Pantheon Report

Data path: GCE Iowa on ens4 (remote) → GCE London on ens4 (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.google.com and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1021-gcp
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 @ 794ca3866981572cb73700a276691acf7c97c0f2b
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/genericCC @ d0153f8e594aa89e93b032143cedbf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4a4e0edbf90c077e64d
third_party/libutp @ b34659b92e2876e2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbefed0c6349ae96009b4f8643c40a
third_party/pantheon-tunnel @ f866df58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1af958fa0d6d18b623c091a55f0ec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acc08fab92c4eb2f49f74ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ebc978f3cf4f
third_party/scream-reproduce @ f099118d1422a3131bf11ff1964974e1da3bd2
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/vivace @ 2babf86211435ae071a32f96b7d8c504587f5d7f4

1
test from GCE Iowa to GCE London, 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>618.48</td>
<td>73.79</td>
<td>0.34</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>316.36</td>
<td>54.16</td>
<td>0.29</td>
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<td>TCP Cubic</td>
<td>5</td>
<td>627.93</td>
<td>73.64</td>
<td>0.36</td>
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<tr>
<td>FillP</td>
<td>5</td>
<td>961.05</td>
<td>86.91</td>
<td>0.47</td>
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<td>Indigo</td>
<td>5</td>
<td>201.13</td>
<td>48.07</td>
<td>0.33</td>
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<td>Indigo-96d2da3</td>
<td>5</td>
<td>284.64</td>
<td>63.83</td>
<td>0.23</td>
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<td>LEBAT</td>
<td>5</td>
<td>39.98</td>
<td>48.80</td>
<td>0.51</td>
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<td>Indigo-Muses</td>
<td>4</td>
<td>668.78</td>
<td>66.06</td>
<td>0.35</td>
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<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>462.98</td>
<td>153.56</td>
<td>2.91</td>
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<tr>
<td>PCC-Expr</td>
<td>5</td>
<td>332.86</td>
<td>140.06</td>
<td>2.74</td>
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<tr>
<td>QUIC Cubic</td>
<td>4</td>
<td>59.07</td>
<td>47.61</td>
<td>0.52</td>
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<td>SCReAM</td>
<td>5</td>
<td>0.22</td>
<td>49.03</td>
<td>0.36</td>
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<td>Sprout</td>
<td>5</td>
<td>9.17</td>
<td>48.70</td>
<td>0.32</td>
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<td>TaoVA-100x</td>
<td>5</td>
<td>244.90</td>
<td>47.84</td>
<td>0.34</td>
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<tr>
<td>TCP Vegas</td>
<td>5</td>
<td>592.88</td>
<td>56.36</td>
<td>0.31</td>
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<tr>
<td>Verus</td>
<td>5</td>
<td>177.77</td>
<td>97.01</td>
<td>0.51</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>414.51</td>
<td>66.08</td>
<td>0.30</td>
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<td>WebRTC media</td>
<td>5</td>
<td>1.92</td>
<td>48.17</td>
<td>0.42</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

End at: 2018-11-15 19:56:05
Local clock offset: 0.28 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-11-15 22:18:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 605.30 Mbit/s
95th percentile per-packet one-way delay: 72.978 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 605.30 Mbit/s
95th percentile per-packet one-way delay: 72.978 ms
Loss rate: 0.39%
Run 1: Report of TCP BBR — Data Link

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

Legend for Graph 1:
- Flow 1 ingress (mean 605.72 Mbit/s)
- Flow 1 egress (mean 605.30 Mbit/s)

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

Legend for Graph 2:
- Flow 1 (95th percentile 72.98 ms)
Run 2: Statistics of TCP BBR

Local clock offset: -0.02 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-11-15 22:18:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 617.60 Mbit/s
95th percentile per-packet one-way delay: 71.183 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 617.60 Mbit/s
95th percentile per-packet one-way delay: 71.183 ms
Loss rate: 0.38%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 618.02 Mbps)
- Flow 1 egress (mean 617.60 Mbps)

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

- Flow 1 (95th percentile 71.18 ms)
Run 3: Statistics of TCP BBR

End at: 2018-11-15 20:48:01
Local clock offset: 0.13 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-11-15 22:18:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 616.60 Mbit/s
  95th percentile per-packet one-way delay: 73.261 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 616.60 Mbit/s
  95th percentile per-packet one-way delay: 73.261 ms
  Loss rate: 0.38%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

End at: 2018-11-15 21:14:09
Local clock offset: 0.133 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-11-15 22:19:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 619.78 Mbit/s
95th percentile per-packet one-way delay: 72.978 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 619.78 Mbit/s
95th percentile per-packet one-way delay: 72.978 ms
Loss rate: 0.38%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput and packet delay over time for Flow 1. The throughput graph shows a peak at around 600 Mbps, with fluctuations over time. The packet delay graph shows a variation in delay with peaks at around 90 ms, with some lower values.](image-url)
Run 5: Statistics of TCP BBR

Start at: 2018-11-15 21:40:17  
End at: 2018-11-15 21:40:47  
Local clock offset: 0.033 ms  
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-11-15 22:19:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 633.14 Mbit/s
95th percentile per-packet one-way delay: 78.533 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 633.14 Mbit/s
95th percentile per-packet one-way delay: 78.533 ms
Loss rate: 0.15%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-11-15 19:51:03
End at: 2018-11-15 19:51:33
Local clock offset: -0.042 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-11-15 22:19:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 328.72 Mbit/s
95th percentile per-packet one-way delay: 50.197 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 328.72 Mbit/s
95th percentile per-packet one-way delay: 50.197 ms
Loss rate: 0.29%
Run 1: Report of Copa — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 329.13 Mbit/s)**
- **Flow 1 egress (mean 328.72 Mbit/s)**

**Round-trip delay (ms)**

- **Flow 1 (95th percentile 50.20 ms)**
Run 2: Statistics of Copa

End at: 2018-11-15 20:16:53
Local clock offset: 0.337 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-11-15 22:19:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 291.62 Mbit/s
95th percentile per-packet one-way delay: 49.685 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 291.62 Mbit/s
95th percentile per-packet one-way delay: 49.685 ms
Loss rate: 0.19%
Run 3: Statistics of Copa

End at: 2018-11-15 20:43:03
Local clock offset: 0.102 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-11-15 22:19:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 301.23 Mbit/s
95th percentile per-packet one-way delay: 61.229 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 301.23 Mbit/s
95th percentile per-packet one-way delay: 61.229 ms
Loss rate: 0.38%
Run 3: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 301.41 Mbps)
  - Flow 1 egress (mean 301.23 Mbps)

- **Packet error rate (1/80s):**
  - Flow 1 (95th percentile 61.23 ms)
Run 4: Statistics of Copa

Start at: 2018-11-15 21:08:39
End at: 2018-11-15 21:09:09
Local clock offset: 0.092 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-11-15 22:29:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.04 Mbit/s
95th percentile per-packet one-way delay: 54.168 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 319.04 Mbit/s
95th percentile per-packet one-way delay: 54.168 ms
Loss rate: 0.32%
Run 4: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 319.02 Mbit/s)**
- **Flow 1 egress (mean 319.04 Mbit/s)**

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

- **Flow 1 (95th percentile 54.17 ms)**
Run 5: Statistics of Copa

Start at: 2018-11-15 21:35:01
End at: 2018-11-15 21:35:31
Local clock offset: 0.048 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-11-15 22:29:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.21 Mbit/s
95th percentile per-packet one-way delay: 55.510 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 341.21 Mbit/s
95th percentile per-packet one-way delay: 55.510 ms
Loss rate: 0.26%
Run 5: Report of Copa — Data Link

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 341.02 Mbit/s)
- Flow 1 egress (mean 341.21 Mbit/s)

Packet loss and delay (ms) vs Time (s)

- Flow 1 (95th percentile 55.51 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-11-15 20:02:58
End at: 2018-11-15 20:03:28
Local clock offset: -0.109 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-11-15 22:30:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 602.01 Mbit/s
95th percentile per-packet one-way delay: 76.409 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 602.01 Mbit/s
95th percentile per-packet one-way delay: 76.409 ms
Loss rate: 0.39%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

End at: 2018-11-15 20:29:25
Local clock offset: 0.079 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-11-15 22:30:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 612.95 Mbit/s
95th percentile per-packet one-way delay: 74.393 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 612.95 Mbit/s
95th percentile per-packet one-way delay: 74.393 ms
Loss rate: 0.39%
Run 2: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 613.38 Mbit/s)
- Flow 1 egress (mean 612.95 Mbit/s)

![Graph of Packet Loss Rate vs Time]

- Flow 1 (95th percentile 74.39 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-11-15 20:55:00
End at: 2018-11-15 20:55:30
Local clock offset: 0.099 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-11-15 22:30:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 637.19 Mbit/s
95th percentile per-packet one-way delay: 73.320 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 637.19 Mbit/s
95th percentile per-packet one-way delay: 73.320 ms
Loss rate: 0.27%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

End at: 2018-11-15 21:21:42
Local clock offset: 0.52 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-11-15 22:31:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 656.39 Mbit/s
95th percentile per-packet one-way delay: 70.102 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 656.39 Mbit/s
95th percentile per-packet one-way delay: 70.102 ms
Loss rate: 0.36%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Local clock offset: -0.03 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-11-15 22:31:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 631.12 Mbit/s
95th percentile per-packet one-way delay: 73.959 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 631.12 Mbit/s
95th percentile per-packet one-way delay: 73.959 ms
Loss rate: 0.38%
Run 5: Report of TCP Cubic — Data Link

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**Graph 1:**
- x-axis: Time (s)
- y-axis: Throughput (Mbps)
- Legend:
  - Dashed line: Flow 1 ingress (mean 631.46 Mbps)
  - Solid line: Flow 1 egress (mean 631.12 Mbps)

**Graph 2:**
- x-axis: Time (s)
- y-axis: Per-packet one-way delay (ms)
- Legend:
  - Marked line: Flow 1 (95th percentile 73.96 ms)
Run 1: Statistics of FillP

End at: 2018-11-15 19:54:18
Local clock offset: -0.117 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-11-15 22:40:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 996.33 Mbit/s
95th percentile per-packet one-way delay: 73.473 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 996.33 Mbit/s
95th percentile per-packet one-way delay: 73.473 ms
Loss rate: 0.23%
Run 1: Report of FillP — Data Link

![Graph of throughput and delay over time.]
Run 2: Statistics of FillP

End at: 2018-11-15 20:20:06
Local clock offset: -0.036 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-11-15 22:52:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 992.59 Mbit/s
95th percentile per-packet one-way delay: 75.163 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 992.59 Mbit/s
95th percentile per-packet one-way delay: 75.163 ms
Loss rate: 0.35%
Run 2: Report of FillP — Data Link

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

- **Flow 1 Ingress**: (mean 993.00 Mbps)
- **Flow 1 Egress**: (mean 992.59 Mbps)

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

- **Flow 1 (95th percentile 75.16 ms)**
Run 3: Statistics of FillP

Start at: 2018-11-15 20:45:46
End at: 2018-11-15 20:46:16
Local clock offset: 0.125 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-11-15 22:52:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 945.23 Mbit/s
95th percentile per-packet one-way delay: 85.622 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 945.23 Mbit/s
95th percentile per-packet one-way delay: 85.622 ms
Loss rate: 0.61%
Run 3: Report of FillP — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 947.89 Mbps)**
- **Flow 1 egress (mean 945.23 Mbps)**

**End-to-end delay (ms)**

- **Flow 1 (95th percentile 85.62 ms)**
Run 4: Statistics of FillP

End at: 2018-11-15 21:12:25
Local clock offset: 0.131 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 943.15 Mbit/s
95th percentile per-packet one-way delay: 103.214 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 943.15 Mbit/s
95th percentile per-packet one-way delay: 103.214 ms
Loss rate: 0.68%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

End at: 2018-11-15 21:38:59
Local clock offset: -0.012 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 927.97 Mbit/s
95th percentile per-packet one-way delay: 97.054 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 927.97 Mbit/s
95th percentile per-packet one-way delay: 97.054 ms
Loss rate: 0.46%
Run 5: Report of FillP — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 929.33 Mbps)
- Flow 1 egress (mean 927.97 Mbps)

Per-packet one-way delay (ms):

- Flow 1 (95th percentile 97.05 ms)
Run 1: Statistics of Indigo

Start at: 2018-11-15 20:04:35
End at: 2018-11-15 20:05:05
Local clock offset: -0.471 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 46.605 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 90.82 Mbit/s
95th percentile per-packet one-way delay: 46.605 ms
Loss rate: 0.35%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-11-15 20:30:32
End at: 2018-11-15 20:31:02
Local clock offset: 0.048 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.11 Mbit/s
95th percentile per-packet one-way delay: 47.105 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 222.11 Mbit/s
95th percentile per-packet one-way delay: 47.105 ms
Loss rate: 0.37%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-11-15 20:56:38
End at: 2018-11-15 20:57:08
Local clock offset: 0.11 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.96 Mbit/s
95th percentile per-packet one-way delay: 47.871 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 226.96 Mbit/s
95th percentile per-packet one-way delay: 47.871 ms
Loss rate: 0.32%
Run 3: Report of Indigo — Data Link

![Graph of throughput over time]

- Flow 1 ingress (mean 226.96 Mb/s)
- Flow 1 egress (mean 226.96 Mb/s)

![Graph of packet delay over time]

- Flow 1 (95th percentile 47.87 ms)
Run 4: Statistics of Indigo

Local clock offset: 0.09 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.37 Mbit/s
95th percentile per-packet one-way delay: 50.735 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 230.37 Mbit/s
95th percentile per-packet one-way delay: 50.735 ms
Loss rate: 0.31%
Run 4: Report of Indigo — Data Link

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

- **Throughput**
  - Y-axis: Throughput (Mbps)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 ingress (mean 230.33 Mbps)
    - Flow 1 egress (mean 230.37 Mbps)

- **Packet Delay**
  - Y-axis: Packet delay (ms)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 (95th percentile 50.73 ms)
Run 5: Statistics of Indigo

Local clock offset: -0.002 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 235.39 Mbit/s
  95th percentile per-packet one-way delay: 48.053 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 235.39 Mbit/s
  95th percentile per-packet one-way delay: 48.053 ms
  Loss rate: 0.31%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of Indigo-96d2da3

End at: 2018-11-15 20:11:50
Local clock offset: -0.456 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 283.32 Mbit/s
95th percentile per-packet one-way delay: 61.085 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 283.32 Mbit/s
95th percentile per-packet one-way delay: 61.085 ms
Loss rate: 0.24%
Run 1: Report of Indigo-96d2da3 — Data Link
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-15 20:37:29
End at: 2018-11-15 20:37:59
Local clock offset: 0.089 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.67 Mbit/s
95th percentile per-packet one-way delay: 62.052 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 282.67 Mbit/s
95th percentile per-packet one-way delay: 62.052 ms
Loss rate: 0.31%
Run 2: Report of Indigo-96d2da3 — Data Link

![Graph showing network throughput and packet delay over time](image-url)
Run 3: Statistics of Indigo-96d2da3

Start at: 2018-11-15 21:03:36
End at: 2018-11-15 21:04:06
Local clock offset: 0.143 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 284.16 Mbit/s
95th percentile per-packet one-way delay: 63.927 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 284.16 Mbit/s
95th percentile per-packet one-way delay: 63.927 ms
Loss rate: 0.23%
Run 3: Report of Indigo-96d2da3 — Data Link

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

Flow 1 ingress (mean 284.64 Mbit/s)  Flow 1 egress (mean 284.16 Mbit/s)

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

Flow 1 (95th percentile 63.93 ms)
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-15 21:29:54
End at: 2018-11-15 21:30:24
Local clock offset: 0.069 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-11-15 22:52:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.48 Mbit/s
95th percentile per-packet one-way delay: 69.640 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 290.48 Mbit/s
95th percentile per-packet one-way delay: 69.640 ms
Loss rate: 0.24%
Run 4: Report of Indigo-96d2da3 — Data Link
Run 5: Statistics of Indigo-96d2da3

Local clock offset: -0.009 ms  
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-11-15 22:53:11  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 282.56 Mbit/s  
95th percentile per-packet one-way delay: 62.460 ms  
Loss rate: 0.15%  
-- Flow 1:  
Average throughput: 282.56 Mbit/s  
95th percentile per-packet one-way delay: 62.460 ms  
Loss rate: 0.15%
Run 5: Report of Indigo-96d2da3 — Data Link

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

- Flow 1 ingress (mean 282.09 Mbit/s)
- Flow 1 egress (mean 282.56 Mbit/s)

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

- Flow 1 (95th percentile 62.46 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-11-15 20:08:34
End at: 2018-11-15 20:09:04
Local clock offset: -0.085 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-11-15 22:53:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 48.596 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 48.596 ms
Loss rate: 0.63%
Run 1: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 41.02 Mbit/s)**
- **Flow 1 egress (mean 40.89 Mbit/s)**

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

- **Flow 1 (95th percentile 48.60 ms)**
Run 2: Statistics of LEDBAT

Start at: 2018-11-15 20:34:42
End at: 2018-11-15 20:35:12
Local clock offset: 0.455 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-11-15 22:53:11
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 41.72 Mbit/s
  95th percentile per-packet one-way delay: 47.900 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 41.72 Mbit/s
  95th percentile per-packet one-way delay: 47.900 ms
  Loss rate: 0.62%
Run 2: Report of LEDBAT — Data Link

![Graph of Throughput vs Time]

- **Flow 1 ingress** (mean 41.85 Mbit/s)
- **Flow 1 egress** (mean 41.72 Mbit/s)

![Graph of Packet Rate vs Delay]

- **Flow 1** (95th percentile 47.90 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-11-15 21:00:52
End at: 2018-11-15 21:01:22
Local clock offset: 0.118 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-11-15 22:53:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 48.831 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 41.15 Mbit/s
95th percentile per-packet one-way delay: 48.831 ms
Loss rate: 0.63%
Run 3: Report of LEDBAT — Data Link

![Graph of Throughput (Mbps)](image1)

- **Flow 1 ingress** (mean 41.27 Mbps)
- **Flow 1 egress** (mean 41.15 Mbps)

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

- **Flow 1** (99th percentile 48.83 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-11-15 21:27:05
Local clock offset: 0.055 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-11-15 22:53:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 48.008 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 37.05 Mbit/s
95th percentile per-packet one-way delay: 48.008 ms
Loss rate: 0.02%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

End at: 2018-11-15 21:54:08
Local clock offset: -0.355 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-11-15 22:53:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.11 Mbit/s
95th percentile per-packet one-way delay: 50.655 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 39.11 Mbit/s
95th percentile per-packet one-way delay: 50.655 ms
Loss rate: 0.63%
Run 5: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 39.23 Mbit/s)**
- **Flow 1 egress (mean 39.11 Mbit/s)**

![Graph 2: Average Packet Round-trip Delay vs Time](image2)

- **Flow 1 95th percentile 50.66 ms**
Run 1: Statistics of Indigo-Muses

Start at: 2018-11-15 19:52:40
End at: 2018-11-15 19:53:10
Local clock offset: -0.104 ms
Remote clock offset: -0.029 ms
Run 1: Report of Indigo-Muses — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress](image)

Flow 1 ingress (mean 0.00 Mbit/s) and Flow 1 egress (mean 0.00 Mbit/s)

![Graph showing per-packet one-way delay over time for Flow 1](image)

Flow 1 (95th percentile 63.27 ms)
Run 2: Statistics of Indigo-Muses

Start at: 2018-11-15 20:17:57
End at: 2018-11-15 20:18:27
Local clock offset: -0.009 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-11-15 23:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 657.48 Mbit/s
95th percentile per-packet one-way delay: 63.367 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 657.48 Mbit/s
95th percentile per-packet one-way delay: 63.367 ms
Loss rate: 0.33%
Run 2: Report of Indigo-Muses — Data Link
Run 3: Statistics of Indigo-Muses

Start at: 2018-11-15 20:44:07
End at: 2018-11-15 20:44:37
Local clock offset: 0.136 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-11-15 23:03:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 667.23 Mbit/s
95th percentile per-packet one-way delay: 67.999 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 667.23 Mbit/s
95th percentile per-packet one-way delay: 67.999 ms
Loss rate: 0.38%
Run 3: Report of Indigo-Muses — Data Link
Run 4: Statistics of Indigo-Muses

Start at: 2018-11-15 21:10:15
End at: 2018-11-15 21:10:45
Local clock offset: 0.094 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2018-11-15 23:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 680.65 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 680.65 Mbit/s
95th percentile per-packet one-way delay: 62.713 ms
Loss rate: 0.33%
Run 4: Report of Indigo-Muses — Data Link

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

- **Flow 1 ingress** (mean 680.77 Mbps)
- **Flow 1 egress** (mean 680.65 Mbps)

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

- **Flow 1** (95th percentile 62.71 ms)
Run 5: Statistics of Indigo-Muses

Start at: 2018-11-15 21:36:41
End at: 2018-11-15 21:37:11
Local clock offset: 0.01 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-11-15 23:06:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 669.74 Mbit/s
95th percentile per-packet one-way delay: 70.142 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 669.74 Mbit/s
95th percentile per-packet one-way delay: 70.142 ms
Loss rate: 0.37%
Run 5: Report of Indigo-Muses — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-11-15 19:58:46
End at: 2018-11-15 19:59:16
Local clock offset: -0.087 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-11-15 23:08:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 434.07 Mbit/s
  95th percentile per-packet one-way delay: 134.613 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 434.07 Mbit/s
  95th percentile per-packet one-way delay: 134.613 ms
  Loss rate: 0.44%
Run 1: Report of PCC-Allegro — Data Link

[Image of a graph showing network throughput and packet delay over time]

- **Flow 1 ingress** (mean 434.62 Mbit/s)
- **Flow 1 egress** (mean 434.07 Mbit/s)

[Graph showing packet delay]
Run 2: Statistics of PCC-Allegro

End at: 2018-11-15 20:25:09
Local clock offset: 0.036 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-11-15 23:09:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 450.93 Mbit/s
  95th percentile per-packet one-way delay: 160.471 ms
  Loss rate: 3.29%
-- Flow 1:
  Average throughput: 450.93 Mbit/s
  95th percentile per-packet one-way delay: 160.471 ms
  Loss rate: 3.29%
Run 2: Report of PCC-Allegro — Data Link

![Throughput graph](image1)

- **Flow 1 ingress** (mean 464.79 Mbit/s)
- **Flow 1 egress** (mean 450.93 Mbit/s)

![Latency graph](image2)

- **Flow 1** (95th percentile 160.47 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-11-15 20:50:45
End at: 2018-11-15 20:51:15
Local clock offset: 0.122 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-11-15 23:10:07
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 475.56 Mbit/s
  95th percentile per-packet one-way delay: 157.211 ms
  Loss rate: 3.45%
-- Flow 1:
  Average throughput: 475.56 Mbit/s
  95th percentile per-packet one-way delay: 157.211 ms
  Loss rate: 3.45%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2018-11-15 21:16:56
End at: 2018-11-15 21:17:26
Local clock offset: 0.155 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-11-15 23:11:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.03 Mbit/s
95th percentile per-packet one-way delay: 145.726 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 491.03 Mbit/s
95th percentile per-packet one-way delay: 145.726 ms
Loss rate: 1.18%
Run 4: Report of PCC-Allegro — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 495.29 Mbit/s)  Flow 1 egress (mean 491.03 Mbit/s)

Packet round trip delay (ms)

Flow 1 (95th percentile 145.73 ms)
Run 5: Statistics of PCC-Allegro

End at: 2018-11-15 21:44:01
Local clock offset: 0.041 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-11-15 23:22:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 463.33 Mbit/s
95th percentile per-packet one-way delay: 169.767 ms
Loss rate: 6.18%
-- Flow 1:
Average throughput: 463.33 Mbit/s
95th percentile per-packet one-way delay: 169.767 ms
Loss rate: 6.18%
Run 5: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Local clock offset: -0.134 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-11-15 23:22:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 301.63 Mbit/s
95th percentile per-packet one-way delay: 146.980 ms
Loss rate: 4.28%
-- Flow 1:
Average throughput: 301.63 Mbit/s
95th percentile per-packet one-way delay: 146.980 ms
Loss rate: 4.28%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 314.09 Mbit/s)
- Flow 1 egress (mean 301.63 Mbit/s)

![Graph showing packet delay distribution over time.]

- Flow 1 (95th percentile 146.98 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-11-15 20:23:00
End at: 2018-11-15 20:23:30
Local clock offset: 0.392 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-11-15 23:22:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 354.84 Mbit/s
95th percentile per-packet one-way delay: 141.017 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 354.84 Mbit/s
95th percentile per-packet one-way delay: 141.017 ms
Loss rate: 1.90%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-11-15 20:49:08  
End at: 2018-11-15 20:49:38  
Local clock offset: 0.113 ms  
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-11-15 23:22:41  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.51 Mbit/s  
95th percentile per-packet one-way delay: 138.554 ms  
Loss rate: 2.27%  
-- Flow 1:
Average throughput: 336.51 Mbit/s  
95th percentile per-packet one-way delay: 138.554 ms  
Loss rate: 2.27%
Run 3: Report of PCC-Expr — Data Link

![Graphs showing network performance metrics over time.](image-url)

- **Throughput:** Plots showing throughput in Mbps over time.
- **Packet Delay:** Plots showing packet delay over time.

Legend:
- Flow 1 ingress (mean 343.24 Mbps)
- Flow 1 egress (mean 336.51 Mbps)
- Flow 1 (95th percentile 138.55 ms)
Run 4: Statistics of PCC-Expr

End at: 2018-11-15 21:15:46
Local clock offset: 0.083 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 370.03 Mbit/s
95th percentile per-packet one-way delay: 125.078 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 370.03 Mbit/s
95th percentile per-packet one-way delay: 125.078 ms
Loss rate: 1.14%
Run 4: Report of PCC-Expr — Data Link

![Graph of throughput and delay over time]

Throughput (Mbit/s)

- Flow 1 ingress (mean 373.11 Mbit/s)
- Flow 1 egress (mean 370.03 Mbit/s)

Packet delay (ms)

- Flow 1 (95th percentile 125.08 ms)
Run 5: Statistics of PCC-Expr

Local clock offset: 0.012 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 301.31 Mbit/s
95th percentile per-packet one-way delay: 148.690 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 301.31 Mbit/s
95th percentile per-packet one-way delay: 148.690 ms
Loss rate: 4.09%
Run 5: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

End at: 2018-11-15 19:47:52
Local clock offset: -0.048 ms
Remote clock offset: -0.063 ms
Run 1: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.01 Mbps)  Flow 1 egress (mean 0.01 Mbps)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 47.42 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-11-15 20:12:42
Local clock offset: -0.107 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.91 Mbit/s
95th percentile per-packet one-way delay: 47.221 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 64.91 Mbit/s
95th percentile per-packet one-way delay: 47.221 ms
Loss rate: 0.49%
Run 2: Report of QUIC Cubic — Data Link

![Graphs showing network throughput and packet delivery delay]
Run 3: Statistics of QUIC Cubic

Start at: 2018-11-15 20:38:51
End at: 2018-11-15 20:39:21
Local clock offset: 0.077 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 46.537 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 58.05 Mbit/s
95th percentile per-packet one-way delay: 46.537 ms
Loss rate: 0.52%
Run 3: Report of QUIC Cubic — Data Link

The first graph shows the throughput over time for Flow 1, with ingress and egress rates indicated. The second graph illustrates the per-packet one-way delay for Flow 1, highlighting the 95th percentile delay.
Run 4: Statistics of QUIC Cubic

Start at: 2018-11-15 21:04:58
End at: 2018-11-15 21:05:28
Local clock offset: 0.067 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.61 Mbit/s
95th percentile per-packet one-way delay: 50.144 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 64.61 Mbit/s
95th percentile per-packet one-way delay: 50.144 ms
Loss rate: 0.51%
Run 4: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 64.73 Mbit/s)
- Flow 1 egress (mean 64.61 Mbit/s)

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

- Flow 1 (95th percentile 50.14 ms)
Run 5: Statistics of QUIC Cubic

Local clock offset: 0.048 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.71 Mbit/s
95th percentile per-packet one-way delay: 46.548 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 48.71 Mbit/s
95th percentile per-packet one-way delay: 46.548 ms
Loss rate: 0.54%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

End at: 2018-11-15 19:49:01
Local clock offset: -0.038 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.631 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.631 ms
Loss rate: 0.25%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

End at: 2018-11-15 20:14:23
Local clock offset: -0.128 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.290 ms
Loss rate: 0.39%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-11-15 20:40:01
End at: 2018-11-15 20:40:31
Local clock offset: 0.117 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
  -- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.323 ms
  Loss rate: 0.38%
  -- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.323 ms
  Loss rate: 0.38%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-11-15 21:06:09
End at: 2018-11-15 21:06:39
Local clock offset: 0.116 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.324 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.324 ms
  Loss rate: 0.39%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

End at: 2018-11-15 21:32:57
Local clock offset: 0.01 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.579 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.579 ms
Loss rate: 0.38%
Run 5: Report of SCReAM — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean 0.22 Mbit/s and 95th percentile delay 49.58 ms.](Graphs.png)
Run 1: Statistics of Sprout

Start at: 2018-11-15 20:01:50
End at: 2018-11-15 20:02:20
Local clock offset: -0.114 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 47.796 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 47.796 ms
Loss rate: 0.27%
Run 1: Report of Sprout — Data Link

---

**Graph 1:**
- **Title:** Throughput (Mbit/s)
- **X-axis:** Time (s)
- **Y-axis:** Throughput (Mbit/s)
- **Legend:**
  - Flow 1 ingress (mean 9.58 Mbit/s)
  - Flow 1 egress (mean 9.58 Mbit/s)

**Graph 2:**
- **Title:** Pre-packet one-way delay (ms)
- **X-axis:** Time (s)
- **Y-axis:** Pre-packet one-way delay (ms)
- **Legend:**
  - Flow 1 (99th percentile 47.80 ms)
Run 2: Statistics of Sprout

End at: 2018-11-15 20:28:16
Local clock offset: 0.049 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 47.057 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 9.65 Mbit/s
95th percentile per-packet one-way delay: 47.057 ms
Loss rate: 0.36%
Run 2: Report of Sprout — Data Link

![Graph showing throughput and delay over time]

- **Flow 1 ingress (mean 9.65 Mbit/s)**
- **Flow 1 egress (mean 9.65 Mbit/s)**

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

- **Flow 1 95th percentile 47.06 ms**
Run 3: Statistics of Sprout

Start at: 2018-11-15 20:53:52
End at: 2018-11-15 20:54:22
Local clock offset: 0.115 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 50.749 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 8.51 Mbit/s
95th percentile per-packet one-way delay: 50.749 ms
Loss rate: 0.21%
Run 3: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 8.50 Mbps/s)**
- **Flow 1 egress (mean 8.51 Mbps/s)**

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

- **Flow 1 (95th percentile 50.75 ms)**
Run 4: Statistics of Sprout

End at: 2018-11-15 21:20:34  
Local clock offset: 0.147 ms  
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2018-11-15 23:22:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 8.34 Mbit/s  
95th percentile per-packet one-way delay: 50.821 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 8.34 Mbit/s  
95th percentile per-packet one-way delay: 50.821 ms  
Loss rate: 0.42%
Run 4: Report of Sprout — Data Link

[Graph showing throughput over time]

[Graph showing per-packet round-trip time over time]
Run 5: Statistics of Sprout

End at: 2018-11-15 21:47:09
Local clock offset: -0.011 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-11-15 23:22:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 47.085 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 47.085 ms
Loss rate: 0.35%
Run 5: Report of Sprout — Data Link

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

Legend:
- Flow 1 ingress (mean 9.76 Mbit/s)
- Flow 1 egress (mean 9.76 Mbit/s)
- Flow 1 (95th percentile 47.09 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-11-15 20:00:21
End at: 2018-11-15 20:00:51
Local clock offset: -0.092 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-11-15 23:23:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.21 Mbit/s
95th percentile per-packet one-way delay: 46.862 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 242.21 Mbit/s
95th percentile per-packet one-way delay: 46.862 ms
Loss rate: 0.35%
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 242.31 Mbit/s)  Flow 1 egress (mean 242.21 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 46.86 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-11-15 20:26:17
End at: 2018-11-15 20:26:47
Local clock offset: 0.04 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-11-15 23:24:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 248.36 Mbit/s
95th percentile per-packet one-way delay: 46.920 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 248.36 Mbit/s
95th percentile per-packet one-way delay: 46.920 ms
Loss rate: 0.34%
Run 2: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 248.42 Mbit/s)
- Flow 1 egress (mean 248.36 Mbit/s)

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

- Flow 1 (95th percentile 46.92 ms)
Run 3: Statistics of TaoVA-100x

End at: 2018-11-15 20:52:52
Local clock offset: 0.075 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2018-11-15 23:24:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.21 Mbit/s
95th percentile per-packet one-way delay: 47.827 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 243.21 Mbit/s
95th percentile per-packet one-way delay: 47.827 ms
Loss rate: 0.34%
Run 3: Report of TaoVA-100x — Data Link

[Graph showing throughput over time with two lines representing Flow 1 ingress and Flow 1 egress]

[Graph showing per-packet one-way delay over time with a symbol representing Flow 1 (99th percentile 47.83 ms)]
Run 4: Statistics of TaoVA-100x

Start at: 2018-11-15 21:18:34
End at: 2018-11-15 21:19:04
Local clock offset: 0.108 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-11-15 23:26:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 244.62 Mbit/s
95th percentile per-packet one-way delay: 50.381 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 244.62 Mbit/s
95th percentile per-packet one-way delay: 50.381 ms
Loss rate: 0.35%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 244.69 Mbit/s)
- Flow 1 egress (mean 244.62 Mbit/s)

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

- Flow 1 (95th percentile 50.38 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-11-15 21:45:10
End at: 2018-11-15 21:45:40
Local clock offset: -0.357 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-11-15 23:27:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.10 Mbit/s
95th percentile per-packet one-way delay: 47.216 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 246.10 Mbit/s
95th percentile per-packet one-way delay: 47.216 ms
Loss rate: 0.34%
Run 1: Statistics of TCP Vegas

Start at: 2018-11-15 20:06:58
End at: 2018-11-15 20:07:28
Local clock offset: -0.108 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-11-15 23:33:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 588.10 Mbit/s
95th percentile per-packet one-way delay: 48.802 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 588.10 Mbit/s
95th percentile per-packet one-way delay: 48.802 ms
Loss rate: 0.33%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-11-15 20:33:07
End at: 2018-11-15 20:33:37
Local clock offset: 0.053 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-11-15 23:34:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 552.30 Mbit/s
95th percentile per-packet one-way delay: 51.405 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 552.30 Mbit/s
95th percentile per-packet one-way delay: 51.405 ms
Loss rate: 0.31%
Run 2: Report of TCP Vegas — Data Link

![Graph of throughput over time](image1)

![Graph of packet loss over time](image2)
Run 3: Statistics of TCP Vegas

End at: 2018-11-15 20:59:44
Local clock offset: 0.483 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-11-15 23:35:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 636.74 Mbit/s
95th percentile per-packet one-way delay: 75.841 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 636.74 Mbit/s
95th percentile per-packet one-way delay: 75.841 ms
Loss rate: 0.29%
Run 3: Report of TCP Vegas — Data Link

![Graph of throughput and packet loss over time for TCP Vegas flow.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 636.61 Mbit/s)
  - Flow 1 egress (mean 636.74 Mbit/s)

- **Packet Loss (ms):**
  - Flow 1 (95th percentile 75.84 ms)
Run 4: Statistics of TCP Vegas

Local clock offset: 0.079 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-11-15 23:35:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 591.39 Mbit/s
95th percentile per-packet one-way delay: 47.936 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 591.39 Mbit/s
95th percentile per-packet one-way delay: 47.936 ms
Loss rate: 0.32%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 591.46 Mbit/s)
- Flow 1 egress (mean 591.39 Mbit/s)

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

- Flow 1 (95th percentile 47.94 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-11-15 21:52:03
End at: 2018-11-15 21:52:33
Local clock offset: -0.396 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-11-15 23:36:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 595.86 Mbit/s
95th percentile per-packet one-way delay: 57.838 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 595.86 Mbit/s
95th percentile per-packet one-way delay: 57.838 ms
Loss rate: 0.32%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

End at: 2018-11-15 19:50:08
Local clock offset: -0.049 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-11-15 23:36:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.82 Mbit/s
95th percentile per-packet one-way delay: 81.789 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 176.82 Mbit/s
95th percentile per-packet one-way delay: 81.789 ms
Loss rate: 0.18%
Run 1: Report of Verus — Data Link

![Graph 1](image1.png)

- **Flow 1 ingress** (mean 176.55 Mbit/s)
- **Flow 1 egress** (mean 176.82 Mbit/s)

![Graph 2](image2.png)

- **Flow 1** (95th percentile 81.79 ms)
Run 2: Statistics of Verus

Start at: 2018-11-15 20:15:00
End at: 2018-11-15 20:15:30
Local clock offset: -0.091 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-11-15 23:36:27
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 171.62 Mbit/s
  95th percentile per-packet one-way delay: 105.541 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 171.62 Mbit/s
  95th percentile per-packet one-way delay: 105.541 ms
  Loss rate: 0.46%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 172.85 Mbit/s)
- Flow 1 egress (mean 171.62 Mbit/s)

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

- Flow 1 (95th percentile 105.54 ms)
Run 3: Statistics of Verus

Start at: 2018-11-15 20:41:09
End at: 2018-11-15 20:41:39
Local clock offset: 0.512 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-11-15 23:36:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.57 Mbit/s
95th percentile per-packet one-way delay: 84.619 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 183.57 Mbit/s
95th percentile per-packet one-way delay: 84.619 ms
Loss rate: 0.47%
Run 3: Report of Verus — Data Link

![Graph of Throughput vs. Time for Flow Ingress and Egress]

![Graph of Packet Delay vs. Time for Flow Ingress]

Flow 1 ingress (mean 183.85 Mbit/s)  
Flow 1 egress (mean 183.57 Mbit/s)

Flow 1 (95th percentile 84.62 ms)
Run 4: Statistics of Verus

Start at: 2018-11-15 21:07:16
End at: 2018-11-15 21:07:46
Local clock offset: 0.121 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-11-15 23:37:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.75 Mbit/s
95th percentile per-packet one-way delay: 94.152 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 164.75 Mbit/s
95th percentile per-packet one-way delay: 94.152 ms
Loss rate: 0.79%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

End at: 2018-11-15 21:34:05
Local clock offset: 0.059 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-11-15 23:39:00
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 192.08 Mbit/s
  95th percentile per-packet one-way delay: 118.973 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 192.08 Mbit/s
  95th percentile per-packet one-way delay: 118.973 ms
  Loss rate: 0.66%
Run 5: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 193.04 Mbit/s)**
- **Flow 1 egress (mean 192.08 Mbit/s)**

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

- **Flow 1 (95th percentile 118.97 ms)**
Run 1: Statistics of PCC-Vivace

Start at: 2018-11-15 20:09:45
End at: 2018-11-15 20:10:15
Local clock offset: -0.066 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-11-15 23:40:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 417.96 Mbit/s
95th percentile per-packet one-way delay: 48.996 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 417.96 Mbit/s
95th percentile per-packet one-way delay: 48.996 ms
Loss rate: 0.35%
Run 1: Report of PCC-Vivace — Data Link

![Throughput Graph]

**Throughput (Mbps)**

- **Flow 1 ingress (mean 418.10 Mbps)**
- **Flow 1 egress (mean 417.16 Mbps)**

![Delay Graph]

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

- **Flow 1 (95th percentile 49.00 ms)**

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Run 2: Statistics of PCC-Vivace

Start at: 2018-11-15 20:35:53
End at: 2018-11-15 20:36:23
Local clock offset: 0.078 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-11-15 23:41:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 437.28 Mbit/s
95th percentile per-packet one-way delay: 48.141 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 437.28 Mbit/s
95th percentile per-packet one-way delay: 48.141 ms
Loss rate: 0.22%
Run 2: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 436.85 Mbit/s)
- Flow 1 egress (mean 437.28 Mbit/s)

- Flow 1 (95th percentile 48.14 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-11-15 21:02:03
End at: 2018-11-15 21:02:33
Local clock offset: 0.105 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-11-15 23:41:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 378.26 Mbit/s
95th percentile per-packet one-way delay: 122.362 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 378.26 Mbit/s
95th percentile per-packet one-way delay: 122.362 ms
Loss rate: 0.22%
Run 3: Report of PCC-Vivace — Data Link

- Flow 1 ingress (mean 377.90 Mbit/s)
- Flow 1 egress (mean 378.26 Mbit/s)

- Flow 1 (95th percentile 122.36 ms)
Run 4: Statistics of PCC-Vivace

Local clock offset: 0.067 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-11-15 23:41:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 417.72 Mbit/s
95th percentile per-packet one-way delay: 59.103 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 417.72 Mbit/s
95th percentile per-packet one-way delay: 59.103 ms
Loss rate: 0.37%
Run 4: Report of PCC-Vivace — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 417.90 Mbit/s)
- Flow 1 egress (mean 417.72 Mbit/s)

**Packet Delay (ms):**
- Flow 1 (95th percentile 59.10 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-11-15 21:54:49
Local clock offset: -0.042 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 421.32 Mbit/s
  95th percentile per-packet one-way delay: 51.798 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 421.32 Mbit/s
  95th percentile per-packet one-way delay: 51.798 ms
  Loss rate: 0.32%
Run 5: Report of PCC-Vivace — Data Link

[Graphs showing throughput and packet delay over time for Flow 1 ingress and egress.]
Run 1: Statistics of WebRTC media

Start at: 2018-11-15 20:05:51
End at: 2018-11-15 20:06:21
Local clock offset: -0.059 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 46.759 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 46.759 ms
Loss rate: 0.49%
Run 1: Report of WebRTC media — Data Link

- Throughput (Mbit/s)
- Time (s)
- Flow 1 ingress (mean 1.72 Mbit/s)
- Flow 1 egress (mean 1.72 Mbit/s)

- Packet one-way delay (ms)
- Time (s)
- Flow 1 (95th percentile 46.76 ms)
Run 2: Statistics of WebRTC media

End at: 2018-11-15 20:32:29
Local clock offset: 0.103 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 46.823 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 46.823 ms
Loss rate: 0.36%
Run 2: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 2.00 Mbit/s)**
- **Flow 1 egress (mean 2.00 Mbit/s)**

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

- **Flow 1 (95th percentile 46.82 ms)**
Run 3: Statistics of WebRTC media

Start at: 2018-11-15 20:58:06
End at: 2018-11-15 20:58:36
Local clock offset: 0.138 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.01 Mbit/s
  95th percentile per-packet one-way delay: 47.531 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 2.01 Mbit/s
  95th percentile per-packet one-way delay: 47.531 ms
  Loss rate: 0.36%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

End at: 2018-11-15 21:24:51
Local clock offset: -0.261 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 50.052 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 50.052 ms
Loss rate: 0.50%
Run 4: Report of WebRTC media — Data Link

![Graph 1](Image)

Time (s)

Throughput (Mbit/s)

Flow 1 ingress (mean 1.62 Mbit/s)  Flow 1 egress (mean 1.62 Mbit/s)

![Graph 2](Image)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 50.05 ms)
Run 5: Statistics of WebRTC media

Local clock offset: -0.047 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-11-15 23:41:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 49.673 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 49.673 ms
Loss rate: 0.37%
Run 5: Report of WebRTC media — Data Link