Pantheon Report

Generated at 2018-06-30 03:38:10 (UTC).
Data path: GCE Iowa Ethernet (remote) → GCE Sydney Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 715dc5f09d172e419699f6f17f1cb4c45064f212
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436d4b834
third_party/fillp-sheep @ 30060ab034deb3424347f5cc3db8619835d2a
third_party/genericCC @ d0153f8e594aa89e93b032143cbedbbfe58e56f4
third_party/indigo @ 2601c92e4a9d58d38dc4dfe0edc8f90c077e64d
third_party/libutp @ b3465b942e2826f2b1b79eaaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82c8f464b1b39
third_party/pcc @ 1afc958fa0d6d18b623c091a55fec872b498e1e
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08f92c4eb24f974ab
third_party/proto-quic @ 77961f1a2733a86b42f1bc8143ec978f3ccf42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3b3b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/sprou $ @ d4b447ea74c6c60a261149af2629562939f9a494
M src/sprou $.
M tools/plot.py
third_party/vivace @ 2ba58521435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9de4735770d143a1fa2851
test from GCE Iowa to GCE Sydney, 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>121.83</td>
<td>94.67</td>
<td>0.61</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>90.14</td>
<td>96.04</td>
<td>0.60</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>107.91</td>
<td>99.02</td>
<td>0.67</td>
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<tr>
<td>FillP</td>
<td>10</td>
<td>487.04</td>
<td>297.74</td>
<td>2.74</td>
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<tr>
<td>FillP-Sheep</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Indigo</td>
<td>9</td>
<td>163.41</td>
<td>99.02</td>
<td>0.60</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>11.80</td>
<td>88.66</td>
<td>1.16</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>253.74</td>
<td>144.06</td>
<td>1.05</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>175.54</td>
<td>91.94</td>
<td>0.69</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>9</td>
<td>50.79</td>
<td>86.36</td>
<td>0.83</td>
</tr>
<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>86.51</td>
<td>0.58</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>0.28</td>
<td>87.21</td>
<td>0.55</td>
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<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>135.97</td>
<td>89.96</td>
<td>0.76</td>
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<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>97.23</td>
<td>96.45</td>
<td>0.47</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>165.06</td>
<td>180.67</td>
<td>1.04</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>239.00</td>
<td>92.48</td>
<td>0.75</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>9</td>
<td>1.91</td>
<td>86.69</td>
<td>0.61</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Local clock offset: 0.356 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-06-30 02:41:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.46 Mbit/s
95th percentile per-packet one-way delay: 92.161 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 122.46 Mbit/s
95th percentile per-packet one-way delay: 92.161 ms
Loss rate: 0.60%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

End at: 2018-06-29 23:43:50
Local clock offset: 0.222 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-06-30 02:41:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 92.263 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 122.14 Mbit/s
95th percentile per-packet one-way delay: 92.263 ms
Loss rate: 0.61%
Run 2: Report of TCP BBR — Data Link

[Graph showing throughput over time with two lines representing different flows.]

[Another graph showing per-packet delay over time with a single line representing a flow.]
Run 3: Statistics of TCP BBR

Start at: 2018-06-30 00:04:18
End at: 2018-06-30 00:04:48
Local clock offset: 0.183 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-30 02:41:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.11 Mbit/s
95th percentile per-packet one-way delay: 93.641 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 121.11 Mbit/s
95th percentile per-packet one-way delay: 93.641 ms
Loss rate: 0.61%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-06-30 00:25:32
End at: 2018-06-30 00:26:02
Local clock offset: 0.13 ms
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2018-06-30 02:41:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.98 Mbit/s
95th percentile per-packet one-way delay: 104.022 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 123.98 Mbit/s
95th percentile per-packet one-way delay: 104.022 ms
Loss rate: 0.60%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-06-30 00:46:35
End at: 2018-06-30 00:47:05
Local clock offset: 0.123 ms
Remote clock offset: 0.216 ms

# Below is generated by plot.py at 2018-06-30 02:41:50
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 122.22 Mbit/s
  95th percentile per-packet one-way delay: 94.920 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 122.22 Mbit/s
  95th percentile per-packet one-way delay: 94.920 ms
  Loss rate: 0.60%
Run 5: Report of TCP BBR — Data Link

[Graph showing throughput over time with two lines, one for ingress (mean 122.25 Mbit/s) and one for egress (mean 122.22 Mbit/s).]

[Graph showing per packet one-way delay (ms) over time with one line, marked as Flow 1 (95th percentile 94.92 ms).]
Run 6: Statistics of TCP BBR

Start at: 2018-06-30 01:07:37
End at: 2018-06-30 01:08:07
Local clock offset: 0.188 ms
Remote clock offset: 0.329 ms

# Below is generated by plot.py at 2018-06-30 02:41:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.28 Mbit/s
95th percentile per-packet one-way delay: 90.834 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 120.28 Mbit/s
95th percentile per-packet one-way delay: 90.834 ms
Loss rate: 0.64%
Run 6: Report of TCP BBR — Data Link

[Graph 1: Throughput (Mbps) vs Time (s)]
Flow 1 ingress (mean 120.35 Mbps)  Flow 1 egress (mean 120.28 Mbps)

[Graph 2: Per packet one way delay (ms) vs Time (s)]
Flow 1 (95th percentile 90.83 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-06-30 01:28:42
End at: 2018-06-30 01:29:12
Local clock offset: 0.314 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2018-06-30 02:41:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.38 Mbit/s
95th percentile per-packet one-way delay: 95.838 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 121.38 Mbit/s
95th percentile per-packet one-way delay: 95.838 ms
Loss rate: 0.61%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-06-30 01:49:56  
End at: 2018-06-30 01:50:26  
Local clock offset: 0.191 ms  
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-30 02:41:50  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 122.22 Mbit/s  
95th percentile per-packet one-way delay: 98.573 ms  
Loss rate: 0.61%  
-- Flow 1:  
Average throughput: 122.22 Mbit/s  
95th percentile per-packet one-way delay: 98.573 ms  
Loss rate: 0.61%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 122.39 Mbps)
- Flow 1 egress (mean 122.22 Mbps)

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

- Flow 1 (95th percentile 98.57 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-06-30 02:10:49
End at: 2018-06-30 02:11:19
Local clock offset: 0.172 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-06-30 02:43:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.33 Mbit/s
95th percentile per-packet one-way delay: 93.784 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 121.33 Mbit/s
95th percentile per-packet one-way delay: 93.784 ms
Loss rate: 0.61%
Run 9: Report of TCP BBR — Data Link

![Graph 1](image1)

Flow 1 ingress (mean 121.37 Mbit/s)  
Flow 1 egress (mean 121.33 Mbit/s)

![Graph 2](image2)

Flow 1 (95th percentile 93.78 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-06-30 02:31:38
End at: 2018-06-30 02:32:08
Local clock offset: 0.39 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-30 02:43:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.20 Mbit/s
95th percentile per-packet one-way delay: 90.623 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 121.20 Mbit/s
95th percentile per-packet one-way delay: 90.623 ms
Loss rate: 0.61%
Run 10: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)](image1)
- Flow 1 ingress (mean 121.24 Mbps)
- Flow 1 egress (mean 121.20 Mbps)

![Graph 2: Per packet one-way delay (ms)](image2)
- Flow 1 (95th percentile 90.62 ms)
Run 1: Statistics of Copa

Start at: 2018-06-29 23:11:05
End at: 2018-06-29 23:11:35
Local clock offset: 0.047 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-30 02:44:20
# Datalink statistics
  -- Total of 1 flow:
  Average throughput: 75.82 Mbit/s
  95th percentile per-packet one-way delay: 95.153 ms
  Loss rate: 0.65%
  -- Flow 1:
  Average throughput: 75.82 Mbit/s
  95th percentile per-packet one-way delay: 95.153 ms
  Loss rate: 0.65%
Run 1: Report of Copa — Data Link

![Graph of Data Link Throughput and One-Way Delay](image-url)
Run 2: Statistics of Copa

Start at: 2018-06-29 23:32:05  
End at: 2018-06-29 23:32:35  
Local clock offset: 0.298 ms  
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-30 02:44:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.05 Mbit/s
95th percentile per-packet one-way delay: 93.928 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 76.05 Mbit/s
95th percentile per-packet one-way delay: 93.928 ms
Loss rate: 0.57%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 76.02 Mbit/s)
- Flow 1 egress (mean 76.05 Mbit/s)

![Graph showing packet delay distribution.]

- Flow 1 (95th percentile 93.93 ms)
Run 3: Statistics of Copa

Start at: 2018-06-29 23:53:21
End at: 2018-06-29 23:53:51
Local clock offset: 0.012 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-30 02:44:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 92.279 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 86.80 Mbit/s
95th percentile per-packet one-way delay: 92.279 ms
Loss rate: 0.74%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-06-30 00:14:14
End at: 2018-06-30 00:14:44
Local clock offset: 0.231 ms
Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2018-06-30 02:44:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 94.329 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 95.78 Mbit/s
95th percentile per-packet one-way delay: 94.329 ms
Loss rate: 0.53%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-06-30 00:35:28
End at: 2018-06-30 00:35:58
Local clock offset: 0.169 ms
Remote clock offset: 0.199 ms

# Below is generated by plot.py at 2018-06-30 02:44:49
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 74.14 Mbit/s
  95th percentile per-packet one-way delay: 93.612 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 74.14 Mbit/s
  95th percentile per-packet one-way delay: 93.612 ms
  Loss rate: 0.70%
Run 5: Report of Copa — Data Link

![Graph of throughput and packet delay over time for Flow 1 ingress and egress.]
Run 6: Statistics of Copa

Start at: 2018-06-30 00:56:30
End at: 2018-06-30 00:57:00
Local clock offset: 0.067 ms
Remote clock offset: 0.192 ms

# Below is generated by plot.py at 2018-06-30 02:44:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 92.084 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 97.22 Mbit/s
95th percentile per-packet one-way delay: 92.084 ms
Loss rate: 0.84%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-06-30 01:17:25
End at: 2018-06-30 01:17:55
Local clock offset: 0.207 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.98 Mbit/s
95th percentile per-packet one-way delay: 116.177 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 124.98 Mbit/s
95th percentile per-packet one-way delay: 116.177 ms
Loss rate: 0.49%
Run 7: Report of Copa — Data Link

[Graphs showing throughput and packet delay over time]
Run 8: Statistics of Copa

Start at: 2018-06-30 01:38:37
End at: 2018-06-30 01:39:07
Local clock offset: 0.2 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.34 Mbit/s
95th percentile per-packet one-way delay: 93.340 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 101.34 Mbit/s
95th percentile per-packet one-way delay: 93.340 ms
Loss rate: 0.75%
Run 8: Report of Copa — Data Link

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

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

**Graph Details:**
- Flow 1 ingress (mean 101.45 Mbit/s)
- Flow 1 egress (mean 101.34 Mbit/s)

**Delay (ms):**
- Flow 1 (95th percentile 93.34 ms)
Run 9: Statistics of Copa

Start at: 2018-06-30 01:59:34
End at: 2018-06-30 02:00:04
Local clock offset: 0.403 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.69 Mbit/s
95th percentile per-packet one-way delay: 95.764 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 87.69 Mbit/s
95th percentile per-packet one-way delay: 95.764 ms
Loss rate: 0.70%
Run 9: Report of Copa — Data Link

![Throughput Graph]

![Latency Graph]

- Flow 1 ingress (mean 87.80 Mbit/s)
- Flow 1 egress (mean 87.69 Mbit/s)

- Flow 1 (95th percentile 95.76 ms)
Run 10: Statistics of Copa

Start at: 2018-06-30 02:20:46
End at: 2018-06-30 02:21:16
Local clock offset: 0.283 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.63 Mbit/s
95th percentile per-packet one-way delay: 93.746 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 81.63 Mbit/s
95th percentile per-packet one-way delay: 93.746 ms
Loss rate: 0.01%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-06-29 23:17:00
End at: 2018-06-29 23:17:30
Local clock offset: 0.174 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
   -- Total of 1 flow:
      Average throughput: 102.05 Mbit/s
      95th percentile per-packet one-way delay: 100.084 ms
      Loss rate: 0.79%
   -- Flow 1:
      Average throughput: 102.05 Mbit/s
      95th percentile per-packet one-way delay: 100.084 ms
      Loss rate: 0.79%
Run 1: Report of TCP Cubic — Data Link

![Diagram 1: Throughput vs. Time]

- **Flow 1 ingress** (mean 102.27 Mbit/s)
- **Flow 1 egress** (mean 102.05 Mbit/s)

![Diagram 2: Packet Delay vs. Time]

- **Flow 1 (95th percentile 100.00 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2018-06-29 23:38:04
End at: 2018-06-29 23:38:34
Local clock offset: 0.177 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 131.75 Mbit/s
  95th percentile per-packet one-way delay: 98.594 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 131.75 Mbit/s
  95th percentile per-packet one-way delay: 98.594 ms
  Loss rate: 0.67%
Run 2: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet delay over time for TCP Cubic.]
Run 3: Statistics of TCP Cubic

Start at: 2018-06-29 23:59:19
End at: 2018-06-29 23:59:49
Local clock offset: 0.237 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.28 Mbit/s
95th percentile per-packet one-way delay: 98.992 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 131.28 Mbit/s
95th percentile per-packet one-way delay: 98.992 ms
Loss rate: 0.66%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-06-30 00:20:13
End at: 2018-06-30 00:20:43
Local clock offset: 0.233 ms
Remote clock offset: 0.143 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.56 Mbit/s
95th percentile per-packet one-way delay: 99.041 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 98.56 Mbit/s
95th percentile per-packet one-way delay: 99.041 ms
Loss rate: 0.82%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-06-30 00:41:29
End at: 2018-06-30 00:41:59
Local clock offset: 0.149 ms
Remote clock offset: 0.27 ms

# Below is generated by plot.py at 2018-06-30 02:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 101.063 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 74.71 Mbit/s
95th percentile per-packet one-way delay: 101.063 ms
Loss rate: 0.66%
Run 5: Report of TCP Cubic — Data Link

![Graphs showing throughput and packet delay over time for TCP Cubic]
Run 6: Statistics of TCP Cubic

Start at: 2018-06-30 01:02:28
End at: 2018-06-30 01:02:58
Local clock offset: 0.112 ms
Remote clock offset: 0.273 ms

# Below is generated by plot.py at 2018-06-30 02:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.25 Mbit/s
95th percentile per-packet one-way delay: 100.617 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 131.25 Mbit/s
95th percentile per-packet one-way delay: 100.617 ms
Loss rate: 0.67%
Run 6: Report of TCP Cubic — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flow characteristics.]
Run 7: Statistics of TCP Cubic

Start at: 2018-06-30 01:23:27  
End at: 2018-06-30 01:23:57  
Local clock offset: 0.093 ms  
Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2018-06-30 02:49:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.41 Mbit/s
95th percentile per-packet one-way delay: 99.911 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 131.41 Mbit/s
95th percentile per-packet one-way delay: 99.911 ms
Loss rate: 0.68%
Run 7: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean: 131.54 Mbit/s)
- Flow 1 egress (mean: 131.41 Mbit/s)

- Flow 1 (95th percentile: 99.91 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-06-30 01:44:41
End at: 2018-06-30 01:45:11
Local clock offset: 0.315 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-06-30 02:49:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 99.158 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 87.06 Mbit/s
95th percentile per-packet one-way delay: 99.158 ms
Loss rate: 0.55%
Run 8: Report of TCP Cubic — Data Link

![Throughput Graph]

![Packet Delay Graph]
Run 9: Statistics of TCP Cubic

Start at: 2018-06-30 02:05:28
End at: 2018-06-30 02:05:58
Local clock offset: 0.298 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-06-30 02:49:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 95.306 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 97.14 Mbit/s
95th percentile per-packet one-way delay: 95.306 ms
Loss rate: 0.82%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-06-30 02:26:37
End at: 2018-06-30 02:27:07
Local clock offset: 0.129 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-30 02:49:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 97.436 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 93.89 Mbit/s
95th percentile per-packet one-way delay: 97.436 ms
Loss rate: 0.39%
Run 10: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 93.71 Mbit/s)
- Flow 1 egress (mean 93.89 Mbit/s)

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

- Flow 1: 95th percentile 97.44 ms
Run 1: Statistics of FillP

End at: 2018-06-29 23:19:52
Local clock offset: 0.364 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-30 03:00:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 614.89 Mbit/s
95th percentile per-packet one-way delay: 313.926 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 614.89 Mbit/s
95th percentile per-packet one-way delay: 313.926 ms
Loss rate: 1.63%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

End at: 2018-06-29 23:40:58
Local clock offset: 0.194 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-30 03:00:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 569.83 Mbit/s
95th percentile per-packet one-way delay: 267.886 ms
Loss rate: 3.52%
-- Flow 1:
Average throughput: 569.83 Mbit/s
95th percentile per-packet one-way delay: 267.886 ms
Loss rate: 3.52%
Run 2: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 587.79 Mbit/s)
- Flow 1 egress (mean 569.83 Mbit/s)

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

- Flow 1 (95th percentile 267.89 ms)
Run 3: Statistics of FillP

Start at: 2018-06-30 00:01:42  
End at: 2018-06-30 00:02:12  
Local clock offset: 0.104 ms  
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-30 03:00:29  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 231.18 Mbit/s  
95th percentile per-packet one-way delay: 358.849 ms  
Loss rate: 4.61%  
-- Flow 1:  
Average throughput: 231.18 Mbit/s  
95th percentile per-packet one-way delay: 358.849 ms  
Loss rate: 4.61%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-06-30 00:22:37  
End at: 2018-06-30 00:23:07  
Local clock offset: 0.191 ms  
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2018-06-30 03:02:58  
# Datalink statistics

-- Total of 1 flow:
Average throughput: 656.73 Mbit/s  
95th percentile per-packet one-way delay: 315.440 ms  
Loss rate: 3.37%

-- Flow 1:
Average throughput: 656.73 Mbit/s  
95th percentile per-packet one-way delay: 315.440 ms  
Loss rate: 3.37%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-06-30 00:43:54
End at: 2018-06-30 00:44:24
Local clock offset: 0.117 ms
Remote clock offset: 0.246 ms

# Below is generated by plot.py at 2018-06-30 03:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 452.32 Mbit/s
95th percentile per-packet one-way delay: 287.482 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 452.32 Mbit/s
95th percentile per-packet one-way delay: 287.482 ms
Loss rate: 2.55%
Run 5: Report of FillP — Data Link

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

- Flow 1 ingress (mean 461.47 Mbps)
- Flow 1 egress (mean 452.32 Mbps)

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

- Flow 1 (95th percentile 287.48 ms)
Run 6: Statistics of FillP

Start at: 2018-06-30 01:04:53
End at: 2018-06-30 01:05:23
Local clock offset: 0.144 ms
Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2018-06-30 03:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 500.90 Mbit/s
95th percentile per-packet one-way delay: 266.893 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 500.90 Mbit/s
95th percentile per-packet one-way delay: 266.893 ms
Loss rate: 0.55%
Run 6: Report of FillP — Data Link

![Graph of Throughput vs Time with legend: Flow 1 ingress (mean 500.73 Mbit/s) and Flow 1 egress (mean 500.90 Mbit/s)]

![Graph of Per Packet One Way Delay vs Time with legend: Flow 1 (95th percentile 266.89 ms)]
Run 7: Statistics of FillP

Start at: 2018-06-30 01:25:55
End at: 2018-06-30 01:26:25
Local clock offset: 0.159 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2018-06-30 03:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 498.43 Mbit/s
95th percentile per-packet one-way delay: 289.276 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 498.43 Mbit/s
95th percentile per-packet one-way delay: 289.276 ms
Loss rate: 0.85%
Run 7: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 499.82 Mbps)
- **Flow 1 egress** (mean 498.43 Mbps)

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

- **Flow 1** (95th percentile 289.28 ms)
Run 8: Statistics of FillP

Start at: 2018-06-30 01:47:07
End at: 2018-06-30 01:47:37
Local clock offset: 0.228 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-30 03:02:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 550.73 Mbit/s
95th percentile per-packet one-way delay: 267.532 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 550.73 Mbit/s
95th percentile per-packet one-way delay: 267.532 ms
Loss rate: 0.93%
Run 8: Report of FillP — Data Link

Graph showing throughput and delay over time for Flow 1 ingress and egress.
Run 9: Statistics of FillP

Start at: 2018-06-30 02:07:54
End at: 2018-06-30 02:08:24
Local clock offset: 0.153 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 616.28 Mbit/s
95th percentile per-packet one-way delay: 302.400 ms
Loss rate: 6.64%
-- Flow 1:
Average throughput: 616.28 Mbit/s
95th percentile per-packet one-way delay: 302.400 ms
Loss rate: 6.64%
Run 9: Report of FillP — Data Link

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

- Flow 1 ingress (mean 656.26 Mbps)
- Flow 1 egress (mean 616.28 Mbps)

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

- Flow 1 (95th percentile 302.40 ms)
Run 10: Statistics of FillP

Start at: 2018-06-30 02:29:03  
End at: 2018-06-30 02:29:33  
Local clock offset: 0.024 ms  
Remote clock offset: -0.098 ms  

# Below is generated by plot.py at 2018-06-30 03:07:22  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 179.07 Mbit/s  
95th percentile per-packet one-way delay: 307.689 ms  
Loss rate: 2.79%  
-- Flow 1:  
Average throughput: 179.07 Mbit/s  
95th percentile per-packet one-way delay: 307.689 ms  
Loss rate: 2.79%
Run 10: Report of FillP — Data Link

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

- **Flow 1 ingress (mean 183.14 Mbit/s)**
- **Flow 1 egress (mean 179.07 Mbit/s)**

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

- **Flow 1 (95th percentile 307.69 ms)**
Run 1: Statistics of FillP-Sheep

Start at: 2018-06-29 23:13:40
End at: 2018-06-29 23:14:10
Local clock offset: 0.167 ms
Remote clock offset: -0.087 ms
Run 1: Report of FillP-Sheep — Data Link

![Graph of throughput over time with two plots showing ingress and egress data.]
Run 2: Statistics of FillP-Sheep

Start at: 2018-06-29 23:34:44
End at: 2018-06-29 23:35:14
Local clock offset: 0.333 ms
Remote clock offset: -0.011 ms
Run 2: Report of FillP-Sheep — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 0.00 Mbps)
- Flow 1 egress (mean 0.00 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 86.53 ms)
Run 3: Statistics of FillP-Sheep

End at: 2018-06-29 23:56:29
Local clock offset: -0.148 ms
Remote clock offset: -0.002 ms
Run 3: Report of FillP-Sheep — Data Link

![Graph of throughput vs time]

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

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

- Flow 1 (95th percentile 86.74 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2018-06-30 00:16:53
End at: 2018-06-30 00:17:23
Local clock offset: 0.185 ms
Remote clock offset: 0.112 ms
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2018-06-30 00:38:10
End at: 2018-06-30 00:38:40
Local clock offset: 0.133 ms
Remote clock offset: 0.175 ms
Run 5: Report of FillP-Sheep — Data Link

![Graphs showing throughput and packet delay over time.]
Run 6: Statistics of FillP-Sheep

Start at: 2018-06-30 00:59:08
End at: 2018-06-30 00:59:38
Local clock offset: 0.12 ms
Remote clock offset: 0.29 ms
Run 6: Report of FillP-Sheep — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.00 Mbps)
  - Flow 1 egress (mean 0.00 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 86.24 ms)
Run 7: Statistics of FillP-Sheep

Start at: 2018-06-30 01:20:07
End at: 2018-06-30 01:20:37
Local clock offset: 0.25 ms
Remote clock offset: 0.149 ms
Run 7: Report of FillP-Sheep — Data Link

![Graph of Throughput vs Time](image1)

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

![Graph of Per-Packet One-Way Delay vs Time](image2)

- Flow 1 (95th percentile 86.55 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-06-30 01:41:22
End at: 2018-06-30 01:41:52
Local clock offset: 0.258 ms
Remote clock offset: 0.042 ms
Run 8: Report of FillP-Sheep — Data Link

![Graph 1](image1.png)

**Throughput (Mbps)**

- **Flow 1 ingress (mean 0.00 Mbps)**
- **Flow 1 egress (mean 0.00 Mbps)**

![Graph 2](image2.png)

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

- **Flow 1 (95th percentile 86.60 ms)**

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Run 9: Statistics of FillP-Sheep

Start at: 2018-06-30 02:02:08
End at: 2018-06-30 02:02:38
Local clock offset: 0.16 ms
Remote clock offset: -0.031 ms
Run 9: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 0.00 Mbps)**
- **Flow 1 egress (mean 0.00 Mbps)**

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

- **Flow 1 (95th percentile 86.53 ms)**

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Run 10: Statistics of FillP-Sheep

Start at: 2018-06-30 02:23:17
End at: 2018-06-30 02:23:47
Local clock offset: 0.259 ms
Remote clock offset: -0.055 ms
Run 10: Report of FillP-Sheep — Data Link

![Data Link Diagram]

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

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

*Flow 1 (95th percentile 86.28 ms)*
Run 1: Statistics of Indigo

Start at: 2018-06-29 23:08:35
End at: 2018-06-29 23:09:05
Local clock offset: 0.044 ms
Remote clock offset: -0.029 ms
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-06-29 23:29:30  
End at: 2018-06-29 23:30:00  
Local clock offset: 0.17 ms  
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-30 03:07:22  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 80.20 Mbit/s  
95th percentile per-packet one-way delay: 89.032 ms  
Loss rate: 0.66%  
-- Flow 1:
Average throughput: 80.20 Mbit/s  
95th percentile per-packet one-way delay: 89.032 ms  
Loss rate: 0.66%
Run 2: Report of Indigo — Data Link

![Graph of data link throughput and delay over time.](image-url)
Run 3: Statistics of Indigo

Start at: 2018-06-29 23:50:38
End at: 2018-06-29 23:51:08
Local clock offset: 0.197 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.20 Mbit/s
95th percentile per-packet one-way delay: 98.698 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 172.20 Mbit/s
95th percentile per-packet one-way delay: 98.698 ms
Loss rate: 0.52%
Run 3: Report of Indigo — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 4: Statistics of Indigo

Start at: 2018-06-30 00:11:30
End at: 2018-06-30 00:12:00
Local clock offset: -0.042 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.21 Mbit/s
95th percentile per-packet one-way delay: 89.919 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 183.21 Mbit/s
95th percentile per-packet one-way delay: 89.919 ms
Loss rate: 0.61%
Run 4: Report of Indigo — Data Link

![Graph of throughput over time showing two distinct flows: Flow 1 ingress (mean 183.27 Mbit/s) and Flow 1 egress (mean 183.21 Mbit/s).]

![Graph of per-packet end-to-end delay, showing Flow 1 with a 95th percentile delay of 89.92 ms.]

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Run 5: Statistics of Indigo

Start at: 2018-06-30 00:32:45
End at: 2018-06-30 00:33:15
Local clock offset: 0.053 ms
Remote clock offset: 0.2 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.43 Mbit/s
95th percentile per-packet one-way delay: 88.884 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 185.43 Mbit/s
95th percentile per-packet one-way delay: 88.884 ms
Loss rate: 0.60%
Run 5: Report of Indigo — Data Link

![Graph 1: Throughput vs Time](image1)
Flow 1 ingress (mean 185.46 Mbit/s)  Flow 1 egress (mean 185.43 Mbit/s)

![Graph 2: Packet Delay Distribution](image2)
Flow 1 (95th percentile 88.88 ms)
Run 6: Statistics of Indigo

Start at: 2018-06-30 00:53:47
End at: 2018-06-30 00:54:17
Local clock offset: 0.197 ms
Remote clock offset: 0.274 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 88.663 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 88.663 ms
Loss rate: 0.62%
Run 6: Report of Indigo — Data Link

![Graph 1: Throughput over time](image1)
- **Flow 1 ingress (mean 179.62 Mbit/s)**
- **Flow 1 egress (mean 179.59 Mbit/s)**

![Graph 2: Per packet delay over time](image2)
- **Flow 1 (95th percentile 88.66 ms)**
Run 7: Statistics of Indigo

Start at: 2018-06-30 01:14:49
End at: 2018-06-30 01:15:19
Local clock offset: 0.179 ms
Remote clock offset: 0.243 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.47 Mbit/s
95th percentile per-packet one-way delay: 88.819 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 178.47 Mbit/s
95th percentile per-packet one-way delay: 88.819 ms
Loss rate: 0.61%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-06-30 01:35:55
End at: 2018-06-30 01:36:26
Local clock offset: 0.215 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.57 Mbit/s
95th percentile per-packet one-way delay: 121.340 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 162.57 Mbit/s
95th percentile per-packet one-way delay: 121.340 ms
Loss rate: 0.61%
Run 8: Report of Indigo — Data Link

[Graphs showing throughput and packet delay over time]
Run 9: Statistics of Indigo

Start at: 2018-06-30 01:56:59
End at: 2018-06-30 01:57:29
Local clock offset: 0.224 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.83 Mbit/s
95th percentile per-packet one-way delay: 118.493 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 156.83 Mbit/s
95th percentile per-packet one-way delay: 118.493 ms
Loss rate: 0.60%
Run 9: Report of Indigo — Data Link

![Throughput vs Time Graph](image1)

- **Flow 1 ingress (mean 156.87 Mbit/s)**
- **Flow 1 egress (mean 156.83 Mbit/s)**

![Packet Delay vs Time Graph](image2)

- **Flow 1 (95th percentile 118.49 ms)**

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Run 10: Statistics of Indigo

Start at: 2018-06-30 02:18:04
End at: 2018-06-30 02:18:34
Local clock offset: 0.477 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.19 Mbit/s
95th percentile per-packet one-way delay: 107.289 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 172.19 Mbit/s
95th percentile per-packet one-way delay: 107.289 ms
Loss rate: 0.57%
Run 10: Report of Indigo — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 1: Statistics of LEDBAT

Start at: 2018-06-29 23:07:27
End at: 2018-06-29 23:07:57
Local clock offset: 0.16 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 11.22 Mbit/s
  95th percentile per-packet one-way delay: 88.548 ms
  Loss rate: 1.19%
-- Flow 1:
  Average throughput: 11.22 Mbit/s
  95th percentile per-packet one-way delay: 88.548 ms
  Loss rate: 1.19%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Local clock offset: 0.467 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 89.265 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 89.265 ms
Loss rate: 1.16%
Run 2: Report of LEDBAT — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 11.98 Mbps)
- Flow 1 egress (mean 11.91 Mbps)

---

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

- Flow 1 (95th percentile 89.27 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-06-29 23:49:30
End at: 2018-06-29 23:50:00
Local clock offset: 0.358 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 88.426 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 88.426 ms
Loss rate: 1.16%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-06-30 00:10:23
End at: 2018-06-30 00:10:53
Local clock offset: 0.234 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 89.529 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 89.529 ms
Loss rate: 1.16%
Run 5: Statistics of LEDBAT

Start at: 2018-06-30 00:31:38
End at: 2018-06-30 00:32:08
Local clock offset: 0.275 ms
Remote clock offset: 0.186 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 88.681 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.90 Mbit/s
95th percentile per-packet one-way delay: 88.681 ms
Loss rate: 1.16%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-06-30 00:52:39
End at: 2018-06-30 00:53:09
Local clock offset: 0.153 ms
Remote clock offset: 0.299 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 88.513 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.85 Mbit/s
95th percentile per-packet one-way delay: 88.513 ms
Loss rate: 1.16%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-06-30 01:13:41
End at: 2018-06-30 01:14:11
Local clock offset: 0.127 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 88.166 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.88 Mbit/s
95th percentile per-packet one-way delay: 88.166 ms
Loss rate: 1.16%
Run 7: Report of LEDBAT — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 11.95 Mbps)
- Flow 1 egress (mean 11.88 Mbps)

**Per-packet round-trip delay (ms)**

- Flow 1 (95th percentile 88.17 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-06-30 01:34:48
End at: 2018-06-30 01:35:18
Local clock offset: 0.239 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 88.910 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 88.910 ms
Loss rate: 1.16%
Run 8: Report of LEDBAT — Data Link

Throughput (Mbps/s) over time for Flow 1 ingress and egress, with a mean of 11.98 Mbps for ingress and 11.91 Mbps for egress.

Per packet one-way delay (ms) for Flow 1, with a 95th percentile of 88.91 ms.
Run 9: Statistics of LEDBAT

Start at: 2018-06-30 01:55:51
End at: 2018-06-30 01:56:21
Local clock offset: 0.069 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 11.63 Mbit/s
  95th percentile per-packet one-way delay: 88.045 ms
  Loss rate: 1.17%
-- Flow 1:
  Average throughput: 11.63 Mbit/s
  95th percentile per-packet one-way delay: 88.045 ms
  Loss rate: 1.17%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-06-30 02:16:56
End at: 2018-06-30 02:17:26
Local clock offset: 0.379 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 88.558 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 11.91 Mbit/s
95th percentile per-packet one-way delay: 88.558 ms
Loss rate: 1.16%
Run 10: Report of LEDBAT — Data Link

![Graph of throughput over time](image1)

- **Flow 1 ingress (mean 11.98 Mbit/s)**
- **Flow 1 egress (mean 11.91 Mbit/s)**

![Graph of packet one-way delay over time](image2)

- **Flow 1 (95th percentile 88.56 ms)**

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Run 1: Statistics of PCC-Allegro

Local clock offset: 0.16 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-06-30 03:08:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 253.11 Mbit/s
95th percentile per-packet one-way delay: 156.483 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 253.11 Mbit/s
95th percentile per-packet one-way delay: 156.483 ms
Loss rate: 1.21%
Run 1: Report of PCC-Allegro — Data Link

![Graph 1](image1)

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

Start at: 2018-06-29 23:44:34
End at: 2018-06-29 23:45:04
Local clock offset: -0.038 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-30 03:09:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.39 Mbit/s
95th percentile per-packet one-way delay: 128.338 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 256.39 Mbit/s
95th percentile per-packet one-way delay: 128.338 ms
Loss rate: 1.05%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-30 00:05:31
End at: 2018-06-30 00:06:01
Local clock offset: 0.107 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-30 03:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.65 Mbit/s
95th percentile per-packet one-way delay: 118.020 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 267.65 Mbit/s
95th percentile per-packet one-way delay: 118.020 ms
Loss rate: 0.95%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-30 00:26:45
End at: 2018-06-30 00:27:15
Local clock offset: -0.129 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2018-06-30 03:09:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 252.17 Mbit/s
95th percentile per-packet one-way delay: 162.541 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 252.17 Mbit/s
95th percentile per-packet one-way delay: 162.541 ms
Loss rate: 1.07%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 253.42 Mbps)
- Flow 1 egress (mean 252.17 Mbps)

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

- Flow 1 (95th percentile 162.54 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-30 00:47:49  
End at: 2018-06-30 00:48:19  
Local clock offset: ~0.06 ms  
Remote clock offset: 0.267 ms

# Below is generated by plot.py at 2018-06-30 03:10:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 254.71 Mbit/s  
95th percentile per-packet one-way delay: 150.152 ms  
Loss rate: 1.05%  
-- Flow 1:  
Average throughput: 254.71 Mbit/s  
95th percentile per-packet one-way delay: 150.152 ms  
Loss rate: 1.05%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-30 01:08:50
End at: 2018-06-30 01:09:20
Local clock offset: 0.125 ms
Remote clock offset: 0.286 ms

# Below is generated by plot.py at 2018-06-30 03:10:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 249.44 Mbit/s
  95th percentile per-packet one-way delay: 127.422 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 249.44 Mbit/s
  95th percentile per-packet one-way delay: 127.422 ms
  Loss rate: 1.23%
Run 6: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 250.84 Mbit/s)  Flow 1 egress (mean 249.44 Mbit/s)

Packet Delay (ms)

Time (s)

Flow 1 (95th percentile 127.42 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-30 01:29:55
End at: 2018-06-30 01:30:25
Local clock offset: 0.323 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-06-30 03:11:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 269.89 Mbit/s
95th percentile per-packet one-way delay: 128.886 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 269.89 Mbit/s
95th percentile per-packet one-way delay: 128.886 ms
Loss rate: 0.98%
Run 7: Report of PCC-Allegro — Data Link

![Graph of Throughput and Delay](image)

- Flow 1 ingress (mean 270.99 Mbit/s)
- Flow 1 egress (mean 269.89 Mbit/s)

Flow 1 (95th percentile 128.89 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-30 01:51:10
End at: 2018-06-30 01:51:40
Local clock offset: 0.325 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-06-30 03:11:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.77 Mbit/s
95th percentile per-packet one-way delay: 183.873 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 227.77 Mbit/s
95th percentile per-packet one-way delay: 183.873 ms
Loss rate: 0.72%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-30 02:12:02
End at: 2018-06-30 02:12:32
Local clock offset: 0.274 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-06-30 03:13:55
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 262.68 Mbit/s
  95th percentile per-packet one-way delay: 151.458 ms
  Loss rate: 1.16%
-- Flow 1:
  Average throughput: 262.68 Mbit/s
  95th percentile per-packet one-way delay: 151.458 ms
  Loss rate: 1.16%
Run 9: Report of PCC-Allegro — Data Link
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-30 02:32:51
End at: 2018-06-30 02:33:21
Local clock offset: -0.022 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-06-30 03:13:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.58 Mbit/s
95th percentile per-packet one-way delay: 133.414 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 243.58 Mbit/s
95th percentile per-packet one-way delay: 133.414 ms
Loss rate: 1.09%
Run 10: Report of PCC-Allegro — Data Link

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

Flow 1 ingress (mean 244.84 Mbit/s) vs Flow 1 egress (mean 243.58 Mbit/s)

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

Flow 1 (95th percentile 133.41 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-06-29 23:09:42
End at: 2018-06-29 23:10:12
Local clock offset: 0.254 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-06-30 03:15:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 88.487 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 179.59 Mbit/s
95th percentile per-packet one-way delay: 88.487 ms
Loss rate: 0.65%
Run 2: Statistics of PCC-Expr

Start at: 2018-06-29 23:30:43
Local clock offset: 0.202 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-06-30 03:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.63 Mbit/s
95th percentile per-packet one-way delay: 92.983 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 177.63 Mbit/s
95th percentile per-packet one-way delay: 92.983 ms
Loss rate: 0.81%
Run 2: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 178.04 Mbit/s)**
- **Flow 1 egress (mean 177.63 Mbit/s)**

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

- **Flow 1 (95th percentile 92.98 ms)**
Run 3: Statistics of PCC-Expr

Start at: 2018-06-29 23:51:56  
End at: 2018-06-29 23:52:26  
Local clock offset: 0.186 ms  
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-30 03:17:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 193.05 Mbit/s  
95th percentile per-packet one-way delay: 89.061 ms  
Loss rate: 0.70%  
-- Flow 1:  
Average throughput: 193.05 Mbit/s  
95th percentile per-packet one-way delay: 89.061 ms  
Loss rate: 0.70%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-06-30 00:12:50
End at: 2018-06-30 00:13:20
Local clock offset: 0.108 ms
Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2018-06-30 03:17:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.30 Mbit/s
95th percentile per-packet one-way delay: 87.884 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 191.30 Mbit/s
95th percentile per-packet one-way delay: 87.884 ms
Loss rate: 0.55%
Run 4: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 191.25 Mbit/s)**
- **Flow 1 egress (mean 191.30 Mbit/s)**

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

- **Flow 1 (95th percentile 87.88 ms)**
Run 5: Statistics of PCC-Expr

Start at: 2018-06-30 00:34:04
End at: 2018-06-30 00:34:34
Local clock offset: -0.001 ms
Remote clock offset: 0.212 ms

# Below is generated by plot.py at 2018-06-30 03:18:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.93 Mbit/s
95th percentile per-packet one-way delay: 89.312 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 191.93 Mbit/s
95th percentile per-packet one-way delay: 89.312 ms
Loss rate: 0.62%
Run 5: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress** (mean 192.01 Mbit/s)
- **Flow 1 egress** (mean 191.93 Mbit/s)

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

- **Flow 1 (95th percentile 89.31 ms)**
Run 6: Statistics of PCC-Expr

Start at: 2018-06-30 00:55:06
End at: 2018-06-30 00:55:36
Local clock offset: 0.097 ms
Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2018-06-30 03:19:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 196.86 Mbit/s
95th percentile per-packet one-way delay: 101.145 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 196.86 Mbit/s
95th percentile per-packet one-way delay: 101.145 ms
Loss rate: 0.71%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 197.09 Mbit/s)
- Flow 1 egress (mean 196.86 Mbit/s)

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

- Flow 1 (95th percentile 101.14 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-30 01:16:08
End at: 2018-06-30 01:16:38
Local clock offset: 0.247 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2018-06-30 03:19:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 112.75 Mbit/s
95th percentile per-packet one-way delay: 87.204 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 112.75 Mbit/s
95th percentile per-packet one-way delay: 87.204 ms
Loss rate: 0.78%
Run 7: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay over time.](image-url)
Run 8: Statistics of PCC-Expr

Start at: 2018-06-30 01:37:13
End at: 2018-06-30 01:37:43
Local clock offset: 0.097 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-06-30 03:21:07
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 195.29 Mbit/s
  95th percentile per-packet one-way delay: 100.172 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 195.29 Mbit/s
  95th percentile per-packet one-way delay: 100.172 ms
  Loss rate: 0.69%
Run 8: Report of PCC-Expr — Data Link

[Graph showing throughput and delay over time for Flow 1 ingress and egress.]
Run 9: Statistics of PCC-Expr

Start at: 2018-06-30 01:58:16
End at: 2018-06-30 01:58:46
Local clock offset: 0.261 ms
Remote clock offset: -0.019 ms

# Below is generated by plot.py at 2018-06-30 03:21:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 91.003 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 91.003 ms
Loss rate: 0.72%
Run 9: Report of PCC-Expr — Data Link

[Graphs showing throughput and per-packet one-way delay over time]
Run 10: Statistics of PCC-Expr

Start at: 2018-06-30 02:19:22
End at: 2018-06-30 02:19:52
Local clock offset: 0.37 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.23 Mbit/s
95th percentile per-packet one-way delay: 92.101 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 192.23 Mbit/s
95th percentile per-packet one-way delay: 92.101 ms
Loss rate: 0.64%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 192.35 Mbit/s)
- Flow 1 egress (mean 192.23 Mbit/s)

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

- Flow 1 (95th percentile 92.10 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-29 23:03:52
End at: 2018-06-29 23:04:22
Local clock offset: 0.3 ms
Remote clock offset: -0.054 ms
Run 1: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 0.06 Mbps)
  - Flow 1 egress (mean 0.06 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 86.63 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-29 23:24:44
End at: 2018-06-29 23:25:14
Local clock offset: 0.19 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.07 Mbit/s
95th percentile per-packet one-way delay: 86.559 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 54.07 Mbit/s
95th percentile per-packet one-way delay: 86.559 ms
Loss rate: 0.93%
Run 2: Report of QUIC Cubic — Data Link

![Graph of Throughput vs Time]

- **Flow 1 ingress** (mean 54.20 Mbit/s)
- **Flow 1 egress** (mean 54.07 Mbit/s)

![Graph of Per-packet round-trip delay vs Time]

- **Flow 1** (95th percentile 86.56 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-29 23:45:50
End at: 2018-06-29 23:46:20
Local clock offset: -0.108 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 86.066 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 86.066 ms
Loss rate: 0.72%
Run 3: Report of QUIC Cubic — Data Link

![Graph showing throughput and delay over time for flow 1 ingress and egress with mean speeds of 59.40 and 59.32 Mbit/s.]

Flow 1 ingress (mean 59.40 Mbit/s)
Flow 1 egress (mean 59.32 Mbit/s)
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-30 00:06:48
End at: 2018-06-30 00:07:18
Local clock offset: 0.283 ms
Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.74 Mbit/s
95th percentile per-packet one-way delay: 86.300 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 43.74 Mbit/s
95th percentile per-packet one-way delay: 86.300 ms
Loss rate: 0.71%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with mean throughput of 43.80 Mbps and 43.74 Mbps respectively.]

![Graph showing per-packet one-way delay over time for Flow 1 with 95th percentile of 86.30 ms.]
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-30 00:28:01
End at: 2018-06-30 00:28:31
Local clock offset: 0.055 ms
Remote clock offset: 0.183 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 49.04 Mbit/s
95th percentile per-packet one-way delay: 86.137 ms
Loss rate: 0.91%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput over time]

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

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Run 6: Statistics of QUIC Cubic

Start at: 2018-06-30 00:49:06
End at: 2018-06-30 00:49:36
Local clock offset: 0.143 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 55.26 Mbit/s
  95th percentile per-packet one-way delay: 86.301 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 55.26 Mbit/s
  95th percentile per-packet one-way delay: 86.301 ms
  Loss rate: 0.77%
Run 6: Report of QUIC Cubic — Data Link

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

Flow 1 ingress (mean 55.37 Mbit/s) and Flow 1 egress (mean 55.26 Mbit/s)

Flow 1 (95th percentile 86.30 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-30 01:10:06
End at: 2018-06-30 01:10:36
Local clock offset: 0.059 ms
Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.27 Mbit/s
95th percentile per-packet one-way delay: 86.244 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 44.27 Mbit/s
95th percentile per-packet one-way delay: 86.244 ms
Loss rate: 1.02%
Run 7: Report of QUIC Cubic — Data Link

![Graph of Throughput and Packet Delay]

Flow 1 ingress (mean 44.47 Mbit/s)  Flow 1 egress (mean 44.27 Mbit/s)

Flow 1 (95th percentile 86.24 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-30 01:31:12
End at: 2018-06-30 01:31:42
Local clock offset: 0.168 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.88 Mbit/s
95th percentile per-packet one-way delay: 86.548 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 50.88 Mbit/s
95th percentile per-packet one-way delay: 86.548 ms
Loss rate: 0.88%
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-30 01:52:25
End at: 2018-06-30 01:52:55
Local clock offset: 0.211 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
   Average throughput: 46.99 Mbit/s
   95th percentile per-packet one-way delay: 86.587 ms
   Loss rate: 0.71%
-- Flow 1:
   Average throughput: 46.99 Mbit/s
   95th percentile per-packet one-way delay: 86.587 ms
   Loss rate: 0.71%
Run 9: Report of QUIC Cubic — Data Link

![Graph showing throughput over time for QUIC Cubic with two flows: ingress and egress]

Throughput (Mbps)

Time (s)

- **Flow 1 ingress (mean 47.06 Mbps)**
- **Flow 1 egress (mean 46.99 Mbps)**

![Graph showing per packet one way delay for QUIC Cubic flow 1]

Per packet one way delay (ms)

Time (s)

- **Flow 1 (95th percentile 86.59 ms)**
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-30 02:13:19
End at: 2018-06-30 02:13:49
Local clock offset: 0.118 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.56 Mbit/s
95th percentile per-packet one-way delay: 86.542 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 53.56 Mbit/s
95th percentile per-packet one-way delay: 86.542 ms
Loss rate: 0.82%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

End at: 2018-06-29 23:15:17
Local clock offset: 0.113 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.380 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.380 ms
Loss rate: 0.52%
Run 1: Report of SCReAM — Data Link

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

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

- **Packet One-Way Delay (ms):**
  - Flow 1 (95th percentile 86.38 ms)
Run 2: Statistics of SCReAM

Start at: 2018-06-29 23:35:51
End at: 2018-06-29 23:36:21
Local clock offset: 0.191 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.659 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.659 ms
Loss rate: 0.64%
Run 2: Report of SCReAM — Data Link

- **Throughput (Mbps)**
  - Time (s) vs. Throughput
    - Flow 1 ingress (mean 0.22 Mbps)
    - Flow 1 egress (mean 0.22 Mbps)

- **Per-packet one way delay (ms)**
  - Time (s) vs. Per-packet one way delay
    - Flow 1 (95th percentile 86.66 ms)
Run 3: Statistics of SCReAM

Start at: 2018-06-29 23:57:05
End at: 2018-06-29 23:57:36
Local clock offset: 0.086 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.250 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.250 ms
Loss rate: 0.64%
Run 3: Report of SCReAM — Data Link

![Graph showing throughput over time]

![Graph showing packet interarrival delay over time]

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Run 4: Statistics of SCReAM

Start at: 2018-06-30 00:17:59
End at: 2018-06-30 00:18:29
Local clock offset: 0.043 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.707 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.707 ms
Loss rate: 0.64%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-06-30 00:39:16
End at: 2018-06-30 00:39:46
Local clock offset: 0.196 ms
Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.909 ms
Loss rate: 0.64%
Run 5: Report of SCReAM — Data Link

![Graph 1: Throughput vs. Time for Flow 1 ingress and egress, showing mean 0.22 Mbit/s]

![Graph 2: Per-packet delay vs. Time for Flow 1, showing 95th percentile 86.91 ms]

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Run 6: Statistics of SCReAM

Start at: 2018-06-30 01:00:14
End at: 2018-06-30 01:00:44
Local clock offset: 0.16 ms
Remote clock offset: 0.246 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 86.305 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 86.305 ms
  Loss rate: 0.51%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-06-30 01:21:14
End at: 2018-06-30 01:21:44
Local clock offset: 0.205 ms
Remote clock offset: 0.137 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.735 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.735 ms
Loss rate: 0.51%
Run 7: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 86.73 ms)
Run 8: Statistics of SCReAM

Start at: 2018-06-30 01:42:28
End at: 2018-06-30 01:42:58
Local clock offset: 0.083 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.615 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.615 ms
Loss rate: 0.64%
Run 8: Report of SCReAM — Data Link

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

![Graph 2: Packet one-way delay (ms)](image2)
Run 9: Statistics of SCReAM

Start at: 2018-06-30 02:03:15
End at: 2018-06-30 02:03:45
Local clock offset: 0.265 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.295 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.295 ms
Loss rate: 0.51%
Run 9: Report of SCReAM — Data Link

![Data Link Throughput Graph](image1)

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

![Data Link Delay Graph](image2)

- Flow 1 (95th percentile 86.30 ms)
Run 10: Statistics of SCReAM

Start at: 2018-06-30 02:24:24
End at: 2018-06-30 02:24:54
Local clock offset: 0.127 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.272 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 86.272 ms
Loss rate: 0.51%
Run 10: Report of SCReAM — Data Link

![Graph showing network performance metrics over time.]

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

- **Packet one-way delay (ms):**
  - Flow 1 (95th percentile 86.27 ms)
Run 1: Statistics of Sprout

End at: 2018-06-29 23:16:23
Local clock offset: 0.211 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.20%
Run 1: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.24 Mbit/s)  Flow 1 egress (mean 0.24 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 86.99 ms)
Run 2: Statistics of Sprout

Start at: 2018-06-29 23:36:57
End at: 2018-06-29 23:37:28
Local clock offset: 0.082 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 86.747 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 86.747 ms
Loss rate: 0.79%
Run 2: Report of Sprout — Data Link

![Graph 1](image1)

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 0.19 Mbit/s)  |  Flow 1 egress (mean 0.19 Mbit/s)

![Graph 2](image2)

Round-trip packet delay (ms) vs Time (s)

Flow 1 (95th percentile 86.75 ms)
Run 3: Statistics of Sprout

Start at: 2018-06-29 23:58:12
End at: 2018-06-29 23:58:42
Local clock offset: 0.097 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 89.167 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 89.167 ms
Loss rate: 0.40%
Run 3: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.29 Mbit/s)
- Flow 1 egress (mean 0.29 Mbit/s)

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

- Flow 1 (95th percentile 89.17 ms)
Run 4: Statistics of Sprout

Start at: 2018-06-30 00:19:06
End at: 2018-06-30 00:19:36
Local clock offset: 0.173 ms
Remote clock offset: 0.147 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 86.766 ms
Loss rate: 0.59%
Run 4: Report of Sprout — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean 0.27 Mbit/s and 95th percentile delay at 86.77 ms.](image-url)
Run 5: Statistics of Sprout

Start at: 2018-06-30 00:40:23
End at: 2018-06-30 00:40:53
Local clock offset: 0.012 ms
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 86.867 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 86.867 ms
Loss rate: 0.57%
Run 5: Report of Sprout — Data Link

![Graph showing throughput and packet delay over time for Flow 1, with a mean ingress of 0.41 Mbit/s and 0.41 Mbit/s for egress.]
Run 6: Statistics of Sprout

Start at: 2018-06-30 01:01:21
End at: 2018-06-30 01:01:51
Local clock offset: 0.295 ms
Remote clock offset: 0.222 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
   Average throughput: 0.26 Mbit/s
   95th percentile per-packet one-way delay: 87.105 ms
   Loss rate: 0.45%
-- Flow 1:
   Average throughput: 0.26 Mbit/s
   95th percentile per-packet one-way delay: 87.105 ms
   Loss rate: 0.45%
Run 6: Report of Sprout — Data Link

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

End at: 2018-06-30 01:22:50
Local clock offset: 0.108 ms
Remote clock offset: 0.157 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.31 Mbit/s
  95th percentile per-packet one-way delay: 88.125 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 0.31 Mbit/s
  95th percentile per-packet one-way delay: 88.125 ms
  Loss rate: 0.03%
Run 7: Report of Sprout — Data Link

---

**Throughput (Mbit/s)**

- **Flow 1 ingress (mean 0.31 Mbit/s)**
- **Flow 1 egress (mean 0.31 Mbit/s)**

---

**Packet One Way Delay (ms)**

- **Flow 1 (95th percentile 88.12 ms)**

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Run 8: Statistics of Sprout

Start at: 2018-06-30 01:43:35
End at: 2018-06-30 01:44:05
Local clock offset: 0.29 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.27 Mbit/s
  95th percentile per-packet one-way delay: 86.888 ms
  Loss rate: 1.72%
-- Flow 1:
  Average throughput: 0.27 Mbit/s
  95th percentile per-packet one-way delay: 86.888 ms
  Loss rate: 1.72%
Run 8: Report of Sprout — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]
Run 9: Statistics of Sprout

Start at: 2018-06-30 02:04:21
End at: 2018-06-30 02:04:51
Local clock offset: 0.244 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 86.828 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 86.828 ms
Loss rate: 0.31%
Run 9: Report of Sprout — Data Link

![Graph of Throughput vs Time with two lines indicating Flow 1 ingress and egress with a mean of 0.25 Mbit/s.]

![Graph of Per-packet one-way delay vs Time with a line indicating Flow 1 at the 95th percentile of 86.83 ms.]
Run 10: Statistics of Sprout

Start at: 2018-06-30 02:25:31
End at: 2018-06-30 02:26:01
Local clock offset: 0.177 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-06-30 03:22:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 86.739 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 0.27 Mbit/s
95th percentile per-packet one-way delay: 86.739 ms
Loss rate: 0.45%
Run 10: Report of Sprout — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 0.27 Mbit/s)  Flow 1 egress (mean 0.27 Mbit/s)

Round-trip end-to-end delay (ms)

Flow 1 (95th percentile 86.74 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-29 23:04:58
End at: 2018-06-29 23:05:28
Local clock offset: 0.065 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 174.99 Mbit/s
  95th percentile per-packet one-way delay: 88.403 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 174.99 Mbit/s
  95th percentile per-packet one-way delay: 88.403 ms
  Loss rate: 0.61%
Run 1: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 175.13 Mbps)**
- **Flow 1 egress (mean 174.99 Mbps)**

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

- **Flow 1 (95th percentile 88.40 ms)**
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-29 23:25:54
End at: 2018-06-29 23:26:24
Local clock offset: 0.321 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 163.89 Mbit/s
95th percentile per-packet one-way delay: 89.521 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 163.89 Mbit/s
95th percentile per-packet one-way delay: 89.521 ms
Loss rate: 0.50%
Run 2: Report of TaoVA-100x — Data Link

[Diagram showing throughput over time with labels for Flow 1 ingress (mean 163.76 Mbit/s) and Flow 1 egress (mean 163.89 Mbit/s).]

[Diagram showing packet delay over time with label for Flow 1 (95th percentile 89.52 ms).]
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-29 23:47:00
End at: 2018-06-29 23:47:30
Local clock offset: 0.076 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 173.02 Mbit/s
95th percentile per-packet one-way delay: 88.924 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 173.02 Mbit/s
95th percentile per-packet one-way delay: 88.924 ms
Loss rate: 0.46%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-30 00:07:57
End at: 2018-06-30 00:08:27
Local clock offset: 0.217 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 132.89 Mbit/s
95th percentile per-packet one-way delay: 89.135 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 132.89 Mbit/s
95th percentile per-packet one-way delay: 89.135 ms
Loss rate: 0.91%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 133.33 Mbit/s)**
- **Flow 1 egress (mean 132.89 Mbit/s)**

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

- **Flow 1 (95th percentile 89.14 ms)**

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Run 5: Statistics of TaoVA-100x

Start at: 2018-06-30 00:29:11
End at: 2018-06-30 00:29:41
Local clock offset: 0.051 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 143.48 Mbit/s
95th percentile per-packet one-way delay: 89.356 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 143.48 Mbit/s
95th percentile per-packet one-way delay: 89.356 ms
Loss rate: 0.04%
Run 5: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet delay over time]

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 142.71 Mbit/s)
  - Flow 1 egress (mean 143.48 Mbit/s)

- **Packet delay (ms)**
  - Flow 1 (95th percentile 89.36 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-30 00:50:16
End at: 2018-06-30 00:50:46
Local clock offset: -0.006 ms
Remote clock offset: 0.238 ms

# Below is generated by plot.py at 2018-06-30 03:25:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.35 Mbit/s
95th percentile per-packet one-way delay: 88.646 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 111.35 Mbit/s
95th percentile per-packet one-way delay: 88.646 ms
Loss rate: 0.90%
Run 6: Report of TaoVA-100x — Data Link

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

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

Flow 1 ingress (mean 111.71 Mbit/s)  
Flow 1 egress (mean 111.35 Mbit/s)

Flow 1 (95th percentile 88.65 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-30 01:11:16
End at: 2018-06-30 01:11:46
Local clock offset: 0.144 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-06-30 03:25:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 137.74 Mbit/s
95th percentile per-packet one-way delay: 88.798 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 137.74 Mbit/s
95th percentile per-packet one-way delay: 88.798 ms
Loss rate: 0.27%
Run 7: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 137.36 Mbit/s)**
- **Flow 1 egress (mean 137.74 Mbit/s)**

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

- **Flow 1 (95th percentile 88.80 ms)**
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-30 01:32:22
End at: 2018-06-30 01:32:52
Local clock offset: 0.164 ms
Remote clock offset: 0.069 ms

# Below is generated by plot.py at 2018-06-30 03:27:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 140.43 Mbit/s
95th percentile per-packet one-way delay: 88.955 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 140.43 Mbit/s
95th percentile per-packet one-way delay: 88.955 ms
Loss rate: 0.50%
Run 8: Report of TaoVA-100x — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 140.14 Mbit/s)
- Flow 1 egress (mean 140.43 Mbit/s)

![Graph 2: Delay](image2)

- Flow 1 (95th percentile 88.95 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-30 01:53:34
End at: 2018-06-30 01:54:04
Local clock offset: 0.211 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-30 03:27:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.05 Mbit/s
95th percentile per-packet one-way delay: 99.836 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 33.05 Mbit/s
95th percentile per-packet one-way delay: 99.836 ms
Loss rate: 2.69%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-30 02:14:29
End at: 2018-06-30 02:14:59
Local clock offset: 0.022 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.83 Mbit/s
95th percentile per-packet one-way delay: 88.063 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 148.83 Mbit/s
95th percentile per-packet one-way delay: 88.063 ms
Loss rate: 0.74%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 149.07 Mbit/s)
- Flow 1 egress (mean 148.83 Mbit/s)

- Flow 1 (95th percentile 88.06 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-06-29 23:18:12
End at: 2018-06-29 23:18:42
Local clock offset: 0.371 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.87 Mbit/s
95th percentile per-packet one-way delay: 91.105 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 52.87 Mbit/s
95th percentile per-packet one-way delay: 91.105 ms
Loss rate: 0.61%
Run 1: Report of TCP Vegas — Data Link

[Graph showing throughput and per-packet one-way delay over time]
Run 2: Statistics of TCP Vegas

Local clock offset: 0.042 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.03 Mbit/s
95th percentile per-packet one-way delay: 88.923 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 48.03 Mbit/s
95th percentile per-packet one-way delay: 88.923 ms
Loss rate: 0.64%
Run 2: Report of TCP Vegas — Data Link

![Graph](image)

**Graph 1:**
- **Flow 1 ingress** (mean 48.06 Mbit/s)
- **Flow 1 egress** (mean 48.03 Mbit/s)

**Graph 2:**
- **Flow 1 95th percentile** 88.92 ms
Run 3: Statistics of TCP Vegas

Start at: 2018-06-30 00:00:32
End at: 2018-06-30 00:01:03
Local clock offset: 0.02 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 43.00 Mbit/s
95th percentile per-packet one-way delay: 88.928 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 43.00 Mbit/s
95th percentile per-packet one-way delay: 88.928 ms
Loss rate: 0.65%
Run 3: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 43.03 Mbps)**
- **Flow 1 egress (mean 43.00 Mbps)**

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

- **Flow 1 (95th percentile 88.93 ms)**
Run 4: Statistics of TCP Vegas

Start at: 2018-06-30 00:21:25
End at: 2018-06-30 00:21:55
Local clock offset: 0.139 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 105.84 Mbit/s
95th percentile per-packet one-way delay: 90.195 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 105.84 Mbit/s
95th percentile per-packet one-way delay: 90.195 ms
Loss rate: 0.61%
Run 4: Report of TCP Vegas — Data Link

![Graph showing throughput over time]

![Graph showing per-packet round-trip time over time]

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Run 5: Statistics of TCP Vegas

Start at: 2018-06-30 00:42:40
End at: 2018-06-30 00:43:10
Local clock offset: 0.187 ms
Remote clock offset: 0.219 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.04 Mbit/s
95th percentile per-packet one-way delay: 101.194 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 119.04 Mbit/s
95th percentile per-packet one-way delay: 101.194 ms
Loss rate: 0.22%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-06-30 01:03:41
End at: 2018-06-30 01:04:11
Local clock offset: 0.112 ms
Remote clock offset: 0.268 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 102.547 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 102.547 ms
Loss rate: 0.35%
Run 7: Statistics of TCP Vegas

Start at: 2018-06-30 01:24:41
End at: 2018-06-30 01:25:11
Local clock offset: 0.1 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.34 Mbit/s
95th percentile per-packet one-way delay: 99.735 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 131.34 Mbit/s
95th percentile per-packet one-way delay: 99.735 ms
Loss rate: 0.67%
Run 7: Report of TCP Vegas — Data Link

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

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

*Flow 1 ingress (mean 131.47 Mbit/s) - Flow 1 egress (mean 131.34 Mbit/s)*

*Flow 1 (95th percentile 99.73 ms)*
Run 8: Statistics of TCP Vegas

Start at: 2018-06-30 01:45:53
End at: 2018-06-30 01:46:23
Local clock offset: 0.37 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.33 Mbit/s
95th percentile per-packet one-way delay: 101.294 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 126.33 Mbit/s
95th percentile per-packet one-way delay: 101.294 ms
Loss rate: 0.50%
Run 8: Report of TCP Vegas — Data Link

![Graphs showing network traffic and packet delay](image-url)
Run 9: Statistics of TCP Vegas

Start at: 2018-06-30 02:06:40
End at: 2018-06-30 02:07:10
Local clock offset: 0.217 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-30 03:29:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.25 Mbit/s
95th percentile per-packet one-way delay: 99.758 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 126.25 Mbit/s
95th percentile per-packet one-way delay: 99.758 ms
Loss rate: 0.29%
Run 9: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 125.85 Mbit/s)**
- **Flow 1 egress (mean 126.25 Mbit/s)**

![Graph 2: Packet One Way Delay vs Time (ms)](image)

- **Flow 1 (95th percentile 99.76 ms)**
Run 10: Statistics of TCP Vegas

Start at: 2018-06-30 02:27:49
End at: 2018-06-30 02:28:19
Local clock offset: 0.188 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-06-30 03:29:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 130.53 Mbit/s
95th percentile per-packet one-way delay: 100.806 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 130.53 Mbit/s
95th percentile per-packet one-way delay: 100.806 ms
Loss rate: 0.16%
Run 10: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress**: mean 129.97 Mbit/s
- **Flow 1 egress**: mean 130.53 Mbit/s

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

- **Flow 1**: 95th percentile 100.81 ms
Run 1: Statistics of Verus

Local clock offset: 0.177 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-06-30 03:30:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 139.858 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 139.858 ms
Loss rate: 0.41%
Run 1: Report of Verus — Data Link

[Graph of throughput vs. time showing two lines: one for flow ingress and one for egress, with labels and mean values.]
Run 2: Statistics of Verus

Start at: 2018-06-29 23:42:02
End at: 2018-06-29 23:42:32
Local clock offset: 0.22 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-06-30 03:31:01
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 168.83 Mbit/s
  95th percentile per-packet one-way delay: 164.091 ms
  Loss rate: 3.33%
-- Flow 1:
  Average throughput: 168.83 Mbit/s
  95th percentile per-packet one-way delay: 164.091 ms
  Loss rate: 3.33%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 173.63 Mbit/s)
- Flow 1 egress (mean 168.83 Mbit/s)

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

- Flow 1 (95th percentile 164.89 ms)
Run 3: Statistics of Verus

Start at: 2018-06-30 00:02:59
End at: 2018-06-30 00:03:30
Local clock offset: 0.008 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-06-30 03:31:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.49 Mbit/s
95th percentile per.packet one-way delay: 196.346 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 169.49 Mbit/s
95th percentile per.packet one-way delay: 196.346 ms
Loss rate: 0.95%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-06-30 00:24:13
End at: 2018-06-30 00:24:43
Local clock offset: 0.152 ms
Remote clock offset: 0.139 ms

# Below is generated by plot.py at 2018-06-30 03:31:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.74 Mbit/s
95th percentile per-packet one-way delay: 166.986 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 169.74 Mbit/s
95th percentile per-packet one-way delay: 166.986 ms
Loss rate: 0.22%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-06-30 00:45:21
End at: 2018-06-30 00:45:51
Local clock offset: 0.223 ms
Remote clock offset: 0.226 ms

# Below is generated by plot.py at 2018-06-30 03:31:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.48 Mbit/s
95th percentile per-packet one-way delay: 153.442 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 119.48 Mbit/s
95th percentile per-packet one-way delay: 153.442 ms
Loss rate: 0.05%
Run 5: Report of Verus — Data Link

[Graphs showing throughput and packet delay over time]

Flow 1 ingress (mean 118.84 Mbit/s)  Flow 1 egress (mean 119.48 Mbit/s)

Flow 1 (95th percentile 153.44 ms)
Run 6: Statistics of Verus

Start at: 2018-06-30 01:06:22
End at: 2018-06-30 01:06:52
Local clock offset: 0.28 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-06-30 03:31:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 127.47 Mbit/s
95th percentile per-packet one-way delay: 277.169 ms
Loss rate: 2.51%
-- Flow 1:
Average throughput: 127.47 Mbit/s
95th percentile per-packet one-way delay: 277.169 ms
Loss rate: 2.51%
Run 6: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 129.99 Mbit/s)
- Flow 1 egress (mean 127.47 Mbit/s)
- Flow 1 (95th percentile 277.17 ms)
Run 7: Statistics of Verus

Start at: 2018-06-30 01:27:23
End at: 2018-06-30 01:27:53
Local clock offset: 0.232 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2018-06-30 03:32:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 177.18 Mbit/s
  95th percentile per-packet one-way delay: 186.338 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 177.18 Mbit/s
  95th percentile per-packet one-way delay: 186.338 ms
  Loss rate: 0.71%
Run 7: Report of Verus — Data Link

![Throughput Graph](image1)

![Latency Graph](image2)
Run 8: Statistics of Verus

Start at: 2018-06-30 01:48:37
End at: 2018-06-30 01:49:07
Local clock offset: 0.174 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-06-30 03:33:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.28 Mbit/s
95th percentile per-packet one-way delay: 174.118 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 186.28 Mbit/s
95th percentile per-packet one-way delay: 174.118 ms
Loss rate: 0.53%
Run 8: Report of Verus — Data Link

[Graphs showing throughput and per-packet one-way delay over time]
Run 9: Statistics of Verus

Start at: 2018-06-30 02:09:30
End at: 2018-06-30 02:10:00
Local clock offset: 0.286 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-06-30 03:33:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.08 Mbit/s
95th percentile per-packet one-way delay: 207.716 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 169.08 Mbit/s
95th percentile per-packet one-way delay: 207.716 ms
Loss rate: 0.71%
Run 10: Statistics of Verus

Start at: 2018-06-30 02:30:18
End at: 2018-06-30 02:30:48
Local clock offset: 0.323 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-06-30 03:33:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.87 Mbit/s
95th percentile per-packet one-way delay: 140.587 ms
Loss rate: 0.97%
-- Flow 1:
Average throughput: 186.87 Mbit/s
95th percentile per-packet one-way delay: 140.587 ms
Loss rate: 0.97%
Run 10: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-29 23:12:18
End at: 2018-06-29 23:12:48
Local clock offset: 0.04 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-30 03:35:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.54 Mbit/s
95th percentile per-packet one-way delay: 87.308 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 213.54 Mbit/s
95th percentile per-packet one-way delay: 87.308 ms
Loss rate: 0.74%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-29 23:33:18
End at: 2018-06-29 23:33:48
Local clock offset: -0.081 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-06-30 03:35:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 269.11 Mbit/s
95th percentile per-packet one-way delay: 86.855 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 269.11 Mbit/s
95th percentile per-packet one-way delay: 86.855 ms
Loss rate: 0.76%
Run 2: Report of PCC-Vivace — Data Link

![Graphs showing data link performance metrics including throughput and one-way delay.]
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-29 23:54:36
End at: 2018-06-29 23:55:06
Local clock offset: 0.185 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-30 03:35:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.02 Mbit/s
95th percentile per-packet one-way delay: 105.366 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 229.02 Mbit/s
95th percentile per-packet one-way delay: 105.366 ms
Loss rate: 0.88%
Run 3: Report of PCC-Vivace — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per packet one way delay (ms)]
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-30 00:15:29
End at: 2018-06-30 00:15:59
Local clock offset: 0.344 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-06-30 03:35:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.30 Mbit/s
95th percentile per-packet one-way delay: 86.927 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 236.30 Mbit/s
95th percentile per-packet one-way delay: 86.927 ms
Loss rate: 0.69%
Run 4: Report of PCC-Vivace — Data Link

Throughput (Mbps)

- Flow 1 ingress (mean 236.56 Mbps)
- Flow 1 egress (mean 236.30 Mbps)

Delay (ms)

- Flow 1 (95th percentile 86.93 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-30 00:36:42
End at: 2018-06-30 00:37:12
Local clock offset: -0.007 ms
Remote clock offset: 0.33 ms

# Below is generated by plot.py at 2018-06-30 03:37:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 299.52 Mbit/s
95th percentile per-packet one-way delay: 89.203 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 299.52 Mbit/s
95th percentile per-packet one-way delay: 89.203 ms
Loss rate: 0.59%
Run 5: Report of PCC-Vivace — Data Link

![Graph 1](image-url1)

**Flow 1 ingress** (mean 299.54 Mbit/s)  
**Flow 1 egress** (mean 299.52 Mbit/s)

![Graph 2](image-url2)

**Flow 1** (95th percentile 89.20 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-30 00:57:45
End at: 2018-06-30 00:58:15
Local clock offset: 0.093 ms
Remote clock offset: 0.267 ms

# Below is generated by plot.py at 2018-06-30 03:37:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.93 Mbit/s
95th percentile per-packet one-way delay: 86.309 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 234.93 Mbit/s
95th percentile per-packet one-way delay: 86.309 ms
Loss rate: 0.44%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-30 01:18:43
End at: 2018-06-30 01:19:13
Local clock offset: 0.169 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2018-06-30 03:37:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 250.21 Mbit/s
95th percentile per-packet one-way delay: 87.008 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 250.21 Mbit/s
95th percentile per-packet one-way delay: 87.008 ms
Loss rate: 0.36%
Run 7: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 249.66 Mbit/s)**
- **Flow 1 egress (mean 250.21 Mbit/s)**

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

- **Flow 1 (95th percentile 87.01 ms)**
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-30 01:39:53
End at: 2018-06-30 01:40:23
Local clock offset: 0.268 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 321.24 Mbit/s
95th percentile per-packet one-way delay: 122.452 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 321.24 Mbit/s
95th percentile per-packet one-way delay: 122.452 ms
Loss rate: 1.05%
Run 8: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 322.78 Mbps)
- Flow 1 egress (mean 321.24 Mbps)

Graph 2: Per packet one-way delay (ms)
- Flow 1 (95th percentile 122.45 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-30 02:00:49
End at: 2018-06-30 02:01:19
Local clock offset: 0.178 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 86.914 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 177.95 Mbit/s
95th percentile per-packet one-way delay: 86.914 ms
Loss rate: 0.85%
Run 9: Report of PCC-Vivace — Data Link

![Graph 1](image1.png)

Flow 1 ingress (mean 178.44 Mbit/s)  Flow 1 egress (mean 177.95 Mbit/s)

![Graph 2](image2.png)

Flow 1 (95th percentile 86.91 ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-30 02:21:59
End at: 2018-06-30 02:22:29
Local clock offset: 0.079 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 158.23 Mbit/s
95th percentile per-packet one-way delay: 86.463 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 158.23 Mbit/s
95th percentile per-packet one-way delay: 86.463 ms
Loss rate: 1.16%
Run 10: Report of PCC-Vivace — Data Link

![Graph of throughput over time with two lines indicating flow ingress and egress with mean throughput values.]

- Flow 1 ingress (mean 159.15 Mbit/s)
- Flow 1 egress (mean 158.23 Mbit/s)

![Graph of packet delay over time for Flow 1 with a 95th percentile value of 86.46 ms.]

- Flow 1 (95th percentile 86.46 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-29 23:06:21
End at: 2018-06-29 23:06:51
Local clock offset: 0.104 ms
Remote clock offset: -0.083 ms
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-06-29 23:27:16
End at: 2018-06-29 23:27:46
Local clock offset: 0.368 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 87.074 ms
Loss rate: 0.62%

-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 87.074 ms
Loss rate: 0.62%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Local clock offset: 0.017 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 86.404 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 1.91 Mbit/s
95th percentile per-packet one-way delay: 86.404 ms
Loss rate: 0.56%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-06-30 00:09:16
End at: 2018-06-30 00:09:46
Local clock offset: 0.06 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 86.734 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 86.734 ms
Loss rate: 0.68%
Run 4: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 1.92 Mbit/s)**
- **Flow 1 egress (mean 1.92 Mbit/s)**

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

- **Flow 1 (95th percentile 96.73 ms)**

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Run 5: Statistics of WebRTC media

Start at: 2018-06-30 00:30:31
End at: 2018-06-30 00:31:01
Local clock offset: 0.304 ms
Remote clock offset: 0.193 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 86.571 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 86.571 ms
Loss rate: 0.61%
Run 5: Report of WebRTC media — Data Link

![Graph of throughput and packet delay]

- Flow 1 ingress (mean 1.93 Mbit/s)
- Flow 1 egress (mean 1.93 Mbit/s)
Run 6: Statistics of WebRTC media

Start at: 2018-06-30 00:51:32
End at: 2018-06-30 00:52:03
Local clock offset: 0.092 ms
Remote clock offset: 0.235 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 86.917 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 86.917 ms
Loss rate: 0.62%
Run 6: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 1.89 Mbit/s)**
- **Flow 1 egress (mean 1.89 Mbit/s)**
Run 7: Statistics of WebRTC media

Start at: 2018-06-30 01:12:34
End at: 2018-06-30 01:13:04
Local clock offset: 0.092 ms
Remote clock offset: 0.227 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 86.808 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 86.808 ms
Loss rate: 0.61%
Run 7: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress (mean 1.90 Mbit/s)**
- **Flow 1 egress (mean 1.90 Mbit/s)**

![Graph showing packet delay over time (95th percentile 86.81 ms)]
Run 8: Statistics of WebRTC media

Start at: 2018-06-30 01:33:41
End at: 2018-06-30 01:34:11
Local clock offset: 0.3 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 86.624 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 86.624 ms
Loss rate: 0.62%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-06-30 01:54:44
End at: 2018-06-30 01:55:14
Local clock offset: 0.206 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 86.312 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 86.312 ms
Loss rate: 0.62%
Run 9: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 1.94 Mbit/s)**
- **Flow 1 egress (mean 1.93 Mbit/s)**

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

- **Flow 1 95th percentile 86.31 ms**
Run 10: Statistics of WebRTC media

Start at: 2018-06-30 02:15:49
End at: 2018-06-30 02:16:19
Local clock offset: 0.288 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-06-30 03:38:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 86.782 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 86.782 ms
Loss rate: 0.56%
Run 10: Report of WebRTC media — Data Link