Repeated the test of 17 congestion control schemes 10 times. Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.

Increased UDP receive buffer to 16 MB (default) and 32 MB (max). NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9250dbec7fb57193cddf1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af85249aeccac061c93e75640ef710b5
third_party/genericCC @ d0153f8e594aa89e93b032143cedbde58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfcfe0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3c
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f6b82cbe8f464b1b39
third_party/pcc @ 1af9d958fa0d666b623c091a55fec872b4981e1
    M receiver/src/buffer.h
    M receiver/src/core.cpp
    M sender/src/buffer.h
    M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08f92ab24f974ab
third_party/proto-quic @ 77961f1a8273a866b42f1be8143e9c978f3c7f42
third_party/scream-reproduce @ f099118d421aa3131bf1ff1964974e1ada3db
    M src/ScreamClient
    M src/ScreamServer
third_party/sprout @ 366e35c6178b0e31d4ad6c18c74f9415f19a26
third_party/verus @ d4b447ea74c660a261149af2629562939f9a494
    M src/verus.hpp
    M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a416b6f9dde4735770d143a1fa2851
test from GCE Tokyo to GCE Sydney, 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>199.51</td>
<td>189.76</td>
<td>165.98</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>142.43</td>
<td>91.71</td>
<td>68.90</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>213.72</td>
<td>161.94</td>
<td>45.24</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>685.26</td>
<td>664.37</td>
<td>550.79</td>
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<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>438.06</td>
<td>583.59</td>
<td>578.39</td>
</tr>
<tr>
<td>Indigo</td>
<td>10</td>
<td>216.73</td>
<td>197.99</td>
<td>129.39</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>30.29</td>
<td>20.16</td>
<td>10.42</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>407.27</td>
<td>81.69</td>
<td>16.73</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>205.30</td>
<td>178.76</td>
<td>62.40</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>51.54</td>
<td>35.91</td>
<td>17.45</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.21</td>
<td>0.21</td>
<td>0.22</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>6.34</td>
<td>6.26</td>
<td>6.19</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>83.75</td>
<td>87.43</td>
<td>74.07</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>129.37</td>
<td>169.61</td>
<td>81.83</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>200.64</td>
<td>166.59</td>
<td>109.51</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>323.78</td>
<td>258.19</td>
<td>112.44</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>2.02</td>
<td>1.32</td>
<td>0.54</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-07-06 07:32:27
End at: 2018-07-06 07:32:57
Local clock offset: 0.082 ms
Remote clock offset: 1.182 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.01 Mbit/s
95th percentile per-packet one-way delay: 82.557 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 203.02 Mbit/s
95th percentile per-packet one-way delay: 74.644 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 195.48 Mbit/s
95th percentile per-packet one-way delay: 81.873 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 181.84 Mbit/s
95th percentile per-packet one-way delay: 90.950 ms
Loss rate: 1.32%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-07-06 07:56:53
End at: 2018-07-06 07:57:23
Local clock offset: -0.034 ms
Remote clock offset: -1.213 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 372.70 Mbit/s
  95th percentile per-packet one-way delay: 97.066 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 192.20 Mbit/s
  95th percentile per-packet one-way delay: 94.328 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 187.80 Mbit/s
  95th percentile per-packet one-way delay: 97.079 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 168.41 Mbit/s
  95th percentile per-packet one-way delay: 100.974 ms
  Loss rate: 1.35%
Run 2: Report of TCP BBR — Data Link

![Graph showing TCP BBR data for Run 2]

- **Flow 1 ingress** (mean 192.29 Mbit/s)
- **Flow 1 egress** (mean 192.20 Mbit/s)
- **Flow 2 ingress** (mean 187.95 Mbit/s)
- **Flow 2 egress** (mean 187.88 Mbit/s)
- **Flow 3 ingress** (mean 169.53 Mbit/s)
- **Flow 3 egress** (mean 168.41 Mbit/s)

![Graph showing per-packet round-trip delay]

- **Flow 1** (95th percentile 94.33 ms)
- **Flow 2** (95th percentile 97.08 ms)
- **Flow 3** (95th percentile 100.97 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-07-06 08:21:26
End at: 2018-07-06 08:21:56
Local clock offset: 0.053 ms
Remote clock offset: 1.186 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 383.43 Mbit/s
  95th percentile per-packet one-way delay: 88.345 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 203.28 Mbit/s
  95th percentile per-packet one-way delay: 86.130 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 186.86 Mbit/s
  95th percentile per-packet one-way delay: 88.015 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 169.32 Mbit/s
  95th percentile per-packet one-way delay: 93.004 ms
  Loss rate: 1.50%
Run 4: Statistics of TCP BBR

Start at: 2018-07-06 08:46:14
End at: 2018-07-06 08:46:44
Local clock offset: -0.083 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 384.97 Mbit/s
95th percentile per-packet one-way delay: 93.555 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 201.04 Mbit/s
95th percentile per-packet one-way delay: 89.677 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 195.68 Mbit/s
95th percentile per-packet one-way delay: 95.713 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 163.19 Mbit/s
95th percentile per-packet one-way delay: 95.049 ms
Loss rate: 1.50%
Run 4: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 201.03 Mbit/s)
- Flow 1 egress (mean 201.04 Mbit/s)
- Flow 2 ingress (mean 195.94 Mbit/s)
- Flow 2 egress (mean 195.68 Mbit/s)
- Flow 3 ingress (mean 164.33 Mbit/s)
- Flow 3 egress (mean 163.39 Mbit/s)

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

- Flow 1 (95th percentile 89.68 ms)
- Flow 2 (95th percentile 95.71 ms)
- Flow 3 (95th percentile 95.05 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-07-06 09:10:51
End at: 2018-07-06 09:11:21
Local clock offset: -0.109 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 363.26 Mbit/s
95th percentile per-packet one-way delay: 106.658 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 193.10 Mbit/s
95th percentile per-packet one-way delay: 103.030 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 185.70 Mbit/s
95th percentile per-packet one-way delay: 107.694 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 141.69 Mbit/s
95th percentile per-packet one-way delay: 109.879 ms
Loss rate: 1.61%
Run 5: Report of TCP BBR — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 193.18 Mbit/s)
- Flow 1 egress (mean 193.10 Mbit/s)
- Flow 2 ingress (mean 186.05 Mbit/s)
- Flow 2 egress (mean 185.70 Mbit/s)
- Flow 3 ingress (mean 142.49 Mbit/s)
- Flow 3 egress (mean 141.69 Mbit/s)

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

- Flow 1 (95th percentile 103.03 ms)
- Flow 2 (95th percentile 107.69 ms)
- Flow 3 (95th percentile 109.88 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-07-06 09:35:18
End at: 2018-07-06 09:35:48
Local clock offset: 0.11 ms
Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.08 Mbit/s
95th percentile per-packet one-way delay: 97.184 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 192.51 Mbit/s
95th percentile per-packet one-way delay: 94.605 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 186.99 Mbit/s
95th percentile per-packet one-way delay: 97.639 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 158.50 Mbit/s
95th percentile per-packet one-way delay: 99.932 ms
Loss rate: 1.55%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-07-06 09:59:48
End at: 2018-07-06 10:00:18
Local clock offset: 0.189 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.24 Mbit/s
95th percentile per-packet one-way delay: 98.372 ms
Loss rate: 0.65%

-- Flow 1:
Average throughput: 201.46 Mbit/s
95th percentile per-packet one-way delay: 98.635 ms
Loss rate: 0.40%

-- Flow 2:
Average throughput: 182.37 Mbit/s
95th percentile per-packet one-way delay: 97.291 ms
Loss rate: 0.64%

-- Flow 3:
Average throughput: 162.79 Mbit/s
95th percentile per-packet one-way delay: 99.944 ms
Loss rate: 1.57%
Run 7: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 201.62 Mbps)
- Flow 1 egress (mean 201.46 Mbps)
- Flow 2 ingress (mean 182.57 Mbps)
- Flow 2 egress (mean 182.37 Mbps)
- Flow 3 ingress (mean 163.69 Mbps)
- Flow 3 egress (mean 162.79 Mbps)

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

- Flow 1 (95th percentile 98.64 ms)
- Flow 2 (95th percentile 97.29 ms)
- Flow 3 (95th percentile 99.94 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-07-06 10:24:50
End at: 2018-07-06 10:25:20
Local clock offset: 0.026 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-07-06 11:41:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 384.08 Mbit/s
  95th percentile per-packet one-way delay: 89.088 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 204.38 Mbit/s
  95th percentile per-packet one-way delay: 86.642 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 186.06 Mbit/s
  95th percentile per-packet one-way delay: 89.121 ms
  Loss rate: 0.60%
-- Flow 3:
  Average throughput: 169.59 Mbit/s
  95th percentile per-packet one-way delay: 93.699 ms
  Loss rate: 1.34%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 204.56 Mbps)
- Flow 1 egress (mean 204.38 Mbps)
- Flow 2 ingress (mean 186.24 Mbps)
- Flow 2 egress (mean 186.06 Mbps)
- Flow 3 ingress (mean 170.31 Mbps)
- Flow 3 egress (mean 169.59 Mbps)

![Graph showing packet delay distribution for three different flows.](image)

- Flow 1 (95th percentile 86.64 ms)
- Flow 2 (95th percentile 89.12 ms)
- Flow 3 (95th percentile 93.70 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-07-06 10:49:24
End at: 2018-07-06 10:49:54
Local clock offset: -0.321 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2018-07-06 11:47:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.15 Mbit/s
95th percentile per-packet one-way delay: 84.584 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 202.91 Mbit/s
95th percentile per-packet one-way delay: 82.148 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 199.79 Mbit/s
95th percentile per-packet one-way delay: 85.278 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 174.56 Mbit/s
95th percentile per-packet one-way delay: 90.323 ms
Loss rate: 1.40%
Run 9: Report of TCP BBR — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 203.01 Mbit/s)
  - Flow 1 egress (mean 202.91 Mbit/s)
  - Flow 2 ingress (mean 199.98 Mbit/s)
  - Flow 2 egress (mean 199.79 Mbit/s)
  - Flow 3 ingress (mean 175.26 Mbit/s)
  - Flow 3 egress (mean 174.56 Mbit/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 82.15 ms)
  - Flow 2 (95th percentile 85.28 ms)
  - Flow 3 (95th percentile 90.32 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-07-06 11:13:59
End at: 2018-07-06 11:14:29
Local clock offset: -0.041 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-07-06 11:47:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 384.07 Mbit/s
  95th percentile per-packet one-way delay: 89.389 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 201.19 Mbit/s
  95th percentile per-packet one-way delay: 85.290 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 190.83 Mbit/s
  95th percentile per-packet one-way delay: 89.722 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 169.95 Mbit/s
  95th percentile per-packet one-way delay: 94.968 ms
  Loss rate: 1.26%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-07-06 07:19:52
End at: 2018-07-06 07:20:22
Local clock offset: 0.145 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-07-06 11:47:19
# Datalink statistics

-- Total of 3 flows:
Average throughput: 179.28 Mbit/s
95th percentile per-packet one-way delay: 58.072 ms
Loss rate: 0.51%

-- Flow 1:
Average throughput: 54.34 Mbit/s
95th percentile per-packet one-way delay: 53.513 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 149.68 Mbit/s
95th percentile per-packet one-way delay: 59.747 ms
Loss rate: 0.49%

-- Flow 3:
Average throughput: 77.78 Mbit/s
95th percentile per-packet one-way delay: 57.184 ms
Loss rate: 1.62%
Run 1: Report of Copa — Data Link

![Throughput Graph]

![Delay Graph]
Run 2: Statistics of Copa

Start at: 2018-07-06 07:44:19
End at: 2018-07-06 07:44:49
Local clock offset: -0.147 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-07-06 11:47:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.69 Mbit/s
95th percentile per-packet one-way delay: 78.190 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 177.97 Mbit/s
95th percentile per-packet one-way delay: 79.931 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 42.02 Mbit/s
95th percentile per-packet one-way delay: 62.284 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 65.66 Mbit/s
95th percentile per-packet one-way delay: 60.980 ms
Loss rate: 0.38%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-07-06 08:08:49
End at: 2018-07-06 08:09:19
Local clock offset: 0.173 ms
Remote clock offset: 1.276 ms

# Below is generated by plot.py at 2018-07-06 11:47:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 221.77 Mbit/s
95th percentile per-packet one-way delay: 62.979 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 115.90 Mbit/s
95th percentile per-packet one-way delay: 61.544 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 116.48 Mbit/s
95th percentile per-packet one-way delay: 62.751 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 86.56 Mbit/s
95th percentile per-packet one-way delay: 69.123 ms
Loss rate: 0.73%
Run 3: Report of Copa — Data Link

![Graph showing network performance metrics for different flows over time. The top graph displays throughput in Mbit/s, while the bottom graph shows per-packet one-way delay in ms.]
Run 4: Statistics of Copa

Start at: 2018-07-06 08:33:42
End at: 2018-07-06 08:34:12
Local clock offset: ~0.013 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-07-06 11:47:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.32 Mbit/s
95th percentile per-packet one-way delay: 58.820 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 71.31 Mbit/s
95th percentile per-packet one-way delay: 54.236 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 99.77 Mbit/s
95th percentile per-packet one-way delay: 76.810 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.79 Mbit/s
95th percentile per-packet one-way delay: 65.932 ms
Loss rate: 3.19%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-07-06 08:58:21
End at: 2018-07-06 08:58:51
Local clock offset: -0.062 ms
Remote clock offset: 0.227 ms

# Below is generated by plot.py at 2018-07-06 11:49:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.46 Mbit/s
95th percentile per-packet one-way delay: 61.186 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 163.90 Mbit/s
95th percentile per-packet one-way delay: 60.852 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 82.03 Mbit/s
95th percentile per-packet one-way delay: 59.196 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 121.22 Mbit/s
95th percentile per-packet one-way delay: 64.477 ms
Loss rate: 0.78%
Run 5: Report of Copa — Data Link

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

- Flow 1 ingress (mean 163.59 Mbit/s)
- Flow 1 egress (mean 163.90 Mbit/s)
- Flow 2 ingress (mean 82.14 Mbit/s)
- Flow 2 egress (mean 82.03 Mbit/s)
- Flow 3 ingress (mean 120.74 Mbit/s)
- Flow 3 egress (mean 121.22 Mbit/s)

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

- Flow 1 (95th percentile 60.85 ms)
- Flow 2 (95th percentile 59.20 ms)
- Flow 3 (95th percentile 64.48 ms)
Run 6: Statistics of Copa

Start at: 2018-07-06 09:22:44  
End at: 2018-07-06 09:23:14  
Local clock offset: -0.011 ms  
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-07-06 11:50:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.73 Mbit/s
95th percentile per-packet one-way delay: 59.161 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 223.78 Mbit/s
95th percentile per-packet one-way delay: 60.418 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 69.13 Mbit/s
95th percentile per-packet one-way delay: 54.360 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 54.53 Mbit/s
95th percentile per-packet one-way delay: 55.337 ms
Loss rate: 0.77%
Run 6: Report of Copa — Data Link

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

- Flow 1 ingress (mean 223.45 Mbit/s)
- Flow 1 egress (mean 223.78 Mbit/s)
- Flow 2 ingress (mean 69.29 Mbit/s)
- Flow 2 egress (mean 69.13 Mbit/s)
- Flow 3 ingress (mean 54.39 Mbit/s)
- Flow 3 egress (mean 54.53 Mbit/s)

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

- Flow 1 (95th percentile 60.42 ms)
- Flow 2 (95th percentile 54.36 ms)
- Flow 3 (95th percentile 55.34 ms)
Run 7: Statistics of Copa

Start at: 2018-07-06 09:47:16
End at: 2018-07-06 09:47:46
Local clock offset: 0.055 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2018-07-06 11:51:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 245.52 Mbit/s
95th percentile per-packet one-way delay: 62.144 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 192.18 Mbit/s
95th percentile per-packet one-way delay: 60.188 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 64.62 Mbit/s
95th percentile per-packet one-way delay: 78.530 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 57.114 ms
Loss rate: 0.72%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-07-06 10:12:11
End at: 2018-07-06 10:12:41
Local clock offset: -0.142 ms
Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2018-07-06 11:55:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 255.20 Mbit/s
95th percentile per-packet one-way delay: 60.156 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 193.93 Mbit/s
95th percentile per-packet one-way delay: 60.262 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 81.42 Mbit/s
95th percentile per-packet one-way delay: 60.158 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 21.59 Mbit/s
95th percentile per-packet one-way delay: 56.028 ms
Loss rate: 1.76%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-07-06 10:36:50
End at: 2018-07-06 10:37:20
Local clock offset: 0.002 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-06 11:55:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 233.11 Mbit/s
  95th percentile per-packet one-way delay: 61.809 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 157.63 Mbit/s
  95th percentile per-packet one-way delay: 62.683 ms
  Loss rate: 0.49%
-- Flow 2:
  Average throughput: 101.67 Mbit/s
  95th percentile per-packet one-way delay: 60.450 ms
  Loss rate: 0.29%
-- Flow 3:
  Average throughput: 47.20 Mbit/s
  95th percentile per-packet one-way delay: 55.634 ms
  Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 157.85 Mbps)
- Flow 1 egress (mean 157.63 Mbps)
- Flow 2 ingress (mean 101.43 Mbps)
- Flow 2 egress (mean 101.67 Mbps)
- Flow 3 ingress (mean 47.42 Mbps)
- Flow 3 egress (mean 47.20 Mbps)

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

- Flow 1 (95th percentile 62.68 ms)
- Flow 2 (95th percentile 60.45 ms)
- Flow 3 (95th percentile 55.63 ms)
Run 10: Statistics of Copa

Start at: 2018-07-06 11:01:26
End at: 2018-07-06 11:01:56
Local clock offset: -0.051 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2018-07-06 11:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.34 Mbit/s
95th percentile per-packet one-way delay: 61.819 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 73.40 Mbit/s
95th percentile per-packet one-way delay: 59.308 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 110.29 Mbit/s
95th percentile per-packet one-way delay: 60.715 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 123.29 Mbit/s
95th percentile per-packet one-way delay: 68.088 ms
Loss rate: 2.23%
Run 10: Report of Copa — Data Link

![Graph of Run 10: Report of Copa — Data Link]

- Flow 1 ingress (mean 73.53 Mbit/s)
- Flow 1 egress (mean 73.40 Mbit/s)
- Flow 2 ingress (mean 110.54 Mbit/s)
- Flow 2 egress (mean 110.29 Mbit/s)
- Flow 3 ingress (mean 124.74 Mbit/s)
- Flow 3 egress (mean 123.29 Mbit/s)

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

- Flow 1 (95th percentile 59.31 ms)
- Flow 2 (95th percentile 60.72 ms)
- Flow 3 (95th percentile 68.09 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-07-06 07:21:15
End at: 2018-07-06 07:21:45
Local clock offset: -0.15 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-07-06 11:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.17 Mbit/s
95th percentile per-packet one-way delay: 102.878 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 206.21 Mbit/s
95th percentile per-packet one-way delay: 95.261 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 192.70 Mbit/s
95th percentile per-packet one-way delay: 101.880 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 160.43 Mbit/s
95th percentile per-packet one-way delay: 113.213 ms
Loss rate: 1.55%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-07-06 07:45:47
End at: 2018-07-06 07:46:17
Local clock offset: -0.072 ms
Remote clock offset: 0.356 ms

# Below is generated by plot.py at 2018-07-06 11:55:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 252.89 Mbit/s
95th percentile per-packet one-way delay: 63.120 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 219.42 Mbit/s
95th percentile per-packet one-way delay: 63.092 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 47.78 Mbit/s
95th percentile per-packet one-way delay: 63.306 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 5.22 Mbit/s
95th percentile per-packet one-way delay: 65.917 ms
Loss rate: 3.20%
Run 2: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 219.54 Mbit/s)
- Flow 1 egress (mean 219.42 Mbit/s)
- Flow 2 ingress (mean 48.05 Mbit/s)
- Flow 2 egress (mean 47.78 Mbit/s)
- Flow 3 ingress (mean 5.34 Mbit/s)
- Flow 3 egress (mean 5.22 Mbit/s)
Run 3: Statistics of TCP Cubic

Start at: 2018-07-06 08:10:16
End at: 2018-07-06 08:10:46
Local clock offset: -0.029 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-07-06 11:56:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.38 Mbit/s
95th percentile per-packet one-way delay: 66.190 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 216.08 Mbit/s
95th percentile per-packet one-way delay: 64.983 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 210.61 Mbit/s
95th percentile per-packet one-way delay: 66.985 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 65.110 ms
Loss rate: 4.60%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-07-06 08:34:58
End at: 2018-07-06 08:35:28
Local clock offset: 0.006 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-07-06 11:57:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 361.40 Mbit/s
  95th percentile per-packet one-way delay: 65.969 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 218.10 Mbit/s
  95th percentile per-packet one-way delay: 65.751 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 213.21 Mbit/s
  95th percentile per-packet one-way delay: 66.275 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 4.57 Mbit/s
  95th percentile per-packet one-way delay: 62.179 ms
  Loss rate: 4.59%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-07-06 08:59:53
End at: 2018-07-06 09:00:23
Local clock offset: -0.088 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-07-06 11:59:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.97 Mbit/s
95th percentile per-packet one-way delay: 64.256 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 216.07 Mbit/s
95th percentile per-packet one-way delay: 63.374 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 212.24 Mbit/s
95th percentile per-packet one-way delay: 65.422 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 64.002 ms
Loss rate: 4.58%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 216.17 Mbit/s)
- Flow 1 egress (mean 216.07 Mbit/s)
- Flow 2 ingress (mean 211.44 Mbit/s)
- Flow 2 egress (mean 212.24 Mbit/s)
- Flow 3 ingress (mean 4.37 Mbit/s)
- Flow 3 egress (mean 4.21 Mbit/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 63.37 ms)
- Flow 2 (95th percentile 65.42 ms)
- Flow 3 (95th percentile 64.00 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-07-06 09:24:17
End at: 2018-07-06 09:24:47
Local clock offset: 0.133 ms
Remote clock offset: -1.222 ms

# Below is generated by plot.py at 2018-07-06 11:59:23
# Datalink statistics
--- Total of 3 flows:
Average throughput: 354.06 Mbit/s
95th percentile per-packet one-way delay: 64.779 ms
Loss rate: 0.37%
--- Flow 1:
Average throughput: 217.82 Mbit/s
95th percentile per-packet one-way delay: 65.045 ms
Loss rate: 0.38%
--- Flow 2:
Average throughput: 202.57 Mbit/s
95th percentile per-packet one-way delay: 64.090 ms
Loss rate: 0.31%
--- Flow 3:
Average throughput: 4.89 Mbit/s
95th percentile per-packet one-way delay: 63.873 ms
Loss rate: 4.06%
Run 6: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 217.92 Mbit/s)
- Flow 1 egress (mean 217.82 Mbit/s)
- Flow 2 ingress (mean 202.14 Mbit/s)
- Flow 2 egress (mean 202.57 Mbit/s)
- Flow 3 ingress (mean 5.05 Mbit/s)
- Flow 3 egress (mean 4.89 Mbit/s)

![Graph showing per-packet round-trip delay distribution for different flows.](diagram.png)

Legend:
- Flow 1 (95th percentile 65.05 ms)
- Flow 2 (95th percentile 64.09 ms)
- Flow 3 (95th percentile 63.87 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-07-06 09:48:45
End at: 2018-07-06 09:49:15
Local clock offset: -0.089 ms
Remote clock offset: -1.145 ms

# Below is generated by plot.py at 2018-07-06 12:00:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 372.17 Mbit/s
  95th percentile per-packet one-way delay: 102.642 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 198.34 Mbit/s
  95th percentile per-packet one-way delay: 99.384 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 183.22 Mbit/s
  95th percentile per-packet one-way delay: 102.654 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 157.88 Mbit/s
  95th percentile per-packet one-way delay: 108.386 ms
  Loss rate: 1.51%
Run 7: Report of TCP Cubic — Data Link

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

Flow 1 ingress (mean 197.94 Mbit/s)  Flow 1 egress (mean 198.34 Mbit/s)
Flow 2 ingress (mean 182.93 Mbit/s)  Flow 2 egress (mean 183.22 Mbit/s)
Flow 3 ingress (mean 158.66 Mbit/s)  Flow 3 egress (mean 157.88 Mbit/s)

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

Flow 1 (95th percentile 99.38 ms)  Flow 2 (95th percentile 102.65 ms)  Flow 3 (95th percentile 108.39 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-07-06 10:13:42
End at: 2018-07-06 10:14:12
Local clock offset: -0.023 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-07-06 12:01:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 381.33 Mbit/s
  95th percentile per-packet one-way delay: 78.663 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 210.89 Mbit/s
  95th percentile per-packet one-way delay: 76.051 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 206.09 Mbit/s
  95th percentile per-packet one-way delay: 80.704 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 101.41 Mbit/s
  95th percentile per-packet one-way delay: 79.144 ms
  Loss rate: 1.35%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-07-06 10:38:19
End at: 2018-07-06 10:38:49
Local clock offset: -0.378 ms
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2018-07-06 12:01:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.85 Mbit/s
95th percentile per-packet one-way delay: 62.511 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 218.92 Mbit/s
95th percentile per-packet one-way delay: 62.731 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 102.82 Mbit/s
95th percentile per-packet one-way delay: 60.483 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 58.888 ms
Loss rate: 3.76%
Run 9: Report of TCP Cubic — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 219.00 Mbps)
- Flow 1 egress (mean 218.92 Mbps)
- Flow 2 ingress (mean 103.05 Mbps)
- Flow 2 egress (mean 102.82 Mbps)
- Flow 3 ingress (mean 5.11 Mbps)
- Flow 3 egress (mean 4.97 Mbps)

Packet Loss (one way delay [ms]):
- Flow 1 (95th percentile 62.73 ms)
- Flow 2 (95th percentile 60.48 ms)
- Flow 3 (95th percentile 58.89 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-07-06 11:02:50
End at: 2018-07-06 11:03:20
Local clock offset: -0.057 ms
Remote clock offset: 1.29 ms

# Below is generated by plot.py at 2018-07-06 12:01:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 248.89 Mbit/s
  95th percentile per-packet one-way delay: 63.673 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 215.32 Mbit/s
  95th percentile per-packet one-way delay: 63.827 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 48.15 Mbit/s
  95th percentile per-packet one-way delay: 61.891 ms
  Loss rate: 2.44%
-- Flow 3:
  Average throughput: 4.69 Mbit/s
  95th percentile per-packet one-way delay: 61.788 ms
  Loss rate: 4.33%
Run 10: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 1: Statistics of FillP

Start at: 2018-07-06 07:16:27
End at: 2018-07-06 07:16:57
Local clock offset: -0.151 ms
Remote clock offset: -1.359 ms

# Below is generated by plot.py at 2018-07-06 12:24:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1262.25 Mbit/s
  95th percentile per-packet one-way delay: 250.918 ms
  Loss rate: 5.44%
-- Flow 1:
  Average throughput: 639.76 Mbit/s
  95th percentile per-packet one-way delay: 278.064 ms
  Loss rate: 4.99%
-- Flow 2:
  Average throughput: 710.52 Mbit/s
  95th percentile per-packet one-way delay: 228.305 ms
  Loss rate: 3.74%
-- Flow 3:
  Average throughput: 456.26 Mbit/s
  95th percentile per-packet one-way delay: 242.900 ms
  Loss rate: 12.11%
Run 1: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 671.05 Mbps)
- Flow 1 Egress (mean 639.76 Mbps)
- Flow 2 Ingress (mean 734.36 Mbps)
- Flow 2 Egress (mean 710.52 Mbps)
- Flow 3 Ingress (mean 513.85 Mbps)
- Flow 3 Egress (mean 456.26 Mbps)

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

- Flow 1 (95th percentile 278.06 ms)
- Flow 2 (95th percentile 228.31 ms)
- Flow 3 (95th percentile 242.90 ms)
Run 2: Statistics of FillP

Start at: 2018-07-06 07:40:53  
End at: 2018-07-06 07:41:23  
Local clock offset: -0.044 ms  
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-07-06 12:27:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1350.56 Mbit/s  
95th percentile per-packet one-way delay: 247.934 ms  
Loss rate: 4.20%  
-- Flow 1:  
Average throughput: 710.42 Mbit/s  
95th percentile per-packet one-way delay: 230.157 ms  
Loss rate: 3.52%  
-- Flow 2:  
Average throughput: 658.27 Mbit/s  
95th percentile per-packet one-way delay: 262.408 ms  
Loss rate: 4.72%  
-- Flow 3:  
Average throughput: 615.80 Mbit/s  
95th percentile per-packet one-way delay: 243.811 ms  
Loss rate: 5.41%
Run 2: Report of FillP — Data Link

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

- **Flow 1** (ingress mean 733.86 Mb/s, egress mean 710.42 Mb/s)
- **Flow 2** (ingress mean 687.21 Mb/s, egress mean 658.27 Mb/s)
- **Flow 3** (ingress mean 644.41 Mb/s, egress mean 615.80 Mb/s)

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

- **Flow 1** (95th percentile 230.16 ms)
- **Flow 2** (95th percentile 262.41 ms)
- **Flow 3** (95th percentile 243.01 ms)
Run 3: Statistics of FillP

Start at: 2018-07-06 08:05:21
End at: 2018-07-06 08:05:51
Local clock offset: 0.029 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2018-07-06 12:28:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1323.25 Mbit/s
95th percentile per-packet one-way delay: 254.775 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 676.04 Mbit/s
95th percentile per-packet one-way delay: 255.174 ms
Loss rate: 5.27%
-- Flow 2:
Average throughput: 653.11 Mbit/s
95th percentile per-packet one-way delay: 261.409 ms
Loss rate: 3.54%
-- Flow 3:
Average throughput: 646.47 Mbit/s
95th percentile per-packet one-way delay: 157.918 ms
Loss rate: 4.19%
Run 3: Report of FillP — Data Link

![Graph of Throughput and Latency](image-url)

- Throughput (Mbps):
  - Flow 1 Ingress (mean 711.15 Mbps)
  - Flow 1 Egress (mean 676.04 Mbps)
  - Flow 2 Ingress (mean 673.39 Mbps)
  - Flow 2 Egress (mean 653.13 Mbps)
  - Flow 3 Ingress (mean 667.38 Mbps)
  - Flow 3 Egress (mean 646.47 Mbps)

- Latency (ms):
  - Flow 1 (95th percentile 255.17 ms)
  - Flow 2 (95th percentile 261.41 ms)
  - Flow 3 (95th percentile 157.92 ms)
Run 4: Statistics of FillP

Start at: 2018-07-06 08:30:14
End at: 2018-07-06 08:30:44
Local clock offset: 0.166 ms
Remote clock offset: -0.234 ms

# Below is generated by plot.py at 2018-07-06 12:28:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1297.87 Mbit/s
95th percentile per-packet one-way delay: 255.733 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 664.44 Mbit/s
95th percentile per-packet one-way delay: 266.159 ms
Loss rate: 4.09%
-- Flow 2:
Average throughput: 627.39 Mbit/s
95th percentile per-packet one-way delay: 263.757 ms
Loss rate: 3.45%
-- Flow 3:
Average throughput: 657.44 Mbit/s
95th percentile per-packet one-way delay: 131.338 ms
Loss rate: 2.73%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-07-06 08:54:55
End at: 2018-07-06 08:55:25
Local clock offset: -0.05 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-07-06 12:28:36
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 1307.46 Mbit/s
 95th percentile per-packet one-way delay: 249.438 ms
 Loss rate: 2.88%
-- Flow 1:
 Average throughput: 713.54 Mbit/s
 95th percentile per-packet one-way delay: 241.197 ms
 Loss rate: 2.22%
-- Flow 2:
 Average throughput: 700.65 Mbit/s
 95th percentile per-packet one-way delay: 262.443 ms
 Loss rate: 3.64%
-- Flow 3:
 Average throughput: 392.62 Mbit/s
 95th percentile per-packet one-way delay: 141.776 ms
 Loss rate: 3.68%
Run 5: Report of FillP — Data Link

![Throughput vs Time Graph]

- **Flow 1 ingress (mean 737.22 Mbit/s)**
- **Flow 1 egress (mean 713.54 Mbit/s)**
- **Flow 2 ingress (mean 723.22 Mbit/s)**
- **Flow 2 egress (mean 700.65 Mbit/s)**
- **Flow 3 ingress (mean 403.18 Mbit/s)**
- **Flow 3 egress (mean 392.62 Mbit/s)**

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

- **Flow 1 (95th percentile 241.20 ms)**
- **Flow 2 (95th percentile 262.44 ms)**
- **Flow 3 (95th percentile 141.78 ms)**
Run 6: Statistics of FILLP

Start at: 2018-07-06 09:19:19
End at: 2018-07-06 09:19:49
Local clock offset: -0.026 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-07-06 12:28:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1248.96 Mbit/s
95th percentile per-packet one-way delay: 243.633 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 655.99 Mbit/s
95th percentile per-packet one-way delay: 244.200 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 707.19 Mbit/s
95th percentile per-packet one-way delay: 247.360 ms
Loss rate: 5.07%
-- Flow 3:
Average throughput: 380.11 Mbit/s
95th percentile per-packet one-way delay: 220.267 ms
Loss rate: 0.02%
Run 6: Report of FillP — Data Link

Throughput vs Time (Mbps):

- Flow 1 Ingress (mean 667.21 Mbps)
- Flow 1 Egress (mean 655.99 Mbps)
- Flow 2 Ingress (mean 741.04 Mbps)
- Flow 2 Egress (mean 707.19 Mbps)
- Flow 3 Ingress (mean 381.63 Mbps)
- Flow 3 Egress (mean 380.11 Mbps)

Packet delay vs Time (ms):

- Flow 1 (95th percentile 244.20 ms)
- Flow 2 (95th percentile 247.36 ms)
- Flow 3 (95th percentile 220.27 ms)
Run 7: Statistics of FillP

Start at: 2018-07-06 09:43:49
End at: 2018-07-06 09:44:19
Local clock offset: 0.274 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-07-06 12:30:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1309.74 Mbit/s
95th percentile per-packet one-way delay: 207.726 ms
Loss rate: 4.85%
-- Flow 1:
Average throughput: 678.70 Mbit/s
95th percentile per-packet one-way delay: 232.470 ms
Loss rate: 4.28%
-- Flow 2:
Average throughput: 635.87 Mbit/s
95th percentile per-packet one-way delay: 185.707 ms
Loss rate: 6.24%
-- Flow 3:
Average throughput: 632.93 Mbit/s
95th percentile per-packet one-way delay: 179.997 ms
Loss rate: 3.81%
Run 7: Report of FillP — Data Link

**Throughput (Mbps)**

- **Flow 1 Ingress** (mean 706.61 Mbps)
- **Flow 1 Egress** (mean 678.70 Mbps)
- **Flow 2 Ingress** (mean 674.67 Mbps)
- **Flow 2 Egress** (mean 635.87 Mbps)
- **Flow 3 Ingress** (mean 650.84 Mbps)
- **Flow 3 Egress** (mean 632.93 Mbps)

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

- **Flow 1** (95th percentile 232.47 ms)
- **Flow 2** (95th percentile 185.71 ms)
- **Flow 3** (95th percentile 180.00 ms)
Run 8: Statistics of FillP

Start at: 2018-07-06 10:08:41
End at: 2018-07-06 10:09:11
Local clock offset: -0.163 ms
Remote clock offset: 0.12 ms

# Below is generated by plot.py at 2018-07-06 12:31:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1338.94 Mbit/s
  95th percentile per-packet one-way delay: 244.673 ms
  Loss rate: 4.47%
-- Flow 1:
  Average throughput: 742.27 Mbit/s
  95th percentile per-packet one-way delay: 218.554 ms
  Loss rate: 2.61%
-- Flow 2:
  Average throughput: 669.50 Mbit/s
  95th percentile per-packet one-way delay: 276.968 ms
  Loss rate: 7.05%
-- Flow 3:
  Average throughput: 461.32 Mbit/s
  95th percentile per-packet one-way delay: 147.444 ms
  Loss rate: 5.58%
Run 8: Report of FillP — Data Link

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

![Graph 2: Per-packet one-way delay vs Time (ms)]
Run 9: Statistics of FillP

Start at: 2018-07-06 10:33:24
End at: 2018-07-06 10:33:54
Local clock offset: -0.09 ms
Remote clock offset: -1.311 ms

# Below is generated by plot.py at 2018-07-06 12:54:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1284.24 Mbit/s
95th percentile per-packet one-way delay: 200.319 ms
Loss rate: 7.30%
-- Flow 1:
Average throughput: 670.32 Mbit/s
95th percentile per-packet one-way delay: 176.576 ms
Loss rate: 6.23%
-- Flow 2:
Average throughput: 590.74 Mbit/s
95th percentile per-packet one-way delay: 250.377 ms
Loss rate: 9.99%
-- Flow 3:
Average throughput: 676.35 Mbit/s
95th percentile per-packet one-way delay: 212.739 ms
Loss rate: 5.59%
Run 9: Report of FillP — Data Link

Throughput (Mbps):

- **Flow 1 Ingress** (mean 712.35 Mbps)
- **Flow 1 Egress** (mean 670.52 Mbps)
- **Flow 2 Ingress** (mean 652.74 Mbps)
- **Flow 2 Egress** (mean 590.74 Mbps)
- **Flow 3 Ingress** (mean 708.78 Mbps)
- **Flow 3 Egress** (mean 676.35 Mbps)

Delay (ms):

- **Flow 1** (95th percentile 176.58 ms)
- **Flow 2** (95th percentile 250.38 ms)
- **Flow 3** (95th percentile 212.74 ms)
Run 10: Statistics of FillP

Start at: 2018-07-06 10:57:58
End at: 2018-07-06 10:58:28
Local clock offset: -0.084 ms
Remote clock offset: 1.3 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1353.34 Mbit/s
  95th percentile per-packet one-way delay: 238.074 ms
  Loss rate: 3.77%
-- Flow 1:
  Average throughput: 701.14 Mbit/s
  95th percentile per-packet one-way delay: 233.167 ms
  Loss rate: 2.41%
-- Flow 2:
  Average throughput: 690.44 Mbit/s
  95th percentile per-packet one-way delay: 266.511 ms
  Loss rate: 4.95%
-- Flow 3:
  Average throughput: 588.58 Mbit/s
  95th percentile per-packet one-way delay: 140.589 ms
  Loss rate: 5.71%
Run 10: Report of FillIP — Data Link

[Graph of data link performance]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 716.05 Mbps) — Flow 1 egress (mean 701.14 Mbps)
Flow 2 ingress (mean 722.63 Mbps) — Flow 2 egress (mean 690.44 Mbps)
Flow 3 ingress (mean 617.81 Mbps) — Flow 3 egress (mean 588.58 Mbps)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 233.17 ms) — Flow 2 (95th percentile 266.51 ms) — Flow 3 (95th percentile 140.59 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-06 07:33:55
End at: 2018-07-06 07:34:25
Local clock offset: -0.198 ms
Remote clock offset: 0.199 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 870.33 Mbit/s
  95th percentile per-packet one-way delay: 258.970 ms
  Loss rate: 7.80%
-- Flow 1:
  Average throughput: 233.82 Mbit/s
  95th percentile per-packet one-way delay: 297.338 ms
  Loss rate: 12.31%
-- Flow 2:
  Average throughput: 663.04 Mbit/s
  95th percentile per-packet one-way delay: 188.117 ms
  Loss rate: 5.53%
-- Flow 3:
  Average throughput: 596.10 Mbit/s
  95th percentile per-packet one-way delay: 187.995 ms
  Loss rate: 7.15%
Run 1: Report of FillP-Sheep — Data Link

![Graph showing data link performance](image)

- Flow 1 Ingress (mean 265.59 Mbit/s)
- Flow 1 Egress (mean 233.82 Mbit/s)
- Flow 2 Ingress (mean 698.25 Mbit/s)
- Flow 2 Egress (mean 663.04 Mbit/s)
- Flow 3 Ingress (mean 636.25 Mbit/s)
- Flow 3 Egress (mean 596.10 Mbit/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 297.34 ms)
- Flow 2 (95th percentile 188.12 ms)
- Flow 3 (95th percentile 188.00 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2018-07-06 07:58:19
End at: 2018-07-06 07:58:49
Local clock offset: 0.034 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.50 Mbit/s
95th percentile per-packet one-way delay: 230.649 ms
Loss rate: 4.90%
-- Flow 1:
Average throughput: 260.63 Mbit/s
95th percentile per-packet one-way delay: 270.820 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 651.92 Mbit/s
95th percentile per-packet one-way delay: 186.699 ms
Loss rate: 6.74%
-- Flow 3:
Average throughput: 611.93 Mbit/s
95th percentile per-packet one-way delay: 194.292 ms
Loss rate: 3.49%
Run 2: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 267.25 Mbit/s)**
- **Flow 1 egress (mean 260.63 Mbit/s)**
- **Flow 2 ingress (mean 695.32 Mbit/s)**
- **Flow 2 egress (mean 651.92 Mbit/s)**
- **Flow 3 ingress (mean 627.50 Mbit/s)**
- **Flow 3 egress (mean 611.93 Mbit/s)**

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

- **Flow 1 (95th percentile 270.82 ms)**
- **Flow 2 (95th percentile 186.70 ms)**
- **Flow 3 (95th percentile 194.29 ms)**

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Run 3: Statistics of FillP-Sheep

Start at: 2018-07-06 08:22:54
End at: 2018-07-06 08:23:24
Local clock offset: 0.147 ms
Remote clock offset: -0.241 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1222.21 Mbit/s
95th percentile per-packet one-way delay: 266.248 ms
Loss rate: 7.40%

-- Flow 1:
Average throughput: 685.59 Mbit/s
95th percentile per-packet one-way delay: 272.333 ms
Loss rate: 9.90%

-- Flow 2:
Average throughput: 511.08 Mbit/s
95th percentile per-packet one-way delay: 254.675 ms
Loss rate: 3.29%

-- Flow 3:
Average throughput: 600.45 Mbit/s
95th percentile per-packet one-way delay: 189.501 ms
Loss rate: 5.18%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-06 08:47:41
End at: 2018-07-06 08:48:11
Local clock offset: 0.082 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 623.30 Mbit/s
  95th percentile per-packet one-way delay: 286.476 ms
  Loss rate: 11.16%
-- Flow 1:
  Average throughput: 264.80 Mbit/s
  95th percentile per-packet one-way delay: 285.107 ms
  Loss rate: 6.35%
-- Flow 2:
  Average throughput: 257.26 Mbit/s
  95th percentile per-packet one-way delay: 274.868 ms
  Loss rate: 12.29%
-- Flow 3:
  Average throughput: 572.57 Mbit/s
  95th percentile per-packet one-way delay: 294.696 ms
  Loss rate: 16.25%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-06 09:12:17
End at: 2018-07-06 09:12:47
Local clock offset: -0.064 ms
Remote clock offset: 1.254 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1039.04 Mbit/s
95th percentile per-packet one-way delay: 253.736 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 550.82 Mbit/s
95th percentile per-packet one-way delay: 259.659 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 478.13 Mbit/s
95th percentile per-packet one-way delay: 275.147 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 523.99 Mbit/s
95th percentile per-packet one-way delay: 169.536 ms
Loss rate: 8.58%
Run 5: Report of FillP-Sheep — Data Link
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-06 09:36:45
End at: 2018-07-06 09:37:15
Local clock offset: -0.166 ms
Remote clock offset: 1.266 ms

# Below is generated by plot.py at 2018-07-06 12:57:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1030.58 Mbit/s
95th percentile per-packet one-way delay: 234.395 ms
Loss rate: 5.42%

-- Flow 1:
Average throughput: 408.85 Mbit/s
95th percentile per-packet one-way delay: 245.382 ms
Loss rate: 3.26%

-- Flow 2:
Average throughput: 660.47 Mbit/s
95th percentile per-packet one-way delay: 185.264 ms
Loss rate: 6.79%

-- Flow 3:
Average throughput: 556.72 Mbit/s
95th percentile per-packet one-way delay: 216.286 ms
Loss rate: 6.79%
Run 7: Statistics of FillP-Sheep

Start at: 2018-07-06 10:01:15
End at: 2018-07-06 10:01:45
Local clock offset: -0.12 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-07-06 13:11:57
# Datalink statistics
--- Total of 3 flows:
Average throughput: 1233.21 Mbit/s
95th percentile per-packet one-way delay: 221.458 ms
Loss rate: 6.87%
--- Flow 1:
Average throughput: 645.83 Mbit/s
95th percentile per-packet one-way delay: 232.120 ms
Loss rate: 7.07%
--- Flow 2:
Average throughput: 628.14 Mbit/s
95th percentile per-packet one-way delay: 172.993 ms
Loss rate: 5.75%
--- Flow 3:
Average throughput: 516.96 Mbit/s
95th percentile per-packet one-way delay: 180.367 ms
Loss rate: 8.79%
Run 7: Report of FillP-Sheep — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 692.58 Mbit/s)
- Blue solid line: Flow 1 egress (mean 645.83 Mbit/s)
- Red dashed-dotted line: Flow 2 ingress (mean 662.92 Mbit/s)
- Red solid line: Flow 2 egress (mean 628.14 Mbit/s)
- Green solid line: Flow 3 ingress (mean 560.67 Mbit/s)
- Green dashed line: Flow 3 egress (mean 516.96 Mbit/s)

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

- Blue circles: Flow 1 (95th percentile 232.12 ms)
- Green squares: Flow 2 (95th percentile 172.99 ms)
- Red triangles: Flow 3 (95th percentile 180.37 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-06 10:26:17
End at: 2018-07-06 10:26:47
Local clock offset: -0.087 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-07-06 13:11:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1019.59 Mbit/s
  95th percentile per-packet one-way delay: 282.873 ms
  Loss rate: 9.60%
-- Flow 1:
  Average throughput: 411.80 Mbit/s
  95th percentile per-packet one-way delay: 292.064 ms
  Loss rate: 9.38%
-- Flow 2:
  Average throughput: 639.14 Mbit/s
  95th percentile per-packet one-way delay: 258.141 ms
  Loss rate: 10.70%
-- Flow 3:
  Average throughput: 556.24 Mbit/s
  95th percentile per-packet one-way delay: 248.672 ms
  Loss rate: 7.45%
Run 8: Report of FillP-Sheep — Data Link

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

Start at: 2018-07-06 10:50:52
End at: 2018-07-06 10:51:22
Local clock offset: -0.269 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-07-06 13:16:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1145.44 Mbit/s
  95th percentile per-packet one-way delay: 266.624 ms
  Loss rate: 6.70%
-- Flow 1:
  Average throughput: 554.55 Mbit/s
  95th percentile per-packet one-way delay: 271.263 ms
  Loss rate: 5.91%
-- Flow 2:
  Average throughput: 593.64 Mbit/s
  95th percentile per-packet one-way delay: 261.098 ms
  Loss rate: 9.78%
-- Flow 3:
  Average throughput: 597.56 Mbit/s
  95th percentile per-packet one-way delay: 130.653 ms
  Loss rate: 2.32%
Run 9: Report of FillP-Sheep — Data Link
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-06 11:15:27
End at: 2018-07-06 11:15:57
Local clock offset: -0.108 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1077.89 Mbit/s
  95th percentile per-packet one-way delay: 271.412 ms
  Loss rate: 5.73%
-- Flow 1:
  Average throughput: 363.87 Mbit/s
  95th percentile per-packet one-way delay: 288.514 ms
  Loss rate: 6.47%
-- Flow 2:
  Average throughput: 753.05 Mbit/s
  95th percentile per-packet one-way delay: 251.836 ms
  Loss rate: 6.33%
-- Flow 3:
  Average throughput: 651.38 Mbit/s
  95th percentile per-packet one-way delay: 225.354 ms
  Loss rate: 2.94%
Run 10: Report of FillIP-Sheep — Data Link

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

*Legend for Graph 1:*
- Flow 1 Ingress (mean 387.71 Mb/s)
- Flow 1 Egress (mean 363.87 Mb/s)
- Flow 2 Ingress (mean 799.77 Mb/s)
- Flow 2 Egress (mean 753.05 Mb/s)
- Flow 3 Ingress (mean 664.81 Mb/s)
- Flow 3 Egress (mean 651.38 Mb/s)

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

*Legend for Graph 2:*
- Flow 1 (95th percentile 288.51 ms)
- Flow 2 (95th percentile 251.84 ms)
- Flow 3 (95th percentile 225.35 ms)
Run 1: Statistics of Indigo

Start at: 2018-07-06 07:28:26
End at: 2018-07-06 07:28:56
Local clock offset: 0.085 ms
Remote clock offset: -1.485 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.53 Mbit/s
95th percentile per-packet one-way delay: 70.883 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 227.35 Mbit/s
95th percentile per-packet one-way delay: 69.281 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 180.94 Mbit/s
95th percentile per-packet one-way delay: 72.072 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 139.59 Mbit/s
95th percentile per-packet one-way delay: 73.233 ms
Loss rate: 1.44%
Run 1: Report of Indigo — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 2: Statistics of Indigo

Start at: 2018-07-06 07:52:48
End at: 2018-07-06 07:53:18
Local clock offset: 0.078 ms
Remote clock offset: 0.256 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.63 Mbit/s
95th percentile per-packet one-way delay: 72.380 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 214.38 Mbit/s
95th percentile per-packet one-way delay: 71.100 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 212.40 Mbit/s
95th percentile per-packet one-way delay: 72.636 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 129.56 Mbit/s
95th percentile per-packet one-way delay: 74.450 ms
Loss rate: 1.38%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-07-06 08:17:19
End at: 2018-07-06 08:17:49
Local clock offset: 0.101 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 383.09 Mbit/s
95th percentile per-packet one-way delay: 72.303 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 200.71 Mbit/s
95th percentile per-packet one-way delay: 71.243 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 211.37 Mbit/s
95th percentile per-packet one-way delay: 72.520 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 129.94 Mbit/s
95th percentile per-packet one-way delay: 75.297 ms
Loss rate: 1.26%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-07-06 08:42:06
End at: 2018-07-06 08:42:36
Local clock offset: -0.033 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 381.38 Mbit/s
95th percentile per-packet one-way delay: 74.359 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 222.21 Mbit/s
95th percentile per-packet one-way delay: 70.741 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 193.93 Mbit/s
95th percentile per-packet one-way delay: 75.393 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 84.602 ms
Loss rate: 1.27%
Run 4: Report of Indigo — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 222.20 Mbit/s)  
Flow 1 egress (mean 222.21 Mbit/s)  
Flow 2 ingress (mean 193.97 Mbit/s)  
Flow 2 egress (mean 193.93 Mbit/s)  
Flow 3 ingress (mean 94.23 Mbit/s)  
Flow 3 egress (mean 94.00 Mbit/s)

Per-packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 70.74 ms)  
Flow 2 (95th percentile 75.39 ms)  
Flow 3 (95th percentile 84.60 ms)
Run 5: Statistics of Indigo

Start at: 2018-07-06 09:06:52
End at: 2018-07-06 09:07:22
Local clock offset: 0.042 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 377.70 Mbit/s
  95th percentile per-packet one-way delay: 67.870 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 213.90 Mbit/s
  95th percentile per-packet one-way delay: 67.057 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 179.73 Mbit/s
  95th percentile per-packet one-way delay: 67.833 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 135.49 Mbit/s
  95th percentile per-packet one-way delay: 69.456 ms
  Loss rate: 1.37%
Run 5: Report of Indigo — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 213.90 Mbit/s)  
Flow 1 egress (mean 213.90 Mbit/s)  
Flow 2 ingress (mean 179.83 Mbit/s)  
Flow 2 egress (mean 179.73 Mbit/s)  
Flow 3 ingress (mean 135.95 Mbit/s)  
Flow 3 egress (mean 135.49 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 67.06 ms)  
Flow 2 (95th percentile 67.83 ms)  
Flow 3 (95th percentile 69.48 ms)
Run 6: Statistics of Indigo

Start at: 2018-07-06 09:31:13
End at: 2018-07-06 09:31:43
Local clock offset: 0.078 ms
Remote clock offset: 1.403 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.67 Mbit/s
95th percentile per-packet one-way delay: 63.453 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 223.07 Mbit/s
95th percentile per-packet one-way delay: 63.025 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 196.89 Mbit/s
95th percentile per-packet one-way delay: 63.581 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 139.34 Mbit/s
95th percentile per-packet one-way delay: 64.784 ms
Loss rate: 1.33%
Run 6: Report of Indigo — Data Link

![Graph 1: Throughput vs Time](image1)
- Flow 1 ingress (mean 222.91 Mbit/s)
- Flow 1 egress (mean 223.07 Mbit/s)
- Flow 2 ingress (mean 197.27 Mbit/s)
- Flow 2 egress (mean 196.89 Mbit/s)
- Flow 3 ingress (mean 139.70 Mbit/s)
- Flow 3 egress (mean 139.34 Mbit/s)

![Graph 2: Per-packet one-way delay vs Time](image2)
- Flow 1 (95th percentile 63.02 ms)
- Flow 2 (95th percentile 63.58 ms)
- Flow 3 (95th percentile 64.78 ms)
Run 7: Statistics of Indigo

Start at: 2018-07-06 09:55:49
End at: 2018-07-06 09:56:19
Local clock offset: -0.127 ms
Remote clock offset: 1.077 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.20 Mbit/s
95th percentile per-packet one-way delay: 73.973 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 217.41 Mbit/s
95th percentile per-packet one-way delay: 71.101 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 196.41 Mbit/s
95th percentile per-packet one-way delay: 74.614 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 133.69 Mbit/s
95th percentile per-packet one-way delay: 77.984 ms
Loss rate: 1.30%
Run 7: Report of Indigo — Data Link

![Graph of Throughput (Mbps) over time]

- Flow 1 ingress (mean 217.42 Mbps)
- Flow 1 egress (mean 217.41 Mbps)
- Flow 2 ingress (mean 196.45 Mbps)
- Flow 2 egress (mean 196.41 Mbps)
- Flow 3 ingress (mean 134.02 Mbps)
- Flow 3 egress (mean 133.69 Mbps)

![Graph of Packet one way delay (ms) over time]

- Flow 1 (95th percentile 71.10 ms)
- Flow 2 (95th percentile 74.61 ms)
- Flow 3 (95th percentile 77.98 ms)
Run 8: Statistics of Indigo

Start at: 2018-07-06 10:20:48
End at: 2018-07-06 10:21:18
Local clock offset: -0.119 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 391.23 Mbit/s
95th percentile per-packet one-way delay: 69.132 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 208.31 Mbit/s
95th percentile per-packet one-way delay: 68.658 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 211.73 Mbit/s
95th percentile per-packet one-way delay: 69.155 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 131.18 Mbit/s
95th percentile per-packet one-way delay: 70.305 ms
Loss rate: 1.25%
Run 8: Report of Indigo — Data Link

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

Start at: 2018-07-06 10:45:22
End at: 2018-07-06 10:45:52
Local clock offset: -0.176 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.05 Mbit/s
95th percentile per-packet one-way delay: 69.663 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 222.42 Mbit/s
95th percentile per-packet one-way delay: 68.233 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 190.81 Mbit/s
95th percentile per-packet one-way delay: 70.222 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 135.22 Mbit/s
95th percentile per-packet one-way delay: 72.442 ms
Loss rate: 1.22%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-07-06 11:09:50
End at: 2018-07-06 11:10:20
Local clock offset: -0.323 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 394.78 Mbit/s
  95th percentile per-packet one-way delay: 71.427 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 217.50 Mbit/s
  95th percentile per-packet one-way delay: 70.125 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 205.71 Mbit/s
  95th percentile per-packet one-way delay: 71.691 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 125.91 Mbit/s
  95th percentile per-packet one-way delay: 74.301 ms
  Loss rate: 1.38%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-07-06 07:15:16
End at: 2018-07-06 07:15:46
Local clock offset: -0.064 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 46.08 Mbit/s
  95th percentile per-packet one-way delay: 54.629 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 31.15 Mbit/s
  95th percentile per-packet one-way delay: 54.747 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 17.51 Mbit/s
  95th percentile per-packet one-way delay: 54.443 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 10.17 Mbit/s
  95th percentile per-packet one-way delay: 54.192 ms
  Loss rate: 2.16%
Run 1: Report of LEDBAT — Data Link

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

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

Start at: 2018-07-06 07:39:42
End at: 2018-07-06 07:40:12
Local clock offset: -0.06 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.37 Mbit/s
95th percentile per-packet one-way delay: 55.581 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 31.85 Mbit/s
95th percentile per-packet one-way delay: 55.812 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 55.042 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 10.69 Mbit/s
95th percentile per-packet one-way delay: 56.147 ms
Loss rate: 2.11%
Run 2: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 31.96 Mbps)
- Flow 1 egress (mean 31.85 Mbps)
- Flow 2 ingress (mean 21.19 Mbps)
- Flow 2 egress (mean 21.08 Mbps)
- Flow 3 ingress (mean 10.81 Mbps)
- Flow 3 egress (mean 10.69 Mbps)

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

- Flow 1 (95th percentile 55.81 ms)
- Flow 2 (95th percentile 55.04 ms)
- Flow 3 (95th percentile 56.15 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-07-06 08:04:10
End at: 2018-07-06 08:04:40
Local clock offset: 0.156 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.76 Mbit/s
95th percentile per-packet one-way delay: 55.853 ms
Loss rate: 0.91%

-- Flow 1:
Average throughput: 31.54 Mbit/s
95th percentile per-packet one-way delay: 56.092 ms
Loss rate: 0.69%

-- Flow 2:
Average throughput: 20.58 Mbit/s
95th percentile per-packet one-way delay: 55.560 ms
Loss rate: 1.08%

-- Flow 3:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 55.112 ms
Loss rate: 2.11%
Run 4: Statistics of LEDBAT

Start at: 2018-07-06 08:29:03
End at: 2018-07-06 08:29:33
Local clock offset: -0.134 ms
Remote clock offset: 1.244 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 48.00 Mbit/s
  95th percentile per-packet one-way delay: 53.646 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 32.50 Mbit/s
  95th percentile per-packet one-way delay: 53.915 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 18.11 Mbit/s
  95th percentile per-packet one-way delay: 53.340 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 10.61 Mbit/s
  95th percentile per-packet one-way delay: 52.562 ms
  Loss rate: 2.11%
Run 4: Report of LEDBAT — Data Link

[Graph showing throughput over time for different flows, with legends indicating mean throughput rates for each flow.]
Run 5: Statistics of LEDBAT

Start at: 2018-07-06 08:53:44
End at: 2018-07-06 08:54:14
Local clock offset: 0.121 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.47 Mbit/s
95th percentile per-packet one-way delay: 55.218 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 55.362 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 54.973 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 9.96 Mbit/s
95th percentile per-packet one-way delay: 54.343 ms
Loss rate: 2.18%
Run 5: Report of LEDBAT — Data Link

[Graphs showing throughput and packet round trip delay for different flow rates.]
Run 6: Statistics of LEDBAT

Start at: 2018-07-06 09:18:08
End at: 2018-07-06 09:18:38
Local clock offset: 0.051 ms
Remote clock offset: 1.069 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 38.34 Mbit/s
  95th percentile per-packet one-way delay: 53.910 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 20.85 Mbit/s
  95th percentile per-packet one-way delay: 54.102 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 21.36 Mbit/s
  95th percentile per-packet one-way delay: 53.745 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 10.16 Mbit/s
  95th percentile per-packet one-way delay: 53.081 ms
  Loss rate: 2.16%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-07-06 09:42:37
End at: 2018-07-06 09:43:07
Local clock offset: -0.144 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.34 Mbit/s
  95th percentile per-packet one-way delay: 55.026 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 32.36 Mbit/s
  95th percentile per-packet one-way delay: 55.114 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 20.23 Mbit/s
  95th percentile per-packet one-way delay: 54.934 ms
  Loss rate: 0.96%
-- Flow 3:
  Average throughput: 10.86 Mbit/s
  95th percentile per-packet one-way delay: 54.815 ms
  Loss rate: 2.11%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-07-06 10:07:29
End at: 2018-07-06 10:07:59
Local clock offset: -0.033 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.50 Mbit/s
  95th percentile per-packet one-way delay: 55.042 ms
  Loss rate: 0.85%
-- Flow 1:
  Average throughput: 32.32 Mbit/s
  95th percentile per-packet one-way delay: 55.100 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 20.72 Mbit/s
  95th percentile per-packet one-way delay: 54.846 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 10.48 Mbit/s
  95th percentile per-packet one-way delay: 54.940 ms
  Loss rate: 1.48%
Run 8: Report of LEDBAT — Data Link

![Graph 1: Throughout (Mbps)]

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

Start at: 2018-07-06 10:32:12
End at: 2018-07-06 10:32:42
Local clock offset: -0.026 ms
Remote clock offset: 1.251 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 54.575 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 29.05 Mbit/s
95th percentile per-packet one-way delay: 54.701 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 21.18 Mbit/s
95th percentile per-packet one-way delay: 54.421 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 9.88 Mbit/s
95th percentile per-packet one-way delay: 53.876 ms
Loss rate: 2.17%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-07-06 10:56:47
End at: 2018-07-06 10:57:17
Local clock offset: -0.171 ms
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-07-06 13:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.68 Mbit/s
95th percentile per-packet one-way delay: 56.221 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 28.90 Mbit/s
95th percentile per-packet one-way delay: 56.275 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 21.51 Mbit/s
95th percentile per-packet one-way delay: 56.035 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 10.55 Mbit/s
95th percentile per-packet one-way delay: 56.028 ms
Loss rate: 2.11%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-06 07:18:26
End at: 2018-07-06 07:18:56
Local clock offset: -0.257 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-07-06 13:24:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 492.94 Mbit/s
  95th percentile per-packet one-way delay: 196.898 ms
  Loss rate: 3.01%
-- Flow 1:
  Average throughput: 486.34 Mbit/s
  95th percentile per-packet one-way delay: 196.905 ms
  Loss rate: 3.00%
-- Flow 2:
  Average throughput: 8.79 Mbit/s
  95th percentile per-packet one-way delay: 196.650 ms
  Loss rate: 3.78%
-- Flow 3:
  Average throughput: 2.33 Mbit/s
  95th percentile per-packet one-way delay: 195.864 ms
  Loss rate: 2.51%
Run 1: Report of PCC-Allegro — Data Link

![Graph of Throughput and Delay]

Flow 1 ingress (mean 499.62 Mbit/s)  
Flow 2 ingress (mean 9.09 Mbit/s)  
Flow 3 ingress (mean 2.36 Mbit/s)  
Flow 1 egress (mean 486.34 Mbit/s)  
Flow 2 egress (mean 8.79 Mbit/s)  
Flow 3 egress (mean 2.33 Mbit/s)  

Flow 1 (95th percentile 196.91 ms)  
Flow 2 (95th percentile 196.65 ms)  
Flow 3 (95th percentile 195.86 ms)  

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Run 2: Statistics of PCC-Allegro

Start at: 2018-07-06 07:42:56
End at: 2018-07-06 07:43:26
Local clock offset: -0.064 ms
Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2018-07-06 13:24:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 396.78 Mbit/s
  95th percentile per-packet one-way delay: 213.358 ms
  Loss rate: 6.54%
-- Flow 1:
  Average throughput: 349.93 Mbit/s
  95th percentile per-packet one-way delay: 213.336 ms
  Loss rate: 6.51%
-- Flow 2:
  Average throughput: 69.68 Mbit/s
  95th percentile per-packet one-way delay: 213.481 ms
  Loss rate: 6.73%
-- Flow 3:
  Average throughput: 1.90 Mbit/s
  95th percentile per-packet one-way delay: 213.249 ms
  Loss rate: 11.35%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-07-06 08:07:23
End at: 2018-07-06 08:07:53
Local clock offset: 0.035 ms
Remote clock offset: 0.457 ms

# Below is generated by plot.py at 2018-07-06 13:24:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 488.54 Mbit/s
95th percentile per-packet one-way delay: 194.877 ms
Loss rate: 2.40%
-- Flow 1:
Average throughput: 430.58 Mbit/s
95th percentile per-packet one-way delay: 194.820 ms
Loss rate: 2.25%
-- Flow 2:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 195.046 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 58.86 Mbit/s
95th percentile per-packet one-way delay: 195.446 ms
Loss rate: 5.15%
Run 3: Report of PCC-Allegro — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 439.00 Mbps)
  - Flow 1 egress (mean 430.58 Mbps)
  - Flow 2 ingress (mean 59.73 Mbps)
  - Flow 2 egress (mean 58.48 Mbps)
  - Flow 3 ingress (mean 61.41 Mbps)
  - Flow 3 egress (mean 58.86 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 194.82 ms)
  - Flow 2 (95th percentile 195.05 ms)
  - Flow 3 (95th percentile 195.45 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-06 08:32:16
End at: 2018-07-06 08:32:46
Local clock offset: 0.183 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-07-06 13:24:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 509.47 Mbit/s
95th percentile per-packet one-way delay: 195.056 ms
Loss rate: 5.61%
-- Flow 1:
Average throughput: 470.22 Mbit/s
95th percentile per-packet one-way delay: 194.964 ms
Loss rate: 5.52%
-- Flow 2:
Average throughput: 58.20 Mbit/s
95th percentile per-packet one-way delay: 195.857 ms
Loss rate: 6.69%
-- Flow 3:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 197.412 ms
Loss rate: 7.37%
Run 4: Report of PCC-Allegro — Data Link

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**Throughput (Mbps)**

| Flow 1 ingress (mean 495.99 Mbps) | Flow 1 egress (mean 470.22 Mbps) |
| Flow 2 ingress (mean 62.05 Mbps)   | Flow 2 egress (mean 58.20 Mbps)   |
| Flow 3 ingress (mean 2.96 Mbps)    | Flow 3 egress (mean 1.93 Mbps)    |

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

| Flow 1 (95th percentile 194.96 ms) | Flow 2 (95th percentile 195.86 ms) | Flow 3 (95th percentile 197.41 ms) |
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-06 08:56:58
End at: 2018-07-06 08:57:28
Local clock offset: 0.0 ms
Remote clock offset: 1.467 ms

# Below is generated by plot.py at 2018-07-06 13:24:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 431.21 Mbit/s
  95th percentile per-packet one-way delay: 182.138 ms
  Loss rate: 1.62%
-- Flow 1:
  Average throughput: 231.04 Mbit/s
  95th percentile per-packet one-way delay: 181.577 ms
  Loss rate: 1.09%
-- Flow 2:
  Average throughput: 294.24 Mbit/s
  95th percentile per-packet one-way delay: 182.638 ms
  Loss rate: 2.18%
-- Flow 3:
  Average throughput: 15.35 Mbit/s
  95th percentile per-packet one-way delay: 184.153 ms
  Loss rate: 3.29%
Run 5: Report of PCC-Allegro — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 232.80 Mbps)
  - Flow 1 egress (mean 231.04 Mbps)
  - Flow 2 ingress (mean 299.24 Mbps)
  - Flow 2 egress (mean 294.24 Mbps)
  - Flow 3 ingress (mean 15.72 Mbps)
  - Flow 3 egress (mean 15.35 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 181.58 ms)
  - Flow 2 (95th percentile 182.64 ms)
  - Flow 3 (95th percentile 184.15 ms)
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-06 09:21:19
End at: 2018-07-06 09:21:49
Local clock offset: -0.071 ms
Remote clock offset: -1.225 ms

# Below is generated by plot.py at 2018-07-06 13:25:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 466.06 Mbit/s
95th percentile per-packet one-way delay: 197.523 ms
Loss rate: 2.44%
-- Flow 1:
Average throughput: 459.83 Mbit/s
95th percentile per-packet one-way delay: 197.581 ms
Loss rate: 2.45%
-- Flow 2:
Average throughput: 8.27 Mbit/s
95th percentile per-packet one-way delay: 195.088 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 2.38 Mbit/s
95th percentile per-packet one-way delay: 195.513 ms
Loss rate: 2.50%
Run 6: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 469.73 Mb/s)
- Flow 1 egress (mean 459.83 Mb/s)
- Flow 2 ingress (mean 8.32 Mb/s)
- Flow 2 egress (mean 8.27 Mb/s)
- Flow 3 ingress (mean 2.41 Mb/s)
- Flow 3 egress (mean 2.38 Mb/s)

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

- Flow 1 (95th percentile 197.58 ms)
- Flow 2 (95th percentile 195.09 ms)
- Flow 3 (95th percentile 195.51 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-06 09:45:50
End at: 2018-07-06 09:46:20
Local clock offset: -0.077 ms
Remote clock offset: 1.294 ms

# Below is generated by plot.py at 2018-07-06 13:27:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 490.09 Mbit/s
95th percentile per-packet one-way delay: 195.447 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 455.46 Mbit/s
95th percentile per-packet one-way delay: 195.277 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 36.45 Mbit/s
95th percentile per-packet one-way delay: 196.017 ms
Loss rate: 1.37%
-- Flow 3:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 196.526 ms
Loss rate: 2.67%
Run 7: Report of PCC-Allegro — Data Link

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

- **Flow 1 Ingress (mean 460.13 Mbit/s)**
- **Flow 2 Ingress (mean 36.76 Mbit/s)**
- **Flow 3 Ingress (mean 32.48 Mbit/s)**
- **Flow 1 Egress (mean 455.46 Mbit/s)**
- **Flow 2 Egress (mean 36.45 Mbit/s)**
- **Flow 3 Egress (mean 31.94 Mbit/s)**

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

- **Flow 1 (95th percentile 195.28 ms)**
- **Flow 2 (95th percentile 196.02 ms)**
- **Flow 3 (95th percentile 196.53 ms)**
Run 8: Statistics of PCC-Allegro

Start at: 2018-07-06 10:10:45
End at: 2018-07-06 10:11:15
Local clock offset: -0.096 ms
Remote clock offset: 0.133 ms

# Below is generated by plot.py at 2018-07-06 13:29:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 501.87 Mbit/s
  95th percentile per-packet one-way delay: 193.850 ms
  Loss rate: 2.27%
-- Flow 1:
  Average throughput: 480.31 Mbit/s
  95th percentile per-packet one-way delay: 193.808 ms
  Loss rate: 2.25%
-- Flow 2:
  Average throughput: 30.61 Mbit/s
  95th percentile per-packet one-way delay: 194.215 ms
  Loss rate: 2.37%
-- Flow 3:
  Average throughput: 4.13 Mbit/s
  95th percentile per-packet one-way delay: 195.743 ms
  Loss rate: 6.06%
Run 8: Report of PCC-Allegro — Data Link

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

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

Start at: 2018-07-06 10:35:25
End at: 2018-07-06 10:35:55
Local clock offset: -0.239 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-07-06 13:30:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 478.22 Mbit/s
  95th percentile per-packet one-way delay: 136.408 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 445.88 Mbit/s
  95th percentile per-packet one-way delay: 136.343 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 32.64 Mbit/s
  95th percentile per-packet one-way delay: 137.612 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 32.69 Mbit/s
  95th percentile per-packet one-way delay: 139.477 ms
  Loss rate: 1.15%
Run 9: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 445.97 Mbit/s)
- Flow 1 egress (mean 445.88 Mbit/s)
- Flow 2 ingress (mean 32.05 Mbit/s)
- Flow 2 egress (mean 32.64 Mbit/s)
- Flow 3 ingress (mean 32.73 Mbit/s)
- Flow 3 egress (mean 32.69 Mbit/s)

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

- Flow 1 (95th percentile 136.34 ms)
- Flow 2 (95th percentile 137.61 ms)
- Flow 3 (95th percentile 139.48 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-07-06 11:00:02
End at: 2018-07-06 11:00:32
Local clock offset: -0.318 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-07-06 13:31:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.93 Mbit/s
95th percentile per-packet one-way delay: 182.248 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 263.11 Mbit/s
95th percentile per-packet one-way delay: 181.852 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 219.56 Mbit/s
95th percentile per-packet one-way delay: 189.867 ms
Loss rate: 2.08%
-- Flow 3:
Average throughput: 15.81 Mbit/s
95th percentile per-packet one-way delay: 111.938 ms
Loss rate: 1.42%
Run 10: Report of PCC-Allegro — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 264.64 Mbps)
  - Flow 1 egress (mean 263.11 Mbps)
  - Flow 2 ingress (mean 223.07 Mbps)
  - Flow 2 egress (mean 219.56 Mbps)
  - Flow 3 ingress (mean 15.98 Mbps)
  - Flow 3 egress (mean 15.81 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 181.85 ms)
  - Flow 2 (95th percentile 189.87 ms)
  - Flow 3 (95th percentile 111.94 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-07-06 07:26:50
End at: 2018-07-06 07:27:20
Local clock offset: 0.053 ms
Remote clock offset: -1.347 ms

# Below is generated by plot.py at 2018-07-06 13:37:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 387.55 Mbit/s
95th percentile per-packet one-way delay: 198.886 ms
Loss rate: 5.61%
-- Flow 1:
Average throughput: 279.98 Mbit/s
95th percentile per-packet one-way delay: 200.294 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 151.67 Mbit/s
95th percentile per-packet one-way delay: 197.377 ms
Loss rate: 6.20%
-- Flow 3:
Average throughput: 21.18 Mbit/s
95th percentile per-packet one-way delay: 198.668 ms
Loss rate: 16.69%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2018-07-06 07:51:11
End at: 2018-07-06 07:51:41
Local clock offset: -0.08 ms
Remote clock offset: 0.332 ms

# Below is generated by plot.py at 2018-07-06 13:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 404.35 Mbit/s
95th percentile per-packet one-way delay: 295.011 ms
Loss rate: 15.43%
-- Flow 1:
Average throughput: 342.29 Mbit/s
95th percentile per-packet one-way delay: 298.277 ms
Loss rate: 17.36%
-- Flow 2:
Average throughput: 86.65 Mbit/s
95th percentile per-packet one-way delay: 185.055 ms
Loss rate: 2.88%
-- Flow 3:
Average throughput: 13.82 Mbit/s
95th percentile per-packet one-way delay: 140.100 ms
Loss rate: 3.01%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-07-06 08:15:46
End at: 2018-07-06 08:16:16
Local clock offset: -0.135 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-07-06 13:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.98 Mbit/s
95th percentile per-packet one-way delay: 61.070 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 129.13 Mbit/s
95th percentile per-packet one-way delay: 59.156 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 205.93 Mbit/s
95th percentile per-packet one-way delay: 61.691 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 46.38 Mbit/s
95th percentile per-packet one-way delay: 64.512 ms
Loss rate: 1.72%
Run 3: Report of PCC-Expr — Data Link

![Throughput Graph]

- **Flow 1 ingress**: (mean 129.09 Mbit/s)
- **Flow 1 egress**: (mean 129.13 Mbit/s)
- **Flow 2 ingress**: (mean 206.01 Mbit/s)
- **Flow 2 egress**: (mean 205.93 Mbit/s)
- **Flow 3 ingress**: (mean 46.69 Mbit/s)
- **Flow 3 egress**: (mean 46.38 Mbit/s)

![Delay Graph]

- **Flow 1 (95th percentile)**: 59.16 ms
- **Flow 2 (95th percentile)**: 61.69 ms
- **Flow 3 (95th percentile)**: 64.51 ms

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Run 4: Statistics of PCC-Expr

Start at: 2018-07-06 08:40:28
End at: 2018-07-06 08:40:58
Local clock offset: 0.111 ms
Remote clock offset: 0.213 ms

# Below is generated by plot.py at 2018-07-06 13:39:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.82 Mbit/s
95th percentile per-packet one-way delay: 214.969 ms
Loss rate: 3.85%
-- Flow 1:
Average throughput: 104.08 Mbit/s
95th percentile per-packet one-way delay: 84.956 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 295.03 Mbit/s
95th percentile per-packet one-way delay: 256.420 ms
Loss rate: 6.39%
-- Flow 3:
Average throughput: 182.93 Mbit/s
95th percentile per-packet one-way delay: 110.522 ms
Loss rate: 1.34%
Run 4: Report of PCC-Expr — Data Link

---

![Graph showing throughput and delay over time for different flows.](image-url)
Run 5: Statistics of PCC-Expr

Start at: 2018-07-06 09:05:15
End at: 2018-07-06 09:05:45
Local clock offset: 0.027 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2018-07-06 13:39:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.50 Mbit/s
95th percentile per-packet one-way delay: 166.218 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 256.03 Mbit/s
95th percentile per-packet one-way delay: 167.945 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 117.23 Mbit/s
95th percentile per-packet one-way delay: 136.677 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 65.91 Mbit/s
95th percentile per-packet one-way delay: 188.304 ms
Loss rate: 6.21%
Run 5: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 259.59 Mbps)
- Flow 1 egress (mean 256.03 Mbps)
- Flow 2 ingress (mean 119.61 Mbps)
- Flow 2 egress (mean 117.23 Mbps)
- Flow 3 ingress (mean 69.55 Mbps)
- Flow 3 egress (mean 65.91 Mbps)

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

- Flow 1 (95th percentile 167.94 ms)
- Flow 2 (95th percentile 136.68 ms)
- Flow 3 (95th percentile 188.30 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-07-06 09:29:47
End at: 2018-07-06 09:30:17
Local clock offset: 0.0 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-07-06 13:39:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 195.57 Mbit/s
  95th percentile per-packet one-way delay: 53.231 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 106.46 Mbit/s
  95th percentile per-packet one-way delay: 53.212 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 104.95 Mbit/s
  95th percentile per-packet one-way delay: 53.234 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 59.25 Mbit/s
  95th percentile per-packet one-way delay: 53.689 ms
  Loss rate: 1.31%
Run 6: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mbps)]
- Flow 1 ingress (mean 106.37 Mbps)
- Flow 1 egress (mean 106.46 Mbps)
- Flow 2 ingress (mean 104.86 Mbps)
- Flow 2 egress (mean 104.95 Mbps)
- Flow 3 ingress (mean 59.42 Mbps)
- Flow 3 egress (mean 59.25 Mbps)

![Graph 2: Per-packet one-way delay (ms)]
- Flow 1 (95th percentile 53.21 ms)
- Flow 2 (95th percentile 53.23 ms)
- Flow 3 (95th percentile 53.69 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-07-06 09:54:14
End at: 2018-07-06 09:54:44
Local clock offset: -0.008 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-07-06 13:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 373.59 Mbit/s
95th percentile per-packet one-way delay: 234.861 ms
Loss rate: 13.18%
-- Flow 1:
Average throughput: 165.95 Mbit/s
95th percentile per-packet one-way delay: 200.390 ms
Loss rate: 4.51%
-- Flow 2:
Average throughput: 300.45 Mbit/s
95th percentile per-packet one-way delay: 304.824 ms
Loss rate: 19.42%
-- Flow 3:
Average throughput: 24.88 Mbit/s
95th percentile per-packet one-way delay: 130.166 ms
Loss rate: 8.93%
Run 7: Report of PCC-Expr — Data Link

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

Legend for Throughput Graph:
- Flow 1 ingress (mean 173.18 Mbit/s)
- Flow 1 egress (mean 165.95 Mbit/s)
- Flow 2 ingress (mean 370.90 Mbit/s)
- Flow 2 egress (mean 300.05 Mbit/s)
- Flow 3 ingress (mean 27.02 Mbit/s)
- Flow 3 egress (mean 24.89 Mbit/s)

Legend for Packet Delay Graph:
- Flow 1 (95th percentile 200.39 ms)
- Flow 2 (95th percentile 304.82 ms)
- Flow 3 (95th percentile 130.17 ms)
Run 8: Statistics of PCC-Expr

Start at: 2018-07-06 10:19:08
End at: 2018-07-06 10:19:38
Local clock offset: -0.288 ms
Remote clock offset: -1.166 ms

# Below is generated by plot.py at 2018-07-06 13:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.95 Mbit/s
95th percentile per-packet one-way delay: 99.761 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 205.28 Mbit/s
95th percentile per-packet one-way delay: 111.012 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 213.81 Mbit/s
95th percentile per-packet one-way delay: 95.180 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 69.28 Mbit/s
95th percentile per-packet one-way delay: 55.813 ms
Loss rate: 1.49%
Run 8: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 205.26 Mbit/s)
- Flow 1 egress (mean 205.28 Mbit/s)
- Flow 2 ingress (mean 213.48 Mbit/s)
- Flow 2 egress (mean 213.81 Mbit/s)
- Flow 3 ingress (mean 69.36 Mbit/s)
- Flow 3 egress (mean 69.28 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 111.01 ms)
- Flow 2 (95th percentile 95.18 ms)
- Flow 3 (95th percentile 55.81 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-07-06 10:43:45  
End at: 2018-07-06 10:44:15  
Local clock offset: -0.264 ms  
Remote clock offset: -1.269 ms

# Below is generated by plot.py at 2018-07-06 13:48:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.27 Mbit/s
95th percentile per-packet one-way delay: 107.319 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 193.94 Mbit/s
95th percentile per-packet one-way delay: 113.718 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 213.39 Mbit/s
95th percentile per-packet one-way delay: 99.176 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 50.82 Mbit/s
95th percentile per-packet one-way delay: 88.117 ms
Loss rate: 2.00%
Run 9: Report of PCC-Expr — Data Link
Run 10: Statistics of PCC-Expr

Start at: 2018-07-06 11:08:15
End at: 2018-07-06 11:08:45
Local clock offset: -0.274 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-07-06 13:50:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 364.59 Mbit/s
  95th percentile per-packet one-way delay: 272.944 ms
  Loss rate: 4.36%
-- Flow 1:
  Average throughput: 269.88 Mbit/s
  95th percentile per-packet one-way delay: 283.484 ms
  Loss rate: 4.88%
-- Flow 2:
  Average throughput: 98.45 Mbit/s
  95th percentile per-packet one-way delay: 187.608 ms
  Loss rate: 2.10%
-- Flow 3:
  Average throughput: 89.59 Mbit/s
  95th percentile per-packet one-way delay: 188.437 ms
  Loss rate: 4.42%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 282.78 Mbit/s)
- Flow 1 egress (mean 269.88 Mbit/s)
- Flow 2 ingress (mean 130.05 Mbit/s)
- Flow 2 egress (mean 98.45 Mbit/s)
- Flow 3 ingress (mean 92.72 Mbit/s)
- Flow 3 egress (mean 89.59 Mbit/s)
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-06 07:12:48
End at: 2018-07-06 07:13:18
Local clock offset: -0.012 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-07-06 13:50:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 53.812 ms
Loss rate: 0.69%

-- Flow 1:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 53.824 ms
Loss rate: 0.56%

-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 50.219 ms
Loss rate: 1.06%

-- Flow 3:
Average throughput: 17.47 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.42%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-07-06 07:37:09
End at: 2018-07-06 07:37:39
Local clock offset: -0.149 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-07-06 13:50:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.67 Mbit/s
  95th percentile per-packet one-way delay: 53.518 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 49.87 Mbit/s
  95th percentile per-packet one-way delay: 53.187 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 41.42 Mbit/s
  95th percentile per-packet one-way delay: 50.524 ms
  Loss rate: 0.96%
-- Flow 3:
  Average throughput: 16.08 Mbit/s
  95th percentile per-packet one-way delay: 53.651 ms
  Loss rate: 0.27%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-06 08:01:35
End at: 2018-07-06 08:02:05
Local clock offset: -0.254 ms
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2018-07-06 13:50:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.49 Mbit/s
95th percentile per-packet one-way delay: 53.788 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 53.802 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 50.316 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 50.425 ms
Loss rate: 0.51%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-06 08:26:26
End at: 2018-07-06 08:26:56
Local clock offset: 0.052 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.46 Mbit/s
  95th percentile per-packet one-way delay: 53.093 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 54.73 Mbit/s
  95th percentile per-packet one-way delay: 50.285 ms
  Loss rate: 0.49%
-- Flow 2:
  Average throughput: 40.06 Mbit/s
  95th percentile per-packet one-way delay: 53.082 ms
  Loss rate: 1.15%
-- Flow 3:
  Average throughput: 15.50 Mbit/s
  95th percentile per-packet one-way delay: 53.271 ms
  Loss rate: 1.81%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows, with mean values and 95th percentile delays indicated.]
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-06 08:50:54
End at: 2018-07-06 08:51:24
Local clock offset: -0.245 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.53 Mbit/s
95th percentile per-packet one-way delay: 53.626 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 52.903 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 34.40 Mbit/s
95th percentile per-packet one-way delay: 53.670 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 20.39 Mbit/s
95th percentile per-packet one-way delay: 49.838 ms
Loss rate: 0.50%
Run 6: Statistics of QUIC Cubic

Start at: 2018-07-06 09:15:41
End at: 2018-07-06 09:16:11
Local clock offset: 0.107 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.13 Mbit/s
95th percentile per-packet one-way delay: 54.002 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 54.34 Mbit/s
95th percentile per-packet one-way delay: 54.019 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 41.36 Mbit/s
95th percentile per-packet one-way delay: 53.461 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 16.15 Mbit/s
95th percentile per-packet one-way delay: 50.890 ms
Loss rate: 0.31%
Run 6: Report of QUIC Cubic — Data Link

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

*Flow 1 ingress (mean 54.38 Mbit/s) - Flow 1 egress (mean 54.34 Mbit/s) - Flow 2 ingress (mean 41.59 Mbit/s) - Flow 2 egress (mean 41.36 Mbit/s) - Flow 3 ingress (mean 16.04 Mbit/s) - Flow 3 egress (mean 16.15 Mbit/s)*

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

*Flow 1 (95th percentile 54.02 ms) - Flow 2 (95th percentile 53.46 ms) - Flow 3 (95th percentile 50.89 ms)*
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-06 09:40:06
End at: 2018-07-06 09:40:36
Local clock offset: 0.075 ms
Remote clock offset: 1.314 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.77 Mbit/s
  95th percentile per-packet one-way delay: 52.457 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 43.02 Mbit/s
  95th percentile per-packet one-way delay: 52.374 ms
  Loss rate: 0.50%
-- Flow 2:
  Average throughput: 37.99 Mbit/s
  95th percentile per-packet one-way delay: 52.502 ms
  Loss rate: 1.07%
-- Flow 3:
  Average throughput: 19.79 Mbit/s
  95th percentile per-packet one-way delay: 49.085 ms
  Loss rate: 0.62%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-06 10:04:49
End at: 2018-07-06 10:05:19
Local clock offset: -0.075 ms
Remote clock offset: -1.06 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.52 Mbit/s
  95th percentile per-packet one-way delay: 54.852 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 49.36 Mbit/s
  95th percentile per-packet one-way delay: 51.598 ms
  Loss rate: 0.62%
-- Flow 2:
  Average throughput: 33.05 Mbit/s
  95th percentile per-packet one-way delay: 54.854 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 15.32 Mbit/s
  95th percentile per-packet one-way delay: 54.972 ms
  Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-07-06 10:29:42
End at: 2018-07-06 10:30:12
Local clock offset: -0.085 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics

-- Total of 3 flows:
Average throughput: 82.93 Mbit/s
95th percentile per-packet one-way delay: 53.691 ms
Loss rate: 0.54%

-- Flow 1:
Average throughput: 56.81 Mbit/s
95th percentile per-packet one-way delay: 53.703 ms
Loss rate: 0.50%

-- Flow 2:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 50.132 ms
Loss rate: 0.67%

-- Flow 3:
Average throughput: 15.97 Mbit/s
95th percentile per-packet one-way delay: 50.431 ms
Loss rate: 0.45%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-06 10:54:23
End at: 2018-07-06 10:54:53
Local clock offset: -0.176 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 70.15 Mbit/s
 95th percentile per-packet one-way delay: 53.487 ms
 Loss rate: 0.53%
-- Flow 1:
 Average throughput: 43.42 Mbit/s
 95th percentile per-packet one-way delay: 53.450 ms
 Loss rate: 0.67%
-- Flow 2:
 Average throughput: 31.56 Mbit/s
 95th percentile per-packet one-way delay: 53.523 ms
 Loss rate: 0.27%
-- Flow 3:
 Average throughput: 17.56 Mbit/s
 95th percentile per-packet one-way delay: 49.825 ms
 Loss rate: 0.43%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-07-06 07:31:19
End at: 2018-07-06 07:31:49
Local clock offset: -0.313 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.550 ms
  Loss rate: 0.52%
-- Flow 1:
 Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.184 ms
  Loss rate: 0.26%
-- Flow 2:
 Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 50.576 ms
  Loss rate: 0.63%
-- Flow 3:
 Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.270 ms
  Loss rate: 1.08%
Run 1: Report of SCReAM — Data Link

![Throughput Graph]

- **Flow 1 ingress (mean 0.22 Mbit/s)**
- **Flow 1 egress (mean 0.22 Mbit/s)**
- **Flow 2 ingress (mean 0.21 Mbit/s)**
- **Flow 2 egress (mean 0.21 Mbit/s)**
- **Flow 3 ingress (mean 0.22 Mbit/s)**
- **Flow 3 egress (mean 0.22 Mbit/s)**

![Delay Graph]

- **Flow 1 (95th percentile 50.18 ms)**
- **Flow 2 (95th percentile 50.58 ms)**
- **Flow 3 (95th percentile 50.27 ms)**
Run 2: Statistics of SCReAM

Start at: 2018-07-06 07:55:44
End at: 2018-07-06 07:56:14
Local clock offset: 0.107 ms
Remote clock offset: 1.307 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 52.687 ms
Loss rate: 0.57%
-- Flow 1:
95th percentile per-packet one-way delay: 52.641 ms
Loss rate: 0.38%
-- Flow 2:
95th percentile per-packet one-way delay: 52.706 ms
Loss rate: 0.61%
-- Flow 3:
95th percentile per-packet one-way delay: 52.375 ms
Loss rate: 1.09%
Run 2: Report of SCReAM — Data Link

![Graphs showing data link](image-url)
Run 3: Statistics of SCReAM

Start at: 2018-07-06 08:20:18
End at: 2018-07-06 08:20:48
Local clock offset: -0.041 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.622 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.634 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 49.988 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.084 ms
  Loss rate: 1.09%
Run 3: Report of SCReAM — Data Link

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

![Graph 2: Per packet one way delay (ms)](image2)
Run 4: Statistics of SCReAM

Start at: 2018-07-06 08:45:06
End at: 2018-07-06 08:45:36
Local clock offset: 0.126 ms
Remote clock offset: 0.172 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.861 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.574 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.848 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.925 ms
Loss rate: 1.09%
Run 4: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time]

- Throughput (Mbps):
  - Flow 1 ingress: mean 0.21 Mbps
  - Flow 2 ingress: mean 0.21 Mbps
  - Flow 3 ingress: mean 0.22 Mbps
  - Flow 1 egress: mean 0.21 Mbps
  - Flow 2 egress: mean 0.21 Mbps
  - Flow 3 egress: mean 0.22 Mbps

- Packet delay (ms):
  - Flow 1 (95th percentile 50.57 ms)
  - Flow 2 (95th percentile 53.85 ms)
  - Flow 3 (95th percentile 53.92 ms)
Run 5: Statistics of SCReAM

Start at: 2018-07-06 09:09:42
End at: 2018-07-06 09:10:12
Local clock offset: 0.081 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 54.120 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.145 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.590 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.957 ms
Loss rate: 1.46%
Run 5: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mbps)
- Flow 1 egress (mean 0.21 Mbps)
- Flow 2 ingress (mean 0.21 Mbps)
- Flow 2 egress (mean 0.21 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

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

- Flow 1 (95th percentile 54.15 ms)
- Flow 2 (95th percentile 53.59 ms)
- Flow 3 (95th percentile 53.96 ms)
Run 6: Statistics of SCReAM

Start at: 2018-07-06 09:34:09
End at: 2018-07-06 09:34:39
Local clock offset: 0.162 ms
Remote clock offset: 0.248 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.836 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 50.376 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.863 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.799 ms
  Loss rate: 1.08%
Run 7: Statistics of SCReAM

Start at: 2018-07-06 09:58:40
End at: 2018-07-06 09:59:10
Local clock offset: 0.107 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.894 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.907 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.174 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.891 ms
Loss rate: 1.08%
Run 7: Report of SCReAM — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 8: Statistics of SCReAM

Start at: 2018-07-06 10:23:42
End at: 2018-07-06 10:24:12
Local clock offset: -0.237 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.591 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.608 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.932 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.561 ms
  Loss rate: 1.09%
Run 9: Statistics of SCReAM

Start at: 2018-07-06 10:48:16
End at: 2018-07-06 10:48:46
Local clock offset: -0.121 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.827 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.670 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.845 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.770 ms
  Loss rate: 1.08%
Run 9: Report of SCReAM — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)
Run 10: Statistics of SCReAM

Start at: 2018-07-06 11:12:51
End at: 2018-07-06 11:13:21
Local clock offset: -0.168 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.750 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.171 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.794 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.352 ms
  Loss rate: 1.09%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-07-06 07:25:41
End at: 2018-07-06 07:26:11
Local clock offset: 0.127 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 54.300 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 54.340 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 54.293 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 5.07 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 1.25%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-07-06 07:50:02
End at: 2018-07-06 07:50:32
Local clock offset: 0.104 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.83 Mbit/s
95th percentile per-packet one-way delay: 55.016 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 54.977 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 55.035 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 6.66 Mbit/s
95th percentile per-packet one-way delay: 55.103 ms
Loss rate: 1.10%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-07-06 08:14:37
End at: 2018-07-06 08:15:07
Local clock offset: -0.081 ms
Remote clock offset: 0.187 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.48 Mbit/s
95th percentile per-packet one-way delay: 53.750 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 53.690 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 53.783 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 53.850 ms
Loss rate: 0.94%
Run 3: Report of Sprout — Data Link

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 5.92 Mbps)
  - Flow 1 egress (mean 5.92 Mbps)
  - Flow 2 ingress (mean 6.53 Mbps)
  - Flow 2 egress (mean 6.54 Mbps)
  - Flow 3 ingress (mean 6.76 Mbps)
  - Flow 3 egress (mean 6.76 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 53.69 ms)
  - Flow 2 (95th percentile 53.78 ms)
  - Flow 3 (95th percentile 53.85 ms)
Run 4: Statistics of Sprout

Start at: 2018-07-06 08:39:19
End at: 2018-07-06 08:39:49
Local clock offset: -0.029 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 54.118 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 6.23 Mbit/s
95th percentile per-packet one-way delay: 54.119 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 5.56 Mbit/s
95th percentile per-packet one-way delay: 54.169 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 6.45 Mbit/s
95th percentile per-packet one-way delay: 53.998 ms
Loss rate: 0.99%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-07-06 09:04:06
End at: 2018-07-06 09:04:36
Local clock offset: -0.164 ms
Remote clock offset: 1.361 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.05 Mbit/s
95th percentile per-packet one-way delay: 52.617 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 52.684 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 5.28 Mbit/s
95th percentile per-packet one-way delay: 52.560 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 52.545 ms
Loss rate: 1.44%
Run 5: Report of Sprout — Data Link

![Graphs showing throughput and packet round-trip time](image-url)
Run 6: Statistics of Sprout

Start at: 2018-07-06 09:28:38
End at: 2018-07-06 09:29:08
Local clock offset: 0.003 ms
Remote clock offset: 1.378 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.01 Mbit/s
95th percentile per-packet one-way delay: 52.770 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 5.30 Mbit/s
95th percentile per-packet one-way delay: 52.845 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 52.691 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 52.792 ms
Loss rate: 0.89%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-07-06 09:53:05
End at: 2018-07-06 09:53:35
Local clock offset: 0.053 ms
Remote clock offset: -0.172 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 54.936 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 54.946 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 6.02 Mbit/s
95th percentile per-packet one-way delay: 54.909 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 3.64 Mbit/s
95th percentile per-packet one-way delay: 55.005 ms
Loss rate: 2.13%
Run 7: Report of Sprout — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 6.66 Mbit/s)
- Flow 1 egress (mean 6.67 Mbit/s)
- Flow 2 ingress (mean 6.01 Mbit/s)
- Flow 2 egress (mean 6.02 Mbit/s)
- Flow 3 ingress (mean 3.68 Mbit/s)
- Flow 3 egress (mean 3.64 Mbit/s)

Packet one-way delay (ms)

- Flow 1 (95th percentile 54.95 ms)
- Flow 2 (95th percentile 54.91 ms)
- Flow 3 (95th percentile 55.01 ms)
Run 8: Statistics of Sprout

Start at: 2018-07-06 10:17:59
End at: 2018-07-06 10:18:29
Local clock offset: 0.001 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 11.53 Mbit/s
  95th percentile per-packet one-way delay: 54.750 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 6.41 Mbit/s
  95th percentile per-packet one-way delay: 54.689 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 4.38 Mbit/s
  95th percentile per-packet one-way delay: 54.782 ms
  Loss rate: 0.93%
-- Flow 3:
  Average throughput: 6.79 Mbit/s
  95th percentile per-packet one-way delay: 54.918 ms
  Loss rate: 1.79%
Run 8: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 6.41 Mbit/s)**
- **Flow 1 egress (mean 6.41 Mbit/s)**
- **Flow 2 ingress (mean 4.40 Mbit/s)**
- **Flow 2 egress (mean 4.38 Mbit/s)**
- **Flow 3 ingress (mean 6.85 Mbit/s)**
- **Flow 3 egress (mean 6.79 Mbit/s)**

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

- **Flow 1 (95th percentile 54.69 ms)**
- **Flow 2 (95th percentile 54.78 ms)**
- **Flow 3 (95th percentile 54.92 ms)**
Run 9: Statistics of Sprout

Start at: 2018-07-06 10:42:36
End at: 2018-07-06 10:43:06
Local clock offset: 0.072 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.24 Mbit/s
  95th percentile per-packet one-way delay: 54.962 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 6.57 Mbit/s
  95th percentile per-packet one-way delay: 54.911 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 6.80 Mbit/s
  95th percentile per-packet one-way delay: 55.060 ms
  Loss rate: 0.75%
-- Flow 3:
  Average throughput: 6.59 Mbit/s
  95th percentile per-packet one-way delay: 54.914 ms
  Loss rate: 1.65%
Run 9: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 6.59 Mbps)
- Flow 1 egress (mean 6.57 Mbps)
- Flow 2 ingress (mean 6.81 Mbps)
- Flow 2 egress (mean 6.80 Mbps)
- Flow 3 ingress (mean 6.62 Mbps)
- Flow 3 egress (mean 6.59 Mbps)

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

- Flow 1 (95th percentile 54.91 ms)
- Flow 2 (95th percentile 55.06 ms)
- Flow 3 (95th percentile 54.91 ms)
Run 10: Statistics of Sprout

Start at: 2018-07-06 11:07:05
End at: 2018-07-06 11:07:35
Local clock offset: -0.146 ms
Remote clock offset: -0.267 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.05 Mbit/s
  95th percentile per-packet one-way delay: 54.915 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 5.95 Mbit/s
  95th percentile per-packet one-way delay: 54.760 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 7.39 Mbit/s
  95th percentile per-packet one-way delay: 55.040 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.67 Mbit/s
  95th percentile per-packet one-way delay: 54.928 ms
  Loss rate: 0.69%
Run 10: Report of Sprout — Data Link

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

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

**Legend:**
- Flow 1 ingress (mean 5.95 Mbps)
- Flow 1 egress (mean 5.95 Mbps)
- Flow 2 ingress (mean 7.35 Mbps)
- Flow 2 egress (mean 7.39 Mbps)
- Flow 3 ingress (mean 6.66 Mbps)
- Flow 3 egress (mean 6.67 Mbps)

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

- Flow 1 (95th percentile 54.76 ms)
- Flow 2 (95th percentile 55.04 ms)
- Flow 3 (95th percentile 54.93 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-06 07:14:01
End at: 2018-07-06 07:14:31
Local clock offset: -0.034 ms
Remote clock offset: -0.342 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.68 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 125.10 Mbit/s
95th percentile per-packet one-way delay: 53.509 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 53.260 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 13.92 Mbit/s
95th percentile per-packet one-way delay: 53.247 ms
Loss rate: 1.06%
Run 1: Report of TaoVA-100x — Data Link

The graphs show the throughput and packet latency for three different flows over time. The throughput graph indicates the mean bandwidth consumption for each flow, while the packet latency graph shows the 95th percentile latency for each flow.
Run 2: Statistics of TaoVA-100x

Start at: 2018-07-06 07:38:21
End at: 2018-07-06 07:38:51
Local clock offset: 0.023 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 145.74 Mbit/s
  95th percentile per-packet one-way delay: 54.205 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 122.01 Mbit/s
  95th percentile per-packet one-way delay: 54.055 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 49.47 Mbit/s
  95th percentile per-packet one-way delay: 55.610 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 17.30 Mbit/s
  95th percentile per-packet one-way delay: 54.036 ms
  Loss rate: 0.86%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-07-06 08:02:48
End at: 2018-07-06 08:03:18
Local clock offset: 0.085 ms
Remote clock offset: -1.157 ms

# Below is generated by plot.py at 2018-07-06 13:50:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 159.24 Mbit/s
95th percentile per-packet one-way delay: 57.465 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 12.66 Mbit/s
95th percentile per-packet one-way delay: 57.395 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 110.29 Mbit/s
95th percentile per-packet one-way delay: 55.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 234.60 Mbit/s
95th percentile per-packet one-way delay: 58.895 ms
Loss rate: 0.36%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 12.66 Mbps)**
- **Flow 1 egress (mean 12.66 Mbps)**
- **Flow 2 ingress (mean 110.31 Mbps)**
- **Flow 2 egress (mean 110.29 Mbps)**
- **Flow 3 ingress (mean 233.68 Mbps)**
- **Flow 3 egress (mean 234.60 Mbps)**

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

- **Flow 1 (95th percentile 57.40 ms)**
- **Flow 2 (95th percentile 55.83 ms)**
- **Flow 3 (95th percentile 58.90 ms)**

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Run 4: Statistics of TaoVA-100x

Start at: 2018-07-06 08:27:39
End at: 2018-07-06 08:28:09
Local clock offset: 0.02 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-07-06 13:50:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 178.62 Mbit/s
  95th percentile per-packet one-way delay: 53.778 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 165.52 Mbit/s
  95th percentile per-packet one-way delay: 53.793 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 12.80 Mbit/s
  95th percentile per-packet one-way delay: 53.232 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 13.90 Mbit/s
  95th percentile per-packet one-way delay: 53.199 ms
  Loss rate: 1.06%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 165.64 Mbit/s)  
Flow 1 egress (mean 165.52 Mbit/s)
Flow 2 ingress (mean 12.79 Mbit/s)  
Flow 2 egress (mean 12.80 Mbit/s)
Flow 3 ingress (mean 13.91 Mbit/s)  
Flow 3 egress (mean 13.90 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 53.79 ms)  
Flow 2 (95th percentile 53.23 ms)  
Flow 3 (95th percentile 53.20 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-07-06 08:52:07
End at: 2018-07-06 08:52:37
Local clock offset: 0.047 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.89 Mbit/s
95th percentile per-packet one-way delay: 62.708 ms
Loss rate: 0.40%

-- Flow 1:
Average throughput: 227.41 Mbit/s
95th percentile per-packet one-way delay: 63.603 ms
Loss rate: 0.41%

-- Flow 2:
Average throughput: 147.55 Mbit/s
95th percentile per-packet one-way delay: 60.929 ms
Loss rate: 0.36%

-- Flow 3:
Average throughput: 22.31 Mbit/s
95th percentile per-packet one-way delay: 56.353 ms
Loss rate: 0.67%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-07-06 09:16:54
End at: 2018-07-06 09:17:24
Local clock offset: -0.006 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.97 Mbit/s
95th percentile per-packet one-way delay: 53.331 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 53.122 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 64.16 Mbit/s
95th percentile per-packet one-way delay: 53.374 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 46.60 Mbit/s
95th percentile per-packet one-way delay: 53.164 ms
Loss rate: 0.32%
Run 6: Report of TaoVA-100x — Data Link

![Graph showing throughput and per-packet one-way delay for flows 1, 2, and 3.]

- Flow 1 ingress (mean 11.91 Mbit/s)
- Flow 1 egress (mean 11.91 Mbit/s)
- Flow 2 ingress (mean 65.91 Mbit/s)
- Flow 2 egress (mean 64.16 Mbit/s)
- Flow 3 ingress (mean 46.27 Mbit/s)
- Flow 3 egress (mean 46.60 Mbit/s)
Run 7: Statistics of TaoVA-100x

Start at: 2018-07-06 09:41:18
End at: 2018-07-06 09:41:48
Local clock offset: 0.143 ms
Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 122.83 Mbit/s
95th percentile per-packet one-way delay: 53.682 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 85.61 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 23.07 Mbit/s
95th percentile per-packet one-way delay: 53.931 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 106.86 Mbit/s
95th percentile per-packet one-way delay: 53.692 ms
Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-07-06 10:06:01
End at: 2018-07-06 10:06:31
Local clock offset: -0.183 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 220.05 Mbit/s
95th percentile per-packet one-way delay: 55.566 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 16.81 Mbit/s
95th percentile per-packet one-way delay: 53.661 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 237.66 Mbit/s
95th percentile per-packet one-way delay: 55.278 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 136.90 Mbit/s
95th percentile per-packet one-way delay: 56.665 ms
Loss rate: 1.94%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-07-06 10:30:55
End at: 2018-07-06 10:31:25
Local clock offset: -0.147 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 113.97 Mbit/s
  95th percentile per-packet one-way delay: 53.859 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 58.19 Mbit/s
  95th percentile per-packet one-way delay: 54.054 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 201.17 Mbit/s
  95th percentile per-packet one-way delay: 53.816 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 38.98 Mbit/s
  95th percentile per-packet one-way delay: 53.960 ms
  Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 58.36 Mbps)  
Flow 1 egress (mean 58.19 Mbps)
Flow 2 ingress (mean 201.21 Mbps)  
Flow 2 egress (mean 201.17 Mbps)
Flow 3 ingress (mean 39.00 Mbps)  
Flow 3 egress (mean 38.98 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 54.05 ms)  
Flow 2 (95th percentile 53.82 ms)  
Flow 3 (95th percentile 53.96 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-06 10:55:35
End at: 2018-07-06 10:56:05
Local clock offset: -0.224 ms
Remote clock offset: 0.376 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 44.73 Mbit/s
  95th percentile per-packet one-way delay: 53.215 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 12.30 Mbit/s
  95th percentile per-packet one-way delay: 53.169 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 14.06 Mbit/s
  95th percentile per-packet one-way delay: 53.180 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 109.29 Mbit/s
  95th percentile per-packet one-way delay: 53.250 ms
  Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 12.31 Mbps)
  - Flow 1 egress (mean 12.30 Mbps)
  - Flow 2 ingress (mean 14.07 Mbps)
  - Flow 2 egress (mean 14.06 Mbps)
  - Flow 3 ingress (mean 109.33 Mbps)
  - Flow 3 egress (mean 109.29 Mbps)

- **Packet Processing Delay (ms):**
  - Flow 1 (95th percentile 53.17 ms)
  - Flow 2 (95th percentile 53.18 ms)
  - Flow 3 (95th percentile 53.25 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-07-06 07:29:59
End at: 2018-07-06 07:30:29
Local clock offset: -0.075 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 223.38 Mbit/s
95th percentile per-packet one-way delay: 62.824 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 26.45 Mbit/s
95th percentile per-packet one-way delay: 57.885 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 195.80 Mbit/s
95th percentile per-packet one-way delay: 62.982 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 203.44 Mbit/s
95th percentile per-packet one-way delay: 63.336 ms
Loss rate: 1.19%
Run 1: Report of TCP Vegas — Data Link

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

Flow 1 (ingress mean 26.41 Mbit/s, egress mean 26.45 Mbit/s)
Flow 2 (ingress mean 195.24 Mbit/s, egress mean 195.88 Mbit/s)
Flow 3 (ingress mean 203.86 Mbit/s, egress mean 203.44 Mbit/s)
Run 2: Statistics of TCP Vegas

Start at: 2018-07-06 07:54:22
End at: 2018-07-06 07:54:52
Local clock offset: 0.086 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-07-06 13:57:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.35 Mbit/s
95th percentile per-packet one-way delay: 68.138 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 91.04 Mbit/s
95th percentile per-packet one-way delay: 64.772 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 207.32 Mbit/s
95th percentile per-packet one-way delay: 69.687 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 119.97 Mbit/s
95th percentile per-packet one-way delay: 67.264 ms
Loss rate: 0.67%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-07-06 08:18:52
End at: 2018-07-06 08:19:22
Local clock offset: -0.019 ms
Remote clock offset: 1.251 ms

# Below is generated by plot.py at 2018-07-06 13:57:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.66 Mbit/s
95th percentile per-packet one-way delay: 61.970 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 216.96 Mbit/s
95th percentile per-packet one-way delay: 62.374 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 213.59 Mbit/s
95th percentile per-packet one-way delay: 61.346 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 56.924 ms
Loss rate: 2.30%
Run 3: Report of TCP Vegas — Data Link

- Flow 1 ingress (mean 217.69 Mbit/s)
- Flow 1 egress (mean 216.96 Mbit/s)
- Flow 2 ingress (mean 213.76 Mbit/s)
- Flow 2 egress (mean 213.59 Mbit/s)
- Flow 3 ingress (mean 5.04 Mbit/s)
- Flow 3 egress (mean 4.98 Mbit/s)

- Flow 1 (95th percentile 62.37 ms)
- Flow 2 (95th percentile 61.35 ms)
- Flow 3 (95th percentile 56.92 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-07-06 08:43:39
End at: 2018-07-06 08:44:09
Local clock offset: 0.105 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2018-07-06 13:58:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 366.84 Mbit/s
95th percentile per-packet one-way delay: 63.001 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 215.84 Mbit/s
95th percentile per-packet one-way delay: 62.853 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 211.65 Mbit/s
95th percentile per-packet one-way delay: 63.330 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 59.746 ms
Loss rate: 1.13%
Run 4: Report of TCP Vegas — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 215.92 Mbps)  Flow 1 egress (mean 215.84 Mbps)
Flow 2 ingress (mean 211.78 Mbps)  Flow 2 egress (mean 211.65 Mbps)
Flow 3 ingress (mean 31.27 Mbps)   Flow 3 egress (mean 31.26 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 62.85 ms)  Flow 2 (95th percentile 63.33 ms)  Flow 3 (95th percentile 59.75 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-07-06 09:08:25  
End at: 2018-07-06 09:08:55  
Local clock offset: 0.15 ms  
Remote clock offset: 0.272 ms

# Below is generated by plot.py at 2018-07-06 13:58:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 180.76 Mbit/s
95th percentile per-packet one-way delay: 61.962 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 37.47 Mbit/s
95th percentile per-packet one-way delay: 60.171 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 213.44 Mbit/s
95th percentile per-packet one-way delay: 62.132 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 60.524 ms
Loss rate: 2.46%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-07-06 09:32:47
End at: 2018-07-06 09:33:17
Local clock offset: -0.092 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2018-07-06 13:59:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 296.63 Mbit/s
  95th percentile per-packet one-way delay: 62.356 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 221.63 Mbit/s
  95th percentile per-packet one-way delay: 62.079 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 9.11 Mbit/s
  95th percentile per-packet one-way delay: 59.678 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 209.04 Mbit/s
  95th percentile per-packet one-way delay: 63.146 ms
  Loss rate: 1.28%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 221.72 Mbit/s)
- Flow 1 egress (mean 221.63 Mbit/s)
- Flow 2 ingress (mean 9.15 Mbit/s)
- Flow 2 egress (mean 9.11 Mbit/s)
- Flow 3 ingress (mean 209.58 Mbit/s)
- Flow 3 egress (mean 209.04 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-07-06 09:57:23
End at: 2018-07-06 09:57:53
Local clock offset: -0.276 ms
Remote clock offset: 0.225 ms

# Below is generated by plot.py at 2018-07-06 13:59:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.55 Mbit/s
95th percentile per-packet one-way delay: 62.630 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 56.693 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 217.79 Mbit/s
95th percentile per-packet one-way delay: 62.834 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 5.36 Mbit/s
95th percentile per-packet one-way delay: 56.253 ms
Loss rate: 2.13%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

End at: 2018-07-06 10:22:52
Local clock offset: 0.057 ms
Remote clock offset: 0.232 ms

# Below is generated by plot.py at 2018-07-06 13:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.32 Mbit/s
95th percentile per-packet one-way delay: 63.788 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 215.43 Mbit/s
95th percentile per-packet one-way delay: 63.962 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 16.80 Mbit/s
95th percentile per-packet one-way delay: 58.916 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 36.50 Mbit/s
95th percentile per-packet one-way delay: 58.890 ms
Loss rate: 1.29%
Run 8: Report of TCP Vegas — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time.](image-url)
Run 9: Statistics of TCP Vegas

Start at: 2018-07-06 10:46:56
End at: 2018-07-06 10:47:26
Local clock offset: 0.015 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-07-06 13:59:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 233.80 Mbit/s
  95th percentile per-packet one-way delay: 66.188 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 26.36 Mbit/s
  95th percentile per-packet one-way delay: 60.225 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 214.34 Mbit/s
  95th percentile per-packet one-way delay: 66.857 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 197.83 Mbit/s
  95th percentile per-packet one-way delay: 64.072 ms
  Loss rate: 1.22%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-07-06 11:11:25
End at: 2018-07-06 11:11:55
Local clock offset: -0.138 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-07-06 14:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 347.35 Mbit/s
95th percentile per-packet one-way delay: 65.149 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 215.33 Mbit/s
95th percentile per-packet one-way delay: 64.989 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 196.24 Mbit/s
95th percentile per-packet one-way delay: 65.503 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 61.521 ms
Loss rate: 2.10%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-07-06 07:11:15
End at: 2018-07-06 07:11:45
Local clock offset: -0.091 ms
Remote clock offset: 0.958 ms

# Below is generated by plot.py at 2018-07-06 14:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.74 Mbit/s
95th percentile per-packet one-way delay: 151.626 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 218.36 Mbit/s
95th percentile per-packet one-way delay: 131.783 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 186.63 Mbit/s
95th percentile per-packet one-way delay: 164.867 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 91.72 Mbit/s
95th percentile per-packet one-way delay: 170.172 ms
Loss rate: 3.34%
Run 1: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 221.88 Mbps)
  - Flow 2 ingress (mean 188.88 Mbps)
  - Flow 3 ingress (mean 93.66 Mbps)
  - Flow 1 egress (mean 218.36 Mbps)
  - Flow 2 egress (mean 186.63 Mbps)
  - Flow 3 egress (mean 91.72 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 131.78 ms)
  - Flow 2 (95th percentile 164.87 ms)
  - Flow 3 (95th percentile 170.17 ms)
Run 2: Statistics of Verus

Start at: 2018-07-06 07:35:40
End at: 2018-07-06 07:36:10
Local clock offset: 0.027 ms
Remote clock offset: -1.383 ms

# Below is generated by plot.py at 2018-07-06 14:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.27 Mbit/s
95th percentile per-packet one-way delay: 153.957 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 166.33 Mbit/s
95th percentile per-packet one-way delay: 136.895 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 132.47 Mbit/s
95th percentile per-packet one-way delay: 164.933 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 150.64 Mbit/s
95th percentile per-packet one-way delay: 187.137 ms
Loss rate: 1.58%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 166.73 Mbps)
- Flow 1 egress (mean 166.33 Mbps)
- Flow 2 ingress (mean 132.70 Mbps)
- Flow 2 egress (mean 132.47 Mbps)
- Flow 3 ingress (mean 150.62 Mbps)
- Flow 3 egress (mean 150.64 Mbps)

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

- Flow 1 (95th percentile 136.90 ms)
- Flow 2 (95th percentile 164.93 ms)
- Flow 3 (95th percentile 187.14 ms)
Run 3: Statistics of Verus

Start at: 2018-07-06 08:00:05
End at: 2018-07-06 08:00:35
Local clock offset: 0.002 ms
Remote clock offset: 0.337 ms

# Below is generated by plot.py at 2018-07-06 14:04:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.56 Mbit/s
95th percentile per-packet one-way delay: 177.470 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 229.52 Mbit/s
95th percentile per-packet one-way delay: 153.865 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 100.53 Mbit/s
95th percentile per-packet one-way delay: 182.586 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 102.72 Mbit/s
95th percentile per-packet one-way delay: 358.944 ms
Loss rate: 7.61%
Run 3: Report of Verus — Data Link

Throughput (Mbps) vs Time (s)

Flow 1 ingress (mean 229.14 Mbps)  Flow 1 egress (mean 229.52 Mbps)
Flow 2 ingress (mean 101.30 Mbps)  Flow 2 egress (mean 100.53 Mbps)
Flow 3 ingress (mean 109.47 Mbps)  Flow 3 egress (mean 102.72 Mbps)

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

Flow 1 (95th percentile 153.97 ms)  Flow 2 (95th percentile 182.59 ms)  Flow 3 (95th percentile 358.94 ms)

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Run 4: Statistics of Verus

Start at: 2018-07-06 08:24:54
End at: 2018-07-06 08:25:24
Local clock offset: -0.068 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-07-06 14:04:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.15 Mbit/s
95th percentile per-packet one-way delay: 135.385 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 209.12 Mbit/s
95th percentile per-packet one-way delay: 128.095 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 179.05 Mbit/s
95th percentile per-packet one-way delay: 135.289 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 92.15 Mbit/s
95th percentile per-packet one-way delay: 146.215 ms
Loss rate: 2.10%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-07-06 08:49:20
End at: 2018-07-06 08:49:50
Local clock offset: -0.002 ms
Remote clock offset: -1.33 ms

# Below is generated by plot.py at 2018-07-06 14:06:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 384.12 Mbit/s
95th percentile per-packet one-way delay: 134.787 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 220.35 Mbit/s
95th percentile per-packet one-way delay: 128.497 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 194.72 Mbit/s
95th percentile per-packet one-way delay: 134.064 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 107.52 Mbit/s
95th percentile per-packet one-way delay: 203.362 ms
Loss rate: 4.75%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 219.33 Mbps)
- Flow 1 egress (mean 220.35 Mbps)
- Flow 2 ingress (mean 195.06 Mbps)
- Flow 2 egress (mean 194.72 Mbps)
- Flow 3 ingress (mean 111.18 Mbps)
- Flow 3 egress (mean 107.52 Mbps)

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

- Flow 1 (95th percentile 128.50 ms)
- Flow 2 (95th percentile 134.06 ms)
- Flow 3 (95th percentile 203.36 ms)
Run 6: Statistics of Verus

Start at: 2018-07-06 09:14:10
End at: 2018-07-06 09:14:40
Local clock offset: -0.228 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-07-06 14:06:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.37 Mbit/s
95th percentile per-packet one-way delay: 206.184 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 207.90 Mbit/s
95th percentile per-packet one-way delay: 171.476 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 138.53 Mbit/s
95th percentile per-packet one-way delay: 204.647 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 128.79 Mbit/s
95th percentile per-packet one-way delay: 276.889 ms
Loss rate: 4.15%
Run 6: Report of Verus — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image-url)
Run 7: Statistics of Verus

Start at: 2018-07-06 09:38:37
End at: 2018-07-06 09:39:07
Local clock offset: 0.249 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-07-06 14:06:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.09 Mbit/s
95th percentile per-packet one-way delay: 178.707 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 143.45 Mbit/s
95th percentile per-packet one-way delay: 178.830 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 197.46 Mbit/s
95th percentile per-packet one-way delay: 143.595 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 108.41 Mbit/s
95th percentile per-packet one-way delay: 301.725 ms
Loss rate: 3.77%
Run 7: Report of Verus — Data Link

![Graph of Throughput (Mbps) over time]

- Flow 1 ingress (mean 143.32 Mbps)
- Flow 1 egress (mean 143.45 Mbps)
- Flow 2 ingress (mean 198.37 Mbps)
- Flow 2 egress (mean 197.46 Mbps)
- Flow 3 ingress (mean 111.48 Mbps)
- Flow 3 egress (mean 108.41 Mbps)

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

- Flow 1 (95th percentile 178.83 ms)
- Flow 2 (95th percentile 143.59 ms)
- Flow 3 (95th percentile 301.73 ms)
Run 8: Statistics of Verus

Start at: 2018-07-06 10:03:16
End at: 2018-07-06 10:03:46
Local clock offset: -0.177 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-07-06 14:09:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 368.07 Mbit/s
  95th percentile per-packet one-way delay: 177.978 ms
  Loss rate: 2.11%
-- Flow 1:
  Average throughput: 207.15 Mbit/s
  95th percentile per-packet one-way delay: 197.551 ms
  Loss rate: 1.91%
-- Flow 2:
  Average throughput: 187.74 Mbit/s
  95th percentile per-packet one-way delay: 134.255 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 110.79 Mbit/s
  95th percentile per-packet one-way delay: 216.242 ms
  Loss rate: 6.35%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-07-06 10:28:11
End at: 2018-07-06 10:28:41
Local clock offset: -0.052 ms
Remote clock offset: 0.331 ms

# Below is generated by plot.py at 2018-07-06 14:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.38 Mbit/s
95th percentile per-packet one-way delay: 148.015 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 198.96 Mbit/s
95th percentile per-packet one-way delay: 142.231 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 173.77 Mbit/s
95th percentile per-packet one-way delay: 154.930 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 139.333 ms
Loss rate: 6.12%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-07-06 10:52:50
End at: 2018-07-06 10:53:20
Local clock offset: 0.002 ms
Remote clock offset: 0.196 ms

# Below is generated by plot.py at 2018-07-06 14:10:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 361.19 Mbit/s
  95th percentile per-packet one-way delay: 178.942 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 205.25 Mbit/s
  95th percentile per-packet one-way delay: 177.411 ms
  Loss rate: 1.26%
-- Flow 2:
  Average throughput: 175.03 Mbit/s
  95th percentile per-packet one-way delay: 177.462 ms
  Loss rate: 0.99%
-- Flow 3:
  Average throughput: 120.68 Mbit/s
  95th percentile per-packet one-way delay: 184.966 ms
  Loss rate: 0.62%
Run 10: Report of Verus — Data Link

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

- Flow 1 ingress (mean 207.91 Mbit/s)
- Flow 1 egress (mean 205.25 Mbit/s)
- Flow 2 ingress (mean 175.86 Mbit/s)
- Flow 2 egress (mean 175.03 Mbit/s)
- Flow 3 ingress (mean 120.68 Mbit/s)
- Flow 3 egress (mean 120.68 Mbit/s)
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-06 07:23:53
End at: 2018-07-06 07:24:23
Local clock offset: -0.028 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-07-06 14:16:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 596.77 Mbit/s
  95th percentile per-packet one-way delay: 151.129 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 333.05 Mbit/s
  95th percentile per-packet one-way delay: 135.104 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 290.20 Mbit/s
  95th percentile per-packet one-way delay: 106.343 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 216.68 Mbit/s
  95th percentile per-packet one-way delay: 190.159 ms
  Loss rate: 1.94%
Run 1: Report of PCC-Vivace — Data Link

![Graph of data link throughput and delay over time for flows 1, 2, and 3.]
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-06 07:48:16
End at: 2018-07-06 07:48:46
Local clock offset: 0.0 ms
Remote clock offset: 1.383 ms

# Below is generated by plot.py at 2018-07-06 14:16:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.73 Mbit/s
95th percentile per-packet one-way delay: 74.152 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 329.24 Mbit/s
95th percentile per-packet one-way delay: 86.266 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 261.98 Mbit/s
95th percentile per-packet one-way delay: 57.995 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 160.62 Mbit/s
95th percentile per-packet one-way delay: 51.657 ms
Loss rate: 1.31%
Run 2: Report of PCC-Vivace — Data Link

![Graph showing data link performance metrics including throughput and per-packet one-way delay.](image-url)
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-06 08:12:51
End at: 2018-07-06 08:13:21
Local clock offset: -0.126 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-07-06 14:16:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 554.72 Mbit/s
  95th percentile per-packet one-way delay: 195.971 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 315.03 Mbit/s
  95th percentile per-packet one-way delay: 83.733 ms
  Loss rate: 0.49%
-- Flow 2:
  Average throughput: 271.18 Mbit/s
  95th percentile per-packet one-way delay: 238.816 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 182.76 Mbit/s
  95th percentile per-packet one-way delay: 55.019 ms
  Loss rate: 1.49%
Run 3: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 315.44 Mbit/s)
- Flow 1 egress (mean 315.03 Mbit/s)
- Flow 2 ingress (mean 272.92 Mbit/s)
- Flow 2 egress (mean 271.18 Mbit/s)
- Flow 3 ingress (mean 183.52 Mbit/s)
- Flow 3 egress (mean 182.76 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 83.73 ms)
- Flow 2 (95th percentile 238.82 ms)
- Flow 3 (95th percentile 55.02 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-06 08:37:34
End at: 2018-07-06 08:38:04
Local clock offset: 0.07 ms
Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-07-06 14:16:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.91 Mbit/s
95th percentile per-packet one-way delay: 66.315 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 335.34 Mbit/s
95th percentile per-packet one-way delay: 72.342 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 274.96 Mbit/s
95th percentile per-packet one-way delay: 56.157 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 85.31 Mbit/s
95th percentile per-packet one-way delay: 50.870 ms
Loss rate: 1.61%
Run 4: Report of PCC-Vivace — Data Link

![Graph showing data link performance metrics over time.](chart1.png)

The graph illustrates the throughput and per-packet one-way delay for three different flows over a 30-second period. The performance metrics are as follows:

- **Throughput**:
  - Flow 1 ingress (mean 335.67 Mbps)
  - Flow 1 egress (mean 335.34 Mbps)
  - Flow 2 ingress (mean 274.78 Mbps)
  - Flow 2 egress (mean 274.96 Mbps)
  - Flow 3 ingress (mean 85.82 Mbps)
  - Flow 3 egress (mean 85.31 Mbps)

- **Per-packet one-way delay**:
  - Flow 1 (95th percentile 72.34 ms)
  - Flow 2 (95th percentile 56.16 ms)
  - Flow 3 (95th percentile 50.87 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-06 09:02:28
End at: 2018-07-06 09:02:58
Local clock offset: -0.099 ms
Remote clock offset: 1.474 ms

# Below is generated by plot.py at 2018-07-06 14:16:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 433.56 Mbit/s
95th percentile per-packet one-way delay: 55.054 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 345.88 Mbit/s
95th percentile per-packet one-way delay: 56.062 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 86.61 Mbit/s
95th percentile per-packet one-way delay: 49.003 ms
Loss rate: 0.78%
-- Flow 3:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 53.046 ms
Loss rate: 1.32%
Run 5: Report of PCC-Vivace — Data Link
Run 6: Statistics of PCC-Vivace

Start at: 2018-07-06 09:26:53
End at: 2018-07-06 09:27:23
Local clock offset: -0.136 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-07-06 14:19:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 552.36 Mbit/s
  95th percentile per-packet one-way delay: 73.961 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 297.70 Mbit/s
  95th percentile per-packet one-way delay: 88.253 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 307.68 Mbit/s
  95th percentile per-packet one-way delay: 85.850 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 153.91 Mbit/s
  95th percentile per-packet one-way delay: 59.285 ms
  Loss rate: 1.33%
Run 6: Report of PCC-Vivace — Data Link

![Graph showing throughput and per-packet loss over time](image-url)
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-06 09:51:22
End at: 2018-07-06 09:51:52
Local clock offset: -0.251 ms
Remote clock offset: -1.218 ms

# Below is generated by plot.py at 2018-07-06 14:19:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 513.91 Mbit/s
95th percentile per-packet one-way delay: 168.531 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 311.93 Mbit/s
95th percentile per-packet one-way delay: 162.517 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 278.53 Mbit/s
95th percentile per-packet one-way delay: 194.508 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 51.99 Mbit/s
95th percentile per-packet one-way delay: 51.643 ms
Loss rate: 2.27%
Run 7: Report of PCC-Vivace — Data Link
Run 8: Statistics of PCC-Vivace

Start at: 2018-07-06 10:16:19
End at: 2018-07-06 10:16:49
Local clock offset: 0.065 ms
Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2018-07-06 14:19:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 461.60 Mbit/s
95th percentile per-packet one-way delay: 101.495 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 305.13 Mbit/s
95th percentile per-packet one-way delay: 96.180 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 203.20 Mbit/s
95th percentile per-packet one-way delay: 153.611 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 65.76 Mbit/s
95th percentile per-packet one-way delay: 50.815 ms
Loss rate: 1.69%
Run 8: Report of PCC-Vivace — Data Link

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

- **Flow 1 Ingress (mean 305.70 Mb/s)**
- **Flow 1 Egress (mean 305.13 Mb/s)**
- **Flow 2 Ingress (mean 203.01 Mb/s)**
- **Flow 2 Egress (mean 203.20 Mb/s)**
- **Flow 3 Ingress (mean 66.26 Mb/s)**
- **Flow 3 Egress (mean 65.76 Mb/s)**

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

- **Flow 1 (95th percentile 96.18 ms)**
- **Flow 2 (95th percentile 153.61 ms)**
- **Flow 3 (95th percentile 50.81 ms)**

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Run 9: Statistics of PCC-Vivace

Start at: 2018-07-06 10:40:50
End at: 2018-07-06 10:41:20
Local clock offset: 0.008 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-07-06 14:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 560.44 Mbit/s
95th percentile per-packet one-way delay: 83.751 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 338.16 Mbit/s
95th percentile per-packet one-way delay: 77.756 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 293.34 Mbit/s
95th percentile per-packet one-way delay: 87.993 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 84.08 Mbit/s
95th percentile per-packet one-way delay: 54.699 ms
Loss rate: 1.25%
Run 9: Report of PCC-Vivace — Data Link

![Graph of throughput and per-packet one-way delay](image-url)
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-06 11:05:20
End at: 2018-07-06 11:05:50
Local clock offset: -0.113 ms
Remote clock offset: 1.051 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 545.21 Mbit/s
95th percentile per-packet one-way delay: 97.062 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 326.35 Mbit/s
95th percentile per-packet one-way delay: 88.985 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 314.23 Mbit/s
95th percentile per-packet one-way delay: 104.492 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 52.972 ms
Loss rate: 1.74%
Run 10: Report of PCC-Vivace — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-07-06 07:22:45
End at: 2018-07-06 07:23:15
Local clock offset: 0.133 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.63 Mbit/s
  95th percentile per-packet one-way delay: 53.873 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 1.76 Mbit/s
  95th percentile per-packet one-way delay: 53.890 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 1.33 Mbit/s
  95th percentile per-packet one-way delay: 53.816 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 0.55 Mbit/s
  95th percentile per-packet one-way delay: 53.225 ms
  Loss rate: 1.59%
Run 1: Report of WebRTC media — Data Link

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

*Graph legend:*
- Blue dashed line: Flow 1 ingress (mean 1.76 Mbit/s)
- Green dashed line: Flow 1 egress (mean 1.76 Mbit/s)
- Blue solid line: Flow 2 ingress (mean 1.34 Mbit/s)
- Green solid line: Flow 2 egress (mean 1.33 Mbit/s)
- Red solid line: Flow 3 ingress (mean 0.56 Mbit/s)
- Red dashed line: Flow 3 egress (mean 0.55 Mbit/s)
Run 2: Statistics of WebRTC media

Start at: 2018-07-06 07:47:08
End at: 2018-07-06 07:47:38
Local clock offset: -0.063 ms
Remote clock offset: 0.194 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.92 Mbit/s
  95th percentile per-packet one-way delay: 53.556 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 2.07 Mbit/s
  95th percentile per-packet one-way delay: 50.243 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 53.583 ms
  Loss rate: 0.74%
-- Flow 3:
  Average throughput: 0.55 Mbit/s
  95th percentile per-packet one-way delay: 53.620 ms
  Loss rate: 1.97%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-07-06 08:11:43
End at: 2018-07-06 08:12:13
Local clock offset: -0.003 ms
Remote clock offset: 1.263 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 52.404 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 49.165 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 48.838 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 52.474 ms
Loss rate: 1.60%
Run 3: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 2.06 Mbps) — Flow 1 egress (mean 2.06 Mbps)
Flow 2 ingress (mean 1.33 Mbps) — Flow 2 egress (mean 1.32 Mbps)
Flow 3 ingress (mean 0.54 Mbps) — Flow 3 egress (mean 0.54 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 49.16 ms) — Flow 2 (95th percentile 48.84 ms) — Flow 3 (95th percentile 52.47 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-07-06 08:36:25
End at: 2018-07-06 08:36:55
Local clock offset: 0.052 ms
Remote clock offset: -0.203 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.89 Mbit/s
  95th percentile per-packet one-way delay: 53.944 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 2.04 Mbit/s
  95th percentile per-packet one-way delay: 53.965 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 50.652 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 53.343 ms
  Loss rate: 1.60%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-07-06 09:01:20
End at: 2018-07-06 09:01:50
Local clock offset: 0.133 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.86 Mbit/s
  95th percentile per-packet one-way delay: 53.640 ms
  Loss rate: 0.63%
  -- Flow 1:
  Average throughput: 2.03 Mbit/s
  95th percentile per-packet one-way delay: 53.442 ms
  Loss rate: 0.47%
  -- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 53.672 ms
  Loss rate: 0.48%
  -- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 53.302 ms
  Loss rate: 1.59%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-07-06 09:25:44
End at: 2018-07-06 09:26:14
Local clock offset: 0.07 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.93 Mbit/s
95th percentile per-packet one-way delay: 53.864 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 50.375 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 53.936 ms
Loss rate: 1.46%
Run 6: Report of WebRTC media — Data Link

[Graph showing throughput and packet delivery]
Run 7: Statistics of WebRTC media

Start at: 2018-07-06 09:50:13
End at: 2018-07-06 09:50:43
Local clock offset: 0.075 ms
Remote clock offset: 1.361 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.89 Mbit/s
95th percentile per-packet one-way delay: 52.473 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 2.07 Mbit/s
95th percentile per-packet one-way delay: 48.848 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 48.930 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 52.568 ms
Loss rate: 1.04%
Run 7: Report of WebRTC media — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 2.07 Mbit/s)
- Flow 1 egress (mean 2.07 Mbit/s)
- Flow 2 ingress (mean 1.31 Mbit/s)
- Flow 2 egress (mean 1.31 Mbit/s)
- Flow 3 ingress (mean 0.54 Mbit/s)
- Flow 3 egress (mean 0.53 Mbit/s)

![Delay Graph](image2)

- Flow 1 (95th percentile 48.85 ms)
- Flow 2 (95th percentile 48.93 ms)
- Flow 3 (95th percentile 52.57 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-07-06 10:15:11
End at: 2018-07-06 10:15:41
Local clock offset: -0.088 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 53.911 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 53.926 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 53.690 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 53.684 ms
Loss rate: 0.97%
Run 8: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-07-06 10:39:41
End at: 2018-07-06 10:40:11
Local clock offset: -0.094 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 50.711 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 2.06 Mbit/s
95th percentile per-packet one-way delay: 50.435 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 1.33 Mbit/s
95th percentile per-packet one-way delay: 50.747 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 53.698 ms
Loss rate: 1.64%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-07-06 11:04:11
End at: 2018-07-06 11:04:41
Local clock offset: -0.134 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-07-06 14:20:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 53.978 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 54.005 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 50.777 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 53.832 ms
Loss rate: 1.13%
Run 10: Report of WebRTC media — Data Link