Pantheon Report

Generated at 2018-06-19 17:00:03 (UTC).
Data path: GCE Sydney Ethernet (local) → GCE London Ethernet (remote).
Repeated the test of 16 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfef0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b498e1e
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3ccf42
third_party/scream-reproduce @ f099118d1421a3131bf11ff1964974e1da3b8b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af262956293f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9ddee4735770d143a1fa2851
test from GCE Sydney to GCE London, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>75.50</td>
<td>74.59</td>
<td>67.37</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>173.96</td>
<td>132.01</td>
<td>102.70</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>59.28</td>
<td>58.28</td>
<td>32.63</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>647.43</td>
<td>571.31</td>
<td>457.13</td>
</tr>
<tr>
<td>Indigo</td>
<td>10</td>
<td>152.20</td>
<td>153.19</td>
<td>142.65</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>4.05</td>
<td>3.20</td>
<td>1.40</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>467.58</td>
<td>131.47</td>
<td>46.38</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>237.60</td>
<td>165.16</td>
<td>91.51</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>47.20</td>
<td>59.40</td>
<td>36.34</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>0.21</td>
<td>0.22</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>0.17</td>
<td>0.16</td>
<td>0.21</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>61.58</td>
<td>161.28</td>
<td>66.87</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>43.11</td>
<td>37.85</td>
<td>35.83</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>130.84</td>
<td>83.48</td>
<td>46.90</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>286.88</td>
<td>213.06</td>
<td>97.98</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.83</td>
<td>1.09</td>
<td>0.37</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-19 11:06:54
End at: 2018-06-19 11:07:24
Local clock offset: 0.305 ms
Remote clock offset: -0.356 ms

# Below is generated by plot.py at 2018-06-19 15:09:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 145.44 Mbit/s
  95th percentile per-packet one-way delay: 136.117 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 74.17 Mbit/s
  95th percentile per-packet one-way delay: 136.133 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 72.36 Mbit/s
  95th percentile per-packet one-way delay: 136.129 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 69.67 Mbit/s
  95th percentile per-packet one-way delay: 135.613 ms
  Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

End at: 2018-06-19 11:32:09
Local clock offset: 0.375 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2018-06-19 15:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.93 Mbit/s
95th percentile per-packet one-way delay: 136.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.56 Mbit/s
95th percentile per-packet one-way delay: 136.223 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.05 Mbit/s
95th percentile per-packet one-way delay: 136.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.30 Mbit/s
95th percentile per-packet one-way delay: 136.281 ms
Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 73.56 Mbit/s)
- Flow 1 egress (mean 73.56 Mbit/s)
- Flow 2 ingress (mean 72.05 Mbit/s)
- Flow 2 egress (mean 72.05 Mbit/s)
- Flow 3 ingress (mean 64.30 Mbit/s)
- Flow 3 egress (mean 64.30 Mbit/s)
Run 3: Statistics of TCP BBR

Start at: 2018-06-19 11:56:31
End at: 2018-06-19 11:57:01
Local clock offset: 0.079 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-06-19 15:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.73 Mbit/s
95th percentile per-packet one-way delay: 136.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.86 Mbit/s
95th percentile per-packet one-way delay: 136.529 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 72.48 Mbit/s
95th percentile per-packet one-way delay: 136.555 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.08 Mbit/s
95th percentile per-packet one-way delay: 136.471 ms
Loss rate: 0.00%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Local clock offset: -0.03 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-19 15:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.53 Mbit/s
95th percentile per-packet one-way delay: 136.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.98 Mbit/s
95th percentile per-packet one-way delay: 136.708 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.78 Mbit/s
95th percentile per-packet one-way delay: 136.891 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.48 Mbit/s
95th percentile per-packet one-way delay: 136.899 ms
Loss rate: 0.00%
Run 5: Statistics of TCP BBR

End at: 2018-06-19 12:47:03
Local clock offset: -0.01 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-06-19 15:09:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.97 Mbit/s
95th percentile per-packet one-way delay: 136.371 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.33 Mbit/s
95th percentile per-packet one-way delay: 136.390 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 75.98 Mbit/s
95th percentile per-packet one-way delay: 136.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.56 Mbit/s
95th percentile per-packet one-way delay: 136.470 ms
Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Local clock offset: -0.292 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2018-06-19 15:09:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.33 Mbit/s
95th percentile per-packet one-way delay: 137.057 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.84 Mbit/s
95th percentile per-packet one-way delay: 136.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.39 Mbit/s
95th percentile per-packet one-way delay: 137.146 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.41 Mbit/s
95th percentile per-packet one-way delay: 137.035 ms
Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-06-19 13:36:03
End at: 2018-06-19 13:36:33
Local clock offset: 0.316 ms
Remote clock offset: -0.328 ms

# Below is generated by plot.py at 2018-06-19 15:09:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 144.37 Mbit/s
  95th percentile per-packet one-way delay: 136.088 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 74.33 Mbit/s
  95th percentile per-packet one-way delay: 136.083 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 72.50 Mbit/s
  95th percentile per-packet one-way delay: 136.090 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 65.56 Mbit/s
  95th percentile per-packet one-way delay: 136.102 ms
  Loss rate: 0.00%
Run 7: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 74.33 Mbps)
Flow 1 egress (mean 74.33 Mbps)
Flow 2 ingress (mean 72.50 Mbps)
Flow 2 egress (mean 72.50 Mbps)
Flow 3 ingress (mean 65.55 Mbps)
Flow 3 egress (mean 65.56 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.08 ms)
Flow 2 (95th percentile 136.09 ms)
Flow 3 (95th percentile 136.10 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-06-19 14:01:12
End at: 2018-06-19 14:01:42
Local clock offset: -0.096 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-06-19 15:09:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.35 Mbit/s
95th percentile per-packet one-way delay: 136.748 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.33 Mbit/s
95th percentile per-packet one-way delay: 136.741 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.44 Mbit/s
95th percentile per-packet one-way delay: 136.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.37 Mbit/s
95th percentile per-packet one-way delay: 136.713 ms
Loss rate: 0.00%
Run 9: Statistics of TCP BBR

Start at: 2018-06-19 14:25:36
End at: 2018-06-19 14:26:06
Local clock offset: -0.054 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-06-19 15:11:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.33 Mbit/s
95th percentile per-packet one-way delay: 136.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.96 Mbit/s
95th percentile per-packet one-way delay: 136.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 77.42 Mbit/s
95th percentile per-packet one-way delay: 136.563 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.65 Mbit/s
95th percentile per-packet one-way delay: 137.253 ms
Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link

---

---

---

---
Run 10: Statistics of TCP BBR

Start at: 2018-06-19 14:50:55
End at: 2018-06-19 14:51:25
Local clock offset: -0.261 ms
Remote clock offset: 0.455 ms

# Below is generated by plot.py at 2018-06-19 15:11:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.32 Mbit/s
95th percentile per-packet one-way delay: 137.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.68 Mbit/s
95th percentile per-packet one-way delay: 137.421 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.53 Mbit/s
95th percentile per-packet one-way delay: 137.546 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 69.64 Mbit/s
95th percentile per-packet one-way delay: 137.585 ms
Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link

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

Legend:
- Flow 1 ingress (mean 73.68 Mbit/s)
- Flow 1 egress (mean 73.68 Mbit/s)
- Flow 2 ingress (mean 74.53 Mbit/s)
- Flow 2 egress (mean 74.53 Mbit/s)
- Flow 3 ingress (mean 69.64 Mbit/s)
- Flow 3 egress (mean 69.64 Mbit/s)
Run 1: Statistics of Copa

Start at: 2018-06-19 11:02:05
End at: 2018-06-19 11:02:35
Local clock offset: 0.188 ms
Remote clock offset: -0.403 ms

# Below is generated by plot.py at 2018-06-19 15:17:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 261.38 Mbit/s
  95th percentile per-packet one-way delay: 162.984 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 168.37 Mbit/s
  95th percentile per-packet one-way delay: 159.789 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 89.28 Mbit/s
  95th percentile per-packet one-way delay: 168.870 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 101.45 Mbit/s
  95th percentile per-packet one-way delay: 162.555 ms
  Loss rate: 0.00%
Run 1: Report of Copa — Data Link

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

- Flow 1 ingress (mean 168.37 Mbps)
- Flow 1 egress (mean 168.37 Mbps)
- Flow 2 ingress (mean 89.28 Mbps)
- Flow 2 egress (mean 89.28 Mbps)
- Flow 3 ingress (mean 101.45 Mbps)
- Flow 3 egress (mean 101.45 Mbps)

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

- Flow 1 (95th percentile 159.79 ms)
- Flow 2 (95th percentile 168.87 ms)
- Flow 3 (95th percentile 162.56 ms)
Run 2: Statistics of Copa

Start at: 2018-06-19 11:26:47
End at: 2018-06-19 11:27:17
Local clock offset: 0.126 ms
Remote clock offset: 0.503 ms

# Below is generated by plot.py at 2018-06-19 15:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.11 Mbit/s
95th percentile per-packet one-way delay: 153.530 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 205.00 Mbit/s
95th percentile per-packet one-way delay: 157.360 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 117.03 Mbit/s
95th percentile per-packet one-way delay: 146.098 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 96.87 Mbit/s
95th percentile per-packet one-way delay: 164.733 ms
Loss rate: 0.00%
Run 2: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-06-19 11:51:43
Local clock offset: -0.143 ms
Remote clock offset: 0.313 ms

# Below is generated by plot.py at 2018-06-19 15:19:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.01 Mbit/s
95th percentile per-packet one-way delay: 170.286 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 135.39 Mbit/s
95th percentile per-packet one-way delay: 164.082 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 115.73 Mbit/s
95th percentile per-packet one-way delay: 154.513 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 117.10 Mbit/s
95th percentile per-packet one-way delay: 202.725 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

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

Start at: 2018-06-19 12:16:43
End at: 2018-06-19 12:17:13
Local clock offset: 0.075 ms
Remote clock offset: 0.281 ms

# Below is generated by plot.py at 2018-06-19 15:19:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.30 Mbit/s
95th percentile per-packet one-way delay: 163.816 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 198.87 Mbit/s
95th percentile per-packet one-way delay: 167.082 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 160.82 Mbit/s
95th percentile per-packet one-way delay: 161.937 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 64.59 Mbit/s
95th percentile per-packet one-way delay: 151.329 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Local clock offset: -0.076 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-19 15:19:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.83 Mbit/s
95th percentile per-packet one-way delay: 153.214 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.81 Mbit/s
95th percentile per-packet one-way delay: 154.427 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.61 Mbit/s
95th percentile per-packet one-way delay: 154.580 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 58.42 Mbit/s
95th percentile per-packet one-way delay: 136.771 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-06-19 13:06:33
End at: 2018-06-19 13:07:03
Local clock offset: 0.092 ms
Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2018-06-19 15:20:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.50 Mbit/s
95th percentile per-packet one-way delay: 159.007 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 240.72 Mbit/s
95th percentile per-packet one-way delay: 160.917 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 139.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 86.06 Mbit/s
95th percentile per-packet one-way delay: 154.185 ms
Loss rate: 0.00%
Run 6: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 7: Statistics of Copa

Local clock offset: -0.228 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2018-06-19 15:20:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.48 Mbit/s
95th percentile per-packet one-way delay: 156.908 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 103.70 Mbit/s
95th percentile per-packet one-way delay: 144.549 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.42 Mbit/s
95th percentile per-packet one-way delay: 160.663 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 174.43 Mbit/s
95th percentile per-packet one-way delay: 159.535 ms
Loss rate: 0.07%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

End at: 2018-06-19 13:56:54
Local clock offset: 0.045 ms
Remote clock offset: -0.379 ms

# Below is generated by plot.py at 2018-06-19 15:20:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 267.29 Mbit/s
  95th percentile per-packet one-way delay: 143.013 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 103.65 Mbit/s
  95th percentile per-packet one-way delay: 137.902 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 203.45 Mbit/s
  95th percentile per-packet one-way delay: 144.278 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 85.97 Mbit/s
  95th percentile per-packet one-way delay: 147.297 ms
  Loss rate: 0.00%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-06-19 14:20:49
End at: 2018-06-19 14:21:19
Local clock offset: -0.093 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-19 15:26:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 302.31 Mbit/s
95th percentile per-packet one-way delay: 147.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 200.44 Mbit/s
95th percentile per-packet one-way delay: 148.273 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 130.95 Mbit/s
95th percentile per-packet one-way delay: 139.359 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.12 Mbit/s
95th percentile per-packet one-way delay: 187.208 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 200.43 Mbit/s)
- Flow 1 egress (mean 200.44 Mbit/s)
- Flow 2 ingress (mean 130.95 Mbit/s)
- Flow 2 egress (mean 130.95 Mbit/s)
- Flow 3 ingress (mean 44.12 Mbit/s)
- Flow 3 egress (mean 44.12 Mbit/s)

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

- Flow 1 (95th percentile 148.27 ms)
- Flow 2 (95th percentile 139.36 ms)
- Flow 3 (95th percentile 187.21 ms)
Run 10: Statistics of Copa

Start at: 2018-06-19 14:46:09
End at: 2018-06-19 14:46:39
Local clock offset: -0.023 ms
Remote clock offset: 0.464 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.79 Mbit/s
95th percentile per-packet one-way delay: 166.771 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.61 Mbit/s
95th percentile per-packet one-way delay: 162.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 85.86 Mbit/s
95th percentile per-packet one-way delay: 167.332 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 198.03 Mbit/s
95th percentile per-packet one-way delay: 201.371 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

Graph 1: Throughput (Mbps) over time (s)
- Flow 1 ingress (mean 184.61 Mbit/s)
- Flow 1 egress (mean 184.61 Mbit/s)
- Flow 2 ingress (mean 86.10 Mbit/s)
- Flow 2 egress (mean 85.86 Mbit/s)
- Flow 3 ingress (mean 196.03 Mbit/s)
- Flow 3 egress (mean 196.03 Mbit/s)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 162.79 ms)
- Flow 2 (95th percentile 167.33 ms)
- Flow 3 (95th percentile 201.37 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 11:03:49
End at: 2018-06-19 11:04:19
Local clock offset: 0.183 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.27 Mbit/s
95th percentile per-packet one-way delay: 147.166 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.88 Mbit/s
95th percentile per-packet one-way delay: 147.166 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 145.639 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 72.75 Mbit/s
95th percentile per-packet one-way delay: 147.889 ms
Loss rate: 0.00%
Run 1: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 78.89 Mbps)
- Flow 1 egress (mean 78.88 Mbps)
- Flow 2 ingress (mean 57.40 Mbps)
- Flow 2 egress (mean 57.39 Mbps)
- Flow 3 ingress (mean 72.81 Mbps)
- Flow 3 egress (mean 72.75 Mbps)

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

- Flow 1 (95th percentile 147.17 ms)
- Flow 2 (95th percentile 145.64 ms)
- Flow 3 (95th percentile 147.89 ms)
Run 2: Statistics of TCP Cubic

End at: 2018-06-19 11:29:07
Local clock offset: 0.25 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.20 Mbit/s
95th percentile per-packet one-way delay: 145.343 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 47.77 Mbit/s
95th percentile per-packet one-way delay: 145.722 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 42.07 Mbit/s
95th percentile per-packet one-way delay: 144.826 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 149.651 ms
Loss rate: 2.64%
Run 2: Report of TCP Cubic — Data Link

- Throughput (Mbps)
- Time (s)
- Flow 1 ingress (mean 47.94 Mbps) vs. Flow 1 egress (mean 47.77 Mbps)
- Flow 2 ingress (mean 42.10 Mbps) vs. Flow 2 egress (mean 42.07 Mbps)
- Flow 3 ingress (mean 1.32 Mbps) vs. Flow 3 egress (mean 1.29 Mbps)

- Per-packet one-way delay (ms)
- Time (s)
- Flow 1 (95th percentile 145.72 ms) vs. Flow 2 (95th percentile 144.83 ms) vs. Flow 3 (95th percentile 149.65 ms)
Run 3: Statistics of TCP Cubic

End at: 2018-06-19 11:53:57
Local clock offset: -0.025 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 143.145 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.64 Mbit/s
95th percentile per-packet one-way delay: 143.517 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.63 Mbit/s
95th percentile per-packet one-way delay: 141.871 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 39.21 Mbit/s
95th percentile per-packet one-way delay: 142.745 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 12:18:34
End at: 2018-06-19 12:19:04
Local clock offset: 0.009 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.56 Mbit/s
95th percentile per-packet one-way delay: 143.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 145.083 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 41.55 Mbit/s
95th percentile per-packet one-way delay: 142.130 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 143.326 ms
Loss rate: 0.00%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Local clock offset: -0.21 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.38 Mbit/s
95th percentile per-packet one-way delay: 146.661 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 48.50 Mbit/s
95th percentile per-packet one-way delay: 147.297 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 81.81 Mbit/s
95th percentile per-packet one-way delay: 146.423 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.46 Mbit/s
95th percentile per-packet one-way delay: 144.463 ms
Loss rate: 0.49%
Run 5: Report of TCP Cubic — Data Link

![TCP Cubic Data Link Graph]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 48.50 Mbps)
Flow 1 egress (mean 48.50 Mbps)
Flow 2 ingress (mean 81.82 Mbps)
Flow 2 egress (mean 81.81 Mbps)
Flow 3 ingress (mean 1.47 Mbps)
Flow 3 egress (mean 1.46 Mbps)

Delay

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 147.30 ms)
Flow 2 (95th percentile 146.42 ms)
Flow 3 (95th percentile 144.46 ms)
Run 6: Statistics of TCP Cubic

End at: 2018-06-19 13:08:53
Local clock offset: -0.214 ms
Remote clock offset: 0.171 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.98 Mbit/s
95th percentile per-packet one-way delay: 147.750 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 147.810 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 80.90 Mbit/s
95th percentile per-packet one-way delay: 147.769 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 147.018 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-06-19 13:33:01  
Local clock offset: -0.172 ms  
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.53 Mbit/s
95th percentile per-packet one-way delay: 145.590 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.70 Mbit/s
95th percentile per-packet one-way delay: 146.217 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.00 Mbit/s
95th percentile per-packet one-way delay: 144.140 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 142.303 ms
Loss rate: 1.30%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-06-19 13:58:08
End at: 2018-06-19 13:58:38
Local clock offset: -0.157 ms
Remote clock offset: -0.4 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.77 Mbit/s
95th percentile per-packet one-way delay: 147.925 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.99 Mbit/s
95th percentile per-packet one-way delay: 146.339 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 42.82 Mbit/s
95th percentile per-packet one-way delay: 153.057 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.17 Mbit/s
95th percentile per-packet one-way delay: 157.535 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

[Graphs showing throughput and per-packet one-way delay over time for flows 1, 2, and 3, with mean and 95th percentile delays.]
Run 9: Statistics of TCP Cubic

End at: 2018-06-19 14:23:07
Local clock offset: -0.064 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 99.50 Mbit/s
  95th percentile per-packet one-way delay: 144.139 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 52.11 Mbit/s
  95th percentile per-packet one-way delay: 144.623 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 47.87 Mbit/s
  95th percentile per-packet one-way delay: 143.821 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 47.61 Mbit/s
  95th percentile per-packet one-way delay: 141.275 ms
  Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Local clock offset: 0.19 ms
Remote clock offset: 0.444 ms

# Below is generated by plot.py at 2018-06-19 15:26:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.14 Mbit/s
95th percentile per-packet one-way delay: 142.909 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.52 Mbit/s
95th percentile per-packet one-way delay: 143.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 70.78 Mbit/s
95th percentile per-packet one-way delay: 141.728 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 42.67 Mbit/s
95th percentile per-packet one-way delay: 143.504 ms
Loss rate: 0.00%
Run 10: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 1: Statistics of FillP

Start at: 2018-06-19 10:56:46
End at: 2018-06-19 10:57:16
Local clock offset: 0.33 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-19 15:46:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1144.62 Mbit/s
  95th percentile per-packet one-way delay: 270.196 ms
  Loss rate: 3.55%
-- Flow 1:
  Average throughput: 611.66 Mbit/s
  95th percentile per-packet one-way delay: 297.308 ms
  Loss rate: 5.42%
-- Flow 2:
  Average throughput: 569.43 Mbit/s
  95th percentile per-packet one-way delay: 207.913 ms
  Loss rate: 1.81%
-- Flow 3:
  Average throughput: 461.34 Mbit/s
  95th percentile per-packet one-way delay: 157.200 ms
  Loss rate: 0.03%
Run 1: Report of FillP — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 646.66 Mbps/s) — Flow 1 egress (mean 611.86 Mbps/s)
Flow 2 ingress (mean 579.95 Mbps/s) — Flow 2 egress (mean 569.43 Mbps/s)
Flow 3 ingress (mean 461.45 Mbps/s) — Flow 3 egress (mean 461.34 Mbps/s)

Per packet oneway delay (ms)

Time (s)

Flow 1 (95th percentile 297.31 ms) — Flow 2 (95th percentile 207.91 ms) — Flow 3 (95th percentile 157.20 ms)
Run 2: Statistics of FillP

Local clock offset: 0.331 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-06-19 15:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1089.84 Mbit/s
95th percentile per-packet one-way delay: 282.794 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 598.76 Mbit/s
95th percentile per-packet one-way delay: 271.398 ms
Loss rate: 2.16%
-- Flow 2:
Average throughput: 518.06 Mbit/s
95th percentile per-packet one-way delay: 319.121 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 440.86 Mbit/s
95th percentile per-packet one-way delay: 169.353 ms
Loss rate: 0.00%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-06-19 11:46:40
End at: 2018-06-19 11:47:10
Local clock offset: 0.114 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-06-19 15:47:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1191.71 Mbit/s
95th percentile per-packet one-way delay: 211.961 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 665.76 Mbit/s
95th percentile per-packet one-way delay: 225.662 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 565.77 Mbit/s
95th percentile per-packet one-way delay: 207.847 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 451.06 Mbit/s
95th percentile per-packet one-way delay: 187.106 ms
Loss rate: 0.00%
Run 3: Report of FillP — Data Link

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

**Throughput (Mbps)**

**Time (s)**

- Flow 1 ingress (mean 673.26 Mbps)
- Flow 1 egress (mean 665.76 Mbps)
- Flow 2 ingress (mean 572.18 Mbps)
- Flow 2 egress (mean 565.77 Mbps)
- Flow 3 ingress (mean 451.03 Mbps)
- Flow 3 egress (mean 451.06 Mbps)

**Per-packet mean delay (ms)**

- Flow 1 (95th percentile 225.66 ms)
- Flow 2 (95th percentile 207.85 ms)
- Flow 3 (95th percentile 147.11 ms)
Run 4: Statistics of FillP

End at: 2018-06-19 12:12:09
Local clock offset: 0.178 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-06-19 15:47:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1153.12 Mbit/s
  95th percentile per-packet one-way delay: 299.614 ms
  Loss rate: 2.01%
-- Flow 1:
  Average throughput: 646.10 Mbit/s
  95th percentile per-packet one-way delay: 308.861 ms
  Loss rate: 2.40%
-- Flow 2:
  Average throughput: 561.78 Mbit/s
  95th percentile per-packet one-way delay: 283.195 ms
  Loss rate: 1.58%
-- Flow 3:
  Average throughput: 402.04 Mbit/s
  95th percentile per-packet one-way delay: 305.186 ms
  Loss rate: 1.36%
Run 4: Report of FillP — Data Link

![Graph showing throughput and packet delay.](image-url)
Run 5: Statistics of FillP

Start at: 2018-06-19 12:36:37
End at: 2018-06-19 12:37:07
Local clock offset: -0.272 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-06-19 15:47:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1176.44 Mbit/s
  95th percentile per-packet one-way delay: 194.832 ms
  Loss rate: 0.75%
-- Flow 1:
  Average throughput: 677.31 Mbit/s
  95th percentile per-packet one-way delay: 202.105 ms
  Loss rate: 1.30%
-- Flow 2:
  Average throughput: 526.17 Mbit/s
  95th percentile per-packet one-way delay: 168.679 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 449.51 Mbit/s
  95th percentile per-packet one-way delay: 150.574 ms
  Loss rate: 0.00%
Run 5: Report of FillP — Data Link

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

- **Flow 1 Ingress** (mean 686.21 Mbps)
- **Flow 1 Egress** (mean 677.31 Mbps)
- **Flow 2 Ingress** (mean 526.20 Mbps)
- **Flow 2 Egress** (mean 526.13 Mbps)
- **Flow 3 Ingress** (mean 449.46 Mbps)
- **Flow 3 Egress** (mean 449.53 Mbps)

![Graph showing packet delay for different flows.]

- **Flow 1** (95th percentile 202.10 ms)
- **Flow 2** (95th percentile 168.68 ms)
- **Flow 3** (95th percentile 150.57 ms)
Run 6: Statistics of FillP

Start at: 2018-06-19 13:01:35
End at: 2018-06-19 13:02:05
Local clock offset: 0.24 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-06-19 15:47:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1128.00 Mbit/s
  95th percentile per-packet one-way delay: 219.708 ms
  Loss rate: 1.93%
-- Flow 1:
  Average throughput: 617.03 Mbit/s
  95th percentile per-packet one-way delay: 274.157 ms
  Loss rate: 2.61%
-- Flow 2:
  Average throughput: 544.41 Mbit/s
  95th percentile per-packet one-way delay: 207.925 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 447.47 Mbit/s
  95th percentile per-packet one-way delay: 145.272 ms
  Loss rate: 0.15%
Run 6: Report of FillP — Data Link

![Graph showing throughput and delay over time for different flows.]
Run 7: Statistics of FillP

End at: 2018-06-19 13:26:43
Local clock offset: -0.064 ms
Remote clock offset: 0.463 ms

# Below is generated by plot.py at 2018-06-19 15:53:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1246.95 Mbit/s
95th percentile per-packet one-way delay: 192.044 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 700.30 Mbit/s
95th percentile per-packet one-way delay: 193.350 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 595.69 Mbit/s
95th percentile per-packet one-way delay: 191.822 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 454.49 Mbit/s
95th percentile per-packet one-way delay: 140.932 ms
Loss rate: 0.00%
Run 7: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 705.38 Mbps/s)
- Flow 1 Egress (mean 700.30 Mbps/s)
- Flow 2 Ingress (mean 596.16 Mbps/s)
- Flow 2 Egress (mean 595.69 Mbps/s)
- Flow 3 Ingress (mean 454.38 Mbps/s)
- Flow 3 Egress (mean 454.49 Mbps/s)

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

- Flow 1 (95th percentile 193.35 ms)
- Flow 2 (95th percentile 191.82 ms)
- Flow 3 (95th percentile 140.93 ms)
Run 8: Statistics of FillP

Local clock offset: -0.016 ms
Remote clock offset: -0.431 ms

# Below is generated by plot.py at 2018-06-19 15:53:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1210.80 Mbit/s
  95th percentile per-packet one-way delay: 217.978 ms
  Loss rate: 3.59%
-- Flow 1:
  Average throughput: 643.54 Mbit/s
  95th percentile per-packet one-way delay: 225.071 ms
  Loss rate: 4.74%
-- Flow 2:
  Average throughput: 616.29 Mbit/s
  95th percentile per-packet one-way delay: 210.653 ms
  Loss rate: 3.08%
-- Flow 3:
  Average throughput: 474.12 Mbit/s
  95th percentile per-packet one-way delay: 147.807 ms
  Loss rate: 0.00%
Run 8: Report of FillP — Data Link
Run 9: Statistics of FillP

Start at: 2018-06-19 14:15:59
End at: 2018-06-19 14:16:29
Local clock offset: 0.028 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-19 16:12:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1235.58 Mbit/s
  95th percentile per-packet one-way delay: 208.814 ms
  Loss rate: 2.31%
-- Flow 1:
  Average throughput: 675.15 Mbit/s
  95th percentile per-packet one-way delay: 213.700 ms
  Loss rate: 3.16%
-- Flow 2:
  Average throughput: 594.38 Mbit/s
  95th percentile per-packet one-way delay: 202.240 ms
  Loss rate: 1.77%
-- Flow 3:
  Average throughput: 496.31 Mbit/s
  95th percentile per-packet one-way delay: 150.880 ms
  Loss rate: 0.03%
Run 9: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 697.17 Mbps/s)
- Flow 1 Egress (mean 675.15 Mbps/s)
- Flow 2 Ingress (mean 605.10 Mbps/s)
- Flow 2 Egress (mean 594.38 Mbps/s)
- Flow 3 Ingress (mean 496.29 Mbps/s)
- Flow 3 Egress (mean 496.31 Mbps/s)

![Graph 2: Per-packet end-to-end delay (ms) over Time (s)]

- Flow 1 (95th percentile 213.70 ms)
- Flow 2 (95th percentile 202.24 ms)
- Flow 3 (95th percentile 150.88 ms)
Run 10: Statistics of FillP

Start at: 2018-06-19 14:40:46
End at: 2018-06-19 14:41:16
Local clock offset: 0.328 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1216.27 Mbit/s
95th percentile per-packet one-way delay: 207.780 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 638.68 Mbit/s
95th percentile per-packet one-way delay: 208.616 ms
Loss rate: 3.22%
-- Flow 2:
Average throughput: 621.08 Mbit/s
95th percentile per-packet one-way delay: 208.025 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 494.14 Mbit/s
95th percentile per-packet one-way delay: 141.650 ms
Loss rate: 0.00%
Run 10: Report of FillIP — Data Link
Run 1: Statistics of Indigo

Start at: 2018-06-19 11:05:13
End at: 2018-06-19 11:05:43
Local clock offset: 0.201 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.76 Mbit/s
95th percentile per-packet one-way delay: 139.684 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 146.43 Mbit/s
95th percentile per-packet one-way delay: 139.433 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.10 Mbit/s
95th percentile per-packet one-way delay: 139.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.79 Mbit/s
95th percentile per-packet one-way delay: 141.874 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 146.43 Mbps)
- Flow 1 egress (mean 146.43 Mbps)
- Flow 2 ingress (mean 170.11 Mbps)
- Flow 2 egress (mean 170.10 Mbps)
- Flow 3 ingress (mean 146.79 Mbps)
- Flow 3 egress (mean 146.79 Mbps)

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

- Flow 1 (95th percentile 139.43 ms)
- Flow 2 (95th percentile 139.63 ms)
- Flow 3 (95th percentile 141.87 ms)
Run 2: Statistics of Indigo

End at: 2018-06-19 11:30:28
Local clock offset: 0.277 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.34 Mbit/s
95th percentile per-packet one-way delay: 137.879 ms
Loss rate: 0.00%
-- Flow 1:
  Average throughput: 166.00 Mbit/s
  95th percentile per-packet one-way delay: 137.450 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 128.55 Mbit/s
  95th percentile per-packet one-way delay: 137.642 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 150.67 Mbit/s
  95th percentile per-packet one-way delay: 141.131 ms
  Loss rate: 0.00%
Run 2: Report of Indigo — Data Link

---

**Graph 1:**
- **x-axis:** Time (s)
- **y-axis:** Throughput (Mbit/s)
- Lines represent:
  - Flow 1 ingress (mean 166.00 Mbit/s)
  - Flow 1 egress (mean 166.00 Mbit/s)
  - Flow 2 ingress (mean 128.55 Mbit/s)
  - Flow 2 egress (mean 128.55 Mbit/s)
  - Flow 3 ingress (mean 150.64 Mbit/s)
  - Flow 3 egress (mean 150.67 Mbit/s)

**Graph 2:**
- **x-axis:** Time (s)
- **y-axis:** Per-packet one-way delay (ms)
- Points represent:
  - Flow 1 (95th percentile 137.45 ms)
  - Flow 2 (95th percentile 137.64 ms)
  - Flow 3 (95th percentile 141.13 ms)
Run 3: Statistics of Indigo

Start at: 2018-06-19 11:54:48
Local clock offset: 0.126 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.72 Mbit/s
95th percentile per-packet one-way delay: 137.916 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 164.38 Mbit/s
95th percentile per-packet one-way delay: 137.298 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.40 Mbit/s
95th percentile per-packet one-way delay: 138.189 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.36 Mbit/s
95th percentile per-packet one-way delay: 140.238 ms
Loss rate: 0.01%
Run 3: Report of Indigo — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress (mean 164.39 Mbps)**
- **Flow 1 egress (mean 164.38 Mbps)**
- **Flow 2 ingress (mean 167.40 Mbps)**
- **Flow 2 egress (mean 167.40 Mbps)**
- **Flow 3 ingress (mean 148.38 Mbps)**
- **Flow 3 egress (mean 148.36 Mbps)**

**Packet delivery delay (ms)**

- **Flow 1 (95th percentile 137.30 ms)**
- **Flow 2 (95th percentile 138.19 ms)**
- **Flow 3 (95th percentile 140.24 ms)**

---

89
Run 4: Statistics of Indigo

Start at: 2018-06-19 12:19:56
End at: 2018-06-19 12:20:26
Local clock offset: 0.003 ms
Remote clock offset: -0.398 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
# Total of 3 flows:
Average throughput: 292.50 Mbit/s
95th percentile per-packet one-way delay: 137.912 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.39 Mbit/s
95th percentile per-packet one-way delay: 137.407 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.83 Mbit/s
95th percentile per-packet one-way delay: 137.951 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 153.24 Mbit/s
95th percentile per-packet one-way delay: 139.721 ms
Loss rate: 0.00%
Run 4: Report of Indigo — Data Link

![Graph showing throughput and latency over time for different flow ingress and egress with specified mean throughput values.]

![Graph showing per-packet one-way delay over time with specified 95th percentile delay values.]
Run 5: Statistics of Indigo

Start at: 2018-06-19 12:44:52
End at: 2018-06-19 12:45:22
Local clock offset: -0.034 ms
Remote clock offset: 0.402 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.47 Mbit/s
95th percentile per-packet one-way delay: 138.700 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 166.37 Mbit/s
95th percentile per-packet one-way delay: 138.110 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.38 Mbit/s
95th percentile per-packet one-way delay: 138.953 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 108.14 Mbit/s
95th percentile per-packet one-way delay: 139.473 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

---

**Throughput (Mbps):**

- **Flow 1 ingress (mean 166.37 Mbps)**
- **Flow 1 egress (mean 166.37 Mbps)**
- **Flow 2 ingress (mean 170.40 Mbps)**
- **Flow 2 egress (mean 170.38 Mbps)**
- **Flow 3 ingress (mean 108.15 Mbps)**
- **Flow 3 egress (mean 108.14 Mbps)**

---

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

- **Flow 1 (95th percentile 138.11 ms)**
- **Flow 2 (95th percentile 138.95 ms)**
- **Flow 3 (95th percentile 139.47 ms)**
Run 6: Statistics of Indigo

End at: 2018-06-19 13:10:17
Local clock offset: -0.47 ms
Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.25 Mbit/s
95th percentile per-packet one-way delay: 138.897 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 168.82 Mbit/s
95th percentile per-packet one-way delay: 138.222 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.71 Mbit/s
95th percentile per-packet one-way delay: 139.399 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 148.44 Mbit/s
95th percentile per-packet one-way delay: 141.307 ms
Loss rate: 0.00%
Run 6: Report of Indigo — Data Link

---

**Graph 1:**

- **X-axis:** Time (s)
- **Y-axis:** Throughput (Mbit/s)
- Lines represent:
  - Flow 1 ingress (mean 168.82 Mbit/s)
  - Flow 1 egress (mean 168.82 Mbit/s)
  - Flow 2 ingress (mean 127.71 Mbit/s)
  - Flow 2 egress (mean 127.71 Mbit/s)
  - Flow 3 ingress (mean 148.45 Mbit/s)
  - Flow 3 egress (mean 148.44 Mbit/s)

---

**Graph 2:**

- **X-axis:** Time (s)
- **Y-axis:** Per-packet one-way delay (ms)
- Points represent:
  - Flow 1 (95th percentile 138.22 ms)
  - Flow 2 (95th percentile 139.40 ms)
  - Flow 3 (95th percentile 141.31 ms)
Run 7: Statistics of Indigo

End at: 2018-06-19 13:34:53
Local clock offset: -0.062 ms
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.36 Mbit/s
95th percentile per-packet one-way delay: 139.407 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.35 Mbit/s
95th percentile per-packet one-way delay: 138.793 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.04 Mbit/s
95th percentile per-packet one-way delay: 138.992 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 152.15 Mbit/s
95th percentile per-packet one-way delay: 143.804 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link

---

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

- **Flow 1 ingress (mean 132.36 Mbit/s)**
- **Flow 1 egress (mean 132.35 Mbit/s)**
- **Flow 2 ingress (mean 170.05 Mbit/s)**
- **Flow 2 egress (mean 170.04 Mbit/s)**
- **Flow 3 ingress (mean 151.65 Mbit/s)**
- **Flow 3 egress (mean 152.15 Mbit/s)**

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

- **Flow 1 (95th percentile 138.79 ms)**
- **Flow 2 (95th percentile 138.99 ms)**
- **Flow 3 (95th percentile 143.80 ms)**
Run 8: Statistics of Indigo

End at: 2018-06-19 14:00:02
Local clock offset: -0.104 ms
Remote clock offset: 0.386 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 314.40 Mbit/s
  95th percentile per-packet one-way delay: 138.328 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 179.71 Mbit/s
  95th percentile per-packet one-way delay: 138.016 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 128.79 Mbit/s
  95th percentile per-packet one-way delay: 138.249 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 154.45 Mbit/s
  95th percentile per-packet one-way delay: 141.939 ms
  Loss rate: 0.00%
Run 8: Report of Indigo — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 179.71 Mbps)
- **Flow 1 egress** (mean 179.71 Mbps)
- **Flow 2 ingress** (mean 128.80 Mbps)
- **Flow 2 egress** (mean 128.79 Mbps)
- **Flow 3 ingress** (mean 154.45 Mbps)
- **Flow 3 egress** (mean 154.45 Mbps)

---

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

- **Flow 1** (95th percentile 139.02 ms)
- **Flow 2** (95th percentile 138.25 ms)
- **Flow 3** (95th percentile 141.94 ms)
Run 9: Statistics of Indigo

End at: 2018-06-19 14:24:29
Local clock offset: 0.139 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.04 Mbit/s
95th percentile per-packet one-way delay: 138.046 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.85 Mbit/s
95th percentile per-packet one-way delay: 137.768 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 127.34 Mbit/s
95th percentile per-packet one-way delay: 138.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 155.54 Mbit/s
95th percentile per-packet one-way delay: 138.206 ms
Loss rate: 0.00%
Run 9: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 132.88 Mbit/s)
- Flow 1 egress (mean 132.85 Mbit/s)
- Flow 2 ingress (mean 127.34 Mbit/s)
- Flow 2 egress (mean 127.34 Mbit/s)
- Flow 3 ingress (mean 155.54 Mbit/s)
- Flow 3 egress (mean 155.54 Mbit/s)

- Flow 1 (95th percentile 137.77 ms)
- Flow 2 (95th percentile 138.23 ms)
- Flow 3 (95th percentile 138.21 ms)
Run 10: Statistics of Indigo

Start at: 2018-06-19 14:49:16
End at: 2018-06-19 14:49:46
Local clock offset: 0.301 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.54 Mbit/s
95th percentile per-packet one-way delay: 139.764 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.68 Mbit/s
95th percentile per-packet one-way delay: 139.039 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.71 Mbit/s
95th percentile per-packet one-way delay: 139.343 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 108.69 Mbit/s
95th percentile per-packet one-way delay: 142.686 ms
Loss rate: 0.00%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 10:52:04
End at: 2018-06-19 10:52:34
Local clock offset: 0.446 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 136.997 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.92 Mbit/s
95th percentile per-packet one-way delay: 137.021 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 137.039 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 136.545 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-06-19 11:17:01
End at: 2018-06-19 11:17:31
Local clock offset: 0.213 ms
Remote clock offset: -0.253 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.47 Mbit/s
  95th percentile per-packet one-way delay: 137.250 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 4.84 Mbit/s
  95th percentile per-packet one-way delay: 137.402 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 3.22 Mbit/s
  95th percentile per-packet one-way delay: 136.892 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 1.57 Mbit/s
  95th percentile per-packet one-way delay: 136.494 ms
  Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 4.84 Mbit/s)
- Flow 1 egress (mean 4.84 Mbit/s)
- Flow 2 ingress (mean 3.22 Mbit/s)
- Flow 2 egress (mean 3.22 Mbit/s)
- Flow 3 ingress (mean 1.57 Mbit/s)
- Flow 3 egress (mean 1.57 Mbit/s)

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

- Flow 1 (95th percentile 137.40 ms)
- Flow 2 (95th percentile 136.89 ms)
- Flow 3 (95th percentile 136.49 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-06-19 11:41:56
End at: 2018-06-19 11:42:26
Local clock offset: 0.131 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.56 Mbit/s
  95th percentile per-packet one-way delay: 137.805 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.90 Mbit/s
  95th percentile per-packet one-way delay: 137.833 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.24 Mbit/s
  95th percentile per-packet one-way delay: 137.712 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.57 Mbit/s
  95th percentile per-packet one-way delay: 137.592 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-06-19 12:06:43
Local clock offset: -0.155 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.13 Mbit/s
  95th percentile per-packet one-way delay: 137.854 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.82 Mbit/s
  95th percentile per-packet one-way delay: 138.163 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.19 Mbit/s
  95th percentile per-packet one-way delay: 137.472 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.62 Mbit/s
  95th percentile per-packet one-way delay: 137.069 ms
  Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 4.82 Mbit/s)
- Flow 1 egress (mean 4.82 Mbit/s)
- Flow 2 ingress (mean 3.19 Mbit/s)
- Flow 2 egress (mean 3.19 Mbit/s)
- Flow 3 ingress (mean 0.62 Mbit/s)
- Flow 3 egress (mean 0.62 Mbit/s)

![Diagram 2: Round-Trip Delay Over Time](image2)

- Flow 1 (95th percentile 138.16 ms)
- Flow 2 (95th percentile 137.47 ms)
- Flow 3 (95th percentile 137.07 ms)
Run 5: Statistics of LEDBAT

End at: 2018-06-19 12:32:19
Local clock offset: 0.115 ms
Remote clock offset: -0.305 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 137.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 137.162 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 137.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 136.731 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-06-19 12:56:50
Local clock offset: 0.03 ms
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.54 Mbit/s
  95th percentile per-packet one-way delay: 136.624 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.88 Mbit/s
  95th percentile per-packet one-way delay: 136.685 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.23 Mbit/s
  95th percentile per-packet one-way delay: 136.550 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 1.57 Mbit/s
  95th percentile per-packet one-way delay: 136.419 ms
  Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Local clock offset: 0.246 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.43 Mbit/s
95th percentile per-packet one-way delay: 137.460 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 137.554 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 137.333 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 137.021 ms
Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 3.65 Mbps) — Flow 1 egress (mean 3.85 Mbps)
Flow 2 ingress (mean 3.13 Mbps) — Flow 2 egress (mean 3.13 Mbps)
Flow 3 ingress (mean 1.56 Mbps) — Flow 3 egress (mean 1.56 Mbps)

Round-trip packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 137.55 ms) — Flow 2 (95th percentile 137.33 ms) — Flow 3 (95th percentile 137.02 ms)
Run 8: Statistics of LEDBAT

Local clock offset: 0.02 ms
Remote clock offset: -0.348 ms

# Below is generated by plot.py at 2018-06-19 16:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 137.183 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.08 Mbit/s
95th percentile per-packet one-way delay: 137.216 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 137.137 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 136.912 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

![Throughput vs Time](image1)

- **Flow 1 ingress** (mean 4.08 Mbit/s)
- **Flow 1 egress** (mean 4.08 Mbit/s)
- **Flow 2 ingress** (mean 3.20 Mbit/s)
- **Flow 2 egress** (mean 3.20 Mbit/s)
- **Flow 3 ingress** (mean 1.56 Mbit/s)
- **Flow 3 egress** (mean 1.56 Mbit/s)

![Delay vs Time](image2)

- **Flow 1** (95th percentile 137.22 ms)
- **Flow 2** (95th percentile 137.14 ms)
- **Flow 3** (95th percentile 136.91 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-06-19 14:11:29
End at: 2018-06-19 14:11:59
Local clock offset: 0.177 ms
Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 136.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.87 Mbit/s
95th percentile per-packet one-way delay: 136.697 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.20 Mbit/s
95th percentile per-packet one-way delay: 136.446 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.87 Mbit/s
95th percentile per-packet one-way delay: 135.017 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 4.87 Mbit/s)
- Flow 1 egress (mean 4.87 Mbit/s)
- Flow 2 ingress (mean 3.20 Mbit/s)
- Flow 2 egress (mean 3.20 Mbit/s)
- Flow 3 ingress (mean 0.87 Mbit/s)
- Flow 3 egress (mean 0.87 Mbit/s)

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

- Flow 1 (95th percentile 136.70 ms)
- Flow 2 (95th percentile 136.45 ms)
- Flow 3 (95th percentile 115.02 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-06-19 14:35:52
End at: 2018-06-19 14:36:22
Local clock offset: -0.425 ms
Remote clock offset: 0.423 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 138.300 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 137.961 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 138.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: 137.919 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

![Graph showing network performance metrics for three flows over time, with throughput and per-packet one-way delay measured.](image-url)
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 11:08:18
End at: 2018-06-19 11:08:48
Local clock offset: 0.23 ms
Remote clock offset: -0.351 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 550.93 Mbit/s
  95th percentile per-packet one-way delay: 285.201 ms
  Loss rate: 8.28%
-- Flow 1:
  Average throughput: 472.74 Mbit/s
  95th percentile per-packet one-way delay: 285.438 ms
  Loss rate: 8.08%
-- Flow 2:
  Average throughput: 114.03 Mbit/s
  95th percentile per-packet one-way delay: 284.441 ms
  Loss rate: 9.21%
-- Flow 3:
  Average throughput: 6.99 Mbit/s
  95th percentile per-packet one-way delay: 285.345 ms
  Loss rate: 16.47%
Run 1: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 Ingress (mean 514.31 Mbps)
- Flow 1 Egress (mean 472.74 Mbps)
- Flow 2 Ingress (mean 125.60 Mbps)
- Flow 2 Egress (mean 114.03 Mbps)
- Flow 3 Ingress (mean 8.37 Mbps)
- Flow 3 Egress (mean 6.99 Mbps)

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

- Flow 1 (95th percentile 285.44 ms)
- Flow 2 (95th percentile 284.44 ms)
- Flow 3 (95th percentile 285.35 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-19 11:33:03
End at: 2018-06-19 11:33:33
Local clock offset: 0.593 ms
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 584.16 Mbit/s
95th percentile per-packet one-way delay: 279.340 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 478.27 Mbit/s
95th percentile per-packet one-way delay: 283.784 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 128.23 Mbit/s
95th percentile per-packet one-way delay: 240.443 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 63.24 Mbit/s
95th percentile per-packet one-way delay: 240.340 ms
Loss rate: 1.29%
Run 2: Report of PCC-Allegro — Data Link

![Graph](image1)

![Graph](image2)

127
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 11:57:56
End at: 2018-06-19 11:58:26
Local clock offset: -0.274 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 534.26 Mbit/s
  95th percentile per-packet one-way delay: 271.539 ms
  Loss rate: 4.13%
-- Flow 1:
  Average throughput: 416.33 Mbit/s
  95th percentile per-packet one-way delay: 271.870 ms
  Loss rate: 4.03%
-- Flow 2:
  Average throughput: 121.73 Mbit/s
  95th percentile per-packet one-way delay: 271.502 ms
  Loss rate: 3.80%
-- Flow 3:
  Average throughput: 112.40 Mbit/s
  95th percentile per-packet one-way delay: 255.735 ms
  Loss rate: 5.96%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-19 12:23:01
Local clock offset: 0.087 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 576.66 Mbit/s
  95th percentile per-packet one-way delay: 257.466 ms
  Loss rate: 3.36%
-- Flow 1:
  Average throughput: 480.58 Mbit/s
  95th percentile per-packet one-way delay: 259.841 ms
  Loss rate: 3.39%
-- Flow 2:
  Average throughput: 129.29 Mbit/s
  95th percentile per-packet one-way delay: 249.604 ms
  Loss rate: 3.01%
-- Flow 3:
  Average throughput: 30.93 Mbit/s
  95th percentile per-packet one-way delay: 251.277 ms
  Loss rate: 5.10%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 497.46 Mbit/s)
- Flow 1 egress (mean 480.58 Mbit/s)
- Flow 2 ingress (mean 133.31 Mbit/s)
- Flow 2 egress (mean 129.29 Mbit/s)
- Flow 3 ingress (mean 32.59 Mbit/s)
- Flow 3 egress (mean 30.93 Mbit/s)
Run 5: Statistics of PCC-Allegro

Local clock offset: -0.074 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 579.64 Mbit/s
95th percentile per-packet one-way delay: 257.129 ms
Loss rate: 2.42%
-- Flow 1:
Average throughput: 478.29 Mbit/s
95th percentile per-packet one-way delay: 259.367 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 137.32 Mbit/s
95th percentile per-packet one-way delay: 244.827 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 30.78 Mbit/s
95th percentile per-packet one-way delay: 245.661 ms
Loss rate: 3.59%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-19 13:12:51
Local clock offset: -0.167 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-06-19 16:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 568.51 Mbit/s
95th percentile per-packet one-way delay: 261.560 ms
Loss rate: 7.92%
-- Flow 1:
Average throughput: 426.26 Mbit/s
95th percentile per-packet one-way delay: 263.982 ms
Loss rate: 7.41%
-- Flow 2:
Average throughput: 213.06 Mbit/s
95th percentile per-packet one-way delay: 253.692 ms
Loss rate: 9.42%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: 252.896 ms
Loss rate: 7.28%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Local clock offset: -0.292 ms
Remote clock offset: 0.421 ms

# Below is generated by plot.py at 2018-06-19 16:18:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.42 Mbit/s
95th percentile per-packet one-way delay: 296.082 ms
Loss rate: 2.23%
-- Flow 1:
Average throughput: 526.78 Mbit/s
95th percentile per-packet one-way delay: 300.219 ms
Loss rate: 2.47%
-- Flow 2:
Average throughput: 74.63 Mbit/s
95th percentile per-packet one-way delay: 239.699 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 33.58 Mbit/s
95th percentile per-packet one-way delay: 242.598 ms
Loss rate: 0.28%
Run 7: Report of PCC-Allegro — Data Link

Graph 1: Throughput (Mbps)
- Blue line: Flow 1 ingress (mean 540.10 Mbps)
- Dashed blue line: Flow 1 egress (mean 526.78 Mbps)
- Green line: Flow 2 ingress (mean 74.73 Mbps)
- Dashed green line: Flow 2 egress (mean 74.63 Mbps)
- Red line: Flow 3 ingress (mean 33.67 Mbps)
- Dashed red line: Flow 3 egress (mean 33.58 Mbps)

Graph 2: Per-packet egress delay (ms)
- Blue line: Flow 1 (95th percentile 300.22 ms)
- Green line: Flow 2 (95th percentile 239.70 ms)
- Red line: Flow 3 (95th percentile 242.60 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-19 14:02:37
End at: 2018-06-19 14:03:07
Local clock offset: -0.213 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-19 16:18:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 586.86 Mbit/s
  95th percentile per-packet one-way delay: 250.387 ms
  Loss rate: 3.16%
-- Flow 1:
  Average throughput: 490.28 Mbit/s
  95th percentile per-packet one-way delay: 250.788 ms
  Loss rate: 3.02%
-- Flow 2:
  Average throughput: 115.02 Mbit/s
  95th percentile per-packet one-way delay: 248.468 ms
  Loss rate: 3.40%
-- Flow 3:
  Average throughput: 61.29 Mbit/s
  95th percentile per-packet one-way delay: 254.313 ms
  Loss rate: 5.67%
Run 8: Report of PCC-Allegro — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Packet loss rate (per packet loss every 10 ms)

Legend:
- Flow 1 Ingress (mean 505.58 Mbps)
- Flow 1 Egress (mean 490.28 Mbps)
- Flow 2 Ingress (mean 119.07 Mbps)
- Flow 2 Egress (mean 115.02 Mbps)
- Flow 3 Ingress (mean 64.96 Mbps)
- Flow 3 Egress (mean 61.29 Mbps)

Legend for Loss Rate:
- Flow 1 (95th percentile 250.79 ms)
- Flow 2 (95th percentile 248.47 ms)
- Flow 3 (95th percentile 254.31 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-19 14:27:01
End at: 2018-06-19 14:27:31
Local clock offset: 0.086 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-06-19 16:18:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 547.88 Mbit/s
  95th percentile per-packet one-way delay: 252.122 ms
  Loss rate: 3.10%
-- Flow 1:
  Average throughput: 436.00 Mbit/s
  95th percentile per-packet one-way delay: 254.807 ms
  Loss rate: 3.05%
-- Flow 2:
  Average throughput: 138.27 Mbit/s
  95th percentile per-packet one-way delay: 242.742 ms
  Loss rate: 2.84%
-- Flow 3:
  Average throughput: 60.59 Mbit/s
  95th percentile per-packet one-way delay: 247.193 ms
  Loss rate: 5.37%
Run 9: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]
- Flow 1 Ingress (mean 449.74 Mbps)
- Flow 1 Egress (mean 436.00 Mbps)
- Flow 2 Ingress (mean 142.33 Mbps)
- Flow 2 Egress (mean 138.27 Mbps)
- Flow 3 Ingress (mean 64.04 Mbps)
- Flow 3 Egress (mean 60.59 Mbps)

![Graph 2: Packet Delay (ms)]
- Flow 1 95th percentile 254.81 ms
- Flow 2 95th percentile 242.74 ms
- Flow 3 95th percentile 247.19 ms
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-19 14:52:19
End at: 2018-06-19 14:52:49
Local clock offset: 0.176 ms
Remote clock offset: -0.322 ms

# Below is generated by plot.py at 2018-06-19 16:19:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 585.63 Mbit/s
95th percentile per-packet one-way delay: 262.411 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 470.23 Mbit/s
95th percentile per-packet one-way delay: 267.408 ms
Loss rate: 3.03%
-- Flow 2:
Average throughput: 143.08 Mbit/s
95th percentile per-packet one-way delay: 244.031 ms
Loss rate: 3.08%
-- Flow 3:
Average throughput: 61.83 Mbit/s
95th percentile per-packet one-way delay: 244.786 ms
Loss rate: 4.63%
Run 10: Report of PCC-Allegro — Data Link

![Graph of throughput and packet delay over time]

Throughput (Mbps):
- Flow 1 Ingress (mean 484.90 Mbps)
- Flow 1 Egress (mean 470.23 Mbps)
- Flow 2 Ingress (mean 147.64 Mbps)
- Flow 2 Egress (mean 143.08 Mbps)
- Flow 3 Ingress (mean 64.84 Mbps)
- Flow 3 Egress (mean 61.83 Mbps)

Packet delay (ms):
- Flow 1 (95th percentile 267.41 ms)
- Flow 2 (95th percentile 244.03 ms)
- Flow 3 (95th percentile 244.79 ms)
Run 1: Statistics of PCC-Expr

End at: 2018-06-19 10:53:50
Local clock offset: 0.016 ms
Remote clock offset: 0.321 ms

# Below is generated by plot.py at 2018-06-19 16:20:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 345.22 Mbit/s
  95th percentile per-packet one-way delay: 159.129 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 180.95 Mbit/s
  95th percentile per-packet one-way delay: 162.781 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 169.33 Mbit/s
  95th percentile per-packet one-way delay: 144.662 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 155.49 Mbit/s
  95th percentile per-packet one-way delay: 168.267 ms
  Loss rate: 0.01%
Run 1: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 180.96 Mbit/s)**
- **Flow 1 egress (mean 180.95 Mbit/s)**
- **Flow 2 ingress (mean 169.32 Mbit/s)**
- **Flow 2 egress (mean 169.33 Mbit/s)**
- **Flow 3 ingress (mean 155.47 Mbit/s)**
- **Flow 3 egress (mean 155.49 Mbit/s)**

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

- **Flow 1 (95th percentile 162.78 ms)**
- **Flow 2 (95th percentile 144.66 ms)**
- **Flow 3 (95th percentile 162.27 ms)**
Run 2: Statistics of PCC-Expr

Start at: 2018-06-19 11:18:17
End at: 2018-06-19 11:18:47
Local clock offset: 0.116 ms
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-06-19 16:22:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.06 Mbit/s
95th percentile per-packet one-way delay: 259.327 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 254.04 Mbit/s
95th percentile per-packet one-way delay: 267.791 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 161.38 Mbit/s
95th percentile per-packet one-way delay: 188.415 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 150.69 Mbit/s
95th percentile per-packet one-way delay: 199.661 ms
Loss rate: 0.01%
Run 2: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 259.71 Mbit/s)
- Flow 1 egress (mean 254.04 Mbit/s)
- Flow 2 ingress (mean 161.41 Mbit/s)
- Flow 2 egress (mean 161.38 Mbit/s)
- Flow 3 ingress (mean 150.72 Mbit/s)
- Flow 3 egress (mean 150.69 Mbit/s)
Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 11:43:12
End at: 2018-06-19 11:43:42
Local clock offset: -0.129 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-06-19 16:23:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.73 Mbit/s
95th percentile per-packet one-way delay: 154.412 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 196.92 Mbit/s
95th percentile per-packet one-way delay: 150.911 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 180.52 Mbit/s
95th percentile per-packet one-way delay: 181.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.82 Mbit/s
95th percentile per-packet one-way delay: 136.994 ms
Loss rate: 0.00%
Run 3: Report of PCC-Expr — Data Link

---

**Throughput (Mbps):**
- Flow 1 ingress (mean 196.94 Mbps)
- Flow 1 egress (mean 196.92 Mbps)
- Flow 2 ingress (mean 180.51 Mbps)
- Flow 2 egress (mean 180.52 Mbps)
- Flow 3 ingress (mean 44.81 Mbps)
- Flow 3 egress (mean 44.82 Mbps)

**Per-packet one way delay (ms):**
- Flow 1 (95th percentile 150.91 ms)
- Flow 2 (95th percentile 181.37 ms)
- Flow 3 (95th percentile 136.99 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 12:07:59
End at: 2018-06-19 12:08:29
Local clock offset: -0.231 ms
Remote clock offset: -0.458 ms

# Below is generated by plot.py at 2018-06-19 16:27:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 434.47 Mbit/s
  95th percentile per-packet one-way delay: 238.235 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 275.13 Mbit/s
  95th percentile per-packet one-way delay: 241.937 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 165.19 Mbit/s
  95th percentile per-packet one-way delay: 171.732 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 150.08 Mbit/s
  95th percentile per-packet one-way delay: 217.316 ms
  Loss rate: 0.49%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-06-19 12:33:05
End at: 2018-06-19 12:33:35
Local clock offset: 0.213 ms
Remote clock offset: -0.331 ms

# Below is generated by plot.py at 2018-06-19 16:33:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 417.17 Mbit/s
  95th percentile per-packet one-way delay: 268.353 ms
  Loss rate: 1.54%
-- Flow 1:
  Average throughput: 275.69 Mbit/s
  95th percentile per-packet one-way delay: 273.672 ms
  Loss rate: 2.32%
-- Flow 2:
  Average throughput: 173.53 Mbit/s
  95th percentile per-packet one-way delay: 179.973 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 79.19 Mbit/s
  95th percentile per-packet one-way delay: 210.088 ms
  Loss rate: 0.00%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Start at: 2018-06-19 12:58:06
End at: 2018-06-19 12:58:36
Local clock offset: -0.027 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2018-06-19 16:33:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 417.60 Mbit/s
  95th percentile per-packet one-way delay: 200.405 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 274.09 Mbit/s
  95th percentile per-packet one-way delay: 200.517 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 175.04 Mbit/s
  95th percentile per-packet one-way delay: 212.956 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 82.22 Mbit/s
  95th percentile per-packet one-way delay: 137.281 ms
  Loss rate: 0.00%
Run 6: Report of PCC-Expr — Data Link

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

Legend for throughput graph:
- Flow 1 ingress (mean 274.10 Mbit/s)
- Flow 1 egress (mean 274.09 Mbit/s)
- Flow 2 ingress (mean 175.04 Mbit/s)
- Flow 2 egress (mean 175.04 Mbit/s)
- Flow 3 ingress (mean 82.22 Mbit/s)
- Flow 3 egress (mean 82.22 Mbit/s)

Legend for packet delay graph:
- Flow 1 (95th percentile 200.52 ms)
- Flow 2 (95th percentile 212.96 ms)
- Flow 3 (95th percentile 137.28 ms)
Run 7: Statistics of PCC-Expr

Local clock offset: 0.023 ms
Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2018-06-19 16:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.98 Mbit/s
95th percentile per-packet one-way delay: 151.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 194.91 Mbit/s
95th percentile per-packet one-way delay: 153.623 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.72 Mbit/s
95th percentile per-packet one-way delay: 148.160 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 45.16 Mbit/s
95th percentile per-packet one-way delay: 136.785 ms
Loss rate: 0.00%
Run 8: Statistics of PCC-Expr

Local clock offset: 0.061 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2018-06-19 16:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.81 Mbit/s
95th percentile per-packet one-way delay: 256.897 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 256.01 Mbit/s
95th percentile per-packet one-way delay: 274.508 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 104.02 Mbit/s
95th percentile per-packet one-way delay: 137.187 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 44.34 Mbit/s
95th percentile per-packet one-way delay: 137.024 ms
Loss rate: 0.00%
Run 8: Report of PCC-Expr — Data Link
Run 9: Statistics of PCC-Expr

Start at: 2018-06-19 14:12:45
End at: 2018-06-19 14:13:15
Local clock offset: 0.043 ms
Remote clock offset: -0.342 ms

# Below is generated by plot.py at 2018-06-19 16:33:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.77 Mbit/s
95th percentile per-packet one-way delay: 136.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 166.74 Mbit/s
95th percentile per-packet one-way delay: 136.252 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.61 Mbit/s
95th percentile per-packet one-way delay: 137.507 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 82.35 Mbit/s
95th percentile per-packet one-way delay: 137.663 ms
Loss rate: 0.00%
Run 9: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 166.74 Mbit/s)**
- **Flow 1 egress (mean 166.74 Mbit/s)**
- **Flow 2 ingress (mean 169.62 Mbit/s)**
- **Flow 2 egress (mean 169.61 Mbit/s)**
- **Flow 3 ingress (mean 82.34 Mbit/s)**
- **Flow 3 egress (mean 82.35 Mbit/s)**
Run 10: Statistics of PCC-Expr

Start at: 2018-06-19 14:37:08
End at: 2018-06-19 14:37:38
Local clock offset: -0.091 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.71 Mbit/s
95th percentile per-packet one-way delay: 177.722 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 301.51 Mbit/s
95th percentile per-packet one-way delay: 183.012 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 172.24 Mbit/s
95th percentile per-packet one-way delay: 163.472 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 80.78 Mbit/s
95th percentile per-packet one-way delay: 166.248 ms
Loss rate: 0.22%
Run 10: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 301.73 Mbps)  Flow 1 egress (mean 301.51 Mbps)
Flow 2 ingress (mean 172.42 Mbps)  Flow 2 egress (mean 172.24 Mbps)
Flow 3 ingress (mean 80.05 Mbps)   Flow 3 egress (mean 80.76 Mbps)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 183.01 ms)  Flow 2 (95th percentile 163.47 ms)  Flow 3 (95th percentile 166.25 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 10:47:33
End at: 2018-06-19 10:48:03
Local clock offset: 0.003 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.06 Mbit/s
95th percentile per-packet one-way delay: 136.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 136.976 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.03 Mbit/s
95th percentile per-packet one-way delay: 136.531 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 43.55 Mbit/s
95th percentile per-packet one-way delay: 136.959 ms
Loss rate: 0.01%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 11:12:34
Local clock offset: 0.195 ms
Remote clock offset: 0.445 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 100.33 Mbit/s
  95th percentile per-packet one-way delay: 136.878 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 49.84 Mbit/s
  95th percentile per-packet one-way delay: 136.886 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 58.84 Mbit/s
  95th percentile per-packet one-way delay: 136.868 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 35.33 Mbit/s
  95th percentile per-packet one-way delay: 136.874 ms
  Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 11:37:26
End at: 2018-06-19 11:37:56
Local clock offset: 0.522 ms
Remote clock offset: 0.199 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 102.92 Mbit/s
  95th percentile per-packet one-way delay: 136.527 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 51.89 Mbit/s
  95th percentile per-packet one-way delay: 136.563 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 60.75 Mbit/s
  95th percentile per-packet one-way delay: 135.803 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 34.18 Mbit/s
  95th percentile per-packet one-way delay: 135.498 ms
  Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 12:02:12
End at: 2018-06-19 12:02:42
Local clock offset: -0.188 ms
Remote clock offset: -0.459 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.09 Mbit/s
  95th percentile per-packet one-way delay: 136.346 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 47.44 Mbit/s
  95th percentile per-packet one-way delay: 135.577 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 48.38 Mbit/s
  95th percentile per-packet one-way delay: 135.733 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 35.94 Mbit/s
  95th percentile per-packet one-way delay: 136.452 ms
  Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps)**
- **Time (s)**

Legend:
- Flow 1 ingress (mean 47.44 Mbit/s)
- Flow 1 egress (mean 47.44 Mbit/s)
- Flow 2 ingress (mean 48.38 Mbit/s)
- Flow 2 egress (mean 48.38 Mbit/s)
- Flow 3 ingress (mean 35.93 Mbit/s)
- Flow 3 egress (mean 35.94 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 135.58 ms)
- Flow 2 (95th percentile 135.73 ms)
- Flow 3 (95th percentile 136.45 ms)
Run 5: Statistics of QUIC Cubic

End at: 2018-06-19 12:27:49
Local clock offset: -0.09 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 99.67 Mbit/s
  95th percentile per-packet one-way delay: 136.751 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 52.63 Mbit/s
  95th percentile per-packet one-way delay: 136.458 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 61.81 Mbit/s
  95th percentile per-packet one-way delay: 136.626 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 21.80 Mbit/s
  95th percentile per-packet one-way delay: 136.958 ms
  Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

[Graphs showing throughput and packet one-way delay over time for different flows.]
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-19 12:52:17
End at: 2018-06-19 12:52:47
Local clock offset: -0.094 ms
Remote clock offset: 0.48 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.94 Mbit/s
95th percentile per-packet one-way delay: 136.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 136.479 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.12 Mbit/s
95th percentile per-packet one-way delay: 136.477 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.38 Mbit/s
95th percentile per-packet one-way delay: 135.253 ms
Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

End at: 2018-06-19 13:17:41
Local clock offset: 0.085 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.77 Mbit/s
  95th percentile per-packet one-way delay: 136.426 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 47.79 Mbit/s
  95th percentile per-packet one-way delay: 136.465 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 58.85 Mbit/s
  95th percentile per-packet one-way delay: 135.813 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 34.00 Mbit/s
  95th percentile per-packet one-way delay: 136.432 ms
  Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Local clock offset: -0.189 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.23 Mbit/s
95th percentile per-packet one-way delay: 136.717 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.19 Mbit/s
95th percentile per-packet one-way delay: 136.738 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 60.50 Mbit/s
95th percentile per-packet one-way delay: 135.217 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.65 Mbit/s
95th percentile per-packet one-way delay: 136.755 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link

---

**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 60.19 Mbit/s)
- **Flow 1 egress** (mean 60.19 Mbit/s)
- **Flow 2 ingress** (mean 60.50 Mbit/s)
- **Flow 2 egress** (mean 60.50 Mbit/s)
- **Flow 3 ingress** (mean 30.65 Mbit/s)
- **Flow 3 egress** (mean 30.65 Mbit/s)

---

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

- **Flow 1** (95th percentile 136.74 ms)
- **Flow 2** (95th percentile 135.22 ms)
- **Flow 3** (95th percentile 136.75 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-19 14:06:53
End at: 2018-06-19 14:07:23
Local clock offset: 0.032 ms
Remote clock offset: -0.346 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 110.53 Mbit/s
  95th percentile per-packet one-way delay: 136.215 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 58.79 Mbit/s
  95th percentile per-packet one-way delay: 136.234 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 61.65 Mbit/s
  95th percentile per-packet one-way delay: 136.127 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 33.71 Mbit/s
  95th percentile per-packet one-way delay: 136.092 ms
  Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-19 14:31:19
End at: 2018-06-19 14:31:49
Local clock offset: 0.102 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 104.03 Mbit/s
95th percentile per-packet one-way delay: 136.410 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.69 Mbit/s
95th percentile per-packet one-way delay: 136.405 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 61.11 Mbit/s
95th percentile per-packet one-way delay: 136.429 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 37.89 Mbit/s
95th percentile per-packet one-way delay: 136.300 ms
Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-06-19 10:50:49
End at: 2018-06-19 10:51:19
Local clock offset: -0.298 ms
Remote clock offset: -0.412 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.859 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.829 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.162 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.910 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph showing throughput over time for different flows]

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

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

Flow 1 (95th percentile 136.83 ms)  Flow 2 (95th percentile 136.16 ms)  Flow 3 (95th percentile 136.91 ms)
Run 2: Statistics of SCReAM

Start at: 2018-06-19 11:15:46
End at: 2018-06-19 11:16:16
Local clock offset: 0.193 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 136.623 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.660 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.157 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.123 ms
  Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

![Graph 1](image1)

![Graph 2](image2)

---

187
Run 3: Statistics of SCReAM

Start at: 2018-06-19 11:40:41
End at: 2018-06-19 11:41:11
Local clock offset: 0.331 ms
Remote clock offset: -0.227 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.480 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.501 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.391 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.623 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for different flows.](image1)

![Graph showing packet delay distribution over time for different flows.](image2)
Run 4: Statistics of SCReAM

Start at: 2018-06-19 12:05:28
End at: 2018-06-19 12:05:58
Local clock offset: -0.278 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 137.036 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 137.009 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.940 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 137.095 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Data Link Throughput Graph]

![Data Link Round-Trip Time Graph]
Run 5: Statistics of SCReAM

Start at: 2018-06-19 12:30:34
End at: 2018-06-19 12:31:04
Local clock offset: 0.024 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 136.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.909 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 136.679 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.801 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

---

**Throughput (Mbps)**

- Blue line: Flow 1 ingress (mean 0.22 Mbps)
- Red line: Flow 1 egress (mean 0.22 Mbps)
- Green line: Flow 2 ingress (mean 0.15 Mbps)
- Orange line: Flow 2 egress (mean 0.15 Mbps)
- Purple line: Flow 3 ingress (mean 0.22 Mbps)
- Pink line: Flow 3 egress (mean 0.22 Mbps)

**Per-Circular One-Way Delay (ms)**

- Blue points: Flow 1 (95th percentile 136.9 ms)
- Red points: Flow 2 (95th percentile 136.68 ms)
- Green points: Flow 3 (95th percentile 136.80 ms)
Run 6: Statistics of SCReAM

End at: 2018-06-19 12:56:05
Local clock offset: -0.027 ms
Remote clock offset: -0.284 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 136.478 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.506 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.813 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.831 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Local clock offset: 0.113 ms
Remote clock offset: 0.499 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 137.045 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 137.063 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.394 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 137.040 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

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

![Graph 2: Packet Delivery vs Time](image2)
Run 8: Statistics of SCReAM

Start at: 2018-06-19 13:45:03
End at: 2018-06-19 13:45:33
Local clock offset: 0.007 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.912 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.954 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.225 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.686 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.22 Mbit/s)
- Flow 2 egress (mean 0.22 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)
Run 9: Statistics of SCReAM

Start at: 2018-06-19 14:10:14
End at: 2018-06-19 14:10:44
Local clock offset: 0.005 ms
Remote clock offset: -0.356 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 136.445 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.470 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 134.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.363 ms
Loss rate: 0.00%
Run 10: Statistics of SCReAM

Start at: 2018-06-19 14:34:37
End at: 2018-06-19 14:35:07
Local clock offset: 0.204 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.44 Mbit/s
   95th percentile per-packet one-way delay: 136.420 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 136.446 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 135.715 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 136.373 ms
   Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-06-19 10:58:59
End at: 2018-06-19 10:59:29
Local clock offset: 0.221 ms
Remote clock offset: 0.334 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 136.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 137.017 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.998 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 136.458 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-06-19 11:24:00
End at: 2018-06-19 11:24:30
Local clock offset: 0.127 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 137.025 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 137.051 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 136.855 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 136.822 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

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

- **Flow 1 ingress** (mean 0.21 Mbit/s)
- **Flow 1 egress** (mean 0.21 Mbit/s)
- **Flow 2 ingress** (mean 0.17 Mbit/s)
- **Flow 2 egress** (mean 0.17 Mbit/s)
- **Flow 3 ingress** (mean 0.18 Mbit/s)
- **Flow 3 egress** (mean 0.18 Mbit/s)
Run 3: Statistics of Sprout

End at: 2018-06-19 11:49:26
Local clock offset: 0.313 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.33 Mbit/s
  95th percentile per-packet one-way delay: 136.490 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 136.493 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 136.490 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.411 ms
  Loss rate: 0.00%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

End at: 2018-06-19 12:14:23
Local clock offset: -0.09 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 136.626 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.633 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 136.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 136.690 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-06-19 12:38:52
Local clock offset: 0.126 ms
Remote clock offset: 0.374 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.33 Mbit/s
  95th percentile per-packet one-way delay: 136.892 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 136.786 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 136.937 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 136.519 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-06-19 13:03:48
End at: 2018-06-19 13:04:18
Local clock offset: 0.138 ms
Remote clock offset: 0.136 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 136.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.457 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 136.492 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 136.580 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Local clock offset: 0.071 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.35 Mbit/s
  95th percentile per-packet one-way delay: 136.729 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 136.602 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 136.608 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.820 ms
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

![Diagram of network throughput and delay over time for different flows.](image-url)

- Flow 1 ingress (mean 0.18 Mbit/s)
- Flow 1 egress (mean 0.18 Mbit/s)
- Flow 2 ingress (mean 0.15 Mbit/s)
- Flow 2 egress (mean 0.15 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)
Run 8: Statistics of Sprout

End at: 2018-06-19 13:53:45
Local clock offset: -0.154 ms
Remote clock offset: -0.376 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.33 Mbit/s
  95th percentile per-packet one-way delay: 136.782 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 136.809 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 136.484 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 136.570 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- **Throughput (Mbps):** Time (s) vs. Throughput (Mbps) for different flows.
- **Per-packet one-way delay (ms):** Time (s) vs. Per-packet one-way delay (ms) for different flows.
Run 9: Statistics of Sprout

Start at: 2018-06-19 14:18:15
End at: 2018-06-19 14:18:45
Local clock offset: -0.363 ms
Remote clock offset: 0.093 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 137.075 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 137.087 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 137.025 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 137.050 ms
  Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.18 Mbit/s)
- Flow 2 egress (mean 0.18 Mbit/s)
- Flow 3 ingress (mean 0.20 Mbit/s)
- Flow 3 egress (mean 0.20 Mbit/s)
Run 10: Statistics of Sprout

Start at: 2018-06-19 14:43:01
End at: 2018-06-19 14:43:31
Local clock offset: -0.433 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2018-06-19 16:39:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 137.586 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 137.615 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 137.502 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 137.386 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-19 11:00:14
End at: 2018-06-19 11:00:44
Local clock offset: 0.399 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 324.44 Mbit/s
  95th percentile per-packet one-way delay: 140.736 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 165.43 Mbit/s
  95th percentile per-packet one-way delay: 139.151 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 164.47 Mbit/s
  95th percentile per-packet one-way delay: 139.435 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 147.85 Mbit/s
  95th percentile per-packet one-way delay: 159.784 ms
  Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-19 11:25:15
End at: 2018-06-19 11:25:45
Local clock offset: 0.19 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.35 Mbit/s
95th percentile per-packet one-way delay: 136.924 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 13.10 Mbit/s
95th percentile per-packet one-way delay: 136.604 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.67 Mbit/s
95th percentile per-packet one-way delay: 136.939 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.75 Mbit/s
95th percentile per-packet one-way delay: 137.357 ms
Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

---

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 13.10 Mbit/s)  Flow 1 egress (mean 13.10 Mbit/s)
Flow 2 ingress (mean 175.67 Mbit/s)  Flow 2 egress (mean 175.67 Mbit/s)
Flow 3 ingress (mean 12.75 Mbit/s)  Flow 3 egress (mean 12.75 Mbit/s)

---

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.60 ms)  Flow 2 (95th percentile 136.94 ms)  Flow 3 (95th percentile 137.36 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 11:50:11
End at: 2018-06-19 11:50:41
Local clock offset: -0.008 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 144.61 Mbit/s
  95th percentile per-packet one-way delay: 136.691 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.35 Mbit/s
  95th percentile per-packet one-way delay: 136.580 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 190.60 Mbit/s
  95th percentile per-packet one-way delay: 136.708 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 12.82 Mbit/s
  95th percentile per-packet one-way delay: 136.637 ms
  Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

---

**Throughput (Mbps)**

<table>
<thead>
<tr>
<th>Flow</th>
<th>Ingress (mean)</th>
<th>Egress (mean)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>13.35 Mbps</td>
<td>13.35 Mbps</td>
</tr>
<tr>
<td>2</td>
<td>190.59 Mbps</td>
<td>190.60 Mbps</td>
</tr>
<tr>
<td>3</td>
<td>12.62 Mbps</td>
<td>12.82 Mbps</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th>Flow</th>
<th>95th Percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>136.58 ms</td>
</tr>
<tr>
<td>2</td>
<td>136.71 ms</td>
</tr>
<tr>
<td>3</td>
<td>136.64 ms</td>
</tr>
</tbody>
</table>

---

229
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-19 12:15:08
End at: 2018-06-19 12:15:38
Local clock offset: 0.056 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 163.97 Mbit/s
 95th percentile per-packet one-way delay: 136.389 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 13.26 Mbit/s
 95th percentile per-packet one-way delay: 136.356 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 147.13 Mbit/s
 95th percentile per-packet one-way delay: 136.486 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 158.86 Mbit/s
 95th percentile per-packet one-way delay: 135.694 ms
 Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 13.26 Mbit/s)
Flow 2 ingress (mean 147.11 Mbit/s)
Flow 3 ingress (mean 156.83 Mbit/s)
Flow 1 egress (mean 13.26 Mbit/s)
Flow 2 egress (mean 147.13 Mbit/s)
Flow 3 egress (mean 156.86 Mbit/s)

Packet error rate (in %)

Time (s)

Flow 1 (95th percentile 136.36 ms)
Flow 2 (95th percentile 136.49 ms)
Flow 3 (95th percentile 135.69 ms)

231
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-19 12:40:07
End at: 2018-06-19 12:40:37
Local clock offset: -0.059 ms
Remote clock offset: -0.347 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 141.51 Mbit/s
  95th percentile per-packet one-way delay: 136.279 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.06 Mbit/s
  95th percentile per-packet one-way delay: 136.537 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 186.91 Mbit/s
  95th percentile per-packet one-way delay: 136.203 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 12.02 Mbit/s
  95th percentile per-packet one-way delay: 135.595 ms
  Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

![Graph 1](image1.png)

**Throughput (Mbps)**

- **Flow 1 ingress (mean 13.06 Mbps)**
- **Flow 1 egress (mean 13.06 Mbps)**
- **Flow 2 ingress (mean 186.91 Mbps)**
- **Flow 2 egress (mean 186.91 Mbps)**
- **Flow 3 ingress (mean 12.02 Mbps)**
- **Flow 3 egress (mean 12.02 Mbps)**

![Graph 2](image2.png)

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

- **Flow 1 (95th percentile 136.5 ms)**
- **Flow 2 (95th percentile 136.2 ms)**
- **Flow 3 (95th percentile 135.5 ms)**
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-19 13:05:03
End at: 2018-06-19 13:05:33
Local clock offset: 0.01 ms
Remote clock offset: -0.221 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.89 Mbit/s
95th percentile per-packet one-way delay: 136.231 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 136.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 177.56 Mbit/s
95th percentile per-packet one-way delay: 136.234 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 136.330 ms
Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps)**: The top graph shows the throughput for different flows over time. Each line represents a flow with its respective mean throughput.
- **Packet Delay (ms)**: The bottom graph illustrates the packet delay for each flow. The markers indicate the 95th percentile delay for each flow.

---

235
Run 7: Statistics of TaoVA-100x

End at: 2018-06-19 13:30:14
Local clock offset: -0.144 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-06-19 16:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 145.01 Mbit/s
95th percentile per-packet one-way delay: 137.058 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 13.37 Mbit/s
95th percentile per-packet one-way delay: 136.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 191.24 Mbit/s
95th percentile per-packet one-way delay: 137.134 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 12.82 Mbit/s
95th percentile per-packet one-way delay: 136.875 ms
Loss rate: 0.01%
Run 7: Report of TaoVA-100x — Data Link

[Graph showing throughput and packet delay trends over time for different flows, with legends indicating mean throughput rates for each flow type.]
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-19 13:54:30
End at: 2018-06-19 13:55:00
Local clock offset: 0.268 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-06-19 16:49:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.76 Mbit/s
95th percentile per-packet one-way delay: 138.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 179.05 Mbit/s
95th percentile per-packet one-way delay: 137.457 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 188.78 Mbit/s
95th percentile per-packet one-way delay: 138.853 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 154.18 Mbit/s
95th percentile per-packet one-way delay: 139.546 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

![Graph of throughput and delay over time for different flows.](image-url)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-19 14:19:30  
End at: 2018-06-19 14:20:00  
Local clock offset: -0.075 ms  
Remote clock offset: -0.334 ms

# Below is generated by plot.py at 2018-06-19 16:49:44  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 26.40 Mbit/s  
  95th percentile per-packet one-way delay: 136.387 ms  
  Loss rate: 0.00%  
  -- Flow 1:  
  Average throughput: 13.33 Mbit/s  
  95th percentile per-packet one-way delay: 136.426 ms  
  Loss rate: 0.00%  
  -- Flow 2:  
  Average throughput: 13.22 Mbit/s  
  95th percentile per-packet one-way delay: 136.105 ms  
  Loss rate: 0.00%  
  -- Flow 3:  
  Average throughput: 12.80 Mbit/s  
  95th percentile per-packet one-way delay: 136.157 ms  
  Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

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

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 13.33 Mbit/s)
Flow 1 egress (mean 13.33 Mbit/s)
Flow 2 ingress (mean 13.23 Mbit/s)
Flow 2 egress (mean 13.27 Mbit/s)
Flow 3 ingress (mean 12.80 Mbit/s)
Flow 3 egress (mean 12.80 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.43 ms)
Flow 2 (95th percentile 136.10 ms)
Flow 3 (95th percentile 136.16 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-19 14:44:16
End at: 2018-06-19 14:44:46
Local clock offset: 0.078 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 346.12 Mbit/s
  95th percentile per-packet one-way delay: 139.986 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 184.31 Mbit/s
  95th percentile per-packet one-way delay: 138.096 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 177.19 Mbit/s
  95th percentile per-packet one-way delay: 138.579 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 132.16 Mbit/s
  95th percentile per-packet one-way delay: 149.433 ms
  Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 184.46 Mbps)
  - Flow 1 egress (mean 184.31 Mbps)
  - Flow 2 ingress (mean 177.20 Mbps)
  - Flow 2 egress (mean 177.19 Mbps)
  - Flow 3 ingress (mean 132.15 Mbps)
  - Flow 3 egress (mean 132.16 Mbps)

- **Round-trip delay (ms):**
  - Flow 1 (95th percentile 138.10 ms)
  - Flow 2 (95th percentile 138.58 ms)
  - Flow 3 (95th percentile 149.43 ms)
Run 1: Statistics of TCP Vegas

End at: 2018-06-19 10:46:43
Local clock offset: 0.205 ms
Remote clock offset: -0.442 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.79 Mbit/s
  95th percentile per-packet one-way delay: 145.686 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 40.02 Mbit/s
  95th percentile per-packet one-way delay: 139.685 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 26.71 Mbit/s
  95th percentile per-packet one-way delay: 144.534 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 72.16 Mbit/s
  95th percentile per-packet one-way delay: 149.223 ms
  Loss rate: 0.12%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 11:11:14  
End at: 2018-06-19 11:11:44  
Local clock offset: 0.19 ms  
Remote clock offset: -0.262 ms

# Below is generated by plot.py at 2018-06-19 16:50:05  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 64.19 Mbit/s  
95th percentile per-packet one-way delay: 140.749 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 33.61 Mbit/s  
95th percentile per-packet one-way delay: 139.028 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 31.55 Mbit/s  
95th percentile per-packet one-way delay: 143.268 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 29.00 Mbit/s  
95th percentile per-packet one-way delay: 137.766 ms  
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 33.61 Mbit/s)
- Flow 1 egress (mean 33.61 Mbit/s)
- Flow 2 ingress (mean 31.55 Mbit/s)
- Flow 2 egress (mean 31.55 Mbit/s)
- Flow 3 ingress (mean 29.00 Mbit/s)
- Flow 3 egress (mean 29.00 Mbit/s)

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

- Flow 1 (95th percentile 139.03 ms)
- Flow 2 (95th percentile 143.27 ms)
- Flow 3 (95th percentile 137.77 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 11:36:01
End at: 2018-06-19 11:36:31
Local clock offset: -0.095 ms
Remote clock offset: -0.189 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.95 Mbit/s
95th percentile per-packet one-way delay: 145.755 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 83.48 Mbit/s
95th percentile per-packet one-way delay: 145.794 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 81.08 Mbit/s
95th percentile per-packet one-way delay: 146.349 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 139.935 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 83.50 Mbps)
  - Flow 1 egress (mean 83.48 Mbps)
  - Flow 2 ingress (mean 81.10 Mbps)
  - Flow 2 egress (mean 81.08 Mbps)
  - Flow 3 ingress (mean 23.42 Mbps)
  - Flow 3 egress (mean 23.42 Mbps)

- **Per-packet one-way delay** (ms):
  - Flow 1 (95th percentile 145.79 ms)
  - Flow 2 (95th percentile 146.35 ms)
  - Flow 3 (95th percentile 139.94 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 12:00:53
End at: 2018-06-19 12:01:23
Local clock offset: -0.11 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.05 Mbit/s
95th percentile per-packet one-way delay: 141.256 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 28.60 Mbit/s
95th percentile per-packet one-way delay: 139.369 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.44 Mbit/s
95th percentile per-packet one-way delay: 141.441 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 143.277 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link

![Graph showing network performance metrics over time.]

- Flow 1 ingress (mean 28.60 Mbit/s)
- Flow 1 egress (mean 28.60 Mbit/s)
- Flow 2 ingress (mean 24.44 Mbit/s)
- Flow 2 egress (mean 24.44 Mbit/s)
- Flow 3 ingress (mean 24.68 Mbit/s)
- Flow 3 egress (mean 24.68 Mbit/s)

![Graph showing packet delay over time.]

- Flow 1 (95th percentile 139.37 ms)
- Flow 2 (95th percentile 141.44 ms)
- Flow 3 (95th percentile 143.28 ms)
Run 5: Statistics of TCP Vegas

End at: 2018-06-19 12:26:29
Local clock offset: -0.261 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.07 Mbit/s
95th percentile per-packet one-way delay: 140.120 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 139.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.90 Mbit/s
95th percentile per-packet one-way delay: 141.569 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 25.10 Mbit/s
95th percentile per-packet one-way delay: 139.221 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

End at: 2018-06-19 12:51:27
Local clock offset: -0.282 ms
Remote clock offset: 0.449 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.03 Mbit/s
  95th percentile per-packet one-way delay: 141.160 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 33.61 Mbit/s
  95th percentile per-packet one-way delay: 139.718 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 25.76 Mbit/s
  95th percentile per-packet one-way delay: 138.903 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 31.07 Mbit/s
  95th percentile per-packet one-way delay: 143.973 ms
  Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

End at: 2018-06-19 13:16:19
Local clock offset: -0.076 ms
Remote clock offset: 0.177 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 107.66 Mbit/s
95th percentile per-packet one-way delay: 139.105 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.75 Mbit/s
95th percentile per-packet one-way delay: 138.882 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 139.596 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.52 Mbit/s
95th percentile per-packet one-way delay: 140.044 ms
Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Local clock offset: -0.092 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.36 Mbit/s
95th percentile per-packet one-way delay: 139.347 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.73 Mbit/s
95th percentile per-packet one-way delay: 138.271 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 26.55 Mbit/s
95th percentile per-packet one-way delay: 140.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.02 Mbit/s
95th percentile per-packet one-way delay: 139.979 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-06-19 14:05:34
End at: 2018-06-19 14:06:04
Local clock offset: -0.096 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.07 Mbit/s
  95th percentile per-packet one-way delay: 147.359 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 26.56 Mbit/s
  95th percentile per-packet one-way delay: 146.501 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 25.13 Mbit/s
  95th percentile per-packet one-way delay: 147.762 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 71.59 Mbit/s
  95th percentile per-packet one-way delay: 147.442 ms
  Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

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

Start at: 2018-06-19 14:29:58
End at: 2018-06-19 14:30:28
Local clock offset: -0.236 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.46 Mbit/s
  95th percentile per-packet one-way delay: 139.021 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 46.91 Mbit/s
  95th percentile per-packet one-way delay: 138.346 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 40.59 Mbit/s
  95th percentile per-packet one-way delay: 140.265 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 28.76 Mbit/s
  95th percentile per-packet one-way delay: 140.730 ms
  Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 46.91 Mbps)
- Flow 1 egress (mean 46.91 Mbps)
- Flow 2 ingress (mean 40.59 Mbps)
- Flow 2 egress (mean 40.59 Mbps)
- Flow 3 ingress (mean 28.76 Mbps)
- Flow 3 egress (mean 28.76 Mbps)

**Packet round trip time (ms):**
- Flow 1 (95th percentile 138.35 ms)
- Flow 2 (95th percentile 140.26 ms)
- Flow 3 (95th percentile 140.73 ms)
Run 1: Statistics of Verus

End at: 2018-06-19 10:55:42
Local clock offset: 0.292 ms
Remote clock offset: -0.389 ms

# Below is generated by plot.py at 2018-06-19 16:50:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.79 Mbit/s
95th percentile per-packet one-way delay: 230.631 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 165.25 Mbit/s
95th percentile per-packet one-way delay: 224.492 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 68.27 Mbit/s
95th percentile per-packet one-way delay: 376.461 ms
Loss rate: 11.51%
-- Flow 3:
Average throughput: 54.39 Mbit/s
95th percentile per-packet one-way delay: 156.859 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

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

- Flow 1 ingress (mean 166.59 Mbit/s)
- Flow 1 egress (mean 165.25 Mbit/s)
- Flow 2 ingress (mean 77.15 Mbit/s)
- Flow 2 egress (mean 68.27 Mbit/s)
- Flow 3 ingress (mean 54.39 Mbit/s)
- Flow 3 egress (mean 54.39 Mbit/s)

Flow 1 (95th percentile 224.49 ms)  
Flow 2 (95th percentile 376.46 ms)  
Flow 3 (95th percentile 156.86 ms)
Run 2: Statistics of Verus

Start at: 2018-06-19 11:20:16
End at: 2018-06-19 11:20:46
Local clock offset: 0.123 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.66 Mbit/s
95th percentile per-packet one-way delay: 305.736 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 139.13 Mbit/s
95th percentile per-packet one-way delay: 304.028 ms
Loss rate: 1.83%
-- Flow 2:
Average throughput: 97.16 Mbit/s
95th percentile per-packet one-way delay: 329.643 ms
Loss rate: 2.58%
-- Flow 3:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 210.245 ms
Loss rate: 0.28%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-06-19 11:45:06
End at: 2018-06-19 11:45:36
Local clock offset: 0.411 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.61 Mbit/s
95th percentile per-packet one-way delay: 281.774 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 147.28 Mbit/s
95th percentile per-packet one-way delay: 183.628 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 49.18 Mbit/s
95th percentile per-packet one-way delay: 225.959 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 111.49 Mbit/s
95th percentile per-packet one-way delay: 360.135 ms
Loss rate: 8.10%
Run 3: Report of Verus — Data Link

![Graph showing network performance metrics](image1)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 147.97 Mbps)
  - Flow 1 egress (mean 147.28 Mbps)
  - Flow 2 ingress (mean 49.39 Mbps)
  - Flow 2 egress (mean 49.18 Mbps)
  - Flow 3 ingress (mean 122.68 Mbps)
  - Flow 3 egress (mean 111.49 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 183.63 ms)
  - Flow 2 (95th percentile 225.96 ms)
  - Flow 3 (95th percentile 360.13 ms)
Run 4: Statistics of Verus

Start at: 2018-06-19 12:10:00  
End at: 2018-06-19 12:10:30  
Local clock offset: -0.001 ms  
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-06-19 16:50:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 275.43 Mbit/s  
95th percentile per-packet one-way delay: 192.868 ms  
Loss rate: 0.16%  
-- Flow 1:  
Average throughput: 177.05 Mbit/s  
95th percentile per-packet one-way delay: 193.373 ms  
Loss rate: 0.24%  
-- Flow 2:  
Average throughput: 141.95 Mbit/s  
95th percentile per-packet one-way delay: 194.857 ms  
Loss rate: 0.01%  
-- Flow 3:  
Average throughput: 29.70 Mbit/s  
95th percentile per-packet one-way delay: 158.129 ms  
Loss rate: 0.00%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-06-19 12:35:06  
End at: 2018-06-19 12:35:36  
Local clock offset: 0.079 ms  
Remote clock offset: -0.363 ms

# Below is generated by plot.py at 2018-06-19 16:50:06  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 186.12 Mbit/s
95th percentile per-packet one-way delay: 220.794 ms
Loss rate: 2.62%

-- Flow 1:
Average throughput: 126.75 Mbit/s
95th percentile per-packet one-way delay: 298.043 ms
Loss rate: 3.79%

-- Flow 2:
Average throughput: 50.71 Mbit/s
95th percentile per-packet one-way delay: 147.385 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 80.67 Mbit/s
95th percentile per-packet one-way delay: 214.973 ms
Loss rate: 0.00%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 131.75 Mbit/s)
- Flow 1 egress (mean 126.75 Mbit/s)
- Flow 2 ingress (mean 50.71 Mbit/s)
- Flow 2 egress (mean 50.71 Mbit/s)
- Flow 3 ingress (mean 80.66 Mbit/s)
- Flow 3 egress (mean 80.67 Mbit/s)

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

- Flow 1 (95th percentile 298.04 ms)
- Flow 2 (95th percentile 147.38 ms)
- Flow 3 (95th percentile 214.97 ms)
Run 6: Statistics of Verus

Start at: 2018-06-19 13:00:08
End at: 2018-06-19 13:00:38
Local clock offset: -0.079 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.35 Mbit/s
95th percentile per-packet one-way delay: 150.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.10 Mbit/s
95th percentile per-packet one-way delay: 153.544 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.43 Mbit/s
95th percentile per-packet one-way delay: 146.641 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 29.73 Mbit/s
95th percentile per-packet one-way delay: 148.303 ms
Loss rate: 0.00%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-06-19 13:24:45
Local clock offset: 0.172 ms
Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 143.84 Mbit/s
  95th percentile per-packet one-way delay: 188.017 ms
  Loss rate: 1.14%
-- Flow 1:
  Average throughput: 62.67 Mbit/s
  95th percentile per-packet one-way delay: 265.935 ms
  Loss rate: 2.13%
-- Flow 2:
  Average throughput: 104.56 Mbit/s
  95th percentile per-packet one-way delay: 162.075 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 43.67 Mbit/s
  95th percentile per-packet one-way delay: 157.720 ms
  Loss rate: 0.00%
Run 7: Report of Verus — Data Link

Throughput (Mbps)

- Flow 1 ingress (mean 64.03 Mbps)
- Flow 1 egress (mean 62.67 Mbps)
- Flow 2 ingress (mean 105.00 Mbps)
- Flow 2 egress (mean 104.56 Mbps)
- Flow 3 ingress (mean 38.99 Mbps)
- Flow 3 egress (mean 43.67 Mbps)

Per packet one way delay (ms)

- Flow 1 (95th percentile 265.94 ms)
- Flow 2 (95th percentile 162.07 ms)
- Flow 3 (95th percentile 157.72 ms)
Run 8: Statistics of Verus

Local clock offset: -0.161 ms
Remote clock offset: -0.388 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.47 Mbit/s
95th percentile per-packet one-way delay: 183.544 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 155.77 Mbit/s
95th percentile per-packet one-way delay: 186.972 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.59 Mbit/s
95th percentile per-packet one-way delay: 150.826 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 153.898 ms
Loss rate: 0.00%
Run 8: Report of Verus — Data Link

![Graph of throughput and packet delay over time]

Legend:
- Flow 1 ingress (mean 155.78 Mbit/s)
- Flow 1 egress (mean 155.77 Mbit/s)
- Flow 2 ingress (mean 57.59 Mbit/s)
- Flow 2 egress (mean 57.59 Mbit/s)
- Flow 3 ingress (mean 50.17 Mbit/s)
- Flow 3 egress (mean 50.16 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 186.97 ms)
- Flow 2 (95th percentile 150.83 ms)
- Flow 3 (95th percentile 152.90 ms)
Run 9: Statistics of Verus

Start at: 2018-06-19 14:14:33
End at: 2018-06-19 14:15:03
Local clock offset: -0.191 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-19 16:50:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.64 Mbit/s
  95th percentile per-packet one-way delay: 158.436 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 79.54 Mbit/s
  95th percentile per-packet one-way delay: 155.457 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 60.82 Mbit/s
  95th percentile per-packet one-way delay: 149.877 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 37.47 Mbit/s
  95th percentile per-packet one-way delay: 215.980 ms
  Loss rate: 0.00%
Run 9: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 79.61 Mbit/s)
Flow 1 egress (mean 79.54 Mbit/s)
Flow 2 ingress (mean 60.83 Mbit/s)
Flow 2 egress (mean 60.82 Mbit/s)
Flow 3 ingress (mean 37.49 Mbit/s)
Flow 3 egress (mean 37.47 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 155.46 ms)
Flow 2 (95th percentile 149.88 ms)
Flow 3 (95th percentile 215.90 ms)
Run 10: Statistics of Verus

Start at: 2018-06-19 14:39:09
End at: 2018-06-19 14:39:39
Local clock offset: 0.123 ms
Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2018-06-19 16:51:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 271.28 Mbit/s
  95th percentile per-packet one-way delay: 322.042 ms
  Loss rate: 4.54%
-- Flow 1:
  Average throughput: 176.86 Mbit/s
  95th percentile per-packet one-way delay: 336.233 ms
  Loss rate: 5.39%
-- Flow 2:
  Average throughput: 135.12 Mbit/s
  95th percentile per-packet one-way delay: 265.724 ms
  Loss rate: 2.88%
-- Flow 3:
  Average throughput: 14.96 Mbit/s
  95th percentile per-packet one-way delay: 242.541 ms
  Loss rate: 3.58%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 186.95 Mbps)**
- **Flow 1 egress (mean 176.86 Mbps)**
- **Flow 2 ingress (mean 139.12 Mbps)**
- **Flow 2 egress (mean 135.12 Mbps)**
- **Flow 3 ingress (mean 15.52 Mbps)**
- **Flow 3 egress (mean 14.96 Mbps)**

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

- **Flow 1 (95th percentile 336.23 ms)**
- **Flow 2 (95th percentile 265.72 ms)**
- **Flow 3 (95th percentile 242.54 ms)**
Run 1: Statistics of PCC-Vivace

Local clock offset: 0.232 ms
Remote clock offset: -0.39 ms

# Below is generated by plot.py at 2018-06-19 16:56:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 498.97 Mbit/s
  95th percentile per-packet one-way delay: 157.737 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 314.68 Mbit/s
  95th percentile per-packet one-way delay: 150.676 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 242.83 Mbit/s
  95th percentile per-packet one-way delay: 173.260 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 68.12 Mbit/s
  95th percentile per-packet one-way delay: 136.619 ms
  Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 317.03 Mbit/s)
- Flow 1 egress (mean 314.68 Mbit/s)
- Flow 2 ingress (mean 242.96 Mbit/s)
- Flow 2 egress (mean 242.83 Mbit/s)
- Flow 3 ingress (mean 68.12 Mbit/s)
- Flow 3 egress (mean 68.12 Mbit/s)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 150.68 ms)
- Flow 2 (95th percentile 173.26 ms)
- Flow 3 (95th percentile 136.62 ms)
Run 2: Statistics of PCC-Vivace

End at: 2018-06-19 11:14:26
Local clock offset: 0.253 ms
Remote clock offset: 0.111 ms

# Below is generated by plot.py at 2018-06-19 16:56:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.86 Mbit/s
95th percentile per-packet one-way delay: 139.596 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.86 Mbit/s
95th percentile per-packet one-way delay: 148.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.26 Mbit/s
95th percentile per-packet one-way delay: 137.645 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 116.47 Mbit/s
95th percentile per-packet one-way delay: 136.996 ms
Loss rate: 0.00%
Run 2: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 247.86 Mbps)
- Flow 1 egress (mean 247.86 Mbps)
- Flow 2 ingress (mean 178.26 Mbps)
- Flow 2 egress (mean 178.26 Mbps)
- Flow 3 ingress (mean 116.47 Mbps)
- Flow 3 egress (mean 116.47 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 148.67 ms)
- Flow 2 (95th percentile 137.65 ms)
- Flow 3 (95th percentile 137.00 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 11:38:48
End at: 2018-06-19 11:39:18
Local clock offset: -0.008 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2018-06-19 16:56:34
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 435.76 Mbit/s
 95th percentile per-packet one-way delay: 151.180 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 268.61 Mbit/s
 95th percentile per-packet one-way delay: 158.214 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 193.88 Mbit/s
 95th percentile per-packet one-way delay: 139.267 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 115.93 Mbit/s
 95th percentile per-packet one-way delay: 141.046 ms
 Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet loss over time with flow labels and data rates.](image)

289
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 12:03:34
End at: 2018-06-19 12:04:04
Local clock offset: -0.53 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-06-19 16:56:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.71 Mbit/s
95th percentile per-packet one-way delay: 146.169 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 275.36 Mbit/s
95th percentile per-packet one-way delay: 142.487 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 187.15 Mbit/s
95th percentile per-packet one-way delay: 138.273 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.00 Mbit/s
95th percentile per-packet one-way delay: 198.204 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link

[Graph showing network performance metrics, with legends indicating different flow types and their respective ingress and egress data rates, as well as per-packet one-way delay statistics.]
Run 5: Statistics of PCC-Vivace

End at: 2018-06-19 12:29:11
Local clock offset: -0.01 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-19 16:57:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 429.56 Mbit/s
  95th percentile per-packet one-way delay: 138.747 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 286.92 Mbit/s
  95th percentile per-packet one-way delay: 140.744 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 180.79 Mbit/s
  95th percentile per-packet one-way delay: 137.461 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 68.02 Mbit/s
  95th percentile per-packet one-way delay: 136.436 ms
  Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps)**: Various lines represent different flows, with annotations for mean throughput.
- **Packet delay (ms)**: Similar representation for different flows, with annotations for 95th percentile delay.

Legend:
- Flow 1 ingress (mean 286.91 Mbps)
- Flow 1 egress (mean 286.92 Mbps)
- Flow 2 ingress (mean 180.78 Mbps)
- Flow 2 egress (mean 180.79 Mbps)
- Flow 3 ingress (mean 68.03 Mbps)
- Flow 3 egress (mean 68.02 Mbps)

---

"293"
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-19 12:53:40
End at: 2018-06-19 12:54:10
Local clock offset: -0.173 ms
Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2018-06-19 16:58:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 472.37 Mbit/s
  95th percentile per-packet one-way delay: 141.556 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 316.85 Mbit/s
  95th percentile per-packet one-way delay: 144.872 ms
  Loss rate: 0.71%
-- Flow 2:
  Average throughput: 201.30 Mbit/s
  95th percentile per-packet one-way delay: 138.592 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 65.38 Mbit/s
  95th percentile per-packet one-way delay: 136.629 ms
  Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

The graphs show the throughput and packet one-way delay over time for three flows. The throughput graph indicates that Flow 1 has the highest peak throughput, followed by Flow 2 and then Flow 3. The packet one-way delay graph shows lower delays for all three flows, with Flow 1 having the lowest delay overall.

The data suggests that Flow 1 is the most efficient in terms of throughput, while Flow 3 has the lowest packet one-way delay.
Run 7: Statistics of PCC-Vivace

End at: 2018-06-19 13:19:03
Local clock offset: -0.11 ms
Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-06-19 16:58:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.45 Mbit/s
95th percentile per-packet one-way delay: 139.676 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.32 Mbit/s
95th percentile per-packet one-way delay: 141.219 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 179.22 Mbit/s
95th percentile per-packet one-way delay: 137.372 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 121.35 Mbit/s
95th percentile per-packet one-way delay: 137.657 ms
Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 247.31 Mbit/s)
- Flow 1 egress (mean 247.32 Mbit/s)
- Flow 2 ingress (mean 179.20 Mbit/s)
- Flow 2 egress (mean 179.22 Mbit/s)
- Flow 3 ingress (mean 121.36 Mbit/s)
- Flow 3 egress (mean 121.35 Mbit/s)
Run 8: Statistics of PCC-Vivace

Local clock offset: -0.001 ms
Remote clock offset: -0.381 ms

# Below is generated by plot.py at 2018-06-19 16:59:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 498.73 Mbit/s
  95th percentile per-packet one-way delay: 182.970 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 316.06 Mbit/s
  95th percentile per-packet one-way delay: 214.293 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 212.63 Mbit/s
  95th percentile per-packet one-way delay: 142.699 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 124.96 Mbit/s
  95th percentile per-packet one-way delay: 141.178 ms
  Loss rate: 0.01%
Run 8: Report of PCC-Vivace — Data Link

---

**Graph 1:**
- **Throughput (Mbps):**
  - Flow 1 Ingress: (mean 317.42 Mbps)
  - Flow 1 Egress: (mean 316.06 Mbps)
  - Flow 2 Ingress: (mean 212.68 Mbps)
  - Flow 2 Egress: (mean 212.63 Mbps)
  - Flow 3 Ingress: (mean 124.93 Mbps)
  - Flow 3 Egress: (mean 124.96 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 214.29 ms)
  - Flow 2 (95th percentile 142.70 ms)
  - Flow 3 (95th percentile 141.18 ms)

---

299
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-19 14:08:16
End at: 2018-06-19 14:08:46
Local clock offset: -0.043 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-19 16:59:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 515.89 Mbit/s
  95th percentile per-packet one-way delay: 137.784 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 299.21 Mbit/s
  95th percentile per-packet one-way delay: 138.256 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 293.75 Mbit/s
  95th percentile per-packet one-way delay: 137.511 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 64.71 Mbit/s
  95th percentile per-packet one-way delay: 135.580 ms
  Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per-packet one-way delay (ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-19 14:32:41
End at: 2018-06-19 14:33:11
Local clock offset: 0.141 ms
Remote clock offset: -0.265 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 492.68 Mbit/s
  95th percentile per-packet one-way delay: 165.356 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 295.89 Mbit/s
  95th percentile per-packet one-way delay: 168.055 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 260.79 Mbit/s
  95th percentile per-packet one-way delay: 172.903 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 70.87 Mbit/s
  95th percentile per-packet one-way delay: 136.713 ms
  Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

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

Throughput (Mbps)

- Flow 1 ingress (mean 295.89 Mbps)
- Flow 1 egress (mean 295.89 Mbps)
- Flow 2 ingress (mean 260.78 Mbps)
- Flow 2 egress (mean 260.79 Mbps)
- Flow 3 ingress (mean 70.85 Mbps)
- Flow 3 egress (mean 70.87 Mbps)

Packet delay (ms)

- Flow 1 (95th percentile 168.06 ms)
- Flow 2 (95th percentile 172.90 ms)
- Flow 3 (95th percentile 136.71 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-19 10:44:58
End at: 2018-06-19 10:45:28
Local clock offset: 0.284 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 136.823 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 136.688 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 136.876 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 136.759 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Throughput Graph]

![Packet Loss Graph]
Run 2: Statistics of WebRTC media

Start at: 2018-06-19 11:09:59
End at: 2018-06-19 11:10:29
Local clock offset: 0.553 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.24 Mbit/s
95th percentile per-packet one-way delay: 136.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.84 Mbit/s
95th percentile per-packet one-way delay: 136.515 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 135.815 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.649 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-06-19 11:34:45
End at: 2018-06-19 11:35:15
Local clock offset: -0.034 ms
Remote clock offset: 0.575 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 137.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 137.368 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 137.582 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 137.375 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

![Graph of throughput and delay](image)

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 1.79 Mbps)
- Flow 1 egress (mean 1.79 Mbps)
- Flow 2 ingress (mean 1.07 Mbps)
- Flow 2 egress (mean 1.07 Mbps)
- Flow 3 ingress (mean 0.36 Mbps)
- Flow 3 egress (mean 0.36 Mbps)

Delay vs. Time (s)

- Flow 1 (95th percentile 137.37 ms)
- Flow 2 (95th percentile 137.58 ms)
- Flow 3 (95th percentile 137.38 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-06-19 11:59:37
End at: 2018-06-19 12:00:07
Local clock offset: -0.202 ms
Remote clock offset: -0.428 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 136.580 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 136.606 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 136.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.452 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Local clock offset: 0.134 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.22 Mbit/s
95th percentile per-packet one-way delay: 136.890 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.930 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 136.716 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 136.383 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

End at: 2018-06-19 12:50:12
Local clock offset: -0.256 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 136.891 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 136.864 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.885 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

End at: 2018-06-19 13:15:03
Local clock offset: -0.139 ms
Remote clock offset: 0.159 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 136.827 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 136.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 136.757 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 136.916 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Local clock offset: -0.167 ms
Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 136.448 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.400 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 136.482 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.456 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-06-19 14:04:18  
End at: 2018-06-19 14:04:48  
Local clock offset: 0.067 ms  
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.19 Mbit/s  
95th percentile per-packet one-way delay: 136.830 ms  
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s  
95th percentile per-packet one-way delay: 136.845 ms  
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.06 Mbit/s  
95th percentile per-packet one-way delay: 136.665 ms  
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s  
95th percentile per-packet one-way delay: 136.855 ms  
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-06-19 14:28:42
End at: 2018-06-19 14:29:12
Local clock offset: -0.067 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-19 17:00:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 136.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.728 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.09 Mbit/s
95th percentile per-packet one-way delay: 136.298 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 136.846 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 1.79 Mbps)
- Flow 1 egress (mean 1.79 Mbps)
- Flow 2 ingress (mean 1.09 Mbps)
- Flow 2 egress (mean 1.09 Mbps)
- Flow 3 ingress (mean 0.36 Mbps)
- Flow 3 egress (mean 0.36 Mbps)

Delay (ms)

Time (s)

- Flow 1 (95th percentile 136.73 ms)
- Flow 2 (95th percentile 136.30 ms)
- Flow 3 (95th percentile 136.85 ms)