Pantheon Report

Generated at 2018-07-06 13:40:22 (UTC).
Data path: GCE Iowa Ethernet (remote) → GCE London Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9250dbeec7fb57193cddf1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143ceedbe58e562f4
third_party/indigo @ 2601c92e4a9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1af958fa0d66d18b623c091a55fec872b4981e1
   M receiver/src/buffer.h
   M receiver/src/core.cpp
   M sender/src/buffer.h
   M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08f92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbb2
   M src/ScreamClient
   M src/ScreamServer
third_party/sprout @ 366e35c6178b0e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562539f9a494
   M src/verus.hpp
   M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Iowa to GCE London, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

Average throughput (Mbit/s)

95th percentile one-way delay (ms)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s) flow 1</th>
<th></th>
<th>mean 95th-%ile delay (ms) flow 1</th>
<th></th>
<th>mean loss rate (%) flow 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>176.39</td>
<td>150.50</td>
<td>122.37</td>
<td>133.70</td>
<td>0.41</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>88.10</td>
<td>70.17</td>
<td>68.17</td>
<td>56.24</td>
<td>0.27</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>174.00</td>
<td>143.43</td>
<td>28.49</td>
<td>83.62</td>
<td>0.36</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>496.23</td>
<td>592.28</td>
<td>550.42</td>
<td>245.93</td>
<td>0.58</td>
</tr>
<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>536.64</td>
<td>563.62</td>
<td>537.43</td>
<td>258.44</td>
<td>0.80</td>
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<tr>
<td>Indigo</td>
<td>10</td>
<td>169.68</td>
<td>139.73</td>
<td>68.75</td>
<td>73.21</td>
<td>0.33</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>33.42</td>
<td>20.26</td>
<td>10.85</td>
<td>52.02</td>
<td>0.69</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>290.28</td>
<td>26.79</td>
<td>20.32</td>
<td>138.85</td>
<td>0.72</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>189.56</td>
<td>113.07</td>
<td>42.16</td>
<td>135.51</td>
<td>1.71</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>68.65</td>
<td>56.16</td>
<td>56.39</td>
<td>50.58</td>
<td>0.33</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>0.22</td>
<td>0.22</td>
<td>50.69</td>
<td>0.31</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>6.61</td>
<td>6.71</td>
<td>6.21</td>
<td>51.15</td>
<td>0.39</td>
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<td>TaoVA-100x</td>
<td>10</td>
<td>133.21</td>
<td>115.66</td>
<td>90.17</td>
<td>52.24</td>
<td>0.19</td>
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<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>160.07</td>
<td>77.48</td>
<td>72.27</td>
<td>66.65</td>
<td>0.27</td>
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<td>Verus</td>
<td>10</td>
<td>189.23</td>
<td>108.09</td>
<td>75.14</td>
<td>180.12</td>
<td>0.96</td>
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<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>277.58</td>
<td>235.24</td>
<td>129.11</td>
<td>52.51</td>
<td>0.29</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>2.00</td>
<td>1.31</td>
<td>0.54</td>
<td>50.76</td>
<td>0.42</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-07-06 07:12:38
End at: 2018-07-06 07:13:08
Local clock offset: -0.054 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-06 11:31:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 316.71 Mbit/s
  95th percentile per-packet one-way delay: 140.637 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 173.01 Mbit/s
  95th percentile per-packet one-way delay: 136.221 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 153.40 Mbit/s
  95th percentile per-packet one-way delay: 141.097 ms
  Loss rate: 0.73%
-- Flow 3:
  Average throughput: 126.69 Mbit/s
  95th percentile per-packet one-way delay: 146.924 ms
  Loss rate: 1.88%
Run 1: Report of TCP BBR — Data Link

![Graph showing network performance metrics over time.]

- Throughput (Mbps): The upper graph illustrates the throughput for different flows over time, showing the data link's capacity utilization.
- Packet Loss: The lower graph displays the packet loss rate, highlighting the reliability of the data transmission.

Legend:
- Flow 1 ingress (mean 173.04 Mbps)
- Flow 1 egress (mean 173.01 Mbps)
- Flow 2 ingress (mean 153.74 Mbps)
- Flow 2 egress (mean 153.40 Mbps)
- Flow 3 ingress (mean 126.04 Mbps)
- Flow 3 egress (mean 126.69 Mbps)

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Run 2: Statistics of TCP BBR

Start at: 2018-07-06 07:36:27
End at: 2018-07-06 07:36:57
Local clock offset: -0.09 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-07-06 11:31:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 328.04 Mbit/s
  95th percentile per-packet one-way delay: 131.532 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 182.91 Mbit/s
  95th percentile per-packet one-way delay: 126.433 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 152.06 Mbit/s
  95th percentile per-packet one-way delay: 131.965 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 133.29 Mbit/s
  95th percentile per-packet one-way delay: 136.209 ms
  Loss rate: 1.83%
Run 2: Report of TCP BBR — Data Link

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[Graph showing throughput and packet delay over time for different flows with mean values provided.]
Run 3: Statistics of TCP BBR

Start at: 2018-07-06 08:00:28
End at: 2018-07-06 08:00:58
Local clock offset: -0.051 ms
Remote clock offset: 0.131 ms

# Below is generated by plot.py at 2018-07-06 11:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.03 Mbit/s
95th percentile per-packet one-way delay: 128.796 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 179.97 Mbit/s
95th percentile per-packet one-way delay: 125.338 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 155.97 Mbit/s
95th percentile per-packet one-way delay: 128.865 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 137.49 Mbit/s
95th percentile per-packet one-way delay: 133.242 ms
Loss rate: 1.78%
Run 3: Report of TCP BBR — Data Link

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

- **Flow 1 ingress** (mean 179.96 Mb/s)
- **Flow 1 egress** (mean 179.97 Mb/s)
- **Flow 2 ingress** (mean 156.13 Mb/s)
- **Flow 2 egress** (mean 155.97 Mb/s)
- **Flow 3 ingress** (mean 138.72 Mb/s)
- **Flow 3 egress** (mean 137.49 Mb/s)

- **Flow 1 (95th percentile 125.34 ms)**
- **Flow 2 (95th percentile 128.87 ms)**
- **Flow 3 (95th percentile 133.24 ms)**
Run 4: Statistics of TCP BBR

Start at: 2018-07-06 08:24:30
End at: 2018-07-06 08:25:00
Local clock offset: 0.017 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-07-06 11:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.46 Mbit/s
95th percentile per-packet one-way delay: 145.619 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 178.93 Mbit/s
95th percentile per-packet one-way delay: 135.470 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 157.15 Mbit/s
95th percentile per-packet one-way delay: 145.437 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 124.14 Mbit/s
95th percentile per-packet one-way delay: 155.421 ms
Loss rate: 1.84%
Run 4: Report of TCP BBR — Data Link

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**Throughput (Mbps)**

![](chart1.png)

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

![](chart2.png)
Run 5: Statistics of TCP BBR

Start at: 2018-07-06 08:48:26
End at: 2018-07-06 08:48:56
Local clock offset: -0.453 ms
Remote clock offset: -0.265 ms

# Below is generated by plot.py at 2018-07-06 11:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 304.53 Mbit/s
95th percentile per-packet one-way delay: 146.231 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 170.71 Mbit/s
95th percentile per-packet one-way delay: 141.701 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 144.77 Mbit/s
95th percentile per-packet one-way delay: 146.094 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 113.66 Mbit/s
95th percentile per-packet one-way delay: 153.402 ms
Loss rate: 1.76%
Run 6: Statistics of TCP BBR

Start at: 2018-07-06 09:12:02
End at: 2018-07-06 09:12:32
Local clock offset: -0.537 ms
Remote clock offset: -0.379 ms

# Below is generated by plot.py at 2018-07-06 11:31:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.98 Mbit/s
95th percentile per-packet one-way delay: 133.148 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 180.30 Mbit/s
95th percentile per-packet one-way delay: 124.663 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 155.68 Mbit/s
95th percentile per-packet one-way delay: 132.638 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 121.85 Mbit/s
95th percentile per-packet one-way delay: 145.326 ms
Loss rate: 1.77%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-07-06 09:36:03
End at: 2018-07-06 09:36:33
Local clock offset: -0.078 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-07-06 11:31:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.68 Mbit/s
95th percentile per-packet one-way delay: 144.298 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 174.38 Mbit/s
95th percentile per-packet one-way delay: 136.955 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 152.95 Mbit/s
95th percentile per-packet one-way delay: 143.604 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 122.82 Mbit/s
95th percentile per-packet one-way delay: 155.695 ms
Loss rate: 1.86%
Run 7: Report of TCP BBR — Data Link

[Graph showing throughput and latency over time for different flows]
Run 8: Statistics of TCP BBR

Start at: 2018-07-06 10:00:00
End at: 2018-07-06 10:00:30
Local clock offset: -0.133 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-07-06 11:31:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.24 Mbit/s
95th percentile per-packet one-way delay: 143.358 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 176.89 Mbit/s
95th percentile per-packet one-way delay: 138.521 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 146.27 Mbit/s
95th percentile per-packet one-way delay: 143.672 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 115.45 Mbit/s
95th percentile per-packet one-way delay: 149.483 ms
Loss rate: 1.91%
Run 8: Report of TCP BBR — Data Link

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

Legend:
- Flow 1 ingress (mean 177.04 Mbit/s)
- Flow 1 egress (mean 176.89 Mbit/s)
- Flow 2 ingress (mean 146.67 Mbit/s)
- Flow 2 egress (mean 146.27 Mbit/s)
- Flow 3 ingress (mean 116.50 Mbit/s)
- Flow 3 egress (mean 115.45 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 138.52 ms)
- Flow 2 (95th percentile 143.67 ms)
- Flow 3 (95th percentile 149.48 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-07-06 10:23:47
End at: 2018-07-06 10:24:17
Local clock offset: -0.15 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-07-06 11:35:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.23 Mbit/s
95th percentile per-packet one-way delay: 146.364 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 169.42 Mbit/s
95th percentile per-packet one-way delay: 141.279 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 137.12 Mbit/s
95th percentile per-packet one-way delay: 146.856 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 111.05 Mbit/s
95th percentile per-packet one-way delay: 153.644 ms
Loss rate: 2.04%
Run 9: Report of TCP BBR — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 169.58 Mbps)
- Flow 1 egress (mean 169.42 Mbps)
- Flow 2 ingress (mean 137.48 Mbps)
- Flow 2 egress (mean 137.12 Mbps)
- Flow 3 ingress (mean 112.29 Mbps)
- Flow 3 egress (mean 111.05 Mbps)

**Round-trip time (ms):**
- Flow 1 (95th percentile 141.28 ms)
- Flow 2 (95th percentile 146.86 ms)
- Flow 3 (95th percentile 153.64 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-07-06 10:47:30
End at: 2018-07-06 10:48:00
Local clock offset: -0.108 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-07-06 11:36:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.62 Mbit/s
95th percentile per-packet one-way delay: 138.320 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 177.39 Mbit/s
95th percentile per-packet one-way delay: 130.441 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 149.67 Mbit/s
95th percentile per-packet one-way delay: 138.689 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 117.28 Mbit/s
95th percentile per-packet one-way delay: 148.034 ms
Loss rate: 1.91%
Run 10: Report of TCP BBR — Data Link

![Graph of Throughput (Mbps)](image1)

- Flow 1 ingress (mean 177.58 Mbps)
- Flow 1 egress (mean 177.39 Mbps)
- Flow 2 ingress (mean 130.05 Mbps)
- Flow 2 egress (mean 149.67 Mbps)
- Flow 3 ingress (mean 118.34 Mbps)
- Flow 3 egress (mean 117.28 Mbps)

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

- Flow 1 (95th percentile 130.44 ms)
- Flow 2 (95th percentile 138.69 ms)
- Flow 3 (95th percentile 148.03 ms)
Run 1: Statistics of Copa

Start at: 2018-07-06 07:16:43
End at: 2018-07-06 07:17:13
Local clock offset: -0.456 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-07-06 11:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 171.56 Mbit/s
95th percentile per-packet one-way delay: 55.379 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 99.27 Mbit/s
95th percentile per-packet one-way delay: 54.436 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 56.785 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 56.574 ms
Loss rate: 1.33%
Run 1: Report of Copa — Data Link

Throughput (Mbit/s)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 99.17 Mbit/s)  Flow 1 egress (mean 99.27 Mbit/s)
Flow 2 ingress (mean 75.96 Mbit/s)  Flow 2 egress (mean 76.19 Mbit/s)
Flow 3 ingress (mean 66.41 Mbit/s)  Flow 3 egress (mean 66.29 Mbit/s)

Per packet one way delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 54.44 ms)  Flow 2 (95th percentile 56.78 ms)  Flow 3 (95th percentile 56.57 ms)
Run 2: Statistics of Copa

Start at: 2018-07-06 07:40:32
End at: 2018-07-06 07:41:02
Local clock offset: -0.076 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-07-06 11:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 167.22 Mbit/s
95th percentile per-packet one-way delay: 55.908 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 82.41 Mbit/s
95th percentile per-packet one-way delay: 56.604 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 100.60 Mbit/s
95th percentile per-packet one-way delay: 54.887 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 56.106 ms
Loss rate: 1.15%
Run 3: Statistics of Copa

Start at: 2018-07-06 08:04:29
End at: 2018-07-06 08:04:59
Local clock offset: 0.291 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-06 11:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.77 Mbit/s
95th percentile per-packet one-way delay: 59.917 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 76.13 Mbit/s
95th percentile per-packet one-way delay: 59.674 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 78.21 Mbit/s
95th percentile per-packet one-way delay: 58.348 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 59.56 Mbit/s
95th percentile per-packet one-way delay: 63.061 ms
Loss rate: 1.16%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-07-06 08:28:33
End at: 2018-07-06 08:29:03
Local clock offset: -0.39 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-07-06 11:36:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.54 Mbit/s
95th percentile per-packet one-way delay: 57.276 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 93.12 Mbit/s
95th percentile per-packet one-way delay: 56.615 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 102.16 Mbit/s
95th percentile per-packet one-way delay: 57.544 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 59.418 ms
Loss rate: 1.74%
Run 4: Report of Copa — Data Link

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

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

- Flow 1 ingress (mean 93.04 Mb/s)
- Flow 1 egress (mean 93.12 Mb/s)
- Flow 2 ingress (mean 102.19 Mb/s)
- Flow 2 egress (mean 102.16 Mb/s)
- Flow 3 ingress (mean 44.23 Mb/s)
- Flow 3 egress (mean 43.87 Mb/s)

Packet round-trip delay (ms) vs. Time (s)

- Flow 1 (95th percentile 56.62 ms)
- Flow 2 (95th percentile 57.54 ms)
- Flow 3 (95th percentile 59.42 ms)
Run 5: Statistics of Copa

Start at: 2018-07-06 08:52:30
End at: 2018-07-06 08:53:01
Local clock offset: -0.137 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2018-07-06 11:36:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 166.65 Mbit/s
95th percentile per-packet one-way delay: 57.630 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 100.17 Mbit/s
95th percentile per-packet one-way delay: 56.523 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.37 Mbit/s
95th percentile per-packet one-way delay: 59.143 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 105.93 Mbit/s
95th percentile per-packet one-way delay: 58.834 ms
Loss rate: 1.09%
Run 5: Report of Copa — Data Link

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

- Flow 1 ingress (mean 100.18 Mbit/s)
- Flow 2 ingress (mean 56.74 Mbit/s)
- Flow 3 ingress (mean 106.00 Mbit/s)
- Flow 1 egress (mean 100.17 Mbit/s)
- Flow 2 egress (mean 56.37 Mbit/s)
- Flow 3 egress (mean 105.93 Mbit/s)

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

- Flow 1 (95th percentile 56.52 ms)
- Flow 2 (95th percentile 59.14 ms)
- Flow 3 (95th percentile 58.83 ms)
Run 6: Statistics of Copa

Start at: 2018-07-06 09:16:08
End at: 2018-07-06 09:16:38
Local clock offset: 0.206 ms
Remote clock offset: -0.24 ms

# Below is generated by plot.py at 2018-07-06 11:36:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.19 Mbit/s
95th percentile per-packet one-way delay: 57.488 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 84.39 Mbit/s
95th percentile per-packet one-way delay: 56.901 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 54.11 Mbit/s
95th percentile per-packet one-way delay: 61.383 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 53.97 Mbit/s
95th percentile per-packet one-way delay: 55.510 ms
Loss rate: 3.32%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-07-06 09:40:06
End at: 2018-07-06 09:40:36
Local clock offset: -0.106 ms
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-07-06 11:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.43 Mbit/s
95th percentile per-packet one-way delay: 56.695 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 85.98 Mbit/s
95th percentile per-packet one-way delay: 55.568 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 61.96 Mbit/s
95th percentile per-packet one-way delay: 59.474 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 75.69 Mbit/s
95th percentile per-packet one-way delay: 55.245 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link

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

- Flow 1 ingress (mean 85.87 Mbit/s)
- Flow 1 egress (mean 85.98 Mbit/s)
- Flow 2 ingress (mean 62.10 Mbit/s)
- Flow 2 egress (mean 61.96 Mbit/s)
- Flow 3 ingress (mean 75.76 Mbit/s)
- Flow 3 egress (mean 75.69 Mbit/s)
Run 8: Statistics of Copa

Start at: 2018-07-06 10:04:01
End at: 2018-07-06 10:04:31
Local clock offset: -0.455 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-07-06 11:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.29 Mbit/s
95th percentile per-packet one-way delay: 56.702 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.32 Mbit/s
95th percentile per-packet one-way delay: 54.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.35 Mbit/s
95th percentile per-packet one-way delay: 59.019 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 83.86 Mbit/s
95th percentile per-packet one-way delay: 53.911 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 76.37 Mbps)
- Flow 1 egress (mean 76.32 Mbps)
- Flow 2 ingress (mean 62.39 Mbps)
- Flow 2 egress (mean 62.35 Mbps)
- Flow 3 ingress (mean 83.93 Mbps)
- Flow 3 egress (mean 83.86 Mbps)
Run 9: Statistics of Copa

Start at: 2018-07-06 10:27:50
End at: 2018-07-06 10:28:20
Local clock offset: -0.463 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-07-06 11:40:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 122.35 Mbit/s
  95th percentile per-packet one-way delay: 56.997 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 78.21 Mbit/s
  95th percentile per-packet one-way delay: 56.858 ms
  Loss rate: 0.43%
-- Flow 2:
  Average throughput: 37.96 Mbit/s
  95th percentile per-packet one-way delay: 57.417 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 57.27 Mbit/s
  95th percentile per-packet one-way delay: 56.941 ms
  Loss rate: 1.44%
Run 9: Report of Copa — Data Link

![Graph showing throughput and delay for different flows.

- **Throughput:**
  - Flow 1 ingress (mean 78.29 Mbit/s)
  - Flow 2 ingress (mean 37.89 Mbit/s)
  - Flow 3 ingress (mean 57.58 Mbit/s)
  - Flow 1 egress (mean 78.21 Mbit/s)
  - Flow 2 egress (mean 37.96 Mbit/s)
  - Flow 3 egress (mean 57.27 Mbit/s)

- **Delay:**
  - Flow 1 (95th percentile 56.86 ms)
  - Flow 2 (95th percentile 57.42 ms)
  - Flow 3 (95th percentile 56.94 ms)
Run 10: Statistics of Copa

Start at: 2018-07-06 10:51:33
End at: 2018-07-06 10:52:03
Local clock offset: -0.15 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-07-06 11:41:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.64 Mbit/s
95th percentile per-packet one-way delay: 55.010 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 105.01 Mbit/s
95th percentile per-packet one-way delay: 54.483 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 71.80 Mbit/s
95th percentile per-packet one-way delay: 55.573 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 81.09 Mbit/s
95th percentile per-packet one-way delay: 55.975 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

[Graph showing network throughput and per-packet delay for flows 1, 2, and 3.]
Run 1: Statistics of TCP Cubic

Start at: 2018-07-06 07:11:15
End at: 2018-07-06 07:11:45
Local clock offset: -0.059 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-07-06 11:41:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.72 Mbit/s
95th percentile per-packet one-way delay: 73.576 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 207.24 Mbit/s
95th percentile per-packet one-way delay: 74.389 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 129.45 Mbit/s
95th percentile per-packet one-way delay: 71.798 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 4.87 Mbit/s
95th percentile per-packet one-way delay: 71.576 ms
Loss rate: 3.81%
Run 1: Report of TCP Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 206.97 Mbit/s)
- Flow 1 egress (mean 207.24 Mbit/s)
- Flow 2 ingress (mean 129.77 Mbit/s)
- Flow 2 egress (mean 129.45 Mbit/s)
- Flow 3 ingress (mean 5.01 Mbit/s)
- Flow 3 egress (mean 4.87 Mbit/s)

Per packet end-to-end delay (ms)

- Flow 1 (95th percentile 74.39 ms)
- Flow 2 (95th percentile 71.80 ms)
- Flow 3 (95th percentile 71.58 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-07-06 07:35:04
End at: 2018-07-06 07:35:34
Local clock offset: 0.292 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-07-06 11:41:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 298.94 Mbit/s
  95th percentile per-packet one-way delay: 68.854 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 163.89 Mbit/s
  95th percentile per-packet one-way delay: 67.237 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 201.10 Mbit/s
  95th percentile per-packet one-way delay: 70.174 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 4.60 Mbit/s
  95th percentile per-packet one-way delay: 70.407 ms
  Loss rate: 4.56%
Run 2: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 164.21 Mbit/s)
- Flow 1 egress (mean 163.89 Mbit/s)
- Flow 2 ingress (mean 200.71 Mbit/s)
- Flow 2 egress (mean 201.10 Mbit/s)
- Flow 3 ingress (mean 4.77 Mbit/s)
- Flow 3 egress (mean 4.60 Mbit/s)

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

- Flow 1 (95th percentile 67.24 ms)
- Flow 2 (95th percentile 70.17 ms)
- Flow 3 (95th percentile 70.41 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-07-06 07:59:07
End at: 2018-07-06 07:59:37
Local clock offset: -0.055 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-07-06 11:41:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.34 Mbit/s
95th percentile per-packet one-way delay: 86.991 ms
Loss rate: 0.64%

-- Flow 1:
Average throughput: 125.97 Mbit/s
95th percentile per-packet one-way delay: 85.870 ms
Loss rate: 0.65%

-- Flow 2:
Average throughput: 203.21 Mbit/s
95th percentile per-packet one-way delay: 88.116 ms
Loss rate: 0.60%

-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 89.310 ms
Loss rate: 4.54%
Run 3: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet round-trip delay over time for Flow 1, Flow 2, and Flow 3.]

- Flow 1 ingress (mean 126.36 Mbit/s)
- Flow 1 egress (mean 125.97 Mbit/s)
- Flow 2 ingress (mean 203.45 Mbit/s)
- Flow 2 egress (mean 203.21 Mbit/s)
- Flow 3 ingress (mean 4.22 Mbit/s)
- Flow 3 egress (mean 4.09 Mbit/s)

![Graph showing per-packet round-trip delay over time for Flow 1, Flow 2, and Flow 3.]

- Flow 1 (95th percentile 85.87 ms)
- Flow 2 (95th percentile 88.12 ms)
- Flow 3 (95th percentile 89.31 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-07-06 08:23:08
End at: 2018-07-06 08:23:38
Local clock offset: -0.021 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-07-06 11:41:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.52 Mbit/s
95th percentile per-packet one-way delay: 99.174 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 146.60 Mbit/s
95th percentile per-packet one-way delay: 97.406 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 188.32 Mbit/s
95th percentile per-packet one-way delay: 99.431 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 106.825 ms
Loss rate: 6.07%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-07-06 08:47:01
End at: 2018-07-06 08:47:31
Local clock offset: -0.476 ms
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2018-07-06 11:44:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 317.82 Mbit/s
  95th percentile per-packet one-way delay: 126.840 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 186.67 Mbit/s
  95th percentile per-packet one-way delay: 124.136 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 155.56 Mbit/s
  95th percentile per-packet one-way delay: 126.914 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 84.27 Mbit/s
  95th percentile per-packet one-way delay: 133.216 ms
  Loss rate: 2.66%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-07-06 09:10:41
End at: 2018-07-06 09:11:11
Local clock offset: -0.151 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-07-06 11:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 249.41 Mbit/s
95th percentile per-packet one-way delay: 64.326 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 214.77 Mbit/s
95th percentile per-packet one-way delay: 64.272 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 49.64 Mbit/s
95th percentile per-packet one-way delay: 64.639 ms
Loss rate: 2.41%
-- Flow 3:
Average throughput: 5.00 Mbit/s
95th percentile per-packet one-way delay: 63.346 ms
Loss rate: 4.09%
Run 6: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet delay over time for different flows.](image-url)
Run 7: Statistics of TCP Cubic

Start at: 2018-07-06 09:34:41
End at: 2018-07-06 09:35:11
Local clock offset: -0.114 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-06 11:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.15 Mbit/s
95th percentile per-packet one-way delay: 70.019 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 161.37 Mbit/s
95th percentile per-packet one-way delay: 70.440 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 158.21 Mbit/s
95th percentile per-packet one-way delay: 69.768 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 69.851 ms
Loss rate: 3.79%
Run 7: Report of TCP Cubic — Data Link

![Graph showing TCP Cubic data link performance over time with throughput and per-packet one-way delay metrics.]

Legend:
- Flow 1 ingress (mean 161.18 Mbit/s)
- Flow 1 egress (mean 161.37 Mbit/s)
- Flow 2 ingress (mean 158.16 Mbit/s)
- Flow 2 egress (mean 158.21 Mbit/s)
- Flow 3 ingress (mean 5.09 Mbit/s)
- Flow 3 egress (mean 4.95 Mbit/s)
Run 8: Statistics of TCP Cubic

Start at: 2018-07-06 09:58:37
End at: 2018-07-06 09:59:07
Local clock offset: 0.262 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-07-06 11:45:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 295.44 Mbit/s
  95th percentile per-packet one-way delay: 67.218 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 223.50 Mbit/s
  95th percentile per-packet one-way delay: 67.396 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 105.95 Mbit/s
  95th percentile per-packet one-way delay: 66.451 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 4.67 Mbit/s
  95th percentile per-packet one-way delay: 67.130 ms
  Loss rate: 4.05%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-07-06 10:22:26
End at: 2018-07-06 10:22:57
Local clock offset: -0.473 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-07-06 11:45:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.62 Mbit/s
95th percentile per-packet one-way delay: 112.644 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 158.72 Mbit/s
95th percentile per-packet one-way delay: 104.037 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 36.81 Mbit/s
95th percentile per-packet one-way delay: 123.323 ms
Loss rate: 2.95%
-- Flow 3:
Average throughput: 165.40 Mbit/s
95th percentile per-packet one-way delay: 121.963 ms
Loss rate: 1.44%
Run 10: Statistics of TCP Cubic

Start at: 2018-07-06 10:46:07
End at: 2018-07-06 10:46:37
Local clock offset: -0.139 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-07-06 11:45:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.64 Mbit/s
95th percentile per-packet one-way delay: 83.575 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 151.28 Mbit/s
95th percentile per-packet one-way delay: 81.001 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 206.08 Mbit/s
95th percentile per-packet one-way delay: 84.978 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 4.09 Mbit/s
95th percentile per-packet one-way delay: 89.796 ms
Loss rate: 4.94%
Run 10: Report of TCP Cubic — Data Link

The graphs show the throughput and per-packet one-way delay over time for three flows:

- **Flow 1**
  - Ingress: Mean 151.17 Mbps
  - Egress: Mean 151.28 Mbps

- **Flow 2**
  - Ingress: Mean 206.36 Mbps
  - Egress: Mean 206.08 Mbps

- **Flow 3**
  - Ingress: Mean 4.26 Mbps
  - Egress: Mean 4.09 Mbps

The throughput graph indicates a peak at around 20 seconds, followed by a decrease. The per-packet one-way delay graph shows a steady increase over time for all flows.
Run 1: Statistics of FillP

Start at: 2018-07-06 07:22:22
End at: 2018-07-06 07:22:52
Local clock offset: -0.417 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-07-06 11:58:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 964.40 Mbit/s
95th percentile per-packet one-way delay: 245.286 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 412.92 Mbit/s
95th percentile per-packet one-way delay: 246.269 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 583.06 Mbit/s
95th percentile per-packet one-way delay: 249.476 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 505.74 Mbit/s
95th percentile per-packet one-way delay: 242.702 ms
Loss rate: 1.31%
Run 1: Report of FillP — Data Link

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

- **Flow 1 ingress (mean 413.40 Mbit/s)**
- **Flow 1 egress (mean 412.92 Mbit/s)**
- **Flow 2 ingress (mean 580.60 Mbit/s)**
- **Flow 2 egress (mean 583.06 Mbit/s)**
- **Flow 3 ingress (mean 500.33 Mbit/s)**
- **Flow 3 egress (mean 505.74 Mbit/s)**

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

- **Flow 1 (95th percentile 246.27 ms)**
- **Flow 2 (95th percentile 249.48 ms)**
- **Flow 3 (95th percentile 242.70 ms)**
Run 2: Statistics of FillP

Start at: 2018-07-06 07:46:11
End at: 2018-07-06 07:46:41
Local clock offset: -0.137 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-07-06 12:03:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1144.45 Mbit/s
95th percentile per-packet one-way delay: 259.455 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 588.87 Mbit/s
95th percentile per-packet one-way delay: 236.587 ms
Loss rate: 1.41%
-- Flow 2:
Average throughput: 584.60 Mbit/s
95th percentile per-packet one-way delay: 283.793 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 505.93 Mbit/s
95th percentile per-packet one-way delay: 260.563 ms
Loss rate: 3.71%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-07-06 08:10:05
End at: 2018-07-06 08:10:35
Local clock offset: -0.016 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-07-06 12:06:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1165.74 Mbit/s
95th percentile per-packet one-way delay: 238.410 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 593.21 Mbit/s
95th percentile per-packet one-way delay: 243.543 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 589.44 Mbit/s
95th percentile per-packet one-way delay: 236.509 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 549.28 Mbit/s
95th percentile per-packet one-way delay: 213.624 ms
Loss rate: 1.89%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-07-06 08:34:12
End at: 2018-07-06 08:34:42
Local clock offset: -0.027 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-07-06 12:07:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1160.78 Mbit/s
  95th percentile per-packet one-way delay: 229.626 ms
  Loss rate: 0.99%
-- Flow 1:
  Average throughput: 612.01 Mbit/s
  95th percentile per-packet one-way delay: 239.225 ms
  Loss rate: 0.55%
-- Flow 2:
  Average throughput: 533.09 Mbit/s
  95th percentile per-packet one-way delay: 224.394 ms
  Loss rate: 0.96%
-- Flow 3:
  Average throughput: 590.49 Mbit/s
  95th percentile per-packet one-way delay: 218.819 ms
  Loss rate: 2.38%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-07-06 08:58:06
End at: 2018-07-06 08:58:36
Local clock offset: -0.138 ms
Remote clock offset: -0.281 ms

# Below is generated by plot.py at 2018-07-06 12:07:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 713.67 Mbit/s
95th percentile per-packet one-way delay: 246.286 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 89.17 Mbit/s
95th percentile per-packet one-way delay: 269.468 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 658.48 Mbit/s
95th percentile per-packet one-way delay: 247.757 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 566.81 Mbit/s
95th percentile per-packet one-way delay: 240.243 ms
Loss rate: 2.22%
Run 5: Report of FillP — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image-url)
Run 6: Statistics of FillP

Start at: 2018-07-06 09:21:45
End at: 2018-07-06 09:22:15
Local clock offset: 0.274 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-07-06 12:08:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1177.38 Mbit/s
  95th percentile per-packet one-way delay: 241.620 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 596.60 Mbit/s
  95th percentile per-packet one-way delay: 242.749 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 631.65 Mbit/s
  95th percentile per-packet one-way delay: 226.953 ms
  Loss rate: 1.17%
-- Flow 3:
  Average throughput: 489.29 Mbit/s
  95th percentile per-packet one-way delay: 248.310 ms
  Loss rate: 1.64%
Run 6: Report of FillP — Data Link

![Graph showing throughput and packet delay over time for Flow 1, 2, and 3.](image_url)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 596.07 Mbps)
  - Flow 1 egress (mean 596.60 Mbps)
  - Flow 2 ingress (mean 635.84 Mbps)
  - Flow 2 egress (mean 631.05 Mbps)
  - Flow 3 ingress (mean 492.46 Mbps)
  - Flow 3 egress (mean 489.29 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 242.75 ms)
  - Flow 2 (95th percentile 226.95 ms)
  - Flow 3 (95th percentile 248.31 ms)
Run 7: Statistics of FillP

Start at: 2018-07-06 09:45:37
End at: 2018-07-06 09:46:07
Local clock offset: -0.075 ms
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2018-07-06 12:08:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1170.14 Mbit/s
95th percentile per-packet one-way delay: 245.968 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 577.59 Mbit/s
95th percentile per-packet one-way delay: 246.804 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 609.39 Mbit/s
95th percentile per-packet one-way delay: 244.318 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 570.21 Mbit/s
95th percentile per-packet one-way delay: 238.331 ms
Loss rate: 0.60%
Run 7: Report of FillP — Data Link

![Graph 1: Throughput vs Time (Mbps) for different flows](image)

- **Flow 1 ingress** (mean 581.55 Mbps)
- **Flow 1 egress** (mean 577.59 Mbps)
- **Flow 2 ingress** (mean 611.09 Mbps)
- **Flow 2 egress** (mean 609.39 Mbps)
- **Flow 3 ingress** (mean 567.54 Mbps)
- **Flow 3 egress** (mean 570.21 Mbps)

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

- **Flow 1** (95th percentile 246.80 ms)
- **Flow 2** (95th percentile 244.32 ms)
- **Flow 3** (95th percentile 238.33 ms)
Run 8: Statistics of FillP

Start at: 2018-07-06 10:09:32
End at: 2018-07-06 10:10:02
Local clock offset: -0.15 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-07-06 12:08:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1093.24 Mbit/s
  95th percentile per-packet one-way delay: 274.221 ms
  Loss rate: 2.17%
-- Flow 1:
  Average throughput: 512.89 Mbit/s
  95th percentile per-packet one-way delay: 262.955 ms
  Loss rate: 0.93%
-- Flow 2:
  Average throughput: 592.52 Mbit/s
  95th percentile per-packet one-way delay: 289.340 ms
  Loss rate: 3.59%
-- Flow 3:
  Average throughput: 568.29 Mbit/s
  95th percentile per-packet one-way delay: 223.892 ms
  Loss rate: 2.46%
Run 8: Report of FillP — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Flow 1 ingress (mean 516.00 Mbps)
  - Flow 1 egress (mean 512.89 Mbps)
  - Flow 2 ingress (mean 611.55 Mbps)
  - Flow 2 egress (mean 592.52 Mbps)
  - Flow 3 ingress (mean 576.71 Mbps)
  - Flow 3 egress (mean 568.29 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 262.95 ms)
  - Flow 2 (95th percentile 289.34 ms)
  - Flow 3 (95th percentile 223.89 ms)
Run 9: Statistics of FillP

Start at: 2018-07-06 10:33:18
End at: 2018-07-06 10:33:48
Local clock offset: 0.228 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-07-06 12:18:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 959.17 Mbit/s
  95th percentile per-packet one-way delay: 238.763 ms
  Loss rate: 1.38%
-- Flow 1:
  Average throughput: 395.97 Mbit/s
  95th percentile per-packet one-way delay: 231.929 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 556.65 Mbit/s
  95th percentile per-packet one-way delay: 248.283 ms
  Loss rate: 2.15%
-- Flow 3:
  Average throughput: 587.39 Mbit/s
  95th percentile per-packet one-way delay: 228.516 ms
  Loss rate: 2.62%
Run 9: Report of FillP — Data Link

![Diagram of network performance metrics over time](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 394.73 Mbps)
  - Flow 1 egress (mean 395.97 Mbps)
  - Flow 2 ingress (mean 565.96 Mbps)
  - Flow 2 egress (mean 556.65 Mbps)
  - Flow 3 ingress (mean 596.99 Mbps)
  - Flow 3 egress (mean 587.39 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 231.93 ms)
  - Flow 2 (95th percentile 248.28 ms)
  - Flow 3 (95th percentile 228.52 ms)
Run 10: Statistics of FillP

Start at: 2018-07-06 10:57:08
End at: 2018-07-06 10:57:38
Local clock offset: 0.268 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-07-06 12:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1159.57 Mbit/s
95th percentile per-packet one-way delay: 235.975 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 583.09 Mbit/s
95th percentile per-packet one-way delay: 239.797 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 583.92 Mbit/s
95th percentile per-packet one-way delay: 229.425 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 570.77 Mbit/s
95th percentile per-packet one-way delay: 218.196 ms
Loss rate: 2.71%
Run 10: Report of FillP — Data Link

![Throughput Graph]

Flow 1 ingress (mean 585.76 Mbit/s)  Flow 1 egress (mean 583.09 Mbit/s)
Flow 2 ingress (mean 588.63 Mbit/s)  Flow 2 egress (mean 583.92 Mbit/s)
Flow 3 ingress (mean 590.65 Mbit/s)  Flow 3 egress (mean 570.77 Mbit/s)

![Delay Graph]

Flow 1 (95th percentile 239.90 ms)  Flow 2 (95th percentile 229.43 ms)  Flow 3 (95th percentile 218.20 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-06 07:31:58
End at: 2018-07-06 07:32:28
Local clock offset: -0.08 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-07-06 12:24:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 857.78 Mbit/s
95th percentile per-packet one-way delay: 304.260 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 351.94 Mbit/s
95th percentile per-packet one-way delay: 302.215 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 456.88 Mbit/s
95th percentile per-packet one-way delay: 320.799 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 621.82 Mbit/s
95th percentile per-packet one-way delay: 220.718 ms
Loss rate: 2.06%
Run 2: Statistics of FillP-Sheep

Start at: 2018-07-06 07:55:55
End at: 2018-07-06 07:56:25
Local clock offset: -0.451 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-07-06 12:29:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1124.35 Mbit/s
95th percentile per-packet one-way delay: 247.643 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 592.36 Mbit/s
95th percentile per-packet one-way delay: 268.172 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 546.52 Mbit/s
95th percentile per-packet one-way delay: 207.453 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 514.53 Mbit/s
95th percentile per-packet one-way delay: 179.378 ms
Loss rate: 0.99%
Run 2: Report of FillP-Sheep — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 Ingress (mean 592.58 Mbps)
  - Flow 1 Egress (mean 592.36 Mbps)
  - Flow 2 Ingress (mean 546.07 Mbps)
  - Flow 2 Egress (mean 546.52 Mbps)
  - Flow 3 Ingress (mean 513.88 Mbps)
  - Flow 3 Egress (mean 514.53 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 268.17 ms)
  - Flow 2 (95th percentile 207.45 ms)
  - Flow 3 (95th percentile 179.38 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2018-07-06 08:19:53
End at: 2018-07-06 08:20:23
Local clock offset: 0.372 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-06 12:31:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1186.87 Mbit/s
95th percentile per-packet one-way delay: 222.831 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 624.61 Mbit/s
95th percentile per-packet one-way delay: 228.079 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 568.46 Mbit/s
95th percentile per-packet one-way delay: 218.713 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 563.27 Mbit/s
95th percentile per-packet one-way delay: 205.882 ms
Loss rate: 2.77%
Run 3: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 625.17 Mbit/s)  Flow 1 egress (mean 624.61 Mbit/s)
Flow 2 ingress (mean 573.07 Mbit/s)  Flow 2 egress (mean 568.46 Mbit/s)
Flow 3 ingress (mean 573.35 Mbit/s)  Flow 3 egress (mean 563.27 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 228.08 ms)  Flow 2 (95th percentile 218.71 ms)  Flow 3 (95th percentile 205.88 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-06 08:43:55
End at: 2018-07-06 08:44:25
Local clock offset: -0.454 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2018-07-06 12:31:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 844.34 Mbit/s
  95th percentile per-packet one-way delay: 261.223 ms
  Loss rate: 1.98%
-- Flow 1:
  Average throughput: 296.08 Mbit/s
  95th percentile per-packet one-way delay: 280.480 ms
  Loss rate: 2.18%
-- Flow 2:
  Average throughput: 546.42 Mbit/s
  95th percentile per-packet one-way delay: 232.921 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 563.57 Mbit/s
  95th percentile per-packet one-way delay: 232.346 ms
  Loss rate: 2.51%
Run 4: Report of FillP-Sheep — Data Link

![Graph showing data link performance over time with legends indicating mean throughput and mean egress speeds for different flows.](image)

![Graph showing packet delay distribution over time with legends indicating 95th percentile delay for different flows.](image)
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-06 09:07:26
End at: 2018-07-06 09:07:56
Local clock offset: -0.166 ms
Remote clock offset: -0.325 ms

# Below is generated by plot.py at 2018-07-06 12:32:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1164.04 Mbit/s
95th percentile per-packet one-way delay: 241.996 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 625.39 Mbit/s
95th percentile per-packet one-way delay: 245.295 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 571.35 Mbit/s
95th percentile per-packet one-way delay: 239.764 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 485.39 Mbit/s
95th percentile per-packet one-way delay: 200.049 ms
Loss rate: 2.76%
Run 5: Report of FillP-Sheep — Data Link

![Graph showing throughput and delay over time for different flows](image-url)
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-06 09:31:28
End at: 2018-07-06 09:31:58
Local clock offset: 0.268 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-07-06 12:32:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1125.65 Mbit/s
95th percentile per-packet one-way delay: 239.035 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 594.63 Mbit/s
95th percentile per-packet one-way delay: 268.341 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 551.57 Mbit/s
95th percentile per-packet one-way delay: 211.215 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 501.21 Mbit/s
95th percentile per-packet one-way delay: 166.317 ms
Loss rate: 2.70%
Run 6: Report of FillP-Sheep — Data Link

![Throughput Graph]

![Delay Graph]

Flow 1 ingress (mean 598.82 Mbit/s)  Flow 1 egress (mean 594.63 Mbit/s)
Flow 2 ingress (mean 553.97 Mbit/s)  Flow 2 egress (mean 551.57 Mbit/s)
Flow 3 ingress (mean 599.82 Mbit/s)  Flow 3 egress (mean 501.21 Mbit/s)

Flow 1 (95th percentile 268.34 ms)  Flow 2 (95th percentile 211.22 ms)  Flow 3 (95th percentile 166.32 ms)
Run 7: Statistics of FillP-Sheep

Start at: 2018-07-06 09:55:20
End at: 2018-07-06 09:55:50
Local clock offset: 0.297 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-07-06 12:45:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1200.72 Mbit/s
95th percentile per-packet one-way delay: 228.463 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 625.77 Mbit/s
95th percentile per-packet one-way delay: 232.747 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 595.81 Mbit/s
95th percentile per-packet one-way delay: 220.335 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 544.17 Mbit/s
95th percentile per-packet one-way delay: 212.247 ms
Loss rate: 2.00%
Run 7: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 625.51 Mbit/s)
- Flow 1 egress (mean 625.77 Mbit/s)
- Flow 2 ingress (mean 600.84 Mbit/s)
- Flow 2 egress (mean 595.81 Mbit/s)
- Flow 3 ingress (mean 549.41 Mbit/s)
- Flow 3 egress (mean 544.17 Mbit/s)
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-06 10:19:14
End at: 2018-07-06 10:19:44
Local clock offset: 0.204 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2018-07-06 12:46:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1132.56 Mbit/s
  95th percentile per-packet one-way delay: 229.877 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 562.01 Mbit/s
  95th percentile per-packet one-way delay: 228.195 ms
  Loss rate: 1.02%
-- Flow 2:
  Average throughput: 596.80 Mbit/s
  95th percentile per-packet one-way delay: 238.391 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 531.07 Mbit/s
  95th percentile per-packet one-way delay: 155.605 ms
  Loss rate: 2.04%
Run 8: Report of FillP-Sheep — Data Link
Run 9: Statistics of FillP-Sheep

Start at: 2018-07-06 10:42:55
End at: 2018-07-06 10:43:25
Local clock offset: 0.262 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-07-06 12:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1228.49 Mbit/s
95th percentile per-packet one-way delay: 260.728 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 672.67 Mbit/s
95th percentile per-packet one-way delay: 270.126 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 592.61 Mbit/s
95th percentile per-packet one-way delay: 256.857 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 494.10 Mbit/s
95th percentile per-packet one-way delay: 82.262 ms
Loss rate: 1.52%
Run 9: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 677.71 Mbps)
- Flow 1 egress (mean 672.67 Mbps)
- Flow 2 ingress (mean 596.28 Mbps)
- Flow 2 egress (mean 592.63 Mbps)
- Flow 3 ingress (mean 496.49 Mbps)
- Flow 3 egress (mean 494.10 Mbps)

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

- Flow 1 (95th percentile 270.13 ms)
- Flow 2 (95th percentile 256.86 ms)
- Flow 3 (95th percentile 82.26 ms)
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-06 11:06:47
End at: 2018-07-06 11:07:17
Local clock offset: -0.041 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-07-06 12:52:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1008.88 Mbit/s
  95th percentile per-packet one-way delay: 247.486 ms
  Loss rate: 1.04%
-- Flow 1:
  Average throughput: 420.92 Mbit/s
  95th percentile per-packet one-way delay: 260.775 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 609.77 Mbit/s
  95th percentile per-packet one-way delay: 233.230 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 555.12 Mbit/s
  95th percentile per-packet one-way delay: 232.629 ms
  Loss rate: 3.24%
Run 10: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 422.37 Mbit/s)
- Flow 1 egress (mean 420.92 Mbit/s)
- Flow 2 ingress (mean 609.13 Mbit/s)
- Flow 2 egress (mean 609.77 Mbit/s)
- Flow 3 ingress (mean 567.92 Mbit/s)
- Flow 3 egress (mean 555.12 Mbit/s)

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

- Flow 1 (95th percentile 260.77 ms)
- Flow 2 (95th percentile 233.23 ms)
- Flow 3 (95th percentile 232.63 ms)
Run 1: Statistics of Indigo

Start at: 2018-07-06 07:18:06
End at: 2018-07-06 07:18:36
Local clock offset: -0.41 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-07-06 12:52:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 293.64 Mbit/s
  95th percentile per-packet one-way delay: 80.313 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 164.94 Mbit/s
  95th percentile per-packet one-way delay: 76.758 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 141.68 Mbit/s
  95th percentile per-packet one-way delay: 80.450 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 96.63 Mbit/s
  95th percentile per-packet one-way delay: 84.771 ms
  Loss rate: 1.22%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-07-06 07:41:54
End at: 2018-07-06 07:42:24
Local clock offset: -0.093 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-07-06 12:52:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.90 Mbit/s
95th percentile per-packet one-way delay: 90.139 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 172.39 Mbit/s
95th percentile per-packet one-way delay: 71.944 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 131.71 Mbit/s
95th percentile per-packet one-way delay: 93.053 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 89.67 Mbit/s
95th percentile per-packet one-way delay: 105.610 ms
Loss rate: 1.20%
Run 2: Report of Indigo — Data Link

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

- **Flow 1 ingress** (mean 172.29 Mbit/s)
- **Flow 1 egress** (mean 172.39 Mbit/s)
- **Flow 2 ingress** (mean 131.58 Mbit/s)
- **Flow 2 egress** (mean 131.71 Mbit/s)
- **Flow 3 ingress** (mean 89.63 Mbit/s)
- **Flow 3 egress** (mean 89.67 Mbit/s)

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

- **Flow 1** (95th percentile 71.94 ms)
- **Flow 2** (95th percentile 93.05 ms)
- **Flow 3** (95th percentile 105.61 ms)
Run 3: Statistics of Indigo

Start at: 2018-07-06 08:05:50
End at: 2018-07-06 08:06:20
Local clock offset: 0.308 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.13 Mbit/s
95th percentile per-packet one-way delay: 92.614 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 159.49 Mbit/s
95th percentile per-packet one-way delay: 88.597 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 134.59 Mbit/s
95th percentile per-packet one-way delay: 92.911 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 93.26 Mbit/s
95th percentile per-packet one-way delay: 97.493 ms
Loss rate: 1.14%
Run 3: Report of Indigo — Data Link

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

![Graph showing per-packet one-way delay over time for different flows.](image2)
Run 4: Statistics of Indigo

Start at: 2018-07-06 08:29:56
End at: 2018-07-06 08:30:26
Local clock offset: 0.345 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.61 Mbit/s
95th percentile per-packet one-way delay: 78.132 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 170.41 Mbit/s
95th percentile per-packet one-way delay: 74.917 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 137.76 Mbit/s
95th percentile per-packet one-way delay: 79.057 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 77.52 Mbit/s
95th percentile per-packet one-way delay: 89.816 ms
Loss rate: 1.10%
Run 4: Report of Indigo — Data Link

Graph 1: Throughput

- Flow 1 ingress (mean 170.40 Mbit/s)
- Flow 1 egress (mean 170.41 Mbit/s)
- Flow 2 ingress (mean 137.63 Mbit/s)
- Flow 2 egress (mean 137.76 Mbit/s)
- Flow 3 ingress (mean 77.56 Mbit/s)
- Flow 3 egress (mean 77.52 Mbit/s)

Graph 2: Per packet round trip delay

- Flow 1 (95th percentile 74.92 ms)
- Flow 2 (95th percentile 79.06 ms)
- Flow 3 (95th percentile 89.82 ms)
Run 5: Statistics of Indigo

Start at: 2018-07-06 08:53:52
End at: 2018-07-06 08:54:22
Local clock offset: 0.24 ms
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.09 Mbit/s
95th percentile per-packet one-way delay: 68.644 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 179.55 Mbit/s
95th percentile per-packet one-way delay: 67.159 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 144.50 Mbit/s
95th percentile per-packet one-way delay: 69.845 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 66.34 Mbit/s
95th percentile per-packet one-way delay: 82.797 ms
Loss rate: 1.40%
Run 5: Report of Indigo — Data Link

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Run 6: Statistics of Indigo

Start at: 2018-07-06 09:17:28
End at: 2018-07-06 09:17:58
Local clock offset: -0.095 ms
Remote clock offset: -0.192 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.90 Mbit/s
95th percentile per-packet one-way delay: 76.640 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 169.75 Mbit/s
95th percentile per-packet one-way delay: 68.770 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 147.55 Mbit/s
95th percentile per-packet one-way delay: 78.746 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 65.24 Mbit/s
95th percentile per-packet one-way delay: 87.234 ms
Loss rate: 1.45%
Run 6: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 169.71 Mbit/s)
- Flow 1 egress (mean 169.75 Mbit/s)
- Flow 2 ingress (mean 147.63 Mbit/s)
- Flow 2 egress (mean 147.55 Mbit/s)
- Flow 3 ingress (mean 65.46 Mbit/s)
- Flow 3 egress (mean 65.24 Mbit/s)
Run 7: Statistics of Indigo

Start at: 2018-07-06 09:41:27
End at: 2018-07-06 09:41:57
Local clock offset: -0.045 ms
Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.33 Mbit/s
95th percentile per-packet one-way delay: 78.472 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 162.15 Mbit/s
95th percentile per-packet one-way delay: 74.219 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 132.60 Mbit/s
95th percentile per-packet one-way delay: 78.811 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 92.75 Mbit/s
95th percentile per-packet one-way delay: 84.089 ms
Loss rate: 1.14%
Run 7: Report of Indigo — Data Link

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**Throughput (Mbit/s)**

- Flow 1 ingress (mean 162.15 Mbit/s)
- Flow 1 egress (mean 162.15 Mbit/s)
- Flow 2 ingress (mean 132.52 Mbit/s)
- Flow 2 egress (mean 132.60 Mbit/s)
- Flow 3 ingress (mean 92.66 Mbit/s)
- Flow 3 egress (mean 92.75 Mbit/s)

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

- Flow 1 (95th percentile 74.22 ms)
- Flow 2 (95th percentile 78.81 ms)
- Flow 3 (95th percentile 84.09 ms)
Run 8: Statistics of Indigo

Start at: 2018-07-06 10:05:21
End at: 2018-07-06 10:05:51
Local clock offset: -0.135 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.54 Mbit/s
95th percentile per-packet one-way delay: 69.429 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 172.48 Mbit/s
95th percentile per-packet one-way delay: 68.035 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 146.78 Mbit/s
95th percentile per-packet one-way delay: 70.591 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 71.236 ms
Loss rate: 1.21%
Run 8: Report of Indigo — Data Link

![Graph showing network throughput and packet delay over time for different flows.](image-url)
Run 9: Statistics of Indigo

Start at: 2018-07-06 10:29:08
End at: 2018-07-06 10:29:38
Local clock offset: -0.134 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.89 Mbit/s
95th percentile per-packet one-way delay: 70.415 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 177.36 Mbit/s
95th percentile per-packet one-way delay: 69.776 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 142.49 Mbit/s
95th percentile per-packet one-way delay: 71.447 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 21.86 Mbit/s
95th percentile per-packet one-way delay: 71.326 ms
Loss rate: 1.19%
Run 9: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 177.41 Mbit/s)
- Flow 1 egress (mean 177.36 Mbit/s)
- Flow 2 ingress (mean 142.53 Mbit/s)
- Flow 2 egress (mean 142.49 Mbit/s)
- Flow 3 ingress (mean 21.89 Mbit/s)
- Flow 3 egress (mean 21.86 Mbit/s)

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

- Flow 1 (95th percentile 69.78 ms)
- Flow 2 (95th percentile 71.45 ms)
- Flow 3 (95th percentile 71.33 ms)
Run 10: Statistics of Indigo

Start at: 2018-07-06 10:52:56
End at: 2018-07-06 10:53:26
Local clock offset: -0.159 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.67 Mbit/s
95th percentile per-packet one-way delay: 74.208 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 168.25 Mbit/s
95th percentile per-packet one-way delay: 71.972 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 137.67 Mbit/s
95th percentile per-packet one-way delay: 76.124 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 79.636 ms
Loss rate: 1.13%
Run 10: Report of Indigo — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 168.25 Mbps)
- Flow 2 ingress (mean 137.76 Mbps)
- Flow 3 ingress (mean 50.12 Mbps)
- Flow 1 egress (mean 168.25 Mbps)
- Flow 2 egress (mean 137.67 Mbps)
- Flow 3 egress (mean 50.13 Mbps)

Packet queue delay (ms):
- Flow 1 (95th percentile 71.97 ms)
- Flow 2 (95th percentile 76.12 ms)
- Flow 3 (95th percentile 79.64 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-07-06 07:26:59
End at: 2018-07-06 07:27:29
Local clock offset: -0.469 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.28 Mbit/s
95th percentile per-packet one-way delay: 51.995 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 35.00 Mbit/s
95th percentile per-packet one-way delay: 51.877 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 52.246 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 52.332 ms
Loss rate: 2.04%
Run 1: Report of LEDBAT — Data Link

![Graph 1: Throughput vs Time](chart1.png)

- **Flow 1 ingress** (mean 35.12 Mbit/s)
- **Flow 1 egress** (mean 35.00 Mbit/s)
- **Flow 2 ingress** (mean 11.39 Mbit/s)
- **Flow 2 egress** (mean 11.28 Mbit/s)
- **Flow 3 ingress** (mean 11.66 Mbit/s)
- **Flow 3 egress** (mean 11.54 Mbit/s)

![Graph 2: Per-packet delay vs Time](chart2.png)

- **Flow 1** (95th percentile 51.88 ms)
- **Flow 2** (95th percentile 52.25 ms)
- **Flow 3** (95th percentile 52.33 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-07-06 07:50:53
End at: 2018-07-06 07:51:23
Local clock offset: -0.064 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.65 Mbit/s
95th percentile per-packet one-way delay: 51.811 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 51.645 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 15.50 Mbit/s
95th percentile per-packet one-way delay: 52.265 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 51.781 ms
Loss rate: 2.18%
Run 2: Report of LEDBAT — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 33.16 Mbps/s)
- Flow 1 egress (mean 33.04 Mbps/s)
- Flow 2 ingress (mean 15.62 Mbps/s)
- Flow 2 egress (mean 15.50 Mbps/s)
- Flow 3 ingress (mean 10.26 Mbps/s)
- Flow 3 egress (mean 10.14 Mbps/s)

**Per packet round-trip time (ms)**
- Flow 1 (95th percentile 51.65 ms)
- Flow 2 (95th percentile 52.27 ms)
- Flow 3 (95th percentile 51.78 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-07-06 08:14:52
End at: 2018-07-06 08:15:22
Local clock offset: 0.33 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.19 Mbit/s
95th percentile per-packet one-way delay: 52.327 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 33.65 Mbit/s
95th percentile per-packet one-way delay: 52.645 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 23.44 Mbit/s
95th percentile per-packet one-way delay: 51.994 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 51.232 ms
Loss rate: 2.29%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 33.77 Mb/s)
- Flow 1 egress (mean 33.65 Mb/s)
- Flow 2 ingress (mean 23.56 Mb/s)
- Flow 2 egress (mean 23.44 Mb/s)
- Flow 3 ingress (mean 9.23 Mb/s)
- Flow 3 egress (mean 9.11 Mb/s)

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

- Flow 1 (95th percentile 52.65 ms)
- Flow 2 (95th percentile 51.99 ms)
- Flow 3 (95th percentile 51.23 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-07-06 08:38:56
End at: 2018-07-06 08:39:26
Local clock offset: -0.056 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.32 Mbit/s
95th percentile per-packet one-way delay: 51.722 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 26.99 Mbit/s
95th percentile per-packet one-way delay: 51.721 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 18.91 Mbit/s
95th percentile per-packet one-way delay: 51.709 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 51.753 ms
Loss rate: 2.05%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-07-06 09:02:27
End at: 2018-07-06 09:02:57
Local clock offset: -0.141 ms
Remote clock offset: -0.325 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.25 Mbit/s
95th percentile per-packet one-way delay: 52.414 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 34.93 Mbit/s
95th percentile per-packet one-way delay: 52.598 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 21.07 Mbit/s
95th percentile per-packet one-way delay: 52.010 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 10.10 Mbit/s
95th percentile per-packet one-way delay: 52.462 ms
Loss rate: 2.18%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-07-06 09:26:27
End at: 2018-07-06 09:26:57
Local clock offset: -0.493 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.44 Mbit/s
95th percentile per-packet one-way delay: 51.906 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 51.671 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 23.47 Mbit/s
95th percentile per-packet one-way delay: 52.455 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 52.163 ms
Loss rate: 2.04%
Run 6: Report of LEDBAT — Data Link

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

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 33.16 Mbps)
- Flow 1 egress (mean 33.04 Mbps)
- Flow 2 ingress (mean 23.39 Mbps)
- Flow 2 egress (mean 23.47 Mbps)
- Flow 3 ingress (mean 11.66 Mbps)
- Flow 3 egress (mean 11.54 Mbps)

Per-packet round-trip delay (ms)

Time (s)

- Flow 1 (95th percentile 51.67 ms)
- Flow 2 (95th percentile 52.45 ms)
- Flow 3 (95th percentile 52.16 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-07-06 09:50:20
End at: 2018-07-06 09:50:50
Local clock offset: 0.292 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.92 Mbit/s
95th percentile per-packet one-way delay: 52.283 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 33.70 Mbit/s
95th percentile per-packet one-way delay: 52.299 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 52.250 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.12 Mbit/s
95th percentile per-packet one-way delay: 52.301 ms
Loss rate: 2.08%
Run 7: Report of LEDBAT — Data Link

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

- **Flow 1 (Ingress)**: Mean 33.82 Mbit/s
- **Flow 1 (Egress)**: Mean 33.70 Mbit/s
- **Flow 2 (Ingress)**: Mean 23.38 Mbit/s
- **Flow 2 (Egress)**: Mean 23.46 Mbit/s
- **Flow 3 (Ingress)**: Mean 11.24 Mbit/s
- **Flow 3 (Egress)**: Mean 11.12 Mbit/s

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

- **Flow 1 (95th percentile)**: 52.30 ms
- **Flow 2 (95th percentile)**: 52.25 ms
- **Flow 3 (95th percentile)**: 52.30 ms
Run 8: Statistics of LEDBAT

Start at: 2018-07-06 10:14:13
End at: 2018-07-06 10:14:43
Local clock offset: -0.127 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.79 Mbit/s
  95th percentile per-packet one-way delay: 52.269 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 34.74 Mbit/s
  95th percentile per-packet one-way delay: 52.120 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 23.12 Mbit/s
  95th percentile per-packet one-way delay: 53.308 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 11.42 Mbit/s
  95th percentile per-packet one-way delay: 51.593 ms
  Loss rate: 2.05%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-07-06 10:37:54
End at: 2018-07-06 10:38:24
Local clock offset: -0.496 ms
Remote clock offset: -0.112 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.27 Mbit/s
95th percentile per-packet one-way delay: 51.499 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 51.554 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 23.45 Mbit/s
95th percentile per-packet one-way delay: 51.479 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.35 Mbit/s
95th percentile per-packet one-way delay: 51.050 ms
Loss rate: 2.06%
Run 9: Report of LEDBAT — Data Link

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

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

Legend:
- Flow 1 ingress (mean 35.07 Mbit/s)
- Flow 1 egress (mean 34.96 Mbit/s)
- Flow 2 ingress (mean 23.57 Mbit/s)
- Flow 2 egress (mean 23.45 Mbit/s)
- Flow 3 ingress (mean 11.47 Mbit/s)
- Flow 3 egress (mean 11.35 Mbit/s)

Flow 1 (95th percentile 51.55 ms)
Flow 2 (95th percentile 51.48 ms)
Flow 3 (95th percentile 51.05 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-07-06 11:01:46
End at: 2018-07-06 11:02:16
Local clock offset: -0.452 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 52.281 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 34.12 Mbit/s
95th percentile per-packet one-way delay: 52.029 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 18.95 Mbit/s
95th percentile per-packet one-way delay: 52.625 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 10.67 Mbit/s
95th percentile per-packet one-way delay: 52.759 ms
Loss rate: 2.12%
Run 10: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 34.30 Mbit/s)
- Flow 1 egress (mean 34.12 Mbit/s)
- Flow 2 ingress (mean 19.07 Mbit/s)
- Flow 2 egress (mean 18.95 Mbit/s)
- Flow 3 ingress (mean 10.80 Mbit/s)
- Flow 3 egress (mean 10.67 Mbit/s)

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

- Flow 1 (95th percentile 52.03 ms)
- Flow 2 (95th percentile 52.62 ms)
- Flow 3 (95th percentile 52.76 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-06 07:21:02
End at: 2018-07-06 07:21:32
Local clock offset: 0.278 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.93 Mbit/s
95th percentile per-packet one-way delay: 126.401 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 319.78 Mbit/s
95th percentile per-packet one-way delay: 127.121 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 123.807 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 17.51 Mbit/s
95th percentile per-packet one-way delay: 71.821 ms
Loss rate: 1.08%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2018-07-06 07:44:51
End at: 2018-07-06 07:45:21
Local clock offset: -0.469 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-07-06 12:52:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.62 Mbit/s
95th percentile per-packet one-way delay: 123.929 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 320.02 Mbit/s
95th percentile per-packet one-way delay: 123.921 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 16.82 Mbit/s
95th percentile per-packet one-way delay: 123.234 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 125.340 ms
Loss rate: 1.41%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 320.67 Mbps)
- **Flow 1 egress** (mean 320.02 Mbps)
- **Flow 2 ingress** (mean 16.85 Mbps)
- **Flow 2 egress** (mean 16.82 Mbps)
- **Flow 3 ingress** (mean 4.46 Mbps)
- **Flow 3 egress** (mean 4.45 Mbps)

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

- **Flow 1** (95th percentile 123.92 ms)
- **Flow 2** (95th percentile 123.23 ms)
- **Flow 3** (95th percentile 125.34 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-07-06 08:08:44
End at: 2018-07-06 08:09:14
Local clock offset: -0.385 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-07-06 12:53:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.90 Mbit/s
95th percentile per-packet one-way delay: 220.995 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 296.15 Mbit/s
95th percentile per-packet one-way delay: 220.689 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 66.99 Mbit/s
95th percentile per-packet one-way delay: 221.686 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 59.02 Mbit/s
95th percentile per-packet one-way delay: 224.772 ms
Loss rate: 4.38%
Run 3: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 300.09 Mbit/s)
- **Flow 1 egress** (mean 296.15 Mbit/s)
- **Flow 2 ingress** (mean 68.49 Mbit/s)
- **Flow 2 egress** (mean 66.99 Mbit/s)
- **Flow 3 ingress** (mean 61.09 Mbit/s)
- **Flow 3 egress** (mean 59.02 Mbit/s)

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

- **Flow 1** (95th percentile 220.69 ms)
- **Flow 2** (95th percentile 221.69 ms)
- **Flow 3** (95th percentile 224.77 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-06 08:32:53  
End at: 2018-07-06 08:33:23  
Local clock offset: -0.007 ms  
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-07-06 12:53:14  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 317.82 Mbit/s  
95th percentile per-packet one-way delay: 138.671 ms  
Loss rate: 0.44%  
-- Flow 1:  
Average throughput: 301.81 Mbit/s  
95th percentile per-packet one-way delay: 137.042 ms  
Loss rate: 0.42%  
-- Flow 2:  
Average throughput: 8.82 Mbit/s  
95th percentile per-packet one-way delay: 133.874 ms  
Loss rate: 0.54%  
-- Flow 3:  
Average throughput: 31.19 Mbit/s  
95th percentile per-packet one-way delay: 154.856 ms  
Loss rate: 1.03%
Run 4: Report of PCC-Allegro — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 302.05 Mbit/s)  Flow 1 egress (mean 301.81 Mbit/s)
Flow 2 ingress (mean 8.82 Mbit/s)    Flow 2 egress (mean 8.82 Mbit/s)
Flow 3 ingress (mean 31.20 Mbit/s)  Flow 3 egress (mean 31.19 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 137.04 ms)  Flow 2 (95th percentile 133.87 ms)  Flow 3 (95th percentile 154.86 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-06 08:56:46
End at: 2018-07-06 08:57:16
Local clock offset: -0.509 ms
Remote clock offset: -0.267 ms

# Below is generated by plot.py at 2018-07-06 12:53:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.91 Mbit/s
95th percentile per-packet one-way delay: 112.966 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 310.56 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 17.50 Mbit/s
95th percentile per-packet one-way delay: 112.680 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 120.043 ms
Loss rate: 0.98%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-06 09:20:25
End at: 2018-07-06 09:20:55
Local clock offset: -0.084 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-07-06 12:53:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 336.03 Mbit/s
  95th percentile per-packet one-way delay: 232.933 ms
  Loss rate: 2.08%
-- Flow 1:
  Average throughput: 298.49 Mbit/s
  95th percentile per-packet one-way delay: 232.778 ms
  Loss rate: 2.09%
-- Flow 2:
  Average throughput: 55.52 Mbit/s
  95th percentile per-packet one-way delay: 234.393 ms
  Loss rate: 1.95%
-- Flow 3:
  Average throughput: 2.13 Mbit/s
  95th percentile per-packet one-way delay: 230.868 ms
  Loss rate: 1.85%
Run 6: Report of PCC-Allegro — Data Link

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

- **Flow 1**
  - Ingress: Mean 303.84 Mbit/s
  - Egress: Mean 298.49 Mbit/s

- **Flow 2**
  - Ingress: Mean 56.34 Mbit/s
  - Egress: Mean 55.52 Mbit/s

- **Flow 3**
  - Ingress: Mean 2.14 Mbit/s
  - Egress: Mean 2.13 Mbit/s

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

- **Flow 1** (95th percentile: 232.78 ms)
- **Flow 2** (95th percentile: 234.39 ms)
- **Flow 3** (95th percentile: 230.87 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-06 09:44:19
End at: 2018-07-06 09:44:49
Local clock offset: -0.443 ms
Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2018-07-06 12:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.99 Mbit/s
95th percentile per-packet one-way delay: 90.828 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 271.13 Mbit/s
95th percentile per-packet one-way delay: 90.988 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 8.40 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 16.14 Mbit/s
95th percentile per-packet one-way delay: 87.804 ms
Loss rate: 1.38%
Run 7: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 271.50 Mbps)
- Flow 1 egress (mean 271.13 Mbps)
- Flow 2 ingress (mean 8.41 Mbps)
- Flow 2 egress (mean 8.40 Mbps)
- Flow 3 ingress (mean 16.20 Mbps)
- Flow 3 egress (mean 16.14 Mbps)

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

- Flow 1 (95th percentile 90.99 ms)
- Flow 2 (95th percentile 87.83 ms)
- Flow 3 (95th percentile 87.80 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-07-06 10:08:15
End at: 2018-07-06 10:08:45
Local clock offset: -0.462 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-06 12:56:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.28 Mbit/s
95th percentile per-packet one-way delay: 89.192 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 202.98 Mbit/s
95th percentile per-packet one-way delay: 88.992 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 65.18 Mbit/s
95th percentile per-packet one-way delay: 90.430 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 15.45 Mbit/s
95th percentile per-packet one-way delay: 90.768 ms
Loss rate: 1.27%
Run 9: Statistics of PCC-Allegro

Start at: 2018-07-06 10:31:59
End at: 2018-07-06 10:32:29
Local clock offset: -0.096 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-07-06 12:57:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 292.57 Mbit/s
95th percentile per-packet one-way delay: 113.144 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 275.90 Mbit/s
95th percentile per-packet one-way delay: 113.123 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 9.03 Mbit/s
95th percentile per-packet one-way delay: 112.357 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 32.61 Mbit/s
95th percentile per-packet one-way delay: 113.554 ms
Loss rate: 1.19%
Run 9: Report of PCC-Allegro — Data Link
Run 10: Statistics of PCC-Allegro

End at: 2018-07-06 10:56:18
Local clock offset: -0.482 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-07-06 12:57:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.88 Mbit/s
95th percentile per-packet one-way delay: 141.180 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 305.99 Mbit/s
95th percentile per-packet one-way delay: 140.951 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 137.928 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 16.25 Mbit/s
95th percentile per-packet one-way delay: 154.223 ms
Loss rate: 1.19%
Run 10: Report of PCC-Allegro — Data Link

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

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

### Graph 1: Throughput (Mbps)
- **Flow 1 ingress (mean 306.50 Mbit/s)**
- **Flow 1 egress (mean 305.99 Mbit/s)**
- **Flow 2 ingress (mean 16.03 Mbit/s)**
- **Flow 2 egress (mean 16.00 Mbit/s)**
- **Flow 3 ingress (mean 16.29 Mbit/s)**
- **Flow 3 egress (mean 16.25 Mbit/s)**

### Graph 2: Per-packet one-way delay (ms)
- **Flow 1 (95th percentile 140.95 ms)**
- **Flow 2 (95th percentile 137.93 ms)**
- **Flow 3 (95th percentile 154.22 ms)**

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Run 1: Statistics of PCC-Expr

Start at: 2018-07-06 07:14:02
End at: 2018-07-06 07:14:32
Local clock offset: -0.046 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-07-06 13:01:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.59 Mbit/s
95th percentile per-packet one-way delay: 61.825 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 194.03 Mbit/s
95th percentile per-packet one-way delay: 58.914 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 125.17 Mbit/s
95th percentile per-packet one-way delay: 65.195 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 16.74 Mbit/s
95th percentile per-packet one-way delay: 66.245 ms
Loss rate: 1.63%
Run 1: Report of PCC-Expr — Data Link

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**Throughput (Mbps)**

![Throughput Graph]

- **Flow 1 ingress (mean 194.14 Mbps)**
- **Flow 1 egress (mean 194.03 Mbps)**
- **Flow 2 ingress (mean 125.38 Mbps)**
- **Flow 2 egress (mean 125.17 Mbps)**
- **Flow 3 ingress (mean 16.85 Mbps)**
- **Flow 3 egress (mean 16.74 Mbps)**

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

![Per-packet Delay Graph]

- **Flow 1 (95th percentile 58.91 ms)**
- **Flow 2 (95th percentile 65.19 ms)**
- **Flow 3 (95th percentile 66.25 ms)**
Run 2: Statistics of PCC-Expr

Start at: 2018-07-06 07:37:52
End at: 2018-07-06 07:38:22
Local clock offset: -0.055 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-07-06 13:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.79 Mbit/s
95th percentile per-packet one-way delay: 341.516 ms
Loss rate: 7.39%
-- Flow 1:
Average throughput: 306.31 Mbit/s
95th percentile per-packet one-way delay: 341.702 ms
Loss rate: 7.43%
-- Flow 2:
Average throughput: 5.95 Mbit/s
95th percentile per-packet one-way delay: 224.764 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 231.227 ms
Loss rate: 7.14%
Run 2: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay over time for different data flows.](image-url)
Run 3: Statistics of PCC-Expr

Start at: 2018-07-06 08:01:53
End at: 2018-07-06 08:02:23
Local clock offset: -0.048 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-07-06 13:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 234.99 Mbit/s
95th percentile per-packet one-way delay: 68.162 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 164.49 Mbit/s
95th percentile per-packet one-way delay: 65.159 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 74.340 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 43.56 Mbit/s
95th percentile per-packet one-way delay: 83.983 ms
Loss rate: 2.65%
Run 3: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 165.02 Mbit/s)
Flow 1 egress (mean 164.49 Mbit/s)
Flow 2 ingress (mean 85.63 Mbit/s)
Flow 2 egress (mean 84.86 Mbit/s)
Flow 3 ingress (mean 44.28 Mbit/s)
Flow 3 egress (mean 43.56 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 65.16 ms)
Flow 2 (95th percentile 74.34 ms)
Flow 3 (95th percentile 83.98 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-07-06 08:25:55
End at: 2018-07-06 08:26:25
Local clock offset: -0.389 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-07-06 13:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 277.11 Mbit/s
95th percentile per-packet one-way delay: 213.351 ms
Loss rate: 5.37%
-- Flow 1:
Average throughput: 150.13 Mbit/s
95th percentile per-packet one-way delay: 210.110 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 138.98 Mbit/s
95th percentile per-packet one-way delay: 213.323 ms
Loss rate: 5.34%
-- Flow 3:
Average throughput: 106.10 Mbit/s
95th percentile per-packet one-way delay: 217.923 ms
Loss rate: 13.21%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-07-06 08:49:49
End at: 2018-07-06 08:50:19
Local clock offset: -0.091 ms
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2018-07-06 13:02:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.72 Mbit/s
95th percentile per-packet one-way delay: 82.463 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 202.60 Mbit/s
95th percentile per-packet one-way delay: 63.397 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 105.17 Mbit/s
95th percentile per-packet one-way delay: 96.646 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 25.35 Mbit/s
95th percentile per-packet one-way delay: 111.781 ms
Loss rate: 3.72%
Run 5: Report of PCC-Expr — Data Link

![Graph showing throughput and delay for flows 1, 2, and 3 over time. The y-axis represents throughput in Mbit/s, and the x-axis represents time in seconds. The graphs illustrate the performance metrics for each flow, detailing ingress and egress rates and their respective delays.]
Run 6: Statistics of PCC-Expr

Start at: 2018-07-06 09:13:26
End at: 2018-07-06 09:13:56
Local clock offset: 0.206 ms
Remote clock offset: -0.293 ms

# Below is generated by plot.py at 2018-07-06 13:06:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 307.06 Mbit/s
  95th percentile per-packet one-way delay: 73.556 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 190.12 Mbit/s
  95th percentile per-packet one-way delay: 72.774 ms
  Loss rate: 0.89%
-- Flow 2:
  Average throughput: 163.55 Mbit/s
  95th percentile per-packet one-way delay: 74.191 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 25.53 Mbit/s
  95th percentile per-packet one-way delay: 96.653 ms
  Loss rate: 3.69%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 191.17 Mbit/s)
- Flow 1 egress (mean 190.12 Mbit/s)
- Flow 2 ingress (mean 165.00 Mbit/s)
- Flow 2 egress (mean 163.55 Mbit/s)
- Flow 3 ingress (mean 26.24 Mbit/s)
- Flow 3 egress (mean 25.53 Mbit/s)

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

- Flow 1 (95th percentile 72.77 ms)
- Flow 2 (95th percentile 74.19 ms)
- Flow 3 (95th percentile 96.65 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-07-06 09:37:26
End at: 2018-07-06 09:37:56
Local clock offset: -0.45 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-07-06 13:07:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 301.95 Mbit/s
95th percentile per-packet one-way delay: 227.606 ms
Loss rate: 2.17%
-- Flow 1:
Average throughput: 219.60 Mbit/s
95th percentile per-packet one-way delay: 221.279 ms
Loss rate: 1.60%
-- Flow 2:
Average throughput: 121.43 Mbit/s
95th percentile per-packet one-way delay: 231.944 ms
Loss rate: 3.62%
-- Flow 3:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 232.708 ms
Loss rate: 4.75%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-07-06 10:01:24
End at: 2018-07-06 10:01:54
Local clock offset: -0.109 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-07-06 13:07:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 264.33 Mbit/s
  95th percentile per-packet one-way delay: 220.850 ms
  Loss rate: 4.11%
-- Flow 1:
  Average throughput: 123.05 Mbit/s
  95th percentile per-packet one-way delay: 208.939 ms
  Loss rate: 1.80%
-- Flow 2:
  Average throughput: 146.59 Mbit/s
  95th percentile per-packet one-way delay: 219.463 ms
  Loss rate: 4.53%
-- Flow 3:
  Average throughput: 134.40 Mbit/s
  95th percentile per-packet one-way delay: 227.063 ms
  Loss rate: 9.20%
Run 8: Report of PCC-Expr — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 124.90 Mbit/s)
- Blue solid line: Flow 1 egress (mean 123.05 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 152.77 Mbit/s)
- Green solid line: Flow 2 egress (mean 146.59 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 146.50 Mbit/s)
- Red solid line: Flow 3 egress (mean 134.40 Mbit/s)

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

- Blue line: Flow 1 (95th percentile 208.94 ms)
- Green line: Flow 2 (95th percentile 219.46 ms)
- Red line: Flow 3 (95th percentile 227.06 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-07-06 10:25:10
End at: 2018-07-06 10:25:40
Local clock offset: 0.249 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-07-06 13:10:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 272.73 Mbit/s
  95th percentile per-packet one-way delay: 60.161 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 179.98 Mbit/s
  95th percentile per-packet one-way delay: 59.598 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 119.46 Mbit/s
  95th percentile per-packet one-way delay: 62.816 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 41.17 Mbit/s
  95th percentile per-packet one-way delay: 56.487 ms
  Loss rate: 1.95%
Run 9: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mb/s)](image1)

- **Flow 1 ingress (mean 179.85 Mb/s)**
- **Flow 1 egress (mean 179.98 Mb/s)**
- **Flow 2 ingress (mean 119.66 Mb/s)**
- **Flow 2 egress (mean 119.46 Mb/s)**
- **Flow 3 ingress (mean 41.36 Mb/s)**
- **Flow 3 egress (mean 41.17 Mb/s)**

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

- **Flow 1 (95th percentile 59.60 ms)**
- **Flow 2 (95th percentile 62.82 ms)**
- **Flow 3 (95th percentile 56.49 ms)**

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Run 10: Statistics of PCC-Expr

Start at: 2018-07-06 10:48:54
End at: 2018-07-06 10:49:24
Local clock offset: -0.091 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.66 Mbit/s
95th percentile per-packet one-way delay: 53.776 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 165.33 Mbit/s
95th percentile per-packet one-way delay: 53.222 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 119.53 Mbit/s
95th percentile per-packet one-way delay: 54.468 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 54.974 ms
Loss rate: 1.93%
Run 10: Report of PCC-Expr — Data Link

![Graph showing data link performance over time with throughput and per-packet end-to-end delay metrics for Flow 1, Flow 2, and Flow 3.]
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-06 07:28:10
End at: 2018-07-06 07:28:40
Local clock offset: -0.06 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 130.57 Mbit/s
  95th percentile per-packet one-way delay: 50.809 ms
  Loss rate: 0.52%
  -- Flow 1:
  Average throughput: 66.10 Mbit/s
  95th percentile per-packet one-way delay: 50.851 ms
  Loss rate: 0.28%
  -- Flow 2:
  Average throughput: 65.73 Mbit/s
  95th percentile per-packet one-way delay: 50.299 ms
  Loss rate: 0.62%
  -- Flow 3:
  Average throughput: 57.34 Mbit/s
  95th percentile per-packet one-way delay: 50.598 ms
  Loss rate: 1.08%
Run 1: Report of QUIC Cubic — Data Link

![Graph of Throughput vs Time](image1)

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

Start at: 2018-07-06 07:52:04
End at: 2018-07-06 07:52:34
Local clock offset: -0.078 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.70 Mbit/s
95th percentile per-packet one-way delay: 50.774 ms
Loss rate: 0.56%

-- Flow 1:
Average throughput: 66.75 Mbit/s
95th percentile per-packet one-way delay: 50.630 ms
Loss rate: 0.38%

-- Flow 2:
Average throughput: 65.22 Mbit/s
95th percentile per-packet one-way delay: 50.837 ms
Loss rate: 0.62%

-- Flow 3:
Average throughput: 56.72 Mbit/s
95th percentile per-packet one-way delay: 50.315 ms
Loss rate: 1.03%
Run 2: Report of QUIC Cubic — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 65.79 Mb/s)
- Purple solid line: Flow 1 egress (mean 66.75 Mb/s)
- Green dashed line: Flow 2 ingress (mean 65.30 Mb/s)
- Grey solid line: Flow 2 egress (mean 65.22 Mb/s)
- Red dashed line: Flow 3 ingress (mean 56.72 Mb/s)
- Red solid line: Flow 3 egress (mean 56.72 Mb/s)

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

- Blue filled circles: Flow 1 (95th percentile 50.63 ms)
- Green filled circles: Flow 2 (95th percentile 50.84 ms)
- Red filled circles: Flow 3 (95th percentile 50.31 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-06 08:16:04
End at: 2018-07-06 08:16:34
Local clock offset: 0.344 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 124.92 Mbit/s
  95th percentile per-packet one-way delay: 51.100 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 66.50 Mbit/s
  95th percentile per-packet one-way delay: 51.153 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 65.81 Mbit/s
  95th percentile per-packet one-way delay: 50.230 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 44.79 Mbit/s
  95th percentile per-packet one-way delay: 50.569 ms
  Loss rate: 0.15%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 65.30 Mbit/s)
- Flow 1 egress (mean 66.50 Mbit/s)
- Flow 2 ingress (mean 65.89 Mbit/s)
- Flow 2 egress (mean 65.81 Mbit/s)
- Flow 3 ingress (mean 44.39 Mbit/s)
- Flow 3 egress (mean 44.79 Mbit/s)
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-06 08:40:07
End at: 2018-07-06 08:40:37
Local clock offset: -0.412 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.98 Mbit/s
95th percentile per-packet one-way delay: 50.546 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 50.476 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 60.84 Mbit/s
95th percentile per-packet one-way delay: 50.588 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 50.59 Mbit/s
95th percentile per-packet one-way delay: 49.924 ms
Loss rate: 1.22%
Run 4: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 63.94 Mbit/s)
- Flow 1 egress (mean 63.95 Mbit/s)
- Flow 2 ingress (mean 60.85 Mbit/s)
- Flow 2 egress (mean 60.84 Mbit/s)
- Flow 3 ingress (mean 50.71 Mbit/s)
- Flow 3 egress (mean 50.59 Mbit/s)

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

- Flow 1 (95th percentile 50.48 ms)
- Flow 2 (95th percentile 50.59 ms)
- Flow 3 (95th percentile 49.92 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-06 09:03:38
End at: 2018-07-06 09:04:08
Local clock offset: 0.231 ms
Remote clock offset: -0.273 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.84 Mbit/s
  95th percentile per-packet one-way delay: 51.217 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 70.98 Mbit/s
  95th percentile per-packet one-way delay: 51.105 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 1.71 Mbit/s
  95th percentile per-packet one-way delay: 51.142 ms
  Loss rate: 3.87%
-- Flow 3:
  Average throughput: 66.14 Mbit/s
  95th percentile per-packet one-way delay: 52.974 ms
  Loss rate: 1.17%
Run 5: Report of QUIC Cubic — Data Link

![Graphs showing throughput and packet delay over time for different flows.](image-url)
Run 6: Statistics of QUIC Cubic

Start at: 2018-07-06 09:27:38
End at: 2018-07-06 09:28:08
Local clock offset: -0.073 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.53 Mbit/s
95th percentile per-packet one-way delay: 50.941 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 72.89 Mbit/s
95th percentile per-packet one-way delay: 50.977 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 50.782 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: 50.372 ms
Loss rate: 1.08%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-06 09:51:31
End at: 2018-07-06 09:52:01
Local clock offset: -0.067 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.11 Mbit/s
95th percentile per-packet one-way delay: 50.772 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 69.65 Mbit/s
95th percentile per-packet one-way delay: 50.455 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 60.06 Mbit/s
95th percentile per-packet one-way delay: 50.794 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 62.65 Mbit/s
95th percentile per-packet one-way delay: 50.788 ms
Loss rate: 0.22%
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-06 10:15:25
End at: 2018-07-06 10:15:55
Local clock offset: -0.165 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.19 Mbit/s
95th percentile per-packet one-way delay: 50.865 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 68.19 Mbit/s
95th percentile per-packet one-way delay: 50.731 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 59.50 Mbit/s
95th percentile per-packet one-way delay: 50.938 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 62.92 Mbit/s
95th percentile per-packet one-way delay: 50.359 ms
Loss rate: 0.17%
Run 9: Statistics of QUIC Cubic

Start at: 2018-07-06 10:39:06  
End at: 2018-07-06 10:39:36  
Local clock offset: -0.142 ms  
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-07-06 13:10:23  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 126.11 Mbit/s
  95th percentile per-packet one-way delay: 50.769 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 68.39 Mbit/s
  95th percentile per-packet one-way delay: 50.292 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 61.80 Mbit/s
  95th percentile per-packet one-way delay: 50.668 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 50.80 Mbit/s
  95th percentile per-packet one-way delay: 51.361 ms
  Loss rate: 1.21%
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-06 11:02:57
End at: 2018-07-06 11:03:27
Local clock offset: -0.4 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.51 Mbit/s
  95th percentile per-packet one-way delay: 49.184 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 73.09 Mbit/s
  95th percentile per-packet one-way delay: 49.156 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 61.18 Mbit/s
  95th percentile per-packet one-way delay: 49.767 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 54.23 Mbit/s
  95th percentile per-packet one-way delay: 49.115 ms
  Loss rate: 1.52%
Run 10: Report of QUIC Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 73.10 Mbit/s)
- Flow 1 egress (mean 73.09 Mbit/s)
- Flow 2 ingress (mean 60.89 Mbit/s)
- Flow 2 egress (mean 61.18 Mbit/s)
- Flow 3 ingress (mean 54.51 Mbit/s)
- Flow 3 egress (mean 54.23 Mbit/s)
Run 1: Statistics of SCReAM

Start at: 2018-07-06 07:29:24
End at: 2018-07-06 07:29:54
Local clock offset: 0.271 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 51.073 ms
  Loss rate: 0.58%
--- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.733 ms
  Loss rate: 0.38%
--- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.121 ms
  Loss rate: 0.61%
--- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.023 ms
  Loss rate: 1.09%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-07-06 07:53:19
End at: 2018-07-06 07:53:49
Local clock offset: -0.057 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.833 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.867 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.726 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.723 ms
Loss rate: 1.09%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-07-06 08:17:18  
End at: 2018-07-06 08:17:48  
Local clock offset: 0.344 ms  
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-07-06 13:10:23  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 51.323 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.365 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.063 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.717 ms
  Loss rate: 1.09%
Run 3: Report of SCReAM — Data Link

![Graph of Throughput (Mbps)]

![Graph of Per-packet one-way delay (ms)]
Run 4: Statistics of SCReAM

Start at: 2018-07-06 08:41:21
End at: 2018-07-06 08:41:51
Local clock offset: 0.322 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.996 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.771 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.778 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.097 ms
  Loss rate: 1.09%
Run 5: Statistics of SCReAM

Start at: 2018-07-06 09:04:51
End at: 2018-07-06 09:05:21
Local clock offset: -0.158 ms
Remote clock offset: -0.286 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.011 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.275 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.973 ms
Loss rate: 1.09%
Run 5: Report of SCReAM — Data Link

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

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Run 6: Statistics of SCReAM

Start at: 2018-07-06 09:28:53
End at: 2018-07-06 09:29:23
Local clock offset: -0.069 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.963 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.885 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.975 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.969 ms
Loss rate: 1.09%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-07-06 09:52:46
End at: 2018-07-06 09:53:16
Local clock offset: 0.261 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.723 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.669 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.758 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.746 ms
Loss rate: 1.09%
Run 7: Report of SCReAM — Data Link

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

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

Start at: 2018-07-06 10:16:39
End at: 2018-07-06 10:17:09
Local clock offset: -0.472 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.500 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.031 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.402 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.574 ms
Loss rate: 1.09%
Run 8: Report of SCReAM — Data Link

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

- **Throughput (Mbps)**
  - Y-axis: 0.00 to 0.25
  - X-axis: 0 to 30 (seconds)
  - Lines represent:
    - Flow 1 ingress (mean 0.22 Mbps)
    - Flow 1 egress (mean 0.22 Mbps)
    - Flow 2 ingress (mean 0.22 Mbps)
    - Flow 2 egress (mean 0.22 Mbps)
    - Flow 3 ingress (mean 0.22 Mbps)
    - Flow 3 egress (mean 0.22 Mbps)

- **Packet Loss (Delay in ms)**
  - Y-axis: 47.0 to 67.5
  - X-axis: 0 to 30 (seconds)
  - Symbols indicate:
    - Flow 1 (95th percentile 50.03 ms)
    - Flow 2 (95th percentile 49.40 ms)
    - Flow 3 (95th percentile 50.57 ms)
Run 9: Statistics of SCReAM

Start at: 2018-07-06 10:40:21
End at: 2018-07-06 10:40:51
Local clock offset: -0.144 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.952 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.956 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.864 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 1.09%
Run 9: Report of SCReAM — Data Link

Below are two graphs showing the throughput and per-packet one-way delay for different flows during a 30-second period. The graphs are labeled with the mean throughput and 95th percentile delay for each flow.
Run 10: Statistics of SCReAM

Start at: 2018-07-06 11:04:12
End at: 2018-07-06 11:04:42
Local clock offset: -0.038 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.194 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.644 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.639 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.282 ms
Loss rate: 1.08%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-07-06 07:15:34
End at: 2018-07-06 07:16:04
Local clock offset: -0.049 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.05 Mbit/s
95th percentile per-packet one-way delay: 51.358 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 51.364 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 51.312 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 51.367 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 7.37 Mbit/s)  Flow 1 egress (mean 7.37 Mbit/s)
Flow 2 ingress (mean 5.02 Mbit/s)  Flow 2 egress (mean 5.03 Mbit/s)
Flow 3 ingress (mean 7.07 Mbit/s)  Flow 3 egress (mean 7.14 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 51.36 ms)  Flow 2 (95th percentile 51.31 ms)  Flow 3 (95th percentile 51.37 ms)
Run 2: Statistics of Sprout

Start at: 2018-07-06 07:39:23
End at: 2018-07-06 07:39:53
Local clock offset: -0.064 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.86 Mbit/s
  95th percentile per-packet one-way delay: 50.947 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 6.93 Mbit/s
  95th percentile per-packet one-way delay: 50.912 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 7.05 Mbit/s
  95th percentile per-packet one-way delay: 50.942 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 6.86 Mbit/s
  95th percentile per-packet one-way delay: 51.029 ms
  Loss rate: 0.95%
Run 2: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 6.93 Mbit/s)
Flow 1 egress (mean 6.93 Mbit/s)
Flow 2 ingress (mean 7.06 Mbit/s)
Flow 2 egress (mean 7.05 Mbit/s)
Flow 3 ingress (mean 6.86 Mbit/s)
Flow 3 egress (mean 6.86 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 50.91 ms)
Flow 2 (95th percentile 50.94 ms)
Flow 3 (95th percentile 51.03 ms)
Run 3: Statistics of Sprout

Start at: 2018-07-06 08:03:20
End at: 2018-07-06 08:03:50
Local clock offset: -0.062 ms
Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.46 Mbit/s
95th percentile per-packet one-way delay: 51.016 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 51.006 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 50.985 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 51.152 ms
Loss rate: 0.17%
Run 3: Report of Sprout — Data Link

Throughput (MBit/s)

Time (s)

Flow 1 ingress (mean 7.38 MBit/s)
Flow 1 egress (mean 7.37 MBit/s)
Flow 2 ingress (mean 7.17 MBit/s)
Flow 2 egress (mean 7.18 MBit/s)
Flow 3 ingress (mean 7.05 MBit/s)
Flow 3 egress (mean 7.09 MBit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 51.01 ms)
Flow 2 (95th percentile 50.98 ms)
Flow 3 (95th percentile 51.15 ms)
Run 4: Statistics of Sprout

Start at: 2018-07-06 08:27:24
End at: 2018-07-06 08:27:54
Local clock offset: 0.376 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.18 Mbit/s
95th percentile per-packet one-way delay: 51.364 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 51.441 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 51.247 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 6.20 Mbit/s
95th percentile per-packet one-way delay: 51.245 ms
Loss rate: 1.29%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-07-06 08:51:21
End at: 2018-07-06 08:51:51
Local clock offset: -0.156 ms
Remote clock offset: -0.234 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.67 Mbit/s
95th percentile per-packet one-way delay: 50.953 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 6.88 Mbit/s
95th percentile per-packet one-way delay: 50.853 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 50.992 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 51.029 ms
Loss rate: 1.15%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-07-06 09:14:59
End at: 2018-07-06 09:15:29
Local clock offset: -0.12 ms
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 51.484 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 51.362 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 51.486 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 6.32 Mbit/s
95th percentile per-packet one-way delay: 51.601 ms
Loss rate: 0.55%
Run 6: Report of Sprout — Data Link

<table>
<thead>
<tr>
<th>Throughput (Mbit/s)</th>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 1 ingress (mean 4.83 Mbit/s)</td>
<td>0 10 20 30</td>
</tr>
<tr>
<td>Flow 1 egress (mean 4.84 Mbit/s)</td>
<td></td>
</tr>
<tr>
<td>Flow 2 ingress (mean 7.41 Mbit/s)</td>
<td></td>
</tr>
<tr>
<td>Flow 2 egress (mean 7.42 Mbit/s)</td>
<td></td>
</tr>
<tr>
<td>Flow 3 ingress (mean 6.31 Mbit/s)</td>
<td></td>
</tr>
<tr>
<td>Flow 3 egress (mean 6.32 Mbit/s)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Per packet one way delay (ms)</th>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 1 (95th percentile 51.36 ms)</td>
<td>0 10 20 30</td>
</tr>
<tr>
<td>Flow 2 (95th percentile 51.49 ms)</td>
<td></td>
</tr>
<tr>
<td>Flow 3 (95th percentile 51.60 ms)</td>
<td></td>
</tr>
</tbody>
</table>
Run 7: Statistics of Sprout

Start at: 2018-07-06 09:38:57
End at: 2018-07-06 09:39:27
Local clock offset: -0.443 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.85 Mbit/s
95th percentile per-packet one-way delay: 50.933 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 50.963 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 7.04 Mbit/s
95th percentile per-packet one-way delay: 50.928 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.55 Mbit/s
95th percentile per-packet one-way delay: 50.807 ms
Loss rate: 1.12%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-07-06 10:02:52
End at: 2018-07-06 10:03:22
Local clock offset: -0.498 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.77 Mbit/s
95th percentile per-packet one-way delay: 50.920 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 4.56 Mbit/s
95th percentile per-packet one-way delay: 50.848 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 6.91 Mbit/s
95th percentile per-packet one-way delay: 50.976 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 4.99 Mbit/s
95th percentile per-packet one-way delay: 50.916 ms
Loss rate: 1.18%
Run 8: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 4.55 Mbit/s)
Flow 1 egress (mean 4.56 Mbit/s)
Flow 2 ingress (mean 6.91 Mbit/s)
Flow 2 egress (mean 6.91 Mbit/s)
Flow 3 ingress (mean 4.97 Mbit/s)
Flow 3 egress (mean 4.99 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 50.85 ms)
Flow 2 (95th percentile 50.98 ms)
Flow 3 (95th percentile 50.92 ms)
Run 9: Statistics of Sprout

Start at: 2018-07-06 10:26:41
End at: 2018-07-06 10:27:11
Local clock offset: -0.119 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.79 Mbit/s
95th percentile per-packet one-way delay: 51.385 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: 51.432 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 51.532 ms
Loss rate: 1.13%
Run 9: Report of Sprout — Data Link

Throughput (Mbit/s):
- Flow 1 ingress (mean 6.53 Mbit/s)
- Flow 1 egress (mean 6.53 Mbit/s)
- Flow 2 ingress (mean 6.53 Mbit/s)
- Flow 2 egress (mean 6.55 Mbit/s)
- Flow 3 ingress (mean 5.92 Mbit/s)
- Flow 3 egress (mean 5.81 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 51.43 ms)
- Flow 2 (95th percentile 51.26 ms)
- Flow 3 (95th percentile 51.53 ms)
Run 10: Statistics of Sprout

Start at: 2018-07-06 10:50:24
End at: 2018-07-06 10:50:54
Local clock offset: -0.13 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-07-06 13:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.56 Mbit/s
95th percentile per-packet one-way delay: 51.305 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 51.320 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 51.285 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 4.82 Mbit/s
95th percentile per-packet one-way delay: 51.281 ms
Loss rate: 1.67%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-06 07:19:32
End at: 2018-07-06 07:20:02
Local clock offset: 0.295 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2018-07-06 13:17:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 251.69 Mbit/s
95th percentile per-packet one-way delay: 53.776 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 191.57 Mbit/s
95th percentile per-packet one-way delay: 52.293 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: 59.179 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 81.89 Mbit/s
95th percentile per-packet one-way delay: 55.413 ms
Loss rate: 1.67%
Run 1: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 191.40 Mbit/s)**
- **Flow 1 egress (mean 191.57 Mbit/s)**
- **Flow 2 ingress (mean 50.01 Mbit/s)**
- **Flow 2 egress (mean 49.75 Mbit/s)**
- **Flow 3 ingress (mean 82.43 Mbit/s)**
- **Flow 3 egress (mean 81.89 Mbit/s)**
Run 2: Statistics of TaoVA-100x

Start at: 2018-07-06 07:43:22
End at: 2018-07-06 07:43:52
Local clock offset: -0.055 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-07-06 13:17:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 233.72 Mbit/s
95th percentile per-packet one-way delay: 51.732 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 115.58 Mbit/s
95th percentile per-packet one-way delay: 50.751 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 183.24 Mbit/s
95th percentile per-packet one-way delay: 51.193 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.05 Mbit/s
95th percentile per-packet one-way delay: 61.026 ms
Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 116.06 Mbit/s)
- Flow 1 egress (mean 115.58 Mbit/s)
- Flow 2 ingress (mean 183.44 Mbit/s)
- Flow 2 egress (mean 183.24 Mbit/s)
- Flow 3 ingress (mean 126.39 Mbit/s)
- Flow 3 egress (mean 126.05 Mbit/s)
Run 3: Statistics of TaoVA-100x

Start at: 2018-07-06 08:07:16
End at: 2018-07-06 08:07:46
Local clock offset: -0.051 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-07-06 13:17:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 221.73 Mbit/s
  95th percentile per-packet one-way delay: 53.405 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 114.47 Mbit/s
  95th percentile per-packet one-way delay: 51.664 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 113.81 Mbit/s
  95th percentile per-packet one-way delay: 52.987 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 127.31 Mbit/s
  95th percentile per-packet one-way delay: 57.598 ms
  Loss rate: 2.16%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-07-06 08:31:23
End at: 2018-07-06 08:31:53
Local clock offset: -0.005 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-06 13:17:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 250.78 Mbit/s
  95th percentile per-packet one-way delay: 52.992 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 140.73 Mbit/s
  95th percentile per-packet one-way delay: 51.743 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 208.82 Mbit/s
  95th percentile per-packet one-way delay: 55.435 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 125.69 Mbit/s
  95th percentile per-packet one-way delay: 57.743 ms
  Loss rate: 0.00%
Run 5: Statistics of TaoVA-100x

Start at: 2018-07-06 08:55:19
End at: 2018-07-06 08:55:49
Local clock offset: 0.236 ms
Remote clock offset: -0.275 ms

# Below is generated by plot.py at 2018-07-06 13:17:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.98 Mbit/s
95th percentile per-packet one-way delay: 53.880 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 151.58 Mbit/s
95th percentile per-packet one-way delay: 52.838 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 59.93 Mbit/s
95th percentile per-packet one-way delay: 54.956 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 93.27 Mbit/s
95th percentile per-packet one-way delay: 56.520 ms
Loss rate: 0.33%
Run 5: Report of TaoVA-100x — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 151.12 Mbps)
- Flow 1 egress (mean 151.58 Mbps)
- Flow 2 ingress (mean 59.96 Mbps)
- Flow 2 egress (mean 59.93 Mbps)
- Flow 3 ingress (mean 92.22 Mbps)
- Flow 3 egress (mean 93.27 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 52.84 ms)
- Flow 2 (95th percentile 54.96 ms)
- Flow 3 (95th percentile 56.52 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-07-06 09:18:55
End at: 2018-07-06 09:19:25
Local clock offset: 0.261 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2018-07-06 13:17:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 246.45 Mbit/s
  95th percentile per-packet one-way delay: 53.883 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 158.65 Mbit/s
  95th percentile per-packet one-way delay: 53.417 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 128.16 Mbit/s
  95th percentile per-packet one-way delay: 54.353 ms
  Loss rate: 0.90%
-- Flow 3:
  Average throughput: 13.95 Mbit/s
  95th percentile per-packet one-way delay: 61.925 ms
  Loss rate: 1.83%
Run 6: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps)

- Flow 1 ingress (mean 158.67 Mbps)
- Flow 1 egress (mean 158.65 Mbps)
- Flow 2 ingress (mean 128.66 Mbps)
- Flow 2 egress (mean 128.16 Mbps)
- Flow 3 ingress (mean 14.07 Mbps)
- Flow 3 egress (mean 13.95 Mbps)

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

- Flow 1 (95th percentile 53.42 ms)
- Flow 2 (95th percentile 54.35 ms)
- Flow 3 (95th percentile 61.92 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-07-06 09:42:53
End at: 2018-07-06 09:43:23
Local clock offset: 0.288 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2018-07-06 13:17:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 207.51 Mbit/s
95th percentile per-packet one-way delay: 62.823 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 70.67 Mbit/s
95th percentile per-packet one-way delay: 53.711 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 199.85 Mbit/s
95th percentile per-packet one-way delay: 64.475 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 68.734 ms
Loss rate: 1.05%
Run 7: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 70.47 Mbps)
- Flow 1 egress (mean 70.67 Mbps)
- Flow 2 ingress (mean 200.03 Mbps)
- Flow 2 egress (mean 199.65 Mbps)
- Flow 3 ingress (mean 11.77 Mbps)
- Flow 3 egress (mean 11.77 Mbps)

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

- Flow 1 (95th percentile 53.71 ms)
- Flow 2 (95th percentile 64.47 ms)
- Flow 3 (95th percentile 68.73 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-07-06 10:06:47
End at: 2018-07-06 10:07:17
Local clock offset: 0.247 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-07-06 13:17:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 233.81 Mbit/s
  95th percentile per-packet one-way delay: 55.352 ms
  Loss rate: 0.31%
  -- Flow 1:
  Average throughput: 155.05 Mbit/s
  95th percentile per-packet one-way delay: 54.289 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 72.34 Mbit/s
  95th percentile per-packet one-way delay: 56.191 ms
  Loss rate: 0.32%
  -- Flow 3:
  Average throughput: 100.06 Mbit/s
  95th percentile per-packet one-way delay: 57.630 ms
  Loss rate: 1.67%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-07-06 10:30:34
End at: 2018-07-06 10:31:04
Local clock offset: -0.503 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-07-06 13:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 197.82 Mbit/s
95th percentile per-packet one-way delay: 52.523 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 131.78 Mbit/s
95th percentile per-packet one-way delay: 50.526 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 61.368 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 102.75 Mbit/s
95th percentile per-packet one-way delay: 57.683 ms
Loss rate: 0.89%
Run 9: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 131.48 Mbit/s)
- Flow 1 egress (mean 131.78 Mbit/s)
- Flow 2 ingress (mean 48.36 Mbit/s)
- Flow 2 egress (mean 48.31 Mbit/s)
- Flow 3 ingress (mean 102.81 Mbit/s)
- Flow 3 egress (mean 102.75 Mbit/s)
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-06 10:54:22
End at: 2018-07-06 10:54:52
Local clock offset: -0.133 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 199.84 Mbit/s
95th percentile per-packet one-way delay: 51.782 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 101.99 Mbit/s
95th percentile per-packet one-way delay: 51.149 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 92.41 Mbit/s
95th percentile per-packet one-way delay: 52.564 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 117.00 Mbit/s
95th percentile per-packet one-way delay: 53.129 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 101.75 Mbit/s), egress (mean 101.99 Mbit/s)
- Flow 2 ingress (mean 92.84 Mbit/s), egress (mean 92.41 Mbit/s)
- Flow 3 ingress (mean 117.13 Mbit/s), egress (mean 117.00 Mbit/s)

![Graph of per packet end-to-end delay for different flows.](Image)

- Flow 1 (95th percentile 51.15 ms)
- Flow 2 (95th percentile 52.56 ms)
- Flow 3 (95th percentile 53.13 ms)

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Run 1: Statistics of TCP Vegas

Start at: 2018-07-06 07:33:42
End at: 2018-07-06 07:34:12
Local clock offset: -0.077 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.77 Mbit/s
95th percentile per-packet one-way delay: 81.715 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 167.40 Mbit/s
95th percentile per-packet one-way delay: 76.148 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 98.56 Mbit/s
95th percentile per-packet one-way delay: 91.215 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 148.17 Mbit/s
95th percentile per-packet one-way delay: 66.910 ms
Loss rate: 1.17%
Run 1: Report of TCP Vegas — Data Link

![Graph of network data](image-url)
Run 2: Statistics of TCP Vegas

Start at: 2018-07-06 07:57:48  
End at: 2018-07-06 07:58:18  
Local clock offset: -0.071 ms  
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-07-06 13:22:42  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 215.31 Mbit/s  
95th percentile per-packet one-way delay: 72.332 ms  
Loss rate: 0.58% 
-- Flow 1:  
Average throughput: 82.53 Mbit/s  
95th percentile per-packet one-way delay: 71.270 ms  
Loss rate: 0.32% 
-- Flow 2:  
Average throughput: 141.46 Mbit/s  
95th percentile per-packet one-way delay: 72.376 ms  
Loss rate: 0.54% 
-- Flow 3:  
Average throughput: 117.13 Mbit/s  
95th percentile per-packet one-way delay: 73.775 ms  
Loss rate: 1.21%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-07-06 08:21:48
End at: 2018-07-06 08:22:18
Local clock offset: -0.035 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.86 Mbit/s
95th percentile per-packet one-way delay: 61.994 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 217.21 Mbit/s
95th percentile per-packet one-way delay: 62.062 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 18.20 Mbit/s
95th percentile per-packet one-way delay: 58.914 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 5.14 Mbit/s
95th percentile per-packet one-way delay: 59.807 ms
Loss rate: 2.34%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-07-06 08:45:38
End at: 2018-07-06 08:46:08
Local clock offset: -0.095 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 285.02 Mbit/s
95th percentile per-packet one-way delay: 75.545 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 213.23 Mbit/s
95th percentile per-packet one-way delay: 75.975 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 74.227 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 111.83 Mbit/s
95th percentile per-packet one-way delay: 75.448 ms
Loss rate: 1.24%
Run 4: Report of TCP Vegas — Data Link

[Graphs showing throughput and per-packet one-way delay over time]
Run 5: Statistics of TCP Vegas

Start at: 2018-07-06 09:09:22
End at: 2018-07-06 09:09:52
Local clock offset: -0.188 ms
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 240.40 Mbit/s
95th percentile per-packet one-way delay: 63.618 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 226.37 Mbit/s
95th percentile per-packet one-way delay: 63.676 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 12.45 Mbit/s
95th percentile per-packet one-way delay: 61.955 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 61.905 ms
Loss rate: 1.13%
Run 5: Report of TCP Vegas — Data Link

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![Graph showing throughput over time for different flows. The legend indicates:
- Flow 1 ingress (mean 226.49 Mbit/s)
- Flow 1 egress (mean 226.37 Mbit/s)
- Flow 2 ingress (mean 12.47 Mbit/s)
- Flow 2 egress (mean 12.45 Mbit/s)
- Flow 3 ingress (mean 17.31 Mbit/s)
- Flow 3 egress (mean 17.49 Mbit/s)

![Graph showing per-packet one-way delay over time for different flows. The legend indicates:
- Flow 1 (95th percentile 63.68 ms)
- Flow 2 (95th percentile 61.95 ms)
- Flow 3 (95th percentile 61.91 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-07-06 09:33:21
End at: 2018-07-06 09:33:51
Local clock offset: -0.09 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-07-06 13:22:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.37 Mbit/s
95th percentile per-packet one-way delay: 54.678 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 178.96 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 10.81 Mbit/s
95th percentile per-packet one-way delay: 55.926 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 124.85 Mbit/s
95th percentile per-packet one-way delay: 56.622 ms
Loss rate: 1.11%
Run 6: Report of TCP Vegas — Data Link

![Graph of throughput over time for different flows]

- Flow 1 ingress (mean 178.95 Mbit/s)
- Flow 1 egress (mean 178.96 Mbit/s)
- Flow 2 ingress (mean 10.07 Mbit/s)
- Flow 2 egress (mean 10.81 Mbit/s)
- Flow 3 ingress (mean 124.96 Mbit/s)
- Flow 3 egress (mean 124.85 Mbit/s)

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

- Flow 1 (95th percentile 53.76 ms)
- Flow 2 (95th percentile 55.93 ms)
- Flow 3 (95th percentile 56.62 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-07-06 09:57:16
End at: 2018-07-06 09:57:46
Local clock offset: -0.127 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-07-06 13:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.53 Mbit/s
95th percentile per-packet one-way delay: 63.315 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 215.98 Mbit/s
95th percentile per-packet one-way delay: 63.571 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 65.66 Mbit/s
95th percentile per-packet one-way delay: 61.958 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 21.22 Mbit/s
95th percentile per-packet one-way delay: 57.927 ms
Loss rate: 1.32%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-07-06 10:21:07
End at: 2018-07-06 10:21:37
Local clock offset: -0.11 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-07-06 13:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.26 Mbit/s
95th percentile per-packet one-way delay: 79.431 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 70.77 Mbit/s
95th percentile per-packet one-way delay: 75.609 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 169.60 Mbit/s
95th percentile per-packet one-way delay: 81.239 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 75.11 Mbit/s
95th percentile per-packet one-way delay: 63.220 ms
Loss rate: 1.17%
Run 8: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 70.75 Mbit/s)
- Flow 1 egress (mean 70.77 Mbit/s)
- Flow 2 ingress (mean 169.13 Mbit/s)
- Flow 2 egress (mean 169.60 Mbit/s)
- Flow 3 ingress (mean 75.22 Mbit/s)
- Flow 3 egress (mean 75.11 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-07-06 10:44:53
End at: 2018-07-06 10:45:23
Local clock offset: -0.099 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-07-06 13:25:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 119.83 Mbit/s
  95th percentile per-packet one-way delay: 55.088 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 80.02 Mbit/s
  95th percentile per-packet one-way delay: 56.181 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 11.57 Mbit/s
  95th percentile per-packet one-way delay: 51.191 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 97.64 Mbit/s
  95th percentile per-packet one-way delay: 54.567 ms
  Loss rate: 1.04%
Run 9: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time with different flow rates and measurements.](image)

- Flow 1 ingress (mean 79.09 Mbit/s)
- Flow 1 egress (mean 80.02 Mbit/s)
- Flow 2 ingress (mean 11.63 Mbit/s)
- Flow 2 egress (mean 11.57 Mbit/s)
- Flow 3 ingress (mean 97.66 Mbit/s)
- Flow 3 egress (mean 97.64 Mbit/s)

Per packet one way delay (ms):

- Flow 1 (95th percentile 56.18 ms)
- Flow 2 (95th percentile 51.19 ms)
- Flow 3 (95th percentile 54.57 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-07-06 11:08:36  
End at: 2018-07-06 11:09:06  
Local clock offset: -0.411 ms  
Remote clock offset: -0.377 ms

# Below is generated by plot.py at 2018-07-06 13:26:23  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 278.47 Mbit/s  
95th percentile per-packet one-way delay: 71.869 ms  
Loss rate: 0.31% 
-- Flow 1:  
Average throughput: 148.22 Mbit/s  
95th percentile per-packet one-way delay: 68.260 ms  
Loss rate: 0.34% 
-- Flow 2:  
Average throughput: 193.96 Mbit/s  
95th percentile per-packet one-way delay: 73.294 ms  
Loss rate: 0.25% 
-- Flow 3:  
Average throughput: 4.14 Mbit/s  
95th percentile per-packet one-way delay: 69.929 ms  
Loss rate: 2.36%
Run 10: Report of TCP Vegas — Data Link

![Graph of TCP Vegas data link performance.](image-url)

**Throughput (Mbps):**
- Flow 1 ingress (mean 148.23 Mbps)
- Flow 1 egress (mean 148.22 Mbps)
- Flow 2 ingress (mean 193.46 Mbps)
- Flow 2 egress (mean 193.96 Mbps)
- Flow 3 ingress (mean 4.20 Mbps)
- Flow 3 egress (mean 4.14 Mbps)

**Per-packet round-trip delay (ms):**
- Flow 1 (95th percentile 68.26 ms)
- Flow 2 (95th percentile 73.29 ms)
- Flow 3 (95th percentile 69.93 ms)
Run 1: Statistics of Verus

Start at: 2018-07-06 07:30:32
End at: 2018-07-06 07:31:02
Local clock offset: -0.062 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-06 13:26:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.75 Mbit/s
95th percentile per-packet one-way delay: 177.375 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 183.15 Mbit/s
95th percentile per-packet one-way delay: 165.822 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 88.39 Mbit/s
95th percentile per-packet one-way delay: 177.858 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 74.91 Mbit/s
95th percentile per-packet one-way delay: 201.244 ms
Loss rate: 1.27%
Run 1: Report of Verus — Data Link

![Graph 1: Throughput vs Time]

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

Legend:
- Flow 1 ingress (mean 185.27 Mbit/s)
- Flow 1 egress (mean 183.15 Mbit/s)
- Flow 2 ingress (mean 83.74 Mbit/s)
- Flow 2 egress (mean 88.39 Mbit/s)
- Flow 3 ingress (mean 67.07 Mbit/s)
- Flow 3 egress (mean 74.91 Mbit/s)

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Run 2: Statistics of Verus

Start at: 2018-07-06 07:54:26
End at: 2018-07-06 07:54:56
Local clock offset: -0.116 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-07-06 13:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.68 Mbit/s
95th percentile per-packet one-way delay: 182.726 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 181.43 Mbit/s
95th percentile per-packet one-way delay: 186.283 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 167.83 Mbit/s
95th percentile per-packet one-way delay: 170.985 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 47.72 Mbit/s
95th percentile per-packet one-way delay: 193.144 ms
Loss rate: 0.20%
Run 2: Report of Verus — Data Link

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**Throughput (Mbit/s)**

- **Flow 1 Ingress (mean 182.22 Mbit/s)**
- **Flow 1 Egress (mean 181.43 Mbit/s)**
- **Flow 2 Ingress (mean 168.27 Mbit/s)**
- **Flow 2 Egress (mean 167.83 Mbit/s)**
- **Flow 3 Ingress (mean 47.47 Mbit/s)**
- **Flow 3 Egress (mean 47.72 Mbit/s)**

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

- **Flow 1 (95th percentile 186.28 ms)**
- **Flow 2 (95th percentile 170.99 ms)**
- **Flow 3 (95th percentile 193.14 ms)**
Run 3: Statistics of Verus

Start at: 2018-07-06 08:18:26
End at: 2018-07-06 08:18:56
Local clock offset: -0.051 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-07-06 13:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.81 Mbit/s
95th percentile per-packet one-way delay: 179.589 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 205.96 Mbit/s
95th percentile per-packet one-way delay: 173.967 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 113.83 Mbit/s
95th percentile per-packet one-way delay: 183.358 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 49.35 Mbit/s
95th percentile per-packet one-way delay: 196.788 ms
Loss rate: 2.67%
Run 3: Report of Verus — Data Link

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

Flow 1 ingress (mean 207.29 Mbit/s)  Flow 1 egress (mean 205.96 Mbit/s)
Flow 2 ingress (mean 114.58 Mbit/s)  Flow 2 egress (mean 113.83 Mbit/s)
Flow 3 ingress (mean 50.07 Mbit/s)   Flow 3 egress (mean 49.35 Mbit/s)

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

Flow 1 (95th percentile 173.97 ms)  Flow 2 (95th percentile 183.36 ms)  Flow 3 (95th percentile 196.79 ms)
Run 4: Statistics of Verus

Start at: 2018-07-06 08:42:29
End at: 2018-07-06 08:42:59
Local clock offset: -0.085 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-07-06 13:27:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.35 Mbit/s
95th percentile per-packet one-way delay: 212.094 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 178.28 Mbit/s
95th percentile per-packet one-way delay: 183.672 ms
Loss rate: 1.30%
-- Flow 2:
Average throughput: 79.01 Mbit/s
95th percentile per-packet one-way delay: 189.048 ms
Loss rate: 3.12%
-- Flow 3:
Average throughput: 126.73 Mbit/s
95th percentile per-packet one-way delay: 227.879 ms
Loss rate: 9.73%
Run 4: Report of Verus — Data Link

![Graphs showing network metrics over time](image-url)
Run 5: Statistics of Verus

Start at: 2018-07-06 09:05:59
End at: 2018-07-06 09:06:29
Local clock offset: -0.182 ms
Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2018-07-06 13:28:36
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 208.458 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 193.63 Mbit/s
95th percentile per-packet one-way delay: 200.940 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 83.01 Mbit/s
95th percentile per-packet one-way delay: 209.813 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 116.85 Mbit/s
95th percentile per-packet one-way delay: 223.741 ms
Loss rate: 0.68%
Run 6: Statistics of Verus

Start at: 2018-07-06 09:30:01
End at: 2018-07-06 09:30:31
Local clock offset: -0.05 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-07-06 13:29:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.73 Mbit/s
95th percentile per-packet one-way delay: 205.505 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 203.60 Mbit/s
95th percentile per-packet one-way delay: 178.588 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 88.76 Mbit/s
95th percentile per-packet one-way delay: 207.299 ms
Loss rate: 2.69%
-- Flow 3:
Average throughput: 82.68 Mbit/s
95th percentile per-packet one-way delay: 227.743 ms
Loss rate: 4.96%
Run 6: Report of Verus — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]
Run 7: Statistics of Verus

Start at: 2018-07-06 09:53:54
End at: 2018-07-06 09:54:24
Local clock offset: 0.278 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-06 13:30:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.51 Mbit/s
95th percentile per-packet one-way delay: 192.338 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 180.23 Mbit/s
95th percentile per-packet one-way delay: 190.499 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 136.87 Mbit/s
95th percentile per-packet one-way delay: 191.841 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 37.68 Mbit/s
95th percentile per-packet one-way delay: 209.160 ms
Loss rate: 2.57%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 182.27 Mbit/s) vs. Flow 1 egress (mean 180.23 Mbit/s)
- Flow 2 ingress (mean 138.54 Mbit/s) vs. Flow 2 egress (mean 136.87 Mbit/s)
- Flow 3 ingress (mean 38.08 Mbit/s) vs. Flow 3 egress (mean 37.66 Mbit/s)

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

- Flow 1 (95th percentile 190.50 ms)
- Flow 2 (95th percentile 191.84 ms)
- Flow 3 (95th percentile 209.16 ms)
Run 8: Statistics of Verus

Start at: 2018-07-06 10:17:47
End at: 2018-07-06 10:18:17
Local clock offset: -0.133 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-07-06 13:31:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 288.07 Mbit/s
  95th percentile per-packet one-way delay: 155.563 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 205.92 Mbit/s
  95th percentile per-packet one-way delay: 144.716 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 95.00 Mbit/s
  95th percentile per-packet one-way delay: 169.296 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 58.46 Mbit/s
  95th percentile per-packet one-way delay: 166.632 ms
  Loss rate: 1.93%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 206.14 Mbit/s)
- Flow 1 egress (mean 205.92 Mbit/s)
- Flow 2 ingress (mean 95.04 Mbit/s)
- Flow 2 egress (mean 95.00 Mbit/s)
- Flow 3 ingress (mean 58.70 Mbit/s)
- Flow 3 egress (mean 58.46 Mbit/s)

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

- Flow 1 (95th percentile 144.72 ms)
- Flow 2 (95th percentile 169.30 ms)
- Flow 3 (95th percentile 166.63 ms)
Run 9: Statistics of Verus

Start at: 2018-07-06 10:41:29
End at: 2018-07-06 10:41:59
Local clock offset: -0.092 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-07-06 13:31:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.07 Mbit/s
95th percentile per-packet one-way delay: 174.459 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 188.79 Mbit/s
95th percentile per-packet one-way delay: 173.605 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 83.02 Mbit/s
95th percentile per-packet one-way delay: 175.504 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 94.82 Mbit/s
95th percentile per-packet one-way delay: 173.309 ms
Loss rate: 1.42%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-07-06 11:05:20
End at: 2018-07-06 11:05:50
Local clock offset: -0.407 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2018-07-06 13:32:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.15 Mbit/s
95th percentile per-packet one-way delay: 214.795 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 171.35 Mbit/s
95th percentile per-packet one-way delay: 203.149 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 145.21 Mbit/s
95th percentile per-packet one-way delay: 221.704 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 62.24 Mbit/s
95th percentile per-packet one-way delay: 230.934 ms
Loss rate: 2.38%
Run 10: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-06 07:25:17
End at: 2018-07-06 07:25:47
Local clock offset: -0.078 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-07-06 13:36:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.85 Mbit/s
95th percentile per-packet one-way delay: 51.382 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 320.57 Mbit/s
95th percentile per-packet one-way delay: 51.461 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 258.53 Mbit/s
95th percentile per-packet one-way delay: 51.107 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 50.387 ms
Loss rate: 2.42%
Run 1: Report of PCC-Vivace — Data Link

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

![Graph 2: Per-packet round-trip delay (ms)](image2)
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-06 07:49:13
End at: 2018-07-06 07:49:43
Local clock offset: -0.489 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-07-06 13:36:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.23 Mbit/s
95th percentile per-packet one-way delay: 70.538 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 286.76 Mbit/s
95th percentile per-packet one-way delay: 50.687 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 213.13 Mbit/s
95th percentile per-packet one-way delay: 117.553 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 97.68 Mbit/s
95th percentile per-packet one-way delay: 50.877 ms
Loss rate: 1.48%
Run 2: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 286.24 Mbps) — Flow 1 egress (mean 286.76 Mbps)
Flow 2 ingress (mean 213.32 Mbps) — Flow 2 egress (mean 213.33 Mbps)
Flow 3 ingress (mean 98.12 Mbps) — Flow 3 egress (mean 97.60 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 50.69 ms) — Flow 2 (95th percentile 117.55 ms) — Flow 3 (95th percentile 50.88 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-06 08:13:08
End at: 2018-07-06 08:13:38
Local clock offset: -0.387 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-07-06 13:38:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.88 Mbit/s
95th percentile per-packet one-way delay: 50.985 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 309.81 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 272.14 Mbit/s
95th percentile per-packet one-way delay: 51.809 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 172.11 Mbit/s
95th percentile per-packet one-way delay: 51.088 ms
Loss rate: 1.41%
Run 3: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 309.33 Mbit/s)
- Flow 1 egress (mean 309.81 Mbit/s)
- Flow 2 ingress (mean 271.77 Mbit/s)
- Flow 2 egress (mean 272.14 Mbit/s)
- Flow 3 ingress (mean 172.76 Mbit/s)
- Flow 3 egress (mean 172.11 Mbit/s)

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

- Flow 1 (95th percentile: 50.74 ms)
- Flow 2 (95th percentile: 51.83 ms)
- Flow 3 (95th percentile: 51.09 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-06 08:37:15
End at: 2018-07-06 08:37:45
Local clock offset: -0.023 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-07-06 13:38:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.66 Mbit/s
95th percentile per-packet one-way delay: 50.831 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 278.78 Mbit/s
95th percentile per-packet one-way delay: 50.909 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 255.07 Mbit/s
95th percentile per-packet one-way delay: 50.691 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 147.94 Mbit/s
95th percentile per-packet one-way delay: 50.428 ms
Loss rate: 1.01%
Run 4: Report of PCC-Vivace — Data Link

**Throughput (Mbps):**
- Flow 1 ingress (mean 278.67 Mbps)
- Flow 1 egress (mean 278.78 Mbps)
- Flow 2 ingress (mean 235.46 Mbps)
- Flow 2 egress (mean 255.07 Mbps)
- Flow 3 ingress (mean 147.90 Mbps)
- Flow 3 egress (mean 147.94 Mbps)

**Per-packet one way delay (ms):**
- Flow 1 (95th percentile 50.91 ms)
- Flow 2 (95th percentile 50.49 ms)
- Flow 3 (95th percentile 50.43 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-06 09:00:51
End at: 2018-07-06 09:01:21
Local clock offset: -0.144 ms
Remote clock offset: -0.321 ms

# Below is generated by plot.py at 2018-07-06 13:38:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.19 Mbit/s
95th percentile per-packet one-way delay: 51.429 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 212.77 Mbit/s
95th percentile per-packet one-way delay: 51.573 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 214.10 Mbit/s
95th percentile per-packet one-way delay: 51.181 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 150.87 Mbit/s
95th percentile per-packet one-way delay: 51.808 ms
Loss rate: 1.20%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing network traffic and delay](image)

**Throughput (Mbit/s):**
- Flow 1 ingress (mean 212.54 Mbit/s)
- Flow 1 egress (mean 212.77 Mbit/s)
- Flow 2 ingress (mean 214.25 Mbit/s)
- Flow 2 egress (mean 214.10 Mbit/s)
- Flow 3 ingress (mean 151.33 Mbit/s)
- Flow 3 egress (mean 150.87 Mbit/s)

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

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 51.57 ms)
- Flow 2 (95th percentile 51.18 ms)
- Flow 3 (95th percentile 51.81 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-07-06 09:24:47  
End at: 2018-07-06 09:25:17  
Local clock offset: -0.095 ms  
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-07-06 13:39:06  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 478.98 Mbit/s  
95th percentile per-packet one-way delay: 51.406 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 293.95 Mbit/s  
95th percentile per-packet one-way delay: 51.496 ms  
Loss rate: 0.29%  
-- Flow 2:  
Average throughput: 254.21 Mbit/s  
95th percentile per-packet one-way delay: 51.395 ms  
Loss rate: 0.39%  
-- Flow 3:  
Average throughput: 49.58 Mbit/s  
95th percentile per-packet one-way delay: 51.063 ms  
Loss rate: 1.33%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-06 09:48:40
End at: 2018-07-06 09:49:10
Local clock offset: -0.082 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2018-07-06 13:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 489.96 Mbit/s
95th percentile per-packet one-way delay: 50.921 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 297.89 Mbit/s
95th percentile per-packet one-way delay: 50.619 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 207.03 Mbit/s
95th percentile per-packet one-way delay: 50.081 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 166.63 Mbit/s
95th percentile per-packet one-way delay: 51.490 ms
Loss rate: 1.32%
Run 7: Report of PCC-Vivace — Data Link

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

Throughput: 0 to 400 Mbps

Time (s): 0 to 30

Flow 1 ing (mean 297.88 Mbps) - Light blue
Flow 1 egress (mean 297.89 Mbps) - Dark blue
Flow 2 ing (mean 297.16 Mbps) - Green
Flow 2 egress (mean 207.03 Mbps) - Dark green
Flow 3 ing (mean 167.15 Mbps) - Red
Flow 3 egress (mean 166.63 Mbps) - Dark red

Packet one way delay: 0 to 140 ms

Time (s): 0 to 30

Flow 1 (95th percentile 50.62 ms) - Light blue
Flow 2 (95th percentile 50.08 ms) - Dark blue
Flow 3 (95th percentile 51.49 ms) - Red

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Run 8: Statistics of PCC-Vivace

Start at: 2018-07-06 10:12:33
End at: 2018-07-06 10:13:03
Local clock offset: -0.129 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-07-06 13:39:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 475.78 Mbit/s
  95th percentile per-packet one-way delay: 50.701 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 289.32 Mbit/s
  95th percentile per-packet one-way delay: 51.028 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 213.44 Mbit/s
  95th percentile per-packet one-way delay: 49.876 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 136.74 Mbit/s
  95th percentile per-packet one-way delay: 49.469 ms
  Loss rate: 1.04%

Run 8: Report of PCC-Vivace — Data Link

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

Flow 1 ingress (mean 289.08 Mbit/s), Flow 1 egress (mean 289.32 Mbit/s), Flow 2 ingress (mean 213.59 Mbit/s), Flow 2 egress (mean 213.44 Mbit/s), Flow 3 ingress (mean 136.79 Mbit/s), Flow 3 egress (mean 136.74 Mbit/s).

Per packet one way delay (ms):

- Flow 1 (95th percentile 51.03 ms)
- Flow 2 (95th percentile 49.88 ms)
- Flow 3 (95th percentile 49.47 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-07-06 10:36:12
End at: 2018-07-06 10:36:42
Local clock offset: 0.223 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-07-06 13:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.73 Mbit/s
95th percentile per-packet one-way delay: 51.972 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 271.03 Mbit/s
95th percentile per-packet one-way delay: 51.799 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 259.29 Mbit/s
95th percentile per-packet one-way delay: 51.805 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 163.40 Mbit/s
95th percentile per-packet one-way delay: 52.305 ms
Loss rate: 1.22%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-06 11:00:10
End at: 2018-07-06 11:00:40
Local clock offset: -0.098 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-07-06 13:40:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.18 Mbit/s
95th percentile per-packet one-way delay: 63.447 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 214.97 Mbit/s
95th percentile per-packet one-way delay: 64.811 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 205.48 Mbit/s
95th percentile per-packet one-way delay: 51.373 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 182.52 Mbit/s
95th percentile per-packet one-way delay: 51.155 ms
Loss rate: 1.43%
Run 10: Report of PCC-Vivace — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-07-06 07:24:09
End at: 2018-07-06 07:24:39
Local clock offset: -0.062 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 50.941 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 50.728 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 50.932 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 51.044 ms
Loss rate: 1.78%
Run 1: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.72 Mbit/s)
- Flow 1 egress (mean 1.72 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.31 Mbit/s)
- Flow 3 ingress (mean 0.54 Mbit/s)
- Flow 3 egress (mean 0.53 Mbit/s)
Run 2: Statistics of WebRTC media

Start at: 2018-07-06 07:48:05
End at: 2018-07-06 07:48:35
Local clock offset: -0.075 ms
Remote clock offset: 0.092 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.92 Mbit/s
  95th percentile per-packet one-way delay: 50.918 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 2.09 Mbit/s
  95th percentile per-packet one-way delay: 50.964 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 50.067 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 0.53 Mbit/s
  95th percentile per-packet one-way delay: 63.246 ms
  Loss rate: 0.52%
Run 2: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 2.09 Mbit/s)**
- **Flow 1 egress (mean 2.09 Mbit/s)**
- **Flow 2 ingress (mean 1.32 Mbit/s)**
- **Flow 2 egress (mean 1.32 Mbit/s)**
- **Flow 3 ingress (mean 0.53 Mbit/s)**
- **Flow 3 egress (mean 0.53 Mbit/s)**

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

- **Flow 1 (95th percentile 50.96 ms)**
- **Flow 2 (95th percentile 50.07 ms)**
- **Flow 3 (95th percentile 61.25 ms)**
Run 3: Statistics of WebRTC media

Start at: 2018-07-06 08:12:00
End at: 2018-07-06 08:12:30
Local clock offset: -0.051 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 50.916 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 50.822 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 50.719 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 51.039 ms
Loss rate: 1.60%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-07-06 08:36:07
End at: 2018-07-06 08:36:37
Local clock offset: -0.007 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.88 Mbit/s
  95th percentile per-packet one-way delay: 50.691 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 2.02 Mbit/s
  95th percentile per-packet one-way delay: 49.857 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 1.33 Mbit/s
  95th percentile per-packet one-way delay: 50.891 ms
  Loss rate: 0.74%
-- Flow 3:
  Average throughput: 0.55 Mbit/s
  95th percentile per-packet one-way delay: 49.922 ms
  Loss rate: 1.11%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-07-06 08:59:43
End at: 2018-07-06 09:00:13
Local clock offset: -0.152 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.86 Mbit/s
  95th percentile per-packet one-way delay: 50.886 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 2.02 Mbit/s
  95th percentile per-packet one-way delay: 50.533 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 50.767 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 51.056 ms
  Loss rate: 1.15%
Run 5: Report of WebRTC media — Data Link

![Data Link Throughput and Delay Graphs](image)
Run 6: Statistics of WebRTC media

Start at: 2018-07-06 09:23:39
End at: 2018-07-06 09:24:09
Local clock offset: -0.101 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.84 Mbit/s
  95th percentile per-packet one-way delay: 51.090 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 2.02 Mbit/s
  95th percentile per-packet one-way delay: 51.112 ms
  Loss rate: 0.49%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 51.063 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 0.52 Mbit/s
  95th percentile per-packet one-way delay: 51.114 ms
  Loss rate: 1.83%
Run 6: Report of WebRTC media — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 2.02 Mbps)
  - Flow 1 egress (mean 2.02 Mbps)
  - Flow 2 ingress (mean 1.31 Mbps)
  - Flow 2 egress (mean 1.31 Mbps)
  - Flow 3 ingress (mean 0.53 Mbps)
  - Flow 3 egress (mean 0.52 Mbps)

- Packet delay (ms):
  - Flow 1 (95th percentile 51.11 ms)
  - Flow 2 (95th percentile 51.06 ms)
  - Flow 3 (95th percentile 51.11 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-07-06 09:47:31
End at: 2018-07-06 09:48:01
Local clock offset: -0.093 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 50.929 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 50.809 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 49.861 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 51.063 ms
Loss rate: 1.53%
Run 7: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 2.04 Mbps)
  - Flow 1 egress (mean 2.03 Mbps)
  - Flow 2 ingress (mean 1.30 Mbps)
  - Flow 2 egress (mean 1.30 Mbps)
  - Flow 3 ingress (mean 0.35 Mbps)
  - Flow 3 egress (mean 0.54 Mbps)

- **Packet Loss Delay (ms):**
  - Flow 1 (95th percentile 50.81 ms)
  - Flow 2 (95th percentile 49.86 ms)
  - Flow 3 (95th percentile 51.06 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-07-06 10:11:25
End at: 2018-07-06 10:11:55
Local clock offset: -0.173 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 50.866 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 50.911 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 50.813 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 50.420 ms
Loss rate: 0.98%
Run 8: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 2.03 Mbps)  Flow 1 egress (mean 2.03 Mbps)
Flow 2 ingress (mean 1.31 Mbps)  Flow 2 egress (mean 1.31 Mbps)
Flow 3 ingress (mean 0.55 Mbps)  Flow 3 egress (mean 0.54 Mbps)

Per-packet one-way delay (ms)

0 5 10 15 20 25 30

Flow 1 (95th percentile 50.91 ms)  Flow 2 (95th percentile 50.81 ms)  Flow 3 (95th percentile 50.42 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-07-06 10:35:04
End at: 2018-07-06 10:35:34
Local clock offset: -0.147 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 50.934 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 51.014 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 50.238 ms
Loss rate: 1.65%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-07-06 10:59:02
End at: 2018-07-06 10:59:32
Local clock offset: -0.107 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2018-07-06 13:40:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 51.176 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 52.543 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 51.049 ms
Loss rate: 1.57%
Run 10: Report of WebRTC media — Data Link

![Graph of Throughput](image1)

- Flow 1 ingress (mean 2.01 Mbit/s)
- Flow 1 egress (mean 2.01 Mbit/s)
- Flow 2 ingress (mean 1.33 Mbit/s)
- Flow 2 egress (mean 1.33 Mbit/s)
- Flow 3 ingress (mean 0.56 Mbit/s)
- Flow 3 egress (mean 0.55 Mbit/s)

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

- Flow 1 (95th percentile 50.98 ms)
- Flow 2 (95th percentile 52.54 ms)
- Flow 3 (95th percentile 51.05 ms)