Pantheon Report

Generated at 2018-08-11 06:36:06 (UTC).
Data path: GCE Iowa Ethernet (local) →GCE Tokyo Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 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 4.15.0-1014-gcp
net.core.default_qdisc = fq_codel
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: master @ 7719b900495aa706f8452ab7d4a94dd562e9296e
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a2843ed6d4b834
third_party/fillp-sheep @ daed0c8f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc04df0edcbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3c
third_party/pantheon-tunnel @ 6f038ed312594366f9840f65b82c88f464b1b39
third_party/pcc @ 1af995f8a0d6606a923c091a55f8c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f613e8ad08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143e978f3cf42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b0e31d4a46ad18c74f9415f19a26
third_party/version @ d4b447e7a49c6c60a261149af262956293f9a494
M src/version.cpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9d4e4735770d143a1fa2851
test from GCE Iowa to GCE Tokyo, 10 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>10</td>
<td>501.30</td>
<td>159.72</td>
<td>2.54</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>174.36</td>
<td>65.31</td>
<td>0.00</td>
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<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>231.74</td>
<td>62.73</td>
<td>0.00</td>
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<tr>
<td>FillP</td>
<td>10</td>
<td>802.38</td>
<td>140.41</td>
<td>5.06</td>
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<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>786.80</td>
<td>131.42</td>
<td>1.51</td>
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<tr>
<td>Indigo</td>
<td>10</td>
<td>213.57</td>
<td>61.46</td>
<td>0.01</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>22.95</td>
<td>63.28</td>
<td>0.01</td>
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<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>610.68</td>
<td>131.32</td>
<td>0.65</td>
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<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>258.83</td>
<td>130.02</td>
<td>1.91</td>
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<tr>
<td>QUIC Cubic</td>
<td>3</td>
<td>52.25</td>
<td>61.19</td>
<td>0.00</td>
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<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>61.98</td>
<td>0.00</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>1.49</td>
<td>61.82</td>
<td>0.01</td>
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<tr>
<td>TaoVA-100x</td>
<td>9</td>
<td>232.88</td>
<td>60.99</td>
<td>0.00</td>
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<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>100.74</td>
<td>62.83</td>
<td>0.00</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>232.07</td>
<td>114.98</td>
<td>0.13</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>387.34</td>
<td>67.34</td>
<td>0.00</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>2.03</td>
<td>61.40</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-08-11 00:42:28
End at: 2018-08-11 00:42:58
Local clock offset: 0.459 ms
Remote clock offset: 0.24 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 520.11 Mbit/s
95th percentile per-packet one-way delay: 151.174 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 520.11 Mbit/s
95th percentile per-packet one-way delay: 151.174 ms
Loss rate: 1.37%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-08-11 01:05:27
End at: 2018-08-11 01:05:57
Local clock offset: 0.202 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 502.83 Mbit/s
  95th percentile per-packet one-way delay: 155.864 ms
  Loss rate: 2.21%
-- Flow 1:
  Average throughput: 502.83 Mbit/s
  95th percentile per-packet one-way delay: 155.864 ms
  Loss rate: 2.21%
Run 2: Report of TCP BBR — Data Link

The graph above shows the throughput (in Mbps) over time for two flows. The blue dotted line represents Flow 1 ingress (mean 514.20 Mbps) and the blue solid line represents Flow 1 egress (mean 502.83 Mbps). The y-axis represents throughput in Mbps, and the x-axis represents time in seconds.

The lower graph displays the per-packet one-way delay (in ms) over time for Flow 1. The y-axis represents delay in ms, and the x-axis represents time in seconds. The marker indicates Flow 1 (95th percentile 155.86 ms).
Run 3: Statistics of TCP BBR

Start at: 2018-08-11 01:28:13
End at: 2018-08-11 01:28:43
Local clock offset: 0.207 ms
Remote clock offset: -2.78 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 508.83 Mbit/s
95th percentile per-packet one-way delay: 162.423 ms
Loss rate: 2.49%
-- Flow 1:
Average throughput: 508.83 Mbit/s
95th percentile per-packet one-way delay: 162.423 ms
Loss rate: 2.49%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-08-11 01:50:40  
End at: 2018-08-11 01:51:10  
Local clock offset: 0.32 ms  
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-08-11 04:46:57  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 494.33 Mbit/s  
95th percentile per-packet one-way delay: 162.430 ms  
Loss rate: 2.62%  
-- Flow 1:  
Average throughput: 494.33 Mbit/s  
95th percentile per-packet one-way delay: 162.430 ms  
Loss rate: 2.62%
Run 4: Report of TCP BBR — Data Link

- Throughput (Mbps)
- Time (s)
- Flow 1 ingress (mean 507.66 Mbps) — Flow 1 egress (mean 494.33 Mbps)

- Packet one way delay (ms)
- Time (s)
- Flow 1 (95th percentile 162.43 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-08-11 02:13:51
End at: 2018-08-11 02:14:21
Local clock offset: 0.493 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics

-- Total of 1 flow:
Average throughput: 509.99 Mbit/s
95th percentile per-packet one-way delay: 160.883 ms
Loss rate: 2.32%

-- Flow 1:
Average throughput: 509.99 Mbit/s
95th percentile per-packet one-way delay: 160.883 ms
Loss rate: 2.32%
Run 5: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet round-trip delay](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 522.13 Mbit/s)
  - Flow 1 egress (mean 509.99 Mbit/s)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 160.88 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-08-11 02:36:48
End at: 2018-08-11 02:37:18
Local clock offset: 0.617 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 496.85 Mbit/s
95th percentile per-packet one-way delay: 154.118 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 496.85 Mbit/s
95th percentile per-packet one-way delay: 154.118 ms
Loss rate: 1.94%
Run 6: Report of TCP BBR — Data Link

![Graph showing throughput over time](image)

- **Flow 1 ingress** (mean 506.71 Mbit/s)
- **Flow 1 egress** (mean 496.85 Mbit/s)

![Graph showing per-packet round trip delay over time](image)

- **Flow 1** (95th percentile 154.12 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-08-11 02:59:35
End at: 2018-08-11 03:00:05
Local clock offset: 0.847 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-08-11 04:46:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 488.10 Mbit/s
  95th percentile per-packet one-way delay: 168.261 ms
  Loss rate: 3.21%
-- Flow 1:
  Average throughput: 488.10 Mbit/s
  95th percentile per-packet one-way delay: 168.261 ms
  Loss rate: 3.21%
Run 7: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 504.27 Mbps)
- Flow 1 egress (mean 488.10 Mbps)

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

- Flow 1 (95th percentile 168.26 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-08-11 03:21:58
End at: 2018-08-11 03:22:28
Local clock offset: 0.11 ms
Remote clock offset: 2.884 ms

# Below is generated by plot.py at 2018-08-11 04:46:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 501.22 Mbit/s
95th percentile per-packet one-way delay: 161.558 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 501.22 Mbit/s
95th percentile per-packet one-way delay: 161.558 ms
Loss rate: 3.03%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-08-11 03:44:58
End at: 2018-08-11 03:45:28
Local clock offset: -0.335 ms
Remote clock offset: -0.156 ms

# Below is generated by plot.py at 2018-08-11 04:54:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 488.28 Mbit/s
95th percentile per-packet one-way delay: 162.294 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 488.28 Mbit/s
95th percentile per-packet one-way delay: 162.294 ms
Loss rate: 3.56%
Run 9: Report of TCP BBR — Data Link

![Throughput Graph](image1)

- **Flow 1 ingress** (mean 506.32 Mbit/s)
- **Flow 1 egress** (mean 488.28 Mbit/s)

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

- **Flow 1** (95th percentile 162.29 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-08-11 04:07:39
End at: 2018-08-11 04:08:09
Local clock offset: -0.516 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 502.43 Mbit/s
95th percentile per-packet one-way delay: 158.184 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 502.43 Mbit/s
95th percentile per-packet one-way delay: 158.184 ms
Loss rate: 2.60%
Run 10: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 515.85 Mbps)
- Flow 1 egress (mean 502.43 Mbps)

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

- Flow 1 (95th percentile 158.18 ms)
Run 1: Statistics of Copa

Start at: 2018-08-11 00:50:06
End at: 2018-08-11 00:50:36
Local clock offset: 0.58 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.43 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.43 Mbit/s
95th percentile per-packet one-way delay: 65.162 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

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

- Flow 1 ingress (mean 208.42 Mbit/s)
- Flow 1 egress (mean 208.43 Mbit/s)

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

- Flow 1 (95th percentile 65.16 ms)
Run 2: Statistics of Copa

Start at: 2018-08-11 01:13:02
End at: 2018-08-11 01:13:32
Local clock offset: 0.192 ms
Remote clock offset: -2.86 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.26 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.26 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

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

Start at: 2018-08-11 01:35:30
End at: 2018-08-11 01:36:00
Local clock offset: 0.291 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.12 Mbit/s
95th percentile per-packet one-way delay: 66.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.12 Mbit/s
95th percentile per-packet one-way delay: 66.689 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-08-11 01:58:25
End at: 2018-08-11 01:58:56
Local clock offset: 0.377 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.18 Mbit/s
95th percentile per-packet one-way delay: 64.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.18 Mbit/s
95th percentile per-packet one-way delay: 64.648 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

![Graph 1](image1)

**Throughput (Mbps)**

- Flow 1 ingress (mean 218.18 Mbps)
- Flow 1 egress (mean 218.18 Mbps)

![Graph 2](image2)

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

- Flow 1 (95th percentile 64.65 ms)
Run 5: Statistics of Copa

Start at: 2018-08-11 02:21:29
End at: 2018-08-11 02:21:59
Local clock offset: 0.563 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.61 Mbit/s
95th percentile per-packet one-way delay: 67.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.61 Mbit/s
95th percentile per-packet one-way delay: 67.097 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-08-11 02:44:21
End at: 2018-08-11 02:44:51
Local clock offset: 0.727 ms
Remote clock offset: -2.731 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.52 Mbit/s
95th percentile per-packet one-way delay: 60.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.52 Mbit/s
95th percentile per-packet one-way delay: 60.975 ms
Loss rate: 0.00%
Run 6: Report of Copa — Data Link

![Graph 1: Throughput (Mbps) over Time (s)]
- Flow 1 ingress (mean 222.52 Mbps)
- Flow 1 egress (mean 222.52 Mbps)

![Graph 2: Per packet one-way delay (ms) over Time (s)]
- Flow 1 (95th percentile 60.98 ms)
Run 7: Statistics of Copa

Start at: 2018-08-11 03:07:09
End at: 2018-08-11 03:07:39
Local clock offset: 0.841 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-08-11 04:55:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.70 Mbit/s
95th percentile per-packet one-way delay: 65.456 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.70 Mbit/s
95th percentile per-packet one-way delay: 65.456 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-08-11 03:29:35
End at: 2018-08-11 03:30:05
Local clock offset: -0.028 ms
Remote clock offset: 2.798 ms

# Below is generated by plot.py at 2018-08-11 04:56:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.96 Mbit/s
95th percentile per-packet one-way delay: 69.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.96 Mbit/s
95th percentile per-packet one-way delay: 69.237 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

![Graph 1](image1)

**Throughput (Mbps)**

- **Flow 1 ingress (mean 209.95 Mbit/s)**
- **Flow 1 egress (mean 209.96 Mbit/s)**

![Graph 2](image2)

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

- **Flow 1 (95th percentile 69.24 ms)**

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Run 9: Statistics of Copa

Start at: 2018-08-11 03:52:31
End at: 2018-08-11 03:53:01
Local clock offset: -0.333 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-08-11 04:57:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.70 Mbit/s
95th percentile per-packet one-way delay: 63.075 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.70 Mbit/s
95th percentile per-packet one-way delay: 63.075 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link
Run 10: Statistics of Copa

Start at: 2018-08-11 04:15:03
End at: 2018-08-11 04:15:33
Local clock offset: -0.488 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-08-11 04:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 197.09 Mbit/s
95th percentile per-packet one-way delay: 66.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 197.09 Mbit/s
95th percentile per-packet one-way delay: 66.937 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

![Throughput Graph]

Flow 1 ingress (mean 197.10 Mbit/s)  Flow 1 egress (mean 197.09 Mbit/s)

![Per-packet one-way delay Graph]

Flow 1 (95th percentile 66.94 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-08-11 00:45:43
End at: 2018-08-11 00:46:13
Local clock offset: 0.458 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-08-11 04:59:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 245.50 Mbit/s
  95th percentile per-packet one-way delay: 62.851 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 245.50 Mbit/s
  95th percentile per-packet one-way delay: 62.851 ms
  Loss rate: 0.00%
Run 1: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress** (mean 245.51 Mbit/s)
- **Flow 1 egress** (mean 245.50 Mbit/s)

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

- **Flow 1 (95th percentile 62.85 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2018-08-11 01:08:40
End at: 2018-08-11 01:09:10
Local clock offset: 0.185 ms
Remote clock offset: -2.785 ms

# Below is generated by plot.py at 2018-08-11 04:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.99 Mbit/s
95th percentile per-packet one-way delay: 59.826 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 280.99 Mbit/s
95th percentile per-packet one-way delay: 59.826 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-08-11 01:31:25
End at: 2018-08-11 01:31:55
Local clock offset: 0.166 ms
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2018-08-11 04:59:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 231.27 Mbit/s
95th percentile per-packet one-way delay: 62.235 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 231.27 Mbit/s
95th percentile per-packet one-way delay: 62.235 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-08-11 01:53:51
End at: 2018-08-11 01:54:21
Local clock offset: 0.341 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-08-11 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 420.34 Mbit/s
95th percentile per-packet one-way delay: 65.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 420.34 Mbit/s
95th percentile per-packet one-way delay: 65.334 ms
Loss rate: 0.00%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 420.34 Mbit/s)
- Flow 1 egress (mean 420.34 Mbit/s)

- Flow 1 (95th percentile 65.33 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-08-11 02:17:08
End at: 2018-08-11 02:17:38
Local clock offset: 0.509 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2018-08-11 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.89 Mbit/s
95th percentile per-packet one-way delay: 62.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.89 Mbit/s
95th percentile per-packet one-way delay: 62.549 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-08-11 02:39:57
End at: 2018-08-11 02:40:27
Local clock offset: 0.666 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-08-11 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.60 Mbit/s
95th percentile per-packet one-way delay: 62.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.60 Mbit/s
95th percentile per-packet one-way delay: 62.124 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 173.61 Mbit/s)
- Flow 1 egress (mean 173.69 Mbit/s)

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

- Flow 1 (95th percentile 62.12 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-08-11 03:02:48
End at: 2018-08-11 03:03:18
Local clock offset: 0.863 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-08-11 05:01:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 231.39 Mbit/s
  95th percentile per-packet one-way delay: 62.331 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 231.39 Mbit/s
  95th percentile per-packet one-way delay: 62.331 ms
  Loss rate: 0.00%
Run 7: Report of TCP Cubic — Data Link

[Graph showing throughput over time]

- Flow 1 ingress (mean 231.38 Mbit/s)
- Flow 1 egress (mean 231.39 Mbit/s)

[Graph showing per-packet one-way delay]

- Flow 1 (95th percentile 62.33 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-08-11 03:25:15
End at: 2018-08-11 03:25:45
Local clock offset: -0.019 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-08-11 05:01:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 230.53 Mbit/s
95th percentile per-packet one-way delay: 63.098 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 230.53 Mbit/s
95th percentile per-packet one-way delay: 63.098 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

![Graph showing throughput and packet delay over time for Flow 1.]

- Throughput (Mbps): 
  - Ingress (mean 230.54 Mbit/s)
  - Egress (mean 230.53 Mbit/s)

- Packet delay (ms): 
  - 95th percentile at 63.10 ms
Run 9: Statistics of TCP Cubic

Start at: 2018-08-11 03:48:06
End at: 2018-08-11 03:48:36
Local clock offset: -0.25 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2018-08-11 05:02:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.97 Mbit/s
95th percentile per-packet one-way delay: 62.497 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 239.97 Mbit/s
95th percentile per-packet one-way delay: 62.497 ms
Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 239.98 Mbps)
- Flow 1 egress (mean 239.97 Mbps)

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

- Flow 1 (95th percentile 62.50 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-08-11 04:10:50
End at: 2018-08-11 04:11:20
Local clock offset: -0.502 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-08-11 05:02:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.96 Mbit/s
95th percentile per-packet one-way delay: 64.428 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 45.96 Mbit/s
95th percentile per-packet one-way delay: 64.428 ms
Loss rate: 0.01%
Run 10: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- **Flow 1 ingress (mean 45.96 Mbit/s)**
- **Flow 1 egress (mean 45.96 Mbit/s)**

![Graph 2: Per-packet one-way delay (ms) vs Time (s)]
- **Flow 1 (95th percentile 64.43 ms)**
Run 1: Statistics of FillP

Start at: 2018-08-11 00:47:01
End at: 2018-08-11 00:47:31
Local clock offset: 0.524 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-08-11 05:16:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 786.42 Mbit/s
95th percentile per-packet one-way delay: 137.477 ms
Loss rate: 4.42%
-- Flow 1:
Average throughput: 786.42 Mbit/s
95th percentile per-packet one-way delay: 137.477 ms
Loss rate: 4.42%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-08-11 01:10:00
End at: 2018-08-11 01:10:30
Local clock offset: 0.186 ms
Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2018-08-11 05:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 776.14 Mbit/s
95th percentile per-packet one-way delay: 139.366 ms
Loss rate: 5.45%
-- Flow 1:
Average throughput: 776.14 Mbit/s
95th percentile per-packet one-way delay: 139.366 ms
Loss rate: 5.45%
Run 2: Report of FillP — Data Link

[Graph showing throughput and delay over time for Flow 1 with ingress and egress data.]
Run 3: Statistics of FillP

Start at: 2018-08-11 01:32:42
End at: 2018-08-11 01:33:12
Local clock offset: 0.256 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-08-11 05:17:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 882.37 Mbit/s
  95th percentile per-packet one-way delay: 139.238 ms
  Loss rate: 2.53%
-- Flow 1:
  Average throughput: 882.37 Mbit/s
  95th percentile per-packet one-way delay: 139.238 ms
  Loss rate: 2.53%
Run 3: Report of FillerP — Data Link

![Graph showing throughput and delay over time]

- **Flow 1 Ingress (mean 905.28 Mb/s)**
- **Flow 1 Egress (mean 882.37 Mb/s)**
Run 4: Statistics of FillP

Start at: 2018-08-11 01:55:17
End at: 2018-08-11 01:55:47
Local clock offset: 0.369 ms
Remote clock offset: -2.777 ms

# Below is generated by plot.py at 2018-08-11 05:18:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 891.79 Mbit/s
95th percentile per-packet one-way delay: 117.602 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 891.79 Mbit/s
95th percentile per-packet one-way delay: 117.602 ms
Loss rate: 1.86%
Run 4: Report of FillP — Data Link

![Graph of Throughput over Time](image)

- Flow 1 ingress (mean 938.70 Mbit/s)
- Flow 1 egress (mean 891.79 Mbit/s)

![Graph of Packet Delay over Time](image)

- Flow 1 (95th percentile 117.60 ms)
Run 5: Statistics of FillP

Start at: 2018-08-11 02:18:25
End at: 2018-08-11 02:18:55
Local clock offset: 0.515 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-08-11 05:18:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 793.60 Mbit/s
95th percentile per-packet one-way delay: 145.987 ms
Loss rate: 6.45%
-- Flow 1:
Average throughput: 793.60 Mbit/s
95th percentile per-packet one-way delay: 145.987 ms
Loss rate: 6.45%
Run 5: Report of FillP — Data Link

**Graph 1:**
- Y-axis: Throughput (Mbps)
- X-axis: Time (s)
- Legend:
  - Dashed line: Flow 1 Ingress (mean 848.31 Mbps)
  - Solid line: Flow 1 Egress (mean 793.60 Mbps)

**Graph 2:**
- Y-axis: Packet Delay (ms)
- X-axis: Time (s)
- Legend:
  - Dotted line: Flow 1 (95th percentile 145.99 ms)
Run 6: Statistics of FillP

Start at: 2018-08-11 02:41:18
End at: 2018-08-11 02:41:48
Local clock offset: 0.735 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-08-11 05:18:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 763.22 Mbit/s
95th percentile per-packet one-way delay: 146.030 ms
Loss rate: 6.09%
-- Flow 1:
Average throughput: 763.22 Mbit/s
95th percentile per-packet one-way delay: 146.030 ms
Loss rate: 6.09%
Run 6: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 812.73 Mbps)  Flow 1 egress (mean 763.22 Mbps)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 146.03 ms)
Run 7: Statistics of FillP

Start at: 2018-08-11 03:04:05
End at: 2018-08-11 03:04:35
Local clock offset: 0.853 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-08-11 05:18:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 778.23 Mbit/s
95th percentile per-packet one-way delay: 143.788 ms
Loss rate: 5.83%
-- Flow 1:
Average throughput: 778.23 Mbit/s
95th percentile per-packet one-way delay: 143.788 ms
Loss rate: 5.83%
Run 7: Report of FillP — Data Link

![Graph of Throughput and Delay](image-url)

- **Flow 1 Ingress (mean 826.45 Mbit/s)**
- **Flow 1 Egress (mean 778.23 Mbit/s)**

- **Flow 1 (95th percentile 143.79 ms)**
Run 8: Statistics of FillP

Start at: 2018-08-11 03:26:32
End at: 2018-08-11 03:27:02
Local clock offset: 0.068 ms
Remote clock offset: -0.146 ms

# Below is generated by plot.py at 2018-08-11 05:18:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 715.82 Mbit/s
95th percentile per-packet one-way delay: 150.188 ms
Loss rate: 8.21%
-- Flow 1:
Average throughput: 715.82 Mbit/s
95th percentile per-packet one-way delay: 150.188 ms
Loss rate: 8.21%
Run 8: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 779.82 Mbit/s)
- **Flow 1 egress** (mean 715.82 Mbit/s)

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

- **Flow 1** (95th percentile 150.19 ms)
Run 9: Statistics of FillP

Start at: 2018-08-11 03:49:24
End at: 2018-08-11 03:49:54
Local clock offset: -0.278 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-08-11 05:33:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 851.45 Mbit/s
95th percentile per-packet one-way delay: 140.577 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 851.45 Mbit/s
95th percentile per-packet one-way delay: 140.577 ms
Loss rate: 3.07%
Run 9: Report of FillP — Data Link

![Graph showing throughput and delay over time for a data link.](image-url)
Run 10: Statistics of FillP

Start at: 2018-08-11 04:11:58
End at: 2018-08-11 04:12:28
Local clock offset: -0.458 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-08-11 05:33:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 784.80 Mbit/s
95th percentile per-packet one-way delay: 143.824 ms
Loss rate: 6.65%
-- Flow 1:
Average throughput: 784.80 Mbit/s
95th percentile per-packet one-way delay: 143.824 ms
Loss rate: 6.65%
Run 10: Report of FillIP — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 840.72 Mbps)
- Flow 1 egress (mean 784.80 Mbps)

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

- Flow 1 (95th percentile 143.82 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-08-11 00:44:07
End at: 2018-08-11 00:44:37
Local clock offset: 0.519 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-08-11 05:34:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 781.78 Mbit/s
95th percentile per-packet one-way delay: 118.322 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 781.78 Mbit/s
95th percentile per-packet one-way delay: 118.322 ms
Loss rate: 0.41%
Run 1: Report of FillP-Sheep — Data Link

![Graph of data link throughput and packet delay over time.]

- Flow 1 ingress (mean 784.97 Mbit/s)
- Flow 1 egress (mean 781.78 Mbit/s)
- Flow 1 (95th percentile 118.32 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2018-08-11 01:07:04
End at: 2018-08-11 01:07:34
Local clock offset: 0.184 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-08-11 05:34:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 757.84 Mbit/s
95th percentile per-packet one-way delay: 110.296 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 757.84 Mbit/s
95th percentile per-packet one-way delay: 110.296 ms
Loss rate: 0.10%
Run 2: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 758.74 Mbps)
- Flow 1 egress (mean 757.84 Mbps)

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

- Flow 1 (95th percentile 110.30 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-11 01:29:46
End at: 2018-08-11 01:30:16
Local clock offset: 0.186 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2018-08-11 05:34:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 762.23 Mbit/s
95th percentile per-packet one-way delay: 145.064 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 762.23 Mbit/s
95th percentile per-packet one-way delay: 145.064 ms
Loss rate: 1.16%
Run 3: Report of FillP-Sheep — Data Link

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

**Flow 1 ingress (mean 771.20 Mbit/s)**

**Flow 1 egress (mean 762.23 Mbit/s)**

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

**Flow 1 (95th percentile 145.06 ms)**
Run 4: Statistics of FillP-Sheep

Start at: 2018-08-11 01:52:14
End at: 2018-08-11 01:52:44
Local clock offset: 0.342 ms
Remote clock offset: -0.268 ms

# Below is generated by plot.py at 2018-08-11 05:34:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 786.56 Mbit/s
95th percentile per-packet one-way delay: 124.907 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 786.56 Mbit/s
95th percentile per-packet one-way delay: 124.907 ms
Loss rate: 0.50%
Run 4: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 790.50 Mbit/s)
- Flow 1 egress (mean 786.56 Mbit/s)
Run 5: Statistics of FillP-Sheep

Start at: 2018-08-11 02:15:28
End at: 2018-08-11 02:15:58
Local clock offset: 0.475 ms
Remote clock offset: -0.201 ms

# Below is generated by plot.py at 2018-08-11 05:37:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 888.57 Mbit/s
95th percentile per-packet one-way delay: 129.299 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 888.57 Mbit/s
95th percentile per-packet one-way delay: 129.299 ms
Loss rate: 1.49%
Run 5: Report of FillP-Sheep — Data Link
Run 6: Statistics of FillP-Sheep

Start at: 2018-08-11 02:38:20
End at: 2018-08-11 02:38:50
Local clock offset: 0.692 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2018-08-11 05:37:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 751.15 Mbit/s
95th percentile per-packet one-way delay: 141.341 ms
Loss rate: 3.42%
-- Flow 1:
Average throughput: 751.15 Mbit/s
95th percentile per-packet one-way delay: 141.341 ms
Loss rate: 3.42%
Run 6: Report of FillP-Sheep — Data Link
Run 7: Statistics of FillP-Sheep

Start at: 2018-08-11 03:01:07
End at: 2018-08-11 03:01:37
Local clock offset: 0.851 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-08-11 05:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 776.43 Mbit/s
95th percentile per-packet one-way delay: 140.853 ms
Loss rate: 3.80%
-- Flow 1:
Average throughput: 776.43 Mbit/s
95th percentile per-packet one-way delay: 140.853 ms
Loss rate: 3.80%
Run 7: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 807.08 Mbit/s)
- Flow 1 egress (mean 776.43 Mbit/s)

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

- Flow 1 (95th percentile 140.85 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-08-11 03:23:33
End at: 2018-08-11 03:24:03
Local clock offset: 0.039 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 884.57 Mbit/s
95th percentile per-packet one-way delay: 126.256 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 884.57 Mbit/s
95th percentile per-packet one-way delay: 126.256 ms
Loss rate: 0.82%
Run 8: Report of FillP-Sheep — Data Link

![Graph showing network performance metrics]

- Flow 1 ingress (mean 891.87 Mbit/s)
- Flow 1 egress (mean 884.57 Mbit/s)

![Graph showing round-trip time metrics]

- Flow 1 (95th percentile 126.26 ms)
Run 9: Statistics of FillP-Sheep

Start at: 2018-08-11 03:46:30
End at: 2018-08-11 03:47:00
Local clock offset: -0.271 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 758.55 Mbit/s
95th percentile per-packet one-way delay: 146.632 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 758.55 Mbit/s
95th percentile per-packet one-way delay: 146.632 ms
Loss rate: 2.13%
Run 9: Report of FillP-Sheep — Data Link

![Graph of Throughput and Delay over Time]

- **Throughput (Mbps)**
- **Time (s)**
- **Flow 1 ingress (mean 775.11 Mbps)**
- **Flow 1 egress (mean 758.55 Mbps)**

- **Per-Packet One-Way Delay (ms)**
- **Time (s)**
- **Flow 1 (95th percentile 146.63 ms)**
Run 10: Statistics of FillP-Sheep

Start at: 2018-08-11 04:09:12
End at: 2018-08-11 04:09:42
Local clock offset: -0.42 ms
Remote clock offset: 0.383 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 720.32 Mbit/s
95th percentile per-packet one-way delay: 131.216 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 720.32 Mbit/s
95th percentile per-packet one-way delay: 131.216 ms
Loss rate: 1.26%
Run 10: Report of FillP-Sheep — Data Link

![Graphs showing throughput and packet delay over time.](image-url)
Run 1: Statistics of Indigo

Start at: 2018-08-11 00:53:03
End at: 2018-08-11 00:53:33
Local clock offset: 0.656 ms
Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.70 Mbit/s
95th percentile per-packet one-way delay: 61.305 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 211.70 Mbit/s
95th percentile per-packet one-way delay: 61.305 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-08-11 01:15:47
End at: 2018-08-11 01:16:17
Local clock offset: 0.15 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 213.19 Mbit/s
  95th percentile per-packet one-way delay: 61.323 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 213.19 Mbit/s
  95th percentile per-packet one-way delay: 61.323 ms
  Loss rate: 0.00%
Run 2: Report of Indigo — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 213.19 Mbit/s)
- Flow 1 egress (mean 213.19 Mbit/s)

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

- Flow 1 (95th percentile 61.32 ms)
Run 3: Statistics of Indigo

Start at: 2018-08-11 01:38:20
End at: 2018-08-11 01:38:50
Local clock offset: 0.321 ms
Remote clock offset: 0.049 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.84 Mbit/s
95th percentile per-packet one-way delay: 61.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.84 Mbit/s
95th percentile per-packet one-way delay: 61.332 ms
Loss rate: 0.00%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-08-11 02:01:22
End at: 2018-08-11 02:01:52
Local clock offset: 0.444 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.39 Mbit/s
95th percentile per-packet one-way delay: 61.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.39 Mbit/s
95th percentile per-packet one-way delay: 61.370 ms
Loss rate: 0.00%
Run 4: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet Loss]
Run 5: Statistics of Indigo

Start at: 2018-08-11 02:24:22
End at: 2018-08-11 02:24:52
Local clock offset: 0.563 ms
Remote clock offset: -0.182 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 212.92 Mbit/s
  95th percentile per-packet one-way delay: 61.092 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 212.92 Mbit/s
  95th percentile per-packet one-way delay: 61.092 ms
  Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 212.92 Mbit/s)
- Flow 1 egress (mean 212.92 Mbit/s)

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

- Flow 1 (99th percentile 61.09 ms)
Run 6: Statistics of Indigo

Start at: 2018-08-11 02:47:16
End at: 2018-08-11 02:47:46
Local clock offset: 0.718 ms
Remote clock offset: -0.216 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.36 Mbit/s
95th percentile per-packet one-way delay: 61.174 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 213.36 Mbit/s
95th percentile per-packet one-way delay: 61.174 ms
Loss rate: 0.09%
Run 6: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 213.58 Mbit/s)
- Flow 1 egress (mean 213.36 Mbit/s)

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

- Flow 1 (95th percentile 61.17 ms)
Run 7: Statistics of Indigo

Start at: 2018-08-11 03:09:40
End at: 2018-08-11 03:10:10
Local clock offset: 0.943 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.63 Mbit/s
95th percentile per-packet one-way delay: 61.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.63 Mbit/s
95th percentile per-packet one-way delay: 61.224 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 217.63 Mbps)**
- **Flow 1 egress (mean 217.63 Mbps)**

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

- **Flow 1 (95th percentile 61.22 ms)**

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Run 8: Statistics of Indigo

Start at: 2018-08-11 03:32:34
End at: 2018-08-11 03:33:04
Local clock offset: -0.125 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.03 Mbit/s
95th percentile per-packet one-way delay: 61.398 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 209.03 Mbit/s
95th percentile per-packet one-way delay: 61.398 ms
Loss rate: 0.00%
Run 8: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 209.03 Mbit/s)**
- **Flow 1 egress (mean 209.03 Mbit/s)**

![Graph showing packet delay distribution for Flow 1.]

- **Flow 1 (95th percentile 61.40 ms)**
Run 9: Statistics of Indigo

Start at: 2018-08-11 03:55:18
End at: 2018-08-11 03:55:48
Local clock offset: -0.353 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.30 Mbit/s
95th percentile per-packet one-way delay: 61.382 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.30 Mbit/s
95th percentile per-packet one-way delay: 61.382 ms
Loss rate: 0.00%
Run 9: Report of Indigo — Data Link

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

![Graph 2: Packet Delay vs Time (ms)]
Run 10: Statistics of Indigo

Start at: 2018-08-11 04:17:52
End at: 2018-08-11 04:18:22
Local clock offset: -0.569 ms
Remote clock offset: 1.254 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 211.34 Mbit/s
  95th percentile per-packet one-way delay: 63.015 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 211.34 Mbit/s
  95th percentile per-packet one-way delay: 63.015 ms
  Loss rate: 0.00%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-08-11 00:37:13
End at: 2018-08-11 00:37:43
Local clock offset: 0.42 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 23.94 Mbit/s
  95th percentile per-packet one-way delay: 62.659 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 23.94 Mbit/s
  95th percentile per-packet one-way delay: 62.659 ms
  Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-08-11 01:00:13
End at: 2018-08-11 01:00:43
Local clock offset: 0.356 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 62.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.94 Mbit/s
95th percentile per-packet one-way delay: 62.578 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time. The throughput graph displays a steady increase with two peaks, while the packet delay graph shows a range of delays with a 95th percentile of 62.58 ms.](image-url)
Run 3: Statistics of LEDBAT

Start at: 2018-08-11 01:22:59
End at: 2018-08-11 01:23:29
Local clock offset: 0.186 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 21.71 Mbit/s
  95th percentile per-packet one-way delay: 67.776 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 21.71 Mbit/s
  95th percentile per-packet one-way delay: 67.776 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

![Graph showing throughput vs time for two flows: Ingress (dashed line) and Egress (solid line). The Ingress line is flat at 21.71 Mbps, while the Egress line shows fluctuations.]

![Graph showing packet inter-arrival delay vs time for Flow 1. The 95th percentile delay is 67.78 ms.]

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Run 4: Statistics of LEDBAT

Start at: 2018-08-11 01:45:25
End at: 2018-08-11 01:45:56
Local clock offset: 0.28 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.00 Mbit/s
95th percentile per-packet one-way delay: 62.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.00 Mbit/s
95th percentile per-packet one-way delay: 62.506 ms
Loss rate: 0.00%
Run 5: Statistics of LEDBAT

Start at: 2018-08-11 02:08:34
End at: 2018-08-11 02:09:04
Local clock offset: 0.469 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.83 Mbit/s
95th percentile per-packet one-way delay: 62.493 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 23.83 Mbit/s
95th percentile per-packet one-way delay: 62.493 ms
Loss rate: 0.03%
Run 5: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 23.84 Mbps/s)**
- **Flow 1 egress (mean 23.83 Mbps/s)**

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

- **Flow 1 (95th percentile 62.49 ms)**
Run 6: Statistics of LEDBAT

Start at: 2018-08-11 02:31:34
End at: 2018-08-11 02:32:04
Local clock offset: 0.645 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 62.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 62.272 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

![Graph showing throughput over time.]

![Graph showing packet delay over time.]
Run 7: Statistics of LEDBAT

Start at: 2018-08-11 02:54:26
End at: 2018-08-11 02:54:56
Local clock offset: 0.759 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 18.23 Mbit/s
95th percentile per-packet one-way delay: 62.533 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 18.23 Mbit/s
95th percentile per-packet one-way delay: 62.533 ms
Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 18.23 Mbit/s)**
- **Flow 1 egress (mean 18.23 Mbit/s)**

![Graph of Packet Delay vs Time](image2)

- **Flow 1 (95th percentile 62.53 ms)**
Run 8: Statistics of LEDBAT

Start at: 2018-08-11 03:16:46
End at: 2018-08-11 03:17:16
Local clock offset: 0.339 ms
Remote clock offset: 2.782 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 65.227 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 65.227 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 21.64 Mbps)**
- **Flow 1 egress (mean 21.64 Mbps)**

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

- **Flow 1 95th percentile 65.23 ms**

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Run 9: Statistics of LEDBAT

Start at: 2018-08-11 03:39:43
End at: 2018-08-11 03:40:14
Local clock offset: -0.203 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 62.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 62.206 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 24.17 Mbit/s)
- Flow 1 egress (mean 24.17 Mbit/s)

![Packet Delay Graph]

- Flow 1 (95th percentile 62.21 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-08-11 04:02:25
End at: 2018-08-11 04:02:55
Local clock offset: 0.383 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-08-11 05:50:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.03 Mbit/s
95th percentile per-packet one-way delay: 62.584 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 24.03 Mbit/s
95th percentile per-packet one-way delay: 62.584 ms
Loss rate: 0.02%
Run 10: Report of LEDBAT — Data Link

![Graph of throughput vs. time with two traces labeled Flow 1 ingress (mean 24.03 Mbit/s) and Flow 1 egress (mean 24.03 Mbit/s).]

![Graph of packet round-trip delay vs. time with a trace labeled Flow 1 (95th percentile 62.58 ms).]
Run 1: Statistics of PCC-Allegro

Start at: 2018-08-11 00:38:20
End at: 2018-08-11 00:38:50
Local clock offset: 0.408 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-08-11 05:55:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 629.91 Mbit/s
95th percentile per-packet one-way delay: 132.893 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 629.91 Mbit/s
95th percentile per-packet one-way delay: 132.893 ms
Loss rate: 0.45%
Run 1: Report of PCC-Allegro — Data Link

[Graphs showing throughput and per-packet one-way delay over time for data link.]
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-11 01:01:20
End at: 2018-08-11 01:01:50
Local clock offset: 0.271 ms
Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2018-08-11 05:55:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 637.90 Mbit/s
95th percentile per-packet one-way delay: 130.154 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 637.90 Mbit/s
95th percentile per-packet one-way delay: 130.154 ms
Loss rate: 0.25%
Run 2: Report of PCC-Allegro — Data Link

![Graph 1](image1)

*Flow 1 ingress (mean 639.49 Mbit/s)  Flow 1 egress (mean 637.90 Mbit/s)*

![Graph 2](image2)

*Flow 1 (95th percentile 130.15 ms)*
Run 3: Statistics of PCC-Allegro

Start at: 2018-08-11 01:24:06
End at: 2018-08-11 01:24:37
Local clock offset: 0.162 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-08-11 05:55:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 625.11 Mbit/s
  95th percentile per-packet one-way delay: 168.478 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 625.11 Mbit/s
  95th percentile per-packet one-way delay: 168.478 ms
  Loss rate: 1.56%
Run 3: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 635.15 Mbit/s)  Flow 1 egress (mean 625.11 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 168.48 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-08-11 01:46:33
End at: 2018-08-11 01:47:03
Local clock offset: 0.289 ms
Remote clock offset: -2.972 ms

# Below is generated by plot.py at 2018-08-11 05:55:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 617.94 Mbit/s
95th percentile per-packet one-way delay: 100.766 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 617.94 Mbit/s
95th percentile per-packet one-way delay: 100.766 ms
Loss rate: 0.66%
Run 4: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 622.05 Mbps)
- Flow 1 egress (mean 617.94 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 100.77 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-08-11 02:09:42
End at: 2018-08-11 02:10:12
Local clock offset: 0.497 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-08-11 05:58:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 603.34 Mbit/s
95th percentile per-packet one-way delay: 135.619 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 603.34 Mbit/s
95th percentile per-packet one-way delay: 135.619 ms
Loss rate: 0.57%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-08-11 02:32:41
End at: 2018-08-11 02:33:11
Local clock offset: 0.692 ms
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2018-08-11 05:59:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 627.87 Mbit/s
95th percentile per-packet one-way delay: 131.305 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 627.87 Mbit/s
95th percentile per-packet one-way delay: 131.305 ms
Loss rate: 0.51%
Run 6: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

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

Legend:
- Flow 1 ingress (mean 631.07 Mbit/s)
- Flow 1 egress (mean 627.87 Mbit/s)
- Flow 1 (95th percentile 131.31 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-08-11 02:55:33
End at: 2018-08-11 02:56:03
Local clock offset: 0.802 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-08-11 05:59:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 572.26 Mbit/s
95th percentile per-packet one-way delay: 93.778 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 572.26 Mbit/s
95th percentile per-packet one-way delay: 93.778 ms
Loss rate: 1.12%
Run 7: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 578.77 Mb/s)**
- **Flow 1 egress (mean 572.26 Mb/s)**

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

- **Flow 1 (95th percentile 93.78 ms)**
Run 8: Statistics of PCC-Allegro

Start at: 2018-08-11 03:17:54  
End at: 2018-08-11 03:18:24  
Local clock offset: 0.252 ms  
Remote clock offset: 2.741 ms

# Below is generated by plot.py at 2018-08-11 06:02:33  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 609.96 Mbit/s  
95th percentile per-packet one-way delay: 139.693 ms  
Loss rate: 0.66%  
-- Flow 1:  
Average throughput: 609.96 Mbit/s  
95th percentile per-packet one-way delay: 139.693 ms  
Loss rate: 0.66%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-08-11 03:40:51
End at: 2018-08-11 03:41:21
Local clock offset: -0.241 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-08-11 06:05:56
# Datalink statistics
-- Total of 1 flow:
   Average throughput: 608.22 Mbit/s
   95th percentile per-packet one-way delay: 125.912 ms
   Loss rate: 0.55%
-- Flow 1:
   Average throughput: 608.22 Mbit/s
   95th percentile per-packet one-way delay: 125.912 ms
   Loss rate: 0.55%
Run 9: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 611.54 Mbit/s)**
- **Flow 1 egress (mean 608.22 Mbit/s)**

![Graph showing packet delay over time.]

- **Flow 1 (95th percentile 125.91 ms)**
Run 10: Statistics of PCC-Allegro

Start at: 2018-08-11 04:03:33
End at: 2018-08-11 04:04:03
Local clock offset: -0.454 ms
Remote clock offset: 0.818 ms

# Below is generated by plot.py at 2018-08-11 06:05:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.33 Mbit/s
95th percentile per-packet one-way delay: 154.612 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 574.33 Mbit/s
95th percentile per-packet one-way delay: 154.612 ms
Loss rate: 0.16%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2018-08-11 00:51:31
End at: 2018-08-11 00:52:01
Local clock offset: 0.61 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-08-11 06:05:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.03 Mbit/s
95th percentile per-packet one-way delay: 122.041 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 294.03 Mbit/s
95th percentile per-packet one-way delay: 122.041 ms
Loss rate: 0.05%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2018-08-11 01:14:15
End at: 2018-08-11 01:14:45
Local clock offset: 0.248 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-08-11 06:07:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 338.54 Mbit/s
95th percentile per-packet one-way delay: 138.408 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 338.54 Mbit/s
95th percentile per-packet one-way delay: 138.408 ms
Loss rate: 0.91%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-08-11 01:36:46
End at: 2018-08-11 01:37:16
Local clock offset: 0.264 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-08-11 06:09:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 312.39 Mbit/s
95th percentile per-packet one-way delay: 171.557 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 312.39 Mbit/s
95th percentile per-packet one-way delay: 171.557 ms
Loss rate: 2.04%
Run 3: Report of PCC-Expr — Data Link

![Graph of Throughput and Delay]

- Flow 1 ingress (mean 318.89 Mbit/s)
- Flow 1 egress (mean 312.39 Mbit/s)

- Flow 1 (95th percentile 171.56 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-08-11 01:59:51
End at: 2018-08-11 02:00:21
Local clock offset: 0.421 ms
Remote clock offset: -0.224 ms

# Below is generated by plot.py at 2018-08-11 06:09:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 266.04 Mbit/s
95th percentile per-packet one-way delay: 231.448 ms
Loss rate: 14.86%
-- Flow 1:
Average throughput: 266.04 Mbit/s
95th percentile per-packet one-way delay: 231.448 ms
Loss rate: 14.86%
Run 4: Report of PCC-Expr — Data Link

[Graph 1: Throughput vs Time
- Flow 1 ingress (mean 312.47 Mbit/s)
- Flow 1 egress (mean 266.04 Mbit/s)
]

[Graph 2: Packet Delay vs Time
- Flow 1 (95th percentile 231.45 ms)
]
Run 5: Statistics of PCC-Expr

Start at: 2018-08-11 02:22:52
End at: 2018-08-11 02:23:22
Local clock offset: 0.623 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-08-11 06:09:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.92 Mbit/s
95th percentile per-packet one-way delay: 72.592 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 279.92 Mbit/s
95th percentile per-packet one-way delay: 72.592 ms
Loss rate: 0.00%
Run 5: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 279.92 Mbit/s)
- Flow 1 egress (mean 279.92 Mbit/s)

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

- Flow 1 (95th percentile 72.59 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-08-11 02:45:47
End at: 2018-08-11 02:46:17
Local clock offset: 0.708 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-08-11 06:11:22
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 268.58 Mbit/s
  95th percentile per-packet one-way delay: 84.761 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 268.58 Mbit/s
  95th percentile per-packet one-way delay: 84.761 ms
  Loss rate: 0.00%
Run 6: Report of PCC-Expr — Data Link

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

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Run 7: Statistics of PCC-Expr

Start at: 2018-08-11 03:08:30
End at: 2018-08-11 03:09:00
Local clock offset: 0.859 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-08-11 06:11:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 64.872 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.70 Mbit/s
95th percentile per-packet one-way delay: 64.872 ms
Loss rate: 0.00%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-08-11 03:31:00
End at: 2018-08-11 03:31:30
Local clock offset: -0.104 ms
Remote clock offset: 2.969 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 307.05 Mbit/s
95th percentile per-packet one-way delay: 141.183 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 307.05 Mbit/s
95th percentile per-packet one-way delay: 141.183 ms
Loss rate: 0.23%
Run 8: Report of PCC-Expr — Data Link

![Graph showing throughput and packet latency over time]

- Flow 1 ingress (mean 307.74 Mbit/s)
- Flow 1 egress (mean 307.05 Mbit/s)

![Graph showing packet latency over time]

- Flow 1 (95th percentile 141.18 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-08-11 03:53:50
End at: 2018-08-11 03:54:20
Local clock offset: -0.313 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.21 Mbit/s
95th percentile per-packet one-way delay: 167.236 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 245.21 Mbit/s
95th percentile per-packet one-way delay: 167.236 ms
Loss rate: 0.10%
Run 9: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 245.45 Mbit/s)
- Flow 1 egress (mean 245.21 Mbit/s)

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

- Flow 1 (95th percentile 167.24 ms)
Run 10: Statistics of PCC-Expr

Start at: 2018-08-11 04:16:26
End at: 2018-08-11 04:16:56
Local clock offset: -0.476 ms
Remote clock offset: -0.664 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 229.80 Mbit/s
  95th percentile per-packet one-way delay: 106.073 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 229.80 Mbit/s
  95th percentile per-packet one-way delay: 106.073 ms
  Loss rate: 0.91%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 231.93 Mbps)
- Flow 1 egress (mean 229.80 Mbps)

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

- Flow 1 (95th percentile 106.07 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-08-11 00:41:23
End at: 2018-08-11 00:41:53
Local clock offset: 0.468 ms
Remote clock offset: 0.152 ms
Run 1: Report of QUIC Cubic — Data Link

[Graphs showing throughput and packet loss over time]

Flow 1 ingress (mean 0.05 Mbit/s)  Flow 1 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 61.31 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-08-11 01:04:22
End at: 2018-08-11 01:04:52
Local clock offset: 0.254 ms
Remote clock offset: 0.064 ms
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-08-11 01:27:08
End at: 2018-08-11 01:27:38
Local clock offset: 0.231 ms
Remote clock offset: 0.049 ms
Run 3: Report of QUIC Cubic — Data Link

![Graph of Throughput (Mb/s) vs Time (s)]

- **Flow 1 ingress (mean 0.05 Mb/s)**
- **Flow 1 egress (mean 0.05 Mb/s)**

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

- **Flow 1 (95th percentile 61.11 ms)**
Run 4: Statistics of QUIC Cubic

Start at: 2018-08-11 01:49:35
End at: 2018-08-11 01:50:05
Local clock offset: 0.337 ms
Remote clock offset: -2.825 ms
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-08-11 02:12:42
End at: 2018-08-11 02:13:12
Local clock offset: 0.541 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 61.297 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 61.297 ms
Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

![Graph of Throughput (Mbps) vs. Time (s) for Flow 1 ingress (mean 64.64 Mbit/s) and Flow 1 egress (mean 64.64 Mbit/s)]

![Graph of RTT (ms) vs. Time (s) for Flow 1 (95th percentile 61.30 ms)]
Run 6: Statistics of QUIC Cubic

Start at: 2018-08-11 02:35:42
End at: 2018-08-11 02:36:12
Local clock offset: 0.651 ms
Remote clock offset: -0.218 ms
Run 6: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 0.05 Mbps)
- Flow 1 egress (mean 0.05 Mbps)

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

- Flow 1 (95th percentile 60.88 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-08-11 02:58:30
End at: 2018-08-11 02:59:00
Local clock offset: 0.767 ms
Remote clock offset: -0.081 ms
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)

Flow 1 (95th percentile 61.39 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-08-11 03:20:49
End at: 2018-08-11 03:21:19
Local clock offset: 0.181 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 61.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.68 Mbit/s
95th percentile per-packet one-way delay: 61.096 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-08-11 03:43:52
End at: 2018-08-11 03:44:22
Local clock offset: -0.238 ms
Remote clock offset: 0.015 ms
Run 10: Statistics of QUIC Cubic

Start at: 2018-08-11 04:06:31
End at: 2018-08-11 04:07:01
Local clock offset: -0.456 ms
Remote clock offset: 0.151 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 61.173 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 61.173 ms
Loss rate: 0.01%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-08-11 00:57:57
End at: 2018-08-11 00:58:27
Local clock offset: 0.381 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.224 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.224 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

- **Flow 1 ingress (mean 0.22 Mbit/s)**
- **Flow 1 egress (mean 0.22 Mbit/s)**

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

- **Flow 1 (95th percentile 61.22 ms)**
Run 2: Statistics of SCReAM

Start at: 2018-08-11 01:20:42
End at: 2018-08-11 01:21:12
Local clock offset: 0.119 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.189 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-08-11 01:43:10
End at: 2018-08-11 01:43:40
Local clock offset: 0.271 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.503 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.503 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Graph showing network performance metrics](image1)

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

![Graph showing packet delay](image2)

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

Flow 1 (95th percentile 61.50 ms)
Run 4: Statistics of SCReAM

Start at: 2018-08-11 02:06:16
End at: 2018-08-11 02:06:46
Local clock offset: 0.403 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.806 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.806 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph of throughput over time for two data flows with mean rates of 0.22 Mbps: Flow 1 ingress and Flow 1 egress.]

![Graph of per-packet one-way delay for Flow 1 with 95th percentile at 61.81 ms.]

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Run 5: Statistics of SCReAM

Start at: 2018-08-11 02:29:16
End at: 2018-08-11 02:29:46
Local clock offset: 0.571 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.309 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.309 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-08-11 02:52:08
End at: 2018-08-11 02:52:38
Local clock offset: 0.791 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.319 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.319 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Graph of network performance metrics](image1)

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

![Graph of packet delay](image2)

- **Per packet one-way delay (ms)**
  - Flow 1 (95th percentile 61.32 ms)
Run 7: Statistics of SCReAM

Start at: 2018-08-11 03:14:31
End at: 2018-08-11 03:15:01
Local clock offset: 0.588 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-08-11 06:16:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.164 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.164 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)

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

- Flow 1 (95th percentile 61.16 ms)
Run 8: Statistics of SCReAM

Start at: 2018-08-11 03:37:26
End at: 2018-08-11 03:37:56
Local clock offset: -0.177 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.340 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.340 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

![Graph of throughput over time showing two lines for flow ingress and egress.]

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![Graph of packet delay over time showing a distribution for flow 1 with a 95th percentile of 61.34 ms.]

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Run 9: Statistics of SCReAM

Start at: 2018-08-11 04:00:10
End at: 2018-08-11 04:00:40
Local clock offset: -0.36 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.424 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.424 ms
Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-08-11 04:22:42
End at: 2018-08-11 04:23:12
Local clock offset: -0.556 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.565 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.565 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)

![Graph 2: Per-packet delay vs Time](Image)

- Flow 1 (95th percentile 61.56 ms)
Run 1: Statistics of Sprout

Start at: 2018-08-11 00:55:45
End at: 2018-08-11 00:56:15
Local clock offset: 0.485 ms
Remote clock offset: 0.111 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 61.647 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.15 Mbit/s
95th percentile per-packet one-way delay: 61.647 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

![Graph of throughput and delay over time]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 1.15 Mbit/s)
  - Flow 1 egress (mean 1.15 Mbit/s)

- **Packet Round-trip time (ms):**
  - Flow 1 (95th percentile 61.65 ms)
Run 2: Statistics of Sprout

Start at: 2018-08-11 01:18:30
End at: 2018-08-11 01:19:00
Local clock offset: 0.161 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 66.900 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 66.900 ms
Loss rate: 0.00%
Run 3: Statistics of Sprout

Start at: 2018-08-11 01:40:58
End at: 2018-08-11 01:41:28
Local clock offset: 0.274 ms
Remote clock offset: -0.158 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 61.234 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 61.234 ms
Loss rate: 0.06%
Run 3: Report of Sprout — Data Link

![Graph showing throughput and packet loss](image1)

![Graph showing packet loss](image2)
Run 4: Statistics of Sprout

Start at: 2018-08-11 02:04:03
End at: 2018-08-11 02:04:33
Local clock offset: 0.405 ms
Remote clock offset: -2.907 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 58.860 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 58.860 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

![Graph of throughput over time]

- **Flow 1 ingress (mean 5.39 Mbit/s)**
- **Flow 1 egress (mean 5.39 Mbit/s)**

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

- **Flow 1 (95th percentile 58.86 ms)**

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Run 5: Statistics of Sprout

Start at: 2018-08-11 02:27:04
End at: 2018-08-11 02:27:34
Local clock offset: 0.579 ms
Remote clock offset: -2.737 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.63 Mbit/s
  95th percentile per-packet one-way delay: 58.658 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.63 Mbit/s
  95th percentile per-packet one-way delay: 58.658 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-08-11 02:49:56
End at: 2018-08-11 02:50:26
Local clock offset: 0.788 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 61.308 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 61.308 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph of throughput and packet delay over time]

- **Flow 1 ingress (mean 0.85 Mbit/s)**
- **Flow 1 egress (mean 0.85 Mbit/s)**

![Graph of packet delay over time]

- **Flow 1 (95th percentile 61.31 ms)**
Run 7: Statistics of Sprout

Start at: 2018-08-11 03:12:19
End at: 2018-08-11 03:12:49
Local clock offset: 0.665 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 61.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 61.531 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.76 Mbit/s)
- Flow 1 egress (mean 0.76 Mbit/s)

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

- Flow 1 (95th percentile 61.53 ms)
Run 8: Statistics of Sprout

Start at: 2018-08-11 03:35:14
End at: 2018-08-11 03:35:44
Local clock offset: -0.163 ms
Remote clock offset: 2.786 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.58 Mbit/s
  95th percentile per-packet one-way delay: 64.183 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.58 Mbit/s
  95th percentile per-packet one-way delay: 64.183 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 1.58 Mbit/s)
- Flow 1 egress (mean 1.58 Mbit/s)

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

- Flow 1 (95th percentile 64.18 ms)
Run 9: Statistics of Sprout

Start at: 2018-08-11 03:57:58
End at: 2018-08-11 03:58:28
Local clock offset: -0.403 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.65 Mbit/s
  95th percentile per-packet one-way delay: 61.623 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.65 Mbit/s
  95th percentile per-packet one-way delay: 61.623 ms
  Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-08-11 04:20:30
End at: 2018-08-11 04:21:00
Local clock offset: -0.51 ms
Remote clock offset: 0.713 ms

# Below is generated by plot.py at 2018-08-11 06:16:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 62.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.77 Mbit/s
95th percentile per-packet one-way delay: 62.229 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-08-11 00:48:40
End at: 2018-08-11 00:49:10
Local clock offset: 0.51 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-08-11 06:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.51 Mbit/s
95th percentile per-packet one-way delay: 61.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.51 Mbit/s
95th percentile per-packet one-way delay: 61.453 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link

The graph shows the throughput over time for two different flows: ingress and egress. The throughput is measured in Mbit/s.

The lower graph illustrates the per-packet one-way delay in milliseconds for Flow 1, with the 95th percentile delay indicated as 61.45 ms.
Run 2: Statistics of TaoVA-100x

Start at: 2018-08-11 01:11:38
End at: 2018-08-11 01:12:08
Local clock offset: 0.152 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-08-11 06:16:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 208.07 Mbit/s
95th percentile per-packet one-way delay: 61.529 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.07 Mbit/s
95th percentile per-packet one-way delay: 61.529 ms
Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 208.07 Mbit/s)**
- **Flow 1 egress (mean 208.07 Mbit/s)**

![Graph of packet delay distribution.](image)

- **Flow 1 (95th percentile 61.53 ms)**

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Run 3: Statistics of TaoVA-100x

Start at: 2018-08-11 01:34:23
End at: 2018-08-11 01:34:53
Local clock offset: 0.255 ms
Remote clock offset: -2.858 ms
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-08-11 01:56:59
End at: 2018-08-11 01:57:29
Local clock offset: 0.363 ms
Remote clock offset: -3.004 ms

# Below is generated by plot.py at 2018-08-11 06:16:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.30 Mbit/s
95th percentile per-packet one-way delay: 58.466 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 238.30 Mbit/s
95th percentile per-packet one-way delay: 58.466 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 238.29 Mbps)
- Flow 1 egress (mean 238.30 Mbps)

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

- Flow 1 (95th percentile 58.47 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-08-11 02:20:03
End at: 2018-08-11 02:20:33
Local clock offset: 0.563 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-08-11 06:17:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.03 Mbit/s
95th percentile per-packet one-way delay: 61.658 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 236.03 Mbit/s
95th percentile per-packet one-way delay: 61.658 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-08-11 02:42:55
End at: 2018-08-11 02:43:25
Local clock offset: 0.709 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-08-11 06:19:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 238.34 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 238.34 Mbit/s
95th percentile per-packet one-way delay: 61.477 ms
Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-08-11 03:05:42
End at: 2018-08-11 03:06:12
Local clock offset: 0.831 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-08-11 06:22:15
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 233.59 Mbit/s
  95th percentile per-packet one-way delay: 61.546 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 233.59 Mbit/s
  95th percentile per-packet one-way delay: 61.546 ms
  Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link

- **Graph 1:** Throughput (Mbps) vs. Time (s)
  - Flow 1 ingress (mean 233.59 Mbit/s)
  - Flow 1 egress (mean 233.59 Mbit/s)

- **Graph 2:** Per-packet one-way delay (ms) vs. Time (s)
  - Flow 1 (95th percentile 61.55 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-08-11 03:28:09
End at: 2018-08-11 03:28:39
Local clock offset: -0.031 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-08-11 06:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.85 Mbit/s
95th percentile per-packet one-way delay: 61.471 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 234.85 Mbit/s
95th percentile per-packet one-way delay: 61.471 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 234.85 Mbps)
- **Flow 1 egress** (mean 234.85 Mbps)

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

- **Flow 1** (95th percentile 61.47 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-08-11 03:51:05
End at: 2018-08-11 03:51:35
Local clock offset: -0.302 ms
Remote clock offset: 0.168 ms

# Below is generated by plot.py at 2018-08-11 06:23:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.20 Mbit/s
95th percentile per-packet one-way delay: 61.462 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 232.20 Mbit/s
95th percentile per-packet one-way delay: 61.462 ms
Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 232.19 Mbit/s)
- **Flow 1 egress** (mean 232.20 Mbit/s)

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

- **Flow 1 (95th percentile 61.46 ms)**
Run 10: Statistics of TaoVA-100x

Start at: 2018-08-11 04:13:36
End at: 2018-08-11 04:14:06
Local clock offset: -0.461 ms
Remote clock offset: -1.471 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.04 Mbit/s
95th percentile per-packet one-way delay: 59.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 242.04 Mbit/s
95th percentile per-packet one-way delay: 59.869 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 242.04 Mbit/s)
- Flow 1 egress (mean 242.04 Mbit/s)

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

- Flow 1 (95th percentile 59.87 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-08-11 00:36:00
End at: 2018-08-11 00:36:30
Local clock offset: 0.434 ms
Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.24 Mbit/s
95th percentile per-packet one-way delay: 62.219 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 130.24 Mbit/s
95th percentile per-packet one-way delay: 62.219 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-08-11 00:59:03
End at: 2018-08-11 00:59:33
Local clock offset: 0.404 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.67 Mbit/s
95th percentile per-packet one-way delay: 62.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.67 Mbit/s
95th percentile per-packet one-way delay: 62.150 ms
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-08-11 01:21:47
End at: 2018-08-11 01:22:17
Local clock offset: 0.126 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.36 Mbit/s
95th percentile per-packet one-way delay: 67.376 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.36 Mbit/s
95th percentile per-packet one-way delay: 67.376 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

![Graph 1](image1.jpg)

![Graph 2](image2.jpg)
Run 4: Statistics of TCP Vegas

Start at: 2018-08-11 01:44:16
End at: 2018-08-11 01:44:46
Local clock offset: 0.276 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.71 Mbit/s
95th percentile per-packet one-way delay: 62.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.71 Mbit/s
95th percentile per-packet one-way delay: 62.525 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-08-11 02:07:22
End at: 2018-08-11 02:07:52
Local clock offset: 0.802 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.48 Mbit/s
95th percentile per-packet one-way delay: 62.067 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 126.48 Mbit/s
95th percentile per-packet one-way delay: 62.067 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-08-11 02:30:22
End at: 2018-08-11 02:30:52
Local clock offset: 0.631 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 112.47 Mbit/s
95th percentile per-packet one-way delay: 62.354 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 112.47 Mbit/s
95th percentile per-packet one-way delay: 62.354 ms
Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-08-11 02:53:14
End at: 2018-08-11 02:53:44
Local clock offset: 0.78 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.04 Mbit/s
95th percentile per-packet one-way delay: 62.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.04 Mbit/s
95th percentile per-packet one-way delay: 62.571 ms
Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link

![Graph 1](image1)

**Legend:**
- Flow 1 ingress (mean 123.04 Mbit/s)
- Flow 1 egress (mean 123.04 Mbit/s)

![Graph 2](image2)

**Legend:**
- Flow 1 (95th percentile 62.57 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-08-11 03:15:37
End at: 2018-08-11 03:16:07
Local clock offset: 0.483 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 62.155 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.73 Mbit/s
95th percentile per-packet one-way delay: 62.155 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 69.73 Mbit/s)
- **Flow 1 egress** (mean 69.73 Mbit/s)

![Graph 2: Per-packet end-to-end delay (ms)]

- **Flow 1** (95th percentile 62.16 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-08-11 03:38:32
End at: 2018-08-11 03:39:02
Local clock offset: -0.132 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 116.95 Mbit/s
95th percentile per-packet one-way delay: 62.334 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 116.95 Mbit/s
95th percentile per-packet one-way delay: 62.334 ms
Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress (mean 116.96 Mbit/s)**
- **Flow 1 egress (mean 116.95 Mbit/s)**

---

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

- **Flow 1 (95th percentile 62.33 ms)**

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Run 10: Statistics of TCP Vegas

Start at: 2018-08-11 04:01:16
End at: 2018-08-11 04:01:46
Local clock offset: -0.407 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-08-11 06:23:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.78 Mbit/s
95th percentile per-packet one-way delay: 62.554 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.78 Mbit/s
95th percentile per-packet one-way delay: 62.554 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-08-11 00:54:22
End at: 2018-08-11 00:54:52
Local clock offset: 0.619 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2018-08-11 06:26:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.16 Mbit/s
95th percentile per-packet one-way delay: 124.878 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 261.16 Mbit/s
95th percentile per-packet one-way delay: 124.878 ms
Loss rate: 0.05%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-08-11 01:17:06
End at: 2018-08-11 01:17:36
Local clock offset: 0.152 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-08-11 06:26:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.18 Mbit/s
95th percentile per-packet one-way delay: 91.213 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 273.18 Mbit/s
95th percentile per-packet one-way delay: 91.213 ms
Loss rate: 0.00%
Run 2: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 273.23 Mbit/s)
- Flow 1 egress (mean 273.18 Mbit/s)

![Graph showing packet delay](image)

Legend:
- Flow 1 (95th percentile 91.21 ms)
Run 3: Statistics of Verus

Start at: 2018-08-11 01:39:39
End at: 2018-08-11 01:40:09
Local clock offset: 0.262 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-08-11 06:26:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.99 Mbit/s
95th percentile per-packet one-way delay: 89.743 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 196.99 Mbit/s
95th percentile per-packet one-way delay: 89.743 ms
Loss rate: 0.15%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-08-11 02:02:42
End at: 2018-08-11 02:03:12
Local clock offset: 0.364 ms
Remote clock offset: -2.944 ms

# Below is generated by plot.py at 2018-08-11 06:26:43
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 244.20 Mbit/s
  95th percentile per-packet one-way delay: 140.265 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 244.20 Mbit/s
  95th percentile per-packet one-way delay: 140.265 ms
  Loss rate: 0.08%
Run 4: Report of Verus — Data Link

![Graph showing network performance metrics over time.](image-url)
Run 5: Statistics of Verus

Start at: 2018-08-11 02:25:42
End at: 2018-08-11 02:26:12
Local clock offset: 0.532 ms
Remote clock offset: -2.757 ms

# Below is generated by plot.py at 2018-08-11 06:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 262.19 Mbit/s
95th percentile per-packet one-way delay: 157.931 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 262.19 Mbit/s
95th percentile per-packet one-way delay: 157.931 ms
Loss rate: 0.52%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-08-11 02:48:36
End at: 2018-08-11 02:49:06
Local clock offset: 0.705 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-08-11 06:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.94 Mbit/s
95th percentile per-packet one-way delay: 112.049 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 219.94 Mbit/s
95th percentile per-packet one-way delay: 112.049 ms
Loss rate: 0.35%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-08-11 03:10:59
End at: 2018-08-11 03:11:29
Local clock offset: 0.816 ms
Remote clock offset: 2.757 ms

# Below is generated by plot.py at 2018-08-11 06:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.08 Mbit/s
95th percentile per-packet one-way delay: 111.120 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 210.08 Mbit/s
95th percentile per-packet one-way delay: 111.120 ms
Loss rate: 0.00%
Run 7: Report of Verus — Data Link

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

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

- Flow 1 ingress (mean 210.10 Mbit/s)
- Flow 1 egress (mean 210.08 Mbit/s)
- Flow 1 (95th percentile 111.12 ms)
Run 8: Statistics of Verus

Start at: 2018-08-11 03:33:53
End at: 2018-08-11 03:34:23
Local clock offset: -0.105 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-08-11 06:27:49
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 224.87 Mbit/s
  95th percentile per-packet one-way delay: 87.189 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 224.87 Mbit/s
  95th percentile per-packet one-way delay: 87.189 ms
  Loss rate: 0.00%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 224.86 Mbit/s)
- Flow 1 egress (mean 224.87 Mbit/s)

![Graph 2: RTT (ms) vs Time (s)]

- Flow 1 (95th percentile 87.19 ms)
Run 9: Statistics of Verus

Start at: 2018-08-11 03:56:38
End at: 2018-08-11 03:57:08
Local clock offset: -0.365 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-08-11 06:28:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.05 Mbit/s
95th percentile per-packet one-way delay: 135.806 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 217.05 Mbit/s
95th percentile per-packet one-way delay: 135.806 ms
Loss rate: 0.07%
Run 9: Report of Verus — Data Link

![Graph of throughput vs time]

- **Flow 1 ingress (mean 217.62 Mbit/s)**
- **Flow 1 egress (mean 217.05 Mbit/s)**

![Graph of per packet one way delay vs time]

- **Flow 1 (95th percentile 135.81 ms)**
Run 10: Statistics of Verus

Start at: 2018-08-11 04:19:11
End at: 2018-08-11 04:19:41
Local clock offset: -0.57 ms
Remote clock offset: 0.14 ms

# Below is generated by plot.py at 2018-08-11 06:29:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.06 Mbit/s
95th percentile per-packet one-way delay: 99.576 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 211.06 Mbit/s
95th percentile per-packet one-way delay: 99.576 ms
Loss rate: 0.09%
Run 1: Statistics of PCC-Vivace

Start at: 2018-08-11 00:39:49
End at: 2018-08-11 00:40:19
Local clock offset: 0.481 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-08-11 06:33:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 397.02 Mbit/s
95th percentile per-packet one-way delay: 77.640 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 397.02 Mbit/s
95th percentile per-packet one-way delay: 77.640 ms
Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

![Graph of Throughput vs Time]

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 597.02 Mbit/s)
- Flow 1 egress (mean 597.02 Mbit/s)

![Graph of Packet Delay vs Time]

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 77.64 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-08-11 01:02:49
End at: 2018-08-11 01:03:19
Local clock offset: 0.223 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-08-11 06:33:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.24 Mbit/s
95th percentile per-packet one-way delay: 73.071 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 391.24 Mbit/s
95th percentile per-packet one-way delay: 73.071 ms
Loss rate: 0.00%
Run 2: Report of PCC-Vivace — Data Link

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

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

- **Flow 1 ingress (mean 391.24 Mbit/s)**
- **Flow 1 egress (mean 391.24 Mbit/s)**
Run 3: Statistics of PCC-Vivace

Start at: 2018-08-11 01:25:35
End at: 2018-08-11 01:26:05
Local clock offset: 0.159 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-08-11 06:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 393.04 Mbit/s
95th percentile per-packet one-way delay: 63.152 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 393.04 Mbit/s
95th percentile per-packet one-way delay: 63.152 ms
Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-08-11 01:48:01
End at: 2018-08-11 01:48:31
Local clock offset: 0.313 ms
Remote clock offset: -3.008 ms

# Below is generated by plot.py at 2018-08-11 06:34:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 415.95 Mbit/s
95th percentile per-packet one-way delay: 66.774 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 415.95 Mbit/s
95th percentile per-packet one-way delay: 66.774 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-08-11 02:11:09
End at: 2018-08-11 02:11:39
Local clock offset: 0.42 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-08-11 06:34:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 402.47 Mbit/s
95th percentile per-packet one-way delay: 69.120 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 402.47 Mbit/s
95th percentile per-packet one-way delay: 69.120 ms
Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time for PCC-Vivace data link.]

- Flow 1 ingress (mean 402.46 Mbit/s)
- Flow 1 egress (mean 402.47 Mbit/s)

![Graph showing packet one way delay over time for PCC-Vivace data link.]

- Flow 1 (95th percentile 69.12 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-08-11 02:34:09
End at: 2018-08-11 02:34:39
Local clock offset: 0.6 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-08-11 06:35:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 397.15 Mbit/s
95th percentile per-packet one-way delay: 69.707 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 397.15 Mbit/s
95th percentile per-packet one-way delay: 69.707 ms
Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

[Graph showing throughput over time]

[Graph showing packet delay over time]
Run 7: Statistics of PCC-Vivace

Start at: 2018-08-11 02:57:00
End at: 2018-08-11 02:57:30
Local clock offset: 0.796 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2018-08-11 06:35:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 359.33 Mbit/s
95th percentile per-packet one-way delay: 62.993 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 359.33 Mbit/s
95th percentile per-packet one-way delay: 62.993 ms
Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link
Run 8: Statistics of PCC-Vivace

Start at: 2018-08-11 03:19:21
End at: 2018-08-11 03:19:51
Local clock offset: 0.26 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-08-11 06:35:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 62.800 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 62.800 ms
Loss rate: 0.02%
Run 8: Report of PCC-Vivace — Data Link
Run 9: Statistics of PCC-Vivace

Start at: 2018-08-11 03:42:19
End at: 2018-08-11 03:42:49
Local clock offset: -0.276 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 402.09 Mbit/s
95th percentile per-packet one-way delay: 63.158 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 402.09 Mbit/s
95th percentile per-packet one-way delay: 63.158 ms
Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link

![Graph of Throughput vs Time](image)

- **Flow 1 ingress (mean 402.08 Mb/s)**
- **Flow 1 egress (mean 402.09 Mb/s)**

![Graph of Packet Delay vs Time](image)

- **Flow 1 (95th percentile 63.16 ms)**
Run 10: Statistics of PCC-Vivace

Start at: 2018-08-11 04:04:59
End at: 2018-08-11 04:05:29
Local clock offset: -0.455 ms
Remote clock offset: 0.621 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 389.14 Mbit/s
95th percentile per-packet one-way delay: 64.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 389.14 Mbit/s
95th percentile per-packet one-way delay: 64.961 ms
Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

The graphs show the throughput and packet loss over time for two flows: ingress and egress. The throughput graph indicates fluctuations in data transfer rates, while the packet loss graph shows instances of packet loss, particularly noticeable around the 15-second mark. The egress flow, marked in a lighter color, maintains a steady throughput, whereas the ingress flow shows a more dynamic pattern. The packet loss graph has spikes indicating high packet loss rates, with a notable peak at around the 25-second mark.
Run 1: Statistics of WebRTC media

Start at: 2018-08-11 00:56:51
End at: 2018-08-11 00:57:21
Local clock offset: 0.394 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 61.502 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 61.502 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput in Mbps over time with two lines indicating flow ingress and egress with a mean of 1.67 Mbps.]

![Graph showing per-packet one-way delay in ms over time with a 95th percentile of 61.50 ms.]
Run 2: Statistics of WebRTC media

Start at: 2018-08-11 01:19:35
End at: 2018-08-11 01:20:05
Local clock offset: 0.152 ms
Remote clock offset: -2.853 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 58.419 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 58.419 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput variations over time for Flow 1 ingress and egress with a mean of 2.05 Mbit/s.]

![Graph showing per-packet one-way delay variations over time for Flow 1 with a 95th percentile of 58.42 ms.]

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Run 3: Statistics of WebRTC media

Start at: 2018-08-11 01:42:04
End at: 2018-08-11 01:42:34
Local clock offset: 0.276 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 61.589 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 61.589 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 2.09 Mbps)
- Flow 1 egress (mean 2.09 Mbps)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 61.59 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-08-11 02:05:10
End at: 2018-08-11 02:05:40
Local clock offset: 0.38 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 61.345 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 61.345 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graph showing throughput and delay over time]

**Throughput (Mbps)**

**Time (s)**

**Flow 1 ingress (mean 1.98 Mbit/s)**

**Flow 1 egress (mean 1.98 Mbit/s)**

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

**Time (s)**

*Flow 1 (95th percentile 61.34 ms)*
Run 5: Statistics of WebRTC media

Start at: 2018-08-11 02:28:10
End at: 2018-08-11 02:28:40
Local clock offset: 0.584 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 61.504 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 61.504 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.11 Mbps)
- Flow 1 egress (mean 2.11 Mbps)

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

- Flow 1 (95th percentile 61.50 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-08-11 02:51:02
End at: 2018-08-11 02:51:32
Local clock offset: 0.744 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 61.325 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 61.325 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.33 Mbit/s)
- Flow 1 egress (mean 2.33 Mbit/s)

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

- Flow 1 (95th percentile 61.33 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-08-11 03:13:25
End at: 2018-08-11 03:13:55
Local clock offset: 0.639 ms
Remote clock offset: 2.886 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

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**Throughput (Mbps)**

![Graph showing throughput in Mbps over time.]

- **Flow 1 ingress (mean 2.02 Mbps)**
- **Flow 1 egress (mean 2.02 Mbps)**

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

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

- **Flow 1 (95th percentile 64.21 ms)**
Run 8: Statistics of WebRTC media

Start at: 2018-08-11 03:36:20
End at: 2018-08-11 03:36:50
Local clock offset: -0.12 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 61.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 61.265 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.03 Mbit/s)
- Flow 1 egress (mean 2.03 Mbit/s)

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

- Flow 1 (95th percentile 61.27 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-08-11 03:59:04
End at: 2018-08-11 03:59:34
Local clock offset: -0.372 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 61.699 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 61.699 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

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

![Graph 2: Packet Loss vs Time](image2)
Run 10: Statistics of WebRTC media

Start at: 2018-08-11 04:21:36
End at: 2018-08-11 04:22:06
Local clock offset: -0.564 ms
Remote clock offset: -0.4 ms

# Below is generated by plot.py at 2018-08-11 06:36:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 61.181 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 61.181 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

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