Pantheon Report

Generated at 2018-10-10 06:26:18 (UTC).
Data path: Mexico on em1 (remote) → AWS California 2 on ens5 (local).
Repeated the test of 18 congestion control schemes 5 times. Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1023-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 2e19c0464530fa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c02d1aadbac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecd4f90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0bbcb967ed70486ba8f94ab95
third_party/libutp @ b3465b942e2826f2b1b79eaab4a906e6bb7cf3cf
third_party/muses @ 65ac1b19bbee5d0c6349ae986009bfa8643c40a
third_party/pantheon-tunnel @ f866dd3f58d27af9427d7625ee3a354cc2e802bd
third_party/pcc @ 1afd958fa0d66d18b623c091a55f4e872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac0d8fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc81433eb978f3c6f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdc2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f9a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from Mexico to AWS California 2, 5 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>TCP BBR</td>
<td>5</td>
<td>58.01 37.46 37.27</td>
<td>189.63 247.81 467.66</td>
<td>0.79 1.41 3.10</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>52.69 36.23 27.98</td>
<td>94.39 44.71 47.50</td>
<td>0.18 0.26 0.79</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>49.91 39.00 33.65</td>
<td>45.57 41.29 47.12</td>
<td>0.16 0.29 0.69</td>
</tr>
<tr>
<td>FillIP</td>
<td>5</td>
<td>57.65 38.57 37.76</td>
<td>91.52 115.16 144.72</td>
<td>0.80 0.81 1.12</td>
</tr>
<tr>
<td>Indigo</td>
<td>5</td>
<td>57.53 40.19 36.26</td>
<td>48.70 48.53 45.25</td>
<td>0.21 0.41 0.75</td>
</tr>
<tr>
<td>Indigo-96d2da3</td>
<td>5</td>
<td>51.98 35.77 32.59</td>
<td>754.09 817.27 765.88</td>
<td>3.21 4.27 7.10</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>5</td>
<td>40.15 30.23 23.17</td>
<td>42.57 44.49 40.40</td>
<td>0.16 0.29 1.08</td>
</tr>
<tr>
<td>Indigo-Muses</td>
<td>5</td>
<td>59.33 36.18 36.71</td>
<td>46.51 47.58 48.34</td>
<td>0.14 0.29 0.73</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>57.20 39.46 27.76</td>
<td>2002.64 957.37 413.03</td>
<td>17.23 10.29 4.43</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>5</td>
<td>57.16 39.77 25.82</td>
<td>868.06 698.17 102.32</td>
<td>31.58 8.17 1.29</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>5</td>
<td>44.50 37.21 26.25</td>
<td>84.25 109.06 135.71</td>
<td>0.26 0.48 1.03</td>
</tr>
<tr>
<td>SCReAM</td>
<td>5</td>
<td>0.21  0.21  0.22</td>
<td>33.57 33.56 33.54</td>
<td>0.16 0.32 0.71</td>
</tr>
<tr>
<td>Sprout</td>
<td>5</td>
<td>12.07 11.95 11.69</td>
<td>42.48 42.80 42.65</td>
<td>0.20 0.30 0.72</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>5</td>
<td>55.22 40.65 29.94</td>
<td>122.57 123.71 136.62</td>
<td>0.65 1.60 3.92</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>5</td>
<td>38.98 38.38 32.39</td>
<td>45.77 36.19 46.84</td>
<td>0.21 0.31 0.71</td>
</tr>
<tr>
<td>Verus</td>
<td>5</td>
<td>54.62 36.36 27.73</td>
<td>141.22 325.51 251.67</td>
<td>0.32 0.61 1.68</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>57.27 33.08 25.32</td>
<td>1185.55 553.06 207.13</td>
<td>3.96 3.15 2.10</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>5</td>
<td>1.74  0.98  0.39</td>
<td>34.08 34.14 34.09</td>
<td>0.09 0.21 0.93</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-10-10 04:24:47
End at: 2018-10-10 04:25:17
Local clock offset: 6.598 ms
Remote clock offset: -4.375 ms

# Below is generated by plot.py at 2018-10-10 06:15:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.98 Mbit/s
95th percentile per-packet one-way delay: 228.510 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 57.89 Mbit/s
95th percentile per-packet one-way delay: 165.912 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 39.66 Mbit/s
95th percentile per-packet one-way delay: 159.461 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 32.29 Mbit/s
95th percentile per-packet one-way delay: 474.330 ms
Loss rate: 2.86%
Run 1: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 58.27 Mbps)  Flow 1 egress (mean 57.89 Mbps)
Flow 2 ingress (mean 39.98 Mbps)  Flow 2 egress (mean 39.66 Mbps)
Flow 3 ingress (mean 33.03 Mbps)  Flow 3 egress (mean 32.29 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 165.91 ms)  Flow 2 (95th percentile 159.46 ms)  Flow 3 (95th percentile 474.33 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-10-10 04:49:43
End at: 2018-10-10 04:50:13
Local clock offset: 2.324 ms
Remote clock offset: -3.609 ms

# Below is generated by plot.py at 2018-10-10 06:15:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 296.602 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 162.918 ms
Loss rate: 0.87%
-- Flow 2:
Average throughput: 39.75 Mbit/s
95th percentile per-packet one-way delay: 311.757 ms
Loss rate: 1.65%
-- Flow 3:
Average throughput: 33.48 Mbit/s
95th percentile per-packet one-way delay: 539.426 ms
Loss rate: 2.99%
Run 2: Report of TCP BBR — Data Link

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

- **Throughput**
  - Flow 1 ingress (mean 58.44 Mbit/s)
  - Flow 1 egress (mean 58.05 Mbit/s)
  - Flow 2 ingress (mean 40.29 Mbit/s)
  - Flow 2 egress (mean 39.75 Mbit/s)
  - Flow 3 ingress (mean 34.29 Mbit/s)
  - Flow 3 egress (mean 33.48 Mbit/s)

- **Per-packet one-way delay**
  - Flow 1 (95th percentile 162.92 ms)
  - Flow 2 (95th percentile 311.76 ms)
  - Flow 3 (95th percentile 539.43 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-10-10 05:14:34
End at: 2018-10-10 05:15:04
Local clock offset: 1.876 ms
Remote clock offset: -2.974 ms

# Below is generated by plot.py at 2018-10-10 06:15:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.20 Mbit/s
95th percentile per-packet one-way delay: 229.249 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 55.59 Mbit/s
95th percentile per-packet one-way delay: 229.075 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 35.95 Mbit/s
95th percentile per-packet one-way delay: 219.676 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 47.42 Mbit/s
95th percentile per-packet one-way delay: 311.966 ms
Loss rate: 1.88%
Run 3: Report of TCP BBR — Data Link

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

Legend:
- Flow 1 ingress (mean 55.93 Mbit/s)
- Flow 1 egress (mean 55.59 Mbit/s)
- Flow 2 ingress (mean 36.24 Mbit/s)
- Flow 2 egress (mean 35.95 Mbit/s)
- Flow 3 ingress (mean 48.00 Mbit/s)
- Flow 3 egress (mean 47.42 Mbit/s)
Run 4: Statistics of TCP BBR

Start at: 2018-10-10 05:39:20
End at: 2018-10-10 05:39:50
Local clock offset: 3.463 ms
Remote clock offset: -2.769 ms

# Below is generated by plot.py at 2018-10-10 06:15:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.00 Mbit/s
95th percentile per-packet one-way delay: 227.835 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 55.44 Mbit/s
95th percentile per-packet one-way delay: 227.472 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 35.87 Mbit/s
95th percentile per-packet one-way delay: 216.015 ms
Loss rate: 1.41%
-- Flow 3:
Average throughput: 47.42 Mbit/s
95th percentile per-packet one-way delay: 320.188 ms
Loss rate: 1.83%
Run 4: Report of TCP BBR — Data Link

![Graph of Throughput](image1)

![Graph of Packet Delay](image2)
Run 5: Statistics of TCP BBR

Start at: 2018-10-10 06:04:26
End at: 2018-10-10 06:04:57
Local clock offset: 3.465 ms
Remote clock offset: -2.276 ms

# Below is generated by plot.py at 2018-10-10 06:15:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 333.028 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 63.09 Mbit/s
95th percentile per-packet one-way delay: 162.785 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 36.07 Mbit/s
95th percentile per-packet one-way delay: 332.140 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 25.72 Mbit/s
95th percentile per-packet one-way delay: 692.382 ms
Loss rate: 5.95%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-10-10 04:17:27
End at: 2018-10-10 04:17:57
Local clock offset: 6.108 ms
Remote clock offset: -4.594 ms

# Below is generated by plot.py at 2018-10-10 06:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 56.487 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 52.22 Mbit/s
95th percentile per-packet one-way delay: 62.611 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.53 Mbit/s
95th percentile per-packet one-way delay: 47.485 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 48.704 ms
Loss rate: 0.74%
Run 1: Report of Copa — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 52.17 Mbps)
- **Flow 1 egress** (mean 52.22 Mbps)
- **Flow 2 ingress** (mean 34.51 Mbps)
- **Flow 2 egress** (mean 34.53 Mbps)
- **Flow 3 ingress** (mean 36.74 Mbps)
- **Flow 3 egress** (mean 36.70 Mbps)

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

- **Flow 1** (95th percentile 62.61 ms)
- **Flow 2** (95th percentile 47.48 ms)
- **Flow 3** (95th percentile 48.70 ms)
Run 2: Statistics of Copa

Start at: 2018-10-10 04:42:38
End at: 2018-10-10 04:43:08
Local clock offset: 2.767 ms
Remote clock offset: -3.825 ms

# Below is generated by plot.py at 2018-10-10 06:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.59 Mbit/s
95th percentile per-packet one-way delay: 66.774 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 102.365 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.72 Mbit/s
95th percentile per-packet one-way delay: 46.951 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 27.15 Mbit/s
95th percentile per-packet one-way delay: 53.851 ms
Loss rate: 1.11%
Run 2: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 3: Statistics of Copa

Start at: 2018-10-10 05:07:33
End at: 2018-10-10 05:08:03
Local clock offset: 1.953 ms
Remote clock offset: -3.374 ms

# Below is generated by plot.py at 2018-10-10 06:16:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 64.619 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 101.593 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 38.197 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 22.96 Mbit/s
95th percentile per-packet one-way delay: 36.363 ms
Loss rate: 0.74%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 54.16 Mbit/s)
- Flow 1 egress (mean 54.18 Mbit/s)
- Flow 2 ingress (mean 36.91 Mbit/s)
- Flow 2 egress (mean 36.87 Mbit/s)
- Flow 3 ingress (mean 22.99 Mbit/s)
- Flow 3 egress (mean 22.96 Mbit/s)

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

- Flow 1 (95th percentile 101.59 ms)
- Flow 2 (95th percentile 38.20 ms)
- Flow 3 (95th percentile 36.36 ms)
Run 4: Statistics of Copa

Start at: 2018-10-10 05:32:20
End at: 2018-10-10 05:32:50
Local clock offset: 2.9 ms
Remote clock offset: -2.865 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.24 Mbit/s
95th percentile per-packet one-way delay: 69.475 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 56.83 Mbit/s
95th percentile per-packet one-way delay: 99.672 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 41.506 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 30.85 Mbit/s
95th percentile per-packet one-way delay: 42.110 ms
Loss rate: 0.83%
Run 4: Report of Copa — Data Link

**Throughput (Mbit/s)**

- **Flow 1 ingress (mean 56.78 Mbit/s)**
- **Flow 1 egress (mean 56.83 Mbit/s)**
- **Flow 2 ingress (mean 31.82 Mbit/s)**
- **Flow 2 egress (mean 31.82 Mbit/s)**
- **Flow 3 ingress (mean 30.91 Mbit/s)**
- **Flow 3 egress (mean 30.85 Mbit/s)**

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

- **Flow 1 (95th percentile 99.67 ms)**
- **Flow 2 (95th percentile 41.51 ms)**
- **Flow 3 (95th percentile 42.11 ms)**
Run 5: Statistics of Copa

Start at: 2018-10-10 05:57:27
End at: 2018-10-10 05:57:57
Local clock offset: 3.829 ms
Remote clock offset: -2.36 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.87 Mbit/s
95th percentile per-packet one-way delay: 79.262 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 105.695 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.23 Mbit/s
95th percentile per-packet one-way delay: 49.405 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 22.23 Mbit/s
95th percentile per-packet one-way delay: 56.484 ms
Loss rate: 0.54%
Run 5: Report of Copa — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]

Legend:
- Flow 1 ingress (mean 49.73 Mbit/s)
- Flow 1 egress (mean 49.74 Mbit/s)
- Flow 2 ingress (mean 40.14 Mbit/s)
- Flow 2 egress (mean 40.23 Mbit/s)
- Flow 3 ingress (mean 22.20 Mbit/s)
- Flow 3 egress (mean 22.23 Mbit/s)

Flow 1 (95th percentile 105.69 ms)  Flow 2 (95th percentile 49.41 ms)  Flow 3 (95th percentile 56.48 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-10-10 04:09:13
End at: 2018-10-10 04:09:43
Local clock offset: 5.351 ms
Remote clock offset: -4.761 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.51 Mbit/s
  95th percentile per-packet one-way delay: 41.055 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 60.87 Mbit/s
  95th percentile per-packet one-way delay: 40.409 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 36.79 Mbit/s
  95th percentile per-packet one-way delay: 41.453 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 24.63 Mbit/s
  95th percentile per-packet one-way delay: 50.113 ms
  Loss rate: 1.00%
Run 1: Report of TCP Cubic — Data Link

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**Diagram:**

**Throughput (Mbps):**
- Flow 1 ingress (mean 60.84 Mbps)
- Flow 1 egress (mean 60.87 Mbps)
- Flow 2 ingress (mean 36.74 Mbps)
- Flow 2 egress (mean 36.79 Mbps)
- Flow 3 ingress (mean 24.72 Mbps)
- Flow 3 egress (mean 24.63 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 40.41 ms)
- Flow 2 (95th percentile 41.45 ms)
- Flow 3 (95th percentile 50.11 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-10-10 04:34:28
End at: 2018-10-10 04:34:58
Local clock offset: 3.776 ms
Remote clock offset: -4.23 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.59 Mbit/s
95th percentile per-packet one-way delay: 43.739 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 48.46 Mbit/s
95th percentile per-packet one-way delay: 47.552 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.95 Mbit/s
95th percentile per-packet one-way delay: 41.754 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 35.87 Mbit/s
95th percentile per-packet one-way delay: 43.236 ms
Loss rate: 0.65%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-10-10 04:59:24
End at: 2018-10-10 04:59:54
Local clock offset: 2.068 ms
Remote clock offset: -3.449 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.61 Mbit/s
  95th percentile per-packet one-way delay: 41.715 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 45.94 Mbit/s
  95th percentile per-packet one-way delay: 41.341 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 45.72 Mbit/s
  95th percentile per-packet one-way delay: 40.682 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 24.89 Mbit/s
  95th percentile per-packet one-way delay: 59.154 ms
  Loss rate: 0.60%
Run 3: Report of TCP Cubic — Data Link

![Graph showing run 3 performance metrics for TCP Cubic over a data link, with throughput and per-packet one-way delay measurements.](image-url)
Run 4: Statistics of TCP Cubic

Start at: 2018-10-10 05:24:13
End at: 2018-10-10 05:24:43
Local clock offset: 1.725 ms
Remote clock offset: -2.835 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.67 Mbit/s
95th percentile per-packet one-way delay: 47.071 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 45.85 Mbit/s
95th percentile per-packet one-way delay: 51.326 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 36.33 Mbit/s
95th percentile per-packet one-way delay: 42.555 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 47.32 Mbit/s
95th percentile per-packet one-way delay: 41.301 ms
Loss rate: 0.55%
Run 4: Report of TCP Cubic — Data Link

![Graph showing network performance metrics over time: Throughput (Mbps) and Per-packet one-way delay (ms).]
Run 5: Statistics of TCP Cubic

Start at: 2018-10-10 05:49:12
End at: 2018-10-10 05:49:42
Local clock offset: 3.891 ms
Remote clock offset: -2.482 ms

# Below is generated by plot.py at 2018-10-10 06:17:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.64 Mbit/s
  95th percentile per-packet one-way delay: 41.444 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 48.41 Mbit/s
  95th percentile per-packet one-way delay: 47.223 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 38.23 Mbit/s
  95th percentile per-packet one-way delay: 40.015 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 35.56 Mbit/s
  95th percentile per-packet one-way delay: 41.820 ms
  Loss rate: 0.65%
Run 5: Report of TCP Cubic — Data Link

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

Start at: 2018-10-10 04:21:54
End at: 2018-10-10 04:22:24
Local clock offset: 6.408 ms
Remote clock offset: -4.384 ms

# Below is generated by plot.py at 2018-10-10 06:17:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.74 Mbit/s
  95th percentile per-packet one-way delay: 106.535 ms
  Loss rate: 0.78%
-- Flow 1:
  Average throughput: 58.56 Mbit/s
  95th percentile per-packet one-way delay: 92.148 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 40.03 Mbit/s
  95th percentile per-packet one-way delay: 116.797 ms
  Loss rate: 0.83%
-- Flow 3:
  Average throughput: 31.99 Mbit/s
  95th percentile per-packet one-way delay: 119.026 ms
  Loss rate: 1.04%
Run 1: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 58.86 Mbps)
Flow 1 egress (mean 58.56 Mbps)
Flow 2 ingress (mean 40.24 Mbps)
Flow 2 egress (mean 40.03 Mbps)
Flow 3 ingress (mean 32.12 Mbps)
Flow 3 egress (mean 31.99 Mbps)

Round-trip one-way delay (ms)

Time (s)

Flow 1 (95th percentile 92.15 ms)
Flow 2 (95th percentile 116.80 ms)
Flow 3 (95th percentile 119.03 ms)
Run 2: Statistics of FillP

Start at: 2018-10-10 04:46:53
End at: 2018-10-10 04:47:23
Local clock offset: 2.478 ms
Remote clock offset: -3.824 ms

# Below is generated by plot.py at 2018-10-10 06:17:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.74 Mbit/s
  95th percentile per-packet one-way delay: 91.890 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 58.63 Mbit/s
  95th percentile per-packet one-way delay: 91.478 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 39.88 Mbit/s
  95th percentile per-packet one-way delay: 92.785 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 32.10 Mbit/s
  95th percentile per-packet one-way delay: 88.311 ms
  Loss rate: 0.94%
Run 3: Statistics of FillP

Start at: 2018-10-10 05:11:46
End at: 2018-10-10 05:12:16
Local clock offset: 1.893 ms
Remote clock offset: -3.301 ms

# Below is generated by plot.py at 2018-10-10 06:17:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.74 Mbit/s
95th percentile per-packet one-way delay: 88.605 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 77.806 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 39.95 Mbit/s
95th percentile per-packet one-way delay: 91.288 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 88.293 ms
Loss rate: 1.80%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-10-10 05:36:32
End at: 2018-10-10 05:37:02
Local clock offset: 3.288 ms
Remote clock offset: -2.663 ms

# Below is generated by plot.py at 2018-10-10 06:17:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.85 Mbit/s
95th percentile per-packet one-way delay: 133.193 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 56.08 Mbit/s
95th percentile per-packet one-way delay: 123.886 ms
Loss rate: 1.08%
-- Flow 2:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: 137.466 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 47.20 Mbit/s
95th percentile per-packet one-way delay: 130.579 ms
Loss rate: 0.89%
Run 4: Report of FillP — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 56.59 Mbps)
  - Flow 1 egress (mean 56.08 Mbps)
  - Flow 2 ingress (mean 36.55 Mbps)
  - Flow 2 egress (mean 36.35 Mbps)
  - Flow 3 ingress (mean 47.31 Mbps)
  - Flow 3 egress (mean 47.20 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 123.89 ms)
  - Flow 2 (95th percentile 137.47 ms)
  - Flow 3 (95th percentile 130.58 ms)
Run 5: Statistics of FillP

Start at: 2018-10-10 06:01:38
End at: 2018-10-10 06:02:08
Local clock offset: 3.58 ms
Remote clock offset: -2.404 ms

# Below is generated by plot.py at 2018-10-10 06:18:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.76 Mbit/s
95th percentile per-packet one-way delay: 125.617 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 72.257 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 36.65 Mbit/s
95th percentile per-packet one-way delay: 137.484 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 45.54 Mbit/s
95th percentile per-packet one-way delay: 297.397 ms
Loss rate: 0.95%
Run 5: Report of FillP — Data Link

Throughput (Mbit/s)

<table>
<thead>
<tr>
<th></th>
<th>Flow 1 ingress (mean 56.57 Mbit/s)</th>
<th>Flow 1 egress (mean 56.35 Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flow 2 ingress (mean 36.85 Mbit/s)</td>
<td>Flow 2 egress (mean 36.65 Mbit/s)</td>
</tr>
<tr>
<td></td>
<td>Flow 3 ingress (mean 45.68 Mbit/s)</td>
<td>Flow 3 egress (mean 45.54 Mbit/s)</td>
</tr>
</tbody>
</table>

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 72.26 ms)
- Flow 2 (95th percentile 137.48 ms)
- Flow 3 (95th percentile 297.40 ms)
Run 1: Statistics of Indigo

Start at: 2018-10-10 04:31:41
End at: 2018-10-10 04:32:11
Local clock offset: 4.3 ms
Remote clock offset: -4.203 ms

# Below is generated by plot.py at 2018-10-10 06:18:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.14 Mbit/s
  95th percentile per-packet one-way delay: 46.020 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 59.27 Mbit/s
  95th percentile per-packet one-way delay: 47.913 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 40.05 Mbit/s
  95th percentile per-packet one-way delay: 45.603 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 31.37 Mbit/s
  95th percentile per-packet one-way delay: 41.668 ms
  Loss rate: 0.73%
Run 1: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 59.30 Mbit/s)**
- **Flow 1 egress (mean 59.27 Mbit/s)**
- **Flow 2 ingress (mean 40.07 Mbit/s)**
- **Flow 2 egress (mean 40.05 Mbit/s)**
- **Flow 3 ingress (mean 31.39 Mbit/s)**
- **Flow 3 egress (mean 31.37 Mbit/s)**

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

- **Flow 1 (95th percentile 47.91 ms)**
- **Flow 2 (95th percentile 45.60 ms)**
- **Flow 3 (95th percentile 41.67 ms)**
Run 2: Statistics of Indigo

Start at: 2018-10-10 04:56:38
End at: 2018-10-10 04:57:08
Local clock offset: 2.101 ms
Remote clock offset: -3.59 ms

# Below is generated by plot.py at 2018-10-10 06:18:22
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 96.02 Mbit/s
    95th percentile per-packet one-way delay: 49.908 ms
    Loss rate: 0.30%
-- Flow 1:
    Average throughput: 56.41 Mbit/s
    95th percentile per-packet one-way delay: 51.233 ms
    Loss rate: 0.16%
-- Flow 2:
    Average throughput: 36.29 Mbit/s
    95th percentile per-packet one-way delay: 48.122 ms
    Loss rate: 0.32%
-- Flow 3:
    Average throughput: 47.28 Mbit/s
    95th percentile per-packet one-way delay: 48.515 ms
    Loss rate: 0.77%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-10-10 05:21:26
End at: 2018-10-10 05:21:56
Local clock offset: 1.774 ms
Remote clock offset: -3.008 ms

# Below is generated by plot.py at 2018-10-10 06:18:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.21 Mbit/s
  95th percentile per-packet one-way delay: 47.766 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 59.13 Mbit/s
  95th percentile per-packet one-way delay: 47.739 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 40.23 Mbit/s
  95th percentile per-packet one-way delay: 48.902 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 31.66 Mbit/s
  95th percentile per-packet one-way delay: 43.105 ms
  Loss rate: 0.73%
Run 3: Report of Indigo — Data Link

---

The graphs show the throughput and per-packet one-way delay for three flows over a 30-second period. The throughput graph tracks the throughput (Mbps) over time, while the per-packet one-way delay graph tracks the delay (ms) over time. The graphs provide insights into the performance of the data link during the run.
Run 4: Statistics of Indigo

Start at: 2018-10-10 05:46:15
End at: 2018-10-10 05:46:45
Local clock offset: 3.77 ms
Remote clock offset: -2.799 ms

# Below is generated by plot.py at 2018-10-10 06:18:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.10 Mbit/s
95th percentile per-packet one-way delay: 50.598 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 56.45 Mbit/s
95th percentile per-packet one-way delay: 47.202 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 36.38 Mbit/s
95th percentile per-packet one-way delay: 57.461 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 47.28 Mbit/s
95th percentile per-packet one-way delay: 49.974 ms
Loss rate: 0.77%
Run 4: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 56.42 Mbit/s)
- Flow 1 egress (mean 56.45 Mbit/s)
- Flow 2 ingress (mean 36.40 Mbit/s)
- Flow 2 egress (mean 36.38 Mbit/s)
- Flow 3 ingress (mean 47.34 Mbit/s)
- Flow 3 egress (mean 47.28 Mbit/s)

- Flow 1 (95th percentile 47.20 ms)
- Flow 2 (95th percentile 57.46 ms)
- Flow 3 (95th percentile 49.97 ms)
Run 5: Statistics of Indigo

Start at: 2018-10-10 06:11:34
End at: 2018-10-10 06:12:04
Local clock offset: 3.305 ms
Remote clock offset: -2.363 ms

# Below is generated by plot.py at 2018-10-10 06:18:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.06 Mbit/s
  95th percentile per-packet one-way delay: 44.567 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 56.41 Mbit/s
  95th percentile per-packet one-way delay: 49.413 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 48.00 Mbit/s
  95th percentile per-packet one-way delay: 42.585 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 23.71 Mbit/s
  95th percentile per-packet one-way delay: 42.999 ms
  Loss rate: 0.77%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-10 04:19:01
End at: 2018-10-10 04:19:31
Local clock offset: 6.22 ms
Remote clock offset: -4.659 ms

# Below is generated by plot.py at 2018-10-10 06:18:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.54 Mbit/s
95th percentile per-packet one-way delay: 821.939 ms
Loss rate: 5.10%
-- Flow 1:
Average throughput: 48.88 Mbit/s
95th percentile per-packet one-way delay: 793.489 ms
Loss rate: 3.39%
-- Flow 2:
Average throughput: 37.02 Mbit/s
95th percentile per-packet one-way delay: 833.701 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 831.385 ms
Loss rate: 11.14%
Run 1: Report of Indigo-96d2da3 — Data Link

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

Throughput (Mbps):

- **Flow 1 ingress (mean 30.55 Mbps)**
- **Flow 1 egress (mean 48.88 Mbps)**
- **Flow 2 ingress (mean 39.25 Mbps)**
- **Flow 2 egress (mean 37.02 Mbps)**
- **Flow 3 ingress (mean 34.19 Mbps)**
- **Flow 3 egress (mean 30.45 Mbps)**

Delay (ms):

- **Flow 1 (95th percentile 793.49 ms)**
- **Flow 2 (95th percentile 833.70 ms)**
- **Flow 3 (95th percentile 831.38 ms)**
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-10 04:44:05
End at: 2018-10-10 04:44:35
Local clock offset: 2.652 ms
Remote clock offset: -3.993 ms

# Below is generated by plot.py at 2018-10-10 06:18:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.23 Mbit/s
95th percentile per-packet one-way delay: 757.482 ms
Loss rate: 3.25%
-- Flow 1:
Average throughput: 56.31 Mbit/s
95th percentile per-packet one-way delay: 676.931 ms
Loss rate: 3.36%
-- Flow 2:
Average throughput: 34.75 Mbit/s
95th percentile per-packet one-way delay: 767.706 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 813.764 ms
Loss rate: 3.65%
Run 2: Report of Indigo-96d2da3 — Data Link
Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-10 05:09:00
End at: 2018-10-10 05:09:30
Local clock offset: 1.939 ms
Remote clock offset: -3.079 ms

# Below is generated by plot.py at 2018-10-10 06:19:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.77 Mbit/s
95th percentile per-packet one-way delay: 776.803 ms
Loss rate: 4.01%
-- Flow 1:
Average throughput: 47.99 Mbit/s
95th percentile per-packet one-way delay: 821.827 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 33.49 Mbit/s
95th percentile per-packet one-way delay: 807.448 ms
Loss rate: 5.44%
-- Flow 3:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 560.890 ms
Loss rate: 6.65%
Run 3: Report of Indigo-96d2da3 — Data Link
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-10 05:33:45
End at: 2018-10-10 05:34:15
Local clock offset: 3.045 ms
Remote clock offset: -2.898 ms

# Below is generated by plot.py at 2018-10-10 06:19:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.43 Mbit/s
95th percentile per-packet one-way delay: 786.936 ms
Loss rate: 4.56%
-- Flow 1:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 744.092 ms
Loss rate: 4.27%
-- Flow 2:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 841.402 ms
Loss rate: 4.10%
-- Flow 3:
Average throughput: 31.65 Mbit/s
95th percentile per-packet one-way delay: 748.860 ms
Loss rate: 7.16%
Run 4: Report of Indigo-96d2da3 — Data Link

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

[Graph 2: Per-packet one-way delay (ms)]
Run 5: Statistics of Indigo-96d2da3

Start at: 2018-10-10 05:58:53
End at: 2018-10-10 05:59:23
Local clock offset: 3.732 ms
Remote clock offset: -2.346 ms

# Below is generated by plot.py at 2018-10-10 06:19:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.55 Mbit/s
  95th percentile per-packet one-way delay: 803.153 ms
  Loss rate: 3.25%
-- Flow 1:
  Average throughput: 49.31 Mbit/s
  95th percentile per-packet one-way delay: 734.112 ms
  Loss rate: 2.49%
-- Flow 2:
  Average throughput: 36.60 Mbit/s
  95th percentile per-packet one-way delay: 836.092 ms
  Loss rate: 3.24%
-- Flow 3:
  Average throughput: 30.10 Mbit/s
  95th percentile per-packet one-way delay: 829.506 ms
  Loss rate: 6.92%
Run 5: Report of Indigo-96d2da3 — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-10-10 04:14:39
End at: 2018-10-10 04:15:09
Local clock offset: 5.876 ms
Remote clock offset: -4.521 ms

# Below is generated by plot.py at 2018-10-10 06:19:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.02 Mbit/s
  95th percentile per-packet one-way delay: 42.501 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 40.20 Mbit/s
  95th percentile per-packet one-way delay: 42.697 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 29.19 Mbit/s
  95th percentile per-packet one-way delay: 42.648 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 22.36 Mbit/s
  95th percentile per-packet one-way delay: 39.028 ms
  Loss rate: 1.00%
Run 1: Report of LEDBAT — Data Link

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

Legend:
- Flow 1 ingress (mean 40.17 Mbit/s)
- Flow 1 egress (mean 40.20 Mbit/s)
- Flow 2 ingress (mean 29.18 Mbit/s)
- Flow 2 egress (mean 29.19 Mbit/s)
- Flow 3 ingress (mean 22.44 Mbit/s)
- Flow 3 egress (mean 22.36 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 42.70 ms)
- Flow 2 (95th percentile 42.65 ms)
- Flow 3 (95th percentile 39.03 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-10-10 04:39:53
End at: 2018-10-10 04:40:23
Local clock offset: 3.018 ms
Remote clock offset: -4.082 ms

# Below is generated by plot.py at 2018-10-10 06:19:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 68.87 Mbit/s
  95th percentile per-packet one-way delay: 41.821 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 39.49 Mbit/s
  95th percentile per-packet one-way delay: 42.187 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 30.42 Mbit/s
  95th percentile per-packet one-way delay: 43.162 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 27.56 Mbit/s
  95th percentile per-packet one-way delay: 38.063 ms
  Loss rate: 1.30%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-10-10 05:04:48
End at: 2018-10-10 05:05:18
Local clock offset: 1.99 ms
Remote clock offset: -3.25 ms

# Below is generated by plot.py at 2018-10-10 06:19:29
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 66.96 Mbit/s
   95th percentile per-packet one-way delay: 41.905 ms
   Loss rate: 0.28%
-- Flow 1:
   Average throughput: 40.48 Mbit/s
   95th percentile per-packet one-way delay: 41.728 ms
   Loss rate: 0.14%
-- Flow 2:
   Average throughput: 28.76 Mbit/s
   95th percentile per-packet one-way delay: 42.278 ms
   Loss rate: 0.30%
-- Flow 3:
   Average throughput: 22.19 Mbit/s
   95th percentile per-packet one-way delay: 42.564 ms
   Loss rate: 1.00%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 40.45 Mbps/s)
- Flow 1 egress (mean 40.48 Mbps/s)
- Flow 2 ingress (mean 28.75 Mbps/s)
- Flow 2 egress (mean 28.76 Mbps/s)
- Flow 3 ingress (mean 22.27 Mbps/s)
- Flow 3 egress (mean 22.19 Mbps/s)

![Graph of Packet round trip delay (ms) vs. Time (s)]

- Flow 1 (95th percentile 41.73 ms)
- Flow 2 (95th percentile 42.28 ms)
- Flow 3 (95th percentile 42.56 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-10-10 05:29:36
End at: 2018-10-10 05:30:06
Local clock offset: 2.55 ms
Remote clock offset: -2.789 ms

# Below is generated by plot.py at 2018-10-10 06:19:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.10 Mbit/s
95th percentile per-packet one-way delay: 41.828 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: 42.031 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 31.27 Mbit/s
95th percentile per-packet one-way delay: 42.214 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 39.518 ms
Loss rate: 1.08%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-10-10 05:54:43  
End at: 2018-10-10 05:55:13  
Local clock offset: 4.029 ms  
Remote clock offset: -2.355 ms

# Below is generated by plot.py at 2018-10-10 06:19:41  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 68.70 Mbit/s  
95th percentile per-packet one-way delay: 46.165 ms  
Loss rate: 0.33%  
-- Flow 1:  
Average throughput: 40.43 Mbit/s  
95th percentile per-packet one-way delay: 44.194 ms  
Loss rate: 0.23%  
-- Flow 2:  
Average throughput: 31.51 Mbit/s  
95th percentile per-packet one-way delay: 52.167 ms  
Loss rate: 0.28%  
-- Flow 3:  
Average throughput: 22.11 Mbit/s  
95th percentile per-packet one-way delay: 42.847 ms  
Loss rate: 1.00%
Run 5: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 40.43 Mbit/s)**
- **Flow 1 egress (mean 40.43 Mbit/s)**
- **Flow 2 ingress (mean 31.30 Mbit/s)**
- **Flow 2 egress (mean 31.51 Mbit/s)**
- **Flow 3 ingress (mean 22.19 Mbit/s)**
- **Flow 3 egress (mean 22.11 Mbit/s)**

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

- **Flow 1 (95th percentile 44.19 ms)**
- **Flow 2 (95th percentile 52.17 ms)**
- **Flow 3 (95th percentile 42.85 ms)**
Run 1: Statistics of Indigo-Muses

Start at: 2018-10-10 04:07:50
End at: 2018-10-10 04:08:20
Local clock offset: 5.21 ms
Remote clock offset: -4.57 ms

# Below is generated by plot.py at 2018-10-10 06:20:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.52 Mbit/s
95th percentile per-packet one-way delay: 45.760 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 64.17 Mbit/s
95th percentile per-packet one-way delay: 43.710 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 35.73 Mbit/s
95th percentile per-packet one-way delay: 48.541 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 52.235 ms
Loss rate: 0.77%
Run 1: Report of Indigo-Muses — Data Link

![Data Link Performance Graphs](image)

The upper graph illustrates the throughput (Mbps) over time for different flows. Each line represents a flow's ingress and egress throughput, with specific mean values noted.

The lower graph shows the per-packet one-way delay for the same flows, with 95th percentile delay values highlighted.

Flow 1 (95th percentile delay: 43.71 ms)
Flow 2 (95th percentile delay: 48.54 ms)
Flow 3 (95th percentile delay: 52.23 ms)
Run 2: Statistics of Indigo-Muses

Start at: 2018-10-10 04:33:05
End at: 2018-10-10 04:33:35
Local clock offset: 4.026 ms
Remote clock offset: -4.247 ms

# Below is generated by plot.py at 2018-10-10 06:20:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.43 Mbit/s
95th percentile per-packet one-way delay: 46.978 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 46.306 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: 49.145 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 45.73 Mbit/s
95th percentile per-packet one-way delay: 46.431 ms
Loss rate: 0.72%
Run 2: Report of Indigo-Muses — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 55.09 Mbit/s)  Flow 1 egress (mean 55.15 Mbit/s)
Flow 2 ingress (mean 37.91 Mbit/s)  Flow 2 egress (mean 37.91 Mbit/s)
Flow 3 ingress (mean 45.77 Mbit/s)  Flow 3 egress (mean 45.73 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 46.31 ms)  Flow 2 (95th percentile 49.15 ms)  Flow 3 (95th percentile 46.43 ms)
Run 3: Statistics of Indigo-Muses

Start at: 2018-10-10 04:58:02
End at: 2018-10-10 04:58:32
Local clock offset: 2.096 ms
Remote clock offset: -3.533 ms

# Below is generated by plot.py at 2018-10-10 06:20:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.58 Mbit/s
95th percentile per-packet one-way delay: 44.811 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 64.18 Mbit/s
95th percentile per-packet one-way delay: 43.403 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 35.71 Mbit/s
95th percentile per-packet one-way delay: 46.939 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 23.19 Mbit/s
95th percentile per-packet one-way delay: 48.096 ms
Loss rate: 0.71%
Run 3: Report of Indigo-Muses — Data Link
Run 4: Statistics of Indigo-Muses

Start at: 2018-10-10 05:22:50
End at: 2018-10-10 05:23:20
Local clock offset: 1.76 ms
Remote clock offset: -2.875 ms

# Below is generated by plot.py at 2018-10-10 06:20:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.45 Mbit/s
  95th percentile per-packet one-way delay: 47.324 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 56.58 Mbit/s
  95th percentile per-packet one-way delay: 47.857 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 35.79 Mbit/s
  95th percentile per-packet one-way delay: 47.597 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 45.76 Mbit/s
  95th percentile per-packet one-way delay: 46.123 ms
  Loss rate: 0.72%
Run 4: Report of Indigo-Muses — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 36.52 Mbps)
  - Flow 1 egress (mean 56.58 Mbps)
  - Flow 2 ingress (mean 35.76 Mbps)
  - Flow 2 egress (mean 35.79 Mbps)
  - Flow 3 ingress (mean 45.80 Mbps)
  - Flow 3 egress (mean 45.76 Mbps)

- **Packet Loss (ms)**:
  - Flow 1 (95th percentile 47.06 ms)
  - Flow 2 (95th percentile 47.60 ms)
  - Flow 3 (95th percentile 46.12 ms)
Run 5: Statistics of Indigo-Muses

Start at: 2018-10-10 05:47:40
End at: 2018-10-10 05:48:10
Local clock offset: 3.851 ms
Remote clock offset: -2.519 ms

# Below is generated by plot.py at 2018-10-10 06:20:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 50.308 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 56.59 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 35.77 Mbit/s
95th percentile per-packet one-way delay: 45.657 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 48.801 ms
Loss rate: 0.73%
Run 5: Report of Indigo-Muses — Data Link

Graph 1: Throughput vs. Time

Graph 2: Packet Size vs. Time

Legend:
- Flow 1 ingress (mean 56.53 Mbit/s)
- Flow 1 egress (mean 56.59 Mbit/s)
- Flow 2 ingress (mean 35.81 Mbit/s)
- Flow 2 egress (mean 35.77 Mbit/s)
- Flow 3 ingress (mean 45.87 Mbit/s)
- Flow 3 egress (mean 45.83 Mbit/s)

Legend:
- Flow 1 (95th percentile 51.26 ms)
- Flow 2 (95th percentile 45.66 ms)
- Flow 3 (95th percentile 48.80 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-10 04:27:34
End at: 2018-10-10 04:28:04
Local clock offset: 5.574 ms
Remote clock offset: -4.262 ms

# Below is generated by plot.py at 2018-10-10 06:20:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.27 Mbit/s
  95th percentile per-packet one-way delay: 2263.887 ms
  Loss rate: 7.06%
-- Flow 1:
  Average throughput: 55.90 Mbit/s
  95th percentile per-packet one-way delay: 2416.944 ms
  Loss rate: 10.88%
-- Flow 2:
  Average throughput: 44.76 Mbit/s
  95th percentile per-packet one-way delay: 42.110 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 20.24 Mbit/s
  95th percentile per-packet one-way delay: 116.895 ms
  Loss rate: 0.91%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2018-10-10 04:52:30
End at: 2018-10-10 04:53:00
Local clock offset: 2.382 ms
Remote clock offset: -3.625 ms

# Below is generated by plot.py at 2018-10-10 06:20:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.15 Mbit/s
95th percentile per-packet one-way delay: 2138.134 ms
Loss rate: 11.30%
-- Flow 1:
Average throughput: 57.04 Mbit/s
95th percentile per-packet one-way delay: 2154.878 ms
Loss rate: 10.70%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: 2089.748 ms
Loss rate: 13.50%
-- Flow 3:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: 907.161 ms
Loss rate: 8.99%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 63.75 Mbps)**
- **Flow 1 egress (mean 57.04 Mbps)**
- **Flow 2 ingress (mean 43.46 Mbps)**
- **Flow 2 egress (mean 37.71 Mbps)**
- **Flow 3 ingress (mean 33.46 Mbps)**
- **Flow 3 egress (mean 30.64 Mbps)**

![Graph 2: Packet delay (ms) vs. Time (s)]

- **Flow 1 (95th percentile 2154.88 ms)**
- **Flow 2 (95th percentile 2089.75 ms)**
- **Flow 3 (95th percentile 907.16 ms)**

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Run 3: Statistics of PCC-Allegro

Start at: 2018-10-10 05:17:19
End at: 2018-10-10 05:17:49
Local clock offset: 1.847 ms
Remote clock offset: -2.912 ms

# Below is generated by plot.py at 2018-10-10 06:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.47 Mbit/s
95th percentile per-packet one-way delay: 1623.336 ms
Loss rate: 22.33%
-- Flow 1:
Average throughput: 57.38 Mbit/s
95th percentile per-packet one-way delay: 1634.964 ms
Loss rate: 26.48%
-- Flow 2:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 1360.382 ms
Loss rate: 20.65%
-- Flow 3:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 132.314 ms
Loss rate: 0.91%
Run 3: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]
- Flow 1 ingress (mean 77.88 Mbps) vs. Flow 1 egress (mean 57.38 Mbps)
- Flow 2 ingress (mean 42.15 Mbps) vs. Flow 2 egress (mean 33.55 Mbps)
- Flow 3 ingress (mean 39.64 Mbps) vs. Flow 3 egress (mean 38.92 Mbps)

![Graph 2: Per-packet one-way delay (ms)]
- Flow 1 (95th percentile 1634.96 ms) vs. Flow 2 (95th percentile 1360.38 ms) vs. Flow 3 (95th percentile 132.31 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-10-10 05:42:06
End at: 2018-10-10 05:42:36
Local clock offset: 3.587 ms
Remote clock offset: -2.471 ms

# Below is generated by plot.py at 2018-10-10 06:21:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.48 Mbit/s
95th percentile per-packet one-way delay: 2137.370 ms
Loss rate: 7.03%

-- Flow 1:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 2167.102 ms
Loss rate: 10.50%

-- Flow 2:
Average throughput: 43.59 Mbit/s
95th percentile per-packet one-way delay: 45.800 ms
Loss rate: 0.41%

-- Flow 3:
Average throughput: 18.38 Mbit/s
95th percentile per-packet one-way delay: 92.438 ms
Loss rate: 2.09%
Run 4: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 64.09 Mbit/s)
- **Flow 1 egress** (mean 57.48 Mbit/s)
- **Flow 2 ingress** (mean 43.63 Mbit/s)
- **Flow 2 egress** (mean 43.59 Mbit/s)
- **Flow 3 ingress** (mean 18.65 Mbit/s)
- **Flow 3 egress** (mean 18.38 Mbit/s)

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

- **Flow 1** (95th percentile 2167.10 ms)
- **Flow 2** (95th percentile 43.80 ms)
- **Flow 3** (95th percentile 92.44 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-10-10 06:07:16
End at: 2018-10-10 06:07:46
Local clock offset: 3.378 ms
Remote clock offset: -2.429 ms

# Below is generated by plot.py at 2018-10-10 06:21:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.29 Mbit/s
  95th percentile per-packet one-way delay: 1637.051 ms
  Loss rate: 23.16%
-- Flow 1:
  Average throughput: 58.19 Mbit/s
  95th percentile per-packet one-way delay: 1639.309 ms
  Loss rate: 27.58%
-- Flow 2:
  Average throughput: 37.68 Mbit/s
  95th percentile per-packet one-way delay: 1248.811 ms
  Loss rate: 16.45%
-- Flow 3:
  Average throughput: 30.62 Mbit/s
  95th percentile per-packet one-way delay: 816.325 ms
  Loss rate: 9.26%
Run 5: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet one-way delay over time for different flows.]
Run 1: Statistics of PCC-Expr

Start at: 2018-10-10 04:30:14
End at: 2018-10-10 04:30:44
Local clock offset: 4.709 ms
Remote clock offset: -4.148 ms

# Below is generated by plot.py at 2018-10-10 06:22:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.57 Mbit/s
  95th percentile per-packet one-way delay: 874.685 ms
  Loss rate: 22.42%
-- Flow 1:
  Average throughput: 57.11 Mbit/s
  95th percentile per-packet one-way delay: 881.937 ms
  Loss rate: 31.69%
-- Flow 2:
  Average throughput: 42.00 Mbit/s
  95th percentile per-packet one-way delay: 168.500 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 22.98 Mbit/s
  95th percentile per-packet one-way delay: 123.699 ms
  Loss rate: 1.41%
Run 1: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 83.42 Mbit/s)
Flow 1 egress (mean 57.11 Mbit/s)
Flow 2 ingress (mean 42.09 Mbit/s)
Flow 2 egress (mean 42.00 Mbit/s)
Flow 3 ingress (mean 23.16 Mbit/s)
Flow 3 egress (mean 22.98 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 881.94 ms)
Flow 2 (95th percentile 168.50 ms)
Flow 3 (95th percentile 123.70 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-10-10 04:55:10
End at: 2018-10-10 04:55:40
Local clock offset: 2.131 ms
Remote clock offset: -3.574 ms

# Below is generated by plot.py at 2018-10-10 06:22:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.55 Mbit/s
95th percentile per-packet one-way delay: 875.010 ms
Loss rate: 22.61%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 881.378 ms
Loss rate: 31.76%
-- Flow 2:
Average throughput: 41.52 Mbit/s
95th percentile per-packet one-way delay: 159.754 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 160.698 ms
Loss rate: 2.34%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-10-10 05:20:00
End at: 2018-10-10 05:20:30
Local clock offset: 1.785 ms
Remote clock offset: -3.001 ms

# Below is generated by plot.py at 2018-10-10 06:22:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.65 Mbit/s
  95th percentile per-packet one-way delay: 819.465 ms
  Loss rate: 25.22%
-- Flow 1:
  Average throughput: 58.16 Mbit/s
  95th percentile per-packet one-way delay: 830.437 ms
  Loss rate: 31.00%
-- Flow 2:
  Average throughput: 38.21 Mbit/s
  95th percentile per-packet one-way delay: 729.923 ms
  Loss rate: 16.49%
-- Flow 3:
  Average throughput: 27.64 Mbit/s
  95th percentile per-packet one-way delay: 71.858 ms
  Loss rate: 0.99%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-10-10 05:44:46
End at: 2018-10-10 05:45:16
Local clock offset: 3.716 ms
Remote clock offset: -2.729 ms

# Below is generated by plot.py at 2018-10-10 06:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.65 Mbit/s
95th percentile per-packet one-way delay: 802.209 ms
Loss rate: 22.28%
-- Flow 1:
Average throughput: 57.18 Mbit/s
95th percentile per-packet one-way delay: 817.968 ms
Loss rate: 28.17%
-- Flow 2:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 793.955 ms
Loss rate: 12.85%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 70.992 ms
Loss rate: 1.04%
Run 4: Report of PCC-Expr — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 79.45 Mbit/s)  |  Flow 1 egress (mean 57.18 Mbit/s)
Flow 2 ingress (mean 43.70 Mbit/s)  |  Flow 2 egress (mean 38.21 Mbit/s)
Flow 3 ingress (mean 27.68 Mbit/s)  |  Flow 3 egress (mean 27.58 Mbit/s)

Per-packet round-trip delay (ms)

Flow 1 (95th percentile 817.97 ms)  |  Flow 2 (95th percentile 793.96 ms)  |  Flow 3 (95th percentile 70.99 ms)
Run 5: Statistics of PCC-Expr

Start at: 2018-10-10 06:10:02
End at: 2018-10-10 06:10:32
Local clock offset: 3.329 ms
Remote clock offset: -2.608 ms

# Below is generated by plot.py at 2018-10-10 06:22:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: 1251.481 ms
Loss rate: 26.95%
-- Flow 1:
Average throughput: 56.14 Mbit/s
95th percentile per-packet one-way delay: 928.575 ms
Loss rate: 35.27%
-- Flow 2:
Average throughput: 38.91 Mbit/s
95th percentile per-packet one-way delay: 1638.706 ms
Loss rate: 10.14%
-- Flow 3:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 84.348 ms
Loss rate: 0.65%
Run 5: Report of PCC-Expr — Data Link

Throughput [Mbit/s]

Time (s)

Flow 1 ingress (mean 86.54 Mbit/s)  Flow 1 egress (mean 56.14 Mbit/s)
Flow 2 ingress (mean 43.16 Mbit/s)  Flow 2 egress (mean 38.91 Mbit/s)
Flow 3 ingress (mean 27.26 Mbit/s)  Flow 3 egress (mean 27.26 Mbit/s)

Per-packet one-way delay [ms]

Time (s)

Flow 1 (95th percentile 928.58 ms)  Flow 2 (95th percentile 1638.71 ms)  Flow 3 (95th percentile 84.35 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-10-10 04:26:11
End at: 2018-10-10 04:26:41
Local clock offset: 6.137 ms
Remote clock offset: -4.284 ms

# Below is generated by plot.py at 2018-10-10 06:22:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.58 Mbit/s
95th percentile per-packet one-way delay: 103.907 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 38.75 Mbit/s
95th percentile per-packet one-way delay: 83.843 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 42.14 Mbit/s
95th percentile per-packet one-way delay: 115.442 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 23.71 Mbit/s
95th percentile per-packet one-way delay: 150.068 ms
Loss rate: 1.03%
Run 1: Report of QUIC Cubic — Data Link

![Graph showing throughput and delay over time for flows 1, 2, and 3.]
Run 2: Statistics of QUIC Cubic

Start at: 2018-10-10 04:51:08
End at: 2018-10-10 04:51:38
Local clock offset: 2.121 ms
Remote clock offset: -3.632 ms

# Below is generated by plot.py at 2018-10-10 06:22:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.54 Mbit/s
95th percentile per-packet one-way delay: 101.405 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 43.50 Mbit/s
95th percentile per-packet one-way delay: 94.724 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 109.837 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 30.29 Mbit/s
95th percentile per-packet one-way delay: 102.537 ms
Loss rate: 0.90%
Run 2: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 43.51 Mbit/s)
- Flow 1 egress (mean 43.50 Mbit/s)
- Flow 2 ingress (mean 36.21 Mbit/s)
- Flow 2 egress (mean 36.19 Mbit/s)
- Flow 3 ingress (mean 30.36 Mbit/s)
- Flow 3 egress (mean 30.29 Mbit/s)

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

- Flow 1 (95th percentile 94.72 ms)
- Flow 2 (95th percentile 109.84 ms)
- Flow 3 (95th percentile 102.54 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-10-10 05:15:57
End at: 2018-10-10 05:16:27
Local clock offset: 1.836 ms
Remote clock offset: -3.102 ms

# Below is generated by plot.py at 2018-10-10 06:22:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.79 Mbit/s
95th percentile per-packet one-way delay: 102.424 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 40.58 Mbit/s
95th percentile per-packet one-way delay: 100.344 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 41.28 Mbit/s
95th percentile per-packet one-way delay: 89.132 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 23.60 Mbit/s
95th percentile per-packet one-way delay: 162.555 ms
Loss rate: 1.12%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-10-10 05:40:44
End at: 2018-10-10 05:41:14
Local clock offset: 3.533 ms
Remote clock offset: -2.563 ms

# Below is generated by plot.py at 2018-10-10 06:23:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.99 Mbit/s
95th percentile per-packet one-way delay: 74.040 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: 45.852 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 123.925 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 23.46 Mbit/s
95th percentile per-packet one-way delay: 156.304 ms
Loss rate: 1.07%
Run 4: Report of QUIC Cubic — Data Link

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

Legend:
- **Flow 1 ingress (mean 57.35 Mbit/s)**
- **Flow 1 egress (mean 57.36 Mbit/s)**
- **Flow 2 ingress (mean 29.99 Mbit/s)**
- **Flow 2 egress (mean 29.95 Mbit/s)**
- **Flow 3 ingress (mean 23.56 Mbit/s)**
- **Flow 3 egress (mean 23.46 Mbit/s)**

Flow 1 (95th percentile 45.85 ms) • Flow 2 (95th percentile 123.92 ms) • Flow 3 (95th percentile 156.30 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-10-10 06:05:51
End at: 2018-10-10 06:06:21
Local clock offset: 3.43 ms
Remote clock offset: -2.351 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.46 Mbit/s
95th percentile per-packet one-way delay: 101.929 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 42.29 Mbit/s
95th percentile per-packet one-way delay: 96.487 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 36.47 Mbit/s
95th percentile per-packet one-way delay: 106.988 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 30.17 Mbit/s
95th percentile per-packet one-way delay: 107.071 ms
Loss rate: 1.05%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing Throughput and Per-packet one-way delay for different flows.]

- Flow 1 ingress (mean 42.32 Mbit/s)
- Flow 1 egress (mean 42.29 Mbit/s)
- Flow 2 ingress (mean 36.49 Mbit/s)
- Flow 2 egress (mean 36.47 Mbit/s)
- Flow 3 ingress (mean 30.29 Mbit/s)
- Flow 3 egress (mean 30.17 Mbit/s)

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

- Flow 1 (95th percentile 96.49 ms)
- Flow 2 (95th percentile 106.99 ms)
- Flow 3 (95th percentile 107.07 ms)
Run 1: Statistics of SCReAM

Start at: 2018-10-10 04:13:21
End at: 2018-10-10 04:13:51
Local clock offset: 5.762 ms
Remote clock offset: -4.712 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 33.677 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.678 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.680 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 33.647 ms
  Loss rate: 0.71%
Run 1: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 33.68 ms)
- Flow 2 (95th percentile 33.68 ms)
- Flow 3 (95th percentile 33.65 ms)
Run 2: Statistics of SCReAM

Start at: 2018-10-10 04:38:35
End at: 2018-10-10 04:39:05
Local clock offset: 3.13 ms
Remote clock offset: -3.906 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 33.626 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.593 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.644 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 33.628 ms
Loss rate: 0.71%
Run 2: Report of SCReAM — Data Link

---

**Graph 1:**
- **Y-axis:** Throughput (Mbps)
- **X-axis:** Time (s)
- Lines represent different flows and their ingress and egress rates:
  - 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:**
- **Y-axis:** Per-packet end-to-end delay (ms)
- **X-axis:** Time (s)
- Lines represent different flows with their 95th percentile delays:
  - Flow 1 (95th percentile 33.59 ms)
  - Flow 2 (95th percentile 33.64 ms)
  - Flow 3 (95th percentile 33.63 ms)

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Run 3: Statistics of SCReAM

Start at: 2018-10-10 05:03:30
End at: 2018-10-10 05:04:00
Local clock offset: 2.023 ms
Remote clock offset: -3.187 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 33.497 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.488 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.506 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 33.413 ms
  Loss rate: 0.71%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-10-10 05:28:18
End at: 2018-10-10 05:28:48
Local clock offset: 2.346 ms
Remote clock offset: -2.934 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 33.533 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.543 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.504 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 33.485 ms
  Loss rate: 0.71%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-10-10 05:53:25
End at: 2018-10-10 05:53:55
Local clock offset: 3.997 ms
Remote clock offset: -2.493 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 33.545 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.552 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 33.484 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 33.534 ms
  Loss rate: 0.71%
Run 5: Report of SCReAM — Data Link

![Data Link Diagram]

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

- Flow 1 (95th percentile 33.55 ms)
- Flow 2 (95th percentile 33.48 ms)
- Flow 3 (95th percentile 33.53 ms)
Run 1: Statistics of Sprout

Start at: 2018-10-10 04:12:02
End at: 2018-10-10 04:12:32
Local clock offset: 5.643 ms
Remote clock offset: -4.53 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: 41.706 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 41.697 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 11.92 Mbit/s
95th percentile per-packet one-way delay: 41.550 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 41.929 ms
Loss rate: 0.83%
Run 1: Report of Sprout — Data Link

**Throughput (Mbps)**

![Graph showing throughput over time](image1)

- **Flow 1 Ingress (mean 12.06 Mbps)**
- **Flow 1 Egress (mean 12.07 Mbps)**
- **Flow 2 Ingress (mean 11.92 Mbps)**
- **Flow 2 Egress (mean 11.92 Mbps)**
- **Flow 3 Ingress (mean 11.80 Mbps)**
- **Flow 3 Egress (mean 11.77 Mbps)**

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

![Graph showing per-packet delay over time](image2)

- **Flow 1 (95th percentile 41.70 ms)**
- **Flow 2 (95th percentile 41.55 ms)**
- **Flow 3 (95th percentile 41.93 ms)**
Run 2: Statistics of Sprout

Start at: 2018-10-10 04:37:16
End at: 2018-10-10 04:37:46
Local clock offset: 3.322 ms
Remote clock offset: -4.009 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 43.407 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 12.11 Mbit/s
95th percentile per-packet one-way delay: 43.225 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 43.769 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 11.70 Mbit/s
95th percentile per-packet one-way delay: 43.168 ms
Loss rate: 0.32%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-10-10 05:02:11  
End at: 2018-10-10 05:02:41  
Local clock offset: 2.031 ms  
Remote clock offset: -3.578 ms

# Below is generated by plot.py at 2018-10-10 06:23:23  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 23.81 Mbit/s  
95th percentile per-packet one-way delay: 44.037 ms  
Loss rate: 0.35%  
-- Flow 1:  
Average throughput: 12.05 Mbit/s  
95th percentile per-packet one-way delay: 43.536 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 11.93 Mbit/s  
95th percentile per-packet one-way delay: 44.368 ms  
Loss rate: 0.41%  
-- Flow 3:  
Average throughput: 11.64 Mbit/s  
95th percentile per-packet one-way delay: 44.679 ms  
Loss rate: 0.78%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-10-10 05:26:59
End at: 2018-10-10 05:27:29
Local clock offset: 2.137 ms
Remote clock offset: -2.831 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.87 Mbit/s
  95th percentile per-packet one-way delay: 41.664 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 12.08 Mbit/s
  95th percentile per-packet one-way delay: 41.536 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 11.96 Mbit/s
  95th percentile per-packet one-way delay: 42.007 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 11.70 Mbit/s
  95th percentile per-packet one-way delay: 41.105 ms
  Loss rate: 0.84%
Run 4: Report of Sprout — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows with labeled mean throughputs and 95th percentiles for delay.]

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Run 5: Statistics of Sprout

Start at: 2018-10-10 05:52:06
End at: 2018-10-10 05:52:36
Local clock offset: 3.953 ms
Remote clock offset: -2.446 ms

# Below is generated by plot.py at 2018-10-10 06:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 42.344 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 42.386 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 11.93 Mbit/s
95th percentile per-packet one-way delay: 42.288 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 42.353 ms
Loss rate: 0.84%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-10-10 04:23:18
End at: 2018-10-10 04:23:48
Local clock offset: 6.509 ms
Remote clock offset: -4.508 ms

# Below is generated by plot.py at 2018-10-10 06:24:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 126.970 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 55.76 Mbit/s
95th percentile per-packet one-way delay: 126.146 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 39.30 Mbit/s
95th percentile per-packet one-way delay: 127.094 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 31.40 Mbit/s
95th percentile per-packet one-way delay: 127.878 ms
Loss rate: 3.01%
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 55.98 Mbit/s)
Flow 1 egress (mean 55.76 Mbit/s)
Flow 2 ingress (mean 39.69 Mbit/s)
Flow 2 egress (mean 39.30 Mbit/s)
Flow 3 ingress (mean 32.17 Mbit/s)
Flow 3 egress (mean 31.40 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 126.15 ms)
Flow 2 (95th percentile 127.09 ms)
Flow 3 (95th percentile 127.88 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-10-10 04:48:16
End at: 2018-10-10 04:48:46
Local clock offset: 2.391 ms
Remote clock offset: -3.797 ms

# Below is generated by plot.py at 2018-10-10 06:24:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.34 Mbit/s
95th percentile per-packet one-way delay: 126.469 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 55.84 Mbit/s
95th percentile per-packet one-way delay: 124.995 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 39.32 Mbit/s
95th percentile per-packet one-way delay: 126.877 ms
Loss rate: 1.80%
-- Flow 3:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: 126.769 ms
Loss rate: 5.31%
Run 2: Report of TaoVA-100x — Data Link

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

Start at: 2018-10-10 05:13:08
End at: 2018-10-10 05:13:38
Local clock offset: 1.884 ms
Remote clock offset: -2.994 ms

# Below is generated by plot.py at 2018-10-10 06:24:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 126.735 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 55.44 Mbit/s
95th percentile per-packet one-way delay: 126.310 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 126.638 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 31.45 Mbit/s
95th percentile per-packet one-way delay: 127.282 ms
Loss rate: 3.54%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-10-10 05:37:54
End at: 2018-10-10 05:38:24
Local clock offset: 3.36 ms
Remote clock offset: -2.578 ms

# Below is generated by plot.py at 2018-10-10 06:25:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.23 Mbit/s
95th percentile per-packet one-way delay: 116.605 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 53.29 Mbit/s
95th percentile per-packet one-way delay: 108.684 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 46.45 Mbit/s
95th percentile per-packet one-way delay: 110.762 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 176.818 ms
Loss rate: 2.45%
Run 4: Report of TaoVA-100x — Data Link

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

- **Flow 1 Ingress** (mean 53.41 Mbps/s)
- **Flow 1 Egress** (mean 53.29 Mbps/s)
- **Flow 2 Ingress** (mean 46.58 Mbps/s)
- **Flow 2 Egress** (mean 46.45 Mbps/s)
- **Flow 3 Ingress** (mean 24.64 Mbps/s)
- **Flow 3 Egress** (mean 24.19 Mbps/s)

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

- **Flow 1** (95th percentile 108.68 ms)
- **Flow 2** (95th percentile 110.76 ms)
- **Flow 3** (95th percentile 176.82 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-10-10 06:03:00
End at: 2018-10-10 06:03:30
Local clock offset: 3.502 ms
Remote clock offset: -2.415 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.24 Mbit/s
95th percentile per-packet one-way delay: 126.911 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 126.716 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 39.12 Mbit/s
95th percentile per-packet one-way delay: 127.199 ms
Loss rate: 2.11%
-- Flow 3:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 124.365 ms
Loss rate: 5.28%
Run 5: Report of TaoVA-100x — Data Link

![Graphs showing throughput and packet loss over time](image1.png)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 56.07 Mbps)
  - Flow 1 egress (mean 55.77 Mbps)
  - Flow 2 ingress (mean 39.84 Mbps)
  - Flow 2 egress (mean 39.32 Mbps)
  - Flow 3 ingress (mean 33.04 Mbps)
  - Flow 3 egress (mean 31.49 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 126.72 ms)
  - Flow 2 (95th percentile 127.20 ms)
  - Flow 3 (95th percentile 124.36 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-10-10 04:16:03
End at: 2018-10-10 04:16:33
Local clock offset: 6.002 ms
Remote clock offset: -4.496 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.64 Mbit/s
95th percentile per-packet one-way delay: 40.760 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 37.04 Mbit/s
95th percentile per-packet one-way delay: 41.598 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 41.10 Mbit/s
95th percentile per-packet one-way delay: 36.894 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 33.99 Mbit/s
95th percentile per-packet one-way delay: 47.604 ms
Loss rate: 0.69%
Run 1: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 37.08 Mbit/s)
- Flow 1 egress (mean 37.04 Mbit/s)
- Flow 2 ingress (mean 41.11 Mbit/s)
- Flow 2 egress (mean 41.10 Mbit/s)
- Flow 3 ingress (mean 34.00 Mbit/s)
- Flow 3 egress (mean 33.99 Mbit/s)

Legend for packet loss:
- Flow 1 (95th percentile 41.60 ms)
- Flow 2 (95th percentile 36.89 ms)
- Flow 3 (95th percentile 47.60 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-10-10 04:41:16
End at: 2018-10-10 04:41:46
Local clock offset: 2.857 ms
Remote clock offset: -3.863 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.33 Mbit/s
95th percentile per-packet one-way delay: 41.920 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 37.38 Mbit/s
95th percentile per-packet one-way delay: 52.435 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 37.46 Mbit/s
95th percentile per-packet one-way delay: 36.571 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 33.28 Mbit/s
95th percentile per-packet one-way delay: 45.774 ms
Loss rate: 0.70%
Run 2: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 37.37 Mbps)
- Flow 1 egress (mean 37.38 Mbps)
- Flow 2 ingress (mean 37.46 Mbps)
- Flow 2 egress (mean 37.46 Mbps)
- Flow 3 ingress (mean 33.30 Mbps)
- Flow 3 egress (mean 33.28 Mbps)

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

- Flow 1 (95th percentile 52.44 ms)
- Flow 2 (95th percentile 36.57 ms)
- Flow 3 (95th percentile 45.77 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-10-10 05:06:11
End at: 2018-10-10 05:06:41
Local clock offset: 1.969 ms
Remote clock offset: -3.262 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.98 Mbit/s
95th percentile per-packet one-way delay: 40.413 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 37.40 Mbit/s
95th percentile per-packet one-way delay: 48.579 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: 36.266 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 36.778 ms
Loss rate: 0.71%
Run 3: Report of TCP Vegas — Data Link

[Graph showing throughput and packet round-trip delay over time for different flows, with annotations for mean throughput and 95th percentile latency for each flow.]
Run 4: Statistics of TCP Vegas

Start at: 2018-10-10 05:30:58
End at: 2018-10-10 05:31:28
Local clock offset: 2.753 ms
Remote clock offset: -2.864 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.18 Mbit/s
95th percentile per-packet one-way delay: 36.118 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 49.969 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 37.26 Mbit/s
95th percentile per-packet one-way delay: 35.494 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 33.83 Mbit/s
95th percentile per-packet one-way delay: 35.273 ms
Loss rate: 0.69%
Run 4: Report of TCP Vegas — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 5: Statistics of TCP Vegas

Start at: 2018-10-10 05:56:05
End at: 2018-10-10 05:56:35
Local clock offset: 3.943 ms
Remote clock offset: -2.404 ms

# Below is generated by plot.py at 2018-10-10 06:25:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.05 Mbit/s
95th percentile per-packet one-way delay: 36.084 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 45.89 Mbit/s
95th percentile per-packet one-way delay: 36.270 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 38.00 Mbit/s
95th percentile per-packet one-way delay: 35.740 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 23.80 Mbit/s
95th percentile per-packet one-way delay: 68.748 ms
Loss rate: 0.76%
Run 5: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 45.87 Mbps)
- Flow 1 egress (mean 45.89 Mbps)
- Flow 2 ingress (mean 38.01 Mbps)
- Flow 2 egress (mean 38.00 Mbps)
- Flow 3 ingress (mean 23.82 Mbps)
- Flow 3 egress (mean 23.80 Mbps)

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

- Flow 1 (95th percentile 36.27 ms)
- Flow 2 (95th percentile 35.74 ms)
- Flow 3 (95th percentile 68.75 ms)
Run 1: Statistics of Verus

Start at: 2018-10-10 04:10:37
End at: 2018-10-10 04:11:07
Local clock offset: 5.513 ms
Remote clock offset: -4.432 ms

# Below is generated by plot.py at 2018-10-10 06:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.92 Mbit/s
  95th percentile per-packet one-way delay: 161.334 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 54.31 Mbit/s
  95th percentile per-packet one-way delay: 145.203 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 37.41 Mbit/s
  95th percentile per-packet one-way delay: 115.838 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 26.41 Mbit/s
  95th percentile per-packet one-way delay: 315.111 ms
  Loss rate: 1.96%
Run 1: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 54.37 Mbps)
Flow 1 egress (mean 54.31 Mbps)
Flow 2 ingress (mean 37.56 Mbps)
Flow 2 egress (mean 37.41 Mbps)
Flow 3 ingress (mean 26.76 Mbps)
Flow 3 egress (mean 26.41 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 145.20 ms)
Flow 2 (95th percentile 115.84 ms)
Flow 3 (95th percentile 315.11 ms)
Run 2: Statistics of Verus

Start at: 2018-10-10 04:35:51
End at: 2018-10-10 04:36:21
Local clock offset: 3.516 ms
Remote clock offset: -3.962 ms

# Below is generated by plot.py at 2018-10-10 06:25:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.33 Mbit/s
95th percentile per-packet one-way delay: 149.123 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 51.99 Mbit/s
95th percentile per-packet one-way delay: 138.200 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 231.107 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 195.381 ms
Loss rate: 1.06%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 52.05 Mbit/s)
- Flow 1 egress (mean 51.99 Mbit/s)
- Flow 2 ingress (mean 36.10 Mbit/s)
- Flow 2 egress (mean 35.99 Mbit/s)
- Flow 3 ingress (mean 31.64 Mbit/s)
- Flow 3 egress (mean 31.50 Mbit/s)

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

- Flow 1 (95th percentile 138.20 ms)
- Flow 2 (95th percentile 231.11 ms)
- Flow 3 (95th percentile 195.38 ms)
Run 3: Statistics of Verus

Start at: 2018-10-10 05:00:47  
End at: 2018-10-10 05:01:17  
Local clock offset: 2.055 ms  
Remote clock offset: -3.349 ms

# Below is generated by plot.py at 2018-10-10 06:25:51  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 87.89 Mbit/s  
95th percentile per-packet one-way delay: 300.260 ms  
Loss rate: 0.51%

-- Flow 1:  
Average throughput: 54.13 Mbit/s  
95th percentile per-packet one-way delay: 139.460 ms  
Loss rate: 0.23%

-- Flow 2:  
Average throughput: 36.82 Mbit/s  
95th percentile per-packet one-way delay: 1035.718 ms  
Loss rate: 0.67%

-- Flow 3:  
Average throughput: 27.99 Mbit/s  
95th percentile per-packet one-way delay: 309.540 ms  
Loss rate: 1.66%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-10-10 05:25:35
End at: 2018-10-10 05:26:05
Local clock offset: 1.865 ms
Remote clock offset: -2.877 ms

# Below is generated by plot.py at 2018-10-10 06:25:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.60 Mbit/s
95th percentile per-packet one-way delay: 150.127 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 53.98 Mbit/s
95th percentile per-packet one-way delay: 149.398 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 37.11 Mbit/s
95th percentile per-packet one-way delay: 108.821 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: 242.781 ms
Loss rate: 1.49%
Run 4: Report of Verus — Data Link

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

Flow 1 ingress (mean 54.06 Mbit/s)  Flow 1 egress (mean 53.98 Mbit/s)
Flow 2 ingress (mean 37.17 Mbit/s)  Flow 2 egress (mean 37.11 Mbit/s)
Flow 3 ingress (mean 30.24 Mbit/s)  Flow 3 egress (mean 29.98 Mbit/s)
Run 5: Statistics of Verus

Start at: 2018-10-10 05:50:41
End at: 2018-10-10 05:51:11
Local clock offset: 3.923 ms
Remote clock offset: -2.727 ms

# Below is generated by plot.py at 2018-10-10 06:25:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.05 Mbit/s
  95th percentile per-packet one-way delay: 136.610 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 58.68 Mbit/s
  95th percentile per-packet one-way delay: 133.838 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 34.47 Mbit/s
  95th percentile per-packet one-way delay: 136.060 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 22.76 Mbit/s
  95th percentile per-packet one-way delay: 195.544 ms
  Loss rate: 2.25%
Run 5: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-10-10 04:20:26
End at: 2018-10-10 04:20:56
Local clock offset: 6.319 ms
Remote clock offset: -4.386 ms

# Below is generated by plot.py at 2018-10-10 06:26:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.77 Mbit/s
95th percentile per-packet one-way delay: 2243.390 ms
Loss rate: 5.17%
-- Flow 1:
Average throughput: 53.39 Mbit/s
95th percentile per-packet one-way delay: 2369.832 ms
Loss rate: 7.70%
-- Flow 2:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 66.595 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 315.301 ms
Loss rate: 2.80%
Run 1: Report of PCC-Vivace — Data Link

[Graph Image]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 57.72 Mbps)  Flow 1 egress (mean 53.39 Mbps)
Flow 2 ingress (mean 41.60 Mbps)  Flow 2 egress (mean 40.95 Mbps)
Flow 3 ingress (mean 22.28 Mbps)  Flow 3 egress (mean 21.80 Mbps)

[Graph Image]

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 2369.83 ms)  Flow 2 (95th percentile 66.59 ms)  Flow 3 (95th percentile 315.30 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-10-10 04:45:28
End at: 2018-10-10 04:45:58
Local clock offset: 2.554 ms
Remote clock offset: -3.801 ms

# Below is generated by plot.py at 2018-10-10 06:26:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 611.975 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 702.207 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 40.00 Mbit/s
95th percentile per-packet one-way delay: 81.906 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 466.277 ms
Loss rate: 3.76%
Run 2: Report of PCC-Vivace — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 54.86 Mbit/s)
- Flow 1 egress (mean 53.91 Mbit/s)
- Flow 2 ingress (mean 40.13 Mbit/s)
- Flow 2 egress (mean 40.00 Mbit/s)
- Flow 3 ingress (mean 21.41 Mbit/s)
- Flow 3 egress (mean 20.74 Mbit/s)

Round-trip one-way delay (ms)

- Flow 1 (95th percentile 702.21 ms)
- Flow 2 (95th percentile 81.91 ms)
- Flow 3 (95th percentile 466.28 ms)

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Run 3: Statistics of PCC-Vivace

Start at: 2018-10-10 05:10:22
End at: 2018-10-10 05:10:52
Local clock offset: 1.902 ms
Remote clock offset: -3.221 ms

# Below is generated by plot.py at 2018-10-10 06:26:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 2010.793 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 57.40 Mbit/s
95th percentile per-packet one-way delay: 2028.717 ms
Loss rate: 8.21%
-- Flow 2:
Average throughput: 33.97 Mbit/s
95th percentile per-packet one-way delay: 571.777 ms
Loss rate: 2.46%
-- Flow 3:
Average throughput: 26.51 Mbit/s
95th percentile per-packet one-way delay: 90.422 ms
Loss rate: 0.80%
Run 3: Report of PCC-Vivace — Data Link

[Graphs showing throughput and packet delay over time for different flows.]
Run 4: Statistics of PCC-Vivace

Start at: 2018-10-10 05:35:08
End at: 2018-10-10 05:35:38
Local clock offset: 3.183 ms
Remote clock offset: -2.845 ms

# Below is generated by plot.py at 2018-10-10 06:26:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.04 Mbit/s
95th percentile per-packet one-way delay: 1128.562 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 57.35 Mbit/s
95th percentile per-packet one-way delay: 158.369 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 1736.354 ms
Loss rate: 9.85%
-- Flow 3:
Average throughput: 21.90 Mbit/s
95th percentile per-packet one-way delay: 95.888 ms
Loss rate: 2.18%
Run 4: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 57.39 Mbps) — Flow 1 egress (mean 57.35 Mbps)
Flow 2 ingress (mean 37.41 Mbps) — Flow 2 egress (mean 33.84 Mbps)
Flow 3 ingress (mean 22.44 Mbps) — Flow 3 egress (mean 21.90 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 158.37 ms) — Flow 2 (95th percentile 1736.35 ms) — Flow 3 (95th percentile 95.89 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-10-10 06:00:15
End at: 2018-10-10 06:00:45
Local clock offset: 3.659 ms
Remote clock offset: -2.413 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.08 Mbit/s
95th percentile per-packet one-way delay: 513.669 ms
Loss rate: 1.66%
-- Flow 1:
Average throughput: 64.29 Mbit/s
95th percentile per-packet one-way delay: 668.634 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 16.66 Mbit/s
95th percentile per-packet one-way delay: 308.658 ms
Loss rate: 2.35%
-- Flow 3:
Average throughput: 35.63 Mbit/s
95th percentile per-packet one-way delay: 67.778 ms
Loss rate: 0.94%
Run 5: Report of PCC-Vivace — Data Link

Graph 1: Throughput over time for different flows.

Graph 2: Per-packet one-way delay over time for different flows.

Legend:
- Flow 1 ingress (mean 65.24 Mbit/s)
- Flow 2 ingress (mean 17.60 Mbit/s)
- Flow 3 ingress (mean 35.75 Mbit/s)
- Flow 1 egress (mean 64.29 Mbit/s)
- Flow 2 egress (mean 16.66 Mbit/s)
- Flow 3 egress (mean 35.63 Mbit/s)
Run 1: Statistics of WebRTC media

Start at: 2018-10-10 04:28:56
End at: 2018-10-10 04:29:26
Local clock offset: 5.102 ms
Remote clock offset: -4.439 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 34.631 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 34.618 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.01 Mbit/s
95th percentile per-packet one-way delay: 34.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 34.685 ms
Loss rate: 0.84%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-10-10 04:53:52
End at: 2018-10-10 04:54:22
Local clock offset: 2.178 ms
Remote clock offset: -3.642 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.05 Mbit/s
  95th percentile per-packet one-way delay: 34.054 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 1.75 Mbit/s
  95th percentile per-packet one-way delay: 34.072 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 0.98 Mbit/s
  95th percentile per-packet one-way delay: 34.065 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 0.33 Mbit/s
  95th percentile per-packet one-way delay: 33.843 ms
  Loss rate: 0.99%
Run 2: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.75 Mbit/s)
- Flow 1 egress (mean 1.75 Mbit/s)
- Flow 2 ingress (mean 0.98 Mbit/s)
- Flow 2 egress (mean 0.98 Mbit/s)
- Flow 3 ingress (mean 0.34 Mbit/s)
- Flow 3 egress (mean 0.33 Mbit/s)

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

- Flow 1 (95th percentile 34.07 ms)
- Flow 2 (95th percentile 34.06 ms)
- Flow 3 (95th percentile 33.84 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-10-10 05:18:42
End at: 2018-10-10 05:19:12
Local clock offset: 1.808 ms
Remote clock offset: -2.992 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 34.021 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 33.919 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 34.067 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 34.183 ms
Loss rate: 0.95%
Run 3: Report of WebRTC media — Data Link

![Graph of throughput over time for three flows.]

- Flow 1 ingress (mean 1.70 Mbit/s)
- Flow 1 egress (mean 1.70 Mbit/s)
- Flow 2 ingress (mean 0.99 Mbit/s)
- Flow 2 egress (mean 0.99 Mbit/s)
- Flow 3 ingress (mean 0.43 Mbit/s)
- Flow 3 egress (mean 0.43 Mbit/s)

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

- Flow 1 (95th percentile 33.92 ms)
- Flow 2 (95th percentile 34.07 ms)
- Flow 3 (95th percentile 34.18 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-10-10 05:43:28
End at: 2018-10-10 05:43:58
Local clock offset: 3.654 ms
Remote clock offset: -2.564 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.02 Mbit/s
  95th percentile per-packet one-way delay: 33.884 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 1.72 Mbit/s
  95th percentile per-packet one-way delay: 33.878 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 0.97 Mbit/s
  95th percentile per-packet one-way delay: 33.927 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 0.35 Mbit/s
  95th percentile per-packet one-way delay: 33.655 ms
  Loss rate: 1.02%
Run 4: Report of WebRTC media — Data Link

[Graphs showing throughput and packet delay over time for different flows.]
Run 5: Statistics of WebRTC media

Start at: 2018-10-10 06:08:43
End at: 2018-10-10 06:09:13
Local clock offset: 3.355 ms
Remote clock offset: -2.419 ms

# Below is generated by plot.py at 2018-10-10 06:26:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.12 Mbit/s
95th percentile per-packet one-way delay: 33.966 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 33.890 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 34.011 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 34.087 ms
Loss rate: 0.84%
Run 5: Report of WebRTC media — Data Link