Pantheon Report

Data path: Brazil Ethernet (remote) → AWS Brazil 1 Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1017-aws
net.core.default_qdisc = fq_codel
net.core.rmem_default = 16777216
net.core.rmem_max = 33554432
net.core.wmem_default = 212992
net.core.wmem_max = 212992
net.ipv4.tcp_rmem = 4096 87380 6291456
net.ipv4.tcp_wmem = 4096 16384 4194304

Git summary:
branch: master @ 7719b900495aa706f8452ab7d4a94dd562e9296e
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436bd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e562f4
third_party/indigo @ 2601c92e4aa9d8d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3c3f
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fecn872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f6513e8aced08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cffe2
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bd2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 36bee35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webtc @ 3f0cc2a9061a41b6f9ddee4735770d143a1fa2851
test from Brazil to AWS Brazil 1, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>49.23 34.01 27.39</td>
<td>17.26 18.47 16.81</td>
<td>0.39 0.72 0.61</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>43.46 32.90 26.13</td>
<td>15.06 16.80 17.37</td>
<td>0.04 0.08 0.17</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>51.44 35.29 28.34</td>
<td>14.86 13.76 13.49</td>
<td>0.09 0.16 0.28</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>49.98 33.39 26.38</td>
<td>35.58 38.99 42.40</td>
<td>3.31 7.67 7.49</td>
</tr>
<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>51.12 34.94 27.70</td>
<td>31.94 35.52 37.22</td>
<td>3.37 5.73 4.88</td>
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<tr>
<td>Indigo</td>
<td>10</td>
<td>50.87 35.43 27.79</td>
<td>10.83 13.32 14.11</td>
<td>0.03 0.42 0.26</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>49.29 33.87 27.69</td>
<td>18.47 19.12 18.62</td>
<td>0.14 0.26 0.41</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>49.37 24.38 22.34</td>
<td>34.28 33.10 23.94</td>
<td>4.35 2.73 0.96</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>45.40 26.43 24.84</td>
<td>31.14 36.04 36.69</td>
<td>0.74 0.65 0.58</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>9.75 55.83 38.79</td>
<td>6.31 17.46 16.95</td>
<td>0.04 0.18 0.40</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22 0.22 0.22</td>
<td>3.46 3.45 3.46</td>
<td>0.00 0.00 0.17</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>33.13 30.86 27.12</td>
<td>24.69 27.63 31.35</td>
<td>0.09 0.15 0.34</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>42.80 36.00 32.07</td>
<td>32.55 35.97 38.50</td>
<td>0.28 0.73 1.27</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>46.89 35.10 28.48</td>
<td>6.97 5.85 6.78</td>
<td>0.01 0.02 0.05</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>37.31 29.69 26.90</td>
<td>18.34 20.65 27.87</td>
<td>0.04 0.05 0.15</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>36.50 25.32 20.52</td>
<td>23.23 29.95 31.29</td>
<td>0.60 1.03 1.62</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.53 0.88 0.42</td>
<td>3.86 3.97 4.20</td>
<td>0.00 0.04 0.09</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-08-22 19:12:20
End at: 2018-08-22 19:12:50
Local clock offset: -3.66 ms
Remote clock offset: -8.24 ms

# Below is generated by plot.py at 2018-08-22 22:14:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.31 Mbit/s
  95th percentile per-packet one-way delay: 17.901 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 46.40 Mbit/s
  95th percentile per-packet one-way delay: 16.743 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 32.17 Mbit/s
  95th percentile per-packet one-way delay: 20.210 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 25.56 Mbit/s
  95th percentile per-packet one-way delay: 16.077 ms
  Loss rate: 0.24%
Run 1: Report of TCP BBR — Data Link

![Graph showing network performance metrics]

- **Throughput (Mbps)**

  - **Flow 1** ingress (mean 46.42 Mbps)
  - **Flow 1** egress (mean 46.40 Mbps)
  - **Flow 2** ingress (mean 32.32 Mbps)
  - **Flow 2** egress (mean 32.17 Mbps)
  - **Flow 3** ingress (mean 25.61 Mbps)
  - **Flow 3** egress (mean 25.56 Mbps)

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

  - **Flow 1** (95th percentile 16.74 ms)
  - **Flow 2** (95th percentile 20.21 ms)
  - **Flow 3** (95th percentile 16.08 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-08-22 19:31:18
End at: 2018-08-22 19:31:48
Local clock offset: -3.27 ms
Remote clock offset: -2.217 ms

# Below is generated by plot.py at 2018-08-22 22:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 19.521 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 46.41 Mbit/s
95th percentile per-packet one-way delay: 19.003 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 31.85 Mbit/s
95th percentile per-packet one-way delay: 20.131 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 20.054 ms
Loss rate: 0.54%
Run 2: Report of TCP BBR — Data Link

![Graph of Throughput (Mbps)]

**Throughput (Mbps)**

- Flow 1 ingress (mean 46.54 Mbps)
- Flow 1 egress (mean 46.41 Mbps)
- Flow 2 ingress (mean 32.07 Mbps)
- Flow 2 egress (mean 31.85 Mbps)
- Flow 3 ingress (mean 25.33 Mbps)
- Flow 3 egress (mean 25.21 Mbps)

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

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

- Flow 1 (95th percentile 19.00 ms)
- Flow 2 (95th percentile 20.13 ms)
- Flow 3 (95th percentile 20.05 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-08-22 19:50:15
End at: 2018-08-22 19:50:45
Local clock offset: -3.033 ms
Remote clock offset: 0.607 ms

# Below is generated by plot.py at 2018-08-22 22:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.25 Mbit/s
95th percentile per-packet one-way delay: 21.500 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 45.20 Mbit/s
95th percentile per-packet one-way delay: 22.342 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 31.08 Mbit/s
95th percentile per-packet one-way delay: 21.214 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 25.13 Mbit/s
95th percentile per-packet one-way delay: 17.611 ms
Loss rate: 0.43%
Run 3: Report of TCP BBR — Data Link

![Graph 1: Throughput Over Time](chart1)

- **Flow 1 Ingress**: (mean 45.71 Mbit/s)
- **Flow 1 Egress**: (mean 45.20 Mbit/s)
- **Flow 2 Ingress**: (mean 31.18 Mbit/s)
- **Flow 2 Egress**: (mean 31.08 Mbit/s)
- **Flow 3 Ingress**: (mean 25.23 Mbit/s)
- **Flow 3 Egress**: (mean 25.13 Mbit/s)

![Graph 2: Per Packet One Way Delay](chart2)

- **Flow 1 (95th percentile)**: 22.34 ms
- **Flow 2 (95th percentile)**: 21.21 ms
- **Flow 3 (95th percentile)**: 17.61 ms
Run 4: Statistics of TCP BBR

Start at: 2018-08-22 20:09:15
End at: 2018-08-22 20:09:45
Local clock offset: -2.349 ms
Remote clock offset: -11.77 ms

# Below is generated by plot.py at 2018-08-22 22:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.96 Mbit/s
95th percentile per-packet one-way delay: 22.421 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 42.97 Mbit/s
95th percentile per-packet one-way delay: 20.704 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 29.97 Mbit/s
95th percentile per-packet one-way delay: 25.001 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 24.14 Mbit/s
95th percentile per-packet one-way delay: 21.725 ms
Loss rate: 0.86%
Run 4: Report of TCP BBR — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 43.01 Mbit/s)
- Flow 1 egress (mean 42.97 Mbit/s)
- Flow 2 ingress (mean 30.17 Mbit/s)
- Flow 2 egress (mean 29.97 Mbit/s)
- Flow 3 ingress (mean 24.34 Mbit/s)
- Flow 3 egress (mean 24.14 Mbit/s)

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

- Flow 1 (95th percentile 20.70 ms)
- Flow 2 (95th percentile 25.00 ms)
- Flow 3 (95th percentile 21.73 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-08-22 20:28:20
End at: 2018-08-22 20:28:50
Local clock offset: -4.92 ms
Remote clock offset: -15.058 ms

# Below is generated by plot.py at 2018-08-22 22:14:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.38 Mbit/s
95th percentile per-packet one-way delay: 21.730 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 45.75 Mbit/s
95th percentile per-packet one-way delay: 21.359 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 23.131 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 26.05 Mbit/s
95th percentile per-packet one-way delay: 18.948 ms
Loss rate: 0.53%
Run 5: Report of TCP BBR — Data Link

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

- **Flow 1**: Ingress (mean 45.98 Mbit/s), Egress (mean 45.75 Mbit/s)
- **Flow 2**: Ingress (mean 32.13 Mbit/s), Egress (mean 31.50 Mbit/s)
- **Flow 3**: Ingress (mean 26.18 Mbit/s), Egress (mean 26.05 Mbit/s)
Run 6: Statistics of TCP BBR

Start at: 2018-08-22 20:47:21
End at: 2018-08-22 20:47:51
Local clock offset: -7.134 ms
Remote clock offset: -16.999 ms

# Below is generated by plot.py at 2018-08-22 22:14:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.64 Mbit/s
95th percentile per-packet one-way delay: 18.269 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 49.72 Mbit/s
95th percentile per-packet one-way delay: 17.023 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 19.935 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 18.859 ms
Loss rate: 0.66%
Run 6: Report of TCP BBR — Data Link

![Graph of Throughput (Mbps)]

- Flow 1 ingress (mean 49.88 Mbps)
- Flow 1 egress (mean 49.72 Mbps)
- Flow 2 ingress (mean 34.29 Mbps)
- Flow 2 egress (mean 34.06 Mbps)
- Flow 3 ingress (mean 27.99 Mbps)
- Flow 3 egress (mean 27.62 Mbps)

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

- Flow 1 (95th percentile 17.02 ms)
- Flow 2 (95th percentile 19.93 ms)
- Flow 3 (95th percentile 18.86 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-08-22 21:06:23
End at: 2018-08-22 21:06:53
Local clock offset: -9.676 ms
Remote clock offset: -9.106 ms

# Below is generated by plot.py at 2018-08-22 22:14:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.52 Mbit/s
  95th percentile per-packet one-way delay: 17.315 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 49.54 Mbit/s
  95th percentile per-packet one-way delay: 16.937 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 34.33 Mbit/s
  95th percentile per-packet one-way delay: 18.284 ms
  Loss rate: 1.00%
-- Flow 3:
  Average throughput: 27.44 Mbit/s
  95th percentile per-packet one-way delay: 16.863 ms
  Loss rate: 1.43%
Run 7: Report of TCP BBR — Data Link

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

- **Flow 1 Ingress (mean 49.76 Mbps)**
- **Flow 1 Egress (mean 49.54 Mbps)**
- **Flow 2 Ingress (mean 34.67 Mbps)**
- **Flow 2 Egress (mean 34.33 Mbps)**
- **Flow 3 Ingress (mean 27.83 Mbps)**
- **Flow 3 Egress (mean 27.44 Mbps)**

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

- **Flow 1 (95th percentile 16.94 ms)**
- **Flow 2 (95th percentile 18.28 ms)**
- **Flow 3 (95th percentile 16.86 ms)**
Run 8: Statistics of TCP BBR

Start at: 2018-08-22 21:25:23
End at: 2018-08-22 21:25:53
Local clock offset: -9.02 ms
Remote clock offset: 1.059 ms

# Below is generated by plot.py at 2018-08-22 22:14:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.98 Mbit/s
95th percentile per-packet one-way delay: 16.549 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 17.292 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 33.25 Mbit/s
95th percentile per-packet one-way delay: 15.665 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 26.78 Mbit/s
95th percentile per-packet one-way delay: 14.708 ms
Loss rate: 0.19%
Run 8: Report of TCP BBR — Data Link

![Throughput](image1)

- **Flow 1 Ingress** (mean 47.96 Mbit/s)
- **Flow 1 Egress** (mean 47.93 Mbit/s)
- **Flow 2 Ingress** (mean 33.28 Mbit/s)
- **Flow 2 Egress** (mean 33.25 Mbit/s)
- **Flow 3 Ingress** (mean 26.82 Mbit/s)
- **Flow 3 Egress** (mean 26.78 Mbit/s)

![Per-packet one-way delays](image2)

- **Flow 1** (95th percentile 17.29 ms)
- **Flow 2** (95th percentile 15.66 ms)
- **Flow 3** (95th percentile 14.71 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-08-22 21:44:22
End at: 2018-08-22 21:44:52
Local clock offset: -6.607 ms
Remote clock offset: -0.29 ms

# Below is generated by plot.py at 2018-08-22 22:15:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.36 Mbit/s
95th percentile per-packet one-way delay: 10.176 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 10.079 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 10.398 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 12.824 ms
Loss rate: 0.53%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-08-22 22:03:32
End at: 2018-08-22 22:04:02
Local clock offset: -3.752 ms
Remote clock offset: -0.802 ms

# Below is generated by plot.py at 2018-08-22 22:15:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.40 Mbit/s
95th percentile per-packet one-way delay: 11.026 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 59.21 Mbit/s
95th percentile per-packet one-way delay: 11.138 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 40.98 Mbit/s
95th percentile per-packet one-way delay: 10.743 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 32.82 Mbit/s
95th percentile per-packet one-way delay: 10.423 ms
Loss rate: 0.70%
Run 1: Statistics of Copa

Start at: 2018-08-22 19:07:51
End at: 2018-08-22 19:08:21
Local clock offset: -2.586 ms
Remote clock offset: -7.988 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 13.831 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 54.42 Mbit/s
95th percentile per-packet one-way delay: 12.339 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 13.498 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 18.091 ms
Loss rate: 0.16%
Run 1: Report of Copa — Data Link

![Diagram of network performance metrics]

- Flow 1 ingress (mean 54.43 Mbit/s)
- Flow 1 egress (mean 54.42 Mbit/s)
- Flow 2 ingress (mean 40.19 Mbit/s)
- Flow 2 egress (mean 40.17 Mbit/s)
- Flow 3 ingress (mean 31.02 Mbit/s)
- Flow 3 egress (mean 30.98 Mbit/s)

![Diagram of packet delay]

- Flow 1 (95th percentile 12.34 ms)
- Flow 2 (95th percentile 13.50 ms)
- Flow 3 (95th percentile 18.09 ms)
Run 2: Statistics of Copa

Start at: 2018-08-22 19:26:51
End at: 2018-08-22 19:27:21
Local clock offset: -3.26 ms
Remote clock offset: -3.586 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.38 Mbit/s
95th percentile per-packet one-way delay: 17.412 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 39.15 Mbit/s
95th percentile per-packet one-way delay: 16.150 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 18.969 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 18.056 ms
Loss rate: 0.18%
Run 2: Report of Copa — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 Ingress (mean 39.17 Mbps)
  - Flow 1 Egress (mean 39.15 Mbps)
  - Flow 2 Ingress (mean 30.16 Mbps)
  - Flow 2 Egress (mean 30.34 Mbps)
  - Flow 3 Ingress (mean 24.59 Mbps)
  - Flow 3 Egress (mean 24.55 Mbps)

- **Per packet one way delay [ms]**
  - Flow 1 (95th percentile 16.15 ms)
  - Flow 2 (95th percentile 18.97 ms)
  - Flow 3 (95th percentile 18.06 ms)
Run 3: Statistics of Copa

Start at: 2018-08-22 19:45:48
End at: 2018-08-22 19:46:18
Local clock offset: -3.038 ms
Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.59 Mbit/s
95th percentile per-packet one-way delay: 17.844 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 39.78 Mbit/s
95th percentile per-packet one-way delay: 16.665 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 30.32 Mbit/s
95th percentile per-packet one-way delay: 18.742 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 22.96 Mbit/s
95th percentile per-packet one-way delay: 19.770 ms
Loss rate: 0.17%
Run 3: Report of Copa — Data Link

[Graphs showing throughput and packet loss over time for different flows, with legends indicating mean bit rates and 95th percentile delays.]
Run 4: Statistics of Copa

Start at: 2018-08-22 20:04:48
End at: 2018-08-22 20:05:18
Local clock offset: -3.576 ms
Remote clock offset: -10.303 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.07 Mbit/s
  95th percentile per-packet one-way delay: 17.062 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 37.70 Mbit/s
  95th percentile per-packet one-way delay: 16.539 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 30.28 Mbit/s
  95th percentile per-packet one-way delay: 17.459 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 24.69 Mbit/s
  95th percentile per-packet one-way delay: 17.712 ms
  Loss rate: 0.18%
Run 4: Report of Copa — Data Link

![Graph showing network data](image1)

- Flow 1 ingress (mean 37.72 Mbit/s)
- Flow 1 egress (mean 37.70 Mbit/s)
- Flow 2 ingress (mean 30.30 Mbit/s)
- Flow 2 egress (mean 30.28 Mbit/s)
- Flow 3 ingress (mean 24.73 Mbit/s)
- Flow 3 egress (mean 24.69 Mbit/s)

![Graph showing packet latency](image2)

- Flow 1 (95th percentile 16.54 ms)
- Flow 2 (95th percentile 17.46 ms)
- Flow 3 (95th percentile 17.71 ms)
Run 5: Statistics of Copa

Start at: 2018-08-22 20:23:53
End at: 2018-08-22 20:24:23
Local clock offset: -4.778 ms
Remote clock offset: -14.526 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.51 Mbit/s
95th percentile per-packet one-way delay: 16.598 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 15.718 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: 17.613 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 16.297 ms
Loss rate: 0.18%
Run 5: Report of Copa — Data Link

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

- **Flow 1 ingress** (mean 40.54 Mbit/s)
- **Flow 1 egress** (mean 40.54 Mbit/s)
- **Flow 2 ingress** (mean 29.24 Mbit/s)
- **Flow 2 egress** (mean 30.71 Mbit/s)
- **Flow 3 ingress** (mean 25.63 Mbit/s)
- **Flow 3 egress** (mean 25.60 Mbit/s)
Run 6: Statistics of Copa

Start at: 2018-08-22 20:42:54
End at: 2018-08-22 20:43:24
Local clock offset: -7.03 ms
Remote clock offset: -16.515 ms

# Below is generated by plot.py at 2018-08-22 22:16:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.65 Mbit/s
  95th percentile per-packet one-way delay: 16.168 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 43.41 Mbit/s
  95th percentile per-packet one-way delay: 14.476 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 32.35 Mbit/s
  95th percentile per-packet one-way delay: 16.698 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 26.15 Mbit/s
  95th percentile per-packet one-way delay: 19.144 ms
  Loss rate: 0.21%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-08-22 21:01:55
End at: 2018-08-22 21:02:25
Local clock offset: -8.576 ms
Remote clock offset: -15.162 ms

# Below is generated by plot.py at 2018-08-22 22:16:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.56 Mbit/s
95th percentile per-packet one-way delay: 17.070 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 15.907 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 17.209 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 26.74 Mbit/s
95th percentile per-packet one-way delay: 18.838 ms
Loss rate: 0.19%
Run 7: Report of Copa — Data Link

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

- Flow 1 ingress (mean 40.92 Mbps)
- Flow 1 egress (mean 40.92 Mbps)
- Flow 2 ingress (mean 31.17 Mbps)
- Flow 2 egress (mean 31.15 Mbps)
- Flow 3 ingress (mean 26.77 Mbps)
- Flow 3 egress (mean 26.74 Mbps)

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

- Flow 1 (95th percentile 15.91 ms)
- Flow 2 (95th percentile 17.21 ms)
- Flow 3 (95th percentile 18.84 ms)
Run 8: Statistics of Copa

Start at: 2018-08-22 21:20:55
End at: 2018-08-22 21:21:25
Local clock offset: -8.228 ms
Remote clock offset: -0.247 ms

# Below is generated by plot.py at 2018-08-22 22:16:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.27 Mbit/s
95th percentile per-packet one-way delay: 16.573 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 43.71 Mbit/s
95th percentile per-packet one-way delay: 15.902 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 18.125 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 14.816 ms
Loss rate: 0.18%
Run 8: Report of Copa — Data Link

[Graph showing throughput (Mbps) vs. time (s) for different flows.]

[Graph showing per-packet one-way delay (ms) vs. time (s) for different flows.]
Run 9: Statistics of Copa

End at: 2018-08-22 21:40:25
Local clock offset: -7.971 ms
Remote clock offset: 0.782 ms

# Below is generated by plot.py at 2018-08-22 22:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.46 Mbit/s
95th percentile per-packet one-way delay: 16.008 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 40.06 Mbit/s
95th percentile per-packet one-way delay: 15.188 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.46 Mbit/s
95th percentile per-packet one-way delay: 16.975 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 25.38 Mbit/s
95th percentile per-packet one-way delay: 16.347 ms
Loss rate: 0.11%
Run 9: Report of Copa — Data Link
Run 10: Statistics of Copa

Start at: 2018-08-22 21:59:03
End at: 2018-08-22 21:59:33
Local clock offset: -4.768 ms
Remote clock offset: -0.931 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.59 Mbit/s
  95th percentile per-packet one-way delay: 12.361 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 54.89 Mbit/s
  95th percentile per-packet one-way delay: 11.728 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 40.12 Mbit/s
  95th percentile per-packet one-way delay: 12.718 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 30.05 Mbit/s
  95th percentile per-packet one-way delay: 14.612 ms
  Loss rate: 0.19%
Run 10: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 1: Statistics of TCP Cubic

Start at: 2018-08-22 19:16:50
End at: 2018-08-22 19:17:20
Local clock offset: -3.856 ms
Remote clock offset: -8.548 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.28 Mbit/s
95th percentile per-packet one-way delay: 16.071 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 46.43 Mbit/s
95th percentile per-packet one-way delay: 16.604 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 32.04 Mbit/s
95th percentile per-packet one-way delay: 15.529 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 14.949 ms
Loss rate: 0.28%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-08-22 19:35:48
End at: 2018-08-22 19:36:18
Local clock offset: -3.257 ms
Remote clock offset: -1.289 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.42 Mbit/s
  95th percentile per-packet one-way delay: 17.105 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 46.70 Mbit/s
  95th percentile per-packet one-way delay: 17.566 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 31.85 Mbit/s
  95th percentile per-packet one-way delay: 16.682 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 25.60 Mbit/s
  95th percentile per-packet one-way delay: 15.865 ms
  Loss rate: 0.30%
Run 2: Report of TCP Cubic — Data Link

![Graph 1: throughput (Mbps) vs. time (s)]

- Blue dashed line: Flow 1 ingress (mean 46.75 Mbps)
- Green dashed line: Flow 2 ingress (mean 31.90 Mbps)
- Pink dashed line: Flow 3 ingress (mean 25.66 Mbps)
- Blue solid line: Flow 1 egress (mean 46.70 Mbps)
- Green solid line: Flow 2 egress (mean 31.85 Mbps)
- Pink solid line: Flow 3 egress (mean 25.60 Mbps)

![Graph 2: per packet round-trip delay (ms) vs. time (s)]

- Blue dots: Flow 1 (95th percentile 17.57 ms)
- Green dots: Flow 2 (95th percentile 16.68 ms)
- Pink dots: Flow 3 (95th percentile 15.87 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-08-22 19:54:47
End at: 2018-08-22 19:55:17
Local clock offset: -2.907 ms
Remote clock offset: -2.899 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 17.128 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 46.71 Mbit/s
95th percentile per-packet one-way delay: 18.544 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 32.72 Mbit/s
95th percentile per-packet one-way delay: 15.392 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 26.05 Mbit/s
95th percentile per-packet one-way delay: 15.306 ms
Loss rate: 0.29%
Run 3: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 Ingress (mean 46.74 Mbit/s)
- Flow 1 Egress (mean 46.71 Mbit/s)
- Flow 2 Ingress (mean 32.78 Mbit/s)
- Flow 2 Egress (mean 32.72 Mbit/s)
- Flow 3 Ingress (mean 26.11 Mbit/s)
- Flow 3 Egress (mean 26.05 Mbit/s)
Run 4: Statistics of TCP Cubic

Start at: 2018-08-22 20:13:48
End at: 2018-08-22 20:14:18
Local clock offset: -3.558 ms
Remote clock offset: -12.931 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.69 Mbit/s
95th percentile per-packet one-way delay: 10.415 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.10 Mbit/s
95th percentile per-packet one-way delay: 10.394 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.29 Mbit/s
95th percentile per-packet one-way delay: 10.328 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.35 Mbit/s
95th percentile per-packet one-way delay: 10.509 ms
Loss rate: 0.22%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-08-22 20:32:51
End at: 2018-08-22 20:33:21
Local clock offset: -4.244 ms
Remote clock offset: -15.543 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.32 Mbit/s
95th percentile per-packet one-way delay: 15.945 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 16.647 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 15.317 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 27.76 Mbit/s
95th percentile per-packet one-way delay: 14.426 ms
Loss rate: 0.27%
Run 5: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 49.37 Mbit/s)**
- **Flow 1 egress (mean 49.34 Mbit/s)**
- **Flow 2 ingress (mean 34.19 Mbit/s)**
- **Flow 2 egress (mean 34.15 Mbit/s)**
- **Flow 3 ingress (mean 27.82 Mbit/s)**
- **Flow 3 egress (mean 27.76 Mbit/s)**

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

- **Flow 1 (99th percentile 16.65 ms)**
- **Flow 2 (99th percentile 15.32 ms)**
- **Flow 3 (99th percentile 14.43 ms)**
Run 6: Statistics of TCP Cubic

Start at: 2018-08-22 20:51:52
End at: 2018-08-22 20:52:22
Local clock offset: -8.446 ms
Remote clock offset: -17.338 ms

# Below is generated by plot.py at 2018-08-22 22:17:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.85 Mbit/s
95th percentile per-packet one-way delay: 15.211 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 50.04 Mbit/s
95th percentile per-packet one-way delay: 15.715 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 34.11 Mbit/s
95th percentile per-packet one-way delay: 14.827 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 27.35 Mbit/s
95th percentile per-packet one-way delay: 14.028 ms
Loss rate: 0.27%
Run 6: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 50.07 Mbps)
- **Flow 1 egress** (mean 50.04 Mbps)
- **Flow 2 ingress** (mean 34.15 Mbps)
- **Flow 2 egress** (mean 34.11 Mbps)
- **Flow 3 ingress** (mean 27.41 Mbps)
- **Flow 3 egress** (mean 27.35 Mbps)

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

- **Flow 1** (99th percentile 15.71 ms)
- **Flow 2** (99th percentile 14.83 ms)
- **Flow 3** (99th percentile 14.03 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-08-22 21:10:54
End at: 2018-08-22 21:11:24
Local clock offset: -9.279 ms
Remote clock offset: -5.119 ms

# Below is generated by plot.py at 2018-08-22 22:17:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.80 Mbit/s
95th percentile per-packet one-way delay: 15.339 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 49.93 Mbit/s
95th percentile per-packet one-way delay: 15.783 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 34.25 Mbit/s
95th percentile per-packet one-way delay: 14.581 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 14.644 ms
Loss rate: 0.34%
Run 7: Report of TCP Cubic — Data Link

![Graph 1: Throughput over time for different flows.](image1)

- **Flow 1 ingress** (mean 49.98 Mbit/s)
- **Flow 1 egress** (mean 49.93 Mbit/s)
- **Flow 2 ingress** (mean 34.31 Mbit/s)
- **Flow 2 egress** (mean 34.25 Mbit/s)
- **Flow 3 ingress** (mean 27.34 Mbit/s)
- **Flow 3 egress** (mean 27.26 Mbit/s)

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

- **Flow 1** (95th percentile 15.78 ms)
- **Flow 2** (95th percentile 14.58 ms)
- **Flow 3** (95th percentile 14.64 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-08-22 21:29:53
End at: 2018-08-22 21:30:23
Local clock offset: -9.098 ms
Remote clock offset: 2.243 ms

# Below is generated by plot.py at 2018-08-22 22:17:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.25 Mbit/s
95th percentile per-packet one-way delay: 16.110 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 47.92 Mbit/s
95th percentile per-packet one-way delay: 16.897 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 32.35 Mbit/s
95th percentile per-packet one-way delay: 15.118 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 26.50 Mbit/s
95th percentile per-packet one-way delay: 14.728 ms
Loss rate: 0.33%
Run 8: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 47.95 Mbit/s)
- Flow 1 egress (mean 47.92 Mbit/s)
- Flow 2 ingress (mean 32.41 Mbit/s)
- Flow 2 egress (mean 32.35 Mbit/s)
- Flow 3 ingress (mean 26.57 Mbit/s)
- Flow 3 egress (mean 26.50 Mbit/s)

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

- Flow 1 (95th percentile 16.90 ms)
- Flow 2 (95th percentile 15.12 ms)
- Flow 3 (95th percentile 14.73 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-08-22 21:48:58
End at: 2018-08-22 21:49:28
Local clock offset: -5.037 ms
Remote clock offset: -0.759 ms

# Below is generated by plot.py at 2018-08-22 22:17:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.29 Mbit/s
95th percentile per-packet one-way delay: 10.242 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: 10.037 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 10.342 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 10.489 ms
Loss rate: 0.25%
Run 9: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 59.55 Mbit/s)
- Flow 1 egress (mean 59.51 Mbit/s)
- Flow 2 ingress (mean 40.62 Mbit/s)
- Flow 2 egress (mean 40.57 Mbit/s)
- Flow 3 ingress (mean 32.51 Mbit/s)
- Flow 3 egress (mean 32.44 Mbit/s)
Run 10: Statistics of TCP Cubic

Start at: 2018-08-22 22:08:08
End at: 2018-08-22 22:08:38
Local clock offset: -4.308 ms
Remote clock offset: -0.709 ms

# Below is generated by plot.py at 2018-08-22 22:18:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.56 Mbit/s
  95th percentile per-packet one-way delay: 9.917 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 58.75 Mbit/s
  95th percentile per-packet one-way delay: 10.378 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 40.60 Mbit/s
  95th percentile per-packet one-way delay: 9.497 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 32.46 Mbit/s
  95th percentile per-packet one-way delay: 9.925 ms
  Loss rate: 0.24%
Run 10: Report of TCP Cubic — Data Link

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

Start at: 2018-08-22 19:06:44
End at: 2018-08-22 19:07:14
Local clock offset: -3.173 ms
Remote clock offset: -7.824 ms

# Below is generated by plot.py at 2018-08-22 22:18:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.96 Mbit/s
  95th percentile per-packet one-way delay: 29.971 ms
  Loss rate: 2.12%
-- Flow 1:
  Average throughput: 59.04 Mbit/s
  95th percentile per-packet one-way delay: 29.095 ms
  Loss rate: 1.44%
-- Flow 2:
  Average throughput: 40.25 Mbit/s
  95th percentile per-packet one-way delay: 29.973 ms
  Loss rate: 3.09%
-- Flow 3:
  Average throughput: 30.62 Mbit/s
  95th percentile per-packet one-way delay: 30.961 ms
  Loss rate: 3.44%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-08-22 19:25:44
End at: 2018-08-22 19:26:14
Local clock offset: -4.093 ms
Remote clock offset: -4.032 ms

# Below is generated by plot.py at 2018-08-22 22:18:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.06 Mbit/s
95th percentile per-packet one-way delay: 42.736 ms
Loss rate: 5.55%
-- Flow 1:
Average throughput: 46.20 Mbit/s
95th percentile per-packet one-way delay: 38.195 ms
Loss rate: 4.06%
-- Flow 2:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 44.546 ms
Loss rate: 7.74%
-- Flow 3:
Average throughput: 23.73 Mbit/s
95th percentile per-packet one-way delay: 48.028 ms
Loss rate: 8.34%
Run 2: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 48.13 Mbit/s)
- **Flow 1 egress** (mean 46.20 Mbit/s)
- **Flow 2 ingress** (mean 32.52 Mbit/s)
- **Flow 2 egress** (mean 30.03 Mbit/s)
- **Flow 3 ingress** (mean 25.84 Mbit/s)
- **Flow 3 egress** (mean 23.73 Mbit/s)

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

- **Flow 1** (95th percentile 38.20 ms)
- **Flow 2** (95th percentile 44.55 ms)
- **Flow 3** (95th percentile 48.03 ms)
Run 3: Statistics of FillP

Start at: 2018-08-22 19:44:41
End at: 2018-08-22 19:45:11
Local clock offset: -3.063 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-08-22 22:18:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.32 Mbit/s
95th percentile per-packet one-way delay: 39.821 ms
Loss rate: 6.07%
-- Flow 1:
Average throughput: 47.38 Mbit/s
95th percentile per-packet one-way delay: 36.352 ms
Loss rate: 4.46%
-- Flow 2:
Average throughput: 32.26 Mbit/s
95th percentile per-packet one-way delay: 40.175 ms
Loss rate: 8.56%
-- Flow 3:
Average throughput: 25.54 Mbit/s
95th percentile per-packet one-way delay: 45.514 ms
Loss rate: 8.42%
Run 3: Report of FillP — Data Link

![Graph of throughput and delay over time]

**Throughput (Mbps)**

- Flow 1 ingress (mean 49.56 Mbps)
- Flow 1 egress (mean 47.38 Mbps)
- Flow 2 ingress (mean 35.25 Mbps)
- Flow 2 egress (mean 32.26 Mbps)
- Flow 3 ingress (mean 27.82 Mbps)
- Flow 3 egress (mean 25.54 Mbps)

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

- Flow 1 (95th percentile 36.35 ms)
- Flow 2 (95th percentile 40.17 ms)
- Flow 3 (95th percentile 45.51 ms)
Run 4: Statistics of FillP

Start at: 2018-08-22 20:03:41
End at: 2018-08-22 20:04:11
Local clock offset: -2.881 ms
Remote clock offset: -9.802 ms

# Below is generated by plot.py at 2018-08-22 22:18:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 44.291 ms
Loss rate: 5.43%
-- Flow 1:
Average throughput: 42.96 Mbit/s
95th percentile per-packet one-way delay: 41.491 ms
Loss rate: 3.72%
-- Flow 2:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 44.786 ms
Loss rate: 7.59%
-- Flow 3:
Average throughput: 23.10 Mbit/s
95th percentile per-packet one-way delay: 50.090 ms
Loss rate: 9.24%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-08-22 20:22:46
End at: 2018-08-22 20:23:16
Local clock offset: -3.996 ms
Remote clock offset: -14.373 ms

# Below is generated by plot.py at 2018-08-22 22:18:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.45 Mbit/s
95th percentile per-packet one-way delay: 40.235 ms
Loss rate: 5.15%
-- Flow 1:
Average throughput: 48.14 Mbit/s
95th percentile per-packet one-way delay: 37.220 ms
Loss rate: 3.68%
-- Flow 2:
Average throughput: 31.61 Mbit/s
95th percentile per-packet one-way delay: 40.951 ms
Loss rate: 7.33%
-- Flow 3:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 44.834 ms
Loss rate: 7.77%
Run 5: Report of FillP — Data Link

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

- **Flow 1 ingress (mean 49.94 Mbit/s)**
- **Flow 1 egress (mean 48.14 Mbit/s)**
- **Flow 2 ingress (mean 34.08 Mbit/s)**
- **Flow 2 egress (mean 31.61 Mbit/s)**
- **Flow 3 ingress (mean 27.00 Mbit/s)**
- **Flow 3 egress (mean 24.95 Mbit/s)**

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

- **Flow 1 (95th percentile 37.22 ms)**
- **Flow 2 (95th percentile 40.95 ms)**
- **Flow 3 (95th percentile 44.83 ms)**
Run 6: Statistics of FillP

Start at: 2018-08-22 20:41:46
End at: 2018-08-22 20:42:16
Local clock offset: -6.763 ms
Remote clock offset: -16.373 ms

# Below is generated by plot.py at 2018-08-22 22:18:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.30 Mbit/s
95th percentile per-packet one-way delay: 37.364 ms
Loss rate: 6.13%
-- Flow 1:
Average throughput: 49.29 Mbit/s
95th percentile per-packet one-way delay: 34.540 ms
Loss rate: 3.42%
-- Flow 2:
Average throughput: 33.07 Mbit/s
95th percentile per-packet one-way delay: 37.862 ms
Loss rate: 11.00%
-- Flow 3:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 41.912 ms
Loss rate: 7.89%
Run 6: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 51.03 Mbits/s)**
- **Flow 1 Egress (mean 49.29 Mbits/s)**
- **Flow 2 Ingress (mean 37.12 Mbits/s)**
- **Flow 2 Egress (mean 33.07 Mbits/s)**
- **Flow 3 Ingress (mean 29.52 Mbits/s)**
- **Flow 3 Egress (mean 27.18 Mbits/s)**

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

- **Flow 1 (95th percentile 34.54 ms)**
- **Flow 2 (95th percentile 37.86 ms)**
- **Flow 3 (95th percentile 41.91 ms)**
Run 7: Statistics of FillP

Start at: 2018-08-22 21:00:48
End at: 2018-08-22 21:01:18
Local clock offset: -8.488 ms
Remote clock offset: -17.206 ms

# Below is generated by plot.py at 2018-08-22 22:19:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.12 Mbit/s
95th percentile per-packet one-way delay: 39.996 ms
Loss rate: 6.10%
-- Flow 1:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 37.186 ms
Loss rate: 3.64%
-- Flow 2:
Average throughput: 33.63 Mbit/s
95th percentile per-packet one-way delay: 40.733 ms
Loss rate: 10.52%
-- Flow 3:
Average throughput: 25.67 Mbit/s
95th percentile per-packet one-way delay: 44.933 ms
Loss rate: 7.67%
Run 7: Report of FillP — Data Link

[Graph showing throughput and per-packet end-to-end delay over time for different flows.]
Run 8: Statistics of FillP

Start at: 2018-08-22 21:19:48
End at: 2018-08-22 21:20:18
Local clock offset: -7.451 ms
Remote clock offset: -0.688 ms

# Below is generated by plot.py at 2018-08-22 22:19:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.08 Mbit/s
95th percentile per-packet one-way delay: 40.018 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 49.14 Mbit/s
95th percentile per-packet one-way delay: 37.097 ms
Loss rate: 3.37%
-- Flow 2:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 41.341 ms
Loss rate: 9.56%
-- Flow 3:
Average throughput: 26.37 Mbit/s
95th percentile per-packet one-way delay: 43.542 ms
Loss rate: 10.35%
Run 8: Report of FillP — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 50.83 Mbps)
  - Flow 1 egress (mean 49.14 Mbps)
  - Flow 2 ingress (mean 36.89 Mbps)
  - Flow 2 egress (mean 33.37 Mbps)
  - Flow 3 ingress (mean 29.36 Mbps)
  - Flow 3 egress (mean 26.37 Mbps)

- Per packet one-way delay (ms):
  - Flow 1 (95th percentile 37.10 ms)
  - Flow 2 (95th percentile 41.34 ms)
  - Flow 3 (95th percentile 43.54 ms)
Run 9: Statistics of FillP

Start at: 2018-08-22 21:38:47
End at: 2018-08-22 21:39:17
Local clock offset: -8.401 ms
Remote clock offset: 1.06 ms

# Below is generated by plot.py at 2018-08-22 22:19:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.76 Mbit/s
95th percentile per-packet one-way delay: 38.274 ms
Loss rate: 5.44%
-- Flow 1:
Average throughput: 48.83 Mbit/s
95th percentile per-packet one-way delay: 35.373 ms
Loss rate: 3.60%
-- Flow 2:
Average throughput: 32.03 Mbit/s
95th percentile per-packet one-way delay: 38.710 ms
Loss rate: 8.25%
-- Flow 3:
Average throughput: 26.06 Mbit/s
95th percentile per-packet one-way delay: 42.661 ms
Loss rate: 8.39%
Run 9: Report of FillP — Data Link

![Graph of throughput over time for different flows]

Flow 1 ingress (mean 50.62 Mbit/s)  
Flow 1 egress (mean 48.83 Mbit/s)  
Flow 2 ingress (mean 34.90 Mbit/s)  
Flow 2 egress (mean 32.03 Mbit/s)  
Flow 3 ingress (mean 28.40 Mbit/s)  
Flow 3 egress (mean 26.06 Mbit/s)

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

Flow 1 (95th percentile 35.37 ms)  
Flow 2 (95th percentile 38.71 ms)  
Flow 3 (95th percentile 42.66 ms)
Run 10: Statistics of FillP

Start at: 2018-08-22 21:57:56
End at: 2018-08-22 21:58:26
Local clock offset: -4.149 ms
Remote clock offset: -0.952 ms

# Below is generated by plot.py at 2018-08-22 22:19:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.88 Mbit/s
95th percentile per-packet one-way delay: 30.521 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 59.63 Mbit/s
95th percentile per-packet one-way delay: 29.289 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 30.793 ms
Loss rate: 3.07%
-- Flow 3:
Average throughput: 30.60 Mbit/s
95th percentile per-packet one-way delay: 31.565 ms
Loss rate: 3.44%
Run 10: Report of FillP — Data Link

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

- Flow 1 ingress (mean 60.62 Mbps)
- Flow 1 egress (mean 59.63 Mbps)
- Flow 2 ingress (mean 40.43 Mbps)
- Flow 2 egress (mean 39.22 Mbps)
- Flow 3 ingress (mean 31.64 Mbps)
- Flow 3 egress (mean 30.60 Mbps)

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

- Flow 1 (95th percentile 29.29 ms)
- Flow 2 (95th percentile 30.79 ms)
- Flow 3 (95th percentile 31.57 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-08-22 19:02:17
End at: 2018-08-22 19:02:47
Local clock offset: -3.348 ms
Remote clock offset: -7.456 ms

# Below is generated by plot.py at 2018-08-22 22:19:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.29 Mbit/s
  95th percentile per-packet one-way delay: 24.670 ms
  Loss rate: 1.41%
-- Flow 1:
  Average throughput: 58.60 Mbit/s
  95th percentile per-packet one-way delay: 23.741 ms
  Loss rate: 1.29%
-- Flow 2:
  Average throughput: 40.45 Mbit/s
  95th percentile per-packet one-way delay: 25.950 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 32.53 Mbit/s
  95th percentile per-packet one-way delay: 25.752 ms
  Loss rate: 1.38%
Run 1: Report of FillP-Sheep — Data Link

![Graph 1](image1.png)

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

Start at: 2018-08-22 19:21:18
End at: 2018-08-22 19:21:48
Local clock offset: -3.201 ms
Remote clock offset: -6.108 ms

# Below is generated by plot.py at 2018-08-22 22:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.52 Mbit/s
95th percentile per-packet one-way delay: 38.292 ms
Loss rate: 6.79%
-- Flow 1:
Average throughput: 46.12 Mbit/s
95th percentile per-packet one-way delay: 35.369 ms
Loss rate: 5.41%
-- Flow 2:
Average throughput: 31.93 Mbit/s
95th percentile per-packet one-way delay: 40.701 ms
Loss rate: 9.28%
-- Flow 3:
Average throughput: 24.68 Mbit/s
95th percentile per-packet one-way delay: 42.822 ms
Loss rate: 7.81%
Run 2: Report of FillP-Sheep — Data Link

![Graph 1: Throughput vs Time](image1)
- Flow 1 ingress (mean 48.76 Mbit/s)
- Flow 1 egress (mean 46.12 Mbit/s)
- Flow 2 ingress (mean 35.15 Mbit/s)
- Flow 2 egress (mean 31.93 Mbit/s)
- Flow 3 ingress (mean 26.76 Mbit/s)
- Flow 3 egress (mean 24.68 Mbit/s)

![Graph 2: Per-packet one-way delay vs Time](image2)
- Flow 1 (95th percentile 35.37 ms)
- Flow 2 (95th percentile 40.70 ms)
- Flow 3 (95th percentile 42.82 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-22 19:40:15
End at: 2018-08-22 19:40:45
Local clock offset: -3.996 ms
Remote clock offset: -0.599 ms

# Below is generated by plot.py at 2018-08-22 22:19:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.10 Mbit/s
95th percentile per-packet one-way delay: 37.747 ms
Loss rate: 6.08%
-- Flow 1:
Average throughput: 46.37 Mbit/s
95th percentile per-packet one-way delay: 34.031 ms
Loss rate: 4.65%
-- Flow 2:
Average throughput: 31.84 Mbit/s
95th percentile per-packet one-way delay: 37.783 ms
Loss rate: 8.80%
-- Flow 3:
Average throughput: 22.68 Mbit/s
95th percentile per-packet one-way delay: 57.016 ms
Loss rate: 6.87%
Run 3: Report of FillP-Sheep — Data Link

![Graph showing throughput and packet delay over time]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 48.63 Mbps)
  - Flow 1 egress (mean 46.37 Mbps)
  - Flow 2 ingress (mean 34.91 Mbps)
  - Flow 2 egress (mean 31.84 Mbps)
  - Flow 3 ingress (mean 24.35 Mbps)
  - Flow 3 egress (mean 22.68 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 34.03 ms)
  - Flow 2 (95th percentile 37.78 ms)
  - Flow 3 (95th percentile 57.02 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2018-08-22 19:59:15
End at: 2018-08-22 19:59:45
Local clock offset: -2.091 ms
Remote clock offset: -7.275 ms

# Below is generated by plot.py at 2018-08-22 22:19:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.96 Mbit/s
  95th percentile per-packet one-way delay: 41.529 ms
  Loss rate: 4.84%
-- Flow 1:
  Average throughput: 45.17 Mbit/s
  95th percentile per-packet one-way delay: 40.215 ms
  Loss rate: 3.36%
-- Flow 2:
  Average throughput: 30.83 Mbit/s
  95th percentile per-packet one-way delay: 42.987 ms
  Loss rate: 8.03%
-- Flow 3:
  Average throughput: 24.99 Mbit/s
  95th percentile per-packet one-way delay: 43.449 ms
  Loss rate: 4.62%
Run 4: Report of FillP-Sheep — Data Link

![Graph showing throughput and packet error rate over time.]

- Flow 1 ingress (mean 45.70 Mbit/s)
- Flow 1 egress (mean 45.17 Mbit/s)
- Flow 2 ingress (mean 33.52 Mbit/s)
- Flow 2 egress (mean 30.83 Mbit/s)
- Flow 3 ingress (mean 26.22 Mbit/s)
- Flow 3 egress (mean 24.99 Mbit/s)
Run 5: Statistics of FillP-Sheep

Start at: 2018-08-22 20:18:19
End at: 2018-08-22 20:18:49
Local clock offset: -4.608 ms
Remote clock offset: -13.727 ms

# Below is generated by plot.py at 2018-08-22 22:20:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.98 Mbit/s
95th percentile per-packet one-way delay: 25.360 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 59.05 Mbit/s
95th percentile per-packet one-way delay: 23.121 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 39.28 Mbit/s
95th percentile per-packet one-way delay: 26.713 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 32.63 Mbit/s
95th percentile per-packet one-way delay: 27.064 ms
Loss rate: 1.17%
Run 5: Report of FillP-Sheep — Data Link
Run 6: Statistics of FillP-Sheep

Start at: 2018-08-22 20:37:19
End at: 2018-08-22 20:37:49
Local clock offset: -4.472 ms
Remote clock offset: -16.006 ms

# Below is generated by plot.py at 2018-08-22 22:20:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.74 Mbit/s
95th percentile per-packet one-way delay: 36.943 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 34.633 ms
Loss rate: 4.23%
-- Flow 2:
Average throughput: 33.41 Mbit/s
95th percentile per-packet one-way delay: 39.639 ms
Loss rate: 5.92%
-- Flow 3:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 37.199 ms
Loss rate: 6.70%
Run 6: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 51.57 Mbit/s)
- Flow 1 egress (mean 49.39 Mbit/s)
- Flow 2 ingress (mean 35.31 Mbit/s)
- Flow 2 egress (mean 33.41 Mbit/s)
- Flow 3 ingress (mean 29.52 Mbit/s)
- Flow 3 egress (mean 27.55 Mbit/s)

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

- Flow 1 (95th percentile 34.63 ms)
- Flow 2 (95th percentile 39.64 ms)
- Flow 3 (95th percentile 37.20 ms)
Run 7: Statistics of FillP-Sheep

Start at: 2018-08-22 20:56:20
End at: 2018-08-22 20:56:50
Local clock offset: -7.366 ms
Remote clock offset: -17.8 ms

# Below is generated by plot.py at 2018-08-22 22:20:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.93 Mbit/s
95th percentile per-packet one-way delay: 35.811 ms
Loss rate: 5.83%
-- Flow 1:
Average throughput: 49.56 Mbit/s
95th percentile per-packet one-way delay: 34.704 ms
Loss rate: 4.39%
-- Flow 2:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 36.855 ms
Loss rate: 8.59%
-- Flow 3:
Average throughput: 27.13 Mbit/s
95th percentile per-packet one-way delay: 37.730 ms
Loss rate: 6.61%
Run 7: Report of FillP-Sheep — Data Link

![Graph 1: Throughput (Mbps)](image1)
- Flow 1 ingress (mean 51.83 Mbps)
- Flow 1 egress (mean 49.56 Mbps)
- Flow 2 ingress (mean 36.81 Mbps)
- Flow 2 egress (mean 33.66 Mbps)
- Flow 3 ingress (mean 29.05 Mbps)
- Flow 3 egress (mean 27.13 Mbps)

![Graph 2: Per-packet one-way delay (ms)](image2)
- Flow 1 (95th percentile 34.70 ms)
- Flow 2 (95th percentile 36.85 ms)
- Flow 3 (95th percentile 37.73 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-08-22 21:15:22
End at: 2018-08-22 21:15:52
Local clock offset: -9.07 ms
Remote clock offset: -2.532 ms

# Below is generated by plot.py at 2018-08-22 22:21:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 36.222 ms
Loss rate: 4.73%
-- Flow 1:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: 35.063 ms
Loss rate: 3.80%
-- Flow 2:
Average throughput: 34.05 Mbit/s
95th percentile per-packet one-way delay: 37.731 ms
Loss rate: 5.94%
-- Flow 3:
Average throughput: 26.34 Mbit/s
95th percentile per-packet one-way delay: 37.320 ms
Loss rate: 6.67%
Run 8: Report of FillP-Sheep — Data Link
Run 9: Statistics of FillP-Sheep

Start at: 2018-08-22 21:34:21
End at: 2018-08-22 21:34:51
Local clock offset: -7.677 ms
Remote clock offset: 3.162 ms

# Below is generated by plot.py at 2018-08-22 22:21:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.82 Mbit/s
95th percentile per-packet one-way delay: 37.674 ms
Loss rate: 4.97%
-- Flow 1:
Average throughput: 48.80 Mbit/s
95th percentile per-packet one-way delay: 35.378 ms
Loss rate: 4.35%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 40.424 ms
Loss rate: 6.01%
-- Flow 3:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 39.843 ms
Loss rate: 5.77%
Run 9: Report of FillP-Sheep — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 10: Statistics of FillP-Sheep

Start at: 2018-08-22 21:53:28
End at: 2018-08-22 21:53:59
Local clock offset: -5.207 ms
Remote clock offset: -0.902 ms

# Below is generated by plot.py at 2018-08-22 22:21:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.43 Mbit/s
  95th percentile per-packet one-way delay: 24.402 ms
  Loss rate: 1.26%
-- Flow 1:
  Average throughput: 58.92 Mbit/s
  95th percentile per-packet one-way delay: 23.169 ms
  Loss rate: 1.13%
-- Flow 2:
  Average throughput: 40.72 Mbit/s
  95th percentile per-packet one-way delay: 26.456 ms
  Loss rate: 1.55%
-- Flow 3:
  Average throughput: 31.39 Mbit/s
  95th percentile per-packet one-way delay: 23.962 ms
  Loss rate: 1.23%
Run 10: Report of FillIP-Sheep — Data Link

![Diagram of network throughput and delay over time]

- **Throughput (Mbit/s):**
  - Flow 1 ingress (mean 59.59 Mbit/s)
  - Flow 1 egress (mean 58.92 Mbit/s)
  - Flow 2 ingress (mean 41.37 Mbit/s)
  - Flow 2 egress (mean 40.72 Mbit/s)
  - Flow 3 ingress (mean 31.77 Mbit/s)
  - Flow 3 egress (mean 31.39 Mbit/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 23.17 ms)
  - Flow 2 (95th percentile 26.46 ms)
  - Flow 3 (95th percentile 23.96 ms)
Run 1: Statistics of Indigo

Start at: 2018-08-22 19:00:04
End at: 2018-08-22 19:00:34
Local clock offset: -1.786 ms
Remote clock offset: -7.036 ms

# Below is generated by plot.py at 2018-08-22 22:21:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.13 Mbit/s
95th percentile per-packet one-way delay: 11.554 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 58.26 Mbit/s
95th percentile per-packet one-way delay: 10.595 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 12.676 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 10.035 ms
Loss rate: 0.10%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-08-22 19:19:06
End at: 2018-08-22 19:19:36
Local clock offset: -3.15 ms
Remote clock offset: -7.45 ms

# Below is generated by plot.py at 2018-08-22 22:21:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.18 Mbit/s
95th percentile per-packet one-way delay: 13.552 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 45.67 Mbit/s
95th percentile per-packet one-way delay: 12.627 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 13.992 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 26.98 Mbit/s
95th percentile per-packet one-way delay: 14.494 ms
Loss rate: 0.14%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-08-22 19:38:04
End at: 2018-08-22 19:38:34
Local clock offset: -3.214 ms
Remote clock offset: -0.925 ms

# Below is generated by plot.py at 2018-08-22 22:21:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.09 Mbit/s
  95th percentile per-packet one-way delay: 11.695 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 43.09 Mbit/s
  95th percentile per-packet one-way delay: 10.777 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 32.92 Mbit/s
  95th percentile per-packet one-way delay: 13.354 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 18.57 Mbit/s
  95th percentile per-packet one-way delay: 29.672 ms
  Loss rate: 0.15%
Run 3: Report of Indigo — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 43.10 Mbit/s)
- Flow 1 egress (mean 43.09 Mbit/s)
- Flow 2 ingress (mean 32.93 Mbit/s)
- Flow 2 egress (mean 32.92 Mbit/s)
- Flow 3 ingress (mean 18.59 Mbit/s)
- Flow 3 egress (mean 10.57 Mbit/s)

![Per-packet one way delay Graph]

- Flow 1 (95th percentile 10.78 ms)
- Flow 2 (95th percentile 13.35 ms)
- Flow 3 (95th percentile 29.67 ms)
Run 4: Statistics of Indigo

Start at: 2018-08-22 19:57:03
End at: 2018-08-22 19:57:33
Local clock offset: -3.714 ms
Remote clock offset: -5.486 ms

# Below is generated by plot.py at 2018-08-22 22:21:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.69 Mbit/s
  95th percentile per-packet one-way delay: 11.876 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 47.51 Mbit/s
  95th percentile per-packet one-way delay: 11.070 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 32.54 Mbit/s
  95th percentile per-packet one-way delay: 12.411 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 25.98 Mbit/s
  95th percentile per-packet one-way delay: 13.165 ms
  Loss rate: 0.21%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2018-08-22 20:16:06
End at: 2018-08-22 20:16:36
Local clock offset: -3.731 ms
Remote clock offset: -13.367 ms

# Below is generated by plot.py at 2018-08-22 22:21:59
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 97.04 Mbit/s
   95th percentile per-packet one-way delay: 11.647 ms
   Loss rate: 0.77%
-- Flow 1:
   Average throughput: 59.49 Mbit/s
   95th percentile per-packet one-way delay: 9.679 ms
   Loss rate: 0.06%
-- Flow 2:
   Average throughput: 40.52 Mbit/s
   95th percentile per-packet one-way delay: 12.176 ms
   Loss rate: 2.49%
-- Flow 3:
   Average throughput: 32.39 Mbit/s
   95th percentile per-packet one-way delay: 10.120 ms
   Loss rate: 0.33%
Run 5: Report of Indigo — Data Link

![Data Link Throughput Graph]

![Data Link Packet Delay Graph]

Flow 1 ingress (mean 59.52 Mbit/s)  Flow 1 egress (mean 59.49 Mbit/s)
Flow 2 ingress (mean 41.54 Mbit/s)  Flow 2 egress (mean 40.52 Mbit/s)
Flow 3 ingress (mean 32.48 Mbit/s)  Flow 3 egress (mean 32.39 Mbit/s)
Run 6: Statistics of Indigo

Start at: 2018-08-22 20:35:07  
End at: 2018-08-22 20:35:37  
Local clock offset: -4.311 ms  
Remote clock offset: -15.753 ms

# Below is generated by plot.py at 2018-08-22 22:21:59  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 80.72 Mbit/s  
  95th percentile per-packet one-way delay: 12.661 ms  
  Loss rate: 0.04%  
-- Flow 1:  
  Average throughput: 48.36 Mbit/s  
  95th percentile per-packet one-way delay: 10.718 ms  
  Loss rate: 0.01%  
-- Flow 2:  
  Average throughput: 34.62 Mbit/s  
  95th percentile per-packet one-way delay: 13.625 ms  
  Loss rate: 0.06%  
-- Flow 3:  
  Average throughput: 28.39 Mbit/s  
  95th percentile per-packet one-way delay: 14.326 ms  
  Loss rate: 0.14%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

Start at: 2018-08-22 20:54:08
End at: 2018-08-22 20:54:38
Local clock offset: -8.77 ms
Remote clock offset: -17.59 ms

# Below is generated by plot.py at 2018-08-22 22:21:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.34 Mbit/s
95th percentile per-packet one-way delay: 11.787 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 48.82 Mbit/s
95th percentile per-packet one-way delay: 10.537 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 33.93 Mbit/s
95th percentile per-packet one-way delay: 13.915 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 12.454 ms
Loss rate: 0.13%
Run 7: Report of Indigo — Data Link

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

- **Flow 1 Ingress (mean 48.84 Mbit/s)**
- **Flow 1 Egress (mean 48.82 Mbit/s)**
- **Flow 2 Ingress (mean 33.93 Mbit/s)**
- **Flow 2 Egress (mean 33.93 Mbit/s)**
- **Flow 3 Ingress (mean 27.26 Mbit/s)**
- **Flow 3 Egress (mean 27.26 Mbit/s)**

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

- **Flow 1 (95th percentile 10.54 ms)**
- **Flow 2 (95th percentile 13.91 ms)**
- **Flow 3 (95th percentile 12.45 ms)**
Run 8: Statistics of Indigo

Start at: 2018-08-22 21:13:10
End at: 2018-08-22 21:13:40
Local clock offset: -8.445 ms
Remote clock offset: -3.7 ms

# Below is generated by plot.py at 2018-08-22 22:22:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.77 Mbit/s
95th percentile per-packet one-way delay: 12.760 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 49.54 Mbit/s
95th percentile per-packet one-way delay: 10.489 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.70 Mbit/s
95th percentile per-packet one-way delay: 15.498 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 27.81 Mbit/s
95th percentile per-packet one-way delay: 13.406 ms
Loss rate: 0.12%
Run 8: Report of Indigo — Data Link

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

**Throughput (Mbit/s)**
- Flow 1 ingress (mean 49.54 Mbit/s)
- Flow 2 ingress (mean 34.71 Mbit/s)
- Flow 3 ingress (mean 27.83 Mbit/s)
- Flow 1 egress (mean 49.54 Mbit/s)
- Flow 2 egress (mean 34.70 Mbit/s)
- Flow 3 egress (mean 27.81 Mbit/s)

**Packet Loss (ms)**
- Flow 1 (95th percentile 10.49 ms)
- Flow 2 (95th percentile 15.50 ms)
- Flow 3 (95th percentile 13.41 ms)
Run 9: Statistics of Indigo

Start at: 2018-08-22 21:32:09
End at: 2018-08-22 21:32:39
Local clock offset: -8.394 ms
Remote clock offset: 2.715 ms

# Below is generated by plot.py at 2018-08-22 22:22:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.82 Mbit/s
  95th percentile per-packet one-way delay: 12.380 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 48.53 Mbit/s
  95th percentile per-packet one-way delay: 11.821 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 32.32 Mbit/s
  95th percentile per-packet one-way delay: 13.438 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 26.71 Mbit/s
  95th percentile per-packet one-way delay: 11.803 ms
  Loss rate: 0.10%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-08-22 21:51:16
End at: 2018-08-22 21:51:46
Local clock offset: -4.724 ms
Remote clock offset: -0.873 ms

# Below is generated by plot.py at 2018-08-22 22:22:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.94 Mbit/s
95th percentile per-packet one-way delay: 11.705 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 59.45 Mbit/s
95th percentile per-packet one-way delay: 10.035 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 12.089 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 32.15 Mbit/s
95th percentile per-packet one-way delay: 11.611 ms
Loss rate: 1.16%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-08-22 19:13:27
End at: 2018-08-22 19:13:57
Local clock offset: -2.958 ms
Remote clock offset: -8.311 ms

# Below is generated by plot.py at 2018-08-22 22:22:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.18 Mbit/s
  95th percentile per-packet one-way delay: 20.462 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 44.99 Mbit/s
  95th percentile per-packet one-way delay: 20.178 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 31.00 Mbit/s
  95th percentile per-packet one-way delay: 20.950 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 25.71 Mbit/s
  95th percentile per-packet one-way delay: 20.866 ms
  Loss rate: 0.48%
Run 1: Report of LEDBAT — Data Link

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

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

Start at: 2018-08-22 19:32:25
End at: 2018-08-22 19:32:55
Local clock offset: -3.266 ms
Remote clock offset: -1.993 ms

# Below is generated by plot.py at 2018-08-22 22:22:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.53 Mbit/s
  95th percentile per-packet one-way delay: 20.498 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 45.51 Mbit/s
  95th percentile per-packet one-way delay: 20.625 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 31.13 Mbit/s
  95th percentile per-packet one-way delay: 20.312 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 24.92 Mbit/s
  95th percentile per-packet one-way delay: 20.292 ms
  Loss rate: 0.45%
Run 3: Statistics of LEDBAT

Start at: 2018-08-22 19:51:24
End at: 2018-08-22 19:51:54
Local clock offset: -2.183 ms
Remote clock offset: 0.814 ms

# Below is generated by plot.py at 2018-08-22 22:22:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 20.830 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 46.19 Mbit/s
95th percentile per-packet one-way delay: 20.650 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 20.842 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 26.35 Mbit/s
95th percentile per-packet one-way delay: 21.289 ms
Loss rate: 0.49%
Run 3: Report of LEDBAT — Data Link

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Run 4: Statistics of LEDBAT

Start at: 2018-08-22 20:10:22
End at: 2018-08-22 20:10:52
Local clock offset: -2.479 ms
Remote clock offset: -12.153 ms

# Below is generated by plot.py at 2018-08-22 22:22:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.16 Mbit/s
  95th percentile per-packet one-way delay: 20.687 ms
  Loss rate: 0.23%
-- Flow 1:
  Average throughput: 45.06 Mbit/s
  95th percentile per-packet one-way delay: 20.848 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 32.48 Mbit/s
  95th percentile per-packet one-way delay: 21.022 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 28.48 Mbit/s
  95th percentile per-packet one-way delay: 18.840 ms
  Loss rate: 0.38%
Run 4: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet Round-trip delay](image2)
Run 5: Statistics of LEDBAT

Start at: 2018-08-22 20:29:27
End at: 2018-08-22 20:29:57
Local clock offset: -4.173 ms
Remote clock offset: -15.125 ms

# Below is generated by plot.py at 2018-08-22 22:22:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.76 Mbit/s
  95th percentile per-packet one-way delay: 19.265 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 47.36 Mbit/s
  95th percentile per-packet one-way delay: 19.218 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 29.44 Mbit/s
  95th percentile per-packet one-way delay: 19.425 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 26.46 Mbit/s
  95th percentile per-packet one-way delay: 19.216 ms
  Loss rate: 0.41%
Run 5: Report of LEDBAT — Data Link

![Graph of Throughput](image1)

![Graph of Per-packet one-way delay](image2)
Run 6: Statistics of LEDBAT

Start at: 2018-08-22 20:48:28
End at: 2018-08-22 20:48:58
Local clock offset: -7.257 ms
Remote clock offset: -17.054 ms

# Below is generated by plot.py at 2018-08-22 22:23:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.29 Mbit/s
  95th percentile per-packet one-way delay: 18.718 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 49.54 Mbit/s
  95th percentile per-packet one-way delay: 18.280 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 34.15 Mbit/s
  95th percentile per-packet one-way delay: 19.223 ms
  Loss rate: 0.27%
-- Flow 3:
  Average throughput: 27.15 Mbit/s
  95th percentile per-packet one-way delay: 19.312 ms
  Loss rate: 0.38%
Run 7: Statistics of LEDBAT

Start at: 2018-08-22 21:07:30
End at: 2018-08-22 21:08:00
Local clock offset: -8.851 ms
Remote clock offset: -7.901 ms

# Below is generated by plot.py at 2018-08-22 22:23:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.35 Mbit/s
  95th percentile per-packet one-way delay: 19.268 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 48.86 Mbit/s
  95th percentile per-packet one-way delay: 18.917 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 34.02 Mbit/s
  95th percentile per-packet one-way delay: 19.950 ms
  Loss rate: 0.30%
-- Flow 3:
  Average throughput: 26.61 Mbit/s
  95th percentile per-packet one-way delay: 19.197 ms
  Loss rate: 0.45%
Run 7: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 48.92 Mbps/s)
- Flow 1 egress (mean 48.86 Mbps/s)
- Flow 2 ingress (mean 34.11 Mbps/s)
- Flow 2 egress (mean 34.02 Mbps/s)
- Flow 3 ingress (mean 26.71 Mbps/s)
- Flow 3 egress (mean 26.61 Mbps/s)

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

- Flow 1 (95th percentile 18.92 ms)
- Flow 2 (95th percentile 19.95 ms)
- Flow 3 (95th percentile 19.20 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-08-22 21:26:30
End at: 2018-08-22 21:27:00
Local clock offset: -9.039 ms
Remote clock offset: 1.297 ms

# Below is generated by plot.py at 2018-08-22 22:23:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.52 Mbit/s
95th percentile per-packet one-way delay: 18.735 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 47.91 Mbit/s
95th percentile per-packet one-way delay: 18.141 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 19.579 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 19.305 ms
Loss rate: 0.41%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-08-22 21:45:30
End at: 2018-08-22 21:46:00
Local clock offset: -6.372 ms
Remote clock offset: -0.477 ms

# Below is generated by plot.py at 2018-08-22 22:23:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.48 Mbit/s
95th percentile per-packet one-way delay: 13.500 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.73 Mbit/s
95th percentile per-packet one-way delay: 12.999 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 14.016 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 12.529 ms
Loss rate: 0.34%
Run 9: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 58.79 Mbit/s)
- Flow 1 egress (mean 58.73 Mbit/s)
- Flow 2 ingress (mean 40.72 Mbit/s)
- Flow 2 egress (mean 40.64 Mbit/s)
- Flow 3 ingress (mean 32.28 Mbit/s)
- Flow 3 egress (mean 32.18 Mbit/s)
Run 10: Statistics of LEDBAT

Start at: 2018-08-22 22:04:40
End at: 2018-08-22 22:05:10
Local clock offset: -2.933 ms
Remote clock offset: -0.819 ms

# Below is generated by plot.py at 2018-08-22 22:23:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.56 Mbit/s
  95th percentile per-packet one-way delay: 15.258 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 58.70 Mbit/s
  95th percentile per-packet one-way delay: 14.845 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 40.60 Mbit/s
  95th percentile per-packet one-way delay: 15.844 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 32.57 Mbit/s
  95th percentile per-packet one-way delay: 15.322 ms
  Loss rate: 0.36%
Run 10: Report of LEDBAT — Data Link

[Graphs showing throughput and packet error rate over time for different flows, with labels and markers for each flow's ingress and egress rates and 95th percentile delay.]

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Run 1: Statistics of PCC-Allegro

Start at: 2018-08-22 19:05:38
End at: 2018-08-22 19:06:08
Local clock offset: -2.428 ms
Remote clock offset: -7.764 ms

# Below is generated by plot.py at 2018-08-22 22:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 33.734 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 59.75 Mbit/s
95th percentile per-packet one-way delay: 32.910 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: 34.523 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 29.04 Mbit/s
95th percentile per-packet one-way delay: 34.763 ms
Loss rate: 0.31%
Run 1: Report of PCC-Allegro — Data Link

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

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

Legend:
- Flow 1 ingress (mean 60.35 Mbps)
- Flow 1 egress (mean 59.75 Mbps)
- Flow 2 ingress (mean 31.08 Mbps)
- Flow 2 egress (mean 30.36 Mbps)
- Flow 3 ingress (mean 29.11 Mbps)
- Flow 3 egress (mean 29.04 Mbps)

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

Legend:
- Flow 1 (95th percentile 32.91 ms)
- Flow 2 (95th percentile 34.52 ms)
- Flow 3 (95th percentile 34.76 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-22 19:24:38
End at: 2018-08-22 19:25:08
Local clock offset: -3.307 ms
Remote clock offset: -4.534 ms

# Below is generated by plot.py at 2018-08-22 22:23:57
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 71.96 Mbit/s
 95th percentile per-packet one-way delay: 42.907 ms
 Loss rate: 5.99%
-- Flow 1:
 Average throughput: 47.66 Mbit/s
 95th percentile per-packet one-way delay: 37.901 ms
 Loss rate: 7.05%
-- Flow 2:
 Average throughput: 25.76 Mbit/s
 95th percentile per-packet one-way delay: 48.502 ms
 Loss rate: 4.99%
-- Flow 3:
 Average throughput: 21.80 Mbit/s
 95th percentile per-packet one-way delay: 47.292 ms
 Loss rate: 0.95%
Run 2: Report of PCC-Allegro — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 51.25 Mbps)
- Flow 1 egress (mean 47.66 Mbps)
- Flow 2 ingress (mean 27.10 Mbps)
- Flow 2 egress (mean 25.76 Mbps)
- Flow 3 ingress (mean 21.96 Mbps)
- Flow 3 egress (mean 21.80 Mbps)

**Packet Error Rate (ms):**
- Flow 1 (95th percentile 37.90 ms)
- Flow 2 (95th percentile 48.50 ms)
- Flow 3 (95th percentile 47.29 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-08-22 19:43:36
End at: 2018-08-22 19:44:06
Local clock offset: -3.09 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2018-08-22 22:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.54 Mbit/s
95th percentile per-packet one-way delay: 43.211 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 27.64 Mbit/s
95th percentile per-packet one-way delay: 42.519 ms
Loss rate: 4.65%
-- Flow 2:
Average throughput: 29.17 Mbit/s
95th percentile per-packet one-way delay: 45.581 ms
Loss rate: 4.87%
-- Flow 3:
Average throughput: 19.84 Mbit/s
95th percentile per-packet one-way delay: 10.824 ms
Loss rate: 0.07%
Run 3: Report of PCC-Allegro — Data Link

![Graph showing throughput and per-packet end-to-end delay over time.]

Legend:
- Flow 1 ingress (mean 28.97 Mbps)
- Flow 1 egress (mean 27.64 Mbps)
- Flow 2 ingress (mean 30.63 Mbps)
- Flow 2 egress (mean 29.17 Mbps)
- Flow 3 ingress (mean 19.84 Mbps)
- Flow 3 egress (mean 19.84 Mbps)
Run 4: Statistics of PCC-Allegro

Start at: 2018-08-22 20:02:36
End at: 2018-08-22 20:03:06
Local clock offset: -2.884 ms
Remote clock offset: -9.239 ms

# Below is generated by plot.py at 2018-08-22 22:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.80 Mbit/s
  95th percentile per-packet one-way delay: 35.044 ms
  Loss rate: 3.83%
-- Flow 1:
  Average throughput: 44.70 Mbit/s
  95th percentile per-packet one-way delay: 35.714 ms
  Loss rate: 4.76%
-- Flow 2:
  Average throughput: 7.59 Mbit/s
  95th percentile per-packet one-way delay: 3.312 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 24.41 Mbit/s
  95th percentile per-packet one-way delay: 35.424 ms
  Loss rate: 0.81%
Run 4: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 46.91 Mbps)**
- **Flow 1 egress (mean 44.70 Mbps)**
- **Flow 2 ingress (mean 7.59 Mbps)**
- **Flow 2 egress (mean 7.59 Mbps)**
- **Flow 3 ingress (mean 24.58 Mbps)**
- **Flow 3 egress (mean 24.41 Mbps)**

![Graph 2: Percentile vs. Time (ms)]

- **Flow 1 (95th percentile 35.71 ms)**
- **Flow 2 (95th percentile 3.31 ms)**
- **Flow 3 (95th percentile 35.42 ms)**

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Run 5: Statistics of PCC-Allegro

Start at: 2018-08-22 20:21:40
End at: 2018-08-22 20:22:10
Local clock offset: -3.96 ms
Remote clock offset: -14.22 ms

# Below is generated by plot.py at 2018-08-22 22:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.07 Mbit/s
95th percentile per-packet one-way delay: 29.498 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 67.02 Mbit/s
95th percentile per-packet one-way delay: 28.517 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 32.667 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 4.73 Mbit/s
95th percentile per-packet one-way delay: 3.611 ms
Loss rate: 0.05%
Run 5: Report of PCC-Allegro — Data Link

![Graph 1: Throughput](image1)

![Graph 2: Packet Delay](image2)
Run 6: Statistics of PCC-Allegro

Start at: 2018-08-22 20:40:40
End at: 2018-08-22 20:41:10
Local clock offset: -5.596 ms
Remote clock offset: -16.439 ms

# Below is generated by plot.py at 2018-08-22 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 38.174 ms
Loss rate: 5.98%
-- Flow 1:
Average throughput: 54.83 Mbit/s
95th percentile per-packet one-way delay: 34.465 ms
Loss rate: 6.94%
-- Flow 2:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 44.631 ms
Loss rate: 5.28%
-- Flow 3:
Average throughput: 22.07 Mbit/s
95th percentile per-packet one-way delay: 18.260 ms
Loss rate: 0.15%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-08-22 20:59:42
End at: 2018-08-22 21:00:12
Local clock offset: -8.41 ms
Remote clock offset: -18.037 ms

# Below is generated by plot.py at 2018-08-22 22:24:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.77 Mbit/s
95th percentile per-packet one-way delay: 30.166 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 47.13 Mbit/s
95th percentile per-packet one-way delay: 31.716 ms
Loss rate: 2.04%
-- Flow 2:
Average throughput: 5.59 Mbit/s
95th percentile per-packet one-way delay: 3.702 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 19.970 ms
Loss rate: 0.13%
Run 7: Report of PCC-Allegro — Data Link

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

- **Throughput** graph:
  - Flow 1 ingress (mean 48.09 Mbit/s)
  - Flow 1 egress (mean 47.13 Mbit/s)
  - Flow 2 ingress (mean 5.59 Mbit/s)
  - Flow 2 egress (mean 5.59 Mbit/s)
  - Flow 3 ingress (mean 30.17 Mbit/s)
  - Flow 3 egress (mean 30.15 Mbit/s)

- **Delay** graph:
  - Flow 1 (95th percentile 31.72 ms)
  - Flow 2 (95th percentile 3.70 ms)
  - Flow 3 (95th percentile 19.97 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-08-22 21:18:43
End at: 2018-08-22 21:19:13
Local clock offset: -9.069 ms
Remote clock offset: -1.13 ms

# Below is generated by plot.py at 2018-08-22 22:24:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.03 Mbit/s
  95th percentile per-packet one-way delay: 37.368 ms
  Loss rate: 4.61%
-- Flow 1:
  Average throughput: 33.38 Mbit/s
  95th percentile per-packet one-way delay: 35.689 ms
  Loss rate: 6.17%
-- Flow 2:
  Average throughput: 25.93 Mbit/s
  95th percentile per-packet one-way delay: 41.787 ms
  Loss rate: 3.03%
-- Flow 3:
  Average throughput: 19.50 Mbit/s
  95th percentile per-packet one-way delay: 9.299 ms
  Loss rate: 0.35%
Run 8: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 35.56 Mbps)
- Flow 1 egress (mean 33.38 Mbps)
- Flow 2 ingress (mean 26.71 Mbps)
- Flow 2 egress (mean 25.93 Mbps)
- Flow 3 ingress (mean 19.55 Mbps)
- Flow 3 egress (mean 19.50 Mbps)

![Graph 2: End-to-end delay (ms)](image2)

- Flow 1 (95th percentile 35.69 ms)
- Flow 2 (95th percentile 41.79 ms)
- Flow 3 (95th percentile 9.30 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-08-22 21:37:41
End at: 2018-08-22 21:38:11
Local clock offset: -7.323 ms
Remote clock offset: 1.479 ms

# Below is generated by plot.py at 2018-08-22 22:24:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.26 Mbit/s
  95th percentile per-packet one-way delay: 41.294 ms
  Loss rate: 6.64%
-- Flow 1:
  Average throughput: 49.32 Mbit/s
  95th percentile per-packet one-way delay: 34.485 ms
  Loss rate: 8.20%
-- Flow 2:
  Average throughput: 26.31 Mbit/s
  95th percentile per-packet one-way delay: 44.761 ms
  Loss rate: 1.94%
-- Flow 3:
  Average throughput: 25.67 Mbit/s
  95th percentile per-packet one-way delay: 48.814 ms
  Loss rate: 6.63%
Run 9: Report of PCC-Allegro — Data Link

[Graph showing throughput and per-packet round trip time over time for different flows, with annotations for mean values of ingress and egress.]
Run 10: Statistics of PCC-Allegro

Start at: 2018-08-22 21:56:50
End at: 2018-08-22 21:57:20
Local clock offset: -4.944 ms
Remote clock offset: -0.948 ms

# Below is generated by plot.py at 2018-08-22 22:24:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.81 Mbit/s
  95th percentile per-packet one-way delay: 30.207 ms
  Loss rate: 2.17%
-- Flow 1:
  Average throughput: 62.23 Mbit/s
  95th percentile per-packet one-way delay: 28.931 ms
  Loss rate: 1.70%
-- Flow 2:
  Average throughput: 33.07 Mbit/s
  95th percentile per-packet one-way delay: 31.583 ms
  Loss rate: 4.22%
-- Flow 3:
  Average throughput: 26.15 Mbit/s
  95th percentile per-packet one-way delay: 11.149 ms
  Loss rate: 0.12%
Run 10: Report of PCC-Allegro — Data Link

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Run 1: Statistics of PCC-Expr

Start at: 2018-08-22 19:15:41
End at: 2018-08-22 19:16:11
Local clock offset: -3.055 ms
Remote clock offset: -8.476 ms

# Below is generated by plot.py at 2018-08-22 22:25:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.79 Mbit/s
  95th percentile per-packet one-way delay: 41.686 ms
  Loss rate: 1.70%
-- Flow 1:
  Average throughput: 45.07 Mbit/s
  95th percentile per-packet one-way delay: 37.548 ms
  Loss rate: 1.84%
-- Flow 2:
  Average throughput: 27.52 Mbit/s
  95th percentile per-packet one-way delay: 44.077 ms
  Loss rate: 1.59%
-- Flow 3:
  Average throughput: 19.49 Mbit/s
  95th percentile per-packet one-way delay: 48.287 ms
  Loss rate: 1.00%
Run 2: Statistics of PCC-Expr

Start at: 2018-08-22 19:34:39
End at: 2018-08-22 19:35:09
Local clock offset: -3.268 ms
Remote clock offset: -1.526 ms

# Below is generated by plot.py at 2018-08-22 22:25:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.42 Mbit/s
95th percentile per-packet one-way delay: 33.603 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 42.00 Mbit/s
95th percentile per-packet one-way delay: 32.241 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 30.797 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 19.66 Mbit/s
95th percentile per-packet one-way delay: 40.073 ms
Loss rate: 0.65%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-08-22 19:53:38
End at: 2018-08-22 19:54:08
Local clock offset: -2.145 ms
Remote clock offset: -1.792 ms

# Below is generated by plot.py at 2018-08-22 22:25:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.86 Mbit/s
95th percentile per-packet one-way delay: 43.029 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 40.516 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 28.66 Mbit/s
95th percentile per-packet one-way delay: 44.856 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 20.54 Mbit/s
95th percentile per-packet one-way delay: 46.035 ms
Loss rate: 0.25%
Run 3: Report of PCC-Expr — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 4: Statistics of PCC-Expr

Start at: 2018-08-22 20:12:38
End at: 2018-08-22 20:13:08
Local clock offset: -2.72 ms
Remote clock offset: -12.717 ms

# Below is generated by plot.py at 2018-08-22 22:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 29.424 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 48.58 Mbit/s
95th percentile per-packet one-way delay: 12.953 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 43.49 Mbit/s
95th percentile per-packet one-way delay: 30.778 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 28.02 Mbit/s
95th percentile per-packet one-way delay: 31.222 ms
Loss rate: 0.43%
Run 4: Report of PCC-Expr — Data Link

![Graph of throughput]  
- Flow 1 ingress (mean 48.64 Mbit/s)  
- Flow 2 ingress (mean 43.74 Mbit/s)  
- Flow 3 ingress (mean 28.10 Mbit/s)  
- Flow 1 egress (mean 48.58 Mbit/s)  
- Flow 2 egress (mean 43.49 Mbit/s)  
- Flow 3 egress (mean 28.02 Mbit/s)

![Graph of per-packet one-way delay]  
- Flow 1 (95th percentile 12.95 ms)  
- Flow 2 (95th percentile 30.78 ms)  
- Flow 3 (95th percentile 31.22 ms)
Run 5: Statistics of PCC-Expr

Start at: 2018-08-22 20:31:42
End at: 2018-08-22 20:32:12
Local clock offset: -4.213 ms
Remote clock offset: -15.411 ms

# Below is generated by plot.py at 2018-08-22 22:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.81 Mbit/s
95th percentile per-packet one-way delay: 37.385 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 44.36 Mbit/s
95th percentile per-packet one-way delay: 35.186 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 28.99 Mbit/s
95th percentile per-packet one-way delay: 39.740 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 21.72 Mbit/s
95th percentile per-packet one-way delay: 41.420 ms
Loss rate: 0.48%
Run 5: Report of PCC-Expr — Data Link

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 45.04 Mbit/s)
- Flow 1 egress (mean 44.36 Mbit/s)
- Flow 2 ingress (mean 29.08 Mbit/s)
- Flow 2 egress (mean 26.99 Mbit/s)
- Flow 3 ingress (mean 21.81 Mbit/s)
- Flow 3 egress (mean 21.72 Mbit/s)

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

- Flow 1 (95th percentile 35.19 ms)
- Flow 2 (95th percentile 39.74 ms)
- Flow 3 (95th percentile 41.42 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-08-22 20:50:43
End at: 2018-08-22 20:51:13
Local clock offset: -8.303 ms
Remote clock offset: -17.224 ms

# Below is generated by plot.py at 2018-08-22 22:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.85 Mbit/s
95th percentile per-packet one-way delay: 37.755 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 43.45 Mbit/s
95th percentile per-packet one-way delay: 33.784 ms
Loss rate: 1.73%
-- Flow 2:
Average throughput: 29.76 Mbit/s
95th percentile per-packet one-way delay: 39.143 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 19.99 Mbit/s
95th percentile per-packet one-way delay: 43.289 ms
Loss rate: 0.63%
Run 6: Report of PCC-Expr — Data Link

![Graph showing throughput and packet round-trip delay over time for different flows.](image-url)
Run 7: Statistics of PCC-Expr

Start at: 2018-08-22 21:09:46
End at: 2018-08-22 21:10:16
Local clock offset: -8.603 ms
Remote clock offset: -6.017 ms

# Below is generated by plot.py at 2018-08-22 22:26:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.99 Mbit/s
95th percentile per-packet one-way delay: 21.589 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 31.58 Mbit/s
95th percentile per-packet one-way delay: 21.266 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 9.90 Mbit/s
95th percentile per-packet one-way delay: 27.712 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 35.85 Mbit/s
95th percentile per-packet one-way delay: 12.725 ms
Loss rate: 0.05%
Run 7: Report of PCC-Expr — Data Link

![Graph 1: Throughput over time](image1)

- Flow 1 ingress (mean 31.60 Mbit/s)
- Flow 1 egress (mean 31.58 Mbit/s)
- Flow 2 ingress (mean 9.90 Mbit/s)
- Flow 2 egress (mean 9.90 Mbit/s)
- Flow 3 ingress (mean 35.85 Mbit/s)
- Flow 3 egress (mean 35.85 Mbit/s)

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

- Flow 1 (95th percentile 21.27 ms)
- Flow 2 (95th percentile 27.71 ms)
- Flow 3 (95th percentile 12.72 ms)
Run 8: Statistics of PCC-Expr

Start at: 2018-08-22 21:28:45
End at: 2018-08-22 21:29:15
Local clock offset: -8.37 ms
Remote clock offset: 1.949 ms

# Below is generated by plot.py at 2018-08-22 22:26:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.85 Mbit/s
  95th percentile per-packet one-way delay: 41.107 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 36.48 Mbit/s
  95th percentile per-packet one-way delay: 39.401 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 25.84 Mbit/s
  95th percentile per-packet one-way delay: 42.585 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 21.77 Mbit/s
  95th percentile per-packet one-way delay: 42.950 ms
  Loss rate: 0.70%
Run 8: Report of PCC-Expr — Data Link

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**Graph 1:**

- **Throughput (Mbit/s):**
  - Flow 1 ingress (mean 35.70 Mbit/s)
  - Flow 1 egress (mean 36.48 Mbit/s)
  - Flow 2 ingress (mean 26.14 Mbit/s)
  - Flow 2 egress (mean 25.84 Mbit/s)
  - Flow 3 ingress (mean 21.89 Mbit/s)
  - Flow 3 egress (mean 21.77 Mbit/s)

**Graph 2:**

- **Per packet one way delay (ms):**
  - Flow 1 (95th percentile 39.40 ms)
  - Flow 2 (95th percentile 42.59 ms)
  - Flow 3 (95th percentile 42.95 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-08-22 21:47:48
End at: 2018-08-22 21:48:18
Local clock offset: -5.202 ms
Remote clock offset: -0.659 ms

# Below is generated by plot.py at 2018-08-22 22:27:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.58 Mbit/s
95th percentile per-packet one-way delay: 29.981 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 67.46 Mbit/s
95th percentile per-packet one-way delay: 29.278 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 14.46 Mbit/s
95th percentile per-packet one-way delay: 30.196 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 30.484 ms
Loss rate: 1.03%
Run 9: Report of PCC-Expr — Data Link

![Graph showing throughput over time for different flows]

- **Flow 1 ingress (mean 67.66 Mbps)**
- **Flow 1 egress (mean 67.46 Mbps)**
- **Flow 2 ingress (mean 14.47 Mbps)**
- **Flow 2 egress (mean 14.46 Mbps)**
- **Flow 3 ingress (mean 32.11 Mbps)**
- **Flow 3 egress (mean 31.62 Mbps)**

![Graph showing per-packet one-way delay]

- **Flow 1 (95th percentile 29.28 ms)**
- **Flow 2 (95th percentile 30.20 ms)**
- **Flow 3 (95th percentile 30.48 ms)**
Run 10: Statistics of PCC-Expr

Start at: 2018-08-22 22:06:58
End at: 2018-08-22 22:07:28
Local clock offset: -3.592 ms
Remote clock offset: -0.672 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.77 Mbit/s
95th percentile per-packet one-way delay: 30.213 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 56.95 Mbit/s
95th percentile per-packet one-way delay: 29.187 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 33.21 Mbit/s
95th percentile per-packet one-way delay: 30.482 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 29.50 Mbit/s
95th percentile per-packet one-way delay: 30.440 ms
Loss rate: 0.60%
Run 10: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 57.17 Mbps)
Flow 1 egress (mean 56.95 Mbps)
Flow 2 ingress (mean 33.32 Mbps)
Flow 2 egress (mean 33.21 Mbps)
Flow 3 ingress (mean 29.64 Mbps)
Flow 3 egress (mean 29.50 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 29.19 ms)
Flow 2 (95th percentile 30.48 ms)
Flow 3 (95th percentile 30.44 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-08-22 19:03:24
End at: 2018-08-22 19:03:54
Local clock offset: -2.535 ms
Remote clock offset: -7.537 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.89 Mbit/s
95th percentile per-packet one-way delay: 11.811 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 2.460 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.35 Mbit/s
95th percentile per-packet one-way delay: 11.703 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 47.61 Mbit/s
95th percentile per-packet one-way delay: 11.956 ms
Loss rate: 0.35%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Local clock offset: -3.982 ms
Remote clock offset: -5.513 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 48.73 Mbit/s
  95th percentile per-packet one-way delay: 20.777 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 1.08 Mbit/s
  95th percentile per-packet one-way delay: 1.929 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 55.15 Mbit/s
  95th percentile per-packet one-way delay: 21.262 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 36.34 Mbit/s
  95th percentile per-packet one-way delay: 19.168 ms
  Loss rate: 0.38%
Run 3: Statistics of QUIC Cubic

Start at: 2018-08-22 19:41:22
End at: 2018-08-22 19:41:52
Local clock offset: -2.378 ms
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.21 Mbit/s
95th percentile per-packet one-way delay: 21.365 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 3.285 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 57.02 Mbit/s
95th percentile per-packet one-way delay: 21.572 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 20.605 ms
Loss rate: 0.35%
Run 3: Report of QUIC Cubic — Data Link

![Graph 1: Throughput vs Time]

![Graph 2: Packet Round Trip Time vs Time]

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 0.69 Mbps)
  - Flow 1 egress (mean 0.70 Mbps)
  - Flow 2 ingress (mean 57.11 Mbps)
  - Flow 2 egress (mean 57.02 Mbps)
  - Flow 3 ingress (mean 37.16 Mbps)
  - Flow 3 egress (mean 37.05 Mbps)

- **Packet Round Trip Time (ms):**
  - Flow 1 (95th percentile 3.29 ms)
  - Flow 2 (95th percentile 21.57 ms)
  - Flow 3 (95th percentile 20.61 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-08-22 20:00:22
End at: 2018-08-22 20:00:52
Local clock offset: -2.845 ms
Remote clock offset: -8.101 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.90 Mbit/s
95th percentile per-packet one-way delay: 22.480 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 40.76 Mbit/s
95th percentile per-packet one-way delay: 23.468 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 20.867 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 21.919 ms
Loss rate: 0.61%
Run 4: Report of QUIC Cubic — Data Link

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 40.85 Mbps)
  - Flow 1 egress (mean 40.76 Mbps)
  - Flow 2 ingress (mean 29.27 Mbps)
  - Flow 2 egress (mean 29.16 Mbps)
  - Flow 3 ingress (mean 23.55 Mbps)
  - Flow 3 egress (mean 23.42 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 23.47 ms)
  - Flow 2 (95th percentile 20.87 ms)
  - Flow 3 (95th percentile 21.92 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-08-22 20:19:26
End at: 2018-08-22 20:19:56
Local clock offset: -3.877 ms
Remote clock offset: -13.897 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.59 Mbit/s
95th percentile per-packet one-way delay: 11.948 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 2.476 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.90 Mbit/s
95th percentile per-packet one-way delay: 12.055 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 47.61 Mbit/s
95th percentile per-packet one-way delay: 11.823 ms
Loss rate: 0.34%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-08-22 20:38:26
End at: 2018-08-22 20:38:56
Local clock offset: -5.674 ms
Remote clock offset: -16.078 ms

# Below is generated by plot.py at 2018-08-22 22:27:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.09 Mbit/s
95th percentile per-packet one-way delay: 17.759 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 1.798 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.25 Mbit/s
95th percentile per-packet one-way delay: 18.013 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 17.424 ms
Loss rate: 0.33%
Run 6: Report of QUIC Cubic — Data Link

![Graph 1: Throughput over Time](Image)

- Flow 1 ingress (mean 1.48 Mbit/s)
- Flow 1 egress (mean 1.53 Mbit/s)
- Flow 2 ingress (mean 59.32 Mbit/s)
- Flow 2 egress (mean 59.25 Mbit/s)
- Flow 3 ingress (mean 41.46 Mbit/s)
- Flow 3 egress (mean 41.35 Mbit/s)

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

- Flow 1 (95th percentile 1.80 ms)
- Flow 2 (95th percentile 18.01 ms)
- Flow 3 (95th percentile 17.42 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-08-22 20:57:27
End at: 2018-08-22 20:57:57
Local clock offset: -8.233 ms
Remote clock offset: -17.832 ms

# Below is generated by plot.py at 2018-08-22 22:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.16 Mbit/s
95th percentile per-packet one-way delay: 18.890 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 46.56 Mbit/s
95th percentile per-packet one-way delay: 18.928 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 33.01 Mbit/s
95th percentile per-packet one-way delay: 18.876 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 26.15 Mbit/s
95th percentile per-packet one-way delay: 18.759 ms
Loss rate: 0.51%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-08-22 21:16:29
End at: 2018-08-22 21:16:59
Local clock offset: -8.261 ms
Remote clock offset: -2.136 ms

# Below is generated by plot.py at 2018-08-22 22:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.09 Mbit/s
  95th percentile per-packet one-way delay: 18.663 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 1.64 Mbit/s
  95th percentile per-packet one-way delay: 2.700 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 59.49 Mbit/s
  95th percentile per-packet one-way delay: 18.927 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 40.86 Mbit/s
  95th percentile per-packet one-way delay: 18.063 ms
  Loss rate: 0.32%
Run 8: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 1.53 Mbit/s)
- Flow 1 egress (mean 1.64 Mbit/s)
- Flow 2 ingress (mean 59.57 Mbit/s)
- Flow 2 egress (mean 59.49 Mbit/s)
- Flow 3 ingress (mean 40.97 Mbit/s)
- Flow 3 egress (mean 40.86 Mbit/s)

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

- Flow 1 (95th percentile 2.70 ms)
- Flow 2 (95th percentile 18.93 ms)
- Flow 3 (95th percentile 18.06 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-08-22 21:35:28
End at: 2018-08-22 21:35:58
Local clock offset: -9.23 ms
Remote clock offset: 2.527 ms

# Below is generated by plot.py at 2018-08-22 22:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 51.77 Mbit/s
  95th percentile per-packet one-way delay: 17.906 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 1.09 Mbit/s
  95th percentile per-packet one-way delay: 2.781 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 58.11 Mbit/s
  95th percentile per-packet one-way delay: 18.374 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 39.61 Mbit/s
  95th percentile per-packet one-way delay: 16.865 ms
  Loss rate: 0.45%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-08-22 21:54:36
End at: 2018-08-22 21:55:06
Local clock offset: -3.575 ms
Remote clock offset: -1.016 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.63 Mbit/s
95th percentile per-packet one-way delay: 12.909 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 3.261 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.85 Mbit/s
95th percentile per-packet one-way delay: 12.905 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 47.85 Mbit/s
95th percentile per-packet one-way delay: 12.912 ms
Loss rate: 0.35%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-08-22 19:09:02
End at: 2018-08-22 19:09:32
Local clock offset: -2.708 ms
Remote clock offset: -7.979 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 2.335 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.338 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.318 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.338 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

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Run 2: Statistics of SCReAM

Start at: 2018-08-22 19:28:00
End at: 2018-08-22 19:28:30
Local clock offset: -2.487 ms
Remote clock offset: -3.242 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 4.626 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.611 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.610 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.649 ms
  Loss rate: 0.35%
Run 2: Report of SCReAM — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)

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Run 3: Statistics of SCReAM

Start at: 2018-08-22 19:46:57
End at: 2018-08-22 19:47:27
Local clock offset: -3.019 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.677 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.659 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.689 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 3.68 ms)
Flow 2 (95th percentile 3.66 ms)
Flow 3 (95th percentile 3.69 ms)
Run 4: Statistics of SCReAM

Start at: 2018-08-22 20:05:57
End at: 2018-08-22 20:06:27
Local clock offset: -2.024 ms
Remote clock offset: -10.685 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.43 Mbit/s
   95th percentile per-packet one-way delay: 4.199 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 4.213 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 4.188 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 4.138 ms
   Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-08-22 20:25:02
End at: 2018-08-22 20:25:32
Local clock offset: -4.069 ms
Remote clock offset: -14.604 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.536 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.565 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.532 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.463 ms
Loss rate: 0.35%
Run 5: Report of SCReAM — Data Link

![Throughput Graph](image)

![Delay Graph](image)
Run 6: Statistics of SCReAM

Start at: 2018-08-22 20:44:03
End at: 2018-08-22 20:44:33
Local clock offset: -5.711 ms
Remote clock offset: -16.622 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 4.430 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.433 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.418 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 4.429 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-08-22 21:03:04
End at: 2018-08-22 21:03:34
Local clock offset: -8.671 ms
Remote clock offset: -12.962 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 4.224 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.113 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.215 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.324 ms
Loss rate: 0.35%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-08-22 21:22:05
End at: 2018-08-22 21:22:35
Local clock offset: -8.275 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.727 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.709 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.718 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.766 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 0.20 Mbps)
- Flow 1 egress (mean 0.18 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.20 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.20 Mbps)

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

- Flow 1 (95th percentile 3.71 ms)
- Flow 2 (95th percentile 3.72 ms)
- Flow 3 (95th percentile 3.77 ms)
Run 9: Statistics of SCReAM

Start at: 2018-08-22 21:41:04
End at: 2018-08-22 21:41:34
Local clock offset: -6.682 ms
Remote clock offset: 0.336 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.313 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.333 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.249 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.170 ms
Loss rate: 0.35%
Run 9: Report of SCReAM — Data Link

![Graph showing throughput over time for different flows with 95th percentile delay times indicated.](image-url)
Run 10: Statistics of SCReAM

Start at: 2018-08-22 22:00:14
End at: 2018-08-22 22:00:44
Local clock offset: -4.701 ms
Remote clock offset: -0.946 ms

# Below is generated by plot.py at 2018-08-22 22:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.646 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.647 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.641 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.631 ms
Loss rate: 0.35%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-08-22 19:10:05
End at: 2018-08-22 19:10:35
Local clock offset: -2.752 ms
Remote clock offset: -8.046 ms

# Below is generated by plot.py at 2018-08-22 22:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.21 Mbit/s
95th percentile per-packet one-way delay: 16.930 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 34.75 Mbit/s
95th percentile per-packet one-way delay: 14.720 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 33.46 Mbit/s
95th percentile per-packet one-way delay: 17.185 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 19.467 ms
Loss rate: 0.14%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-08-22 19:29:04
End at: 2018-08-22 19:29:34
Local clock offset: -2.51 ms
Remote clock offset: -2.848 ms

# Below is generated by plot.py at 2018-08-22 22:28:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 59.44 Mbit/s
  95th percentile per-packet one-way delay: 32.880 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 31.56 Mbit/s
  95th percentile per-packet one-way delay: 29.759 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 29.50 Mbit/s
  95th percentile per-packet one-way delay: 33.817 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 25.03 Mbit/s
  95th percentile per-packet one-way delay: 37.409 ms
  Loss rate: 0.39%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-08-22 19:48:01
End at: 2018-08-22 19:48:31
Local clock offset: -3.064 ms
Remote clock offset: 0.413 ms

# Below is generated by plot.py at 2018-08-22 22:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.13 Mbit/s
95th percentile per-packet one-way delay: 34.334 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 31.455 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 28.43 Mbit/s
95th percentile per-packet one-way delay: 34.596 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 24.40 Mbit/s
95th percentile per-packet one-way delay: 39.012 ms
Loss rate: 0.49%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-08-22 20:07:01
End at: 2018-08-22 20:07:31
Local clock offset: -2.806 ms
Remote clock offset: -11.142 ms

# Below is generated by plot.py at 2018-08-22 22:28:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.35 Mbit/s
  95th percentile per-packet one-way delay: 33.695 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 32.48 Mbit/s
  95th percentile per-packet one-way delay: 30.913 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 29.44 Mbit/s
  95th percentile per-packet one-way delay: 33.964 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 25.09 Mbit/s
  95th percentile per-packet one-way delay: 38.720 ms
  Loss rate: 0.44%
Run 4: Report of Sprout — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 Ingress** (mean 32.52 Mbit/s)
- **Flow 1 Egress** (mean 32.48 Mbit/s)
- **Flow 2 Ingress** (mean 29.49 Mbit/s)
- **Flow 2 Egress** (mean 29.44 Mbit/s)
- **Flow 3 Ingress** (mean 25.15 Mbit/s)
- **Flow 3 Egress** (mean 25.09 Mbit/s)

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

- Flow 1 (95th percentile 30.91 ms)
- Flow 2 (95th percentile 33.96 ms)
- Flow 3 (95th percentile 38.72 ms)
Run 5: Statistics of Sprout

Start at: 2018-08-22 20:26:06
End at: 2018-08-22 20:26:36
Local clock offset: -4.853 ms
Remote clock offset: -14.78 ms

# Below is generated by plot.py at 2018-08-22 22:28:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.76 Mbit/s
95th percentile per-packet one-way delay: 32.024 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 28.372 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 32.907 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 25.50 Mbit/s
95th percentile per-packet one-way delay: 36.906 ms
Loss rate: 0.51%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-08-22 20:45:07
End at: 2018-08-22 20:45:37
Local clock offset: -6.651 ms
Remote clock offset: -16.793 ms

# Below is generated by plot.py at 2018-08-22 22:28:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.17 Mbit/s
  95th percentile per-packet one-way delay: 28.187 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 32.37 Mbit/s
  95th percentile per-packet one-way delay: 25.373 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 30.04 Mbit/s
  95th percentile per-packet one-way delay: 28.366 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 26.75 Mbit/s
  95th percentile per-packet one-way delay: 32.667 ms
  Loss rate: 0.21%
Run 6: Report of Sprout — Data Link

![Graph](image)

Throughput (mbps)

Flow 1 ingress (mean 32.40 Mbit/s)
Flow 1 egress (mean 32.37 Mbit/s)
Flow 2 ingress (mean 30.08 Mbit/s)
Flow 2 egress (mean 30.04 Mbit/s)
Flow 3 ingress (mean 26.84 Mbit/s)
Flow 3 egress (mean 26.75 Mbit/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 25.37 ms)
Flow 2 (95th percentile 28.37 ms)
Flow 3 (95th percentile 32.67 ms)
Run 7: Statistics of Sprout

Start at: 2018-08-22 21:04:08
End at: 2018-08-22 21:04:38
Local clock offset: -8.746 ms
Remote clock offset: -11.789 ms

# Below is generated by plot.py at 2018-08-22 22:28:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.86 Mbit/s
95th percentile per-packet one-way delay: 29.780 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 33.86 Mbit/s
95th percentile per-packet one-way delay: 27.146 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 30.24 Mbit/s
95th percentile per-packet one-way delay: 29.493 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 26.96 Mbit/s
95th percentile per-packet one-way delay: 34.628 ms
Loss rate: 0.48%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-08-22 21:23:09
End at: 2018-08-22 21:23:39
Local clock offset: -8.285 ms
Remote clock offset: 0.469 ms

# Below is generated by plot.py at 2018-08-22 22:28:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.07 Mbit/s
  95th percentile per-packet one-way delay: 31.159 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 33.37 Mbit/s
  95th percentile per-packet one-way delay: 28.800 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 30.39 Mbit/s
  95th percentile per-packet one-way delay: 31.598 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 25.71 Mbit/s
  95th percentile per-packet one-way delay: 35.471 ms
  Loss rate: 0.15%

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Run 9: Statistics of Sprout

Start at: 2018-08-22 21:42:07
End at: 2018-08-22 21:42:37
Local clock offset: -6.415 ms
Remote clock offset: 0.187 ms

# Below is generated by plot.py at 2018-08-22 22:28:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.09 Mbit/s
  95th percentile per-packet one-way delay: 16.543 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 34.48 Mbit/s
  95th percentile per-packet one-way delay: 14.373 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 33.75 Mbit/s
  95th percentile per-packet one-way delay: 16.940 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 30.79 Mbit/s
  95th percentile per-packet one-way delay: 19.016 ms
  Loss rate: 0.30%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-08-22 22:01:17
End at: 2018-08-22 22:01:47
Local clock offset: -3.878 ms
Remote clock offset: -0.909 ms

# Below is generated by plot.py at 2018-08-22 22:28:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.96 Mbit/s
  95th percentile per-packet one-way delay: 17.579 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 34.76 Mbit/s
  95th percentile per-packet one-way delay: 16.016 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 33.52 Mbit/s
  95th percentile per-packet one-way delay: 17.405 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 30.04 Mbit/s
  95th percentile per-packet one-way delay: 20.177 ms
  Loss rate: 0.34%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-08-22 19:17:57
End at: 2018-08-22 19:18:27
Local clock offset: -3.932 ms
Remote clock offset: -8.472 ms

# Below is generated by plot.py at 2018-08-22 22:29:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.67 Mbit/s
  95th percentile per-packet one-way delay: 36.801 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 33.68 Mbit/s
  95th percentile per-packet one-way delay: 32.736 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 37.38 Mbit/s
  95th percentile per-packet one-way delay: 37.703 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 27.38 Mbit/s
  95th percentile per-packet one-way delay: 40.519 ms
  Loss rate: 0.82%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 (mean 33.75 Mbit/s, 95th percentile 32.74 ms)
- Flow 2 (mean 37.62 Mbit/s, 95th percentile 37.70 ms)
- Flow 3 (mean 27.60 Mbit/s, 95th percentile 40.52 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-08-22 19:36:55
End at: 2018-08-22 19:37:25
Local clock offset: -4.054 ms
Remote clock offset: -1.115 ms

# Below is generated by plot.py at 2018-08-22 22:29:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.11 Mbit/s
95th percentile per-packet one-way delay: 37.081 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 34.53 Mbit/s
95th percentile per-packet one-way delay: 32.520 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 35.27 Mbit/s
95th percentile per-packet one-way delay: 38.567 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 41.416 ms
Loss rate: 1.15%
Run 2: Report of TaoVA-100x — Data Link

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

- **Flow 1 ing: (mean 34.62 Mbit/s)**
- **Flow 1 egress (mean 34.53 Mbit/s)**
- **Flow 2 ing: (mean 35.38 Mbit/s)**
- **Flow 2 egress (mean 35.27 Mbit/s)**
- **Flow 3 ing: (mean 33.68 Mbit/s)**
- **Flow 3 egress (mean 33.35 Mbit/s)**
Run 3: Statistics of TaoVA-100x

Start at: 2018-08-22 19:55:54
End at: 2018-08-22 19:56:24
Local clock offset: -2.899 ms
Remote clock offset: -4.389 ms

# Below is generated by plot.py at 2018-08-22 22:29:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.04 Mbit/s
  95th percentile per-packet one-way delay: 36.999 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 43.31 Mbit/s
  95th percentile per-packet one-way delay: 34.886 ms
  Loss rate: 0.50%
-- Flow 2:
  Average throughput: 23.11 Mbit/s
  95th percentile per-packet one-way delay: 36.120 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 34.12 Mbit/s
  95th percentile per-packet one-way delay: 41.983 ms
  Loss rate: 0.92%
Run 3: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 43.52 Mbit/s)
- Flow 1 egress (mean 43.31 Mbit/s)
- Flow 2 ingress (mean 23.24 Mbit/s)
- Flow 2 egress (mean 23.11 Mbit/s)
- Flow 3 ingress (mean 34.36 Mbit/s)
- Flow 3 egress (mean 34.12 Mbit/s)

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

- Flow 1 (95th percentile 34.89 ms)
- Flow 2 (95th percentile 36.12 ms)
- Flow 3 (95th percentile 41.98 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-08-22 20:14:56
End at: 2018-08-22 20:15:26
Local clock offset: -4.471 ms
Remote clock offset: -13.188 ms

# Below is generated by plot.py at 2018-08-22 22:30:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.91 Mbit/s
  95th percentile per-packet one-way delay: 30.257 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 54.07 Mbit/s
  95th percentile per-packet one-way delay: 30.132 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 39.45 Mbit/s
  95th percentile per-packet one-way delay: 30.368 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 31.78 Mbit/s
  95th percentile per-packet one-way delay: 30.344 ms
  Loss rate: 2.18%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-08-22 20:33:58
End at: 2018-08-22 20:34:28
Local clock offset: -4.255 ms
Remote clock offset: -15.646 ms

# Below is generated by plot.py at 2018-08-22 22:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.80 Mbit/s
95th percentile per-packet one-way delay: 40.383 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 37.356 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 34.63 Mbit/s
95th percentile per-packet one-way delay: 41.007 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 45.150 ms
Loss rate: 1.08%
Run 5: Report of TaoVA-100x — Data Link

![Graph of throughput over time for different flows]

Legend:
- Flow 1 ingress (mean 41.04 Mbit/s)
- Flow 1 egress (mean 40.96 Mbit/s)
- Flow 2 ingress (mean 34.83 Mbit/s)
- Flow 2 egress (mean 34.63 Mbit/s)
- Flow 3 ingress (mean 29.70 Mbit/s)
- Flow 3 egress (mean 29.39 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 37.36 ms)
- Flow 2 (95th percentile 41.01 ms)
- Flow 3 (95th percentile 45.15 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-08-22 20:52:59
End at: 2018-08-22 20:53:29
Local clock offset: -7.765 ms
Remote clock offset: -17.514 ms

# Below is generated by plot.py at 2018-08-22 22:30:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.14 Mbit/s
95th percentile per-packet one-way delay: 36.754 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 37.54 Mbit/s
95th percentile per-packet one-way delay: 32.450 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 37.49 Mbit/s
95th percentile per-packet one-way delay: 37.235 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 32.02 Mbit/s
95th percentile per-packet one-way delay: 40.598 ms
Loss rate: 0.92%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-08-22 21:12:01
End at: 2018-08-22 21:12:31
Local clock offset: -8.499 ms
Remote clock offset: -4.487 ms

# Below is generated by plot.py at 2018-08-22 22:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.70 Mbit/s
95th percentile per-packet one-way delay: 35.753 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 36.97 Mbit/s
95th percentile per-packet one-way delay: 31.942 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.50 Mbit/s
95th percentile per-packet one-way delay: 36.584 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 35.39 Mbit/s
95th percentile per-packet one-way delay: 39.540 ms
Loss rate: 1.10%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-08-22 21:31:00
End at: 2018-08-22 21:31:30
Local clock offset: -8.364 ms
Remote clock offset: 2.506 ms

# Below is generated by plot.py at 2018-08-22 22:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.02 Mbit/s
95th percentile per-packet one-way delay: 37.939 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 31.606 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 35.71 Mbit/s
95th percentile per-packet one-way delay: 39.965 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 33.66 Mbit/s
95th percentile per-packet one-way delay: 42.891 ms
Loss rate: 1.10%
Run 8: Report of TaoVA-100x — Data Link

![Graph of throughput and packet error rate over time]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 35.13 Mbps)
  - Flow 1 egress (mean 35.65 Mbps)
  - Flow 2 ingress (mean 35.97 Mbps)
  - Flow 2 egress (mean 35.71 Mbps)
  - Flow 3 ingress (mean 33.98 Mbps)
  - Flow 3 egress (mean 33.66 Mbps)

- **Packet Error Rate (ms):**
  - Flow 1 (95th percentile 31.61 ms)
  - Flow 2 (95th percentile 39.97 ms)
  - Flow 3 (95th percentile 42.89 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-08-22 21:50:05
End at: 2018-08-22 21:50:35
Local clock offset: -4.8 ms
Remote clock offset: -0.925 ms

# Below is generated by plot.py at 2018-08-22 22:31:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.76 Mbit/s
95th percentile per-packet one-way delay: 31.138 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 55.87 Mbit/s
95th percentile per-packet one-way delay: 30.959 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 31.194 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 31.325 ms
Loss rate: 1.74%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-08-22 22:09:16
End at: 2018-08-22 22:09:46
Local clock offset: -3.512 ms
Remote clock offset: -0.925 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.12 Mbit/s
  95th percentile per-packet one-way delay: 31.016 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 55.99 Mbit/s
  95th percentile per-packet one-way delay: 30.892 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 39.90 Mbit/s
  95th percentile per-packet one-way delay: 30.931 ms
  Loss rate: 0.85%
-- Flow 3:
  Average throughput: 31.79 Mbit/s
  95th percentile per-packet one-way delay: 31.254 ms
  Loss rate: 1.64%
Run 10: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 56.14 Mbit/s)
Flow 1 egress (mean 55.99 Mbit/s)
Flow 2 ingress (mean 40.20 Mbit/s)
Flow 2 egress (mean 39.90 Mbit/s)
Flow 3 ingress (mean 32.26 Mbit/s)
Flow 3 egress (mean 31.79 Mbit/s)

Per packet one-way delay [ms]

Time (s)

Flow 1 (95th percentile 30.89 ms)
Flow 2 (95th percentile 30.93 ms)
Flow 3 (95th percentile 31.25 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-08-22 19:11:13
End at: 2018-08-22 19:11:43
Local clock offset: -2.895 ms
Remote clock offset: -7.791 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.00 Mbit/s
  95th percentile per-packet one-way delay: 6.954 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 44.82 Mbit/s
  95th percentile per-packet one-way delay: 7.244 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 30.36 Mbit/s
  95th percentile per-packet one-way delay: 5.675 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 26.98 Mbit/s
  95th percentile per-packet one-way delay: 8.164 ms
  Loss rate: 0.06%
Run 1: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 44.82 Mbps)
- Flow 1 egress (mean 44.82 Mbps)
- Flow 2 ingress (mean 30.36 Mbps)
- Flow 2 egress (mean 30.36 Mbps)
- Flow 3 ingress (mean 26.99 Mbps)
- Flow 3 egress (mean 26.98 Mbps)

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

- Flow 1 (95th percentile 7.24 ms)
- Flow 2 (95th percentile 5.67 ms)
- Flow 3 (95th percentile 8.16 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-08-22 19:30:11
End at: 2018-08-22 19:30:41
Local clock offset: -2.516 ms
Remote clock offset: -2.62 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.48 Mbit/s
95th percentile per-packet one-way delay: 8.537 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 45.16 Mbit/s
95th percentile per-packet one-way delay: 8.775 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.54 Mbit/s
95th percentile per-packet one-way delay: 7.071 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 27.05 Mbit/s
95th percentile per-packet one-way delay: 9.948 ms
Loss rate: 0.06%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-08-22 19:49:08
End at: 2018-08-22 19:49:38
Local clock offset: -3.814 ms
Remote clock offset: 0.514 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.12 Mbit/s
95th percentile per-packet one-way delay: 7.141 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 42.46 Mbit/s
95th percentile per-packet one-way delay: 7.021 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 32.24 Mbit/s
95th percentile per-packet one-way delay: 7.508 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 5.770 ms
Loss rate: 0.07%
Run 3: Report of TCP Vegas — Data Link

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

Legend:
- Flow 1 ingress (mean 42.46 Mbit/s)
- Flow 1 egress (mean 42.46 Mbit/s)
- Flow 2 ingress (mean 32.24 Mbit/s)
- Flow 2 egress (mean 32.24 Mbit/s)
- Flow 3 ingress (mean 24.60 Mbit/s)
- Flow 3 egress (mean 24.67 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 7.02 ms)
- Flow 2 (95th percentile 7.51 ms)
- Flow 3 (95th percentile 5.77 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-08-22 20:08:08
End at: 2018-08-22 20:08:38
Local clock offset: -2.971 ms
Remote clock offset: -11.553 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.32 Mbit/s
95th percentile per-packet one-way delay: 7.504 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 42.05 Mbit/s
95th percentile per-packet one-way delay: 8.138 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.01 Mbit/s
95th percentile per-packet one-way delay: 6.307 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.90 Mbit/s
95th percentile per-packet one-way delay: 6.479 ms
Loss rate: 0.03%
Run 4: Report of TCP Vegas — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 42.04 Mbit/s)
- Flow 1 egress (mean 42.65 Mbit/s)
- Flow 2 ingress (mean 30.01 Mbit/s)
- Flow 2 egress (mean 30.01 Mbit/s)
- Flow 3 ingress (mean 24.90 Mbit/s)
- Flow 3 egress (mean 24.90 Mbit/s)

![Graph 2: Per-Packet One-Way Delay](image2)

- Flow 1 (95th percentile 8.14 ms)
- Flow 2 (95th percentile 6.31 ms)
- Flow 3 (95th percentile 6.48 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-08-22 20:27:13
End at: 2018-08-22 20:27:43
Local clock offset: -4.885 ms
Remote clock offset: -14.916 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.96 Mbit/s
  95th percentile per-packet one-way delay: 6.345 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 44.46 Mbit/s
  95th percentile per-packet one-way delay: 6.605 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 31.28 Mbit/s
  95th percentile per-packet one-way delay: 5.458 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 26.07 Mbit/s
  95th percentile per-packet one-way delay: 6.932 ms
  Loss rate: 0.03%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-08-22 20:46:14
End at: 2018-08-22 20:46:44
Local clock offset: -7.638 ms
Remote clock offset: -16.878 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.01 Mbit/s
95th percentile per-packet one-way delay: 7.108 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 7.492 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 33.06 Mbit/s
95th percentile per-packet one-way delay: 6.301 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 26.92 Mbit/s
95th percentile per-packet one-way delay: 6.624 ms
Loss rate: 0.05%
Run 6: Report of TCP Vegas — Data Link

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 49.04 Mbit/s)
- Blue solid line: Flow 1 egress (mean 49.05 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 33.06 Mbit/s)
- Green solid line: Flow 2 egress (mean 33.06 Mbit/s)
- Pink dashed line: Flow 3 ingress (mean 26.92 Mbit/s)
- Pink solid line: Flow 3 egress (mean 26.92 Mbit/s)

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

Legend:
- Blue dots: Flow 1 (95th percentile 7.49 ms)
- Green dots: Flow 2 (95th percentile 6.30 ms)
- Red dots: Flow 3 (95th percentile 6.62 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-08-22 21:05:15
End at: 2018-08-22 21:05:45
Local clock offset: -9.671 ms
Remote clock offset: -10.228 ms

# Below is generated by plot.py at 2018-08-22 22:31:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.88 Mbit/s
95th percentile per-packet one-way delay: 7.476 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 51.37 Mbit/s
95th percentile per-packet one-way delay: 8.118 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.23 Mbit/s
95th percentile per-packet one-way delay: 4.956 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 28.25 Mbit/s
95th percentile per-packet one-way delay: 6.964 ms
Loss rate: 0.05%
Run 7: Report of TCP Vegas — Data Link

[Graph of throughput over time for different flows with annotations for mean bandwidths]

[Graph of per-packet one-way delay over time for different flows with annotations for 95th percentile delay]

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Run 8: Statistics of TCP Vegas

Start at: 2018-08-22 21:24:16
End at: 2018-08-22 21:24:46
Local clock offset: -9.067 ms
Remote clock offset: 0.779 ms

# Below is generated by plot.py at 2018-08-22 22:31:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.02 Mbit/s
95th percentile per-packet one-way delay: 7.376 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 47.73 Mbit/s
95th percentile per-packet one-way delay: 8.254 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.98 Mbit/s
95th percentile per-packet one-way delay: 5.334 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 26.07 Mbit/s
95th percentile per-packet one-way delay: 5.566 ms
Loss rate: 0.04%
Run 8: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 47.73 Mbps)
- Flow 1 egress (mean 47.73 Mbps)
- Flow 2 ingress (mean 30.97 Mbps)
- Flow 2 egress (mean 30.98 Mbps)
- Flow 3 ingress (mean 26.07 Mbps)
- Flow 3 egress (mean 26.07 Mbps)

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

- Flow 1 (95th percentile 8.25 ms)
- Flow 2 (95th percentile 5.33 ms)
- Flow 3 (95th percentile 5.57 ms)

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Run 9: Statistics of TCP Vegas

Start at: 2018-08-22 21:43:15
End at: 2018-08-22 21:43:45
Local clock offset: -5.355 ms
Remote clock offset: -0.203 ms

# Below is generated by plot.py at 2018-08-22 22:32:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.35 Mbit/s
95th percentile per-packet one-way delay: 5.311 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.82 Mbit/s
95th percentile per-packet one-way delay: 4.444 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 47.02 Mbit/s
95th percentile per-packet one-way delay: 5.157 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 5.986 ms
Loss rate: 0.06%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-08-22 22:02:25
End at: 2018-08-22 22:02:55
Local clock offset: -3.873 ms
Remote clock offset: -0.901 ms

# Below is generated by plot.py at 2018-08-22 22:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.08 Mbit/s
95th percentile per-packet one-way delay: 4.878 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 47.94 Mbit/s
95th percentile per-packet one-way delay: 3.647 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 55.32 Mbit/s
95th percentile per-packet one-way delay: 4.705 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 5.363 ms
Loss rate: 0.06%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 47.94 Mbit/s)
- Flow 1 egress (mean 47.94 Mbit/s)
- Flow 2 ingress (mean 55.32 Mbit/s)
- Flow 2 egress (mean 55.32 Mbit/s)
- Flow 3 ingress (mean 37.06 Mbit/s)
- Flow 3 egress (mean 37.00 Mbit/s)

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

- Flow 1 (95th percentile 3.65 ms)
- Flow 2 (95th percentile 4.71 ms)
- Flow 3 (95th percentile 5.36 ms)
Run 1: Statistics of Verus

Start at: 2018-08-22 19:04:30
End at: 2018-08-22 19:05:00
Local clock offset: -2.446 ms
Remote clock offset: -7.638 ms

# Below is generated by plot.py at 2018-08-22 22:32:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.49 Mbit/s
95th percentile per-packet one-way delay: 18.800 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 33.60 Mbit/s
95th percentile per-packet one-way delay: 16.437 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 18.105 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 35.54 Mbit/s
95th percentile per-packet one-way delay: 25.835 ms
Loss rate: 0.15%
Run 1: Report of Verus — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 33.63 Mbit/s)
- Flow 1 egress (mean 33.60 Mbit/s)
- Flow 2 ingress (mean 34.69 Mbit/s)
- Flow 2 egress (mean 34.68 Mbit/s)
- Flow 3 ingress (mean 35.60 Mbit/s)
- Flow 3 egress (mean 35.54 Mbit/s)

![Delay Graph](image2)

- Flow 1 (95th percentile 16.44 ms)
- Flow 2 (95th percentile 18.11 ms)
- Flow 3 (95th percentile 25.84 ms)
Run 2: Statistics of Verus

Start at: 2018-08-22 19:23:31
End at: 2018-08-22 19:24:01
Local clock offset: -3.239 ms
Remote clock offset: -5.058 ms

# Below is generated by plot.py at 2018-08-22 22:32:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.01 Mbit/s
  95th percentile per-packet one-way delay: 22.498 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 31.68 Mbit/s
  95th percentile per-packet one-way delay: 21.133 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 26.51 Mbit/s
  95th percentile per-packet one-way delay: 24.086 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 26.90 Mbit/s
  95th percentile per-packet one-way delay: 26.723 ms
  Loss rate: 0.15%
Run 2: Report of Verus — Data Link

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

- **Flow 1 Ingress (mean 31.69 Mbit/s)**
- **Flow 1 Egress (mean 31.68 Mbit/s)**
- **Flow 2 Ingress (mean 26.51 Mbit/s)**
- **Flow 2 Egress (mean 26.51 Mbit/s)**
- **Flow 3 Ingress (mean 26.94 Mbit/s)**
- **Flow 3 Egress (mean 26.90 Mbit/s)**

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

- **Flow 1 (95th percentile 21.13 ms)**
- **Flow 2 (95th percentile 24.09 ms)**
- **Flow 3 (95th percentile 26.72 ms)**
Run 3: Statistics of Verus

Start at: 2018-08-22 19:42:28
End at: 2018-08-22 19:42:58
Local clock offset: -3.931 ms
Remote clock offset: -0.253 ms

# Below is generated by plot.py at 2018-08-22 22:32:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.33 Mbit/s
  95th percentile per-packet one-way delay: 21.137 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 37.20 Mbit/s
  95th percentile per-packet one-way delay: 20.370 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 30.17 Mbit/s
  95th percentile per-packet one-way delay: 18.790 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 21.17 Mbit/s
  95th percentile per-packet one-way delay: 31.145 ms
  Loss rate: 0.08%
Run 3: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 37.20 Mbit/s)**
- **Flow 1 egress (mean 37.20 Mbit/s)**
- **Flow 2 ingress (mean 30.19 Mbit/s)**
- **Flow 2 egress (mean 30.17 Mbit/s)**
- **Flow 3 ingress (mean 21.19 Mbit/s)**
- **Flow 3 egress (mean 21.17 Mbit/s)**

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

- **Flow 1 (95th percentile 20.37 ms)**
- **Flow 2 (95th percentile 18.79 ms)**
- **Flow 3 (95th percentile 31.14 ms)**
Run 4: Statistics of Verus

Start at: 2018-08-22 20:01:28
End at: 2018-08-22 20:01:58
Local clock offset: -3.651 ms
Remote clock offset: -8.55 ms

# Below is generated by plot.py at 2018-08-22 22:32:16
# Datalink statistics

-- Total of 3 flows:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: 20.462 ms
Loss rate: 0.15%

-- Flow 1:
Average throughput: 34.45 Mbit/s
95th percentile per-packet one-way delay: 19.222 ms
Loss rate: 0.17%

-- Flow 2:
Average throughput: 27.06 Mbit/s
95th percentile per-packet one-way delay: 19.568 ms
Loss rate: 0.03%

-- Flow 3:
Average throughput: 21.26 Mbit/s
95th percentile per-packet one-way delay: 32.086 ms
Loss rate: 0.38%
Run 4: Report of Verus — Data Link

Graphs showing network performance metrics over time.
Run 5: Statistics of Verus

Start at: 2018-08-22 20:20:32
End at: 2018-08-22 20:21:02
Local clock offset: -3.926 ms
Remote clock offset: -14.012 ms

# Below is generated by plot.py at 2018-08-22 22:32:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.45 Mbit/s
95th percentile per-packet one-way delay: 17.091 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 35.65 Mbit/s
95th percentile per-packet one-way delay: 14.880 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 18.294 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 33.11 Mbit/s
95th percentile per-packet one-way delay: 23.927 ms
Loss rate: 0.09%
Run 5: Report of Verus — Data Link

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

Throughput (Mbit/s)

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

Per packet one-way delay (ms)
Run 6: Statistics of Verus

Start at: 2018-08-22 20:39:33
End at: 2018-08-22 20:40:03
Local clock offset: -6.053 ms
Remote clock offset: -16.182 ms

# Below is generated by plot.py at 2018-08-22 22:32:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.89 Mbit/s
  95th percentile per-packet one-way delay: 22.336 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 40.85 Mbit/s
  95th percentile per-packet one-way delay: 18.757 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 23.84 Mbit/s
  95th percentile per-packet one-way delay: 24.173 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 30.65 Mbit/s
  95th percentile per-packet one-way delay: 30.164 ms
  Loss rate: 0.12%
Run 6: Report of Verus — Data Link

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

- Flow 1 ingress (mean 40.85 Mbps)
- Flow 1 egress (mean 40.85 Mbps)
- Flow 2 ingress (mean 23.85 Mbps)
- Flow 2 egress (mean 23.85 Mbps)
- Flow 3 ingress (mean 30.69 Mbps)
- Flow 3 egress (mean 30.65 Mbps)

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

- Flow 1 (95th percentile 18.76 ms)
- Flow 2 (95th percentile 24.17 ms)
- Flow 3 (95th percentile 30.16 ms)
Run 7: Statistics of Verus

Start at: 2018-08-22 20:58:35
End at: 2018-08-22 20:59:05
Local clock offset: -8.331 ms
Remote clock offset: -17.941 ms

# Below is generated by plot.py at 2018-08-22 22:32:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.79 Mbit/s
95th percentile per-packet one-way delay: 21.150 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 42.12 Mbit/s
95th percentile per-packet one-way delay: 19.462 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 21.239 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 22.21 Mbit/s
95th percentile per-packet one-way delay: 29.307 ms
Loss rate: 0.13%
Run 7: Report of Verus — Data Link

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

- **Throughput**
  - Flow 1 ingress (mean 42.13 Mbit/s)
  - Flow 1 egress (mean 42.12 Mbit/s)
  - Flow 2 ingress (mean 27.48 Mbit/s)
  - Flow 2 egress (mean 27.48 Mbit/s)
  - Flow 3 ingress (mean 22.22 Mbit/s)
  - Flow 3 egress (mean 22.21 Mbit/s)

- **Per-packet one-way delay**
  - Flow 1 (95th percentile 19.46 ms)
  - Flow 2 (95th percentile 21.24 ms)
  - Flow 3 (95th percentile 29.31 ms)
Run 8: Statistics of Verus

Start at: 2018-08-22 21:17:35
End at: 2018-08-22 21:18:05
Local clock offset: -8.248 ms
Remote clock offset: -1.548 ms

# Below is generated by plot.py at 2018-08-22 22:32:54
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 68.43 Mbit/s
   95th percentile per-packet one-way delay: 21.773 ms
   Loss rate: 0.03%
-- Flow 1:
   Average throughput: 40.40 Mbit/s
   95th percentile per-packet one-way delay: 20.131 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 29.57 Mbit/s
   95th percentile per-packet one-way delay: 23.457 ms
   Loss rate: 0.05%
-- Flow 3:
   Average throughput: 25.15 Mbit/s
   95th percentile per-packet one-way delay: 26.447 ms
   Loss rate: 0.06%
Run 8: Report of Verus — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 40.41 Mbit/s)
- Flow 1 egress (mean 40.40 Mbit/s)
- Flow 2 ingress (mean 29.38 Mbit/s)
- Flow 2 egress (mean 29.57 Mbit/s)
- Flow 3 ingress (mean 25.14 Mbit/s)
- Flow 3 egress (mean 25.15 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 20.13 ms)
- Flow 2 (95th percentile 23.46 ms)
- Flow 3 (95th percentile 26.45 ms)
Run 9: Statistics of Verus

Start at: 2018-08-22 21:36:34
End at: 2018-08-22 21:37:04
Local clock offset: -9.277 ms
Remote clock offset: 1.913 ms

# Below is generated by plot.py at 2018-08-22 22:33:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.77 Mbit/s
95th percentile per-packet one-way delay: 22.090 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 38.36 Mbit/s
95th percentile per-packet one-way delay: 19.202 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 30.08 Mbit/s
95th percentile per-packet one-way delay: 20.526 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 33.107 ms
Loss rate: 0.10%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 38.37 Mbit/s)
- Flow 1 egress (mean 38.36 Mbit/s)
- Flow 2 ingress (mean 30.09 Mbit/s)
- Flow 2 egress (mean 30.08 Mbit/s)
- Flow 3 ingress (mean 19.24 Mbit/s)
- Flow 3 egress (mean 19.22 Mbit/s)

---

![Graph showing packet delay distribution](image)

- Flow 1 (95th percentile 19.20 ms)
- Flow 2 (95th percentile 20.53 ms)
- Flow 3 (95th percentile 31.11 ms)
Run 10: Statistics of Verus

Start at: 2018-08-22 21:55:42
End at: 2018-08-22 21:56:12
Local clock offset: -5.091 ms
Remote clock offset: -1.003 ms

# Below is generated by plot.py at 2018-08-22 22:33:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.17 Mbit/s
95th percentile per-packet one-way delay: 16.615 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 38.81 Mbit/s
95th percentile per-packet one-way delay: 13.767 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 18.255 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 33.76 Mbit/s
95th percentile per-packet one-way delay: 19.955 ms
Loss rate: 0.19%
Run 10: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 38.85 Mbps)
Flow 1 egress (mean 38.81 Mbps)
Flow 2 ingress (mean 34.80 Mbps)
Flow 2 egress (mean 34.76 Mbps)
Flow 3 ingress (mean 33.86 Mbps)
Flow 3 egress (mean 33.76 Mbps)

Per-packet round trip delay (ms)

Time (s)

Flow 1 (95th percentile 13.77 ms)
Flow 2 (95th percentile 18.25 ms)
Flow 3 (95th percentile 19.95 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-08-22 19:14:35
End at: 2018-08-22 19:15:05
Local clock offset: -3.841 ms
Remote clock offset: -8.359 ms

# Below is generated by plot.py at 2018-08-22 22:33:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 43.988 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 24.24 Mbit/s
95th percentile per-packet one-way delay: 36.372 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 23.81 Mbit/s
95th percentile per-packet one-way delay: 45.086 ms
Loss rate: 3.71%
-- Flow 3:
Average throughput: 20.06 Mbit/s
95th percentile per-packet one-way delay: 51.683 ms
Loss rate: 3.76%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2018-08-22 19:33:33
End at: 2018-08-22 19:34:03
Local clock offset: -4.105 ms
Remote clock offset: -1.688 ms

# Below is generated by plot.py at 2018-08-22 22:33:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.29 Mbit/s
95th percentile per-packet one-way delay: 35.105 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 22.71 Mbit/s
95th percentile per-packet one-way delay: 30.610 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 21.330 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 20.91 Mbit/s
95th percentile per-packet one-way delay: 45.123 ms
Loss rate: 2.19%
Run 2: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 22.84 Mbps)
- Flow 1 egress (mean 22.71 Mbps)
- Flow 2 ingress (mean 17.57 Mbps)
- Flow 2 egress (mean 17.55 Mbps)
- Flow 3 ingress (mean 21.35 Mbps)
- Flow 3 egress (mean 20.91 Mbps)

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

- Flow 1 (95th percentile 30.61 ms)
- Flow 2 (95th percentile 21.33 ms)
- Flow 3 (95th percentile 45.12 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-08-22 19:52:32
End at: 2018-08-22 19:53:02
Local clock offset: -2.933 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2018-08-22 22:33:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.89 Mbit/s
95th percentile per-packet one-way delay: 45.338 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 22.01 Mbit/s
95th percentile per-packet one-way delay: 42.645 ms
Loss rate: 1.23%
-- Flow 2:
Average throughput: 23.79 Mbit/s
95th percentile per-packet one-way delay: 45.853 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 47.880 ms
Loss rate: 3.45%
Run 3: Report of PCC-Vivace — Data Link

![Graph showing Throughput and Delay]

**Throughput (Mbps)**

- **Flow 1 Ingress** (mean 22.27 Mbps)
- **Flow 1 Egress** (mean 22.01 Mbps)
- **Flow 2 Ingress** (mean 24.37 Mbps)
- **Flow 2 Egress** (mean 23.79 Mbps)
- **Flow 3 Ingress** (mean 25.28 Mbps)
- **Flow 3 Egress** (mean 24.41 Mbps)

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

- **Flow 1 95th percentile** 42.65 ms
- **Flow 2 95th percentile** 45.85 ms
- **Flow 3 95th percentile** 47.88 ms
Run 4: Statistics of PCC-Vivace

Start at: 2018-08-22 20:11:29
End at: 2018-08-22 20:11:59
Local clock offset: -2.603 ms
Remote clock offset: -12.473 ms

# Below is generated by plot.py at 2018-08-22 22:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.66 Mbit/s
95th percentile per-packet one-way delay: 7.025 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 58.19 Mbit/s
95th percentile per-packet one-way delay: 10.129 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 31.80 Mbit/s
95th percentile per-packet one-way delay: 4.931 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 22.16 Mbit/s
95th percentile per-packet one-way delay: 6.228 ms
Loss rate: 0.05%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-08-22 20:30:35
End at: 2018-08-22 20:31:05
Local clock offset: -4.189 ms
Remote clock offset: -15.274 ms

# Below is generated by plot.py at 2018-08-22 22:33:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 44.98 Mbit/s
  95th percentile per-packet one-way delay: 27.980 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 28.44 Mbit/s
  95th percentile per-packet one-way delay: 23.406 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 16.38 Mbit/s
  95th percentile per-packet one-way delay: 34.645 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 17.12 Mbit/s
  95th percentile per-packet one-way delay: 28.790 ms
  Loss rate: 0.14%
Run 5: Report of PCC-Vivace — Data Link
Run 6: Statistics of PCC-Vivace

Start at: 2018-08-22 20:49:36
End at: 2018-08-22 20:50:06
Local clock offset: -8.214 ms
Remote clock offset: -17.087 ms

# Below is generated by plot.py at 2018-08-22 22:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 26.684 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 28.02 Mbit/s
95th percentile per-packet one-way delay: 25.133 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 30.971 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 14.49 Mbit/s
95th percentile per-packet one-way delay: 22.951 ms
Loss rate: 0.65%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-08-22 21:08:38
End at: 2018-08-22 21:09:08
Local clock offset: -9.472 ms
Remote clock offset: -6.968 ms

# Below is generated by plot.py at 2018-08-22 22:33:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.81 Mbit/s
  95th percentile per-packet one-way delay: 38.644 ms
  Loss rate: 2.48%
-- Flow 1:
  Average throughput: 48.45 Mbit/s
  95th percentile per-packet one-way delay: 35.201 ms
  Loss rate: 2.81%
-- Flow 2:
  Average throughput: 23.42 Mbit/s
  95th percentile per-packet one-way delay: 35.991 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 23.58 Mbit/s
  95th percentile per-packet one-way delay: 48.773 ms
  Loss rate: 4.25%
Run 7: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress** (mean 49.85 Mbit/s)
- **Flow 1 egress** (mean 48.45 Mbit/s)
- **Flow 2 ingress** (mean 23.31 Mbit/s)
- **Flow 2 egress** (mean 23.42 Mbit/s)
- **Flow 3 ingress** (mean 24.61 Mbit/s)
- **Flow 3 egress** (mean 23.58 Mbit/s)
Run 8: Statistics of PCC-Vivace

Start at: 2018-08-22 21:27:38
End at: 2018-08-22 21:28:08
Local clock offset: -8.351 ms
Remote clock offset: 1.691 ms

# Below is generated by plot.py at 2018-08-22 22:33:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.71 Mbit/s
95th percentile per-packet one-way delay: 39.693 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 24.73 Mbit/s
95th percentile per-packet one-way delay: 14.460 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 44.800 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 22.98 Mbit/s
95th percentile per-packet one-way delay: 45.917 ms
Loss rate: 1.65%
Run 8: Report of PCC-Vivace — Data Link

![Graphs showing throughput and packet error delay over time for different flows with specified mean throughput and 95th percentile delay.]
Run 9: Statistics of PCC-Vivace

Start at: 2018-08-22 21:46:39
End at: 2018-08-22 21:47:09
Local clock offset: -5.406 ms
Remote clock offset: -0.554 ms

# Below is generated by plot.py at 2018-08-22 22:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.94 Mbit/s
95th percentile per-packet one-way delay: 5.010 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 55.03 Mbit/s
95th percentile per-packet one-way delay: 5.761 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.42 Mbit/s
95th percentile per-packet one-way delay: 3.482 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 17.17 Mbit/s
95th percentile per-packet one-way delay: 3.537 ms
Loss rate: 0.04%
Run 9: Report of PCC-Vivace — Data Link

![Graph of data link performance](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 55.03 Mbps)
  - Flow 1 egress (mean 55.03 Mbps)
  - Flow 2 ingress (mean 30.42 Mbps)
  - Flow 2 egress (mean 30.42 Mbps)
  - Flow 3 ingress (mean 17.17 Mbps)
  - Flow 3 egress (mean 17.17 Mbps)

![Graph of packet delay](image)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 5.76 ms)
  - Flow 2 (95th percentile 3.48 ms)
  - Flow 3 (95th percentile 3.54 ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-08-22 22:05:49
End at: 2018-08-22 22:06:19
Local clock offset: -2.872 ms
Remote clock offset: -0.757 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.01 Mbit/s
95th percentile per-packet one-way delay: 27.655 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 8.578 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.38 Mbit/s
95th percentile per-packet one-way delay: 32.439 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 22.27 Mbit/s
95th percentile per-packet one-way delay: 12.049 ms
Loss rate: 0.05%
Run 10: Report of PCC-Vivace — Data Link

![Graph of data link performance](image)

![Graph of packet delay](image)

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Run 1: Statistics of WebRTC media

Start at: 2018-08-22 19:01:13
End at: 2018-08-22 19:01:43
Local clock offset: -2.52 ms
Remote clock offset: -7.258 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 3.020 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 2.952 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 3.084 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 3.399 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-08-22 19:20:14
End at: 2018-08-22 19:20:44
Local clock offset: -3.962 ms
Remote clock offset: -6.743 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.73 Mbit/s
  95th percentile per-packet one-way delay: 3.814 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: 3.698 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.79 Mbit/s
  95th percentile per-packet one-way delay: 3.433 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 5.329 ms
  Loss rate: 0.01%
Run 2: Report of WebRTC media — Data Link

![Graph of throughput (Mbps) over time](image)

![Graph of packet delay (ms) over time](image)
Run 3: Statistics of WebRTC media

Start at: 2018-08-22 19:39:11
End at: 2018-08-22 19:39:41
Local clock offset: -3.196 ms
Remote clock offset: -0.817 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 4.838 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 4.823 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 4.736 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 5.214 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-08-22 19:58:11
End at: 2018-08-22 19:58:41
Local clock offset: -2.881 ms
Remote clock offset: -6.453 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 4.066 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: 4.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 3.903 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 4.176 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graphs showing throughput and packet delay over time for different data flows.](image-url)

- Flow 1 ingress (mean 1.52 Mbit/s)
- Flow 1 egress (mean 1.52 Mbit/s)
- Flow 2 ingress (mean 0.92 Mbit/s)
- Flow 2 egress (mean 0.92 Mbit/s)
- Flow 3 ingress (mean 0.43 Mbit/s)
- Flow 3 egress (mean 0.43 Mbit/s)

![Graphs showing packet delay over time for different data flows.](image-url)

- Flow 1 (95th percentile 4.09 ms)
- Flow 2 (95th percentile 3.90 ms)
- Flow 3 (95th percentile 4.18 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-08-22 20:17:15
End at: 2018-08-22 20:17:45
Local clock offset: -2.999 ms
Remote clock offset: -13.626 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 3.893 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.61 Mbit/s
95th percentile per-packet one-way delay: 3.854 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.81 Mbit/s
95th percentile per-packet one-way delay: 3.926 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 4.255 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 1.61 Mbps)
- Flow 1 egress (mean 1.61 Mbps)
- Flow 2 ingress (mean 0.81 Mbps)
- Flow 2 egress (mean 0.81 Mbps)
- Flow 3 ingress (mean 0.44 Mbps)
- Flow 3 egress (mean 0.44 Mbps)

![Graph 2: Packet Delay (ms)]

- Flow 1 (95th percentile 3.85 ms)
- Flow 2 (95th percentile 3.93 ms)
- Flow 3 (95th percentile 4.25 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-08-22 20:36:15
End at: 2018-08-22 20:36:45
Local clock offset: -5.044 ms
Remote clock offset: -15.862 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 3.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: 3.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 3.689 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 3.577 ms
Loss rate: 0.01%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-08-22 20:55:16
End at: 2018-08-22 20:55:46
Local clock offset: -8.818 ms
Remote clock offset: -17.682 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.74 Mbit/s
  95th percentile per-packet one-way delay: 3.631 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 1.51 Mbit/s
  95th percentile per-packet one-way delay: 3.519 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.90 Mbit/s
  95th percentile per-packet one-way delay: 3.753 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 0.35 Mbit/s
  95th percentile per-packet one-way delay: 3.953 ms
  Loss rate: 0.25%
Run 7: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 1.51 Mbit/s)  Flow 1 egress (mean 1.51 Mbit/s)
Flow 2 ingress (mean 0.90 Mbit/s)  Flow 2 egress (mean 0.90 Mbit/s)
Flow 3 ingress (mean 0.35 Mbit/s)  Flow 3 egress (mean 0.35 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 3.52 ms)  Flow 2 (95th percentile 3.75 ms)  Flow 3 (95th percentile 3.95 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-08-22 21:14:18
End at: 2018-08-22 21:14:48
Local clock offset: -8.33 ms
Remote clock offset: -3.221 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.79 Mbit/s
95th percentile per-packet one-way delay: 4.495 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 4.385 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 4.849 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 4.219 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph of WebRTC media throughput and packet delay over time]

- **Throughput (Mbps):**
  - Blue dashed line: Flow 1 ingress (mean 1.49 Mbps)
  - Blue solid line: Flow 1 egress (mean 1.49 Mbps)
  - Green dashed line: Flow 2 ingress (mean 0.91 Mbps)
  - Green solid line: Flow 2 egress (mean 0.91 Mbps)
  - Red dashed line: Flow 3 ingress (mean 0.39 Mbps)
  - Red solid line: Flow 3 egress (mean 0.39 Mbps)

- **Packet Delay (ms):**
  - Blue dashes: Flow 1 (95th percentile 4.38 ms)
  - Green dashes: Flow 2 (95th percentile 4.85 ms)
  - Red dashes: Flow 3 (95th percentile 4.22 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-08-22 21:33:17
End at: 2018-08-22 21:33:47
Local clock offset: -7.635 ms
Remote clock offset: 3.015 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.78 Mbit/s
95th percentile per-packet one-way delay: 5.017 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.50 Mbit/s
95th percentile per-packet one-way delay: 5.050 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 5.038 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 4.739 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.50 Mbit/s)
- Flow 1 egress (mean 1.50 Mbit/s)
- Flow 2 ingress (mean 0.90 Mbit/s)
- Flow 2 egress (mean 0.90 Mbit/s)
- Flow 3 ingress (mean 0.40 Mbit/s)
- Flow 3 egress (mean 0.40 Mbit/s)

Throughput (Mbps):
- Time (s)
- 0.0
- 0.5
- 1.0
- 1.5
- 2.0
- 2.5
- 3.0
- 3.5

Per packet one-way delay (ms):
- Flow 1 (95th percentile 5.05 ms)
- Flow 2 (95th percentile 5.04 ms)
- Flow 3 (95th percentile 4.74 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-08-22 21:52:25
End at: 2018-08-22 21:52:55
Local clock offset: -4.558 ms
Remote clock offset: -0.926 ms

# Below is generated by plot.py at 2018-08-22 22:33:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.92 Mbit/s
95th percentile per-packet one-way delay: 3.115 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 1.54 Mbit/s
95th percentile per-packet one-way delay: 2.956 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 3.287 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 3.144 ms
Loss rate: 0.59%
Run 10: Report of WebRTC media — Data Link