Pantheon Report

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

Git summary:
branch: master @ 0088822873ea99180f63545a341ef069f40efe59
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1b7be5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1af0958fa0d66d18b623c091a55f8c872b498e1e
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ebc978f3c9f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3b6b2
third_party/sprout @ c838669682f0c19f5baf92afc9a5964a064d84c1f
third_party/verus @ d4b477ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2af86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Tokyo to GCE Iowa, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

Average throughput (Mbit/s) vs. 95th percentile one-way delay (ms)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>173.85</td>
<td>171.89</td>
<td>164.35</td>
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<tr>
<td>Copp</td>
<td>10</td>
<td>129.14</td>
<td>124.45</td>
<td>99.66</td>
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<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>141.56</td>
<td>116.40</td>
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<td>FillIP</td>
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<td>701.11</td>
<td>616.22</td>
<td>549.55</td>
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<td>Indigo</td>
<td>10</td>
<td>209.81</td>
<td>206.31</td>
<td>165.60</td>
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<td>LEDBAT</td>
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<td>21.19</td>
<td>13.62</td>
<td>6.72</td>
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<td>PCC-Allegro</td>
<td>10</td>
<td>525.90</td>
<td>26.43</td>
<td>29.98</td>
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<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>236.79</td>
<td>161.25</td>
<td>96.34</td>
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<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>45.61</td>
<td>25.00</td>
<td>20.43</td>
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<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>0.22</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>0.91</td>
<td>0.84</td>
<td>0.88</td>
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<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>135.92</td>
<td>151.28</td>
<td>152.77</td>
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<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>96.88</td>
<td>94.37</td>
<td>93.78</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>207.23</td>
<td>144.68</td>
<td>111.32</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>307.52</td>
<td>212.27</td>
<td>159.72</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-05-25 14:56:05
End at: 2018-05-25 14:56:35
Local clock offset: 0.002 ms
Remote clock offset: 0.33 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 346.50 Mbit/s
  95th percentile per-packet one-way delay: 68.782 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 178.67 Mbit/s
  95th percentile per-packet one-way delay: 68.282 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 171.42 Mbit/s
  95th percentile per-packet one-way delay: 69.616 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 163.47 Mbit/s
  95th percentile per-packet one-way delay: 68.711 ms
  Loss rate: 1.43%
Run 1: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image_url)
Run 2: Statistics of TCP BBR

End at: 2018-05-25 15:19:54
Local clock offset: 0.061 ms
Remote clock offset: 0.188 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.22 Mbit/s
95th percentile per-packet one-way delay: 78.318 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 168.67 Mbit/s
95th percentile per-packet one-way delay: 76.535 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 180.23 Mbit/s
95th percentile per-packet one-way delay: 79.200 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 160.01 Mbit/s
95th percentile per-packet one-way delay: 79.976 ms
Loss rate: 1.51%
Run 2: Report of TCP BBR — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 168.76 Mbps)
- Flow 1 egress (mean 168.67 Mbps)
- Flow 2 ingress (mean 180.26 Mbps)
- Flow 2 egress (mean 180.23 Mbps)
- Flow 3 ingress (mean 160.39 Mbps)
- Flow 3 egress (mean 160.01 Mbps)

Packet delay (ms):

- Flow 1 (95th percentile 76.53 ms)
- Flow 2 (95th percentile 79.20 ms)
- Flow 3 (95th percentile 79.98 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-05-25 15:42:45
End at: 2018-05-25 15:43:15
Local clock offset: 0.096 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 344.89 Mbit/s
  95th percentile per-packet one-way delay: 75.314 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 175.65 Mbit/s
  95th percentile per-packet one-way delay: 72.879 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 174.61 Mbit/s
  95th percentile per-packet one-way delay: 76.953 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 161.96 Mbit/s
  95th percentile per-packet one-way delay: 76.455 ms
  Loss rate: 1.52%
Run 3: Report of TCP BBR — Data Link

![Throughput Graph](chart1.png)

- Flow 1 ingress (mean 175.18 Mbit/s)
- Flow 1 egress (mean 175.65 Mbit/s)
- Flow 2 ingress (mean 174.62 Mbit/s)
- Flow 2 egress (mean 174.61 Mbit/s)
- Flow 3 ingress (mean 162.21 Mbit/s)
- Flow 3 egress (mean 161.96 Mbit/s)

![Per-packet Delay Graph](chart2.png)

- Flow 1 (95th percentile 72.88 ms)
- Flow 2 (95th percentile 76.95 ms)
- Flow 3 (95th percentile 76.45 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-05-25 16:06:05
End at: 2018-05-25 16:06:35
Local clock offset: 0.085 ms
Remote clock offset: -0.216 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.26 Mbit/s
95th percentile per-packet one-way delay: 70.016 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 175.44 Mbit/s
95th percentile per-packet one-way delay: 70.016 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 172.59 Mbit/s
95th percentile per-packet one-way delay: 69.750 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 161.59 Mbit/s
95th percentile per-packet one-way delay: 70.534 ms
Loss rate: 1.37%
Run 4: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 175.45 Mbps)  Flow 1 egress (mean 175.44 Mbps)
Flow 2 ingress (mean 172.65 Mbps)  Flow 2 egress (mean 172.59 Mbps)
Flow 3 ingress (mean 161.77 Mbps)  Flow 3 egress (mean 161.59 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 70.02 ms)  Flow 2 (95th percentile 69.75 ms)  Flow 3 (95th percentile 70.53 ms)
Run 5: Statistics of TCP BBR

End at: 2018-05-25 16:29:56
Local clock offset: -0.055 ms
Remote clock offset: 0.263 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.28 Mbit/s
95th percentile per-packet one-way delay: 71.783 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 176.59 Mbit/s
95th percentile per-packet one-way delay: 71.693 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 166.44 Mbit/s
95th percentile per-packet one-way delay: 71.169 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 158.00 Mbit/s
95th percentile per-packet one-way delay: 72.766 ms
Loss rate: 1.52%
Run 5: Report of TCP BBR — Data Link

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

- **Flow 1** (ingress mean 176.60 Mbps) and (egress mean 176.59 Mbps)
- **Flow 2** (ingress mean 166.52 Mbps) and (egress mean 166.44 Mbps)
- **Flow 3** (ingress mean 158.69 Mbps) and (egress mean 158.00 Mbps)

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

- **Flow 1** (95th percentile 71.69 ms)
- **Flow 2** (95th percentile 71.17 ms)
- **Flow 3** (95th percentile 72.77 ms)
Run 6: Statistics of TCP BBR

End at: 2018-05-25 16:53:18
Local clock offset: -0.017 ms
Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.46 Mbit/s
95th percentile per-packet one-way delay: 71.718 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 168.75 Mbit/s
95th percentile per-packet one-way delay: 70.374 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 176.44 Mbit/s
95th percentile per-packet one-way delay: 72.162 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 165.08 Mbit/s
95th percentile per-packet one-way delay: 72.792 ms
Loss rate: 1.43%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-05-25 17:15:57
End at: 2018-05-25 17:16:27
Local clock offset: -0.082 ms
Remote clock offset: 0.521 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.78 Mbit/s
95th percentile per-packet one-way delay: 68.956 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 177.85 Mbit/s
95th percentile per-packet one-way delay: 69.340 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 169.47 Mbit/s
95th percentile per-packet one-way delay: 67.063 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 161.96 Mbit/s
95th percentile per-packet one-way delay: 69.809 ms
Loss rate: 1.40%
Run 7: Report of TCP BBR — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 177.11 Mbps)
  - Flow 1 egress (mean 177.85 Mbps)
  - Flow 2 ingress (mean 169.55 Mbps)
  - Flow 2 egress (mean 169.47 Mbps)
  - Flow 3 ingress (mean 162.17 Mbps)
  - Flow 3 egress (mean 161.96 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 69.34 ms)
  - Flow 2 (95th percentile 67.06 ms)
  - Flow 3 (95th percentile 69.81 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-05-25 17:39:10
End at: 2018-05-25 17:39:40
Local clock offset: -0.076 ms
Remote clock offset: 0.387 ms

# Below is generated by plot.py at 2018-05-25 18:52:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 340.94 Mbit/s
95th percentile per-packet one-way delay: 73.461 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 173.59 Mbit/s
95th percentile per-packet one-way delay: 72.288 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 166.99 Mbit/s
95th percentile per-packet one-way delay: 73.357 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 171.66 Mbit/s
95th percentile per-packet one-way delay: 74.541 ms
Loss rate: 1.43%
Run 8: Report of TCP BBR — Data Link

The graphs depict the throughput and per-packet one-way delay over time. The throughput graphs show the mean data rate for each flow, while the per-packet delay graphs illustrate the 95th percentile delay for each flow.
Run 9: Statistics of TCP BBR

Start at: 2018-05-25 18:02:49
End at: 2018-05-25 18:03:19
Local clock offset: -0.104 ms
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-05-25 18:58:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 345.17 Mbit/s
  95th percentile per-packet one-way delay: 70.398 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 174.62 Mbit/s
  95th percentile per-packet one-way delay: 68.118 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 172.94 Mbit/s
  95th percentile per-packet one-way delay: 70.438 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 168.77 Mbit/s
  95th percentile per-packet one-way delay: 73.238 ms
  Loss rate: 1.42%
Run 9: Report of TCP BBR — Data Link

![Graphs showing network performance metrics for different flows over time.](image-url)
Run 10: Statistics of TCP BBR

Start at: 2018-05-25 18:26:01
End at: 2018-05-25 18:26:31
Local clock offset: -0.086 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-05-25 18:58:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.29 Mbit/s
95th percentile per-packet one-way delay: 71.432 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 168.66 Mbit/s
95th percentile per-packet one-way delay: 69.324 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 167.76 Mbit/s
95th percentile per-packet one-way delay: 71.507 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 171.02 Mbit/s
95th percentile per-packet one-way delay: 72.880 ms
Loss rate: 1.44%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-05-25 14:52:50
Local clock offset: 0.016 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-05-25 19:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 225.04 Mbit/s
  95th percentile per-packet one-way delay: 73.818 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 109.04 Mbit/s
  95th percentile per-packet one-way delay: 72.780 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 120.02 Mbit/s
  95th percentile per-packet one-way delay: 77.135 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 110.02 Mbit/s
  95th percentile per-packet one-way delay: 70.271 ms
  Loss rate: 0.01%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-05-25 15:16:10
End at: 2018-05-25 15:16:40
Local clock offset: 0.049 ms
Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-05-25 19:00:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 206.30 Mbit/s
  95th percentile per-packet one-way delay: 75.497 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 103.89 Mbit/s
  95th percentile per-packet one-way delay: 73.786 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 112.01 Mbit/s
  95th percentile per-packet one-way delay: 77.338 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 85.41 Mbit/s
  95th percentile per-packet one-way delay: 76.441 ms
  Loss rate: 0.02%
Run 2: Report of Copa — Data Link

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

- **Flow 1** (ingress mean 104.11 Mbit/s, egress mean 103.89 Mbit/s)
- **Flow 2** (ingress mean 112.06 Mbit/s, egress mean 112.01 Mbit/s)
- **Flow 3** (ingress mean 84.19 Mbit/s, egress mean 85.41 Mbit/s)

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Run 3: Statistics of Copa

End at: 2018-05-25 15:40:00
Local clock offset: 0.088 ms
Remote clock offset: 0.344 ms

# Below is generated by plot.py at 2018-05-25 19:02:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.20 Mbit/s
95th percentile per-packet one-way delay: 73.578 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 158.56 Mbit/s
95th percentile per-packet one-way delay: 69.634 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 137.22 Mbit/s
95th percentile per-packet one-way delay: 80.871 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 93.36 Mbit/s
95th percentile per-packet one-way delay: 69.991 ms
Loss rate: 0.88%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-05-25 16:02:45
End at: 2018-05-25 16:03:15
Local clock offset: 0.111 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-05-25 19:02:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.58 Mbit/s
95th percentile per-packet one-way delay: 67.228 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 154.01 Mbit/s
95th percentile per-packet one-way delay: 67.264 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 89.26 Mbit/s
95th percentile per-packet one-way delay: 65.122 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 113.11 Mbit/s
95th percentile per-packet one-way delay: 70.236 ms
Loss rate: 1.04%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-05-25 16:26:19
End at: 2018-05-25 16:26:49
Local clock offset: -0.027 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-05-25 19:02:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.27 Mbit/s
95th percentile per-packet one-way delay: 70.300 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 108.79 Mbit/s
95th percentile per-packet one-way delay: 69.199 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 120.25 Mbit/s
95th percentile per-packet one-way delay: 75.810 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 75.82 Mbit/s
95th percentile per-packet one-way delay: 65.092 ms
Loss rate: 1.42%
Run 5: Report of Copa — Data Link

[Diagrams showing network throughput and packet delay over time for different flows]

Legend:
- Flow 1 ingress (mean 108.50 Mbit/s) - Flow 1 egress (mean 108.79 Mbit/s)
- Flow 2 ingress (mean 119.99 Mbit/s) - Flow 2 egress (mean 120.25 Mbit/s)
- Flow 3 ingress (mean 75.92 Mbit/s) - Flow 3 egress (mean 75.82 Mbit/s)

[Diagrams showing packet delay over time for different flows]

Legend:
- Flow 1 (95th percentile 69.20 ms)
- Flow 2 (95th percentile 75.81 ms)
- Flow 3 (95th percentile 65.09 ms)
Run 6: Statistics of Copa

Local clock offset: -0.018 ms
Remote clock offset: 0.319 ms

# Below is generated by plot.py at 2018-05-25 19:02:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.87 Mbit/s
95th percentile per-packet one-way delay: 68.210 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 133.46 Mbit/s
95th percentile per-packet one-way delay: 65.554 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 173.24 Mbit/s
95th percentile per-packet one-way delay: 70.163 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 73.61 Mbit/s
95th percentile per-packet one-way delay: 76.992 ms
Loss rate: 3.62%
Run 6: Report of Copa — Data Link

![Graph of network data](image)

**Throughput (Mbps):**
- Flow 1 ingress (mean 133.36 Mbps)
- Flow 1 egress (mean 133.46 Mbps)
- Flow 2 ingress (mean 172.62 Mbps)
- Flow 2 egress (mean 173.24 Mbps)
- Flow 3 ingress (mean 75.39 Mbps)
- Flow 3 egress (mean 73.61 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 65.55 ms)
- Flow 2 (95th percentile 70.16 ms)
- Flow 3 (95th percentile 76.99 ms)
Run 7: Statistics of Copa

Start at: 2018-05-25 17:12:37
Local clock offset: -0.021 ms
Remote clock offset: 0.232 ms

# Below is generated by plot.py at 2018-05-25 19:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.28 Mbit/s
95th percentile per-packet one-way delay: 72.031 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 138.09 Mbit/s
95th percentile per-packet one-way delay: 68.424 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 162.53 Mbit/s
95th percentile per-packet one-way delay: 77.324 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 91.62 Mbit/s
95th percentile per-packet one-way delay: 72.996 ms
Loss rate: 2.33%
Run 7: Report of Copa — Data Link

[Diagram showing throughput and per-packet one-way delay over time for different flows with mean throughputs given]
Run 8: Statistics of Copa

Start at: 2018-05-25 17:35:56
End at: 2018-05-25 17:36:26
Local clock offset: -0.057 ms
Remote clock offset: 0.344 ms

# Below is generated by plot.py at 2018-05-25 19:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 225.32 Mbit/s
95th percentile per-packet one-way delay: 70.688 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 141.21 Mbit/s
95th percentile per-packet one-way delay: 72.531 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 85.83 Mbit/s
95th percentile per-packet one-way delay: 63.861 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 82.23 Mbit/s
95th percentile per-packet one-way delay: 66.426 ms
Loss rate: 1.06%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-05-25 17:59:34
End at: 2018-05-25 18:00:04
Local clock offset: ~0.05 ms
Remote clock offset: 0.15 ms

# Below is generated by plot.py at 2018-05-25 19:09:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 224.11 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 99.37 Mbit/s
95th percentile per-packet one-way delay: 64.139 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 110.88 Mbit/s
95th percentile per-packet one-way delay: 75.720 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 154.79 Mbit/s
95th percentile per-packet one-way delay: 72.271 ms
Loss rate: 1.46%
Run 9: Report of Copa — Data Link

![Data Link Graph]

- Flow 1 ingress (mean 99.45 Mbit/s)
- Flow 1 egress (mean 99.37 Mbit/s)
- Flow 2 ingress (mean 110.08 Mbit/s)
- Flow 2 egress (mean 110.88 Mbit/s)
- Flow 3 ingress (mean 155.10 Mbit/s)
- Flow 3 egress (mean 154.79 Mbit/s)

![Per Packet One Way Delay Graph]

- Flow 1 (95th percentile 64.14 ms)
- Flow 2 (95th percentile 75.72 ms)
- Flow 3 (95th percentile 72.27 ms)
Run 10: Statistics of Copa

End at: 2018-05-25 18:23:10
Local clock offset: -0.05 ms
Remote clock offset: -0.273 ms

# Below is generated by plot.py at 2018-05-25 19:10:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 271.56 Mbit/s
95th percentile per-packet one-way delay: 76.434 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 145.02 Mbit/s
95th percentile per-packet one-way delay: 77.287 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 133.21 Mbit/s
95th percentile per-packet one-way delay: 78.465 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 116.61 Mbit/s
95th percentile per-packet one-way delay: 69.993 ms
Loss rate: 1.38%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-05-25 14:50:17  
End at: 2018-05-25 14:50:47  
Local clock offset: 0.016 ms  
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-05-25 19:10:43  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 241.82 Mbit/s  
  95th percentile per-packet one-way delay: 72.772 ms  
  Loss rate: 0.87%  
-- Flow 1:  
  Average throughput: 182.29 Mbit/s  
  95th percentile per-packet one-way delay: 72.862 ms  
  Loss rate: 0.45%  
-- Flow 2:  
  Average throughput: 38.99 Mbit/s  
  95th percentile per-packet one-way delay: 72.504 ms  
  Loss rate: 2.96%  
-- Flow 3:  
  Average throughput: 102.78 Mbit/s  
  95th percentile per-packet one-way delay: 72.452 ms  
  Loss rate: 1.51%
Run 1: Report of TCP Cubic — Data Link

![Graph of TCP Cubic Data Link]

- Flow 1 ingress (mean 182.35 Mbit/s)
- Flow 1 egress (mean 182.29 Mbit/s)
- Flow 2 ingress (mean 39.92 Mbit/s)
- Flow 2 egress (mean 38.99 Mbit/s)
- Flow 3 ingress (mean 103.03 Mbit/s)
- Flow 3 egress (mean 102.78 Mbit/s)

![Graph of Packet loss rate]

- Flow 1 (95th percentile 72.86 ms)
- Flow 2 (95th percentile 72.50 ms)
- Flow 3 (95th percentile 72.45 ms)
Run 2: Statistics of TCP Cubic

End at: 2018-05-25 15:14:04
Local clock offset: 0.06 ms
Remote clock offset: -0.326 ms

# Below is generated by plot.py at 2018-05-25 19:10:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.45 Mbit/s
95th percentile per-packet one-way delay: 72.825 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 181.76 Mbit/s
95th percentile per-packet one-way delay: 72.770 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 168.10 Mbit/s
95th percentile per-packet one-way delay: 72.956 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 3.15 Mbit/s
95th percentile per-packet one-way delay: 69.151 ms
Loss rate: 5.56%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-05-25 15:36:54
Local clock offset: 0.023 ms
Remote clock offset: -0.231 ms

# Below is generated by plot.py at 2018-05-25 19:10:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.01 Mbit/s
95th percentile per-packet one-way delay: 73.610 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 178.83 Mbit/s
95th percentile per-packet one-way delay: 73.987 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 175.45 Mbit/s
95th percentile per-packet one-way delay: 72.843 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 67.871 ms
Loss rate: 5.36%
Run 3: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 178.44 Mbit/s)
- Flow 1 egress (mean 178.83 Mbit/s)
- Flow 2 ingress (mean 174.86 Mbit/s)
- Flow 2 egress (mean 175.45 Mbit/s)
- Flow 3 ingress (mean 1.45 Mbit/s)
- Flow 3 egress (mean 3.31 Mbit/s)
Run 4: Statistics of TCP Cubic

Start at: 2018-05-25 16:00:12
End at: 2018-05-25 16:00:42
Local clock offset: 0.119 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-05-25 19:10:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 245.48 Mbit/s
  95th percentile per-packet one-way delay: 74.522 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 126.76 Mbit/s
  95th percentile per-packet one-way delay: 73.967 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 177.02 Mbit/s
  95th percentile per-packet one-way delay: 75.184 ms
  Loss rate: 0.74%
-- Flow 3:
  Average throughput: 3.13 Mbit/s
  95th percentile per-packet one-way delay: 71.146 ms
  Loss rate: 5.54%
Run 4: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per-packet Round-trip delay vs Time](image2)
Run 5: Statistics of TCP Cubic

Local clock offset: 0.007 ms
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-05-25 19:11:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 278.53 Mbit/s
95th percentile per-packet one-way delay: 72.192 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 126.93 Mbit/s
95th percentile per-packet one-way delay: 71.346 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 143.97 Mbit/s
95th percentile per-packet one-way delay: 71.175 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 170.24 Mbit/s
95th percentile per-packet one-way delay: 74.361 ms
Loss rate: 1.49%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Local clock offset: -0.033 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-05-25 19:13:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.05 Mbit/s
95th percentile per-packet one-way delay: 70.528 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 140.41 Mbit/s
95th percentile per-packet one-way delay: 70.969 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 108.65 Mbit/s
95th percentile per-packet one-way delay: 68.789 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 68.880 ms
Loss rate: 1.47%
Run 6: Report of TCP Cubic — Data Link

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

Legend:
- **Flow 1 ingress (mean 140.65 Mbit/s)**
- **Flow 1 egress (mean 140.41 Mbit/s)**
- **Flow 2 ingress (mean 108.88 Mbit/s)**
- **Flow 2 egress (mean 108.05 Mbit/s)**
- **Flow 3 ingress (mean 95.90 Mbit/s)**
- **Flow 3 egress (mean 95.71 Mbit/s)**

- **Flow 1 (95th percentile 70.97 ms)**
- **Flow 2 (95th percentile 68.79 ms)**
- **Flow 3 (95th percentile 68.88 ms)**
Run 7: Statistics of TCP Cubic

Start at: 2018-05-25 17:10:05
End at: 2018-05-25 17:10:35
Local clock offset: -0.026 ms
Remote clock offset: 0.295 ms

# Below is generated by plot.py at 2018-05-25 19:13:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 213.85 Mbit/s
95th percentile per-packet one-way delay: 72.950 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 91.65 Mbit/s
95th percentile per-packet one-way delay: 72.659 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 136.47 Mbit/s
95th percentile per-packet one-way delay: 73.476 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 70.642 ms
Loss rate: 1.54%
Run 7: Report of TCP Cubic — Data Link

[Graph showing throughput and delay over time with Legend: Flow 1 ingress (mean 92.06 Mbps), Flow 1 egress (mean 91.65 Mbps), Flow 2 ingress (mean 136.42 Mbps), Flow 2 egress (mean 136.47 Mbps), Flow 3 ingress (mean 96.12 Mbps), Flow 3 egress (mean 95.86 Mbps).]
Run 8: Statistics of TCP Cubic

End at: 2018-05-25 17:33:53
Local clock offset: -0.077 ms
Remote clock offset: 0.246 ms

# Below is generated by plot.py at 2018-05-25 19:13:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 240.11 Mbit/s
  95th percentile per-packet one-way delay: 73.393 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 129.62 Mbit/s
  95th percentile per-packet one-way delay: 73.257 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 82.55 Mbit/s
  95th percentile per-packet one-way delay: 71.279 ms
  Loss rate: 0.73%
-- Flow 3:
  Average throughput: 169.79 Mbit/s
  95th percentile per-packet one-way delay: 74.334 ms
  Loss rate: 1.45%
Run 8: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 129.85 Mbps)
- Flow 1 egress (mean 129.62 Mbps)
- Flow 2 ingress (mean 82.60 Mbps)
- Flow 2 egress (mean 82.55 Mbps)
- Flow 3 ingress (mean 170.17 Mbps)
- Flow 3 egress (mean 169.79 Mbps)

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

- Flow 1 (95th percentile 73.26 ms)
- Flow 2 (95th percentile 71.28 ms)
- Flow 3 (95th percentile 74.33 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-05-25 17:57:01
End at: 2018-05-25 17:57:31
Local clock offset: -0.063 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-05-25 19:13:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 218.71 Mbit/s
95th percentile per-packet one-way delay: 73.313 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 105.16 Mbit/s
95th percentile per-packet one-way delay: 72.750 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 71.105 ms
Loss rate: 0.91%
-- Flow 3:
Average throughput: 169.67 Mbit/s
95th percentile per-packet one-way delay: 76.935 ms
Loss rate: 1.42%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-05-25 18:20:07
End at: 2018-05-25 18:20:37
Local clock offset: -0.06 ms
Remote clock offset: -0.213 ms

# Below is generated by plot.py at 2018-05-25 19:14:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 239.46 Mbit/s
95th percentile per-packet one-way delay: 73.414 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 152.16 Mbit/s
95th percentile per-packet one-way delay: 74.018 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 45.74 Mbit/s
95th percentile per-packet one-way delay: 66.955 ms
Loss rate: 2.56%
-- Flow 3:
Average throughput: 173.29 Mbit/s
95th percentile per-packet one-way delay: 72.306 ms
Loss rate: 1.40%
Run 10: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 152.07 Mbps)
  - Flow 1 egress (mean 152.16 Mbps)
  - Flow 2 ingress (mean 45.65 Mbps)
  - Flow 2 egress (mean 45.74 Mbps)
  - Flow 3 ingress (mean 173.64 Mbps)
  - Flow 3 egress (mean 173.29 Mbps)

- **Per-packet round trip time (ms):**
  - Flow 1 (95th percentile 74.02 ms)
  - Flow 2 (95th percentile 66.95 ms)
  - Flow 3 (95th percentile 72.31 ms)
Run 1: Statistics of FillP

Start at: 2018-05-25 14:35:28
End at: 2018-05-25 14:35:58
Local clock offset: 0.015 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-05-25 19:45:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1343.65 Mbit/s
95th percentile per-packet one-way delay: 163.957 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 704.06 Mbit/s
95th percentile per-packet one-way delay: 165.974 ms
Loss rate: 4.14%
-- Flow 2:
Average throughput: 672.28 Mbit/s
95th percentile per-packet one-way delay: 157.529 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 588.62 Mbit/s
95th percentile per-packet one-way delay: 168.333 ms
Loss rate: 4.44%
Run 1: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 Ingress (mean 731.42 Mbps) — Flow 1 Egress (mean 704.06 Mbps)
Flow 2 Ingress (mean 706.25 Mbps) — Flow 2 Egress (mean 672.28 Mbps)
Flow 3 Ingress (mean 608.07 Mbps) — Flow 3 Egress (mean 588.62 Mbps)

Packet error rate / delay (ms)

Time (s)

Flow 1 (99th percentile 165.97 ms) — Flow 2 (99th percentile 157.53 ms) — Flow 3 (99th percentile 160.33 ms)
Run 2: Statistics of FillP

Start at: 2018-05-25 14:58:46
End at: 2018-05-25 14:59:16
Local clock offset: 0.012 ms
Remote clock offset: -0.192 ms

# Below is generated by plot.py at 2018-05-25 19:45:01
# Datalink statistics
  -- Total of 3 flows:
    Average throughput: 1211.82 Mbit/s
    95th percentile per-packet one-way delay: 177.648 ms
    Loss rate: 2.73%
  -- Flow 1:
    Average throughput: 650.92 Mbit/s
    95th percentile per-packet one-way delay: 207.313 ms
    Loss rate: 3.46%
  -- Flow 2:
    Average throughput: 567.26 Mbit/s
    95th percentile per-packet one-way delay: 146.861 ms
    Loss rate: 2.12%
  -- Flow 3:
    Average throughput: 560.75 Mbit/s
    95th percentile per-packet one-way delay: 115.838 ms
    Loss rate: 1.37%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Local clock offset: 0.073 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-05-25 19:45:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1266.16 Mbit/s
95th percentile per-packet one-way delay: 180.103 ms
Loss rate: 5.22%
-- Flow 1:
Average throughput: 662.38 Mbit/s
95th percentile per-packet one-way delay: 185.838 ms
Loss rate: 5.54%
-- Flow 2:
Average throughput: 677.30 Mbit/s
95th percentile per-packet one-way delay: 178.353 ms
Loss rate: 4.14%
-- Flow 3:
Average throughput: 466.54 Mbit/s
95th percentile per-packet one-way delay: 175.129 ms
Loss rate: 6.94%
Run 3: Report of FillP — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 698.26 Mbps)
  - Flow 2 ingress (mean 702.03 Mbps)
  - Flow 3 ingress (mean 494.91 Mbps)
  - Flow 1 egress (mean 662.38 Mbps)
  - Flow 2 egress (mean 677.30 Mbps)
  - Flow 3 egress (mean 466.54 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 185.84 ms)
  - Flow 2 (95th percentile 178.35 ms)
  - Flow 3 (95th percentile 175.13 ms)
Run 4: Statistics of FillP

Start at: 2018-05-25 15:45:25
End at: 2018-05-25 15:45:55
Local clock offset: 0.078 ms
Remote clock offset: -0.287 ms

# Below is generated by plot.py at 2018-05-25 19:47:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1322.70 Mbit/s
95th percentile per-packet one-way delay: 166.467 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 711.79 Mbit/s
95th percentile per-packet one-way delay: 142.393 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 629.27 Mbit/s
95th percentile per-packet one-way delay: 202.542 ms
Loss rate: 5.76%
-- Flow 3:
Average throughput: 587.79 Mbit/s
95th percentile per-packet one-way delay: 167.740 ms
Loss rate: 4.93%
Run 4: Report of FillP — Data Link

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

Flow 1 Ingress (mean 729.76 Mb/s), Flow 2 Ingress (mean 663.36 Mb/s), Flow 3 Ingress (mean 610.33 Mb/s), Flow 1 Egress (mean 711.79 Mb/s), Flow 2 Egress (mean 629.73 Mb/s), Flow 3 Egress (mean 587.79 Mb/s)

Flow 1 95th percentile 142.39 ms, Flow 2 95th percentile 202.54 ms, Flow 3 95th percentile 167.74 ms
Run 5: Statistics of FillP

Start at: 2018-05-25 16:08:45
End at: 2018-05-25 16:09:15
Local clock offset: 0.091 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2018-05-25 19:49:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1375.95 Mbit/s
95th percentile per-packet one-way delay: 176.356 ms
Loss rate: 5.53%
-- Flow 1:
Average throughput: 775.63 Mbit/s
95th percentile per-packet one-way delay: 181.639 ms
Loss rate: 3.41%
-- Flow 2:
Average throughput: 587.17 Mbit/s
95th percentile per-packet one-way delay: 178.511 ms
Loss rate: 10.76%
-- Flow 3:
Average throughput: 641.84 Mbit/s
95th percentile per-packet one-way delay: 140.546 ms
Loss rate: 2.80%
Run 5: Report of FillP — Data Link

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

- Flow 1 (Ingress mean 799.67 Mbit/s) — Flow 1 (Egress mean 775.63 Mbit/s)
- Flow 2 (Ingress mean 653.79 Mbit/s) — Flow 2 (Egress mean 587.12 Mbit/s)
- Flow 3 (Ingress mean 651.89 Mbit/s) — Flow 3 (Egress mean 641.84 Mbit/s)

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

- Flow 1 (95th percentile 181.64 ms) — Flow 2 (95th percentile 178.51 ms) — Flow 3 (95th percentile 140.55 ms)
Run 6: Statistics of FillP

End at: 2018-05-25 16:32:37
Local clock offset: -0.055 ms
Remote clock offset: 0.292 ms

# Below is generated by plot.py at 2018-05-25 19:49:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1335.13 Mbit/s
  95th percentile per-packet one-way delay: 175.937 ms
  Loss rate: 4.96%
-- Flow 1:
  Average throughput: 736.53 Mbit/s
  95th percentile per-packet one-way delay: 176.292 ms
  Loss rate: 2.48%
-- Flow 2:
  Average throughput: 606.86 Mbit/s
  95th percentile per-packet one-way delay: 176.157 ms
  Loss rate: 8.60%
-- Flow 3:
  Average throughput: 594.79 Mbit/s
  95th percentile per-packet one-way delay: 174.156 ms
  Loss rate: 6.25%
Run 6: Report of FillP — Data Link

![Graph of Throughput vs. Time] (Throughput Graph)

- Flow 1 Ingress (mean 752.11 Mbit/s)
- Flow 1 Egress (mean 736.53 Mbit/s)
- Flow 2 Ingress (mean 659.77 Mbit/s)
- Flow 2 Egress (mean 606.86 Mbit/s)
- Flow 3 Ingress (mean 626.44 Mbit/s)
- Flow 3 Egress (mean 594.79 Mbit/s)

![Graph of Ping-Pong vs. Time] (Ping-Pong Graph)

- Flow 1 (95th percentile 176.29 ms)
- Flow 2 (95th percentile 176.16 ms)
- Flow 3 (95th percentile 174.16 ms)
Run 7: Statistics of FillP

Local clock offset: -0.044 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2018-05-25 19:49:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1249.98 Mbit/s
  95th percentile per-packet one-way delay: 171.284 ms
  Loss rate: 4.80%
-- Flow 1:
  Average throughput: 692.52 Mbit/s
  95th percentile per-packet one-way delay: 155.034 ms
  Loss rate: 2.72%
-- Flow 2:
  Average throughput: 603.18 Mbit/s
  95th percentile per-packet one-way delay: 187.689 ms
  Loss rate: 6.79%
-- Flow 3:
  Average throughput: 477.94 Mbit/s
  95th percentile per-packet one-way delay: 193.648 ms
  Loss rate: 8.43%
Run 7: Report of FillP — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 8: Statistics of FillP

Start at: 2018-05-25 17:18:38  
End at: 2018-05-25 17:19:08  
Local clock offset: -0.028 ms  
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-05-25 19:49:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1273.49 Mbit/s  
95th percentile per-packet one-way delay: 161.144 ms  
Loss rate: 6.30%  
-- Flow 1:  
Average throughput: 700.62 Mbit/s  
95th percentile per-packet one-way delay: 148.366 ms  
Loss rate: 5.64%  
-- Flow 2:  
Average throughput: 577.50 Mbit/s  
95th percentile per-packet one-way delay: 180.756 ms  
Loss rate: 8.14%  
-- Flow 3:  
Average throughput: 578.18 Mbit/s  
95th percentile per-packet one-way delay: 157.494 ms  
Loss rate: 4.86%
Run 8: Report of FillP — Data Link

Throughput (Mbps/s)

Time (s)

0 5 10 15 20 25 30

Flow 1 Ingress (mean 759.37 Mbps/s)
Flow 1 Egress (mean 700.62 Mbps/s)
Flow 2 Ingress (mean 624.64 Mbps/s)
Flow 2 Egress (mean 577.50 Mbps/s)
Flow 3 Ingress (mean 599.83 Mbps/s)
Flow 3 Egress (mean 578.18 Mbps/s)

Packet arrival delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 148.37 ms)
Flow 2 (95th percentile 180.76 ms)
Flow 3 (95th percentile 157.49 ms)

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Run 9: Statistics of FillP

Start at: 2018-05-25 17:41:50
Local clock offset: -0.082 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-05-25 20:18:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1291.91 Mbit/s
95th percentile per-packet one-way delay: 161.949 ms
Loss rate: 6.02%
-- Flow 1:
Average throughput: 713.19 Mbit/s
95th percentile per-packet one-way delay: 149.851 ms
Loss rate: 5.65%
-- Flow 2:
Average throughput: 608.58 Mbit/s
95th percentile per-packet one-way delay: 157.359 ms
Loss rate: 4.76%
-- Flow 3:
Average throughput: 530.37 Mbit/s
95th percentile per-packet one-way delay: 179.231 ms
Loss rate: 10.24%
Run 9: Report of FillP — Data Link

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

- **Flow 1 Ingress** (mean 752.72 Mbps/s)
- **Flow 1 Egress** (mean 713.19 Mbps/s)
- **Flow 2 Ingress** (mean 634.99 Mbps/s)
- **Flow 2 Egress** (mean 608.58 Mbps/s)
- **Flow 3 Ingress** (mean 583.28 Mbps/s)
- **Flow 3 Egress** (mean 530.37 Mbps/s)

![Graph 2: Delay (ms) vs Time (s)]

- **Flow 1 (95th percentile 149.85 ms)**
- **Flow 2 (95th percentile 157.36 ms)**
- **Flow 3 (95th percentile 179.23 ms)**
Run 10: Statistics of FillIP

Start at: 2018-05-25 18:05:30
End at: 2018-05-25 18:06:00
Local clock offset: -0.054 ms
Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1237.45 Mbit/s
95th percentile per-packet one-way delay: 206.119 ms
Loss rate: 7.08%
-- Flow 1:
Average throughput: 663.48 Mbit/s
95th percentile per-packet one-way delay: 214.327 ms
Loss rate: 7.21%
-- Flow 2:
Average throughput: 632.76 Mbit/s
95th percentile per-packet one-way delay: 166.096 ms
Loss rate: 6.01%
-- Flow 3:
Average throughput: 468.71 Mbit/s
95th percentile per-packet one-way delay: 233.365 ms
Loss rate: 9.35%
Run 10: Report of FillIP — Data Link

![Graphs showing network traffic data over time, including throughput and packet delay.]
Run 1: Statistics of Indigo

Local clock offset: 0.006 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 418.87 Mbit/s
95th percentile per-packet one-way delay: 77.171 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 212.18 Mbit/s
95th percentile per-packet one-way delay: 74.008 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 206.99 Mbit/s
95th percentile per-packet one-way delay: 77.817 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 182.51 Mbit/s
95th percentile per-packet one-way delay: 89.013 ms
Loss rate: 1.35%
Run 1: Report of Indigo — Data Link

---

**Throughput (Mbit/s)**

- **Flow 1 ingress (mean 212.21 Mbit/s)**
- **Flow 1 egress (mean 212.18 Mbit/s)**
- **Flow 2 ingress (mean 206.99 Mbit/s)**
- **Flow 2 egress (mean 206.99 Mbit/s)**
- **Flow 3 ingress (mean 182.63 Mbit/s)**
- **Flow 3 egress (mean 182.51 Mbit/s)**

---

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

- **Flow 1 (95th percentile 74.01 ms)**
- **Flow 2 (95th percentile 77.82 ms)**
- **Flow 3 (95th percentile 89.01 ms)**

---

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Run 2: Statistics of Indigo

Start at: 2018-05-25 15:02:31
End at: 2018-05-25 15:03:01
Local clock offset: -0.012 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 401.70 Mbit/s
95th percentile per-packet one-way delay: 70.792 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 212.06 Mbit/s
95th percentile per-packet one-way delay: 70.291 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 206.18 Mbit/s
95th percentile per-packet one-way delay: 71.956 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 162.45 Mbit/s
95th percentile per-packet one-way delay: 70.142 ms
Loss rate: 1.50%
Run 2: Report of Indigo — Data Link

![Graph showing throughput and packet delay](image)
Run 3: Statistics of Indigo

End at: 2018-05-25 15:26:19
Local clock offset: 0.032 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.72 Mbit/s
95th percentile per-packet one-way delay: 74.907 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 205.31 Mbit/s
95th percentile per-packet one-way delay: 73.409 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 199.36 Mbit/s
95th percentile per-packet one-way delay: 76.157 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 149.70 Mbit/s
95th percentile per-packet one-way delay: 77.226 ms
Loss rate: 1.48%
Run 3: Report of Indigo — Data Link

![Graph showing throughput and packet size over time for different flows]
Run 4: Statistics of Indigo

Local clock offset: 0.085 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.56 Mbit/s
95th percentile per-packet one-way delay: 76.484 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 213.60 Mbit/s
95th percentile per-packet one-way delay: 73.982 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 206.03 Mbit/s
95th percentile per-packet one-way delay: 75.610 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 167.60 Mbit/s
95th percentile per-packet one-way delay: 83.235 ms
Loss rate: 1.46%
Run 4: Report of Indigo — Data Link

![Graph of throughput and delay for flow 1, 2, and 3]
Run 5: Statistics of Indigo

Start at: 2018-05-25 16:12:43
Local clock offset: 0.014 ms
Remote clock offset: 0.279 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 393.84 Mbit/s
  95th percentile per-packet one-way delay: 75.376 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 206.62 Mbit/s
  95th percentile per-packet one-way delay: 71.711 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 204.71 Mbit/s
  95th percentile per-packet one-way delay: 78.272 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 158.05 Mbit/s
  95th percentile per-packet one-way delay: 79.554 ms
  Loss rate: 1.61%
Run 5: Report of Indigo — Data Link
Run 6: Statistics of Indigo

Start at: 2018-05-25 16:35:53
End at: 2018-05-25 16:36:23
Local clock offset: -0.064 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 405.87 Mbit/s
  95th percentile per-packet one-way delay: 72.747 ms
  Loss rate: 0.63%
  -- Flow 1:
  Average throughput: 209.06 Mbit/s
  95th percentile per-packet one-way delay: 70.281 ms
  Loss rate: 0.43%
  -- Flow 2:
  Average throughput: 207.63 Mbit/s
  95th percentile per-packet one-way delay: 72.547 ms
  Loss rate: 0.53%
  -- Flow 3:
  Average throughput: 172.19 Mbit/s
  95th percentile per-packet one-way delay: 78.005 ms
  Loss rate: 1.56%
Run 6: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 209.10 Mbps)**
- **Flow 1 egress (mean 209.06 Mbps)**
- **Flow 2 ingress (mean 207.42 Mbps)**
- **Flow 2 egress (mean 207.63 Mbps)**
- **Flow 3 ingress (mean 172.66 Mbps)**
- **Flow 3 egress (mean 172.19 Mbps)**

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

- **Flow 1 (95th percentile 70.28 ms)**
- **Flow 2 (95th percentile 72.55 ms)**
- **Flow 3 (95th percentile 78.00 ms)**
Run 7: Statistics of Indigo

End at: 2018-05-25 16:59:42
Local clock offset: -0.036 ms
Remote clock offset: 0.195 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.90 Mbit/s
95th percentile per-packet one-way delay: 72.039 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 208.82 Mbit/s
95th percentile per-packet one-way delay: 70.315 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 198.98 Mbit/s
95th percentile per-packet one-way delay: 73.940 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 163.96 Mbit/s
95th percentile per-packet one-way delay: 72.860 ms
Loss rate: 1.53%
Run 7: Report of Indigo — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 208.84 Mbps)
- Flow 1 egress (mean 208.82 Mbps)
- Flow 2 ingress (mean 199.06 Mbps)
- Flow 2 egress (mean 198.98 Mbps)
- Flow 3 ingress (mean 164.39 Mbps)
- Flow 3 egress (mean 163.96 Mbps)

Packet Delay (ms):
- Flow 1 (95th percentile 70.31 ms)
- Flow 2 (95th percentile 73.94 ms)
- Flow 3 (95th percentile 72.86 ms)
Run 8: Statistics of Indigo

Local clock offset: -0.061 ms
Remote clock offset: 0.53 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.61 Mbit/s
95th percentile per-packet one-way delay: 69.931 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 209.68 Mbit/s
95th percentile per-packet one-way delay: 69.357 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 209.82 Mbit/s
95th percentile per-packet one-way delay: 69.983 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 156.80 Mbit/s
95th percentile per-packet one-way delay: 71.192 ms
Loss rate: 1.55%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Start at: 2018-05-25 17:45:44
Local clock offset: -0.097 ms
Remote clock offset: 0.468 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 402.11 Mbit/s
  95th percentile per-packet one-way delay: 67.938 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 209.53 Mbit/s
  95th percentile per-packet one-way delay: 66.784 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 211.10 Mbit/s
  95th percentile per-packet one-way delay: 68.838 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 161.95 Mbit/s
  95th percentile per-packet one-way delay: 69.713 ms
  Loss rate: 0.97%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-05-25 18:09:15
End at: 2018-05-25 18:09:45
Local clock offset: -0.05 ms
Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 410.71 Mbit/s
95th percentile per-packet one-way delay: 70.994 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 211.20 Mbit/s
95th percentile per-packet one-way delay: 69.197 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 212.28 Mbit/s
95th percentile per-packet one-way delay: 71.267 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 180.76 Mbit/s
95th percentile per-packet one-way delay: 76.646 ms
Loss rate: 1.31%
Run 10: Report of Indigo — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows with specified mean and 95th percentile values]
Run 1: Statistics of LEDBAT

End at: 2018-05-25 14:52:09
Local clock offset: -0.014 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 64.873 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 22.20 Mbit/s
95th percentile per-packet one-way delay: 64.987 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 64.690 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 64.739 ms
Loss rate: 2.57%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

End at: 2018-05-25 15:15:29
Local clock offset: 0.063 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.05 Mbit/s
95th percentile per-packet one-way delay: 64.456 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 22.23 Mbit/s
95th percentile per-packet one-way delay: 64.429 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 14.87 Mbit/s
95th percentile per-packet one-way delay: 64.591 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 64.080 ms
Loss rate: 3.86%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-05-25 15:38:18
Local clock offset: 0.087 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.45 Mbit/s
95th percentile per-packet one-way delay: 64.654 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 64.658 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 64.328 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 7.06 Mbit/s
95th percentile per-packet one-way delay: 65.132 ms
Loss rate: 2.58%
Run 3: Report of LEDBAT — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 22.19 Mbps)
- **Flow 1 egress** (mean 22.09 Mbps)
- **Flow 2 ingress** (mean 13.89 Mbps)
- **Flow 2 egress** (mean 13.59 Mbps)
- **Flow 3 ingress** (mean 7.13 Mbps)
- **Flow 3 egress** (mean 7.06 Mbps)

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

- **Flow 1** (95th percentile 64.66 ms)
- **Flow 2** (95th percentile 64.33 ms)
- **Flow 3** (95th percentile 65.13 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-05-25 16:01:34
End at: 2018-05-25 16:02:04
Local clock offset: 0.099 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.04 Mbit/s
95th percentile per-packet one-way delay: 65.465 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 22.04 Mbit/s
95th percentile per-packet one-way delay: 65.661 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 14.42 Mbit/s
95th percentile per-packet one-way delay: 65.256 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 64.901 ms
Loss rate: 2.54%
Run 4: Report of LEDBAT — Data Link

The graphs show the throughput and latency for different flows over time. The throughput measurements are given in Mbit/s, and the latency is measured in milliseconds (ms).

**Throughput (Mbps):**
- Flow 1 ingress (mean 22.14 Mbit/s)
- Flow 1 egress (mean 22.04 Mbit/s)
- Flow 2 ingress (mean 14.32 Mbit/s)
- Flow 2 egress (mean 14.42 Mbit/s)
- Flow 3 ingress (mean 7.57 Mbit/s)
- Flow 3 egress (mean 7.47 Mbit/s)

**Latency (ms):**
- Flow 1 (95th percentile 65.66 ms)
- Flow 2 (95th percentile 65.26 ms)
- Flow 3 (95th percentile 64.90 ms)
Run 5: Statistics of LEDBAT

Local clock offset: -0.024 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 65.216 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 22.64 Mbit/s
95th percentile per-packet one-way delay: 65.357 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 64.898 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 64.840 ms
Loss rate: 2.56%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Local clock offset: -0.026 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 34.49 Mbit/s
  95th percentile per-packet one-way delay: 65.648 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 22.27 Mbit/s
  95th percentile per-packet one-way delay: 65.715 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 14.81 Mbit/s
  95th percentile per-packet one-way delay: 65.533 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 7.25 Mbit/s
  95th percentile per-packet one-way delay: 65.305 ms
  Loss rate: 2.55%
Run 6: Report of LEDBAT — Data Link

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

- Flow 1: Ingress (mean 22.36 Mbit/s), Egress (mean 22.27 Mbit/s)
- Flow 2: Ingress (mean 14.90 Mbit/s), Egress (mean 14.81 Mbit/s)
- Flow 3: Ingress (mean 7.43 Mbit/s), Egress (mean 7.25 Mbit/s)
Run 7: Statistics of LEDBAT

Start at: 2018-05-25 17:11:26
End at: 2018-05-25 17:11:56
Local clock offset: -0.051 ms
Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 64.409 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 13.35 Mbit/s
95th percentile per-packet one-way delay: 64.401 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 14.71 Mbit/s
95th percentile per-packet one-way delay: 64.465 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 64.318 ms
Loss rate: 2.58%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-05-25 17:34:44
End at: 2018-05-25 17:35:14
Local clock offset: -0.081 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 31.17 Mbit/s
  95th percentile per-packet one-way delay: 65.043 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 20.63 Mbit/s
  95th percentile per-packet one-way delay: 65.208 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 12.87 Mbit/s
  95th percentile per-packet one-way delay: 64.794 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 6.23 Mbit/s
  95th percentile per-packet one-way delay: 62.546 ms
  Loss rate: 1.77%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-05-25 17:58:22
End at: 2018-05-25 17:58:52
Local clock offset: -0.064 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 34.85 Mbit/s
  95th percentile per-packet one-way delay: 64.853 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 22.49 Mbit/s
  95th percentile per-packet one-way delay: 64.996 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 15.14 Mbit/s
  95th percentile per-packet one-way delay: 64.533 ms
  Loss rate: 1.26%
-- Flow 3:
  Average throughput: 7.12 Mbit/s
  95th percentile per-packet one-way delay: 64.461 ms
  Loss rate: 2.58%
Run 9: Report of LEDBAT — Data Link

![Graph of throughput over time](image1)

![Graph of per-packet round-trip delay over time](image2)

- **Flow 1 ingress (mean 22.59 Mbit/s)**
- **Flow 1 egress (mean 22.49 Mbit/s)**
- **Flow 2 ingress (mean 15.23 Mbit/s)**
- **Flow 2 egress (mean 15.14 Mbit/s)**
- **Flow 3 ingress (mean 7.22 Mbit/s)**
- **Flow 3 egress (mean 7.12 Mbit/s)**
Run 10: Statistics of LEDBAT

Local clock offset: -0.069 ms
Remote clock offset: -0.194 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.02 Mbit/s
95th percentile per-packet one-way delay: 64.930 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 21.98 Mbit/s
95th percentile per-packet one-way delay: 65.015 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 12.97 Mbit/s
95th percentile per-packet one-way delay: 64.801 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 7.38 Mbit/s
95th percentile per-packet one-way delay: 64.440 ms
Loss rate: 2.54%
Run 10: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet one-way delay vs. Time (s)]
Run 1: Statistics of PCC-Allegro

Start at: 2018-05-25 14:46:05
Local clock offset: -0.023 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 540.62 Mbit/s
  95th percentile per-packet one-way delay: 197.595 ms
  Loss rate: 3.10%
-- Flow 1:
  Average throughput: 517.26 Mbit/s
  95th percentile per-packet one-way delay: 197.653 ms
  Loss rate: 3.13%
-- Flow 2:
  Average throughput: 32.67 Mbit/s
  95th percentile per-packet one-way delay: 196.229 ms
  Loss rate: 2.72%
-- Flow 3:
  Average throughput: 5.27 Mbit/s
  95th percentile per-packet one-way delay: 173.463 ms
  Loss rate: 1.44%
Run 1: Report of PCC-Allegro — Data Link

![Graph](image)

![Graph](image)
Run 2: Statistics of PCC-Allegro

Start at: 2018-05-25 15:09:21
End at: 2018-05-25 15:09:51
Local clock offset: 0.031 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.13 Mbit/s
95th percentile per-packet one-way delay: 176.808 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 519.60 Mbit/s
95th percentile per-packet one-way delay: 176.825 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 62.15 Mbit/s
95th percentile per-packet one-way delay: 176.695 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 150.409 ms
Loss rate: 1.23%
Run 3: Statistics of PCC-Allegro

End at: 2018-05-25 15:33:07
Local clock offset: 0.064 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 543.67 Mbit/s
  95th percentile per-packet one-way delay: 175.372 ms
  Loss rate: 1.28%
-- Flow 1:
  Average throughput: 512.58 Mbit/s
  95th percentile per-packet one-way delay: 175.310 ms
  Loss rate: 1.25%
-- Flow 2:
  Average throughput: 16.88 Mbit/s
  95th percentile per-packet one-way delay: 175.183 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 61.03 Mbit/s
  95th percentile per-packet one-way delay: 176.354 ms
  Loss rate: 2.15%
Run 3: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 516.93 Mbps)
- Flow 1 egress (mean 512.58 Mbps)
- Flow 2 ingress (mean 16.94 Mbps)
- Flow 2 egress (mean 16.88 Mbps)
- Flow 3 ingress (mean 61.66 Mbps)
- Flow 3 egress (mean 61.03 Mbps)

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

- Flow 1 (95th percentile 175.31 ms)
- Flow 2 (95th percentile 175.18 ms)
- Flow 3 (95th percentile 176.35 ms)
Run 4: Statistics of PCC-Allegro

End at: 2018-05-25 15:56:21
Local clock offset: 0.126 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 535.97 Mbit/s
  95th percentile per-packet one-way delay: 194.221 ms
  Loss rate: 3.65%
-- Flow 1:
  Average throughput: 495.52 Mbit/s
  95th percentile per-packet one-way delay: 194.289 ms
  Loss rate: 3.71%
-- Flow 2:
  Average throughput: 1.81 Mbit/s
  95th percentile per-packet one-way delay: 194.090 ms
  Loss rate: 4.95%
-- Flow 3:
  Average throughput: 120.20 Mbit/s
  95th percentile per-packet one-way delay: 154.362 ms
  Loss rate: 2.79%
Run 4: Report of PCC-Allegro — Data Link

![Diagram of network throughput and delay over time]

- Flow 1 ingress (mean 512.41 Mbps)
- Flow 1 egress (mean 495.52 Mbps)
- Flow 2 ingress (mean 1.90 Mbps)
- Flow 2 egress (mean 1.61 Mbps)
- Flow 3 ingress (mean 122.04 Mbps)
- Flow 3 egress (mean 120.20 Mbps)

![Diagram of network delay over time]

- Flow 1 (95th percentile 194.29 ms)
- Flow 2 (95th percentile 194.09 ms)
- Flow 3 (95th percentile 154.36 ms)
Run 5: Statistics of PCC-Allegro

Local clock offset: -0.003 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 546.35 Mbit/s
95th percentile per-packet one-way delay: 196.182 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 525.58 Mbit/s
95th percentile per-packet one-way delay: 196.514 ms
Loss rate: 4.34%
-- Flow 2:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 192.069 ms
Loss rate: 3.25%
-- Flow 3:
Average throughput: 59.68 Mbit/s
95th percentile per-packet one-way delay: 174.493 ms
Loss rate: 2.54%
Run 5: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 6: Statistics of PCC-Allegro

End at: 2018-05-25 16:43:07
Local clock offset: -0.045 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-05-25 20:18:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.97 Mbit/s
95th percentile per-packet one-way delay: 155.371 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 522.30 Mbit/s
95th percentile per-packet one-way delay: 155.912 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 148.152 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 8.30 Mbit/s
95th percentile per-packet one-way delay: 153.088 ms
Loss rate: 1.60%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-05-25 17:05:53
End at: 2018-05-25 17:06:23
Local clock offset: -0.027 ms
Remote clock offset: 0.295 ms

# Below is generated by plot.py at 2018-05-25 20:25:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 549.71 Mbit/s
95th percentile per-packet one-way delay: 163.091 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 541.22 Mbit/s
95th percentile per-packet one-way delay: 163.161 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 10.46 Mbit/s
95th percentile per-packet one-way delay: 159.515 ms
Loss rate: 1.71%
-- Flow 3:
Average throughput: 4.79 Mbit/s
95th percentile per-packet one-way delay: 121.842 ms
Loss rate: 1.40%
Run 7: Report of PCC-Allegro — Data Link

![Graph of throughput and packet delay for different flows.](image)
Run 8: Statistics of PCC-Allegro

Start at: 2018-05-25 17:29:03
End at: 2018-05-25 17:29:33
Local clock offset: -0.079 ms
Remote clock offset: 0.492 ms

# Below is generated by plot.py at 2018-05-25 20:26:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 554.46 Mbit/s
95th percentile per-packet one-way delay: 237.718 ms
Loss rate: 2.89%
-- Flow 1:
Average throughput: 488.91 Mbit/s
95th percentile per-packet one-way delay: 239.413 ms
Loss rate: 2.91%
-- Flow 2:
Average throughput: 97.70 Mbit/s
95th percentile per-packet one-way delay: 178.240 ms
Loss rate: 2.76%
-- Flow 3:
Average throughput: 2.31 Mbit/s
95th percentile per-packet one-way delay: 176.558 ms
Loss rate: 1.69%
Run 8: Report of PCC-Allegro — Data Link

![Graphs showing network performance metrics over time, including throughput and packet delay.]

- Flow 1 ingress (mean 501.41 Mbit/s)
- Flow 1 egress (mean 486.91 Mbit/s)
- Flow 2 ingress (mean 99.83 Mbit/s)
- Flow 2 egress (mean 97.70 Mbit/s)
- Flow 3 ingress (mean 2.32 Mbit/s)
- Flow 3 egress (mean 2.31 Mbit/s)
Run 9: Statistics of PCC-Allegro

Start at: 2018-05-25 17:52:36
End at: 2018-05-25 17:53:06
Local clock offset: -0.078 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-05-25 20:27:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 588.32 Mbit/s
95th percentile per-packet one-way delay: 212.658 ms
Loss rate: 2.38%
-- Flow 1:
Average throughput: 584.84 Mbit/s
95th percentile per-packet one-way delay: 213.054 ms
Loss rate: 2.39%
-- Flow 2:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 176.640 ms
Loss rate: 2.16%
-- Flow 3:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 175.532 ms
Loss rate: 1.90%
Run 9: Report of PCC-Allegro — Data Link

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

- Flow 1 Ingress (mean 596.56 Mb/s)
- Flow 1 Egress (mean 584.84 Mb/s)
- Flow 2 Ingress (mean 4.29 Mb/s)
- Flow 2 Egress (mean 4.22 Mb/s)
- Flow 3 Ingress (mean 2.09 Mb/s)
- Flow 3 Egress (mean 2.08 Mb/s)

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

- Flow 1 (95th percentile 213.05 ms)
- Flow 2 (95th percentile 176.64 ms)
- Flow 3 (95th percentile 175.53 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-05-25 18:16:10
End at: 2018-05-25 18:16:40
Local clock offset: -0.09 ms
Remote clock offset: 0.229 ms

# Below is generated by plot.py at 2018-05-25 20:27:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 564.71 Mbit/s
95th percentile per-packet one-way delay: 167.313 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 551.19 Mbit/s
95th percentile per-packet one-way delay: 169.024 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 4.75 Mbit/s
95th percentile per-packet one-way delay: 97.415 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 31.79 Mbit/s
95th percentile per-packet one-way delay: 96.388 ms
Loss rate: 1.52%
Run 10: Report of PCC-Allegro — Data Link

![Throughput and Delay Graphs]

Throughput (Mbps):
- Flow 1 ingress (mean 553.87 Mbps)
- Flow 1 egress (mean 551.19 Mbps)
- Flow 2 ingress (mean 4.76 Mbps)
- Flow 2 egress (mean 4.75 Mbps)
- Flow 3 ingress (mean 31.87 Mbps)
- Flow 3 egress (mean 31.79 Mbps)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 169.02 ms)
- Flow 2 (95th percentile 97.42 ms)
- Flow 3 (95th percentile 96.39 ms)
Run 1: Statistics of PCC-Expr

End at: 2018-05-25 14:38:05
Local clock offset: 0.011 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-05-25 20:34:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 434.75 Mbit/s
  95th percentile per-packet one-way delay: 223.444 ms
  Loss rate: 5.27%
-- Flow 1:
  Average throughput: 287.35 Mbit/s
  95th percentile per-packet one-way delay: 230.831 ms
  Loss rate: 6.19%
-- Flow 2:
  Average throughput: 154.79 Mbit/s
  95th percentile per-packet one-way delay: 173.138 ms
  Loss rate: 2.12%
-- Flow 3:
  Average throughput: 136.54 Mbit/s
  95th percentile per-packet one-way delay: 174.265 ms
  Loss rate: 6.23%
Run 1: Report of PCC-Expr — Data Link

![Graph 1: Throughput](image)

![Graph 2: Packet Delay](image)

[Legend for Graph 1]

- Flow 1 ingress (mean 305.03 Mbit/s)
- Flow 1 egress (mean 287.35 Mbit/s)
- Flow 2 ingress (mean 157.15 Mbit/s)
- Flow 2 egress (mean 154.79 Mbit/s)
- Flow 3 ingress (mean 143.77 Mbit/s)
- Flow 3 egress (mean 136.54 Mbit/s)

[Legend for Graph 2]

- Flow 1 (95th percentile 230.83 ms)
- Flow 2 (95th percentile 173.14 ms)
- Flow 3 (95th percentile 174.26 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-05-25 15:00:46
End at: 2018-05-25 15:01:16
Local clock offset: 0.019 ms
Remote clock offset: -0.163 ms

# Below is generated by plot.py at 2018-05-25 20:34:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 383.26 Mbit/s
95th percentile per-packet one-way delay: 239.043 ms
Loss rate: 3.30%
-- Flow 1:
Average throughput: 220.86 Mbit/s
95th percentile per-packet one-way delay: 252.106 ms
Loss rate: 4.06%
-- Flow 2:
Average throughput: 217.47 Mbit/s
95th percentile per-packet one-way delay: 243.276 ms
Loss rate: 2.30%
-- Flow 3:
Average throughput: 55.28 Mbit/s
95th percentile per-packet one-way delay: 64.086 ms
Loss rate: 1.69%
Run 2: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 229.26 Mbit/s)
- Flow 1 egress (mean 220.86 Mbit/s)
- Flow 2 ingress (mean 223.19 Mbit/s)
- Flow 2 egress (mean 217.47 Mbit/s)
- Flow 3 ingress (mean 55.31 Mbit/s)
- Flow 3 egress (mean 55.28 Mbit/s)
Run 3: Statistics of PCC-Expr

Start at: 2018-05-25 15:24:08
Local clock offset: 0.033 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-05-25 20:34:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.52 Mbit/s
95th percentile per-packet one-way delay: 100.390 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 173.16 Mbit/s
95th percentile per-packet one-way delay: 87.780 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 193.73 Mbit/s
95th percentile per-packet one-way delay: 80.244 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 173.54 Mbit/s
95th percentile per-packet one-way delay: 192.472 ms
Loss rate: 1.55%
Run 3: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 173.35 Mbps)
- Flow 1 egress (mean 173.16 Mbps)
- Flow 2 ingress (mean 193.94 Mbps)
- Flow 2 egress (mean 193.73 Mbps)
- Flow 3 ingress (mean 173.98 Mbps)
- Flow 3 egress (mean 173.54 Mbps)

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

- Flow 1 (95th percentile 87.78 ms)
- Flow 2 (95th percentile 80.24 ms)
- Flow 3 (95th percentile 192.47 ms)
Run 4: Statistics of PCC-Expr

End at: 2018-05-25 15:48:01
Local clock offset: 0.095 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-05-25 20:34:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.61 Mbit/s
95th percentile per-packet one-way delay: 64.723 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 158.10 Mbit/s
95th percentile per-packet one-way delay: 65.233 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 196.23 Mbit/s
95th percentile per-packet one-way delay: 64.476 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 107.68 Mbit/s
95th percentile per-packet one-way delay: 64.575 ms
Loss rate: 1.75%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-05-25 16:10:54
End at: 2018-05-25 16:11:24
Local clock offset: 0.029 ms
Remote clock offset: 0.066 ms

# Below is generated by plot.py at 2018-05-25 20:48:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.93 Mbit/s
95th percentile per-packet one-way delay: 203.917 ms
Loss rate: 11.26%
-- Flow 1:
Average throughput: 338.43 Mbit/s
95th percentile per-packet one-way delay: 212.216 ms
Loss rate: 10.38%
-- Flow 2:
Average throughput: 240.14 Mbit/s
95th percentile per-packet one-way delay: 198.757 ms
Loss rate: 13.06%
-- Flow 3:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 195.082 ms
Loss rate: 13.32%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

End at: 2018-05-25 16:34:43
Local clock offset: -0.041 ms
Remote clock offset: 0.464 ms

# Below is generated by plot.py at 2018-05-25 20:48:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.21 Mbit/s
95th percentile per-packet one-way delay: 326.725 ms
Loss rate: 13.05%
-- Flow 1:
Average throughput: 317.70 Mbit/s
95th percentile per-packet one-way delay: 330.484 ms
Loss rate: 14.99%
-- Flow 2:
Average throughput: 89.44 Mbit/s
95th percentile per-packet one-way delay: 194.205 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 194.988 ms
Loss rate: 4.16%
Run 6: Report of PCC-Expr — Data Link
Run 7: Statistics of PCC-Expr

Start at: 2018-05-25 16:57:30
End at: 2018-05-25 16:58:00
Local clock offset: -0.045 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-05-25 20:48:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 348.25 Mbit/s
95th percentile per-packet one-way delay: 133.694 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 200.82 Mbit/s
95th percentile per-packet one-way delay: 72.151 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 174.80 Mbit/s
95th percentile per-packet one-way delay: 191.409 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 96.05 Mbit/s
95th percentile per-packet one-way delay: 71.483 ms
Loss rate: 1.43%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-05-25 17:20:42
End at: 2018-05-25 17:21:12
Local clock offset: -0.063 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-05-25 20:48:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.63 Mbit/s
95th percentile per-packet one-way delay: 85.060 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 189.13 Mbit/s
95th percentile per-packet one-way delay: 68.830 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 37.06 Mbit/s
95th percentile per-packet one-way delay: 63.866 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 171.03 Mbit/s
95th percentile per-packet one-way delay: 121.148 ms
Loss rate: 1.64%
Run 8: Report of PCC-Expr — Data Link

![Data Link Throughput Graph]

- Flow 1 ingress (mean 189.02 Mbit/s)
- Flow 1 egress (mean 189.13 Mbit/s)
- Flow 2 ingress (mean 37.21 Mbit/s)
- Flow 2 egress (mean 37.06 Mbit/s)
- Flow 3 ingress (mean 171.66 Mbit/s)
- Flow 3 egress (mean 171.03 Mbit/s)

![Data Link Delay Graph]

- Flow 1 (95th percentile 68.83 ms)
- Flow 2 (95th percentile 63.87 ms)
- Flow 3 (95th percentile 121.15 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-05-25 17:43:56
End at: 2018-05-25 17:44:26
Local clock offset: -0.061 ms
Remote clock offset: 0.347 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.73 Mbit/s
95th percentile per-packet one-way delay: 184.046 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 251.82 Mbit/s
95th percentile per-packet one-way delay: 197.580 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 195.40 Mbit/s
95th percentile per-packet one-way delay: 68.389 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 98.50 Mbit/s
95th percentile per-packet one-way delay: 64.665 ms
Loss rate: 2.31%
Run 9: Report of PCC-Expr — Data Link
Run 10: Statistics of PCC-Expr

End at: 2018-05-25 18:08:02
Local clock offset: -0.087 ms
Remote clock offset: 0.159 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 343.43 Mbit/s
   95th percentile per-packet one-way delay: 202.700 ms
   Loss rate: 2.68%
-- Flow 1:
   Average throughput: 230.55 Mbit/s
   95th percentile per-packet one-way delay: 206.265 ms
   Loss rate: 3.38%
-- Flow 2:
   Average throughput: 113.41 Mbit/s
   95th percentile per-packet one-way delay: 64.998 ms
   Loss rate: 0.82%
-- Flow 3:
   Average throughput: 114.70 Mbit/s
   95th percentile per-packet one-way delay: 68.568 ms
   Loss rate: 1.99%
Run 10: Report of PCC-Expr — Data Link

[Graph showing throughput and packet delay over time with specific flow statistics]
Run 1: Statistics of QUIC Cubic

End at: 2018-05-25 14:58:03
Local clock offset: 0.004 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.28 Mbit/s
95th percentile per-packet one-way delay: 63.536 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 43.17 Mbit/s
95th percentile per-packet one-way delay: 63.543 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 29.12 Mbit/s
95th percentile per-packet one-way delay: 63.406 ms
Loss rate: 1.82%
-- Flow 3:
Average throughput: 18.83 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 1.51%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-05-25 15:20:51
Local clock offset: 0.037 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.36 Mbit/s
95th percentile per-packet one-way delay: 63.492 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 63.518 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 32.41 Mbit/s
95th percentile per-packet one-way delay: 63.364 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 15.27 Mbit/s
95th percentile per-packet one-way delay: 61.809 ms
Loss rate: 0.66%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

End at: 2018-05-25 15:44:43
Local clock offset: 0.096 ms
Remote clock offset: 0.155 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.89 Mbit/s
95th percentile per-packet one-way delay: 63.401 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 47.22 Mbit/s
95th percentile per-packet one-way delay: 63.416 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 61.636 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 16.67 Mbit/s
95th percentile per-packet one-way delay: 63.368 ms
Loss rate: 0.42%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 47.27 Mbit/s)
- Flow 1 egress (mean 47.22 Mbit/s)
- Flow 2 ingress (mean 23.26 Mbit/s)
- Flow 2 egress (mean 22.92 Mbit/s)
- Flow 3 ingress (mean 16.53 Mbit/s)
- Flow 3 egress (mean 16.67 Mbit/s)

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

- Flow 1 (95th percentile 63.42 ms)
- Flow 2 (95th percentile 61.64 ms)
- Flow 3 (95th percentile 63.37 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-05-25 16:07:32
End at: 2018-05-25 16:08:02
Local clock offset: 0.09 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.65 Mbit/s
95th percentile per-packet one-way delay: 62.070 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 51.86 Mbit/s
95th percentile per-packet one-way delay: 63.576 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 61.807 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 14.88 Mbit/s
95th percentile per-packet one-way delay: 61.895 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 51.97 Mbit/s)
- Flow 1 egress (mean 51.86 Mbit/s)
- Flow 2 ingress (mean 21.25 Mbit/s)
- Flow 2 egress (mean 20.96 Mbit/s)
- Flow 3 ingress (mean 14.88 Mbit/s)
- Flow 3 egress (mean 14.88 Mbit/s)

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

- Flow 1 (95th percentile 63.58 ms)
- Flow 2 (95th percentile 61.81 ms)
- Flow 3 (95th percentile 61.90 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-05-25 16:30:53
Local clock offset: -0.02 ms
Remote clock offset: 0.224 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.68 Mbit/s
95th percentile per-packet one-way delay: 63.661 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 44.39 Mbit/s
95th percentile per-packet one-way delay: 63.727 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 63.296 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 61.957 ms
Loss rate: 1.75%
Run 5: Report of QUIC Cubic — Data Link

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

Legend:
- Flow 1 (ingress mean 44.47 Mbit/s)
- Flow 1 (egress mean 44.39 Mbit/s)
- Flow 2 (ingress mean 31.66 Mbit/s)
- Flow 2 (egress mean 31.78 Mbit/s)
- Flow 3 (ingress mean 49.50 Mbit/s)
- Flow 3 (egress mean 49.26 Mbit/s)
Run 6: Statistics of QUIC Cubic

Start at: 2018-05-25 16:54:15
End at: 2018-05-25 16:54:45
Local clock offset: -0.037 ms
Remote clock offset: 0.394 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.66 Mbit/s
95th percentile per-packet one-way delay: 63.698 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 46.23 Mbit/s
95th percentile per-packet one-way delay: 63.742 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 21.82 Mbit/s
95th percentile per-packet one-way delay: 63.535 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 21.19 Mbit/s
95th percentile per-packet one-way delay: 63.451 ms
Loss rate: 0.62%
Run 6: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress: mean 46.06 Mbps
  - Flow 1 egress: mean 46.23 Mbps
  - Flow 2 ingress: mean 22.11 Mbps
  - Flow 2 egress: mean 21.82 Mbps
  - Flow 3 ingress: mean 21.05 Mbps
  - Flow 3 egress: mean 21.19 Mbps

- **Packet Delay (ms):**
  - Flow 1 (95th percentile: 63.74 ms)
  - Flow 2 (95th percentile: 63.53 ms)
  - Flow 3 (95th percentile: 63.45 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-05-25 17:17:24
End at: 2018-05-25 17:17:54
Local clock offset: -0.058 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.01 Mbit/s
95th percentile per-packet one-way delay: 63.655 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 47.85 Mbit/s
95th percentile per-packet one-way delay: 63.635 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 22.72 Mbit/s
95th percentile per-packet one-way delay: 63.686 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 15.47 Mbit/s
95th percentile per-packet one-way delay: 63.693 ms
Loss rate: 0.88%
Run 7: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 47.95 Mbit/s)
Flow 1 egress (mean 47.85 Mbit/s)
Flow 2 ingress (mean 22.96 Mbit/s)
Flow 2 egress (mean 22.72 Mbit/s)
Flow 3 ingress (mean 15.40 Mbit/s)
Flow 3 egress (mean 15.47 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 63.63 ms)
Flow 2 (95th percentile 63.69 ms)
Flow 3 (95th percentile 63.69 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-05-25 17:40:37
End at: 2018-05-25 17:41:07
Local clock offset: -0.073 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.96 Mbit/s
95th percentile per-packet one-way delay: 63.815 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 45.82 Mbit/s
95th percentile per-packet one-way delay: 63.640 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 63.832 ms
Loss rate: 1.45%
-- Flow 3:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 64.003 ms
Loss rate: 0.48%
Run 8: Report of QUIC Cubic — Data Link

![Graph showing network performance metrics](image_url)

- **Flow 1 Ingress** (mean 45.92 Mbit/s)
- **Flow 1 Egress** (mean 45.82 Mbit/s)
- **Flow 2 Ingress** (mean 29.80 Mbit/s)
- **Flow 2 Egress** (mean 29.56 Mbit/s)
- **Flow 3 Ingress** (mean 16.66 Mbit/s)
- **Flow 3 Egress** (mean 16.80 Mbit/s)

![Graph showing packet round-trip time](image_url)

- **Flow 1** (95th percentile 63.64 ms)
- **Flow 2** (95th percentile 63.83 ms)
- **Flow 3** (95th percentile 64.00 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-05-25 18:04:17
End at: 2018-05-25 18:04:47
Local clock offset: -0.063 ms
Remote clock offset: 0.284 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.54 Mbit/s
  95th percentile per-packet one-way delay: 63.635 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 47.41 Mbit/s
  95th percentile per-packet one-way delay: 63.660 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 19.96 Mbit/s
  95th percentile per-packet one-way delay: 63.566 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 14.85 Mbit/s
  95th percentile per-packet one-way delay: 61.625 ms
  Loss rate: 1.06%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

End at: 2018-05-25 18:28:00
Local clock offset: -0.104 ms
Remote clock offset: 0.374 ms

# Below is generated by plot.py at 2018-05-25 20:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.65 Mbit/s
95th percentile per-packet one-way delay: 63.287 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 63.303 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 18.72 Mbit/s
95th percentile per-packet one-way delay: 61.753 ms
Loss rate: 1.98%
-- Flow 3:
Average throughput: 21.04 Mbit/s
95th percentile per-packet one-way delay: 63.247 ms
Loss rate: 0.79%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

End at: 2018-05-25 14:43:54
Local clock offset: -0.015 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.725 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.633 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.734 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.822 ms
Loss rate: 1.10%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-05-25 15:06:39
End at: 2018-05-25 15:07:09
Local clock offset: 0.045 ms
Remote clock offset: 0.159 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 64.044 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 64.077 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 64.454 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.448 ms
  Loss rate: 1.10%
Run 2: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 64.08 ms)  Flow 2 (95th percentile 64.45 ms)  Flow 3 (95th percentile 63.45 ms)
Run 3: Statistics of SCReAM

End at: 2018-05-25 15:30:26
Local clock offset: 0.037 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  95th percentile per-packet one-way delay: 63.674 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.697 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.613 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.553 ms
  Loss rate: 1.08%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

End at: 2018-05-25 15:53:40
Local clock offset: 0.088 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.667 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.781 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.708 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 1.08%
Run 4: Report of SCReAM — Data Link

![Graph showing network performance metrics over time]

**Throughput (Mbps):**

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

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

- Flow 1 (95th percentile 63.78 ms)
- Flow 2 (95th percentile 61.71 ms)
- Flow 3 (95th percentile 61.65 ms)
Run 5: Statistics of SCReAM

End at: 2018-05-25 16:17:17
Local clock offset: 0.042 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 63.648 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.670 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.570 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 63.625 ms
  Loss rate: 1.08%
Run 5: Report of SCReAM — Data Link

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

- Per-packet one-way delay (ms):
  - Flow 1 (95th percentile 63.67 ms)
  - Flow 2 (95th percentile 63.57 ms)
  - Flow 3 (95th percentile 63.62 ms)
Run 6: Statistics of SCReAM

Start at: 2018-05-25 16:39:54
End at: 2018-05-25 16:40:24
Local clock offset: -0.006 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.746 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.778 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.582 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.028 ms
Loss rate: 1.08%
Run 6: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 63.78 ms)  
Flow 2 (95th percentile 63.58 ms)  
Flow 3 (95th percentile 62.03 ms)
Run 7: Statistics of SCReAM

Start at: 2018-05-25 17:03:13
End at: 2018-05-25 17:03:43
Local clock offset: -0.044 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.43 Mbit/s
   95th percentile per-packet one-way delay: 63.862 ms
   Loss rate: 0.57%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 63.884 ms
   Loss rate: 0.38%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 63.663 ms
   Loss rate: 0.61%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 63.677 ms
   Loss rate: 1.08%
Run 8: Statistics of SCReAM

Start at: 2018-05-25 17:26:19
End at: 2018-05-25 17:26:49
Local clock offset: -0.028 ms
Remote clock offset: 0.234 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.713 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.739 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.691 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.624 ms
Loss rate: 1.08%
Run 8: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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 rate (%)

Time (s)

Flow 1 (95th percentile 63.74 ms)  Flow 2 (95th percentile 63.69 ms)  Flow 3 (95th percentile 63.62 ms)
Run 9: Statistics of SCReAM

Start at: 2018-05-25 17:49:52
End at: 2018-05-25 17:50:22
Local clock offset: -0.069 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.350 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.318 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.378 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.210 ms
Loss rate: 1.08%
Run 9: Report of SCReAM — Data Link

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

![Graph 2: Response Time (ms)](image)
Run 10: Statistics of SCReAM

Local clock offset: -0.081 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 63.635 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.463 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.534 ms
Loss rate: 1.08%
Run 10: Report of SCReAM — Data Link

![Graph of throughput and packet delay over time for different flows.](image-url)
Run 1: Statistics of Sprout

End at: 2018-05-25 14:42:45
Local clock offset: 0.001 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 64.177 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 1.12 Mbit/s
95th percentile per-packet one-way delay: 64.282 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.68 Mbit/s
95th percentile per-packet one-way delay: 63.651 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 62.081 ms
Loss rate: 0.91%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-05-25 15:05:30
End at: 2018-05-25 15:06:00
Local clock offset: 0.012 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1.34 Mbit/s
  95th percentile per-packet one-way delay: 63.669 ms
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 0.46 Mbit/s
  95th percentile per-packet one-way delay: 63.642 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 0.96 Mbit/s
  95th percentile per-packet one-way delay: 63.672 ms
  Loss rate: 0.30%
-- Flow 3:
  Average throughput: 0.75 Mbit/s
  95th percentile per-packet one-way delay: 63.690 ms
  Loss rate: 2.39%
Run 2: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.46 Mbps)
  - Flow 1 egress (mean 0.46 Mbps)
  - Flow 2 ingress (mean 0.96 Mbps)
  - Flow 2 egress (mean 0.96 Mbps)
  - Flow 3 ingress (mean 0.75 Mbps)
  - Flow 3 egress (mean 0.75 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 63.64 ms)
  - Flow 2 (95th percentile 63.67 ms)
  - Flow 3 (95th percentile 63.69 ms)
Run 3: Statistics of Sprout

Local clock offset: 0.08 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.83 Mbit/s
  95th percentile per-packet one-way delay: 64.006 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 0.59 Mbit/s
  95th percentile per-packet one-way delay: 63.828 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 2.72 Mbit/s
  95th percentile per-packet one-way delay: 64.077 ms
  Loss rate: 1.32%
-- Flow 3:
  Average throughput: 1.34 Mbit/s
  95th percentile per-packet one-way delay: 63.901 ms
  Loss rate: 0.27%
Run 3: Report of Sprout — Data Link

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

[Legend:
- Flow 1 ingress (mean 0.58 Mbit/s)
- Flow 1 egress (mean 0.59 Mbit/s)
- Flow 2 ingress (mean 2.74 Mbit/s)
- Flow 2 egress (mean 2.72 Mbit/s)
- Flow 3 ingress (mean 1.32 Mbit/s)
- Flow 3 egress (mean 1.34 Mbit/s)
]

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

[Legend:
- Flow 1 (95th percentile 63.83 ms)
- Flow 2 (95th percentile 64.08 ms)
- Flow 3 (95th percentile 63.90 ms)
]
Run 4: Statistics of Sprout

Start at: 2018-05-25 15:52:00
End at: 2018-05-25 15:52:30
Local clock offset: 0.099 ms
Remote clock offset: -0.135 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.88 Mbit/s
  95th percentile per-packet one-way delay: 64.303 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 0.37 Mbit/s
  95th percentile per-packet one-way delay: 64.366 ms
  Loss rate: 0.21%
-- Flow 2:
  Average throughput: 0.38 Mbit/s
  95th percentile per-packet one-way delay: 64.370 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 0.78 Mbit/s
  95th percentile per-packet one-way delay: 63.646 ms
  Loss rate: 3.40%
Run 4: Report of Sprout — Data Link

[Graphs showing throughput and packet loss over time for different flows]
Run 5: Statistics of Sprout

End at: 2018-05-25 16:16:07
Local clock offset: 0.012 ms
Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 63.916 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 63.888 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 63.896 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 1.08 Mbit/s
95th percentile per-packet one-way delay: 63.977 ms
Loss rate: 0.90%
Run 5: Report of Sprout — Data Link

![Graph of throughput over time for different flows, showing variations in performance.]

![Graph of packet delay over time for different flows, showing differences in latency.]
Run 6: Statistics of Sprout

Start at: 2018-05-25 16:38:45
Local clock offset: -0.064 ms
Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 63.983 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 1.42 Mbit/s
95th percentile per-packet one-way delay: 64.010 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 63.890 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 63.978 ms
Loss rate: 0.72%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-05-25 17:02:04
End at: 2018-05-25 17:02:34
Local clock offset: -0.053 ms
Remote clock offset: 0.578 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.24 Mbit/s
95th percentile per-packet one-way delay: 63.427 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 63.465 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 63.302 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 63.165 ms
Loss rate: 0.82%
Run 7: Report of Sprout — Data Link

![Throughput (Mbps)]

![Per packet one way delay (ms)]

- Flow 1 ingress (mean 0.62 Mbps)
- Flow 1 egress (mean 0.62 Mbps)
- Flow 2 ingress (mean 0.51 Mbps)
- Flow 2 egress (mean 0.51 Mbps)
- Flow 3 ingress (mean 0.85 Mbps)
- Flow 3 egress (mean 0.85 Mbps)
Run 8: Statistics of Sprout

Start at: 2018-05-25 17:25:09
End at: 2018-05-25 17:25:39
Local clock offset: -0.127 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.71 Mbit/s
95th percentile per-packet one-way delay: 63.765 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 1.19 Mbit/s
95th percentile per-packet one-way delay: 63.758 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 63.777 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 0.69 Mbit/s
95th percentile per-packet one-way delay: 63.756 ms
Loss rate: 0.20%
Run 8: Report of Sprout — Data Link

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

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 1.19 Mbit/s)
- Flow 1 egress (mean 1.19 Mbit/s)
- Flow 2 ingress (mean 0.44 Mbit/s)
- Flow 2 egress (mean 0.44 Mbit/s)
- Flow 3 ingress (mean 0.68 Mbit/s)
- Flow 3 egress (mean 0.69 Mbit/s)

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

- Flow 1 (95th percentile 63.76 ms)
- Flow 2 (95th percentile 63.78 ms)
- Flow 3 (95th percentile 63.76 ms)
Run 9: Statistics of Sprout

End at: 2018-05-25 17:49:12
Local clock offset: -0.049 ms
Remote clock offset: 0.233 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.07 Mbit/s
95th percentile per-packet one-way delay: 64.060 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 64.056 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 64.013 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 64.169 ms
Loss rate: 0.45%
Run 9: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.64 Mbit/s)
Flow 1 egress (mean 0.64 Mbit/s)
Flow 2 ingress (mean 0.50 Mbit/s)
Flow 2 egress (mean 0.49 Mbit/s)
Flow 3 ingress (mean 0.30 Mbit/s)
Flow 3 egress (mean 0.30 Mbit/s)

Packet loss rate (ms)

Time (s)

Flow 1 (95th percentile 64.06 ms)
Flow 2 (95th percentile 64.01 ms)
Flow 3 (95th percentile 64.17 ms)
Run 10: Statistics of Sprout

Start at: 2018-05-25 18:12:17
End at: 2018-05-25 18:12:47
Local clock offset: -0.071 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-05-25 20:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.40 Mbit/s
95th percentile per-packet one-way delay: 63.605 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 63.635 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 63.548 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 2.10 Mbit/s
95th percentile per-packet one-way delay: 63.572 ms
Loss rate: 0.50%
Run 10: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.08 Mbps/s)
- Flow 2 ingress (mean 0.96 Mbps/s)
- Flow 3 ingress (mean 2.08 Mbps/s)
- Flow 1 egress (mean 2.08 Mbps/s)
- Flow 2 egress (mean 0.96 Mbps/s)
- Flow 3 egress (mean 2.10 Mbps/s)

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

- Flow 1 (95th percentile 63.63 ms)
- Flow 2 (95th percentile 63.55 ms)
- Flow 3 (95th percentile 63.57 ms)

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Run 1: Statistics of TaoVA-100x

Start at: 2018-05-25 14:47:34
Local clock offset: -0.013 ms
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2018-05-25 20:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.84 Mbit/s
95th percentile per-packet one-way delay: 68.645 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 109.53 Mbit/s
95th percentile per-packet one-way delay: 65.034 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 214.48 Mbit/s
95th percentile per-packet one-way delay: 70.748 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 69.14 Mbit/s
95th percentile per-packet one-way delay: 69.012 ms
Loss rate: 1.35%
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 109.60 Mbit/s)
Flow 1 egress (mean 109.53 Mbit/s)
Flow 2 ingress (mean 214.25 Mbit/s)
Flow 2 egress (mean 214.48 Mbit/s)
Flow 3 ingress (mean 69.30 Mbit/s)
Flow 3 egress (mean 69.14 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 65.03 ms)
Flow 2 (95th percentile 70.75 ms)
Flow 3 (95th percentile 69.01 ms)
Run 2: Statistics of TaoVA-100x

Local clock offset: 0.048 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-05-25 20:53:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 243.75 Mbit/s
95th percentile per-packet one-way delay: 63.789 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 149.60 Mbit/s
95th percentile per-packet one-way delay: 63.545 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 83.62 Mbit/s
95th percentile per-packet one-way delay: 66.266 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 117.15 Mbit/s
95th percentile per-packet one-way delay: 63.566 ms
Loss rate: 1.41%
Run 2: Report of TaoVA-100x — Data Link

![Graph showing throughput and delay over time for different flows and their ingress and egress data rates.](image-url)
Run 3: Statistics of TaoVA-100x

Start at: 2018-05-25 15:34:07
End at: 2018-05-25 15:34:37
Local clock offset: -0.007 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-05-25 20:55:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 311.15 Mbit/s
  95th percentile per-packet one-way delay: 67.090 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 100.22 Mbit/s
  95th percentile per-packet one-way delay: 64.156 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 215.91 Mbit/s
  95th percentile per-packet one-way delay: 67.828 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 204.53 Mbit/s
  95th percentile per-packet one-way delay: 71.831 ms
  Loss rate: 1.40%
Run 3: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 99.85 Mbps)
- Flow 1 egress (mean 100.22 Mbps)
- Flow 2 ingress (mean 216.66 Mbps)
- Flow 2 egress (mean 215.91 Mbps)
- Flow 3 ingress (mean 204.75 Mbps)
- Flow 3 egress (mean 204.53 Mbps)

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

Legend:
- Flow 1 (95th percentile 64.16 ms)
- Flow 2 (95th percentile 67.83 ms)
- Flow 3 (95th percentile 71.83 ms)
Run 4: Statistics of TaoVA-100x

End at: 2018-05-25 15:57:50
Local clock offset: 0.13 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-05-25 20:57:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.03 Mbit/s
95th percentile per-packet one-way delay: 70.942 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 192.83 Mbit/s
95th percentile per-packet one-way delay: 67.815 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 180.74 Mbit/s
95th percentile per-packet one-way delay: 73.782 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 136.84 Mbit/s
95th percentile per-packet one-way delay: 75.320 ms
Loss rate: 0.13%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 192.90 Mbps)
- Flow 1 egress (mean 192.83 Mbps)
- Flow 2 ingress (mean 180.88 Mbps)
- Flow 2 egress (mean 180.74 Mbps)
- Flow 3 ingress (mean 135.26 Mbps)
- Flow 3 egress (mean 136.64 Mbps)

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

- Flow 1 (95th percentile 67.81 ms)
- Flow 2 (95th percentile 73.78 ms)
- Flow 3 (95th percentile 73.32 ms)
Run 5: Statistics of TaoVA-100x

Local clock offset: -0.024 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2018-05-25 20:57:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.38 Mbit/s
95th percentile per-packet one-way delay: 66.229 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 136.10 Mbit/s
95th percentile per-packet one-way delay: 63.780 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 170.95 Mbit/s
95th percentile per-packet one-way delay: 66.055 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 190.25 Mbit/s
95th percentile per-packet one-way delay: 69.793 ms
Loss rate: 0.73%
Run 5: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 135.84 Mbps)
  - Flow 1 egress (mean 136.10 Mbps)
  - Flow 2 ingress (mean 170.42 Mbps)
  - Flow 2 egress (mean 170.95 Mbps)
  - Flow 3 ingress (mean 189.17 Mbps)
  - Flow 3 egress (mean 190.25 Mbps)

- **Per-packet round trip delay (ms):**
  - Flow 1 (95th percentile 63.78 ms)
  - Flow 2 (95th percentile 66.06 ms)
  - Flow 3 (95th percentile 69.79 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-05-25 16:44:06
End at: 2018-05-25 16:44:36
Local clock offset: -0.03 ms
Remote clock offset: 0.354 ms

# Below is generated by plot.py at 2018-05-25 21:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.36 Mbit/s
95th percentile per-packet one-way delay: 75.272 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 161.53 Mbit/s
95th percentile per-packet one-way delay: 74.865 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 136.50 Mbit/s
95th percentile per-packet one-way delay: 72.232 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 155.06 Mbit/s
95th percentile per-packet one-way delay: 80.098 ms
Loss rate: 1.29%
Run 6: Report of TaoVA-100x — Data Link

![Graph 1: Throughput](image1)

![Graph 2: Per-packet one-way delay](image2)
Run 7: Statistics of TaoVA-100x

Start at: 2018-05-25 17:07:23
End at: 2018-05-25 17:07:53
Local clock offset: -0.025 ms
Remote clock offset: 0.263 ms

# Below is generated by plot.py at 2018-05-25 21:00:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.07 Mbit/s
95th percentile per-packet one-way delay: 81.238 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 117.39 Mbit/s
95th percentile per-packet one-way delay: 81.192 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 143.09 Mbit/s
95th percentile per-packet one-way delay: 84.410 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 129.14 Mbit/s
95th percentile per-packet one-way delay: 68.189 ms
Loss rate: 1.29%
Run 7: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 117.55 Mbps)
- Flow 1 egress (mean 117.39 Mbps)
- Flow 2 ingress (mean 143.55 Mbps)
- Flow 2 egress (mean 143.09 Mbps)
- Flow 3 ingress (mean 129.14 Mbps)
- Flow 3 egress (mean 129.14 Mbps)

Legend for delay:
- Flow 1 (95th percentile 81.19 ms)
- Flow 2 (95th percentile 84.41 ms)
- Flow 3 (95th percentile 68.19 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-05-25 17:30:33
End at: 2018-05-25 17:31:03
Local clock offset: -0.072 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-05-25 21:04:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.48 Mbit/s
95th percentile per-packet one-way delay: 81.414 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 175.26 Mbit/s
95th percentile per-packet one-way delay: 71.724 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 171.64 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 140.09 Mbit/s
95th percentile per-packet one-way delay: 92.157 ms
Loss rate: 2.01%
Run 8: Report of TaoVA-100x — Data Link

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**Graph 1: Throughput (Mbps)**
- Flow 1 ingress (mean 175.06 Mbps)
- Flow 1 egress (mean 175.26 Mbps)
- Flow 2 ingress (mean 171.19 Mbps)
- Flow 2 egress (mean 171.64 Mbps)
- Flow 3 ingress (mean 141.13 Mbps)
- Flow 3 egress (mean 140.09 Mbps)

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**Graph 2: Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 71.72 ms)
- Flow 2 (95th percentile 86.89 ms)
- Flow 3 (95th percentile 92.16 ms)

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Run 9: Statistics of TaoVA-100x

Start at: 2018-05-25 17:54:07
End at: 2018-05-25 17:54:37
Local clock offset: -0.15 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 385.28 Mbit/s
  95th percentile per-packet one-way delay: 75.475 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 202.45 Mbit/s
  95th percentile per-packet one-way delay: 72.102 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 184.01 Mbit/s
  95th percentile per-packet one-way delay: 77.094 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 183.86 Mbit/s
  95th percentile per-packet one-way delay: 81.358 ms
  Loss rate: 1.43%
Run 9: Report of TaoVA-100x — Data Link

[Diagram of network performance metrics showing throughput and per-packet one-way delay over time for different flows, each flow marked with its respective mean throughput and 95th percentile delay.]
Run 10: Statistics of TaoVA-100x

Start at: 2018-05-25 18:17:40
End at: 2018-05-25 18:18:10
Local clock offset: -0.074 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.63 Mbit/s
95th percentile per-packet one-way delay: 63.924 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 14.29 Mbit/s
95th percentile per-packet one-way delay: 63.963 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 63.831 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 201.63 Mbit/s
95th percentile per-packet one-way delay: 63.922 ms
Loss rate: 0.25%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-05-25 14:40:54
End at: 2018-05-25 14:41:24
Local clock offset: 0.002 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.12 Mbit/s
95th percentile per-packet one-way delay: 72.509 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 182.59 Mbit/s
95th percentile per-packet one-way delay: 72.364 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 68.947 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 104.03 Mbit/s
95th percentile per-packet one-way delay: 73.390 ms
Loss rate: 0.79%
Run 1: Report of TCP Vegas — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress (mean 182.65 Mbps)**
- **Flow 1 egress (mean 182.59 Mbps)**
- **Flow 2 ingress (mean 6.80 Mbps)**
- **Flow 2 egress (mean 6.75 Mbps)**
- **Flow 3 ingress (mean 103.51 Mbps)**
- **Flow 3 egress (mean 104.03 Mbps)**

**Packet Delay (ms):**
- **Flow 1 (95th percentile 72.36 ms)**
- **Flow 2 (95th percentile 68.95 ms)**
- **Flow 3 (95th percentile 73.39 ms)**
Run 2: Statistics of TCP Vegas

Start at: 2018-05-25 15:04:07
End at: 2018-05-25 15:04:37
Local clock offset: 0.023 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.97 Mbit/s
95th percentile per-packet one-way delay: 71.003 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 98.29 Mbit/s
95th percentile per-packet one-way delay: 70.865 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 182.54 Mbit/s
95th percentile per-packet one-way delay: 71.032 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 110.36 Mbit/s
95th percentile per-packet one-way delay: 71.714 ms
Loss rate: 1.41%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 98.21 Mbit/s)
- Flow 1 egress (mean 98.29 Mbit/s)
- Flow 2 ingress (mean 182.66 Mbit/s)
- Flow 2 egress (mean 182.54 Mbit/s)
- Flow 3 ingress (mean 110.51 Mbit/s)
- Flow 3 egress (mean 110.36 Mbit/s)

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

- Flow 1 (95th percentile 70.86 ms)
- Flow 2 (95th percentile 71.03 ms)
- Flow 3 (95th percentile 71.71 ms)
Run 3: Statistics of TCP Vegas

Local clock offset: 0.083 ms
Remote clock offset: -0.318 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.53 Mbit/s
95th percentile per-packet one-way delay: 71.011 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 116.40 Mbit/s
95th percentile per-packet one-way delay: 67.928 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 181.90 Mbit/s
95th percentile per-packet one-way delay: 71.817 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 65.946 ms
Loss rate: 2.75%
Run 3: Report of TCP Vegas — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 116.43 Mbit/s)
Flow 1 egress (mean 116.40 Mbit/s)
Flow 2 ingress (mean 182.68 Mbit/s)
Flow 2 egress (mean 181.90 Mbit/s)
Flow 3 ingress (mean 3.78 Mbit/s)
Flow 3 egress (mean 3.73 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 67.93 ms)
Flow 2 (95th percentile 71.82 ms)
Flow 3 (95th percentile 65.95 ms)
Run 4: Statistics of TCP Vegas

End at: 2018-05-25 15:51:16
Local clock offset: 0.11 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.11 Mbit/s
95th percentile per-packet one-way delay: 65.091 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 40.28 Mbit/s
95th percentile per-packet one-way delay: 64.851 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 50.66 Mbit/s
95th percentile per-packet one-way delay: 64.946 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 88.78 Mbit/s
95th percentile per-packet one-way delay: 65.550 ms
Loss rate: 0.79%
Run 5: Statistics of TCP Vegas

End at: 2018-05-25 16:14:50
Local clock offset: 0.036 ms
Remote clock offset: 0.188 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.88 Mbit/s
95th percentile per-packet one-way delay: 70.482 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 43.27 Mbit/s
95th percentile per-packet one-way delay: 66.162 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 180.06 Mbit/s
95th percentile per-packet one-way delay: 70.939 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 3.36 Mbit/s
95th percentile per-packet one-way delay: 66.024 ms
Loss rate: 3.00%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

End at: 2018-05-25 16:37:59
Local clock offset: -0.083 ms
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 128.18 Mbit/s
  95th percentile per-packet one-way delay: 64.767 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 39.85 Mbit/s
  95th percentile per-packet one-way delay: 64.725 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 105.03 Mbit/s
  95th percentile per-packet one-way delay: 64.714 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 56.20 Mbit/s
  95th percentile per-packet one-way delay: 65.452 ms
  Loss rate: 1.28%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 39.67 Mbit/s)
- Flow 1 egress (mean 39.85 Mbit/s)
- Flow 2 ingress (mean 105.06 Mbit/s)
- Flow 2 egress (mean 105.03 Mbit/s)
- Flow 3 ingress (mean 56.21 Mbit/s)
- Flow 3 egress (mean 56.20 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-05-25 17:00:47
End at: 2018-05-25 17:01:17
Local clock offset: -0.078 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.67 Mbit/s
95th percentile per-packet one-way delay: 69.103 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 65.239 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 65.407 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 69.97 Mbit/s
95th percentile per-packet one-way delay: 72.468 ms
Loss rate: 0.68%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Local clock offset: -0.04 ms
Remote clock offset: 0.425 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 131.55 Mbit/s
95th percentile per-packet one-way delay: 71.937 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 75.93 Mbit/s
95th percentile per-packet one-way delay: 67.996 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: 68.934 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 154.76 Mbit/s
95th percentile per-packet one-way delay: 73.175 ms
Loss rate: 1.02%
Run 8: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 25.83 Mbps)
  - Flow 1 egress (mean 75.93 Mbps)
  - Flow 2 ingress (mean 7.43 Mbps)
  - Flow 2 egress (mean 7.39 Mbps)
  - Flow 3 ingress (mean 154.38 Mbps)
  - Flow 3 egress (mean 154.76 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 68.00 ms)
  - Flow 2 (95th percentile 68.93 ms)
  - Flow 3 (95th percentile 73.17 ms)
Run 9: Statistics of TCP Vegas

End at: 2018-05-25 17:47:50
Local clock offset: -0.062 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-05-25 21:08:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.34 Mbit/s
95th percentile per-packet one-way delay: 70.865 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 102.31 Mbit/s
95th percentile per-packet one-way delay: 65.761 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 124.46 Mbit/s
95th percentile per-packet one-way delay: 65.367 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 174.37 Mbit/s
95th percentile per-packet one-way delay: 72.807 ms
Loss rate: 1.37%
Run 9: Report of TCP Vegas — Data Link

[Graphs showing network performance metrics with various lines and markers representing different flows and their ingress and egress rates, along with delay statistics.]
Run 10: Statistics of TCP Vegas

Start at: 2018-05-25 18:10:52
End at: 2018-05-25 18:11:22
Local clock offset: -0.052 ms
Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-05-25 21:09:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 284.38 Mbit/s
95th percentile per-packet one-way delay: 72.364 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 181.22 Mbit/s
95th percentile per-packet one-way delay: 72.991 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 70.13 Mbit/s
95th percentile per-packet one-way delay: 68.450 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 172.25 Mbit/s
95th percentile per-packet one-way delay: 70.627 ms
Loss rate: 1.41%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-05-25 14:44:33
End at: 2018-05-25 14:45:03
Local clock offset: -0.027 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2018-05-25 21:10:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.14 Mbit/s
95th percentile per-packet one-way delay: 225.627 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 237.40 Mbit/s
95th percentile per-packet one-way delay: 236.374 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 189.180 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 112.17 Mbit/s
95th percentile per-packet one-way delay: 176.356 ms
Loss rate: 0.89%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

End at: 2018-05-25 15:08:18
Local clock offset: 0.045 ms
Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2018-05-25 21:11:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.62 Mbit/s
95th percentile per-packet one-way delay: 166.766 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 192.41 Mbit/s
95th percentile per-packet one-way delay: 157.364 ms
Loss rate: 1.79%
-- Flow 2:
Average throughput: 167.12 Mbit/s
95th percentile per-packet one-way delay: 123.171 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 120.01 Mbit/s
95th percentile per-packet one-way delay: 317.357 ms
Loss rate: 4.38%
Run 2: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 195.23 Mbps)
  - Flow 1 egress (mean 192.41 Mbps)
  - Flow 2 ingress (mean 166.81 Mbps)
  - Flow 2 egress (mean 167.12 Mbps)
  - Flow 3 ingress (mean 123.87 Mbps)
  - Flow 3 egress (mean 120.01 Mbps)

- **Packet loss (per second):**
  - Flow 1 (95th percentile 157.36 ms)
  - Flow 2 (95th percentile 123.17 ms)
  - Flow 3 (95th percentile 317.36 ms)
Run 3: Statistics of Verus

Start at: 2018-05-25 15:31:05
Local clock offset: 0.072 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-05-25 21:11:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.80 Mbit/s
95th percentile per-packet one-way delay: 138.973 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 186.70 Mbit/s
95th percentile per-packet one-way delay: 130.016 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 165.552 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 140.16 Mbit/s
95th percentile per-packet one-way delay: 140.846 ms
Loss rate: 0.59%
Run 3: Report of Verus — Data Link

![Graphs showing network flow and delay over time for different flows.](image)

- **Flow 1 ingress (mean 186.04 Mbit/s)**
- **Flow 1 egress (mean 186.70 Mbit/s)**
- **Flow 2 ingress (mean 146.81 Mbit/s)**
- **Flow 2 egress (mean 146.82 Mbit/s)**
- **Flow 3 ingress (mean 139.15 Mbit/s)**
- **Flow 3 egress (mean 140.16 Mbit/s)**

- **Flow 1 (95th percentile 130.02 ms)**
- **Flow 2 (95th percentile 165.55 ms)**
- **Flow 3 (95th percentile 140.85 ms)**

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Run 4: Statistics of Verus

Start at: 2018-05-25 15:54:18
End at: 2018-05-25 15:54:48
Local clock offset: 0.119 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-05-25 21:11:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 330.62 Mbit/s
  95th percentile per-packet one-way delay: 192.219 ms
  Loss rate: 1.20%
-- Flow 1:
  Average throughput: 218.74 Mbit/s
  95th percentile per-packet one-way delay: 145.311 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 103.34 Mbit/s
  95th percentile per-packet one-way delay: 273.134 ms
  Loss rate: 2.25%
-- Flow 3:
  Average throughput: 131.56 Mbit/s
  95th percentile per-packet one-way delay: 295.859 ms
  Loss rate: 3.83%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-05-25 16:17:56
End at: 2018-05-25 16:18:26
Local clock offset: -0.004 ms
Remote clock offset: 0.219 ms

# Below is generated by plot.py at 2018-05-25 21:11:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.38 Mbit/s
95th percentile per-packet one-way delay: 189.210 ms
Loss rate: 3.39%
-- Flow 1:
Average throughput: 189.50 Mbit/s
95th percentile per-packet one-way delay: 156.651 ms
Loss rate: 2.18%
-- Flow 2:
Average throughput: 116.85 Mbit/s
95th percentile per-packet one-way delay: 306.420 ms
Loss rate: 6.28%
-- Flow 3:
Average throughput: 140.67 Mbit/s
95th percentile per-packet one-way delay: 171.390 ms
Loss rate: 3.27%
Run 5: Report of Verus — Data Link

---

**Graph 1:**

- **X-axis:** Time (s)
- **Y-axis:** Throughput (Mbps)
- Legend:
  - Flow 1 ingress (mean 192.93 Mbps)
  - Flow 1 egress (mean 189.50 Mbps)
  - Flow 2 ingress (mean 123.94 Mbps)
  - Flow 2 egress (mean 116.85 Mbps)
  - Flow 3 ingress (mean 143.64 Mbps)
  - Flow 3 egress (mean 140.67 Mbps)

---

**Graph 2:**

- **X-axis:** Time (s)
- **Y-axis:** Per-packet one-way delay (ms)
- Legend:
  - Flow 1 (95th percentile 156.65 ms)
  - Flow 2 (95th percentile 306.42 ms)
  - Flow 3 (95th percentile 171.39 ms)

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Run 6: Statistics of Verus

Start at: 2018-05-25 16:41:03  
End at: 2018-05-25 16:41:33  
Local clock offset: -0.01 ms  
Remote clock offset: 0.22 ms

# Below is generated by plot.py at 2018-05-25 21:15:43  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 339.99 Mbit/s  
  95th percentile per-packet one-way delay: 232.570 ms  
  Loss rate: 3.65%  
-- Flow 1:  
  Average throughput: 211.75 Mbit/s  
  95th percentile per-packet one-way delay: 177.285 ms  
  Loss rate: 2.99%  
-- Flow 2:  
  Average throughput: 157.01 Mbit/s  
  95th percentile per-packet one-way delay: 267.490 ms  
  Loss rate: 4.72%  
-- Flow 3:  
  Average throughput: 72.72 Mbit/s  
  95th percentile per-packet one-way delay: 169.445 ms  
  Loss rate: 4.77%
Run 6: Report of Verus — Data Link

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

Flow 1 ingress (mean 217.43 Mbit/s) — Flow 1 egress (mean 211.75 Mbit/s)
Flow 2 ingress (mean 164.70 Mbit/s) — Flow 2 egress (mean 157.01 Mbit/s)
Flow 3 ingress (mean 75.46 Mbit/s) — Flow 3 egress (mean 72.72 Mbit/s)

Flow 1 (95th percentile 177.28 ms) — Flow 2 (95th percentile 267.49 ms) — Flow 3 (95th percentile 169.44 ms)
Run 7: Statistics of Verus

Start at: 2018-05-25 17:04:22
End at: 2018-05-25 17:04:52
Local clock offset: 0.006 ms
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-05-25 21:15:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.72 Mbit/s
95th percentile per-packet one-way delay: 160.929 ms
Loss rate: 3.65%
-- Flow 1:
Average throughput: 189.77 Mbit/s
95th percentile per-packet one-way delay: 107.588 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 119.54 Mbit/s
95th percentile per-packet one-way delay: 189.801 ms
Loss rate: 2.58%
-- Flow 3:
Average throughput: 112.50 Mbit/s
95th percentile per-packet one-way delay: 368.759 ms
Loss rate: 18.60%
Run 7: Report of Verus — Data Link
Run 8: Statistics of Verus

Local clock offset: -0.045 ms
Remote clock offset: 0.236 ms

# Below is generated by plot.py at 2018-05-25 21:17:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.94 Mbit/s
95th percentile per-packet one-way delay: 132.026 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 214.39 Mbit/s
95th percentile per-packet one-way delay: 122.065 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 206.58 Mbit/s
95th percentile per-packet one-way delay: 143.944 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 56.53 Mbit/s
95th percentile per-packet one-way delay: 126.998 ms
Loss rate: 0.03%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-05-25 17:51:01
End at: 2018-05-25 17:51:31
Local clock offset: -0.08 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2018-05-25 21:18:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 379.50 Mbit/s
95th percentile per-packet one-way delay: 139.900 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 231.99 Mbit/s
95th percentile per-packet one-way delay: 130.814 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 170.72 Mbit/s
95th percentile per-packet one-way delay: 158.979 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 103.91 Mbit/s
95th percentile per-packet one-way delay: 131.468 ms
Loss rate: 1.94%
Run 9: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 232.61 Mbps)  Flow 1 egress (mean 231.99 Mbps)
Flow 2 ingress (mean 171.96 Mbps)  Flow 2 egress (mean 170.72 Mbps)
Flow 3 ingress (mean 104.51 Mbps)  Flow 3 egress (mean 103.91 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 130.81 ms)  Flow 2 (95th percentile 158.98 ms)  Flow 3 (95th percentile 131.47 ms)
Run 10: Statistics of Verus

End at: 2018-05-25 18:15:05
Local clock offset: -0.079 ms
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2018-05-25 21:19:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.93 Mbit/s
95th percentile per-packet one-way delay: 169.321 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 199.70 Mbit/s
95th percentile per-packet one-way delay: 173.205 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 174.51 Mbit/s
95th percentile per-packet one-way delay: 153.794 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 123.01 Mbit/s
95th percentile per-packet one-way delay: 191.897 ms
Loss rate: 4.28%
Run 10: Report of Verus — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows.]
Run 1: Statistics of PCC-Vivace

End at: 2018-05-25 14:54:50
Local clock offset: -0.028 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-05-25 21:23:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 506.52 Mbit/s
  95th percentile per-packet one-way delay: 233.580 ms
  Loss rate: 2.44%
-- Flow 1:
  Average throughput: 316.69 Mbit/s
  95th percentile per-packet one-way delay: 245.436 ms
  Loss rate: 2.95%
-- Flow 2:
  Average throughput: 244.08 Mbit/s
  95th percentile per-packet one-way delay: 233.738 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 85.35 Mbit/s
  95th percentile per-packet one-way delay: 62.888 ms
  Loss rate: 1.78%
Run 1: Report of PCC-Vivace — Data Link

The diagram above illustrates the throughput and per-packet one-way delay for three different flows over time.

Throughput (Mbps):
- **Flow 1 ingress (mean 324.95 Mbps)**
- **Flow 1 egress (mean 316.69 Mbps)**
- **Flow 2 ingress (mean 246.27 Mbps)**
- **Flow 2 egress (mean 244.08 Mbps)**
- **Flow 3 ingress (mean 85.79 Mbps)**
- **Flow 3 egress (mean 85.35 Mbps)**

Per-packet one-way delay (ms):
- **Flow 1 (95th percentile 245.44 ms)**
- **Flow 2 (95th percentile 233.74 ms)**
- **Flow 3 (95th percentile 62.89 ms)**

The charts show a clear comparison of the performance metrics for each flow, highlighting the variations in throughput and delay over the observed time period.
Run 2: Statistics of PCC-Vivace

Start at: 2018-05-25 15:17:38
End at: 2018-05-25 15:18:08
Local clock offset: 0.055 ms
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2018-05-25 21:23:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 514.74 Mbit/s
  95th percentile per-packet one-way delay: 299.436 ms
  Loss rate: 4.15%
-- Flow 1:
  Average throughput: 291.73 Mbit/s
  95th percentile per-packet one-way delay: 310.138 ms
  Loss rate: 5.29%
-- Flow 2:
  Average throughput: 210.95 Mbit/s
  95th percentile per-packet one-way delay: 125.746 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 253.39 Mbit/s
  95th percentile per-packet one-way delay: 284.339 ms
  Loss rate: 5.95%
Run 2: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 396.70 Mbps)  Flow 1 egress (mean 291.73 Mbps)
Flow 2 ingress (mean 210.71 Mbps)  Flow 2 egress (mean 210.95 Mbps)
Flow 3 ingress (mean 265.90 Mbps)  Flow 3 egress (mean 253.39 Mbps)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 310.14 ms)  Flow 2 (95th percentile 125.75 ms)  Flow 3 (95th percentile 284.34 ms)
Run 3: Statistics of PCC-Vivace

End at: 2018-05-25 15:41:34
Local clock offset: 0.104 ms
Remote clock offset: 0.37 ms

# Below is generated by plot.py at 2018-05-25 21:23:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 455.23 Mbit/s
  95th percentile per-packet one-way delay: 234.964 ms
  Loss rate: 2.38%
-- Flow 1:
  Average throughput: 337.44 Mbit/s
  95th percentile per-packet one-way delay: 205.745 ms
  Loss rate: 1.23%
-- Flow 2:
  Average throughput: 38.02 Mbit/s
  95th percentile per-packet one-way delay: 63.072 ms
  Loss rate: 0.97%
-- Flow 3:
  Average throughput: 283.12 Mbit/s
  95th percentile per-packet one-way delay: 238.708 ms
  Loss rate: 6.69%
Run 3: Report of PCC-Vivace — Data Link

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**Throughput (Mbps) vs. Time (s)**

- Flow 1 ingress (mean 340.19 Mbps)
- Flow 1 egress (mean 337.44 Mbps)
- Flow 2 ingress (mean 38.14 Mbps)
- Flow 2 egress (mean 38.02 Mbps)
- Flow 3 ingress (mean 299.53 Mbps)
- Flow 3 egress (mean 283.12 Mbps)

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

- Flow 1 (95th percentile 205.75 ms)
- Flow 2 (95th percentile 63.07 ms)
- Flow 3 (95th percentile 238.71 ms)

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Run 4: Statistics of PCC-Vivace

Start at: 2018-05-25 16:04:17
End at: 2018-05-25 16:04:47
Local clock offset: 0.104 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-05-25 21:27:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 542.55 Mbit/s
  95th percentile per-packet one-way delay: 237.046 ms
  Loss rate: 1.17%
-- Flow 1:
  Average throughput: 314.49 Mbit/s
  95th percentile per-packet one-way delay: 243.992 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 239.00 Mbit/s
  95th percentile per-packet one-way delay: 177.345 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 212.16 Mbit/s
  95th percentile per-packet one-way delay: 99.127 ms
  Loss rate: 3.02%
Run 4: Report of PCC-Vivace — Data Link

![Graphs showing throughput and one-way delay over time for different flows.]
Run 5: Statistics of PCC-Vivace

Local clock offset: -0.022 ms  
Remote clock offset: 0.315 ms

# Below is generated by plot.py at 2018-05-25 21:27:20  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 386.98 Mbit/s  
95th percentile per-packet one-way delay: 90.450 ms  
Loss rate: 0.93%  
-- Flow 1:  
Average throughput: 235.22 Mbit/s  
95th percentile per-packet one-way delay: 84.840 ms  
Loss rate: 0.67%  
-- Flow 2:  
Average throughput: 151.81 Mbit/s  
95th percentile per-packet one-way delay: 98.702 ms  
Loss rate: 1.05%  
-- Flow 3:  
Average throughput: 156.11 Mbit/s  
95th percentile per-packet one-way delay: 80.926 ms  
Loss rate: 1.86%
Run 5: Report of PCC-Vivace — Data Link

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

- **Flow 1**: Ingress (mean 235.67 Mbit/s) and Egress (mean 235.22 Mbit/s)
- **Flow 2**: Ingress (mean 152.30 Mbit/s) and Egress (mean 151.81 Mbit/s)
- **Flow 3**: Ingress (mean 156.71 Mbit/s) and Egress (mean 156.11 Mbit/s)

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

- **Flow 1**: 95th percentile 84.84 ms
- **Flow 2**: 95th percentile 98.70 ms
- **Flow 3**: 95th percentile 80.93 ms
Run 6: Statistics of PCC-Vivace

End at: 2018-05-25 16:51:29
Local clock offset: -0.056 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-05-25 21:28:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 557.00 Mbit/s
95th percentile per-packet one-way delay: 179.323 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 320.41 Mbit/s
95th percentile per-packet one-way delay: 75.505 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 264.79 Mbit/s
95th percentile per-packet one-way delay: 219.173 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 186.02 Mbit/s
95th percentile per-packet one-way delay: 245.843 ms
Loss rate: 6.12%
Run 6: Report of PCC-Vivace — Data Link

![Graph of throughput and delay](image-url)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 320.15 Mbps)
  - Flow 1 egress (mean 320.41 Mbps)
  - Flow 2 ingress (mean 264.51 Mbps)
  - Flow 2 egress (mean 264.79 Mbps)
  - Flow 3 ingress (mean 195.60 Mbps)
  - Flow 3 egress (mean 186.02 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 75.50 ms)
  - Flow 2 (95th percentile 219.17 ms)
  - Flow 3 (95th percentile 245.84 ms)
Run 7: Statistics of PCC-Vivace

Start at: 2018-05-25 17:14:11
End at: 2018-05-25 17:14:41
Local clock offset: -0.043 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-05-25 21:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 506.50 Mbit/s
95th percentile per-packet one-way delay: 228.880 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 313.08 Mbit/s
95th percentile per-packet one-way delay: 238.842 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 248.12 Mbit/s
95th percentile per-packet one-way delay: 227.884 ms
Loss rate: 3.39%
-- Flow 3:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 64.291 ms
Loss rate: 1.77%
Run 7: Report of PCC-Vivace — Data Link

![Graph showing data link performance metrics over time.](image)

- **Flow 1 ingress (mean 313.51 Mbit/s)**
- **Flow 1 egress (mean 313.08 Mbit/s)**
- **Flow 2 ingress (mean 235.18 Mbit/s)**
- **Flow 2 egress (mean 248.12 Mbit/s)**
- **Flow 3 ingress (mean 88.54 Mbit/s)**
- **Flow 3 egress (mean 98.11 Mbit/s)**

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

- **Flow 1 (95th percentile 238.84 ms)**
- **Flow 2 (95th percentile 227.88 ms)**
- **Flow 3 (95th percentile 64.29 ms)**

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Run 8: Statistics of PCC-Vivace

End at: 2018-05-25 17:37:55
Local clock offset: -0.069 ms
Remote clock offset: 0.307 ms

# Below is generated by plot.py at 2018-05-25 21:28:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 499.39 Mbit/s
95th percentile per-packet one-way delay: 172.654 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 298.36 Mbit/s
95th percentile per-packet one-way delay: 241.329 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 224.62 Mbit/s
95th percentile per-packet one-way delay: 68.758 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 158.90 Mbit/s
95th percentile per-packet one-way delay: 66.270 ms
Loss rate: 1.62%
Run 8: Report of PCC-Vivace — Data Link

![Throughput Graph](image1)

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 299.72 Mbit/s)
- Flow 1 egress (mean 298.36 Mbit/s)
- Flow 2 ingress (mean 225.23 Mbit/s)
- Flow 2 egress (mean 224.62 Mbit/s)
- Flow 3 ingress (mean 159.43 Mbit/s)
- Flow 3 egress (mean 158.90 Mbit/s)

![Delay Graph](image2)

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

- Flow 1 (95th percentile 241.33 ms)
- Flow 2 (95th percentile 68.76 ms)
- Flow 3 (95th percentile 66.27 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-05-25 18:01:02
End at: 2018-05-25 18:01:32
Local clock offset: -0.049 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2018-05-25 21:29:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.59 Mbit/s
95th percentile per-packet one-way delay: 123.452 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 329.28 Mbit/s
95th percentile per-packet one-way delay: 100.099 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 256.91 Mbit/s
95th percentile per-packet one-way delay: 188.587 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 88.11 Mbit/s
95th percentile per-packet one-way delay: 62.901 ms
Loss rate: 2.19%
Run 9: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress** (mean 329.69 Mbps)
- **Flow 1 egress** (mean 329.28 Mbps)
- **Flow 2 ingress** (mean 257.98 Mbps)
- **Flow 2 egress** (mean 256.91 Mbps)
- **Flow 3 ingress** (mean 88.92 Mbps)
- **Flow 3 egress** (mean 88.11 Mbps)

![Graph 2: Round trip time delay (ms)](image2)

- **Flow 1** (95th percentile 100.10 ms)
- **Flow 2** (95th percentile 188.59 ms)
- **Flow 3** (95th percentile 62.90 ms)
Run 10: Statistics of PCC-Vivace

End at: 2018-05-25 18:24:44
Local clock offset: -0.08 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 508.77 Mbit/s
95th percentile per-packet one-way delay: 156.536 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 318.48 Mbit/s
95th percentile per-packet one-way delay: 121.841 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 244.42 Mbit/s
95th percentile per-packet one-way delay: 245.640 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 85.93 Mbit/s
95th percentile per-packet one-way delay: 64.911 ms
Loss rate: 1.63%
Run 10: Report of PCC-Vivace — Data Link
Run 1: Statistics of WebRTC media

Local clock offset: -0.014 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 64.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.945 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.091 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.948 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

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

Per-packet round-trip delay (ms)

Flow 1 (95th percentile 63.95 ms)
Flow 2 (95th percentile 64.09 ms)
Flow 3 (95th percentile 64.95 ms)
Run 2: Statistics of WebRTC media

End at: 2018-05-25 15:12:55
Local clock offset: 0.071 ms
Remote clock offset: 0.23 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.796 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.052 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.778 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.462 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.05 Mbps)
Flow 1 egress (mean 0.05 Mbps)
Flow 2 ingress (mean 0.05 Mbps)
Flow 2 egress (mean 0.05 Mbps)
Flow 3 ingress (mean 0.05 Mbps)
Flow 3 egress (mean 0.05 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 64.05 ms)
Flow 2 (95th percentile 63.78 ms)
Flow 3 (95th percentile 63.46 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-05-25 15:35:45
End at: 2018-05-25 15:36:15
Local clock offset: 0.08 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 64.263 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.197 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.009 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.340 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

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

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

- Flow 1 (95th percentile 64.20 ms)
- Flow 2 (95th percentile 64.01 ms)
- Flow 3 (95th percentile 64.34 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-05-25 15:59:03
End at: 2018-05-25 15:59:33
Local clock offset: 0.079 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 64.436 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.480 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 63.765 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.500 ms
  Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.05 Mbit/s)
- Flow 2 egress (mean 0.05 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 5: Statistics of WebRTC media

End at: 2018-05-25 16:23:05  
Local clock offset: -0.019 ms  
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-05-25 21:29:28  
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.14 Mbit/s
   95th percentile per-packet one-way delay: 64.042 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 0.05 Mbit/s
   95th percentile per-packet one-way delay: 63.322 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 0.05 Mbit/s
   95th percentile per-packet one-way delay: 62.151 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 0.05 Mbit/s
   95th percentile per-packet one-way delay: 64.216 ms
   Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps) over time (s) for different flows with mean 0.05 Mbps ingress and egress.]

![Graph 2: Per-packet one-way delay (ms) over time (s) for different flows with 95th percentile delay values.]
Run 6: Statistics of WebRTC media

Start at: 2018-05-25 16:45:43
Local clock offset: -0.03 ms
Remote clock offset: 0.162 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.794 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.840 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.841 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.737 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

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

Detailed analysis of WebRTC media performance for Run 6, focusing on data link metrics.
Run 7: Statistics of WebRTC media

Start at: 2018-05-25 17:08:56
End at: 2018-05-25 17:09:26
Local clock offset: -0.021 ms
Remote clock offset: 0.563 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.643 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.372 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.916 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.705 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

End at: 2018-05-25 17:32:44
Local clock offset: -0.092 ms
Remote clock offset: 0.622 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.614 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.258 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.648 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

End at: 2018-05-25 17:56:22
Local clock offset: -0.067 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 63.856 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.689 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 64.248 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.662 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Local clock offset: -0.074 ms
Remote clock offset: -0.261 ms

# Below is generated by plot.py at 2018-05-25 21:29:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 64.033 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.100 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 63.712 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 64.040 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link