Pantheon Report

Generated at 2018-10-10 02:36:41 (UTC).
Data path: Mexico on em1 (remote) → AWS California 2 on ens5 (local).
Repeated the test of 18 congestion control schemes 5 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

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

Git summary:
branch: muses @ 2e19c0464530faa92c63f8217c9971438a26a3be
third_party/fillp @ 5332fc9127c63565e13f4933b336c021aabdac6
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edaf90c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0cb967ed7048bbe8f994ab95
third_party/libutp @ b3465b9428296f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f8666df5827af1942717625ee3a354cc2e802bd
third_party/pcc @ 1afc958afa0d6d18b62c091a55f8c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e343f5f5613e8acc08fab92c4eb24f974ab
third_party/proto-quic @ 77961fa1b273a86b42f1bc8143ebc978f3c4f42
third_party/scream-reproduce @ f099118d1421aa3131bf1f1964974e1da3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a6ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutcomm.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
test from Mexico to AWS California 2, 5 runs of 30s each per scheme
(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>94.16</td>
<td>62.88</td>
<td>0.82</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>79.00</td>
<td>70.34</td>
<td>0.30</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>90.13</td>
<td>40.40</td>
<td>0.21</td>
</tr>
<tr>
<td>FillP</td>
<td>5</td>
<td>94.47</td>
<td>54.96</td>
<td>0.68</td>
</tr>
<tr>
<td>Indigo</td>
<td>5</td>
<td>95.69</td>
<td>38.11</td>
<td>0.23</td>
</tr>
<tr>
<td>Indigo-96d2da3</td>
<td>5</td>
<td>81.07</td>
<td>346.20</td>
<td>4.00</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>5</td>
<td>60.58</td>
<td>39.41</td>
<td>0.22</td>
</tr>
<tr>
<td>Indigo-Muses</td>
<td>5</td>
<td>95.58</td>
<td>37.86</td>
<td>0.23</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>91.41</td>
<td>38.66</td>
<td>0.25</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>5</td>
<td>86.35</td>
<td>153.57</td>
<td>0.35</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>5</td>
<td>76.68</td>
<td>50.13</td>
<td>0.27</td>
</tr>
<tr>
<td>SCReAM</td>
<td>5</td>
<td>0.21</td>
<td>33.50</td>
<td>0.21</td>
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<tr>
<td>Sprout</td>
<td>5</td>
<td>12.01</td>
<td>41.02</td>
<td>0.17</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>5</td>
<td>88.38</td>
<td>44.73</td>
<td>0.21</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>5</td>
<td>81.76</td>
<td>35.06</td>
<td>0.26</td>
</tr>
<tr>
<td>Verus</td>
<td>5</td>
<td>84.51</td>
<td>73.75</td>
<td>0.52</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>84.87</td>
<td>35.70</td>
<td>0.24</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>5</td>
<td>2.33</td>
<td>33.95</td>
<td>0.25</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-10-10 00:24:30  
End at: 2018-10-10 00:25:00  
Local clock offset: 5.02 ms  
Remote clock offset: -3.968 ms

# Below is generated by plot.py at 2018-10-10 02:26:04  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.12 Mbit/s  
95th percentile per-packet one-way delay: 58.126 ms  
Loss rate: 0.75%  
-- Flow 1:  
Average throughput: 94.12 Mbit/s  
95th percentile per-packet one-way delay: 58.126 ms  
Loss rate: 0.75%
Run 1: Report of TCP BBR — Data Link

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

Throughput (Mbps)

Flow 1 ingress (mean 94.62 Mbit/s)  Flow 1 egress (mean 94.12 Mbit/s)

Packet one way delay (ms)

Flow 1 (95th percentile 58.13 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-10-10 00:48:32
End at: 2018-10-10 00:49:02
Local clock offset: 0.81 ms
Remote clock offset: -3.624 ms

# Below is generated by plot.py at 2018-10-10 02:26:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 71.380 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 94.16 Mbit/s
95th percentile per-packet one-way delay: 71.380 ms
Loss rate: 0.93%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 94.84 Mbps)
- Flow 1 egress (mean 94.16 Mbps)

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

- Flow 1 (95th percentile 71.38 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-10-10 01:12:56
End at: 2018-10-10 01:13:26
Local clock offset: 4.06 ms
Remote clock offset: -3.413 ms

# Below is generated by plot.py at 2018-10-10 02:26:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 69.161 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 69.161 ms
Loss rate: 0.89%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-10-10 01:37:08
End at: 2018-10-10 01:37:38
Local clock offset: 4.572 ms
Remote clock offset: -2.971 ms

# Below is generated by plot.py at 2018-10-10 02:26:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 58.789 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 58.789 ms
Loss rate: 0.67%
Run 5: Statistics of TCP BBR

Start at: 2018-10-10 02:01:20  
End at: 2018-10-10 02:01:50  
Local clock offset: 2.93 ms  
Remote clock offset: -2.964 ms

# Below is generated by plot.py at 2018-10-10 02:26:05  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.17 Mbit/s  
95th percentile per-packet one-way delay: 56.924 ms  
Loss rate: 0.87%  
-- Flow 1:  
Average throughput: 94.17 Mbit/s  
95th percentile per-packet one-way delay: 56.924 ms  
Loss rate: 0.87%
Run 5: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 94.80 Mbit/s)
- Flow 1 egress (mean 94.17 Mbit/s)
Run 1: Statistics of Copa

Start at: 2018-10-10 00:43:06
End at: 2018-10-10 00:43:36
Local clock offset: 1.205 ms
Remote clock offset: -3.678 ms

# Below is generated by plot.py at 2018-10-10 02:26:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.77 Mbit/s
95th percentile per-packet one-way delay: 74.873 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 75.77 Mbit/s
95th percentile per-packet one-way delay: 74.873 ms
Loss rate: 0.31%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-10-10 01:07:26
End at: 2018-10-10 01:07:56
Local clock offset: 3.582 ms
Remote clock offset: -3.43 ms

# Below is generated by plot.py at 2018-10-10 02:26:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.58 Mbit/s
95th percentile per-packet one-way delay: 74.449 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 77.58 Mbit/s
95th percentile per-packet one-way delay: 74.449 ms
Loss rate: 0.35%
Run 2: Report of Copa — Data Link

![Graph showing throughput and delay over time](image-url)
Run 3: Statistics of Copa

Start at: 2018-10-10 01:31:44
End at: 2018-10-10 01:32:14
Local clock offset: 4.573 ms
Remote clock offset: -2.991 ms

# Below is generated by plot.py at 2018-10-10 02:26:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.14 Mbit/s
95th percentile per-packet one-way delay: 71.880 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 81.14 Mbit/s
95th percentile per-packet one-way delay: 71.880 ms
Loss rate: 0.27%
Run 3: Report of Copa — Data Link

![Graph showing throughput and delay over time for Copa's data link.]

- **Flow 1 ingress (mean 81.19 Mbit/s)**
- **Flow 1 egress (mean 81.14 Mbit/s)**

- **Flow 1 (95th percentile 71.88 ms)**
Run 4: Statistics of Copa

Start at: 2018-10-10 01:55:50
End at: 2018-10-10 01:56:20
Local clock offset: 4.317 ms
Remote clock offset: -2.966 ms

# Below is generated by plot.py at 2018-10-10 02:27:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.67 Mbit/s
95th percentile per-packet one-way delay: 58.116 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 79.67 Mbit/s
95th percentile per-packet one-way delay: 58.116 ms
Loss rate: 0.31%
Run 4: Report of Copa — Data Link

![Throughput Graph](https://via.placeholder.com/150)

- Flow 1 ingress (mean 79.75 Mbit/s)
- Flow 1 egress (mean 79.67 Mbit/s)

![Packet Delay Graph](https://via.placeholder.com/150)

- Flow 1 (95th percentile 58.12 ms)
Run 5: Statistics of Copa

Start at: 2018-10-10 02:20:04
End at: 2018-10-10 02:20:34
Local clock offset: 1.669 ms
Remote clock offset: -2.62 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.86 Mbit/s
95th percentile per-packet one-way delay: 72.373 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 80.86 Mbit/s
95th percentile per-packet one-way delay: 72.373 ms
Loss rate: 0.28%
Run 5: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-10-10 00:23:10
End at: 2018-10-10 00:23:40
Local clock offset: 4.974 ms
Remote clock offset: -3.805 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 40.287 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 40.287 ms
Loss rate: 0.19%
Run 1: Report of TCP Cubic — Data Link

![Graph showing throughput and delay over time for Flow 1]
Run 2: Statistics of TCP Cubic

Start at: 2018-10-10 00:47:12
End at: 2018-10-10 00:47:42
Local clock offset: 0.874 ms
Remote clock offset: -3.79 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 40.523 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 82.32 Mbit/s
95th percentile per-packet one-way delay: 40.523 ms
Loss rate: 0.26%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-10-10 01:11:35
End at: 2018-10-10 01:12:05
Local clock offset: 3.988 ms
Remote clock offset: -3.218 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 92.11 Mbit/s
  95th percentile per-packet one-way delay: 40.124 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 92.11 Mbit/s
  95th percentile per-packet one-way delay: 40.124 ms
  Loss rate: 0.18%
Run 3: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 92.09 Mbit/s)  Flow 1 egress (mean 92.11 Mbit/s)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 40.12 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-10-10 01:35:47
End at: 2018-10-10 01:36:17
Local clock offset: 4.572 ms
Remote clock offset: -2.986 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 40.531 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 40.531 ms
Loss rate: 0.25%
Run 4: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 92.30 Mbit/s)  Flow 1 egress (mean 92.27 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 40.53 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-10-10 02:00:00
End at: 2018-10-10 02:00:30
Local clock offset: 3.215 ms
Remote clock offset: -2.777 ms

# Below is generated by plot.py at 2018-10-10 02:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 40.514 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 91.90 Mbit/s
95th percentile per-packet one-way delay: 40.514 ms
Loss rate: 0.19%
Run 5: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2018-10-10 00:45:52
End at: 2018-10-10 00:46:22
Local clock offset: 0.983 ms
Remote clock offset: -3.651 ms

# Below is generated by plot.py at 2018-10-10 02:28:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 54.932 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 94.45 Mbit/s
95th percentile per-packet one-way delay: 54.932 ms
Loss rate: 0.52%
Run 1: Report of FillP — Data Link

![Graph showing throughput and delay over time]

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 94.74 Mbit/s)
  - Flow 1 egress (mean 94.45 Mbit/s)

- **Delay (ms)**:
  - Flow 1 (95th percentile 54.93 ms)
Run 2: Statistics of FillP

Start at: 2018-10-10 01:10:15
End at: 2018-10-10 01:10:45
Local clock offset: 3.847 ms
Remote clock offset: -3.372 ms

# Below is generated by plot.py at 2018-10-10 02:28:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.43 Mbit/s
95th percentile per-packet one-way delay: 52.882 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 94.43 Mbit/s
95th percentile per-packet one-way delay: 52.882 ms
Loss rate: 0.50%
Run 2: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 94.70 Mbit/s)  Flow 1 egress (mean 94.43 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 52.88 ms)
Run 3: Statistics of FillP

Start at: 2018-10-10 01:34:28
End at: 2018-10-10 01:34:58
Local clock offset: 4.568 ms
Remote clock offset: -2.929 ms

# Below is generated by plot.py at 2018-10-10 02:28:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 94.48 Mbit/s
95th percentile per-packet one-way delay: 54.029 ms
Loss rate: 0.68%
Run 3: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 94.93 Mbit/s)  Flow 1 egress (mean 94.48 Mbit/s)

Packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 54.03 ms)
Run 4: Statistics of FillP

Start at: 2018-10-10 01:58:40
End at: 2018-10-10 01:59:10
Local clock offset: 3.496 ms
Remote clock offset: -2.792 ms

# Below is generated by plot.py at 2018-10-10 02:28:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 53.368 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 94.47 Mbit/s
95th percentile per-packet one-way delay: 53.368 ms
Loss rate: 1.02%
Run 4: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 95.24 Mbit/s)  Flow 1 egress (mean 94.47 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 53.37 ms)
Run 5: Statistics of FillP

Start at: 2018-10-10 02:22:48
End at: 2018-10-10 02:23:18
Local clock offset: 1.614 ms
Remote clock offset: -2.573 ms

# Below is generated by plot.py at 2018-10-10 02:29:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.54 Mbit/s
95th percentile per-packet one-way delay: 59.588 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 94.54 Mbit/s
95th percentile per-packet one-way delay: 59.588 ms
Loss rate: 0.67%
Run 5: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 94.98 Mbit/s)  Flow 1 egress (mean 94.54 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 59.59 ms)
Run 1: Statistics of Indigo

Start at: 2018-10-10 00:33:53
End at: 2018-10-10 00:34:23
Local clock offset: 2.38 ms
Remote clock offset: -3.797 ms

# Below is generated by plot.py at 2018-10-10 02:29:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.257 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.257 ms
Loss rate: 0.23%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-10-10 00:58:17
End at: 2018-10-10 00:58:47
Local clock offset: 1.637 ms
Remote clock offset: -3.495 ms

# Below is generated by plot.py at 2018-10-10 02:29:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 37.781 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 37.781 ms
Loss rate: 0.23%
Run 2: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 3: Statistics of Indigo

Start at: 2018-10-10 01:22:23
End at: 2018-10-10 01:22:53
Local clock offset: 4.486 ms
Remote clock offset: -3.107 ms

# Below is generated by plot.py at 2018-10-10 02:29:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.49 Mbit/s
95th percentile per-packet one-way delay: 38.052 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.49 Mbit/s
95th percentile per-packet one-way delay: 38.052 ms
Loss rate: 0.23%
Run 3: Report of Indigo — Data Link

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

![Graph 2: Per-packet one-way delay (ms) vs Time (s)]
Run 4: Statistics of Indigo

Start at: 2018-10-10 01:46:34
End at: 2018-10-10 01:47:04
Local clock offset: 4.565 ms
Remote clock offset: -3.059 ms

# Below is generated by plot.py at 2018-10-10 02:29:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 38.357 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 96.01 Mbit/s
95th percentile per-packet one-way delay: 38.357 ms
Loss rate: 0.22%
Run 4: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 96.02 Mbit/s)
- Flow 1 egress (mean 96.01 Mbit/s)

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

- Flow 1 (95th percentile 38.36 ms)
Run 5: Statistics of Indigo

Start at: 2018-10-10 02:10:48
End at: 2018-10-10 02:11:18
Local clock offset: 1.915 ms
Remote clock offset: -2.648 ms

# Below is generated by plot.py at 2018-10-10 02:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 38.089 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.55 Mbit/s
95th percentile per-packet one-way delay: 38.089 ms
Loss rate: 0.23%
Run 5: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 1: Statistics of Indigo-96d2da3

Start at: 2018-10-10 00:39:10
End at: 2018-10-10 00:39:40
Local clock offset: 1.605 ms
Remote clock offset: -3.954 ms

# Below is generated by plot.py at 2018-10-10 02:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.53 Mbit/s
95th percentile per-packet one-way delay: 507.757 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 72.53 Mbit/s
95th percentile per-packet one-way delay: 507.757 ms
Loss rate: 0.64%
Run 1: Report of Indigo-96d2da3 — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 72.74 Mbit/s)**
- **Flow 1 egress (mean 72.53 Mbit/s)**

![Graph 2](image2)

- **Flow 1 (95th percentile 507.76 ms)**
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-10-10 01:03:33
End at: 2018-10-10 01:04:03
Local clock offset: 3.001 ms
Remote clock offset: -3.596 ms

# Below is generated by plot.py at 2018-10-10 02:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 492.549 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 71.04 Mbit/s
95th percentile per-packet one-way delay: 492.549 ms
Loss rate: 1.29%
Run 2: Report of Indigo-96d2da3 — Data Link

- Flow 1 ingress (mean 72.19 Mbit/s)
- Flow 1 egress (mean 71.04 Mbit/s)

Flow 1 (95th percentile 492.55 ms)
Run 3: Statistics of Indigo-96d2da3

Start at: 2018-10-10 01:27:42
End at: 2018-10-10 01:28:12
Local clock offset: 4.569 ms
Remote clock offset: -3.041 ms

# Below is generated by plot.py at 2018-10-10 02:30:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 118.638 ms
Loss rate: 8.59%
-- Flow 1:
Average throughput: 96.13 Mbit/s
95th percentile per-packet one-way delay: 118.638 ms
Loss rate: 8.59%
Run 3: Report of Indigo-96d2da3 — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 104.93 Mbps)
- Flow 1 egress (mean 96.13 Mbps)

Per packet one way delay (ms)

Time (s)

- Flow 1 (95th percentile 118.64 ms)
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-10-10 01:51:55
End at: 2018-10-10 01:52:25
Local clock offset: 4.559 ms
Remote clock offset: -2.83 ms

# Below is generated by plot.py at 2018-10-10 02:30:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 121.548 ms
Loss rate: 7.32%
-- Flow 1:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 121.548 ms
Loss rate: 7.32%
Run 4: Report of Indigo-96d2da3 — Data Link

![Graph of Throughput (Mbps)]

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

Start at: 2018-10-10 02:16:07
End at: 2018-10-10 02:16:37
Local clock offset: 1.749 ms
Remote clock offset: -2.884 ms

# Below is generated by plot.py at 2018-10-10 02:30:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.65 Mbit/s
95th percentile per-packet one-way delay: 490.506 ms
Loss rate: 2.14%
-- Flow 1:
Average throughput: 71.65 Mbit/s
95th percentile per-packet one-way delay: 490.506 ms
Loss rate: 2.14%
Run 5: Report of Indigo-96d2da3 — Data Link

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

- **Flow 1 ingress** (mean 73.10 Mbit/s)
- **Flow 1 egress** (mean 71.65 Mbit/s)

![Graph 2: Packet delay (ms)](image2)

- Flow 1 (95th percentile 490.53 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-10-10 00:40:29
End at: 2018-10-10 00:40:59
Local clock offset: 1.459 ms
Remote clock offset: -3.708 ms

# Below is generated by plot.py at 2018-10-10 02:30:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 39.497 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.02 Mbit/s
95th percentile per-packet one-way delay: 39.497 ms
Loss rate: 0.20%
Run 1: Report of LEDBAT — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- Flow 1 ingress (mean 63.01 Mbit/s)
- Flow 1 egress (mean 63.02 Mbit/s)

![Graph 2: Pre-packet re-try delay (ms) vs Time (s)]
- Flow 1 (95th percentile 39.50 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-10-10 01:04:52
End at: 2018-10-10 01:05:22
Local clock offset: 3.245 ms
Remote clock offset: -3.387 ms

# Below is generated by plot.py at 2018-10-10 02:30:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.55 Mbit/s
95th percentile per-packet one-way delay: 38.691 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 50.55 Mbit/s
95th percentile per-packet one-way delay: 38.691 ms
Loss rate: 0.32%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-10-10 01:29:08
End at: 2018-10-10 01:29:38
Local clock offset: 4.562 ms
Remote clock offset: -3.181 ms

# Below is generated by plot.py at 2018-10-10 02:30:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.09 Mbit/s
95th percentile per-packet one-way delay: 39.721 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.09 Mbit/s
95th percentile per-packet one-way delay: 39.721 ms
Loss rate: 0.20%
Run 3: Report of LEDBAT — Data Link

![Graph 1: Throughput vs. Time for Flow 1 ingress and egress.]

![Graph 2: Per-packet one-way delay vs. Time for Flow 1.]

Flow 1 ingress (mean 63.08 Mbit/s) vs. Flow 1 egress (mean 63.09 Mbit/s)
Run 4: Statistics of LEDBAT

Start at: 2018-10-10 01:53:15
End at: 2018-10-10 01:53:45
Local clock offset: 4.565 ms
Remote clock offset: -2.677 ms

# Below is generated by plot.py at 2018-10-10 02:30:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 39.519 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 39.519 ms
Loss rate: 0.20%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-10-10 02:17:28
End at: 2018-10-10 02:17:58
Local clock offset: 1.719 ms
Remote clock offset: -2.699 ms

# Below is generated by plot.py at 2018-10-10 02:30:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 39.615 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 63.15 Mbit/s
95th percentile per-packet one-way delay: 39.615 ms
Loss rate: 0.20%
Run 5: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 63.14 Mbit/s)
- Flow 1 egress (mean 63.15 Mbit/s)

![Graph 2: One-way Delay (ms) over Time (s)](image)

- Flow 1 (95th percentile 39.62 ms)
Run 1: Statistics of Indigo-Muses

Start at: 2018-10-10 00:28:31
End at: 2018-10-10 00:29:01
Local clock offset: 3.784 ms
Remote clock offset: -3.918 ms

# Below is generated by plot.py at 2018-10-10 02:31:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.220 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.71 Mbit/s
95th percentile per-packet one-way delay: 38.220 ms
Loss rate: 0.23%
Run 1: Report of Indigo-Muses — Data Link

Throughput (Mbps):

Flow 1 ingress (mean 95.73 Mbit/s) — Flow 1 egress (mean 95.71 Mbit/s)

Packet delay (ms):

Flow 1 (95th percentile 38.22 ms)
Run 2: Statistics of Indigo-Muses

Start at: 2018-10-10 00:52:37
End at: 2018-10-10 00:53:07
Local clock offset: 0.532 ms
Remote clock offset: -3.719 ms

# Below is generated by plot.py at 2018-10-10 02:31:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 38.096 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 38.096 ms
Loss rate: 0.23%
Run 2: Report of Indigo-Muses — Data Link

![Graph 1: Throughput (Mbps)]

- Blue dashed line: Flow ingress (mean 95.37 Mbit/s)
- Blue solid line: Flow egress (mean 95.35 Mbit/s)

![Graph 2: Ping Delay]
Run 3: Statistics of Indigo-Muses

Start at: 2018-10-10 01:17:00
End at: 2018-10-10 01:17:30
Local clock offset: 4.308 ms
Remote clock offset: -3.206 ms

# Below is generated by plot.py at 2018-10-10 02:31:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 37.581 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.61 Mbit/s
95th percentile per-packet one-way delay: 37.581 ms
Loss rate: 0.23%
Run 3: Report of Indigo-Muses — Data Link

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

- **Flow 1 ingress (mean 95.63 Mbit/s)**
- **Flow 1 egress (mean 95.61 Mbit/s)**

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

- **Flow 1 (95th percentile 37.58 ms)**
Run 4: Statistics of Indigo-Muses

Start at: 2018-10-10 01:41:08
End at: 2018-10-10 01:41:38
Local clock offset: 4.569 ms
Remote clock offset: -2.931 ms

# Below is generated by plot.py at 2018-10-10 02:31:20
# Datalink statistics

-- Total of 1 flow:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.23%

-- Flow 1:
Average throughput: 95.63 Mbit/s
95th percentile per-packet one-way delay: 37.643 ms
Loss rate: 0.23%
Run 4: Report of Indigo-Muses — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean values and 95th percentile delay.]
Run 5: Statistics of Indigo-Muses

Start at: 2018-10-10 02:05:21
End at: 2018-10-10 02:05:51
Local clock offset: 2.27 ms
Remote clock offset: -2.783 ms

# Below is generated by plot.py at 2018-10-10 02:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 37.744 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 37.744 ms
Loss rate: 0.23%
Run 5: Report of Indigo-Muses — Data Link

![Graph of Throughput (Mbps) over Time (s)]

- **Flow 1 ingress** (mean 95.61 Mbit/s)
- **Flow 1 egress** (mean 95.59 Mbit/s)

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

- **Flow 1** (95th percentile 37.74 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-10-10 00:27:12
End at: 2018-10-10 00:27:42
Local clock offset: 4.188 ms
Remote clock offset: -3.896 ms

# Below is generated by plot.py at 2018-10-10 02:31:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: 39.569 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: 39.569 ms
Loss rate: 0.23%
Run 1: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 91.16 Mbit/s)
- Flow 1 egress (mean 91.14 Mbit/s)

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

- Flow 1 (95th percentile 39.57 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-10-10 00:51:16
End at: 2018-10-10 00:51:46
Local clock offset: 0.603 ms
Remote clock offset: -3.631 ms

# Below is generated by plot.py at 2018-10-10 02:31:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 37.922 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 92.14 Mbit/s
95th percentile per-packet one-way delay: 37.922 ms
Loss rate: 0.24%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-10-10 01:15:41
End at: 2018-10-10 01:16:11
Local clock offset: 4.246 ms
Remote clock offset: -3.402 ms

# Below is generated by plot.py at 2018-10-10 02:31:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.70 Mbit/s
95th percentile per-packet one-way delay: 38.264 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 91.70 Mbit/s
95th percentile per-packet one-way delay: 38.264 ms
Loss rate: 0.26%
Run 3: Report of PCC-Allegro — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 91.74 Mbit/s)
- Flow 1 egress (mean 91.70 Mbit/s)

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

- Flow 1 (95th percentile 38.26 ms)

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Run 4: Statistics of PCC-Allegro

Start at: 2018-10-10 01:39:49
End at: 2018-10-10 01:40:19
Local clock offset: 4.581 ms
Remote clock offset: -3.148 ms

# Below is generated by plot.py at 2018-10-10 02:32:06
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 89.97 Mbit/s
  95th percentile per-packet one-way delay: 38.103 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 89.97 Mbit/s
  95th percentile per-packet one-way delay: 38.103 ms
  Loss rate: 0.31%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2018-10-10 02:04:01
End at: 2018-10-10 02:04:31
Local clock offset: 2.445 ms
Remote clock offset: -2.944 ms

# Below is generated by plot.py at 2018-10-10 02:32:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 39.453 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 92.12 Mbit/s
95th percentile per-packet one-way delay: 39.453 ms
Loss rate: 0.23%
Run 5: Report of PCC-Allegro — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 92.14 Mbit/s)  Flow 1 egress (mean 92.12 Mbit/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 39.45 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-10-10 00:35:14
End at: 2018-10-10 00:35:44
Local clock offset: 2.137 ms
Remote clock offset: -3.829 ms

# Below is generated by plot.py at 2018-10-10 02:33:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 149.718 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 149.718 ms
Loss rate: 0.27%
Run 1: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 86.97 Mbit/s)  Flow 1 egress (mean 86.93 Mbit/s)

Per packet one way delay (ms)

Time (s)

* Flow 1 (95th percentile 149.72 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-10-10 00:59:38
End at: 2018-10-10 01:00:08
Local clock offset: 2.095 ms
Remote clock offset: -3.684 ms

# Below is generated by plot.py at 2018-10-10 02:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 146.973 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 146.973 ms
Loss rate: 0.41%
Run 2: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 88.06 Mbit/s)
  - Flow 1 egress (mean 87.89 Mbit/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 146.97 ms)
Run 3: Statistics of PCC-Expr

Start at: 2018-10-10 01:23:45
End at: 2018-10-10 01:24:15
Local clock offset: 4.529 ms
Remote clock offset: -3.116 ms

# Below is generated by plot.py at 2018-10-10 02:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 161.635 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 85.16 Mbit/s
95th percentile per-packet one-way delay: 161.635 ms
Loss rate: 0.39%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-10-10 01:47:59
End at: 2018-10-10 01:48:29
Local clock offset: 4.571 ms
Remote clock offset: -2.985 ms

# Below is generated by plot.py at 2018-10-10 02:33:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 147.317 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 147.317 ms
Loss rate: 0.32%
Run 5: Statistics of PCC-Expr

Start at: 2018-10-10 02:12:10
End at: 2018-10-10 02:12:40
Local clock offset: 1.861 ms
Remote clock offset: -2.607 ms

# Below is generated by plot.py at 2018-10-10 02:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.03 Mbit/s
95th percentile per-packet one-way delay: 162.220 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 86.03 Mbit/s
95th percentile per-packet one-way delay: 162.220 ms
Loss rate: 0.34%
Run 5: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 86.14 Mbit/s)  Flow 1 egress (mean 86.03 Mbit/s)

Per packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 162.22 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-10-10 00:32:33
End at: 2018-10-10 00:33:03
Local clock offset: 2.701 ms
Remote clock offset: -3.833 ms

# Below is generated by plot.py at 2018-10-10 02:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 49.033 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 77.28 Mbit/s
95th percentile per-packet one-way delay: 49.033 ms
Loss rate: 0.22%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-10-10 00:56:56
End at: 2018-10-10 00:57:26
Local clock offset: 1.125 ms
Remote clock offset: -3.668 ms

# Below is generated by plot.py at 2018-10-10 02:33:15
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 77.10 Mbit/s
  95th percentile per-packet one-way delay: 48.785 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 77.10 Mbit/s
  95th percentile per-packet one-way delay: 48.785 ms
  Loss rate: 0.28%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-10-10 01:21:04
End at: 2018-10-10 01:21:34
Local clock offset: 4.455 ms
Remote clock offset: -3.14 ms

# Below is generated by plot.py at 2018-10-10 02:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.43 Mbit/s
95th percentile per-packet one-way delay: 51.570 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.43 Mbit/s
95th percentile per-packet one-way delay: 51.570 ms
Loss rate: 0.28%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-10-10 01:45:12
End at: 2018-10-10 01:45:42
Local clock offset: 4.565 ms
Remote clock offset: -2.811 ms

# Below is generated by plot.py at 2018-10-10 02:33:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 49.262 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 49.262 ms
Loss rate: 0.28%
Run 4: Report of QUIC Cubic — Data Link

![Graph of throughput and RTT over time](image)

- Flow 1 ingress (mean 77.22 Mbit/s)
- Flow 1 egress (mean 77.17 Mbit/s)
- Flow 1 (95th percentile 49.26 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-10-10 02:09:28
End at: 2018-10-10 02:09:58
Local clock offset: 1.976 ms
Remote clock offset: -2.763 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.40 Mbit/s
95th percentile per-packet one-way delay: 52.006 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.40 Mbit/s
95th percentile per-packet one-way delay: 52.006 ms
Loss rate: 0.28%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-10-10 00:36:38
End at: 2018-10-10 00:37:08
Local clock offset: 1.96 ms
Remote clock offset: -3.765 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.646 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.646 ms
Loss rate: 0.13%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-10-10 01:01:01
End at: 2018-10-10 01:01:31
Local clock offset: 2.436 ms
Remote clock offset: -3.426 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.291 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.291 ms
Loss rate: 0.26%
Run 2: Report of SCReAM — Data Link

![Graph showing throughput over time for two flows, with one showing ingress and the other egress.]

![Graph showing per-packet one-way delay over time for Flow 1, showing the 95th percentile delay.]

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Run 3: Statistics of SCReAM

Start at: 2018-10-10 01:25:08
End at: 2018-10-10 01:25:39
Local clock offset: 4.556 ms
Remote clock offset: -3.065 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.487 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.487 ms
Loss rate: 0.26%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-10-10 01:49:22
End at: 2018-10-10 01:49:52
Local clock offset: 4.572 ms
Remote clock offset: -2.797 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.552 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.552 ms
Loss rate: 0.26%
Run 4: Report of SCReAM — Data Link

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

![Graph 2: Per-packet one-way delay (ms) over time (s)](image2)
Run 5: Statistics of SCReAM

Start at: 2018-10-10 02:13:35
End at: 2018-10-10 02:14:05
Local clock offset: 1.814 ms
Remote clock offset: -2.696 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.537 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.537 ms
Loss rate: 0.13%
Run 5: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-10-10 00:37:54
End at: 2018-10-10 00:38:24
Local clock offset: 1.756 ms
Remote clock offset: -3.82 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 41.099 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 41.099 ms
Loss rate: 0.19%
Run 1: Report of Sprout — Data Link

![Graph of Throughput and Delay over Time]

Throughput: 12 to 14 Mbps, with fluctuations and peaks.

Delay: 34 to 42 ms, with spikes and variations.

Legend:
- Flow 1 ingress (mean 11.99 Mbit/s)
- Flow 1 egress (mean 11.99 Mbit/s)
Run 2: Statistics of Sprout

Start at: 2018-10-10 01:02:17
End at: 2018-10-10 01:02:47
Local clock offset: 2.732 ms
Remote clock offset: -3.429 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.172 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 12.06 Mbit/s
95th percentile per-packet one-way delay: 41.172 ms
Loss rate: 0.15%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-10-10 01:26:24
End at: 2018-10-10 01:26:54
Local clock offset: 4.561 ms
Remote clock offset: -3.062 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 41.091 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 12.00 Mbit/s
95th percentile per-packet one-way delay: 41.091 ms
Loss rate: 0.12%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-10-10 01:50:38
End at: 2018-10-10 01:51:08
Local clock offset: 4.572 ms
Remote clock offset: -2.838 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 40.775 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 40.775 ms
Loss rate: 0.24%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-10-10 02:14:51
End at: 2018-10-10 02:15:21
Local clock offset: 1.783 ms
Remote clock offset: -2.707 ms

# Below is generated by plot.py at 2018-10-10 02:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.971 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 12.03 Mbit/s
95th percentile per-packet one-way delay: 40.971 ms
Loss rate: 0.16%
Run 5: Report of Sprout — Data Link

![Throughput Graph]

![Packet Delay Graph]

Flow 1 ingress (mean 12.02 Mbit/s)  Flow 1 egress (mean 12.03 Mbit/s)
Run 1: Statistics of TaoVA-100x

Start at: 2018-10-10 00:31:10
End at: 2018-10-10 00:31:40
Local clock offset: 2.991 ms
Remote clock offset: -3.898 ms

# Below is generated by plot.py at 2018-10-10 02:35:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 44.997 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 44.997 ms
Loss rate: 0.21%
Run 1: Report of TaoVA-100x — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with mean 88.31 Mbit/s.]

![Graph showing round-trip delay for Flow 1 with 99th percentile 43.00 ms.]
Run 2: Statistics of TaoVA-100x

Start at: 2018-10-10 00:55:28
End at: 2018-10-10 00:55:58
Local clock offset: 0.502 ms
Remote clock offset: -3.427 ms

# Below is generated by plot.py at 2018-10-10 02:35:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 44.259 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 44.259 ms
Loss rate: 0.22%
Run 2: Report of TaoVA-100x — Data Link

![Graph showing network throughput over time]

![Graph showing packet delay over time]

Flow 1 ingress (mean 88.34 Mbps)  Flow 1 egress (mean 88.33 Mbps)

Flow 1 (95th percentile 44.26 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-10-10 01:19:41
End at: 2018-10-10 01:20:11
Local clock offset: 4.409 ms
Remote clock offset: -3.102 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.55 Mbit/s
95th percentile per-packet one-way delay: 44.659 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.55 Mbit/s
95th percentile per-packet one-way delay: 44.659 ms
Loss rate: 0.20%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-10-10 01:43:48
End at: 2018-10-10 01:44:18
Local clock offset: 4.59 ms
Remote clock offset: -3.034 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 44.991 ms
Loss rate: 0.22%

-- Flow 1:
Average throughput: 88.34 Mbit/s
95th percentile per-packet one-way delay: 44.991 ms
Loss rate: 0.22%
Run 4: Report of TaoVA-100x — Data Link

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

**Flow 1 ingress (mean 88.34 Mbit/s)**

**Flow 1 egress (mean 88.34 Mbit/s)**

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

**Flow 1 (95th percentile 44.99 ms)**
Run 5: Statistics of TaoVA-100x

Start at: 2018-10-10 02:08:03
End at: 2018-10-10 02:08:33
Local clock offset: 2.028 ms
Remote clock offset: -2.72 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.37 Mbit/s
95th percentile per-packet one-way delay: 44.760 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 88.37 Mbit/s
95th percentile per-packet one-way delay: 44.760 ms
Loss rate: 0.20%
Run 5: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 88.36 Mbit/s)
- **Flow 1 egress** (mean 88.37 Mbit/s)

![Graph 2: Round-trip delay vs Time](image2)

- **Flow 1 (95th percentile 44.76 ms)**
Run 1: Statistics of TCP Vegas

Start at: 2018-10-10 00:29:51
End at: 2018-10-10 00:30:21
Local clock offset: 3.337 ms
Remote clock offset: -3.901 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.98 Mbit/s
95th percentile per-packet one-way delay: 35.196 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 75.98 Mbit/s
95th percentile per-packet one-way delay: 35.196 ms
Loss rate: 0.28%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-10-10 00:54:04
End at: 2018-10-10 00:54:34
Local clock offset: 0.438 ms
Remote clock offset: -3.714 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.03 Mbit/s
95th percentile per-packet one-way delay: 35.039 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.03 Mbit/s
95th percentile per-packet one-way delay: 35.039 ms
Loss rate: 0.28%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-10-10 01:18:21
End at: 2018-10-10 01:18:51
Local clock offset: 4.354 ms
Remote clock offset: -3.182 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.88 Mbit/s
95th percentile per-packet one-way delay: 34.966 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 86.88 Mbit/s
95th percentile per-packet one-way delay: 34.966 ms
Loss rate: 0.25%
Run 3: Report of TCP Vegas — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 86.91 Mb/s)  Flow 1 egress (mean 86.88 Mb/s)

Packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 34.97 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-10-10 01:42:28
End at: 2018-10-10 01:42:58
Local clock offset: 4.578 ms
Remote clock offset: -3.121 ms

# Below is generated by plot.py at 2018-10-10 02:35:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 35.119 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 76.19 Mbit/s
95th percentile per-packet one-way delay: 35.119 ms
Loss rate: 0.28%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 76.24 Mbit/s)
- Flow 1 egress (mean 76.19 Mbit/s)

![Graph of Per-packet end-to-end delay (ms) vs Time (s)]

- Flow 1 (95th percentile 35.12 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-10-10 02:06:42
End at: 2018-10-10 02:07:12
Local clock offset: 2.148 ms
Remote clock offset: -2.757 ms

# Below is generated by plot.py at 2018-10-10 02:35:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 34.995 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 34.995 ms
Loss rate: 0.23%
Run 1: Statistics of Verus

Start at: 2018-10-10 00:44:30
End at: 2018-10-10 00:45:00
Local clock offset: 1.096 ms
Remote clock offset: -3.856 ms

# Below is generated by plot.py at 2018-10-10 02:36:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 74.372 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 74.372 ms
Loss rate: 0.54%
Run 1: Report of Verus — Data Link

![Graphs showing network traffic and latency](image-url)
Run 2: Statistics of Verus

Start at: 2018-10-10 01:08:48
End at: 2018-10-10 01:09:18
Local clock offset: 3.715 ms
Remote clock offset: -3.373 ms

# Below is generated by plot.py at 2018-10-10 02:36:13
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 84.63 Mbit/s
  95th percentile per-packet one-way delay: 74.474 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 84.63 Mbit/s
  95th percentile per-packet one-way delay: 74.474 ms
  Loss rate: 0.48%
Run 2: Report of Verus — Data Link

![Graph of throughput (Mbps) over time (s) with two lines: one for ingress (mean 84.87 Mbps) and one for egress (mean 84.63 Mbps).]

![Graph of per packet one-way delay (ms) over time (s) with one line indicating the 95th percentile (74.47 ms).]
Run 3: Statistics of Verus

Start at: 2018-10-10 01:33:07
End at: 2018-10-10 01:33:37
Local clock offset: 4.587 ms
Remote clock offset: -2.879 ms

# Below is generated by plot.py at 2018-10-10 02:36:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 73.615 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 86.20 Mbit/s
95th percentile per-packet one-way delay: 73.615 ms
Loss rate: 0.50%
Run 3: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)](image1)
- Flow 1 ingress (mean 86.45 Mbit/s)
- Flow 1 egress (mean 86.20 Mbit/s)

![Graph 2: Per-packet one way delay (ms)](image2)
- Flow 1 (95th percentile 73.61 ms)
Run 4: Statistics of Verus

Start at: 2018-10-10 01:57:12
End at: 2018-10-10 01:57:42
Local clock offset: 3.918 ms
Remote clock offset: -2.94 ms

# Below is generated by plot.py at 2018-10-10 02:36:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 71.672 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 71.672 ms
Loss rate: 0.56%
Run 4: Report of Verus — Data Link

![Graph showing throughput and packet delay over time]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 84.21 Mbit/s)  Flow 1 egress (mean 83.91 Mbit/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 71.67 ms)
Run 5: Statistics of Verus

Start at: 2018-10-10 02:21:27
End at: 2018-10-10 02:21:57
Local clock offset: 1.66 ms
Remote clock offset: -2.644 ms

# Below is generated by plot.py at 2018-10-10 02:36:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 74.600 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 83.42 Mbit/s
95th percentile per-packet one-way delay: 74.600 ms
Loss rate: 0.53%
Run 5: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-10-10 00:25:51
End at: 2018-10-10 00:26:21
Local clock offset: 4.751 ms
Remote clock offset: -3.837 ms

# Below is generated by plot.py at 2018-10-10 02:36:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.05 Mbit/s
95th percentile per-packet one-way delay: 35.862 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.05 Mbit/s
95th percentile per-packet one-way delay: 35.862 ms
Loss rate: 0.24%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time for Flow 1. The throughput graph indicates fluctuations in data rate, while the packet delay graph shows high spikes at specific points in time.](image-url)
Run 2: Statistics of PCC-Vivace

Start at: 2018-10-10 00:49:54
End at: 2018-10-10 00:50:24
Local clock offset: 0.697 ms
Remote clock offset: -3.541 ms

# Below is generated by plot.py at 2018-10-10 02:36:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.22 Mbit/s
95th percentile per-packet one-way delay: 36.684 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 84.22 Mbit/s
95th percentile per-packet one-way delay: 36.684 ms
Loss rate: 0.24%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2018-10-10 01:14:19
End at: 2018-10-10 01:14:49
Local clock offset: 4.157 ms
Remote clock offset: -3.294 ms

# Below is generated by plot.py at 2018-10-10 02:36:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 34.623 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 34.623 ms
Loss rate: 0.24%
Run 3: Report of PCC-Vivace — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 85.04 Mbit/s)**
- **Flow 1 egress (mean 85.00 Mbit/s)**

![Graph 2](image2)

- **Flow 1 (95th percentile 34.62 ms)**
Run 4: Statistics of PCC-Vivace

Start at: 2018-10-10 01:38:28
End at: 2018-10-10 01:38:58
Local clock offset: 4.578 ms
Remote clock offset: -2.871 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 35.500 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 84.96 Mbit/s
95th percentile per-packet one-way delay: 35.500 ms
Loss rate: 0.25%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-10-10 02:02:40
End at: 2018-10-10 02:03:10
Local clock offset: 2.674 ms
Remote clock offset: -2.747 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 85.11 Mbit/s
  95th percentile per-packet one-way delay: 35.834 ms
  Loss rate: 0.23%
-- Flow 1:
  Average throughput: 85.11 Mbit/s
  95th percentile per-packet one-way delay: 35.834 ms
  Loss rate: 0.23%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing network performance metrics over time. The graphs display throughput and packet delay data for Flow 1 ingress and egress, indicating fluctuations in network performance.]
Run 1: Statistics of WebRTC media

Start at: 2018-10-10 00:41:50
End at: 2018-10-10 00:42:20
Local clock offset: 1.318 ms
Remote clock offset: -3.912 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 34.018 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 34.018 ms
Loss rate: 0.24%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress with mean of 2.34 Mbit/s.]

![Graph showing packet delay over time for Flow 1 with 95th percentile of 34.02 ms.]
Run 2: Statistics of WebRTC media

Start at: 2018-10-10 01:06:10
End at: 2018-10-10 01:06:40
Local clock offset: 3.404 ms
Remote clock offset: -3.433 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 33.787 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.34 Mbit/s
95th percentile per-packet one-way delay: 33.787 ms
Loss rate: 0.24%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-10-10 01:30:28
End at: 2018-10-10 01:30:58
Local clock offset: 4.571 ms
Remote clock offset: -3.235 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 34.055 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 2.29 Mbit/s
95th percentile per-packet one-way delay: 34.055 ms
Loss rate: 0.26%
Run 3: Report of WebRTC media — Data Link

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 2.29 Mbit/s)
- Flow 1 egress (mean 2.29 Mbit/s)

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

- Flow 1 (95th percentile 34.05 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-10-10 01:54:34
End at: 2018-10-10 01:55:04
Local clock offset: 4.572 ms
Remote clock offset: -2.926 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.34 Mbit/s
  95th percentile per-packet one-way delay: 34.115 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 2.34 Mbit/s
  95th percentile per-packet one-way delay: 34.115 ms
  Loss rate: 0.25%
Run 4: Report of WebRTC media — Data Link

![Graph showing throughput over time](image1)

- Flow 1 ingress (mean 2.34 Mbit/s)
- Flow 1 egress (mean 2.34 Mbit/s)

![Graph showing per-packet one-way delay](image2)

- Flow 1 (95th percentile 34.12 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-10-10 02:18:48
End at: 2018-10-10 02:19:18
Local clock offset: 1.697 ms
Remote clock offset: -2.66 ms

# Below is generated by plot.py at 2018-10-10 02:36:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.798 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 33.798 ms
Loss rate: 0.24%
Run 5: Report of WebRTC media — Data Link

![Graph 1: Throughput over Time]

![Graph 2: Round-trip Delay over Time]

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