way delay: 103.071 ms
Loss rate: 0.41%
Run 9: Report of FillP — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 924.63 Mb/s)  Flow 1 egress (mean 920.94 Mb/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 103.07 ms)
Run 10: Statistics of FillP

Start at: 2018-05-26 00:40:26
End at: 2018-05-26 00:40:56
Local clock offset: 0.119 ms
Remote clock offset: 0.254 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 874.66 Mbit/s
95th percentile per-packet one-way delay: 160.537 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 874.66 Mbit/s
95th percentile per-packet one-way delay: 160.537 ms
Loss rate: 1.61%
Run 10: Report of FillP — Data Link

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

- Throughput (Mbps):
  - Flow 1 ingress (mean 857.96 Mbps)
  - Flow 1 egress (mean 874.66 Mbps)

- Packet delay (ms):
  - Flow 1 (95th percentile 160.54 ms)
Run 1: Statistics of Indigo

End at: 2018-05-25 21:35:06
Local clock offset: 0.096 ms
Remote clock offset: 0.446 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.92 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 169.92 Mbit/s
95th percentile per-packet one-way delay: 54.065 ms
Loss rate: 0.02%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Local clock offset: 0.552 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 232.86 Mbit/s
  95th percentile per-packet one-way delay: 53.443 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 232.86 Mbit/s
  95th percentile per-packet one-way delay: 53.443 ms
  Loss rate: 0.01%
Run 2: Report of Indigo — Data Link

---

**Throughput (Mbit/s)**

0 5 10 15 20 25 30

0 50 100 150 200 250 300

- Flow 1 ingress (mean 232.87 Mbit/s)
- Flow 1 egress (mean 232.86 Mbit/s)

---

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

0 5 10 15 20 25 30

55 60 65 70 75 80 85

- Flow 1 (95th percentile 53.44 ms)
Run 3: Statistics of Indigo

Local clock offset: -0.009 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 53.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.34 Mbit/s
95th percentile per-packet one-way delay: 53.827 ms
Loss rate: 0.00%
Run 3: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 211.34 Mbit/s)**
- **Flow 1 egress (mean 211.34 Mbit/s)**

![Graph showing packet delay over time.](image-url)

- **Flow 1 (95th percentile 53.83 ms)**
Run 4: Statistics of Indigo

Start at: 2018-05-25 22:35:34
Local clock offset: 0.327 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.53 Mbit/s
95th percentile per-packet one-way delay: 53.253 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 236.53 Mbit/s
95th percentile per-packet one-way delay: 53.253 ms
Loss rate: 0.01%
Run 4: Report of Indigo — Data Link

![Graph showing throughput and packet delay over time]

Throughput (Mbps) vs. Time (s)
- **Flow 1 ingress** (mean 236.54 Mbit/s)
- **Flow 1 egress** (mean 236.53 Mbit/s)

Packet delay (ms) vs. Time (s)
- **Flow 1** (95th percentile 53.25 ms)
Run 5: Statistics of Indigo

Local clock offset: 0.203 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.27 Mbit/s
95th percentile per-packet one-way delay: 53.389 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 236.27 Mbit/s
95th percentile per-packet one-way delay: 53.389 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 236.24 Mbit/s)
- Flow 1 egress (mean 236.27 Mbit/s)

![Packet Delay Graph]

- Flow 1 (95th percentile 53.39 ms)
Run 6: Statistics of Indigo

Local clock offset: 0.294 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.11 Mbit/s
95th percentile per-packet one-way delay: 53.008 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 236.11 Mbit/s
95th percentile per-packet one-way delay: 53.008 ms
Loss rate: 0.01%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

End at: 2018-05-25 23:37:08
Local clock offset: -0.195 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.69 Mbit/s
95th percentile per-packet one-way delay: 53.944 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 224.69 Mbit/s
95th percentile per-packet one-way delay: 53.944 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link

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

- **Flow 1 ingress** (mean 224.65 Mbit/s)
- **Flow 1 egress** (mean 224.69 Mbit/s)

![Graph 2: Packet delay over Time](image)

- **Flow 1** (95th percentile 53.94 ms)
Run 8: Statistics of Indigo

Local clock offset: ~0.202 ms
Remote clock offset: 0.374 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.25 Mbit/s
95th percentile per-packet one-way delay: 54.326 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 216.25 Mbit/s
95th percentile per-packet one-way delay: 54.326 ms
Loss rate: 0.01%
Run 8: Report of Indigo — Data Link

![Graphs showing throughput and packet latency over time.]
Run 9: Statistics of Indigo

Start at: 2018-05-26 00:18:07
End at: 2018-05-26 00:18:37
Local clock offset: -0.44 ms
Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.61 Mbit/s
95th percentile per-packet one-way delay: 54.170 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 235.61 Mbit/s
95th percentile per-packet one-way delay: 54.170 ms
Loss rate: 0.01%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-05-26 00:39:09
End at: 2018-05-26 00:39:39
Local clock offset: -0.379 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.55 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 185.55 Mbit/s
95th percentile per-packet one-way delay: 53.781 ms
Loss rate: 0.02%
Run 10: Report of Indigo — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress with 95th percentile delays.]
Run 1: Statistics of LEDBAT

Local clock offset: 0.234 ms
Remote clock offset: 0.297 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 34.35 Mbit/s
  95th percentile per-packet one-way delay: 54.051 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.35 Mbit/s
  95th percentile per-packet one-way delay: 54.051 ms
  Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph of throughput vs. time for flow 1 ingress and egress](image)

Flow 1 ingress (mean 34.34 Mbit/s) — Flow 1 egress (mean 34.35 Mbit/s)

![Graph of per-packet inter-arrival delay vs. time for flow 1](image)

Flow 1 (95th percentile 54.05 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-05-25 22:02:16
End at: 2018-05-25 22:02:46
Local clock offset: 0.021 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 54.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 54.319 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput and delay over time](image-url)

- **Flow 1 ingress (mean 32.29 Mbit/s)**
- **Flow 1 egress (mean 32.29 Mbit/s)**

![Graph showing per-packet delay over time](image-url)

- **Flow 1 95th percentile 54.32 ms**
Run 3: Statistics of LEDBAT

Local clock offset: 0.35 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 54.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 54.566 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Local clock offset: 0.365 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 51.487 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 51.487 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 34.17 Mbit/s)**
- **Flow 1 egress (mean 34.17 Mbit/s)**

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

- **Flow 1 (95th percentile 51.49 ms)**
Run 5: Statistics of LEDBAT

End at: 2018-05-25 23:04:02
Local clock offset: 0.254 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 54.040 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.59 Mbit/s
95th percentile per-packet one-way delay: 54.040 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Local clock offset: -0.001 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 54.039 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

End at: 2018-05-25 23:45:14
Local clock offset: -0.053 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 54.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 54.893 ms
Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

![Graph 1](image1)

**Flow 1 ingress (mean 32.77 Mbit/s)**

**Flow 1 egress (mean 32.77 Mbit/s)**

![Graph 2](image2)

**Flow 1 (95th percentile 54.89 ms)**
Run 8: Statistics of LEDBAT

Start at: 2018-05-26 00:05:16
End at: 2018-05-26 00:05:46
Local clock offset: 0.253 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 54.348 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 54.348 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-05-26 00:26:15
End at: 2018-05-26 00:26:45
Local clock offset: 0.443 ms
Remote clock offset: 0.334 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 54.789 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 30.97 Mbit/s
95th percentile per-packet one-way delay: 54.789 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-05-26 00:46:59
End at: 2018-05-26 00:47:29
Local clock offset: -0.098 ms
Remote clock offset: 0.194 ms

# Below is generated by plot.py at 2018-05-26 01:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 54.693 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.28 Mbit/s
95th percentile per-packet one-way delay: 54.693 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 32.28 Mbit/s)
- Flow 1 egress (mean 32.28 Mbit/s)

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

- Flow 1 (95th percentile 54.69 ms)
Run 1: Statistics of PCC-Allegro

Local clock offset: -0.298 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-05-26 01:59:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 632.44 Mbit/s
95th percentile per-packet one-way delay: 97.314 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 632.44 Mbit/s
95th percentile per-packet one-way delay: 97.314 ms
Loss rate: 0.09%
Run 1: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 632.93 Mbps)
- Flow 1 egress (mean 632.44 Mbps)

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

- Flow 1 (95th percentile 97.31 ms)
Run 2: Statistics of PCC-Allegro

Local clock offset: -0.086 ms
Remote clock offset: -0.433 ms

# Below is generated by plot.py at 2018-05-26 01:59:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 560.84 Mbit/s
95th percentile per-packet one-way delay: 181.618 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 560.84 Mbit/s
95th percentile per-packet one-way delay: 181.618 ms
Loss rate: 1.95%
Run 2: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 572.02 Mbit/s)
- Flow 1 egress (mean 560.84 Mbit/s)

![Graph showing packet delay distribution.]

- Flow 1 (95th percentile 181.62 ms)
Run 3: Statistics of PCC-Allegro

End at: 2018-05-25 22:30:36
Local clock offset: 0.243 ms
Remote clock offset: 0.145 ms

# Below is generated by plot.py at 2018-05-26 01:59:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 595.46 Mbit/s
95th percentile per-packet one-way delay: 139.406 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 595.46 Mbit/s
95th percentile per-packet one-way delay: 139.406 ms
Loss rate: 0.24%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Local clock offset: -0.099 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-05-26 01:59:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 615.13 Mbit/s
95th percentile per-packet one-way delay: 88.587 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 615.13 Mbit/s
95th percentile per-packet one-way delay: 88.587 ms
Loss rate: 0.13%
Run 4: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 615.90 Mbit/s)  Flow 1 egress (mean 615.13 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 88.59 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-05-25 23:10:54
Local clock offset: 0.199 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-05-26 01:59:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 618.60 Mbit/s
95th percentile per-packet one-way delay: 163.182 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 618.60 Mbit/s
95th percentile per-packet one-way delay: 163.182 ms
Loss rate: 0.47%
Run 5: Report of PCC-Allegro — Data Link

Flow 1 ingress (mean 621.53 Mbit/s)  
Flow 1 egress (mean 618.60 Mbit/s)

Flow 1 (95th percentile 163.18 ms)
Run 6: Statistics of PCC-Allegro

Local clock offset: 0.435 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-05-26 01:59:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 602.52 Mbit/s
95th percentile per-packet one-way delay: 126.784 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 602.52 Mbit/s
95th percentile per-packet one-way delay: 126.784 ms
Loss rate: 0.10%
Run 6: Report of PCC-Allegro — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 603.64 Mbit/s)
- Flow 1 egress (mean 602.52 Mbit/s)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 126.78 ms)
Run 7: Statistics of PCC-Allegro

Local clock offset: 0.13 ms
Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-05-26 02:08:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 580.15 Mbit/s
95th percentile per-packet one-way delay: 179.485 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 580.15 Mbit/s
95th percentile per-packet one-way delay: 179.485 ms
Loss rate: 1.31%
Run 7: Report of PCC-Allegro — Data Link
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-26 00:12:42
End at: 2018-05-26 00:13:12
Local clock offset: -0.144 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-05-26 02:08:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 563.78 Mbit/s
95th percentile per-packet one-way delay: 80.192 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 563.78 Mbit/s
95th percentile per-packet one-way delay: 80.192 ms
Loss rate: 0.21%
Run 8: Report of PCC-Allegro — Data Link

![Graph showing throughput and delay over time](image-url)

- **Flow 1 ingress** (mean 565.00 Mbit/s)
- **Flow 1 egress** (mean 563.78 Mbit/s)

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

- **Flow 1** (95th percentile 80.19 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-26 00:33:48
End at: 2018-05-26 00:34:18
Local clock offset: 0.026 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-05-26 02:09:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 614.64 Mbit/s
95th percentile per-packet one-way delay: 152.843 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 614.64 Mbit/s
95th percentile per-packet one-way delay: 152.843 ms
Loss rate: 0.10%
Run 9: Report of PCC-Allegro — Data Link

![Throughput](image1)

*Flow 1 ingress (mean 615.22 Mbit/s) — Flow 1 egress (mean 614.64 Mbit/s)*

![Delay](image2)

*Flow 1 (95th percentile 152.84 ms)*
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-26 00:54:33
End at: 2018-05-26 00:55:03
Local clock offset: -0.328 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-05-26 02:09:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 589.24 Mbit/s
95th percentile per-packet one-way delay: 153.665 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 589.24 Mbit/s
95th percentile per-packet one-way delay: 153.665 ms
Loss rate: 0.27%
Run 10: Report of PCC-Allegro — Data Link

![Throughput Graph]

**Throughput (Mbps)**

- **Flow 1 ingress (mean 590.85 Mbps)**
- **Flow 1 egress (mean 589.24 Mbps)**

![Round-Trip Time Graph]

**Round-Trip Time (ms)**

- **Flow 1 (95th percentile 153.66 ms)**
Run 1: Statistics of PCC-Expr

Local clock offset: -0.137 ms
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2018-05-26 02:09:10
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 231.49 Mbit/s
  95th percentile per-packet one-way delay: 115.583 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 231.49 Mbit/s
  95th percentile per-packet one-way delay: 115.583 ms
  Loss rate: 0.01%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 231.53 Mbit/s)
- Flow 1 egress (mean 231.49 Mbit/s)

![Graph 2: Packet Delay](image2.png)

- Flow 1 (95th percentile 115.58 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-05-25 22:05:45
End at: 2018-05-25 22:06:15
Local clock offset: -0.237 ms
Remote clock offset: 0.211 ms

# Below is generated by plot.py at 2018-05-26 02:10:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 351.28 Mbit/s
95th percentile per-packet one-way delay: 248.510 ms
Loss rate: 5.41%
-- Flow 1:
Average throughput: 351.28 Mbit/s
95th percentile per-packet one-way delay: 248.510 ms
Loss rate: 5.41%
Run 2: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 371.34 Mbit/s)  Flow 1 egress (mean 351.28 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 248.53 ms)
Run 3: Statistics of PCC-Expr

End at: 2018-05-25 22:26:34
Local clock offset: -0.014 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-05-26 02:10:37
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 366.32 Mbit/s
  95th percentile per-packet one-way delay: 134.622 ms
  Loss rate: 1.69%
-- Flow 1:
  Average throughput: 366.32 Mbit/s
  95th percentile per-packet one-way delay: 134.622 ms
  Loss rate: 1.69%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Local clock offset: -0.089 ms
Remote clock offset: -0.289 ms

# Below is generated by plot.py at 2018-05-26 02:10:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.49 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 101.49 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.00%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-05-25 23:07:01
Local clock offset: 0.27 ms
Remote clock offset: -0.279 ms

# Below is generated by plot.py at 2018-05-26 02:11:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 263.76 Mbit/s
95th percentile per-packet one-way delay: 92.564 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 263.76 Mbit/s
95th percentile per-packet one-way delay: 92.564 ms
Loss rate: 0.01%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Local clock offset: 0.326 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2018-05-26 02:11:01
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 115.59 Mbit/s
  95th percentile per-packet one-way delay: 53.563 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 115.59 Mbit/s
  95th percentile per-packet one-way delay: 53.563 ms
  Loss rate: 0.01%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 115.59 Mbit/s)
- Flow 1 egress (mean 115.59 Mbit/s)

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

- Flow 1 (95th percentile 53.56 ms)
Run 7: Statistics of PCC-Expr

Local clock offset: 0.106 ms
Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2018-05-26 02:20:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 379.08 Mbit/s
95th percentile per-packet one-way delay: 265.926 ms
Loss rate: 5.92%
-- Flow 1:
Average throughput: 379.08 Mbit/s
95th percentile per-packet one-way delay: 265.926 ms
Loss rate: 5.92%
Run 7: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress** (mean 402.89 Mbit/s)
- **Flow 1 egress** (mean 379.08 Mbit/s)

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

- **Flow 1** (95th percentile: 265.93 ms)
Run 8: Statistics of PCC-Expr

Start at: 2018-05-26 00:08:46
End at: 2018-05-26 00:09:16
Local clock offset: -0.031 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-05-26 02:20:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.91 Mbit/s
95th percentile per-packet one-way delay: 146.909 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 226.91 Mbit/s
95th percentile per-packet one-way delay: 146.909 ms
Loss rate: 0.12%
Run 8: Report of PCC-Expr — Data Link
Run 9: Statistics of PCC-Expr

Start at: 2018-05-26 00:29:44
End at: 2018-05-26 00:30:14
Local clock offset: 0.342 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-05-26 02:20:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.22 Mbit/s
95th percentile per-packet one-way delay: 155.071 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 300.22 Mbit/s
95th percentile per-packet one-way delay: 155.071 ms
Loss rate: 0.90%
Run 9: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps)**
  - **Flow 1 ingress (mean 302.94 Mbit/s)**
  - **Flow 1 egress (mean 300.22 Mbit/s)**

- **Per-packet round-trip delay (ms)**
  - **Flow 1 (95th percentile 155.07 ms)**

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Run 10: Statistics of PCC-Expr

Start at: 2018-05-26 00:50:28
End at: 2018-05-26 00:50:58
Local clock offset: 0.156 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 376.17 Mbit/s
95th percentile per-packet one-way delay: 75.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 376.17 Mbit/s
95th percentile per-packet one-way delay: 75.141 ms
Loss rate: 0.00%
Run 10: Report of PCC-Expr — Data Link

```
flow 1 ingress (mean 376.13 Mbit/s)  flow 1 egress (mean 376.17 Mbit/s)
```

```
flow 1 (95th percentile 75.14 ms)
```
Run 1: Statistics of QUIC Cubic

Start at: 2018-05-25 21:47:02
Local clock offset: 0.129 ms
Remote clock offset: -0.02 ms
Run 1: Report of QUIC Cubic — Data Link

Throughput (Mb/s) vs Time (s)

- Flow 1 ingress (mean 0.06 Mb/s)
- Flow 1 egress (mean 0.06 Mb/s)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 53.06 ms)
Run 2: Statistics of QUIC Cubic

End at: 2018-05-25 22:07:45
Local clock offset: -0.107 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.29 Mbit/s
95th percentile per-packet one-way delay: 50.115 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.29 Mbit/s
95th percentile per-packet one-way delay: 50.115 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 64.28 Mbit/s)
- **Flow 1 egress** (mean 64.29 Mbit/s)

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

- **Flow 1** (95th percentile 50.12 ms)
Run 3: Statistics of QUIC Cubic

Local clock offset: 0.049 ms
Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 50.546 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 50.546 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delay](image-url)
Run 4: Statistics of QUIC Cubic

Local clock offset: -0.249 ms
Remote clock offset: -0.062 ms
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

End at: 2018-05-25 23:08:56
Local clock offset: 0.153 ms
Remote clock offset: 0.124 ms
Run 5: Report of QUIC Cubic — Data Link

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

- Flow ingress (mean 0.06 Mbit/s)
- Flow egress (mean 0.06 Mbit/s)

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

- Flow 1 (95th percentile 50.23 ms)
Run 6: Statistics of QUIC Cubic

Local clock offset: 0.027 ms
Remote clock offset: 0.212 ms
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Local clock offset: 0.113 ms
Remote clock offset: 0.187 ms
Run 7: Report of QUIC Cubic — Data Link

![Throughput graph]

- Flow 1 ingress (mean 0.06 Mb/s)
- Flow 1 egress (mean 0.06 Mb/s)

![Packet delay graph]

- Flow 1 (99th percentile 53.63 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-26 00:10:11
End at: 2018-05-26 00:10:41
Local clock offset: 0.107 ms
Remote clock offset: 0.148 ms
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-26 00:31:16
End at: 2018-05-26 00:31:46
Local clock offset: -0.508 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 54.299 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.98 Mbit/s
95th percentile per-packet one-way delay: 54.299 ms
Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-05-26 00:52:07
End at: 2018-05-26 00:52:37
Local clock offset: -0.248 ms
Remote clock offset: 0.041 ms
Run 10: Report of QUIC Cubic — Data Link

![Graph 1](Image 1)

![Graph 2](Image 2)
Run 1: Statistics of SCReAM

Local clock offset: 0.406 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.427 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.427 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time.]
Run 2: Statistics of SCReAM

Local clock offset: -0.103 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.756 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.756 ms
Loss rate: 0.13%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Local clock offset: ~0.025 ms
Remote clock offset: 0.331 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.571 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.571 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Graph of throughput and packet delay over time for Flow 1]
Run 4: Statistics of SCReAM

Local clock offset: -0.259 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.002 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 54.002 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph showing network performance metrics over time]

**Legend:**
- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)

**Diagrams:**
- Throughput (Mbps)
- Round-trip one-way delay (ms)

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Run 5: Statistics of SCReAM

Start at: 2018-05-25 23:04:40
End at: 2018-05-25 23:05:10
Local clock offset: 0.008 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.589 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Local clock offset: 0.076 ms
Remote clock offset: 0.503 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.274 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.274 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)

![Delay Graph](image2)

- Flow 1 (95th percentile 54.27 ms)
Run 7: Statistics of SCReAM

Start at: 2018-05-25 23:45:52
Local clock offset: -0.254 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.157 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.157 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-05-26 00:06:24  
End at: 2018-05-26 00:06:54  
Local clock offset: -0.241 ms  
Remote clock offset: 0.153 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.865 ms  
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s  
95th percentile per-packet one-way delay: 50.865 ms  
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

---

**Graph 1:**
- **Y-axis:** Throughput (Mbps)
- **X-axis:** Time (s)
- **Legend:**
  - Flow 1 ingress (mean 0.22 Mbps)
  - Flow 1 egress (mean 0.22 Mbps)

**Graph 2:**
- **Y-axis:** Round-trip delay (ms)
- **X-axis:** Time (s)
- **Legend:**
  - Flow 1 (95th percentile 50.87 ms)
Run 9: Statistics of SCReAM

Start at: 2018-05-26 00:27:22
End at: 2018-05-26 00:27:52
Local clock offset: 0.122 ms
Remote clock offset: 0.206 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.774 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.774 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-05-26 00:48:07
End at: 2018-05-26 00:48:37
Local clock offset: -0.283 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-05-26 02:21:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.071 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.071 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

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

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

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Run 1: Statistics of Sprout

Local clock offset: 0.519 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 54.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 54.089 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-05-25 22:00:04
End at: 2018-05-25 22:00:34
Local clock offset: 0.336 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.60 Mbit/s
95th percentile per-packet one-way delay: 54.118 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.60 Mbit/s
95th percentile per-packet one-way delay: 54.118 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 5.60 Mbit/s)  Flow 1 egress (mean 5.60 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 54.12 ms)
Run 3: Statistics of Sprout

Local clock offset: -0.021 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 54.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 54.380 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

![Graph showing throughput vs time](image)

![Graph showing packet loss and delay vs time](image)
Run 4: Statistics of Sprout

Local clock offset: 0.084 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 54.328 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

End at: 2018-05-25 23:01:50
Local clock offset: 0.103 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 53.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 53.887 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Local clock offset: 0.158 ms
Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 53.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 53.953 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

End at: 2018-05-25 23:43:02
Local clock offset: 0.055 ms
Remote clock offset: 0.296 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 54.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 54.674 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-05-26 00:03:04
End at: 2018-05-26 00:03:34
Local clock offset: 0.04 ms
Remote clock offset: 0.185 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 54.436 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 54.436 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-05-26 00:24:03
End at: 2018-05-26 00:24:33
Local clock offset: -0.324 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 54.700 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 54.700 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-05-26 00:44:47
End at: 2018-05-26 00:45:17
Local clock offset: -0.314 ms
Remote clock offset: 0.295 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 54.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 54.309 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

---

**Throughput (Mbps)**

![Throughput Graph]

**Time (s)**

Flow 1 ingress (mean 6.00 Mbit/s)  Flow 1 egress (mean 6.00 Mbit/s)

---

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

![Delay Graph]

Time (s)

Flow 1 95th percentile 54.31 ms

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Run 1: Statistics of TaoVA-100x

Local clock offset: -0.001 ms
Remote clock offset: -0.371 ms
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Local clock offset: 0.27 ms
Remote clock offset: 0.165 ms
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Local clock offset: -0.448 ms
Remote clock offset: 0.143 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 54.399 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: 54.399 ms
Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

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

- Blue line: Flow 1 ingress (mean 12.47 Mbit/s)
- Black line: Flow 1 egress (mean 12.47 Mbit/s)

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

- Blue line: Flow 1 (95th percentile 54.40 ms)
Run 4: Statistics of TaoVA-100x

Local clock offset: 0.329 ms
Remote clock offset: 0.185 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 53.385 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 15.24 Mbit/s
95th percentile per-packet one-way delay: 53.385 ms
Loss rate: 0.01%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-05-25 23:00:13
End at: 2018-05-25 23:00:43
Local clock offset: 0.167 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 17.91 Mbit/s
95th percentile per-packet one-way delay: 53.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 17.91 Mbit/s
95th percentile per-packet one-way delay: 53.504 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Local clock offset: -0.106 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.69 Mbit/s
95th percentile per-packet one-way delay: 53.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.69 Mbit/s
95th percentile per-packet one-way delay: 53.354 ms
Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

![Graph](image)

Flow 1 ingress (mean 186.69 Mbit/s)  
Flow 1 egress (mean 186.69 Mbit/s)

![Graph](image)

Flow 1 (95th percentile 53.35 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-25 23:41:05
Local clock offset: 0.054 ms
Remote clock offset: -0.33 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.66 Mbit/s
95th percentile per-packet one-way delay: 52.972 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 243.66 Mbit/s
95th percentile per-packet one-way delay: 52.972 ms
Loss rate: 0.01%
Run 7: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 243.67 Mbit/s)
- Flow 1 egress (mean 243.66 Mbit/s)

Packet delay (ms) over time:

- Flow 1 (95th percentile 52.97 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-05-26 00:01:57
End at: 2018-05-26 00:02:27
Local clock offset: 0.19 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-05-26 02:21:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.04 Mbit/s
95th percentile per-packet one-way delay: 53.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 18.04 Mbit/s
95th percentile per-packet one-way delay: 53.370 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

![Graph 1: Throughput](image1)

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

Start at: 2018-05-26 00:22:35
End at: 2018-05-26 00:23:05
Local clock offset: -0.201 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-05-26 02:21:26
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 255.47 Mbit/s
  95th percentile per-packet one-way delay: 53.907 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 255.47 Mbit/s
  95th percentile per-packet one-way delay: 53.907 ms
  Loss rate: 0.01%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-05-26 00:43:21
End at: 2018-05-26 00:43:51
Local clock offset: -0.063 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-05-26 02:21:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.25 Mbit/s
95th percentile per-packet one-way delay: 53.491 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 250.25 Mbit/s
95th percentile per-packet one-way delay: 53.491 ms
Loss rate: 0.01%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Local clock offset: 0.039 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-05-26 02:21:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.86 Mbit/s
95th percentile per-packet one-way delay: 61.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.86 Mbit/s
95th percentile per-packet one-way delay: 61.752 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Time (s): 0 to 30
  - Throughput values range from 0 to 250 Mbps

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Time (s): 0 to 30
  - Delay values range from 50 to 75 ms
  - Flow 1 (95th percentile: 61.75 ms)

---

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Run 2: Statistics of TCP Vegas

Local clock offset: -0.17 ms
Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-05-26 02:21:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 55.149 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: 55.149 ms
Loss rate: 0.02%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 34.20 Mbit/s)
- Flow 1 egress (mean 34.23 Mbit/s)

![Graph showing packet delay over time for Flow 1.]

- Flow 1 (95th percentile 55.15 ms)
Run 3: Statistics of TCP Vegas

Local clock offset: 0.044 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2018-05-26 02:21:43
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 110.06 Mbit/s
  95th percentile per-packet one-way delay: 51.850 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 110.06 Mbit/s
  95th percentile per-packet one-way delay: 51.850 ms
  Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 110.66 Mbit/s)  Flow 1 egress (mean 110.06 Mbit/s)

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

Flow 1 (95th percentile 51.85 ms)
Run 4: Statistics of TCP Vegas

Local clock offset: 0.238 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-05-26 02:23:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.61 Mbit/s
95th percentile per-packet one-way delay: 60.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.61 Mbit/s
95th percentile per-packet one-way delay: 60.507 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 214.58 Mbit/s)
- Flow 1 egress (mean 214.61 Mbit/s)

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

- Flow 1 (95th percentile 60.51 ms)
Run 5: Statistics of TCP Vegas

Local clock offset: 0.213 ms
Remote clock offset: 0.261 ms

# Below is generated by plot.py at 2018-05-26 02:23:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.27 Mbit/s
95th percentile per-packet one-way delay: 60.950 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 226.27 Mbit/s
95th percentile per-packet one-way delay: 60.950 ms
Loss rate: 0.08%
Run 5: Report of TCP Vegas — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 226.44 Mbit/s)  Flow 1 egress (mean 226.27 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 60.95 ms)
Run 6: Statistics of TCP Vegas

Local clock offset: 0.325 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-05-26 02:24:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.04 Mbit/s
95th percentile per-packet one-way delay: 60.395 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 223.04 Mbit/s
95th percentile per-packet one-way delay: 60.395 ms
Loss rate: 0.05%
Run 6: Report of TCP Vegas — Data Link

![Graph showing throughput and delay over time for Flow 1 with ingress and egress mean 223.16 Mbit/s and Flow 1 95th percentile 60.40 ms.]
Run 7: Statistics of TCP Vegas

End at: 2018-05-25 23:34:45
Local clock offset: 0.006 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-05-26 02:24:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 24.69 Mbit/s
  95th percentile per-packet one-way delay: 54.129 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 24.69 Mbit/s
  95th percentile per-packet one-way delay: 54.129 ms
  Loss rate: 0.07%
Run 7: Report of TCP Vegas — Data Link

![Graph of network throughput and packet delay over time]

- **Throughput (Mbps)**
  - Time (s)
  - Flow 1 ingress (mean 24.69 Mbps)
  - Flow 1 egress (mean 24.69 Mbps)

- **Per packet one-way delay (ms)**
  - Time (s)
  - Flow 1 (95th percentile 54.13 ms)
Run 8: Statistics of TCP Vegas

Local clock offset: 0.472 ms
Remote clock offset: 0.232 ms

# Below is generated by plot.py at 2018-05-26 02:24:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.97 Mbit/s
95th percentile per-packet one-way delay: 53.531 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 89.97 Mbit/s
95th percentile per-packet one-way delay: 53.531 ms
Loss rate: 0.04%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-05-26 00:15:37
End at: 2018-05-26 00:16:07
Local clock offset: -0.222 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-05-26 02:24:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.98 Mbit/s
95th percentile per-packet one-way delay: 54.482 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 180.98 Mbit/s
95th percentile per-packet one-way delay: 54.482 ms
Loss rate: 0.02%
Run 9: Report of TCP Vegas — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 181.07 Mbit/s)  Flow 1 egress (mean 180.98 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 54.48 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-05-26 00:36:47
End at: 2018-05-26 00:37:17
Local clock offset: -0.371 ms
Remote clock offset: 0.437 ms

# Below is generated by plot.py at 2018-05-26 02:24:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 37.41 Mbit/s
  95th percentile per-packet one-way delay: 54.701 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 37.41 Mbit/s
  95th percentile per-packet one-way delay: 54.701 ms
  Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Local clock offset: -0.131 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-05-26 02:26:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.97 Mbit/s
95th percentile per-packet one-way delay: 82.755 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.97 Mbit/s
95th percentile per-packet one-way delay: 82.755 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 260.93 Mbps)
  - Flow 1 egress (mean 260.97 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 82.75 ms)
Run 2: Statistics of Verus

Local clock offset: 0.186 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-05-26 02:26:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.56 Mbit/s
95th percentile per-packet one-way delay: 81.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 250.56 Mbit/s
95th percentile per-packet one-way delay: 81.105 ms
Loss rate: 0.00%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Local clock offset: 0.014 ms
Remote clock offset: 0.305 ms

# Below is generated by plot.py at 2018-05-26 02:27:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 298.41 Mbit/s
95th percentile per-packet one-way delay: 78.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 298.41 Mbit/s
95th percentile per-packet one-way delay: 78.869 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 298.36 Mbit/s)
- Flow 1 egress (mean 298.41 Mbit/s)

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

- Flow 1 (95th percentile 78.87 ms)
Run 4: Statistics of Verus

Start at: 2018-05-25 22:49:00
Local clock offset: 0.13 ms
Remote clock offset: 0.216 ms

# Below is generated by plot.py at 2018-05-26 02:27:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.25 Mbit/s
95th percentile per-packet one-way delay: 92.485 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 287.25 Mbit/s
95th percentile per-packet one-way delay: 92.485 ms
Loss rate: 0.01%
Run 4: Report of Verus — Data Link

![Graph showing throughput and per packet one way delay over time]
Run 5: Statistics of Verus

End at: 2018-05-25 23:10:02
Local clock offset: 0.261 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-05-26 02:27:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 268.33 Mbit/s
  95th percentile per-packet one-way delay: 126.640 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 268.33 Mbit/s
  95th percentile per-packet one-way delay: 126.640 ms
  Loss rate: 0.00%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

End at: 2018-05-25 23:30:25
Local clock offset: 0.174 ms
Remote clock offset: 0.19 ms

# Below is generated by plot.py at 2018-05-26 02:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.45 Mbit/s
95th percentile per-packet one-way delay: 190.295 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 282.45 Mbit/s
95th percentile per-packet one-way delay: 190.295 ms
Loss rate: 0.34%
Run 6: Report of Verus — Data Link

![Graph showing throughput and per-packet one-way delay over time. The graph includes two lines for flow ingress and egress, with mean values given. There is also a marker indicating the 95th percentile for per-packet delay, marked as 198.29 ms.]
Run 7: Statistics of Verus

Local clock offset: 0.036 ms
Remote clock offset: 0.24 ms

# Below is generated by plot.py at 2018-05-26 02:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.85 Mbit/s
95th percentile per-packet one-way delay: 73.218 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 235.85 Mbit/s
95th percentile per-packet one-way delay: 73.218 ms
Loss rate: 0.01%
Run 7: Report of Verus — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress.]
Run 8: Statistics of Verus

Start at: 2018-05-26 00:11:16
End at: 2018-05-26 00:11:46
Local clock offset: 0.165 ms
Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2018-05-26 02:30:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.51 Mbit/s
95th percentile per-packet one-way delay: 163.834 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 316.51 Mbit/s
95th percentile per-packet one-way delay: 163.834 ms
Loss rate: 0.40%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 318.09 Mbps)
- Flow 1 egress (mean 316.51 Mbps)

![Graph of Per Packet One-Way Delay (ms) vs Time (s)]

- Flow 1 (95th percentile 163.83 ms)
Run 9: Statistics of Verus

Start at: 2018-05-26 00:32:25
End at: 2018-05-26 00:32:55
Local clock offset: -0.239 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2018-05-26 02:30:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 268.24 Mbit/s
95th percentile per-packet one-way delay: 141.883 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 268.24 Mbit/s
95th percentile per-packet one-way delay: 141.883 ms
Loss rate: 0.48%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-05-26 00:53:12
End at: 2018-05-26 00:53:42
Local clock offset: -0.075 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-05-26 02:30:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.60 Mbit/s
95th percentile per-packet one-way delay: 161.761 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 238.60 Mbit/s
95th percentile per-packet one-way delay: 161.761 ms
Loss rate: 0.43%
Run 10: Report of Verus — Data Link

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

- Flow 1 ingress (mean 240.71 Mbit/s)
- Flow 1 egress (mean 238.60 Mbit/s)

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

- Flow 1 (95th percentile 161.76 ms)
Run 1: Statistics of PCC-Vivace

Local clock offset: 0.057 ms
Remote clock offset: 0.325 ms

# Below is generated by plot.py at 2018-05-26 02:34:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 393.85 Mbit/s
95th percentile per-packet one-way delay: 51.420 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 393.85 Mbit/s
95th percentile per-packet one-way delay: 51.420 ms
Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

[Graph showing throughput over time]

[Graph showing packet delay over time]

Flow 1 ingress (mean 393.84 Mbit/s)  Flow 1 egress (mean 393.85 Mbit/s)

Flow 1 (95th percentile 51.42 ms)
Run 2: Statistics of PCC-Vivace

Local clock offset: -0.19 ms
Remote clock offset: 0.186 ms

# Below is generated by plot.py at 2018-05-26 02:34:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 402.67 Mbit/s
95th percentile per-packet one-way delay: 54.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 402.67 Mbit/s
95th percentile per-packet one-way delay: 54.272 ms
Loss rate: 0.00%
Run 2: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time](image-url)
Run 3: Statistics of PCC-Vivace

End at: 2018-05-25 22:32:02
Local clock offset: 0.025 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-05-26 02:35:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 405.27 Mbit/s
95th percentile per-packet one-way delay: 56.085 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 405.27 Mbit/s
95th percentile per-packet one-way delay: 56.085 ms
Loss rate: 0.00%
Run 4: Statistics of PCC-Vivace

Local clock offset: 0.111 ms
Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-05-26 02:35:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 388.93 Mbit/s
95th percentile per-packet one-way delay: 54.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 388.93 Mbit/s
95th percentile per-packet one-way delay: 54.740 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link

- Throughput (Mbps)
- Time (s)
- Flow 1 ingress (mean 388.93 Mbps)
- Flow 1 egress (mean 388.93 Mbps)

- Packet one-way delay (ms)
- Time (s)
- Flow 1 (95th percentile 54.74 ms)
Run 5: Statistics of PCC-Vivace

End at: 2018-05-25 23:12:50
Local clock offset: -0.063 ms
Remote clock offset: 0.317 ms

# Below is generated by plot.py at 2018-05-26 02:35:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 352.15 Mbit/s
  95th percentile per-packet one-way delay: 53.867 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 352.15 Mbit/s
  95th percentile per-packet one-way delay: 53.867 ms
  Loss rate: 0.01%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time.](image-url)
Run 6: Statistics of PCC-Vivace

Local clock offset: -0.197 ms
Remote clock offset: 0.261 ms

# Below is generated by plot.py at 2018-05-26 02:36:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 385.32 Mbit/s
95th percentile per-packet one-way delay: 55.186 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 385.32 Mbit/s
95th percentile per-packet one-way delay: 55.186 ms
Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

End at: 2018-05-25 23:54:08
Local clock offset: -0.174 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-05-26 02:36:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 404.09 Mbit/s
95th percentile per-packet one-way delay: 54.741 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 404.09 Mbit/s
95th percentile per-packet one-way delay: 54.741 ms
Loss rate: 0.01%
Run 7: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 404.08 Mbit/s)
- Flow 1 egress (mean 404.09 Mbit/s)

- Flow 1 (95th percentile 54.74 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-05-26 00:14:06
End at: 2018-05-26 00:14:36
Local clock offset: 0.12 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-05-26 02:36:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 390.96 Mbit/s
95th percentile per-packet one-way delay: 53.409 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 390.96 Mbit/s
95th percentile per-packet one-way delay: 53.409 ms
Loss rate: 0.00%
Run 8: Report of PCC-Vivace — Data Link

![Graph of throughput and packet delay over time for flow 1.]
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-26 00:35:14
End at: 2018-05-26 00:35:44
Local clock offset: 0.196 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2018-05-26 02:37:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 422.58 Mbit/s
95th percentile per-packet one-way delay: 54.212 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 422.58 Mbit/s
95th percentile per-packet one-way delay: 54.212 ms
Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

Start at: 2018-05-26 00:55:58
End at: 2018-05-26 00:56:28
Local clock offset: -0.145 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 426.86 Mbit/s
95th percentile per-packet one-way delay: 59.364 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 426.86 Mbit/s
95th percentile per-packet one-way delay: 59.364 ms
Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 426.86 Mbit/s)**
- **Flow 1 egress (mean 426.86 Mbit/s)**

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

- **Flow 1 (95th percentile 59.36 ms)**
Run 1: Statistics of WebRTC media

Local clock offset: -0.12 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.303 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.303 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

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

Start at: 2018-05-25 22:01:10
End at: 2018-05-25 22:01:40
Local clock offset: -0.199 ms
Remote clock offset: 0.319 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.979 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.979 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

![Graph of throughput and packet delay over time for WebRTC media.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.05 Mbps)
  - Flow 1 egress (mean 0.05 Mbps)

- **Packet delay (ms):**
  - Flow 1 95th percentile: 54.98 ms
Run 3: Statistics of WebRTC media

Local clock offset: -0.188 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.645 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.645 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 0.05 Mb/s)
- Blue solid line: Flow 1 egress (mean 0.05 Mb/s)

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

- Black dots: Flow 1 (90th percentile 54.65 ms)
Run 4: Statistics of WebRTC media

Local clock offset: -0.141 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.280 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-05-25 23:02:27
End at: 2018-05-25 23:02:57
Local clock offset: 0.212 ms
Remote clock offset: 0.129 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 50.977 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 50.977 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.05 Mbps)
- Flow 1 egress (mean 0.05 Mbps)

![Graph 2: RTT per packet vs. Time (s)]

- Flow 1 95th percentile 50.98 ms

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Run 6: Statistics of WebRTC media

Local clock offset: 0.107 ms
Remote clock offset: 0.155 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

![Graph of throughput over time with two lines, one for ingoing traffic and one for outgoing traffic.](image1)

![Graph of packet delay over time with a scatter plot.](image2)
Run 7: Statistics of WebRTC media

End at: 2018-05-25 23:44:08
Local clock offset: -0.129 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

![Graph showing network throughput and delay over time with labels for Flow 1 ingress and egress.]
Run 8: Statistics of WebRTC media

Start at: 2018-05-26 00:04:11
End at: 2018-05-26 00:04:41
Local clock offset: 0.14 ms
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.304 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress with mean 0.05 Mbit/s and 95th percentile 54.30 ms.]
Run 9: Statistics of WebRTC media

Start at: 2018-05-26 00:25:09
End at: 2018-05-26 00:25:39
Local clock offset: 0.212 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.000 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 54.000 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 10: Statistics of WebRTC media

Start at: 2018-05-26 00:45:54
End at: 2018-05-26 00:46:24
Local clock offset: -0.463 ms
Remote clock offset: 0.205 ms

# Below is generated by plot.py at 2018-05-26 02:37:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.566 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.566 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

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

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

- Flow 1 (95th percentile 54.57 ms)