Pantheon Report

Data path: Mexico on em1 (remote) → AWS California 2 on ens5 (local).
Repeated the test of 24 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1054-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafed722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7e9a17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedb2f58e552f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e6d4
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20956337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1af9958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ec978f3ccf42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M  tools/plot.py
third_party/vavace  @  2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc  @  3f0cc2a9061a41b6f9d4e4735770d143a1fa2851
test from Mexico to AWS California 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>5</td>
<td>58.09 41.83 27.05</td>
<td>222.94 148.35 334.74</td>
<td>1.14 1.31 3.04</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>48.45 37.07 31.20</td>
<td>95.28 56.93 51.62</td>
<td>0.16 0.32 0.69</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>56.67 36.49 30.81</td>
<td>46.67 47.17 52.27</td>
<td>0.17 0.38 0.78</td>
</tr>
<tr>
<td>FillP</td>
<td>5</td>
<td>56.92 41.12 30.30</td>
<td>97.06 141.31 117.80</td>
<td>0.35 4.25 3.75</td>
</tr>
<tr>
<td>FillP-Sheep</td>
<td>5</td>
<td>57.03 41.44 28.66</td>
<td>106.28 110.30 131.84</td>
<td>0.27 0.54 1.79</td>
</tr>
<tr>
<td>Indigo</td>
<td>5</td>
<td>57.37 42.10 31.19</td>
<td>52.63 48.05 47.55</td>
<td>0.22 0.37 0.84</td>
</tr>
<tr>
<td>Indigo-MusesC3</td>
<td>5</td>
<td>62.64 37.41 32.97</td>
<td>56.10 74.66 65.12</td>
<td>0.25 0.49 1.19</td>
</tr>
<tr>
<td>Indigo-MusesC5</td>
<td>5</td>
<td>60.13 39.84 31.78</td>
<td>111.29 146.52 129.53</td>
<td>1.20 3.91 5.31</td>
</tr>
<tr>
<td>Indigo-MusesD</td>
<td>5</td>
<td>59.61 42.71 30.06</td>
<td>152.95 126.79 93.53</td>
<td>5.71 9.62 5.53</td>
</tr>
<tr>
<td>Indigo-MusesT</td>
<td>5</td>
<td>61.87 40.17 29.63</td>
<td>124.37 191.00 271.58</td>
<td>2.74 6.27 8.32</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>5</td>
<td>37.05 30.03 18.89</td>
<td>43.88 44.46 44.25</td>
<td>0.20 0.32 1.19</td>
</tr>
<tr>
<td>Muses_DecisionTree</td>
<td>5</td>
<td>55.74 40.77 34.02</td>
<td>49.59 53.31 57.34</td>
<td>0.21 0.32 0.86</td>
</tr>
<tr>
<td>Muses_DecisionTreeH0</td>
<td>5</td>
<td>47.01 31.89 29.95</td>
<td>234.14 272.83 193.52</td>
<td>0.80 1.10 2.41</td>
</tr>
<tr>
<td>Muses_DecisionTreeR0</td>
<td>5</td>
<td>56.28 42.46 29.35</td>
<td>49.98 50.49 70.54</td>
<td>0.15 0.35 0.81</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>58.07 40.79 21.58</td>
<td>2126.25 1043.06 611.67</td>
<td>11.28 6.95 7.32</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>5</td>
<td>59.36 38.07 25.80</td>
<td>848.12 1144.77 256.25</td>
<td>39.57 29.07 4.92</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>5</td>
<td>44.17 38.09 26.41</td>
<td>94.85 104.76 132.08</td>
<td>0.21 0.45 1.04</td>
</tr>
<tr>
<td>SCReAM</td>
<td>5</td>
<td>0.22 0.22 0.22</td>
<td>36.77 36.72 36.76</td>
<td>0.26 0.39 0.63</td>
</tr>
<tr>
<td>Sprout</td>
<td>5</td>
<td>11.72 11.60 11.19</td>
<td>41.80 41.75 41.90</td>
<td>0.24 0.36 0.80</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>5</td>
<td>40.98 33.47 83.48</td>
<td>104.47 123.75 53.28</td>
<td>0.06 0.10 0.83</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>5</td>
<td>46.97 32.94 34.65</td>
<td>40.37 39.07 41.20</td>
<td>0.20 0.33 0.88</td>
</tr>
<tr>
<td>Verus</td>
<td>5</td>
<td>53.20 37.17 26.26</td>
<td>159.37 154.33 409.83</td>
<td>0.37 0.87 1.65</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>53.48 36.24 25.65</td>
<td>944.25 478.92 192.60</td>
<td>2.94 3.46 2.54</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>5</td>
<td>1.78 1.00 0.43</td>
<td>37.26 37.29 37.49</td>
<td>0.13 0.24 0.75</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2019-12-11 15:06:23
End at: 2019-12-11 15:06:53
Local clock offset: 1.398 ms
Remote clock offset: 3.28 ms

# Below is generated by plot.py at 2019-12-11 17:26:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.15 Mbit/s
  95th percentile per-packet one-way delay: 179.919 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 58.43 Mbit/s
  95th percentile per-packet one-way delay: 180.185 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 39.51 Mbit/s
  95th percentile per-packet one-way delay: 173.637 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 31.58 Mbit/s
  95th percentile per-packet one-way delay: 284.117 ms
  Loss rate: 2.56%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2019-12-11 15:36:17
End at: 2019-12-11 15:36:47
Local clock offset: 2.004 ms
Remote clock offset: 3.67 ms

# Below is generated by plot.py at 2019-12-11 17:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.99 Mbit/s
95th percentile per-packet one-way delay: 240.309 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 55.77 Mbit/s
95th percentile per-packet one-way delay: 308.719 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 47.14 Mbit/s
95th percentile per-packet one-way delay: 73.811 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 296.799 ms
Loss rate: 2.89%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2019-12-11 16:06:40
End at: 2019-12-11 16:07:10
Local clock offset: 0.945 ms
Remote clock offset: 3.867 ms

# Below is generated by plot.py at 2019-12-11 17:26:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.74 Mbit/s
  95th percentile per-packet one-way delay: 195.902 ms
  Loss rate: 1.68%
-- Flow 1:
  Average throughput: 57.91 Mbit/s
  95th percentile per-packet one-way delay: 197.849 ms
  Loss rate: 1.46%
-- Flow 2:
  Average throughput: 39.58 Mbit/s
  95th percentile per-packet one-way delay: 171.700 ms
  Loss rate: 1.84%
-- Flow 3:
  Average throughput: 31.72 Mbit/s
  95th percentile per-packet one-way delay: 291.777 ms
  Loss rate: 2.50%
Run 4: Statistics of TCP BBR

Start at: 2019-12-11 16:37:33
End at: 2019-12-11 16:38:03
Local clock offset: -2.167 ms
Remote clock offset: 3.629 ms

# Below is generated by plot.py at 2019-12-11 17:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.67 Mbit/s
95th percentile per-packet one-way delay: 246.583 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 181.291 ms
Loss rate: 0.92%
-- Flow 2:
Average throughput: 35.79 Mbit/s
95th percentile per-packet one-way delay: 241.983 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 24.08 Mbit/s
95th percentile per-packet one-way delay: 401.588 ms
Loss rate: 3.61%
Run 4: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 63.33 Mbps)
- Flow 1 egress (mean 62.90 Mbps)
- Flow 2 ingress (mean 36.15 Mbps)
- Flow 2 egress (mean 35.79 Mbps)
- Flow 3 ingress (mean 24.80 Mbps)
- Flow 3 egress (mean 24.08 Mbps)

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

- Flow 1 (95th percentile 181.29 ms)
- Flow 2 (95th percentile 241.99 ms)
- Flow 3 (95th percentile 401.59 ms)
Run 5: Statistics of TCP BBR

Start at: 2019-12-11 17:09:39
End at: 2019-12-11 17:10:09
Local clock offset: 1.209 ms
Remote clock offset: 1.991 ms

# Below is generated by plot.py at 2019-12-11 17:26:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 246.394 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 55.42 Mbit/s
95th percentile per-packet one-way delay: 246.662 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 47.15 Mbit/s
95th percentile per-packet one-way delay: 80.631 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 24.14 Mbit/s
95th percentile per-packet one-way delay: 399.405 ms
Loss rate: 3.63%
Run 5: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 56.04 Mbps)
- Flow 2 ingress (mean 47.72 Mbps)
- Flow 3 ingress (mean 24.88 Mbps)
- Flow 1 egress (mean 55.42 Mbps)
- Flow 2 egress (mean 47.15 Mbps)
- Flow 3 egress (mean 24.14 Mbps)

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

- Flow 1 (95th percentile 246.66 ms)
- Flow 2 (95th percentile 80.63 ms)
- Flow 3 (95th percentile 399.40 ms)
Run 1: Statistics of Copa

Start at: 2019-12-11 14:51:34
End at: 2019-12-11 14:52:04
Local clock offset: 0.397 ms
Remote clock offset: 2.941 ms

# Below is generated by plot.py at 2019-12-11 17:27:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.46 Mbit/s
95th percentile per-packet one-way delay: 51.565 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 50.33 Mbit/s
95th percentile per-packet one-way delay: 57.379 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 32.06 Mbit/s
95th percentile per-packet one-way delay: 45.147 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 41.66 Mbit/s
95th percentile per-packet one-way delay: 51.196 ms
Loss rate: 0.75%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2019-12-11 15:21:09
End at: 2019-12-11 15:21:39
Local clock offset: 1.678 ms
Remote clock offset: 3.577 ms

# Below is generated by plot.py at 2019-12-11 17:27:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.95 Mbit/s
95th percentile per-packet one-way delay: 84.174 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 44.44 Mbit/s
95th percentile per-packet one-way delay: 105.424 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 45.25 Mbit/s
95th percentile per-packet one-way delay: 64.854 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.39 Mbit/s
95th percentile per-packet one-way delay: 39.323 ms
Loss rate: 0.75%
Run 2: Report of Copa — Data Link

![Graph showing throughput and packet inter-arrival time over time for different flows.]

Flow 1 ingress (mean 44.44 Mbit/s)  
Flow 1 egress (mean 44.44 Mbit/s)  
Flow 2 ingress (mean 45.23 Mbit/s)  
Flow 2 egress (mean 45.25 Mbit/s)  
Flow 3 ingress (mean 31.40 Mbit/s)  
Flow 3 egress (mean 31.39 Mbit/s)
Run 3: Statistics of Copa

Start at: 2019-12-11 15:51:43
End at: 2019-12-11 15:52:13
Local clock offset: 1.129 ms
Remote clock offset: 3.677 ms

# Below is generated by plot.py at 2019-12-11 17:27:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.44 Mbit/s
  95th percentile per-packet one-way delay: 82.018 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 49.31 Mbit/s
  95th percentile per-packet one-way delay: 104.579 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 35.89 Mbit/s
  95th percentile per-packet one-way delay: 61.370 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 30.96 Mbit/s
  95th percentile per-packet one-way delay: 63.344 ms
  Loss rate: 0.78%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2019-12-11 16:21:49
End at: 2019-12-11 16:22:19
Local clock offset: -1.266 ms
Remote clock offset: 3.466 ms

# Below is generated by plot.py at 2019-12-11 17:28:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.25 Mbit/s
  95th percentile per-packet one-way delay: 84.280 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 46.81 Mbit/s
  95th percentile per-packet one-way delay: 105.429 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 37.17 Mbit/s
  95th percentile per-packet one-way delay: 66.388 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 29.30 Mbit/s
  95th percentile per-packet one-way delay: 49.979 ms
  Loss rate: 0.22%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2019-12-11 16:53:00
End at: 2019-12-11 16:53:30
Local clock offset: 0.554 ms
Remote clock offset: 2.265 ms

# Below is generated by plot.py at 2019-12-11 17:28:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.12 Mbit/s
  95th percentile per-packet one-way delay: 73.458 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 51.34 Mbit/s
  95th percentile per-packet one-way delay: 103.580 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 34.96 Mbit/s
  95th percentile per-packet one-way delay: 46.915 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 22.68 Mbit/s
  95th percentile per-packet one-way delay: 54.246 ms
  Loss rate: 0.94%
Run 5: Report of Copa — Data Link

![Graph of throughput and packet loss]
Run 1: Statistics of TCP Cubic

Start at: 2019-12-11 15:05:08
End at: 2019-12-11 15:05:38
Local clock offset: 1.324 ms
Remote clock offset: 3.142 ms

# Below is generated by plot.py at 2019-12-11 17:28:54
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 90.69 Mbit/s
    95th percentile per-packet one-way delay: 48.021 ms
    Loss rate: 0.30%
-- Flow 1:
    Average throughput: 54.91 Mbit/s
    95th percentile per-packet one-way delay: 49.850 ms
    Loss rate: 0.13%
-- Flow 2:
    Average throughput: 41.12 Mbit/s
    95th percentile per-packet one-way delay: 44.974 ms
    Loss rate: 0.47%
-- Flow 3:
    Average throughput: 25.45 Mbit/s
    95th percentile per-packet one-way delay: 65.669 ms
    Loss rate: 0.85%
Run 1: Report of TCP Cubic — Data Link

![Graph of throughput and per-packet round trip delay]

- **Flow 1 ingress** (mean 54.85 Mbit/s)
- **Flow 1 egress** (mean 54.91 Mbit/s)
- **Flow 2 ingress** (mean 41.17 Mbit/s)
- **Flow 2 egress** (mean 41.12 Mbit/s)
- **Flow 3 ingress** (mean 25.48 Mbit/s)
- **Flow 3 egress** (mean 25.45 Mbit/s)
Run 2: Statistics of TCP Cubic

Start at: 2019-12-11 15:35:03
End at: 2019-12-11 15:35:33
Local clock offset: 1.973 ms
Remote clock offset: 3.715 ms

# Below is generated by plot.py at 2019-12-11 17:28:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 47.258 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 57.77 Mbit/s
95th percentile per-packet one-way delay: 46.027 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: 53.665 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 33.93 Mbit/s
95th percentile per-packet one-way delay: 45.287 ms
Loss rate: 0.80%
Run 2: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 57.72 Mbps)  Flow 1 egress (mean 57.77 Mbps)
Flow 2 ingress (mean 32.59 Mbps)  Flow 2 egress (mean 32.57 Mbps)
Flow 3 ingress (mean 33.96 Mbps)  Flow 3 egress (mean 33.93 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 46.03 ms)  Flow 2 (95th percentile 53.66 ms)  Flow 3 (95th percentile 45.29 ms)
Run 3: Statistics of TCP Cubic

Start at: 2019-12-11 16:05:26
End at: 2019-12-11 16:05:56
Local clock offset: 0.961 ms
Remote clock offset: 3.944 ms

# Below is generated by plot.py at 2019-12-11 17:28:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.73 Mbit/s
95th percentile per-packet one-way delay: 46.049 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 46.647 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 45.962 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 34.66 Mbit/s
95th percentile per-packet one-way delay: 45.757 ms
Loss rate: 0.68%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2019-12-11 16:36:16
End at: 2019-12-11 16:36:46
Local clock offset: -2.135 ms
Remote clock offset: 3.711 ms

# Below is generated by plot.py at 2019-12-11 17:28:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.75 Mbit/s
  95th percentile per-packet one-way delay: 46.438 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 55.35 Mbit/s
  95th percentile per-packet one-way delay: 46.200 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 37.41 Mbit/s
  95th percentile per-packet one-way delay: 45.824 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 34.78 Mbit/s
  95th percentile per-packet one-way delay: 46.727 ms
  Loss rate: 0.66%
Run 4: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 55.31 Mbit/s)**
- **Flow 1 egress (mean 55.35 Mbit/s)**
- **Flow 2 ingress (mean 37.42 Mbit/s)**
- **Flow 2 egress (mean 37.41 Mbit/s)**
- **Flow 3 ingress (mean 34.77 Mbit/s)**
- **Flow 3 egress (mean 34.78 Mbit/s)**
Run 5: Statistics of TCP Cubic

Start at: 2019-12-11 17:08:13
End at: 2019-12-11 17:08:43
Local clock offset: 1.276 ms
Remote clock offset: 2.028 ms

# Below is generated by plot.py at 2019-12-11 17:28:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.90 Mbit/s
  95th percentile per-packet one-way delay: 44.971 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 60.93 Mbit/s
  95th percentile per-packet one-way delay: 44.641 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 33.99 Mbit/s
  95th percentile per-packet one-way delay: 45.427 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 25.22 Mbit/s
  95th percentile per-packet one-way delay: 57.908 ms
  Loss rate: 0.89%
Run 5: Report of TCP Cubic — Data Link

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

Start at: 2019-12-11 15:03:54
End at: 2019-12-11 15:04:24
Local clock offset: 1.264 ms
Remote clock offset: 3.116 ms

# Below is generated by plot.py at 2019-12-11 17:29:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.41 Mbit/s
95th percentile per-packet one-way delay: 122.470 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 54.40 Mbit/s
95th percentile per-packet one-way delay: 124.415 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 120.586 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 123.569 ms
Loss rate: 3.16%
Run 1: Report of FillP — Data Link

![Graph showing network performance metrics over time]
Run 2: Statistics of FillP

Start at: 2019-12-11 15:33:49
End at: 2019-12-11 15:34:19
Local clock offset: 1.956 ms
Remote clock offset: 3.66 ms

# Below is generated by plot.py at 2019-12-11 17:29:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.40 Mbit/s
  95th percentile per-packet one-way delay: 131.483 ms
  Loss rate: 2.37%
-- Flow 1:
  Average throughput: 55.67 Mbit/s
  95th percentile per-packet one-way delay: 95.998 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 42.17 Mbit/s
  95th percentile per-packet one-way delay: 147.932 ms
  Loss rate: 6.10%
-- Flow 3:
  Average throughput: 32.13 Mbit/s
  95th percentile per-packet one-way delay: 109.823 ms
  Loss rate: 3.18%
Run 2: Report of FillP — Data Link

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

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

Start at: 2019-12-11 16:04:12
End at: 2019-12-11 16:04:42
Local clock offset: 0.992 ms
Remote clock offset: 3.97 ms

# Below is generated by plot.py at 2019-12-11 17:29:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.27 Mbit/s
95th percentile per-packet one-way delay: 115.569 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 60.13 Mbit/s
95th percentile per-packet one-way delay: 68.891 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 38.92 Mbit/s
95th percentile per-packet one-way delay: 136.354 ms
Loss rate: 5.48%
-- Flow 3:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 122.877 ms
Loss rate: 4.93%
Run 3: Report of FillP — Data Link

[Graph 1: Throughput (Mb/s) vs. Time (s)]

- Flow 1 ingress (mean 60.14 Mb/s)
- Flow 1 egress (mean 60.13 Mb/s)
- Flow 2 ingress (mean 41.06 Mb/s)
- Flow 2 egress (mean 38.92 Mb/s)
- Flow 3 ingress (mean 26.01 Mb/s)
- Flow 3 egress (mean 24.92 Mb/s)

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

- Flow 1 (95th percentile 68.89 ms)
- Flow 2 (95th percentile 136.35 ms)
- Flow 3 (95th percentile 122.88 ms)
Run 4: Statistics of FillP

Start at: 2019-12-11 16:34:54
End at: 2019-12-11 16:35:24
Local clock offset: -2.081 ms
Remote clock offset: 3.649 ms

# Below is generated by plot.py at 2019-12-11 17:29:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.21 Mbit/s
  95th percentile per-packet one-way delay: 139.089 ms
  Loss rate: 2.09%
  -- Flow 1:
  Average throughput: 53.58 Mbit/s
  95th percentile per-packet one-way delay: 113.164 ms
  Loss rate: 0.37%
  -- Flow 2:
  Average throughput: 38.51 Mbit/s
  95th percentile per-packet one-way delay: 165.871 ms
  Loss rate: 5.98%
  -- Flow 3:
  Average throughput: 45.38 Mbit/s
  95th percentile per-packet one-way delay: 95.638 ms
  Loss rate: 1.16%
Run 4: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 53.68 Mbps)
- Flow 1 egress (mean 53.58 Mbps)
- Flow 2 ingress (mean 40.82 Mbps)
- Flow 2 egress (mean 38.51 Mbps)
- Flow 3 ingress (mean 45.60 Mbps)
- Flow 3 egress (mean 45.38 Mbps)

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

- Flow 1 (95th percentile 113.16 ms)
- Flow 2 (95th percentile 165.87 ms)
- Flow 3 (95th percentile 95.64 ms)
Run 5: Statistics of FillP

Start at: 2019-12-11 17:06:43
End at: 2019-12-11 17:07:13
Local clock offset: 1.216 ms
Remote clock offset: 1.961 ms

# Below is generated by plot.py at 2019-12-11 17:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.26 Mbit/s
95th percentile per-packet one-way delay: 124.040 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 60.80 Mbit/s
95th percentile per-packet one-way delay: 82.811 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: 135.807 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 137.077 ms
Loss rate: 6.31%
Run 5: Report of FillP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2019-12-11 14:52:51
End at: 2019-12-11 14:53:21
Local clock offset: 0.521 ms
Remote clock offset: 2.836 ms

# Below is generated by plot.py at 2019-12-11 17:30:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.08 Mbit/s
95th percentile per-packet one-way delay: 114.428 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 55.88 Mbit/s
95th percentile per-packet one-way delay: 118.313 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 43.95 Mbit/s
95th percentile per-packet one-way delay: 67.850 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 27.06 Mbit/s
95th percentile per-packet one-way delay: 159.651 ms
Loss rate: 2.04%
Run 1: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 55.92 Mbit/s)
Flow 1 egress (mean 55.88 Mbit/s)
Flow 2 ingress (mean 44.01 Mbit/s)
Flow 2 egress (mean 43.95 Mbit/s)
Flow 3 ingress (mean 27.42 Mbit/s)
Flow 3 egress (mean 27.06 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 118.31 ms)
Flow 2 (95th percentile 67.85 ms)
Flow 3 (95th percentile 159.65 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-12-11 15:22:26
End at: 2019-12-11 15:22:56
Local clock offset: 1.711 ms
Remote clock offset: 3.696 ms

# Below is generated by plot.py at 2019-12-11 17:30:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.03 Mbit/s
95th percentile per-packet one-way delay: 113.650 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 56.21 Mbit/s
95th percentile per-packet one-way delay: 100.261 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 40.50 Mbit/s
95th percentile per-packet one-way delay: 119.225 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 32.77 Mbit/s
95th percentile per-packet one-way delay: 123.317 ms
Loss rate: 1.66%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

Start at: 2019-12-11 15:53:01
End at: 2019-12-11 15:53:31
Local clock offset: 1.081 ms
Remote clock offset: 3.757 ms

# Below is generated by plot.py at 2019-12-11 17:30:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 110.052 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 55.25 Mbit/s
95th percentile per-packet one-way delay: 121.414 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 45.48 Mbit/s
95th percentile per-packet one-way delay: 78.386 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 25.85 Mbit/s
95th percentile per-packet one-way delay: 143.600 ms
Loss rate: 1.72%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2019-12-11 16:23:20
End at: 2019-12-11 16:23:50
Local clock offset: -1.41 ms
Remote clock offset: 3.495 ms

# Below is generated by plot.py at 2019-12-11 17:30:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.22 Mbit/s
95th percentile per-packet one-way delay: 112.293 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 61.75 Mbit/s
95th percentile per-packet one-way delay: 88.307 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 35.82 Mbit/s
95th percentile per-packet one-way delay: 159.897 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 26.10 Mbit/s
95th percentile per-packet one-way delay: 144.625 ms
Loss rate: 2.05%
Run 4: Report of FillP-Sheep — Data Link

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

*Legend for Graph 1:*
- Flow 1 ingress (mean 61.80 Mbit/s)
- Flow 1 egress (mean 61.75 Mbit/s)
- Flow 2 ingress (mean 35.90 Mbit/s)
- Flow 2 egress (mean 35.82 Mbit/s)
- Flow 3 ingress (mean 26.46 Mbit/s)
- Flow 3 egress (mean 26.10 Mbit/s)

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

*Legend for Graph 2:*
- Flow 1 (95th percentile 88.31 ms)
- Flow 2 (95th percentile 159.90 ms)
- Flow 3 (95th percentile 144.62 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2019-12-11 16:54:35
End at: 2019-12-11 16:55:05
Local clock offset: 0.67 ms
Remote clock offset: 2.14 ms

# Below is generated by plot.py at 2019-12-11 17:31:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.05 Mbit/s
95th percentile per-packet one-way delay: 109.751 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 56.06 Mbit/s
95th percentile per-packet one-way delay: 103.115 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 41.43 Mbit/s
95th percentile per-packet one-way delay: 126.139 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 88.005 ms
Loss rate: 1.50%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2019-12-11 15:18:41
End at: 2019-12-11 15:19:11
Local clock offset: 1.653 ms
Remote clock offset: 3.467 ms

# Below is generated by plot.py at 2019-12-11 17:31:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.50 Mbit/s
95th percentile per-packet one-way delay: 49.411 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 58.86 Mbit/s
95th percentile per-packet one-way delay: 50.692 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 39.81 Mbit/s
95th percentile per-packet one-way delay: 49.328 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 45.342 ms
Loss rate: 0.82%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2019-12-11 15:49:10
End at: 2019-12-11 15:49:40
Local clock offset: 1.185 ms
Remote clock offset: 3.655 ms

# Below is generated by plot.py at 2019-12-11 17:31:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.43 Mbit/s
95th percentile per-packet one-way delay: 48.779 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.11 Mbit/s
95th percentile per-packet one-way delay: 55.028 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 47.62 Mbit/s
95th percentile per-packet one-way delay: 41.554 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 23.67 Mbit/s
95th percentile per-packet one-way delay: 52.420 ms
Loss rate: 0.88%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2019-12-11 16:19:13
End at: 2019-12-11 16:19:43
Local clock offset: -1.052 ms
Remote clock offset: 3.577 ms

# Below is generated by plot.py at 2019-12-11 17:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.89 Mbit/s
95th percentile per-packet one-way delay: 50.032 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 52.533 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 49.285 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 44.125 ms
Loss rate: 0.78%
Run 3: Report of Indigo — Data Link

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

Legend for throughput graph:
- Flow 1 ingress (mean 59.23 Mbit/s)
- Flow 1 egress (mean 59.24 Mbit/s)
- Flow 2 ingress (mean 39.88 Mbit/s)
- Flow 2 egress (mean 39.88 Mbit/s)
- Flow 3 ingress (mean 31.11 Mbit/s)
- Flow 3 egress (mean 31.10 Mbit/s)

Legend for per-packet one-way delay graph:
- Flow 1 (95th percentile 52.53 ms)
- Flow 2 (95th percentile 49.28 ms)
- Flow 3 (95th percentile 44.12 ms)
Run 4: Statistics of Indigo

Start at: 2019-12-11 16:50:12
End at: 2019-12-11 16:50:42
Local clock offset: 0.308 ms
Remote clock offset: 2.407 ms

# Below is generated by plot.py at 2019-12-11 17:31:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 52.159 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 56.57 Mbit/s
95th percentile per-packet one-way delay: 53.224 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.97 Mbit/s
95th percentile per-packet one-way delay: 55.878 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 46.15 Mbit/s
95th percentile per-packet one-way delay: 45.811 ms
Loss rate: 0.77%
Run 4: Report of Indigo — Data Link

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

Legend:
- Flow 1 ingress (mean 56.56 Mbit/s)
- Flow 1 egress (mean 56.57 Mbit/s)
- Flow 2 ingress (mean 35.96 Mbit/s)
- Flow 2 egress (mean 35.97 Mbit/s)
- Flow 3 ingress (mean 46.17 Mbit/s)
- Flow 3 egress (mean 46.13 Mbit/s)
Run 5: Statistics of Indigo

Start at: 2019-12-11 17:22:33
End at: 2019-12-11 17:23:03
Local clock offset: 1.049 ms
Remote clock offset: 2.945 ms

# Below is generated by plot.py at 2019-12-11 17:31:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.23 Mbit/s
95th percentile per-packet one-way delay: 48.732 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 51.668 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 44.220 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 23.90 Mbit/s
95th percentile per-packet one-way delay: 50.039 ms
Loss rate: 0.95%
Run 5: Report of Indigo — Data Link

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**Throughput (Mbps)**

Time (s)

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**Delay (ms)**

Time (s)

---

Flow 1 ingress (mean 56.05 Mbps)  
Flow 1 egress (mean 56.05 Mbps)  
Flow 2 ingress (mean 47.26 Mbps)  
Flow 2 egress (mean 47.24 Mbps)  
Flow 3 ingress (mean 23.96 Mbps)  
Flow 3 egress (mean 23.90 Mbps)  

Flow 1 (95th percentile 51.67 ms)  
Flow 2 (95th percentile 44.22 ms)  
Flow 3 (95th percentile 50.04 ms)
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-12-11 14:54:04
End at: 2019-12-11 14:54:34
Local clock offset: 0.662 ms
Remote clock offset: 2.881 ms

# Below is generated by plot.py at 2019-12-11 17:31:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 70.116 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 58.32 Mbit/s
95th percentile per-packet one-way delay: 66.741 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 37.35 Mbit/s
95th percentile per-packet one-way delay: 77.684 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 59.158 ms
Loss rate: 1.00%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-12-11 15:23:39
End at: 2019-12-11 15:24:09
Local clock offset: 1.724 ms
Remote clock offset: 3.696 ms

# Below is generated by plot.py at 2019-12-11 17:32:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.39 Mbit/s
  95th percentile per-packet one-way delay: 63.201 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 65.41 Mbit/s
  95th percentile per-packet one-way delay: 50.426 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 37.56 Mbit/s
  95th percentile per-packet one-way delay: 72.957 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 23.60 Mbit/s
  95th percentile per-packet one-way delay: 72.232 ms
  Loss rate: 1.40%
Run 2: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 65.42 Mbit/s)
- Flow 1 egress (mean 65.41 Mbit/s)
- Flow 2 ingress (mean 37.60 Mbit/s)
- Flow 2 egress (mean 37.56 Mbit/s)
- Flow 3 ingress (mean 23.72 Mbit/s)
- Flow 3 egress (mean 23.60 Mbit/s)
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-12-11 15:54:14
End at: 2019-12-11 15:54:44
Local clock offset: 1.057 ms
Remote clock offset: 3.8 ms

# Below is generated by plot.py at 2019-12-11 17:32:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 62.245 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 65.45 Mbit/s
95th percentile per-packet one-way delay: 49.016 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.53 Mbit/s
95th percentile per-packet one-way delay: 80.550 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 23.61 Mbit/s
95th percentile per-packet one-way delay: 70.010 ms
Loss rate: 1.39%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-12-11 16:24:39
End at: 2019-12-11 16:25:09
Local clock offset: -1.528 ms
Remote clock offset: 3.532 ms

# Below is generated by plot.py at 2019-12-11 17:32:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.28 Mbit/s
  95th percentile per-packet one-way delay: 66.000 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 58.63 Mbit/s
  95th percentile per-packet one-way delay: 65.379 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 37.21 Mbit/s
  95th percentile per-packet one-way delay: 69.474 ms
  Loss rate: 0.44%
-- Flow 3:
  Average throughput: 46.93 Mbit/s
  95th percentile per-packet one-way delay: 55.750 ms
  Loss rate: 0.97%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-12-11 16:55:58
End at: 2019-12-11 16:56:28
Local clock offset: 0.771 ms
Remote clock offset: 2.133 ms

# Below is generated by plot.py at 2019-12-11 17:32:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.38 Mbit/s
95th percentile per-packet one-way delay: 61.365 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 48.918 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 37.39 Mbit/s
95th percentile per-packet one-way delay: 72.658 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 23.88 Mbit/s
95th percentile per-packet one-way delay: 68.450 ms
Loss rate: 1.21%
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-12-11 14:56:31
End at: 2019-12-11 14:57:01
Local clock offset: 0.859 ms
Remote clock offset: 2.85 ms

# Below is generated by plot.py at 2019-12-11 17:32:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 169.945 ms
Loss rate: 3.58%
-- Flow 1:
Average throughput: 57.54 Mbit/s
95th percentile per-packet one-way delay: 184.947 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 36.98 Mbit/s
95th percentile per-packet one-way delay: 156.019 ms
Loss rate: 5.68%
-- Flow 3:
Average throughput: 45.46 Mbit/s
95th percentile per-packet one-way delay: 105.503 ms
Loss rate: 4.01%
Run 1: Report of Indigo-MusesC5 — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress**: mean 58.02 Mbps
- **Flow 1 egress**: mean 57.54 Mbps
- **Flow 2 ingress**: mean 39.06 Mbps
- **Flow 2 egress**: mean 36.98 Mbps
- **Flow 3 ingress**: mean 46.99 Mbps
- **Flow 3 egress**: mean 45.46 Mbps

---

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

- **Flow 1**: 95th percentile 184.95 ms
- **Flow 2**: 95th percentile 156.02 ms
- **Flow 3**: 95th percentile 105.50 ms
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-12-11 15:26:06
End at: 2019-12-11 15:26:36
Local clock offset: 1.797 ms
Remote clock offset: 3.864 ms

# Below is generated by plot.py at 2019-12-11 17:32:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 115.943 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 61.00 Mbit/s
95th percentile per-packet one-way delay: 89.934 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 41.40 Mbit/s
95th percentile per-packet one-way delay: 135.458 ms
Loss rate: 3.27%
-- Flow 3:
Average throughput: 26.06 Mbit/s
95th percentile per-packet one-way delay: 132.164 ms
Loss rate: 6.10%
Run 2: Report of Indigo-MusesC5 — Data Link

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

- **Flow 1 ingress (mean 61.21 Mbit/s)**
- **Flow 1 egress (mean 61.00 Mbit/s)**
- **Flow 2 ingress (mean 42.63 Mbit/s)**
- **Flow 2 egress (mean 41.40 Mbit/s)**
- **Flow 3 ingress (mean 27.52 Mbit/s)**
- **Flow 3 egress (mean 26.06 Mbit/s)**

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

- **Flow 1 (95th percentile 89.93 ms)**
- **Flow 2 (95th percentile 135.46 ms)**
- **Flow 3 (95th percentile 132.10 ms)**
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-12-11 15:56:42
End at: 2019-12-11 15:57:12
Local clock offset: 1.058 ms
Remote clock offset: 3.843 ms

# Below is generated by plot.py at 2019-12-11 17:32:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.00 Mbit/s
  95th percentile per-packet one-way delay: 106.201 ms
  Loss rate: 2.18%
-- Flow 1:
  Average throughput: 61.04 Mbit/s
  95th percentile per-packet one-way delay: 100.713 ms
  Loss rate: 1.54%
-- Flow 2:
  Average throughput: 37.58 Mbit/s
  95th percentile per-packet one-way delay: 99.486 ms
  Loss rate: 2.85%
-- Flow 3:
  Average throughput: 33.03 Mbit/s
  95th percentile per-packet one-way delay: 112.867 ms
  Loss rate: 4.46%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-12-11 16:27:18
End at: 2019-12-11 16:27:48
Local clock offset: -1.718 ms
Remote clock offset: 3.568 ms

# Below is generated by plot.py at 2019-12-11 17:32:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.47 Mbit/s
95th percentile per-packet one-way delay: 159.296 ms
Loss rate: 2.24%
-- Flow 1:
Average throughput: 61.41 Mbit/s
95th percentile per-packet one-way delay: 90.328 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 41.45 Mbit/s
95th percentile per-packet one-way delay: 195.531 ms
Loss rate: 4.20%
-- Flow 3:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 153.964 ms
Loss rate: 6.63%
Run 4: Report of Indigo-MusesC5 — Data Link

![Graph showing throughput and delay over time for different flows.](image-url)
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-12-11 16:58:39
End at: 2019-12-11 16:59:09
Local clock offset: 0.906 ms
Remote clock offset: 2.154 ms

# Below is generated by plot.py at 2019-12-11 17:33:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.16 Mbit/s
95th percentile per-packet one-way delay: 109.283 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 90.549 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 41.78 Mbit/s
95th percentile per-packet one-way delay: 146.126 ms
Loss rate: 3.57%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: 143.137 ms
Loss rate: 5.37%
Run 5: Report of Indigo-MusesC5 — Data Link

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

Legend:
- Flow 1 ingress (mean 59.86 Mbit/s)
- Flow 1 egress (mean 59.66 Mbit/s)
- Flow 2 ingress (mean 43.15 Mbit/s)
- Flow 2 egress (mean 41.78 Mbit/s)
- Flow 3 ingress (mean 30.89 Mbit/s)
- Flow 3 egress (mean 29.49 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 90.55 ms)
- Flow 2 (95th percentile 146.13 ms)
- Flow 3 (95th percentile 143.14 ms)
Run 1: Statistics of Indigo-MusesD

Start at: 2019-12-11 15:16:13
End at: 2019-12-11 15:16:43
Local clock offset: 1.589 ms
Remote clock offset: 3.391 ms

# Below is generated by plot.py at 2019-12-11 17:33:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.02 Mbit/s
95th percentile per-packet one-way delay: 151.547 ms
Loss rate: 7.56%
-- Flow 1:
Average throughput: 58.97 Mbit/s
95th percentile per-packet one-way delay: 153.910 ms
Loss rate: 5.82%
-- Flow 2:
Average throughput: 47.65 Mbit/s
95th percentile per-packet one-way delay: 140.780 ms
Loss rate: 10.78%
-- Flow 3:
Average throughput: 21.71 Mbit/s
95th percentile per-packet one-way delay: 86.789 ms
Loss rate: 7.19%
Run 1: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 62.47 Mbit/s)
- Flow 1 egress (mean 58.97 Mbit/s)
- Flow 2 ingress (mean 53.20 Mbit/s)
- Flow 2 egress (mean 47.65 Mbit/s)
- Flow 3 ingress (mean 23.20 Mbit/s)
- Flow 3 egress (mean 21.71 Mbit/s)

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

- Flow 1 (95th percentile 153.91 ms)
- Flow 2 (95th percentile 140.78 ms)
- Flow 3 (95th percentile 86.79 ms)
Run 2: Statistics of Indigo-MusesD

Start at: 2019-12-11 15:46:36
End at: 2019-12-11 15:47:06
Local clock offset: 1.32 ms
Remote clock offset: 3.644 ms

# Below is generated by plot.py at 2019-12-11 17:33:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.97 Mbit/s
95th percentile per-packet one-way delay: 151.841 ms
Loss rate: 4.24%
-- Flow 1:
Average throughput: 59.07 Mbit/s
95th percentile per-packet one-way delay: 155.098 ms
Loss rate: 5.82%
-- Flow 2:
Average throughput: 47.29 Mbit/s
95th percentile per-packet one-way delay: 68.341 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 22.02 Mbit/s
95th percentile per-packet one-way delay: 91.781 ms
Loss rate: 6.43%
Run 2: Report of Indigo-MusesD — Data Link

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

- **Flow 1 ingress (mean 62.57 Mbit/s)**
- **Flow 1 egress (mean 59.07 Mbit/s)**
- **Flow 2 ingress (mean 47.36 Mbit/s)**
- **Flow 2 egress (mean 47.29 Mbit/s)**
- **Flow 3 ingress (mean 23.33 Mbit/s)**
- **Flow 3 egress (mean 22.02 Mbit/s)**

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

- **Flow 1 (95th percentile 155.10 ms)**
- **Flow 2 (95th percentile 68.34 ms)**
- **Flow 3 (95th percentile 91.78 ms)**
Run 3: Statistics of Indigo-MusesD

Start at: 2019-12-11 16:16:42
End at: 2019-12-11 16:17:12
Local clock offset: -0.721 ms
Remote clock offset: 3.588 ms

# Below is generated by plot.py at 2019-12-11 17:33:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.93 Mbit/s
  95th percentile per-packet one-way delay: 151.189 ms
  Loss rate: 7.00%
-- Flow 1:
  Average throughput: 58.52 Mbit/s
  95th percentile per-packet one-way delay: 152.673 ms
  Loss rate: 5.68%
-- Flow 2:
  Average throughput: 37.56 Mbit/s
  95th percentile per-packet one-way delay: 130.944 ms
  Loss rate: 12.78%
-- Flow 3:
  Average throughput: 45.21 Mbit/s
  95th percentile per-packet one-way delay: 61.068 ms
  Loss rate: 1.06%
Run 3: Report of Indigo-MusesD — Data Link

### Throughput (Mbit/s)

- **Flow 1 ingress (mean 61.91 Mbit/s)**
- **Flow 1 egress (mean 58.52 Mbit/s)**
- **Flow 2 ingress (mean 42.90 Mbit/s)**
- **Flow 2 egress (mean 37.56 Mbit/s)**
- **Flow 3 ingress (mean 45.30 Mbit/s)**
- **Flow 3 egress (mean 45.21 Mbit/s)**

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

- **Flow 1 (95th percentile 152.67 ms)**
- **Flow 2 (95th percentile 130.94 ms)**
- **Flow 3 (95th percentile 61.07 ms)**
Run 4: Statistics of Indigo-MusesD

Start at: 2019-12-11 16:47:34
End at: 2019-12-11 16:48:04
Local clock offset: -0.028 ms
Remote clock offset: 2.441 ms

# Below is generated by plot.py at 2019-12-11 17:33:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.86 Mbit/s
95th percentile per-packet one-way delay: 151.297 ms
Loss rate: 7.68%
-- Flow 1:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 152.422 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 40.52 Mbit/s
95th percentile per-packet one-way delay: 143.253 ms
Loss rate: 12.06%
-- Flow 3:
Average throughput: 30.91 Mbit/s
95th percentile per-packet one-way delay: 130.422 ms
Loss rate: 8.08%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Start at: 2019-12-11 17:20:02
End at: 2019-12-11 17:20:32
Local clock offset: 1.068 ms
Remote clock offset: 2.92 ms

# Below is generated by plot.py at 2019-12-11 17:34:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.88 Mbit/s
  95th percentile per-packet one-way delay: 150.217 ms
  Loss rate: 7.39%
-- Flow 1:
  Average throughput: 60.75 Mbit/s
  95th percentile per-packet one-way delay: 150.634 ms
  Loss rate: 5.65%
-- Flow 2:
  Average throughput: 40.52 Mbit/s
  95th percentile per-packet one-way delay: 150.648 ms
  Loss rate: 11.95%
-- Flow 3:
  Average throughput: 30.47 Mbit/s
  95th percentile per-packet one-way delay: 97.592 ms
  Loss rate: 4.90%
Run 5: Report of Indigo-MusesD — Data Link
Run 1: Statistics of Indigo-MusesT

Start at: 2019-12-11 15:17:27
End at: 2019-12-11 15:17:57
Local clock offset: 1.624 ms
Remote clock offset: 3.414 ms

# Below is generated by plot.py at 2019-12-11 17:34:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 177.481 ms
Loss rate: 4.23%
-- Flow 1:
Average throughput: 61.13 Mbit/s
95th percentile per-packet one-way delay: 128.467 ms
Loss rate: 2.95%
-- Flow 2:
Average throughput: 40.99 Mbit/s
95th percentile per-packet one-way delay: 144.689 ms
Loss rate: 6.00%
-- Flow 3:
Average throughput: 30.76 Mbit/s
95th percentile per-packet one-way delay: 284.070 ms
Loss rate: 7.47%
Run 1: Report of Indigo-MusesT — Data Link

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

Flow 1 ingress (mean 62.85 Mbit/s)  Flow 1 egress (mean 61.13 Mbit/s)
Flow 2 ingress (mean 43.48 Mbit/s)  Flow 2 egress (mean 40.99 Mbit/s)
Flow 3 ingress (mean 32.97 Mbit/s)  Flow 3 egress (mean 30.76 Mbit/s)

Flow 1 (95th percentile 128.47 ms)  Flow 2 (95th percentile 144.69 ms)  Flow 3 (95th percentile 284.07 ms)
Run 2: Statistics of Indigo-MusesT

Start at: 2019-12-11 15:47:52
End at: 2019-12-11 15:48:22
Local clock offset: 1.239 ms
Remote clock offset: 3.719 ms

# Below is generated by plot.py at 2019-12-11 17:34:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.39 Mbit/s
  95th percentile per-packet one-way delay: 168.099 ms
  Loss rate: 4.78%
-- Flow 1:
  Average throughput: 60.78 Mbit/s
  95th percentile per-packet one-way delay: 117.680 ms
  Loss rate: 3.18%
-- Flow 2:
  Average throughput: 40.95 Mbit/s
  95th percentile per-packet one-way delay: 212.856 ms
  Loss rate: 7.32%
-- Flow 3:
  Average throughput: 30.86 Mbit/s
  95th percentile per-packet one-way delay: 316.033 ms
  Loss rate: 7.57%
Run 2: Report of Indigo-MusesT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 62.67 Mbps)  Flow 1 egress (mean 60.78 Mbps)
Flow 2 ingress (mean 44.02 Mbps)  Flow 2 egress (mean 60.95 Mbps)
Flow 3 ingress (mean 33.17 Mbps)  Flow 3 egress (mean 30.86 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 117.68 ms)  Flow 2 (95th percentile 212.86 ms)  Flow 3 (95th percentile 316.03 ms)
Run 3: Statistics of Indigo-MusesT

Start at: 2019-12-11 16:17:58
End at: 2019-12-11 16:18:28
Local clock offset: -0.858 ms
Remote clock offset: 3.528 ms

# Below is generated by plot.py at 2019-12-11 17:34:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.46 Mbit/s
95th percentile per-packet one-way delay: 185.124 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 61.15 Mbit/s
95th percentile per-packet one-way delay: 111.455 ms
Loss rate: 2.83%
-- Flow 2:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 192.876 ms
Loss rate: 5.94%
-- Flow 3:
Average throughput: 30.76 Mbit/s
95th percentile per-packet one-way delay: 300.654 ms
Loss rate: 6.69%
Run 3: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 62.77 Mbps)
- Flow 1 egress (mean 61.15 Mbps)
- Flow 2 ingress (mean 43.38 Mbps)
- Flow 2 egress (mean 40.96 Mbps)
- Flow 3 ingress (mean 32.68 Mbps)
- Flow 3 egress (mean 30.76 Mbps)

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

- Flow 1 (95th percentile 111.45 ms)
- Flow 2 (95th percentile 192.88 ms)
- Flow 3 (95th percentile 300.65 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-12-11 16:48:51
End at: 2019-12-11 16:49:21
Local clock offset: 0.134 ms
Remote clock offset: 2.405 ms

# Below is generated by plot.py at 2019-12-11 17:34:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.44 Mbit/s
95th percentile per-packet one-way delay: 177.824 ms
Loss rate: 3.82%
-- Flow 1:
Average throughput: 65.45 Mbit/s
95th percentile per-packet one-way delay: 86.341 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 248.749 ms
Loss rate: 5.57%
-- Flow 3:
Average throughput: 24.42 Mbit/s
95th percentile per-packet one-way delay: 282.597 ms
Loss rate: 11.50%
Run 4: Report of Indigo-MusesT — Data Link
Run 5: Statistics of Indigo-MusesT

Start at: 2019-12-11 17:21:18
End at: 2019-12-11 17:21:48
Local clock offset: 1.075 ms
Remote clock offset: 2.893 ms

# Below is generated by plot.py at 2019-12-11 17:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 167.210 ms
Loss rate: 4.21%
-- Flow 1:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 177.882 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 41.03 Mbit/s
95th percentile per-packet one-way delay: 155.809 ms
Loss rate: 6.53%
-- Flow 3:
Average throughput: 31.34 Mbit/s
95th percentile per-packet one-way delay: 174.527 ms
Loss rate: 8.38%
Run 1: Statistics of LEDEBAT

Start at: 2019-12-11 14:55:18
End at: 2019-12-11 14:55:48
Local clock offset: 0.778 ms
Remote clock offset: 2.767 ms

# Below is generated by plot.py at 2019-12-11 17:34:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.38 Mbit/s
95th percentile per-packet one-way delay: 44.019 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 38.46 Mbit/s
95th percentile per-packet one-way delay: 44.094 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 26.29 Mbit/s
95th percentile per-packet one-way delay: 45.460 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 22.45 Mbit/s
95th percentile per-packet one-way delay: 39.442 ms
Loss rate: 1.45%
Run 1: Report of LEDBAT — Data Link

![Graph showing throughput and per-packet round-trip time delay](image-url)
Run 2: Statistics of LEDBAT

Start at: 2019-12-11 15:24:53
End at: 2019-12-11 15:25:23
Local clock offset: 1.742 ms
Remote clock offset: 3.752 ms

# Below is generated by plot.py at 2019-12-11 17:34:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.16 Mbit/s
  95th percentile per-packet one-way delay: 43.536 ms
  Loss rate: 0.30%
-- Flow 1:
  Average throughput: 34.02 Mbit/s
  95th percentile per-packet one-way delay: 43.364 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 28.93 Mbit/s
  95th percentile per-packet one-way delay: 44.070 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 20.83 Mbit/s
  95th percentile per-packet one-way delay: 43.348 ms
  Loss rate: 0.82%
Run 2: Report of LEDBAT — Data Link

![Throughput Graph]

![Latency Graph]

Legend:
- Flow 1 ingress (mean 34.00 Mbit/s)
- Flow 1 egress (mean 34.02 Mbit/s)
- Flow 2 ingress (mean 28.92 Mbit/s)
- Flow 2 egress (mean 28.93 Mbit/s)
- Flow 3 ingress (mean 20.86 Mbit/s)
- Flow 3 egress (mean 20.83 Mbit/s)

Legend:
- Flow 1 (95th percentile 43.36 ms)
- Flow 2 (95th percentile 44.07 ms)
- Flow 3 (95th percentile 43.35 ms)
Run 3: Statistics of LEDBAT

End at: 2019-12-11 15:55:58
Local clock offset: 1.025 ms
Remote clock offset: 3.813 ms

# Below is generated by plot.py at 2019-12-11 17:34:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.11 Mbit/s
95th percentile per-packet one-way delay: 44.044 ms
Loss rate: 0.35%

-- Flow 1:
Average throughput: 36.58 Mbit/s
95th percentile per-packet one-way delay: 43.840 ms
Loss rate: 0.20%

-- Flow 2:
Average throughput: 32.91 Mbit/s
95th percentile per-packet one-way delay: 43.969 ms
Loss rate: 0.37%

-- Flow 3:
Average throughput: 16.98 Mbit/s
95th percentile per-packet one-way delay: 45.229 ms
Loss rate: 1.27%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2019-12-11 16:26:00
End at: 2019-12-11 16:26:30
Local clock offset: -1.641 ms
Remote clock offset: 3.693 ms

# Below is generated by plot.py at 2019-12-11 17:34:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 44.815 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 36.49 Mbit/s
95th percentile per-packet one-way delay: 44.365 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 43.979 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 17.58 Mbit/s
95th percentile per-packet one-way delay: 48.166 ms
Loss rate: 1.07%
Run 4: Report of LEDBAT — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 36.48 Mbps)
  - Flow 1 egress (mean 36.49 Mbps)
  - Flow 2 ingress (mean 33.19 Mbps)
  - Flow 2 egress (mean 33.19 Mbps)
  - Flow 3 ingress (mean 17.84 Mbps)
  - Flow 3 egress (mean 17.58 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 44.37 ms)
  - Flow 2 (95th percentile 43.98 ms)
  - Flow 3 (95th percentile 48.17 ms)
Run 5: Statistics of LEDBAT

Start at: 2019-12-11 16:57:20
End at: 2019-12-11 16:57:50
Local clock offset: 0.856 ms
Remote clock offset: 2.087 ms

# Below is generated by plot.py at 2019-12-11 17:34:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.39 Mbit/s
  95th percentile per-packet one-way delay: 44.056 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 39.70 Mbit/s
  95th percentile per-packet one-way delay: 43.722 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 28.83 Mbit/s
  95th percentile per-packet one-way delay: 44.813 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 16.62 Mbit/s
  95th percentile per-packet one-way delay: 45.086 ms
  Loss rate: 1.32%
Run 5: Report of LEDBAT — Data Link

![Throughput Over Time Graph]

![Per Packet One Way Delay Graph]

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Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 15:12:33
End at: 2019-12-11 15:13:03
Local clock offset: 1.52 ms
Remote clock offset: 3.424 ms

# Below is generated by plot.py at 2019-12-11 17:35:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.80 Mbit/s
95th percentile per-packet one-way delay: 50.707 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 56.54 Mbit/s
95th percentile per-packet one-way delay: 49.752 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 40.54 Mbit/s
95th percentile per-packet one-way delay: 52.771 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 32.42 Mbit/s
95th percentile per-packet one-way delay: 47.970 ms
Loss rate: 1.28%
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 15:42:42
End at: 2019-12-11 15:43:12
Local clock offset: 1.606 ms
Remote clock offset: 3.595 ms

# Below is generated by plot.py at 2019-12-11 17:35:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.76 Mbit/s
  95th percentile per-packet one-way delay: 52.852 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 57.59 Mbit/s
  95th percentile per-packet one-way delay: 49.434 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 39.02 Mbit/s
  95th percentile per-packet one-way delay: 58.268 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 32.04 Mbit/s
  95th percentile per-packet one-way delay: 60.642 ms
  Loss rate: 0.85%
Run 2: Report of Muses_DecisionTree — Data Link
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 16:12:56
End at: 2019-12-11 16:13:26
Local clock offset: -0.104 ms
Remote clock offset: 3.585 ms

# Below is generated by plot.py at 2019-12-11 17:35:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.79 Mbit/s
  95th percentile per-packet one-way delay: 51.454 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 54.12 Mbit/s
  95th percentile per-packet one-way delay: 50.379 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 47.09 Mbit/s
  95th percentile per-packet one-way delay: 49.941 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 25.86 Mbit/s
  95th percentile per-packet one-way delay: 61.656 ms
  Loss rate: 0.73%
Run 3: Report of Muses

DecisionTree — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 54.06 Mbps)
- Flow 1 egress (mean 54.12 Mbps)
- Flow 2 ingress (mean 47.12 Mbps)
- Flow 2 egress (mean 47.09 Mbps)
- Flow 3 ingress (mean 25.86 Mbps)
- Flow 3 egress (mean 25.86 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)

- Flow 1 (95th percentile 50.38 ms)
- Flow 2 (95th percentile 49.94 ms)
- Flow 3 (95th percentile 61.66 ms)
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 16:43:44
End at: 2019-12-11 16:44:14
Local clock offset: -0.745 ms
Remote clock offset: 2.74 ms

# Below is generated by plot.py at 2019-12-11 17:35:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.52 Mbit/s
95th percentile per-packet one-way delay: 51.554 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 57.00 Mbit/s
95th percentile per-packet one-way delay: 49.589 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 51.172 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 61.024 ms
Loss rate: 0.76%
Run 4: Report of Muses_DecisionTree — Data Link

![Graph showing network performance metrics over time. The top graph displays throughput in Mbps, and the bottom graph shows per-packet one-way delay in ms. Each flow is represented by a different line color, and specific metrics are indicated for each flow.]
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 17:16:12  
End at: 2019-12-11 17:16:42  
Local clock offset: 1.108 ms  
Remote clock offset: 2.537 ms

# Below is generated by plot.py at 2019-12-11 17:36:08  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 93.85 Mbit/s  
95th percentile per-packet one-way delay: 52.227 ms  
Loss rate: 0.27%  
-- Flow 1:  
Average throughput: 53.43 Mbit/s  
95th percentile per-packet one-way delay: 48.791 ms  
Loss rate: 0.13%  
-- Flow 2:  
Average throughput: 37.82 Mbit/s  
95th percentile per-packet one-way delay: 54.407 ms  
Loss rate: 0.32%  
-- Flow 3:  
Average throughput: 47.43 Mbit/s  
95th percentile per-packet one-way delay: 55.395 ms  
Loss rate: 0.69%
Run 5: Report of Muses_DecisionTree — Data Link
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 14:50:21
End at: 2019-12-11 14:50:51
Local clock offset: 0.246 ms
Remote clock offset: 2.763 ms

# Below is generated by plot.py at 2019-12-11 17:36:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.67 Mbit/s
95th percentile per-packet one-way delay: 219.424 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 46.15 Mbit/s
95th percentile per-packet one-way delay: 220.073 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 254.580 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 136.378 ms
Loss rate: 2.26%
Run 1: Report of Muses_DecisionTreeH0 — Data Link
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 15:19:56
End at: 2019-12-11 15:20:26
Local clock offset: 1.697 ms
Remote clock offset: 3.504 ms

# Below is generated by plot.py at 2019-12-11 17:36:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.36 Mbit/s
95th percentile per-packet one-way delay: 233.652 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 48.31 Mbit/s
95th percentile per-packet one-way delay: 192.618 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 33.45 Mbit/s
95th percentile per-packet one-way delay: 267.085 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 263.393 ms
Loss rate: 3.68%
Run 2: Report of Muses_DecisionTreeH0 — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 48.84 Mbps)
- Flow 1 egress (mean 48.31 Mbps)
- Flow 2 ingress (mean 33.50 Mbps)
- Flow 2 egress (mean 33.45 Mbps)
- Flow 3 ingress (mean 26.34 Mbps)
- Flow 3 egress (mean 27.43 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 192.62 ms)
- Flow 2 (95th percentile 267.08 ms)
- Flow 3 (95th percentile 263.39 ms)
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 15:50:29
End at: 2019-12-11 15:50:59
Local clock offset: 1.151 ms
Remote clock offset: 3.658 ms

# Below is generated by plot.py at 2019-12-11 17:36:08
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 78.86 Mbit/s
   95th percentile per-packet one-way delay: 267.870 ms
   Loss rate: 1.20%
-- Flow 1:
   Average throughput: 49.60 Mbit/s
   95th percentile per-packet one-way delay: 259.378 ms
   Loss rate: 0.60%
-- Flow 2:
   Average throughput: 30.65 Mbit/s
   95th percentile per-packet one-way delay: 297.045 ms
   Loss rate: 2.03%
-- Flow 3:
   Average throughput: 28.00 Mbit/s
   95th percentile per-packet one-way delay: 217.087 ms
   Loss rate: 2.55%
Run 3: Report of Muses_DecimalTreeH0 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 49.78 Mbps)
  - Flow 1 egress (mean 49.60 Mbps)
  - Flow 2 ingress (mean 31.25 Mbps)
  - Flow 2 egress (mean 30.65 Mbps)
  - Flow 3 ingress (mean 26.79 Mbps)
  - Flow 3 egress (mean 28.00 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 259.38 ms)
  - Flow 2 (95th percentile 297.05 ms)
  - Flow 3 (95th percentile 217.09 ms)
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 16:20:33
End at: 2019-12-11 16:21:03
Local clock offset: -1.167 ms
Remote clock offset: 3.611 ms

# Below is generated by plot.py at 2019-12-11 17:36:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.88 Mbit/s
  95th percentile per-packet one-way delay: 214.523 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 47.64 Mbit/s
  95th percentile per-packet one-way delay: 220.890 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 34.51 Mbit/s
  95th percentile per-packet one-way delay: 254.034 ms
  Loss rate: 1.26%
-- Flow 3:
  Average throughput: 31.91 Mbit/s
  95th percentile per-packet one-way delay: 88.409 ms
  Loss rate: 1.11%
Run 4: Report of Muses Decision Tree H0 — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.](image)
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 16:51:37
End at: 2019-12-11 16:52:07
Local clock offset: 0.406 ms
Remote clock offset: 2.261 ms

# Below is generated by plot.py at 2019-12-11 17:36:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.30 Mbit/s
  95th percentile per-packet one-way delay: 281.456 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 43.37 Mbit/s
  95th percentile per-packet one-way delay: 277.754 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 27.61 Mbit/s
  95th percentile per-packet one-way delay: 291.419 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 32.87 Mbit/s
  95th percentile per-packet one-way delay: 262.321 ms
  Loss rate: 2.44%
Run 5: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 15:14:59
End at: 2019-12-11 15:15:29
Local clock offset: 1.591 ms
Remote clock offset: 3.424 ms

# Below is generated by plot.py at 2019-12-11 17:37:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.92 Mbit/s
  95th percentile per-packet one-way delay: 49.927 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 55.06 Mbit/s
  95th percentile per-packet one-way delay: 50.202 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 47.19 Mbit/s
  95th percentile per-packet one-way delay: 49.367 ms
  Loss rate: 0.45%
-- Flow 3:
  Average throughput: 23.43 Mbit/s
  95th percentile per-packet one-way delay: 50.787 ms
  Loss rate: 0.75%
Run 1: Report of Muses_DecisionTreeR0 — Data Link

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

- Flow 1 ingress (mean 55.01 Mbit/s)
- Flow 1 egress (mean 55.06 Mbit/s)
- Flow 2 ingress (mean 47.24 Mbit/s)
- Flow 2 egress (mean 47.19 Mbit/s)
- Flow 3 ingress (mean 23.42 Mbit/s)
- Flow 3 egress (mean 23.43 Mbit/s)

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

- Flow 1 (95th percentile 50.20 ms)
- Flow 2 (95th percentile 49.37 ms)
- Flow 3 (95th percentile 50.79 ms)
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 15:45:20
End at: 2019-12-11 15:45:50
Local clock offset: 1.412 ms
Remote clock offset: 3.633 ms

# Below is generated by plot.py at 2019-12-11 17:37:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.99 Mbit/s
95th percentile per-packet one-way delay: 52.724 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 62.67 Mbit/s
95th percentile per-packet one-way delay: 51.159 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 35.13 Mbit/s
95th percentile per-packet one-way delay: 52.285 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 66.128 ms
Loss rate: 0.73%
Run 2: Report of Muses_DecisionTreeR0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 16:15:26
End at: 2019-12-11 16:15:56
Local clock offset: -0.548 ms
Remote clock offset: 3.613 ms

# Below is generated by plot.py at 2019-12-11 17:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.73 Mbit/s
95th percentile per-packet one-way delay: 50.040 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 54.54 Mbit/s
95th percentile per-packet one-way delay: 50.087 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 46.56 Mbit/s
95th percentile per-packet one-way delay: 46.560 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 25.71 Mbit/s
95th percentile per-packet one-way delay: 58.860 ms
Loss rate: 0.92%
Run 3: Report of Muses.DecisionTreeR0 — Data Link

[Graph showing throughput and per-packet one-way delay for different flows over time]
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 16:46:13
End at: 2019-12-11 16:46:43
Local clock offset: -0.208 ms
Remote clock offset: 2.549 ms

# Below is generated by plot.py at 2019-12-11 17:37:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.03 Mbit/s
  95th percentile per-packet one-way delay: 51.664 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 54.78 Mbit/s
  95th percentile per-packet one-way delay: 48.943 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 46.31 Mbit/s
  95th percentile per-packet one-way delay: 46.010 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 26.60 Mbit/s
  95th percentile per-packet one-way delay: 128.135 ms
  Loss rate: 0.69%
Run 4: Report of Muses_DecisionTreeR0 — Data Link

![Network Performance Graphs]

**Throughput (Mbps):**
- Flow 1 ingress (mean 54.71 Mbps)
- Flow 1 egress (mean 54.78 Mbps)
- Flow 2 ingress (mean 46.34 Mbps)
- Flow 2 egress (mean 46.31 Mbps)
- Flow 3 ingress (mean 26.59 Mbps)
- Flow 3 egress (mean 26.60 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 48.94 ms)
- Flow 2 (95th percentile 46.01 ms)
- Flow 3 (95th percentile 128.13 ms)
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 17:18:45
End at: 2019-12-11 17:19:15
Local clock offset: 1.093 ms
Remote clock offset: 2.725 ms

# Below is generated by plot.py at 2019-12-11 17:37:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.71 Mbit/s
  95th percentile per-packet one-way delay: 51.154 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 54.34 Mbit/s
  95th percentile per-packet one-way delay: 49.491 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 37.12 Mbit/s
  95th percentile per-packet one-way delay: 58.243 ms
  Loss rate: 0.24%
-- Flow 3:
  Average throughput: 45.81 Mbit/s
  95th percentile per-packet one-way delay: 48.806 ms
  Loss rate: 0.98%
Run 5: Report of Muses_DecimalTreeR0 — Data Link

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

- Flow 1 ingress (mean 54.28 Mbit/s)
- Flow 1 egress (mean 54.34 Mbit/s)
- Flow 2 ingress (mean 37.68 Mbit/s)
- Flow 2 egress (mean 37.12 Mbit/s)
- Flow 3 ingress (mean 45.93 Mbit/s)
- Flow 3 egress (mean 45.81 Mbit/s)

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

- Flow 1 (95th percentile 49.49 ms)
- Flow 2 (95th percentile 58.24 ms)
- Flow 3 (95th percentile 48.81 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2019-12-11 14:59:06
End at: 2019-12-11 14:59:36
Local clock offset: 1.038 ms
Remote clock offset: 2.892 ms

# Below is generated by plot.py at 2019-12-11 17:37:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.42 Mbit/s
  95th percentile per-packet one-way delay: 2343.906 ms
  Loss rate: 7.09%
-- Flow 1:
  Average throughput: 56.60 Mbit/s
  95th percentile per-packet one-way delay: 2452.770 ms
  Loss rate: 10.76%
-- Flow 2:
  Average throughput: 43.47 Mbit/s
  95th percentile per-packet one-way delay: 60.018 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 21.12 Mbit/s
  95th percentile per-packet one-way delay: 155.661 ms
  Loss rate: 1.29%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-12-11 15:28:41
End at: 2019-12-11 15:29:11
Local clock offset: 1.845 ms
Remote clock offset: 3.859 ms

# Below is generated by plot.py at 2019-12-11 17:37:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.81 Mbit/s
95th percentile per-packet one-way delay: 2157.878 ms
Loss rate: 11.43%
-- Flow 1:
Average throughput: 57.78 Mbit/s
95th percentile per-packet one-way delay: 2160.022 ms
Loss rate: 10.59%
-- Flow 2:
Average throughput: 37.56 Mbit/s
95th percentile per-packet one-way delay: 2250.600 ms
Loss rate: 13.61%
-- Flow 3:
Average throughput: 30.63 Mbit/s
95th percentile per-packet one-way delay: 1002.728 ms
Loss rate: 10.68%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2019-12-11 15:59:20
End at: 2019-12-11 15:59:50
Local clock offset: 0.977 ms
Remote clock offset: 3.922 ms

# Below is generated by plot.py at 2019-12-11 17:38:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.64 Mbit/s
  95th percentile per-packet one-way delay: 2146.151 ms
  Loss rate: 11.57%
-- Flow 1:
  Average throughput: 56.68 Mbit/s
  95th percentile per-packet one-way delay: 2158.474 ms
  Loss rate: 10.83%
-- Flow 2:
  Average throughput: 37.47 Mbit/s
  95th percentile per-packet one-way delay: 2135.507 ms
  Loss rate: 13.52%
-- Flow 3:
  Average throughput: 30.60 Mbit/s
  95th percentile per-packet one-way delay: 1005.829 ms
  Loss rate: 10.80%
Run 3: Report of PCC-Allegro — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 63.42 Mbps)
- Flow 1 egress (mean 56.68 Mbps)
- Flow 2 ingress (mean 41.24 Mbps)
- Flow 2 egress (mean 37.47 Mbps)
- Flow 3 ingress (mean 34.06 Mbps)
- Flow 3 egress (mean 30.60 Mbps)

Packet delay (ms):

- Flow 1 (95th percentile 2158.47 ms)
- Flow 2 (95th percentile 2155.51 ms)
- Flow 3 (95th percentile 1005.83 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2019-12-11 16:29:59
End at: 2019-12-11 16:30:29
Local clock offset: -1.853 ms
Remote clock offset: 3.655 ms

# Below is generated by plot.py at 2019-12-11 17:38:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.22 Mbit/s
  95th percentile per-packet one-way delay: 2187.252 ms
  Loss rate: 7.06%
-- Flow 1:
  Average throughput: 56.74 Mbit/s
  95th percentile per-packet one-way delay: 2204.985 ms
  Loss rate: 10.72%
-- Flow 2:
  Average throughput: 44.48 Mbit/s
  95th percentile per-packet one-way delay: 46.024 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 18.05 Mbit/s
  95th percentile per-packet one-way delay: 161.230 ms
  Loss rate: 1.18%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2019-12-11 17:01:40
End at: 2019-12-11 17:02:10
Local clock offset: 1.057 ms
Remote clock offset: 2.096 ms

# Below is generated by plot.py at 2019-12-11 17:38:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.26 Mbit/s
95th percentile per-packet one-way delay: 1646.500 ms
Loss rate: 11.57%
-- Flow 1:
Average throughput: 62.56 Mbit/s
95th percentile per-packet one-way delay: 1654.980 ms
Loss rate: 13.48%
-- Flow 2:
Average throughput: 40.97 Mbit/s
95th percentile per-packet one-way delay: 723.153 ms
Loss rate: 6.75%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 732.912 ms
Loss rate: 12.64%
Run 5: Report of PCC-Allegro — Data Link

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

Start at: 2019-12-11 14:57:47
End at: 2019-12-11 14:58:17
Local clock offset: 0.957 ms
Remote clock offset: 2.974 ms

# Below is generated by plot.py at 2019-12-11 17:39:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.61 Mbit/s
95th percentile per-packet one-way delay: 1151.620 ms
Loss rate: 37.23%
-- Flow 1:
Average throughput: 58.90 Mbit/s
95th percentile per-packet one-way delay: 702.564 ms
Loss rate: 44.58%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 1242.998 ms
Loss rate: 23.76%
-- Flow 3:
Average throughput: 26.97 Mbit/s
95th percentile per-packet one-way delay: 68.522 ms
Loss rate: 1.02%
Run 1: Report of PCC-Expr — Data Link

[Graph 1: Throughput over time for different flows with annotations]

[Graph 2: Per-packet end-to-end delay over time for different flows with annotations]
Run 2: Statistics of PCC-Expr

Start at: 2019-12-11 15:27:19
End at: 2019-12-11 15:27:49
Local clock offset: 1.82 ms
Remote clock offset: 3.797 ms

# Below is generated by plot.py at 2019-12-11 17:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 1197.820 ms
Loss rate: 37.77%
-- Flow 1:
Average throughput: 58.93 Mbit/s
95th percentile per-packet one-way delay: 694.525 ms
Loss rate: 44.70%
-- Flow 2:
Average throughput: 38.62 Mbit/s
95th percentile per-packet one-way delay: 1240.272 ms
Loss rate: 25.98%
-- Flow 3:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 201.172 ms
Loss rate: 1.75%
Run 3: Statistics of PCC-Expr

Start at: 2019-12-11 15:57:56
End at: 2019-12-11 15:58:26
Local clock offset: 1.021 ms
Remote clock offset: 4.038 ms

# Below is generated by plot.py at 2019-12-11 17:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.55 Mbit/s
95th percentile per-packet one-way delay: 1076.562 ms
Loss rate: 32.49%
-- Flow 1:
Average throughput: 58.81 Mbit/s
95th percentile per-packet one-way delay: 871.004 ms
Loss rate: 38.21%
-- Flow 2:
Average throughput: 38.20 Mbit/s
95th percentile per-packet one-way delay: 1156.693 ms
Loss rate: 24.24%
-- Flow 3:
Average throughput: 25.44 Mbit/s
95th percentile per-packet one-way delay: 95.790 ms
Loss rate: 0.56%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2019-12-11 16:28:36
End at: 2019-12-11 16:29:06
Local clock offset: -1.785 ms
Remote clock offset: 3.632 ms

# Below is generated by plot.py at 2019-12-11 17:39:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.33 Mbit/s
  95th percentile per-packet one-way delay: 1063.510 ms
  Loss rate: 31.33%
-- Flow 1:
  Average throughput: 62.20 Mbit/s
  95th percentile per-packet one-way delay: 1104.704 ms
  Loss rate: 30.97%
-- Flow 2:
  Average throughput: 36.47 Mbit/s
  95th percentile per-packet one-way delay: 1063.037 ms
  Loss rate: 36.60%
-- Flow 3:
  Average throughput: 20.96 Mbit/s
  95th percentile per-packet one-way delay: 330.849 ms
  Loss rate: 9.16%
Run 4: Report of PCC-Expr — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 89.90 Mbit/s)
Flow 1 egress (mean 62.20 Mbit/s)
Flow 2 ingress (mean 57.31 Mbit/s)
Flow 2 egress (mean 36.47 Mbit/s)
Flow 3 ingress (mean 22.91 Mbit/s)
Flow 3 egress (mean 20.96 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 1104.70 ms)
Flow 2 (95th percentile 1063.04 ms)
Flow 3 (95th percentile 330.85 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-12-11 17:00:00
End at: 2019-12-11 17:00:30
Local clock offset: 0.976 ms
Remote clock offset: 2.131 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.57 Mbit/s
  95th percentile per-packet one-way delay: 976.591 ms
  Loss rate: 36.14%
-- Flow 1:
  Average throughput: 57.94 Mbit/s
  95th percentile per-packet one-way delay: 867.781 ms
  Loss rate: 39.37%
-- Flow 2:
  Average throughput: 38.11 Mbit/s
  95th percentile per-packet one-way delay: 1020.844 ms
  Loss rate: 34.76%
-- Flow 3:
  Average throughput: 28.32 Mbit/s
  95th percentile per-packet one-way delay: 584.939 ms
  Loss rate: 12.09%
Run 1: Statistics of QUIC Cubic

Start at: 2019-12-11 15:11:20
End at: 2019-12-11 15:11:50
Local clock offset: 1.483 ms
Remote clock offset: 3.339 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.19 Mbit/s
95th percentile per-packet one-way delay: 104.468 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 48.98 Mbit/s
95th percentile per-packet one-way delay: 90.881 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 32.47 Mbit/s
95th percentile per-packet one-way delay: 117.975 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 168.697 ms
Loss rate: 1.15%
Run 1: Report of QUIC Cubic — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows]
Run 2: Statistics of QUIC Cubic

Start at: 2019-12-11 15:41:28
End at: 2019-12-11 15:41:58
Local clock offset: 1.724 ms
Remote clock offset: 3.597 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.27 Mbit/s
95th percentile per-packet one-way delay: 98.988 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 41.49 Mbit/s
95th percentile per-packet one-way delay: 98.278 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 43.66 Mbit/s
95th percentile per-packet one-way delay: 96.708 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 23.56 Mbit/s
95th percentile per-packet one-way delay: 147.600 ms
Loss rate: 1.06%
Run 2: Report of QUIC Cubic — Data Link

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

Throughput:
- Flow 1 ingress (mean 41.47 Mbit/s)
- Flow 2 ingress (mean 43.70 Mbit/s)
- Flow 3 ingress (mean 23.64 Mbit/s)

Latency:
- Flow 1 (95th percentile 98.28 ms)
- Flow 2 (95th percentile 96.71 ms)
- Flow 3 (95th percentile 147.60 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2019-12-11 16:11:41
End at: 2019-12-11 16:12:11
Local clock offset: 0.149 ms
Remote clock offset: 3.59 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.92 Mbit/s
95th percentile per-packet one-way delay: 99.358 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 44.59 Mbit/s
95th percentile per-packet one-way delay: 92.176 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 35.22 Mbit/s
95th percentile per-packet one-way delay: 103.084 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 30.23 Mbit/s
95th percentile per-packet one-way delay: 105.231 ms
Loss rate: 1.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2019-12-11 16:42:30
End at: 2019-12-11 16:43:00
Local clock offset: -1.019 ms
Remote clock offset: 2.861 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.35 Mbit/s
  95th percentile per-packet one-way delay: 99.949 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 41.87 Mbit/s
  95th percentile per-packet one-way delay: 97.889 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 43.06 Mbit/s
  95th percentile per-packet one-way delay: 93.938 ms
  Loss rate: 0.45%
-- Flow 3:
  Average throughput: 23.90 Mbit/s
  95th percentile per-packet one-way delay: 157.501 ms
  Loss rate: 1.11%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2019-12-11 17:14:56
End at: 2019-12-11 17:15:26
Local clock offset: 1.134 ms
Remote clock offset: 2.423 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.08 Mbit/s
95th percentile per-packet one-way delay: 98.072 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 43.92 Mbit/s
95th percentile per-packet one-way delay: 95.047 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 36.02 Mbit/s
95th percentile per-packet one-way delay: 112.074 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 81.388 ms
Loss rate: 0.89%
Run 5: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: One-way Delay (ms)]
Run 1: Statistics of SCReAM

Start at: 2019-12-11 15:02:45
End at: 2019-12-11 15:03:15
Local clock offset: 1.266 ms
Remote clock offset: 3.095 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 36.709 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.706 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.713 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.677 ms
Loss rate: 0.70%
Run 1: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet end-to-end delay (ms)]
Run 2: Statistics of SCReAM

Start at: 2019-12-11 15:32:40
End at: 2019-12-11 15:33:10
Local clock offset: 1.933 ms
Remote clock offset: 3.793 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 36.714 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.679 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.658 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.734 ms
  Loss rate: 0.35%
Run 2: Report of SCReAM — Data Link

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

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

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 36.68 ms)
  - Flow 2 (95th percentile 36.66 ms)
  - Flow 3 (95th percentile 36.73 ms)
Run 3: Statistics of SCReAM

Start at: 2019-12-11 16:03:03
End at: 2019-12-11 16:03:33
Local clock offset: 0.985 ms
Remote clock offset: 3.977 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 36.836 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.844 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.729 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 36.789 ms
  Loss rate: 0.70%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2019-12-11 16:33:45
End at: 2019-12-11 16:34:15
Local clock offset: -2.018 ms
Remote clock offset: 3.663 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 36.821 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.817 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.826 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 36.822 ms
Loss rate: 0.70%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2019-12-11 17:05:34
End at: 2019-12-11 17:06:04
Local clock offset: 1.171 ms
Remote clock offset: 2.032 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.43 Mbit/s
   95th percentile per-packet one-way delay: 36.771 ms
   Loss rate: 0.38%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 36.797 ms
   Loss rate: 0.26%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 36.693 ms
   Loss rate: 0.39%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 36.785 ms
   Loss rate: 0.70%
Run 5: Report of SCReAM — Data Link

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**Graph 1:**
- Title: Throughput (Mbps)
- X-axis: Time (s)
- Y-axis: Throughput (Mbps)
- Legend:
  - 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)

**Graph 2:**
- Title: Per-packet one-way delay (ms)
- X-axis: Time (s)
- Y-axis: Per-packet one-way delay (ms)
- Legend:
  - Flow 1 (95th percentile 36.80 ms)
  - Flow 2 (95th percentile 36.69 ms)
  - Flow 3 (95th percentile 36.78 ms)
Run 1: Statistics of Sprout

Start at: 2019-12-11 15:07:37
End at: 2019-12-11 15:08:07
Local clock offset: 1.413 ms
Remote clock offset: 3.222 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.15 Mbit/s
95th percentile per-packet one-way delay: 42.040 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 42.101 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 41.679 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 11.11 Mbit/s
95th percentile per-packet one-way delay: 42.635 ms
Loss rate: 0.77%
Run 1: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 11.69 Mbit/s)
- Flow 1 egress (mean 11.69 Mbit/s)
- Flow 2 ingress (mean 11.76 Mbit/s)
- Flow 2 egress (mean 11.76 Mbit/s)
- Flow 3 ingress (mean 11.13 Mbit/s)
- Flow 3 egress (mean 11.13 Mbit/s)

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

- Flow 1 (95th percentile 42.10 ms)
- Flow 2 (95th percentile 41.68 ms)
- Flow 3 (95th percentile 42.63 ms)
Run 2: Statistics of Sprout

Start at: 2019-12-11 15:37:32
End at: 2019-12-11 15:38:02
Local clock offset: 2.061 ms
Remote clock offset: 3.652 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.12 Mbit/s
  95th percentile per-packet one-way delay: 41.870 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 11.72 Mbit/s
  95th percentile per-packet one-way delay: 41.835 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 11.66 Mbit/s
  95th percentile per-packet one-way delay: 41.649 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 11.10 Mbit/s
  95th percentile per-packet one-way delay: 42.310 ms
  Loss rate: 0.87%
Run 2: Report of Sprout — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 11.72 Mbps)
- Flow 1 egress (mean 11.72 Mbps)
- Flow 2 ingress (mean 11.67 Mbps)
- Flow 2 egress (mean 11.66 Mbps)
- Flow 3 ingress (mean 11.11 Mbps)
- Flow 3 egress (mean 11.10 Mbps)

**Per-packet delay (ms):**
- Flow 1 (95th percentile 41.84 ms)
- Flow 2 (95th percentile 41.65 ms)
- Flow 3 (95th percentile 42.31 ms)
Run 3: Statistics of Sprout

Start at: 2019-12-11 16:07:55
End at: 2019-12-11 16:08:25
Local clock offset: 0.969 ms
Remote clock offset: 3.796 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.24 Mbit/s
95th percentile per-packet one-way delay: 41.599 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 41.501 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 11.56 Mbit/s
95th percentile per-packet one-way delay: 41.796 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 11.35 Mbit/s
95th percentile per-packet one-way delay: 41.501 ms
Loss rate: 0.67%
Run 3: Report of Sprout — Data Link

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**Throughput (Mbps)**

- **Flow 1 Ingress (mean 11.83 Mbps)**
- **Flow 2 Ingress (mean 11.56 Mbps)**
- **Flow 3 Ingress (mean 11.34 Mbps)**
- **Flow 1 Egress (mean 11.83 Mbps)**
- **Flow 2 Egress (mean 11.56 Mbps)**
- **Flow 3 Egress (mean 11.35 Mbps)**

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

- **Flow 1 (95th percentile 41.50 ms)**
- **Flow 2 (95th percentile 41.80 ms)**
- **Flow 3 (95th percentile 41.50 ms)**

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Run 4: Statistics of Sprout

Start at: 2019-12-11 16:38:48
End at: 2019-12-11 16:39:18
Local clock offset: -2.128 ms
Remote clock offset: 3.431 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.20 Mbit/s
95th percentile per-packet one-way delay: 41.321 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 11.75 Mbit/s
95th percentile per-packet one-way delay: 41.449 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 11.59 Mbit/s
95th percentile per-packet one-way delay: 41.417 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 11.39 Mbit/s
95th percentile per-packet one-way delay: 40.528 ms
Loss rate: 0.78%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2019-12-11 17:11:01
End at: 2019-12-11 17:11:31
Local clock offset: 1.186 ms
Remote clock offset: 1.998 ms

# Below is generated by plot.py at 2019-12-11 17:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.83 Mbit/s
95th percentile per-packet one-way delay: 42.218 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 11.61 Mbit/s
95th percentile per-packet one-way delay: 42.122 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 42.215 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 11.02 Mbit/s
95th percentile per-packet one-way delay: 42.546 ms
Loss rate: 0.89%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2019-12-11 15:10:03
End at: 2019-12-11 15:10:33
Local clock offset: 1.475 ms
Remote clock offset: 3.274 ms

# Below is generated by plot.py at 2019-12-11 17:42:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 109.755 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 41.54 Mbit/s
95th percentile per-packet one-way delay: 108.450 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 35.96 Mbit/s
95th percentile per-packet one-way delay: 123.544 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 80.54 Mbit/s
95th percentile per-packet one-way delay: 62.159 ms
Loss rate: 0.75%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2019-12-11 15:40:09
End at: 2019-12-11 15:40:39
Local clock offset: 1.844 ms
Remote clock offset: 3.617 ms

# Below is generated by plot.py at 2019-12-11 17:42:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.93 Mbit/s
95th percentile per-packet one-way delay: 99.110 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 101.726 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 28.20 Mbit/s
95th percentile per-packet one-way delay: 124.121 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 87.16 Mbit/s
95th percentile per-packet one-way delay: 49.194 ms
Loss rate: 0.74%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2019-12-11 16:10:22
End at: 2019-12-11 16:10:52
Local clock offset: 0.445 ms
Remote clock offset: 3.614 ms

# Below is generated by plot.py at 2019-12-11 17:42:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.05 Mbit/s
  95th percentile per-packet one-way delay: 100.041 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 41.61 Mbit/s
  95th percentile per-packet one-way delay: 100.569 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 35.31 Mbit/s
  95th percentile per-packet one-way delay: 119.250 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 82.41 Mbit/s
  95th percentile per-packet one-way delay: 50.142 ms
  Loss rate: 0.98%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2019-12-11 16:41:13
End at: 2019-12-11 16:41:43
Local clock offset: -1.36 ms
Remote clock offset: 3.029 ms

# Below is generated by plot.py at 2019-12-11 17:42:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.66 Mbit/s
95th percentile per-packet one-way delay: 107.693 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 41.52 Mbit/s
95th percentile per-packet one-way delay: 105.738 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 34.47 Mbit/s
95th percentile per-packet one-way delay: 126.581 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 81.79 Mbit/s
95th percentile per-packet one-way delay: 55.343 ms
Loss rate: 0.78%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 5: Statistics of TaoVA-100x

Start at: 2019-12-11 17:13:34
End at: 2019-12-11 17:14:04
Local clock offset: 1.144 ms
Remote clock offset: 2.365 ms

# Below is generated by plot.py at 2019-12-11 17:42:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.55 Mbit/s
  95th percentile per-packet one-way delay: 104.328 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 41.61 Mbit/s
  95th percentile per-packet one-way delay: 105.848 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 33.41 Mbit/s
  95th percentile per-packet one-way delay: 125.259 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 85.48 Mbit/s
  95th percentile per-packet one-way delay: 49.581 ms
  Loss rate: 0.89%
Run 5: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 41.64 Mbit/s)
- Flow 1 egress (mean 41.61 Mbit/s)
- Flow 2 ingress (mean 33.46 Mbit/s)
- Flow 2 egress (mean 33.41 Mbit/s)
- Flow 3 ingress (mean 85.62 Mbit/s)
- Flow 3 egress (mean 85.48 Mbit/s)

- Flow 1 (95th percentile 105.85 ms)
- Flow 2 (95th percentile 125.26 ms)
- Flow 3 (95th percentile 49.58 ms)
Run 1: Statistics of TCP Vegas

Start at: 2019-12-11 15:13:47
End at: 2019-12-11 15:14:17
Local clock offset: 1.531 ms
Remote clock offset: 3.45 ms

# Below is generated by plot.py at 2019-12-11 17:42:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.37 Mbit/s
  95th percentile per-packet one-way delay: 40.930 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 44.50 Mbit/s
  95th percentile per-packet one-way delay: 42.104 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 27.87 Mbit/s
  95th percentile per-packet one-way delay: 39.502 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 43.32 Mbit/s
  95th percentile per-packet one-way delay: 39.090 ms
  Loss rate: 0.81%
Run 1: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 44.47 Mbps/s)
- Flow 1 egress (mean 44.50 Mbps/s)
- Flow 2 ingress (mean 27.86 Mbps/s)
- Flow 2 egress (mean 27.87 Mbps/s)
- Flow 3 ingress (mean 43.36 Mbps/s)
- Flow 3 egress (mean 43.32 Mbps/s)

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

- Flow 1 (95th percentile 42.10 ms)
- Flow 2 (95th percentile 39.50 ms)
- Flow 3 (95th percentile 39.09 ms)
Run 2: Statistics of TCP Vegas

Start at: 2019-12-11 15:44:05
End at: 2019-12-11 15:44:35
Local clock offset: 1.46 ms
Remote clock offset: 3.63 ms

# Below is generated by plot.py at 2019-12-11 17:42:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.59 Mbit/s
95th percentile per-packet one-way delay: 40.038 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 47.75 Mbit/s
95th percentile per-packet one-way delay: 40.295 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 32.10 Mbit/s
95th percentile per-packet one-way delay: 38.570 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 42.404 ms
Loss rate: 0.79%
Run 2: Report of TCP Vegas — Data Link

- Throughput vs. Time
- Per-packet one-way delay vs. Time

Legend:
- Flow 1 ingress (mean 47.72 Mbit/s)
- Flow 1 egress (mean 47.75 Mbit/s)
- Flow 2 ingress (mean 32.10 Mbit/s)
- Flow 2 egress (mean 32.10 Mbit/s)
- Flow 3 ingress (mean 31.70 Mbit/s)
- Flow 3 egress (mean 31.67 Mbit/s)
Run 3: Statistics of TCP Vegas

Start at: 2019-12-11 16:14:11
End at: 2019-12-11 16:14:41
Local clock offset: -0.383 ms
Remote clock offset: 3.554 ms

# Below is generated by plot.py at 2019-12-11 17:42:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.44 Mbit/s
95th percentile per-packet one-way delay: 41.053 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 48.38 Mbit/s
95th percentile per-packet one-way delay: 41.268 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 28.19 Mbit/s
95th percentile per-packet one-way delay: 39.188 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 34.14 Mbit/s
95th percentile per-packet one-way delay: 42.239 ms
Loss rate: 0.79%
Run 3: Report of TCP Vegas — Data Link

![Graph showing network performance metrics over time]

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Flow 1 ingress (mean 48.35 Mbit/s)
Flow 1 egress (mean 48.38 Mbit/s)
Flow 2 ingress (mean 28.19 Mbit/s)
Flow 2 egress (mean 28.19 Mbit/s)
Flow 3 ingress (mean 34.16 Mbit/s)
Flow 3 egress (mean 34.14 Mbit/s)

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Flow 1 (95th percentile 41.27 ms)
Flow 2 (95th percentile 39.19 ms)
Flow 3 (95th percentile 42.24 ms)
Run 4: Statistics of TCP Vegas

Start at: 2019-12-11 16:44:59
End at: 2019-12-11 16:45:29
Local clock offset: -0.461 ms
Remote clock offset: 2.593 ms

# Below is generated by plot.py at 2019-12-11 17:42:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.27 Mbit/s
  95th percentile per-packet one-way delay: 39.177 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 49.10 Mbit/s
  95th percentile per-packet one-way delay: 38.280 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 37.91 Mbit/s
  95th percentile per-packet one-way delay: 39.089 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 30.04 Mbit/s
  95th percentile per-packet one-way delay: 40.386 ms
  Loss rate: 0.79%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2019-12-11 17:17:29
End at: 2019-12-11 17:17:59
Local clock offset: 1.089 ms
Remote clock offset: 2.705 ms

# Below is generated by plot.py at 2019-12-11 17:42:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.09 Mbit/s
95th percentile per-packet one-way delay: 40.543 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 45.10 Mbit/s
95th percentile per-packet one-way delay: 39.881 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 39.023 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 34.06 Mbit/s
95th percentile per-packet one-way delay: 41.860 ms
Loss rate: 1.23%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2019-12-11 15:01:29
End at: 2019-12-11 15:01:59
Local clock offset: 1.17 ms
Remote clock offset: 3.102 ms

# Below is generated by plot.py at 2019-12-11 17:42:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.54 Mbit/s
  95th percentile per-packet one-way delay: 147.638 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 58.76 Mbit/s
  95th percentile per-packet one-way delay: 123.605 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 32.28 Mbit/s
  95th percentile per-packet one-way delay: 134.435 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 22.16 Mbit/s
  95th percentile per-packet one-way delay: 1028.190 ms
  Loss rate: 1.76%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2019-12-11 15:31:13
End at: 2019-12-11 15:31:43
Local clock offset: 1.906 ms
Remote clock offset: 3.772 ms

# Below is generated by plot.py at 2019-12-11 17:43:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 194.644 ms
Loss rate: 0.74%
-- Flow 1:
  Average throughput: 50.85 Mbit/s
  95th percentile per-packet one-way delay: 176.258 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 30.41 Mbit/s
  95th percentile per-packet one-way delay: 217.828 ms
  Loss rate: 1.00%
-- Flow 3:
  Average throughput: 42.40 Mbit/s
  95th percentile per-packet one-way delay: 231.947 ms
  Loss rate: 1.34%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 50.96 Mbit/s)
- Flow 1 egress (mean 50.85 Mbit/s)
- Flow 2 ingress (mean 30.66 Mbit/s)
- Flow 2 egress (mean 30.41 Mbit/s)
- Flow 3 ingress (mean 42.68 Mbit/s)
- Flow 3 egress (mean 42.40 Mbit/s)

- Flow 1 (95th percentile 176.26 ms)
- Flow 2 (95th percentile 217.83 ms)
- Flow 3 (95th percentile 231.95 ms)
Run 3: Statistics of Verus

Start at: 2019-12-11 16:01:46
End at: 2019-12-11 16:02:16
Local clock offset: 0.967 ms
Remote clock offset: 4.058 ms

# Below is generated by plot.py at 2019-12-11 17:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.27 Mbit/s
95th percentile per-packet one-way delay: 161.481 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 52.73 Mbit/s
95th percentile per-packet one-way delay: 151.466 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 43.11 Mbit/s
95th percentile per-packet one-way delay: 94.018 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 20.80 Mbit/s
95th percentile per-packet one-way delay: 305.937 ms
Loss rate: 2.47%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2019-12-11 16:32:23
End at: 2019-12-11 16:32:53
Local clock offset: -1.965 ms
Remote clock offset: 3.602 ms

# Below is generated by plot.py at 2019-12-11 17:43:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.64 Mbit/s
  95th percentile per-packet one-way delay: 168.494 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 50.29 Mbit/s
  95th percentile per-packet one-way delay: 179.619 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 44.32 Mbit/s
  95th percentile per-packet one-way delay: 90.961 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 20.78 Mbit/s
  95th percentile per-packet one-way delay: 236.845 ms
  Loss rate: 1.23%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2019-12-11 17:04:09
End at: 2019-12-11 17:04:39
Local clock offset: 1.147 ms
Remote clock offset: 2.066 ms

# Below is generated by plot.py at 2019-12-11 17:43:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.34 Mbit/s
95th percentile per-packet one-way delay: 182.272 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 53.39 Mbit/s
95th percentile per-packet one-way delay: 165.910 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 35.71 Mbit/s
95th percentile per-packet one-way delay: 234.425 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 246.217 ms
Loss rate: 1.45%
Run 5: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2019-12-11 15:08:48
End at: 2019-12-11 15:09:18
Local clock offset: 1.491 ms
Remote clock offset: 3.29 ms

# Below is generated by plot.py at 2019-12-11 17:43:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.05 Mbit/s
95th percentile per-packet one-way delay: 1416.500 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 1458.050 ms
Loss rate: 3.36%
-- Flow 2:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 282.932 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 28.66 Mbit/s
95th percentile per-packet one-way delay: 295.899 ms
Loss rate: 3.60%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2019-12-11 15:38:46
End at: 2019-12-11 15:39:16
Local clock offset: 2.056 ms
Remote clock offset: 3.625 ms

# Below is generated by plot.py at 2019-12-11 17:43:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.24 Mbit/s
  95th percentile per-packet one-way delay: 314.515 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 50.75 Mbit/s
  95th percentile per-packet one-way delay: 330.628 ms
  Loss rate: 0.89%
-- Flow 2:
  Average throughput: 41.98 Mbit/s
  95th percentile per-packet one-way delay: 101.454 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 20.06 Mbit/s
  95th percentile per-packet one-way delay: 85.762 ms
  Loss rate: 1.45%
Run 2: Report of PCC-Vivace — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 51.09 Mb/s)
Flow 1 egress (mean 50.75 Mb/s)
Flow 2 ingress (mean 42.65 Mb/s)
Flow 2 egress (mean 41.95 Mb/s)
Flow 3 ingress (mean 20.20 Mb/s)
Flow 3 egress (mean 20.06 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 330.63 ms)
Flow 2 (95th percentile 101.45 ms)
Flow 3 (95th percentile 85.76 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-12-11 16:09:06
End at: 2019-12-11 16:09:36
Local clock offset: 0.803 ms
Remote clock offset: 3.792 ms

# Below is generated by plot.py at 2019-12-11 17:43:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.82 Mbit/s
  95th percentile per-packet one-way delay: 1837.194 ms
  Loss rate: 5.62%
-- Flow 1:
  Average throughput: 56.46 Mbit/s
  95th percentile per-packet one-way delay: 1907.464 ms
  Loss rate: 8.13%
-- Flow 2:
  Average throughput: 34.01 Mbit/s
  95th percentile per-packet one-way delay: 146.504 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 26.60 Mbit/s
  95th percentile per-packet one-way delay: 111.566 ms
  Loss rate: 1.01%
Run 3: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time for different flows.](image-url)
Run 4: Statistics of PCC-Vivace

Start at: 2019-12-11 16:39:58
End at: 2019-12-11 16:40:28
Local clock offset: -1.691 ms
Remote clock offset: 3.245 ms

# Below is generated by plot.py at 2019-12-11 17:43:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.31 Mbit/s
95th percentile per-packet one-way delay: 344.078 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 52.93 Mbit/s
95th percentile per-packet one-way delay: 359.652 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 292.441 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 28.00 Mbit/s
95th percentile per-packet one-way delay: 358.663 ms
Loss rate: 5.36%
Run 4: Report of PCC-Vivace — Data Link

![Throughput Chart]

- Flow 1 ingress (mean 53.33 Mbit/s)
- Flow 2 ingress (mean 35.52 Mbit/s)
- Flow 3 ingress (mean 29.37 Mbit/s)
- Flow 1 egress (mean 52.93 Mbit/s)
- Flow 2 egress (mean 34.86 Mbit/s)
- Flow 3 egress (mean 28.00 Mbit/s)

![Delay Chart]

- Flow 1 (95th percentile 359.65 ms)
- Flow 2 (95th percentile 292.44 ms)
- Flow 3 (95th percentile 350.66 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2019-12-11 17:12:12
End at: 2019-12-11 17:12:42
Local clock offset: 1.161 ms
Remote clock offset: 2.198 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.60 Mbit/s
95th percentile per-packet one-way delay: 1410.804 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 52.49 Mbit/s
95th percentile per-packet one-way delay: 665.480 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 37.48 Mbit/s
95th percentile per-packet one-way delay: 1571.255 ms
Loss rate: 12.89%
-- Flow 3:
Average throughput: 24.95 Mbit/s
95th percentile per-packet one-way delay: 111.114 ms
Loss rate: 1.30%
Run 5: Report of PCC-Vivace — Data Link
Run 1: Statistics of WebRTC media

Start at: 2019-12-11 15:00:19
End at: 2019-12-11 15:00:49
Local clock offset: 1.134 ms
Remote clock offset: 3.067 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.25 Mbit/s
95th percentile per-packet one-way delay: 37.267 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 37.234 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: 37.196 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 37.473 ms
Loss rate: 0.73%
Run 1: Report of WebRTC media — Data Link

Graph 1: Throughput (Mbps) vs Time (s)
- Flow 1 ingress (mean 1.81 Mbps)
- Flow 1 egress (mean 1.81 Mbps)
- Flow 2 ingress (mean 1.02 Mbps)
- Flow 2 egress (mean 1.02 Mbps)
- Flow 3 ingress (mean 0.44 Mbps)
- Flow 3 egress (mean 0.44 Mbps)

Graph 2: Per-packet one-way delay (ms) vs Time (s)
- Flow 1 (95th percentile 37.23 ms)
- Flow 2 (95th percentile 37.20 ms)
- Flow 3 (95th percentile 37.47 ms)
Run 2: Statistics of WebRTC media

Start at: 2019-12-11 15:30:03
End at: 2019-12-11 15:30:33
Local clock offset: 1.892 ms
Remote clock offset: 3.768 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 37.387 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 37.258 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 37.427 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.54%
Run 2: Report of WebRTC media — Data Link

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

Flow 1 ingress (mean 1.76 Mbit/s)
Flow 1 egress (mean 1.76 Mbit/s)
Flow 2 ingress (mean 0.99 Mbit/s)
Flow 2 egress (mean 0.99 Mbit/s)
Flow 3 ingress (mean 0.43 Mbit/s)
Flow 3 egress (mean 0.43 Mbit/s)
Run 3: Statistics of WebRTC media

Start at: 2019-12-11 16:00:36
End at: 2019-12-11 16:01:06
Local clock offset: 0.974 ms
Remote clock offset: 4.037 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.20 Mbit/s
  95th percentile per-packet one-way delay: 37.209 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 1.80 Mbit/s
  95th percentile per-packet one-way delay: 37.187 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 1.00 Mbit/s
  95th percentile per-packet one-way delay: 37.165 ms
  Loss rate: 0.12%
-- Flow 3:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 37.341 ms
  Loss rate: 0.84%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2019-12-11 16:31:13
End at: 2019-12-11 16:31:43
Local clock offset: -1.893 ms
Remote clock offset: 3.711 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
# Total of 3 flows:
Average throughput: 3.19 Mbit/s
95th percentile per-packet one-way delay: 37.385 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 37.378 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 37.348 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 37.505 ms
Loss rate: 0.83%
Run 5: Statistics of WebRTC media

Start at: 2019-12-11 17:02:59
End at: 2019-12-11 17:03:29
Local clock offset: 1.079 ms
Remote clock offset: 2.01 ms

# Below is generated by plot.py at 2019-12-11 17:43:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.15 Mbit/s
  95th percentile per-packet one-way delay: 37.311 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 1.75 Mbit/s
  95th percentile per-packet one-way delay: 37.247 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 0.98 Mbit/s
  95th percentile per-packet one-way delay: 37.326 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 37.482 ms
  Loss rate: 0.82%
Run 5: Report of WebRTC media — Data Link