Pantheon Report

Data path: GCE Tokyo Ethernet (remote) → GCE Sydney Ethernet (local).
Repeated the test of 16 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 @ 9141c5f9450c85ea5ea2ea755a8e9469988d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436bd4b834
third_party/genericCC @ c7966e494a9299986eaa5a9c169a7f381fe1bbe5
third_party/indigo @ 2601c92e4aa9d58d38dc44df90c077e64d
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc95bfa0d66d18b623c091a55f8c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e88ac08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ebc978f3ccff42
third_party/scream-reproduce @ f099118d1421a3131bf11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c5045587f57f4
third_party/webtcc @ 3f0cc2a9061a41b6f9ddec4735770d143a1fa2851
test from GCE Tokyo 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>
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<td>LEDBAT</td>
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<td>30.77</td>
<td>54.98</td>
<td>0.66</td>
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<tr>
<td>PCC-Allegro</td>
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<td>141.57</td>
<td>1.37</td>
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<td>PCC-Expr</td>
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<td>266.43</td>
<td>141.55</td>
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<td>QUIC Cubic</td>
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<td>58.04</td>
<td>52.91</td>
<td>0.51</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.21</td>
<td>53.00</td>
<td>0.36</td>
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<tr>
<td>Sprout</td>
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<td>6.65</td>
<td>54.72</td>
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<tr>
<td>TaoVA-100x</td>
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<tr>
<td>TCP Vegas</td>
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<td>116.31</td>
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<td>0.32</td>
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<tr>
<td>Verus</td>
<td>10</td>
<td>281.66</td>
<td>159.35</td>
<td>0.49</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>365.84</td>
<td>66.15</td>
<td>0.38</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.91</td>
<td>52.78</td>
<td>0.40</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-20 16:54:46
End at: 2018-06-20 16:55:16
Local clock offset: -0.174 ms
Remote clock offset: -0.301 ms

# Below is generated by plot.py at 2018-06-20 20:20:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.89 Mbit/s
95th percentile per-packet one-way delay: 55.852 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 205.89 Mbit/s
95th percentile per-packet one-way delay: 55.852 ms
Loss rate: 0.38%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-06-20 17:15:11
End at: 2018-06-20 17:15:41
Local clock offset: -0.27 ms
Remote clock offset: -1.383 ms

# Below is generated by plot.py at 2018-06-20 20:20:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 210.32 Mbit/s
95th percentile per-packet one-way delay: 55.201 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 210.32 Mbit/s
95th percentile per-packet one-way delay: 55.201 ms
Loss rate: 0.37%
Run 3: Statistics of TCP BBR

Start at: 2018-06-20 17:36:03
End at: 2018-06-20 17:36:33
Local clock offset: 0.083 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-20 20:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.20 Mbit/s
95th percentile per-packet one-way delay: 54.305 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 211.20 Mbit/s
95th percentile per-packet one-way delay: 54.305 ms
Loss rate: 0.39%
Run 3: Report of TCP BBR — Data Link

![Throughput Graph](image1)

Flow 1 ingress (mean 211.22 Mbit/s)  
Flow 1 egress (mean 211.20 Mbit/s)

![Delay Graph](image2)

Flow 1 (95th percentile 54.30 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-06-20 17:56:33
End at: 2018-06-20 17:57:03
Local clock offset: -0.149 ms
Remote clock offset: 1.237 ms

# Below is generated by plot.py at 2018-06-20 20:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 209.44 Mbit/s
95th percentile per-packet one-way delay: 52.809 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 209.44 Mbit/s
95th percentile per-packet one-way delay: 52.809 ms
Loss rate: 0.36%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput over time with annotations for Flow 1 ingress and egress mean speeds (209.48 Mbit/s and 209.44 Mbit/s, respectively).]

![Graph showing per-packet end-to-end delay over time with Flow 1 95th percentile at 52.81 ms.]

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Run 5: Statistics of TCP BBR

Start at: 2018-06-20 18:16:54
End at: 2018-06-20 18:17:24
Local clock offset: 0.076 ms
Remote clock offset: -1.312 ms

# Below is generated by plot.py at 2018-06-20 20:20:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.73 Mbit/s
95th percentile per-packet one-way delay: 59.490 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 214.73 Mbit/s
95th percentile per-packet one-way delay: 59.490 ms
Loss rate: 0.36%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-06-20 18:37:40
End at: 2018-06-20 18:38:10
Local clock offset: 0.011 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-06-20 20:20:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.48 Mbit/s
95th percentile per-packet one-way delay: 57.686 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 218.48 Mbit/s
95th percentile per-packet one-way delay: 57.686 ms
Loss rate: 0.36%
Run 6: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 218.54 Mbit/s)
- Flow 1 egress (mean 218.48 Mbit/s)
Run 7: Statistics of TCP BBR

Start at: 2018-06-20 18:57:53
End at: 2018-06-20 18:58:23
Local clock offset: -0.052 ms
Remote clock offset: -0.361 ms

# Below is generated by plot.py at 2018-06-20 20:20:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.26 Mbit/s
95th percentile per-packet one-way delay: 51.181 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 217.26 Mbit/s
95th percentile per-packet one-way delay: 51.181 ms
Loss rate: 0.38%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-06-20 19:18:42
End at: 2018-06-20 19:19:12
Local clock offset: 0.061 ms
Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2018-06-20 20:20:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.03 Mbit/s
95th percentile per-packet one-way delay: 54.583 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 211.03 Mbit/s
95th percentile per-packet one-way delay: 54.583 ms
Loss rate: 0.37%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

End at: 2018-06-20 19:40:03
Local clock offset: 0.18 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-20 20:23:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.18 Mbit/s
95th percentile per-packet one-way delay: 57.420 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 213.18 Mbit/s
95th percentile per-packet one-way delay: 57.420 ms
Loss rate: 0.36%
Run 9: Report of TCP BBR — Data Link

![Throughput Graph](image1)

- **Flow 1 ingress** (mean 213.19 Mbit/s)
- **Flow 1 egress** (mean 213.18 Mbit/s)

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

- **Flow 1** (95th percentile 57.42 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-06-20 20:00:05
End at: 2018-06-20 20:00:35
Local clock offset: -0.103 ms
Remote clock offset: 0.285 ms

# Below is generated by plot.py at 2018-06-20 20:24:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.76 Mbit/s
95th percentile per-packet one-way delay: 54.171 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 217.76 Mbit/s
95th percentile per-packet one-way delay: 54.171 ms
Loss rate: 0.37%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-06-20 17:00:03
End at: 2018-06-20 17:00:33
Local clock offset: -0.098 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-20 20:24:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.82 Mbit/s
95th percentile per-packet one-way delay: 53.700 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 47.82 Mbit/s
95th percentile per-packet one-way delay: 53.700 ms
Loss rate: 0.45%
Run 1: Report of Copa — Data Link

![Graph of throughput over time](image)

- **Flow 1 ingress (mean 47.86 Mb/s)**
- **Flow 1 egress (mean 47.82 Mb/s)**

![Graph of per-packet end-to-end delay over time](image)

- **Flow 1 (95th percentile 53.70 ms)**
Run 2: Statistics of Copa

Start at: 2018-06-20 17:20:35
End at: 2018-06-20 17:21:05
Local clock offset: -0.059 ms
Remote clock offset: -1.253 ms

# Below is generated by plot.py at 2018-06-20 20:24:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 138.63 Mbit/s
95th percentile per-packet one-way delay: 60.129 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 138.63 Mbit/s
95th percentile per-packet one-way delay: 60.129 ms
Loss rate: 0.77%
Run 2: Report of Copa — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 139.20 Mbps)
- Flow 1 egress (mean 138.63 Mbps)

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

- Flow 1 (95th percentile 60.13 ms)
Run 3: Statistics of Copa

Start at: 2018-06-20 17:41:14
End at: 2018-06-20 17:41:44
Local clock offset: -0.079 ms
Remote clock offset: 0.17 ms

# Below is generated by plot.py at 2018-06-20 20:29:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.46 Mbit/s
95th percentile per-packet one-way delay: 58.912 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 281.46 Mbit/s
95th percentile per-packet one-way delay: 58.912 ms
Loss rate: 0.40%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 281.61 Mbps)
- Flow 1 egress (mean 281.46 Mbps)

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

- Flow 1 (95th percentile 58.91 ms)
Run 4: Statistics of Copa

Start at: 2018-06-20 18:01:42
End at: 2018-06-20 18:02:13
Local clock offset: -0.041 ms
Remote clock offset: 0.33 ms

# Below is generated by plot.py at 2018-06-20 20:29:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 139.46 Mbit/s
95th percentile per-packet one-way delay: 56.529 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 139.46 Mbit/s
95th percentile per-packet one-way delay: 56.529 ms
Loss rate: 0.73%
Run 4: Report of Copa — Data Link

![Graph showing throughput and packet delay over time. The graph includes two lines representing Flow 1 ingress and egress, with the egress line showing a peak at around 25s. There is also a histogram showing packet delay, indicating high variability at certain points in time.]
Run 5: Statistics of Copa

End at: 2018-06-20 18:22:50
Local clock offset: -0.016 ms
Remote clock offset: -1.248 ms

# Below is generated by plot.py at 2018-06-20 20:29:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 114.26 Mbit/s
95th percentile per-packet one-way delay: 59.459 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 114.26 Mbit/s
95th percentile per-packet one-way delay: 59.459 ms
Loss rate: 0.17%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

End at: 2018-06-20 18:43:29
Local clock offset: 0.089 ms
Remote clock offset: -0.337 ms

# Below is generated by plot.py at 2018-06-20 20:29:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 54.002 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 49.71 Mbit/s
95th percentile per-packet one-way delay: 54.002 ms
Loss rate: 0.35%
Run 6: Report of Copa — Data Link

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**Throughput (Mb/s)**

- **Flow 1 ingress (mean 49.70 Mb/s)**
- **Flow 1 egress (mean 49.71 Mb/s)**

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

- **Flow 1 95th percentile 54.00 ms**

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Run 7: Statistics of Copa

Start at: 2018-06-20 19:03:21
End at: 2018-06-20 19:03:51
Local clock offset: -0.338 ms
Remote clock offset: -0.213 ms

# Below is generated by plot.py at 2018-06-20 20:29:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.23 Mbit/s
95th percentile per-packet one-way delay: 54.460 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 207.23 Mbit/s
95th percentile per-packet one-way delay: 54.460 ms
Loss rate: 0.41%
Run 7: Report of Copa — Data Link

![Graph of throughput over time with two lines indicating flow ingress and egress.]
Run 8: Statistics of Copa

Start at: 2018-06-20 19:24:07
End at: 2018-06-20 19:24:37
Local clock offset: 0.047 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-06-20 20:30:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.26 Mbit/s
95th percentile per-packet one-way delay: 59.903 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 255.26 Mbit/s
95th percentile per-packet one-way delay: 59.903 ms
Loss rate: 0.30%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-06-20 19:44:58
End at: 2018-06-20 19:45:28
Local clock offset: 0.017 ms
Remote clock offset: 1.308 ms

# Below is generated by plot.py at 2018-06-20 20:30:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.72 Mbit/s
95th percentile per-packet one-way delay: 54.878 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 121.72 Mbit/s
95th percentile per-packet one-way delay: 54.878 ms
Loss rate: 0.13%
Run 9: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 10: Statistics of Copa

Start at: 2018-06-20 20:05:14
End at: 2018-06-20 20:05:44
Local clock offset: -0.127 ms
Remote clock offset: -1.195 ms

# Below is generated by plot.py at 2018-06-20 20:31:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.91 Mbit/s
95th percentile per-packet one-way delay: 60.697 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 206.91 Mbit/s
95th percentile per-packet one-way delay: 60.697 ms
Loss rate: 0.59%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-06-20 16:45:56
End at: 2018-06-20 16:46:26
Local clock offset: -0.324 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-06-20 20:31:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 61.551 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 61.551 ms
Loss rate: 0.38%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-06-20 17:06:26
End at: 2018-06-20 17:06:56
Local clock offset: 0.006 ms
Remote clock offset: -0.2 ms

# Below is generated by plot.py at 2018-06-20 20:31:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.85 Mbit/s
95th percentile per-packet one-way delay: 63.108 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 203.85 Mbit/s
95th percentile per-packet one-way delay: 63.108 ms
Loss rate: 0.16%
Run 2: Report of TCP Cubic — Data Link

![Graph of TCP Cubic Data Link](image)

- **Flow 1 ingress (mean 203.46 Mbit/s)**
- **Flow 1 egress (mean 203.85 Mbit/s)**
Run 3: Statistics of TCP Cubic

Start at: 2018-06-20 17:27:11
End at: 2018-06-20 17:27:41
Local clock offset: -0.106 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2018-06-20 20:31:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.23 Mbit/s
95th percentile per-packet one-way delay: 61.442 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 224.23 Mbit/s
95th percentile per-packet one-way delay: 61.442 ms
Loss rate: 0.37%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-06-20 17:47:42
End at: 2018-06-20 17:48:12
Local clock offset: -0.183 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-06-20 20:32:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 60.935 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 213.95 Mbit/s
95th percentile per-packet one-way delay: 60.935 ms
Loss rate: 0.22%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-06-20 18:08:12
End at: 2018-06-20 18:08:42
Local clock offset: 0.01 ms
Remote clock offset: 1.413 ms

# Below is generated by plot.py at 2018-06-20 20:32:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 154.66 Mbit/s
  95th percentile per-packet one-way delay: 53.768 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 154.66 Mbit/s
  95th percentile per-packet one-way delay: 53.768 ms
  Loss rate: 0.27%
Run 5: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image)

- **Flow 1 ingress (mean 154.54 Mbit/s)**
- **Flow 1 egress (mean 154.66 Mbit/s)**

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

- **Flow 1 (95th percentile 53.77 ms)**
Run 6: Statistics of TCP Cubic

Start at: 2018-06-20 18:28:54
End at: 2018-06-20 18:29:24
Local clock offset: 0.017 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-20 20:32:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.42 Mbit/s
95th percentile per-packet one-way delay: 61.511 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 222.42 Mbit/s
95th percentile per-packet one-way delay: 61.511 ms
Loss rate: 0.38%
Run 6: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 222.47 Mbit/s)**
- **Flow 1 egress (mean 222.42 Mbit/s)**

![Graph showing packet delay distribution](image)

- **Flow 1 (99th percentile 61.31 ms)**
Run 7: Statistics of TCP Cubic

Start at: 2018-06-20 18:49:10
End at: 2018-06-20 18:49:40
Local clock offset: 0.0 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-06-20 20:32:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.36 Mbit/s
95th percentile per-packet one-way delay: 54.786 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 164.36 Mbit/s
95th percentile per-packet one-way delay: 54.786 ms
Loss rate: 0.47%
Run 8: Statistics of TCP Cubic

Start at: 2018-06-20 19:09:55
End at: 2018-06-20 19:10:25
Local clock offset: 0.105 ms
Remote clock offset: 0.173 ms

# Below is generated by plot.py at 2018-06-20 20:33:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.63 Mbit/s
95th percentile per-packet one-way delay: 58.511 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 225.63 Mbit/s
95th percentile per-packet one-way delay: 58.511 ms
Loss rate: 0.37%
Run 8: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 225.68 Mbps)
- Flow 1 egress (mean 225.63 Mbps)

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

- Flow 1 (99th percentile 58.51 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-06-20 19:30:43
Local clock offset: 0.005 ms
Remote clock offset: 0.071 ms

# Below is generated by plot.py at 2018-06-20 20:33:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.48 Mbit/s
95th percentile per-packet one-way delay: 61.609 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 220.48 Mbit/s
95th percentile per-packet one-way delay: 61.609 ms
Loss rate: 0.38%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-06-20 19:51:15
End at: 2018-06-20 19:51:45
Local clock offset: 0.074 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-06-20 20:34:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.17 Mbit/s
95th percentile per-packet one-way delay: 62.063 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 222.17 Mbit/s
95th percentile per-packet one-way delay: 62.063 ms
Loss rate: 0.40%
Run 10: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 222.30 Mbps)
- Flow 1 egress (mean 222.17 Mbps)

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

- Flow 1 (95th percentile 62.06 ms)
Run 1: Statistics of FillP

Start at: 2018-06-20 16:42:52
End at: 2018-06-20 16:43:22
Local clock offset: -0.159 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-06-20 20:48:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 754.29 Mbit/s
95th percentile per-packet one-way delay: 129.888 ms
Loss rate: 4.63%
-- Flow 1:
Average throughput: 754.29 Mbit/s
95th percentile per-packet one-way delay: 129.888 ms
Loss rate: 4.63%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-06-20 17:03:27
End at: 2018-06-20 17:03:57
Local clock offset: -0.208 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-06-20 20:50:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 898.85 Mbit/s
95th percentile per-packet one-way delay: 107.907 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 898.85 Mbit/s
95th percentile per-packet one-way delay: 107.907 ms
Loss rate: 1.12%
Run 2: Report of FillP — Data Link

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

- **Flow 1 Ingress** (mean 905.95 Mbps)
- **Flow 1 Egress** (mean 898.85 Mbps)

![Graph of Per Socket End-to-End Delay (ms) vs Time (s)]

- **Flow 1 (95th percentile 107.91 ms)**
Run 3: Statistics of FillP

Start at: 2018-06-20 17:24:07
End at: 2018-06-20 17:24:37
Local clock offset: 0.017 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2018-06-20 20:50:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 796.95 Mbit/s
95th percentile per-packet one-way delay: 128.513 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 796.95 Mbit/s
95th percentile per-packet one-way delay: 128.513 ms
Loss rate: 4.10%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 828.19 Mb/s)
- Flow 1 egress (mean 796.95 Mb/s)

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

- Flow 1 (95th percentile 128.51 ms)
Run 4: Statistics of FillP

Start at: 2018-06-20 17:44:58
End at: 2018-06-20 17:45:28
Local clock offset: -0.061 ms
Remote clock offset: 0.199 ms

# Below is generated by plot.py at 2018-06-20 20:50:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 777.66 Mbit/s
95th percentile per-packet one-way delay: 270.828 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 777.66 Mbit/s
95th percentile per-packet one-way delay: 270.828 ms
Loss rate: 3.88%
Run 4: Report of FillP — Data Link

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

- Flow 1 ingress (mean 806.16 Mbit/s)
- Flow 1 egress (mean 777.66 Mbit/s)

![Graph of per-packet one-way delay for Flow 1.]
Run 5: Statistics of FillP

Start at: 2018-06-20 18:05:14
End at: 2018-06-20 18:05:44
Local clock offset: -0.056 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-06-20 20:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 910.99 Mbit/s
95th percentile per-packet one-way delay: 151.062 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 910.99 Mbit/s
95th percentile per-packet one-way delay: 151.062 ms
Loss rate: 1.40%
Run 5: Report of FillP — Data Link

Throughput (Mb/s)

Time(s)

Flow 1 ingress (mean 920.82 Mb/s)  Flow 1 egress (mean 910.99 Mb/s)

Packet one way delay (ms)

Flow 1 (95th percentile 151.06 ms)
Run 6: Statistics of FillP

Start at: 2018-06-20 18:25:49
End at: 2018-06-20 18:26:19
Local clock offset: -0.032 ms
Remote clock offset: 0.203 ms

# Below is generated by plot.py at 2018-06-20 20:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 864.89 Mbit/s
95th percentile per-packet one-way delay: 119.873 ms
Loss rate: 2.81%
-- Flow 1:
Average throughput: 864.89 Mbit/s
95th percentile per-packet one-way delay: 119.873 ms
Loss rate: 2.81%
Run 6: Report of FillP — Data Link

![Graph showing throughput and packet delay over time]

- Throughput (Mbps): Increased sharply at the start and stabilized around 800 Mbps for the duration.
- Packet delay (ms): Fluctuated significantly, with a 95th percentile of 119.87 ms.
Run 7: Statistics of FillP

End at: 2018-06-20 18:46:53
Local clock offset: -0.147 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-20 20:52:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 810.06 Mbit/s
95th percentile per-packet one-way delay: 127.629 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 810.06 Mbit/s
95th percentile per-packet one-way delay: 127.629 ms
Loss rate: 4.00%
Run 7: Report of FillP — Data Link

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

Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 840.75 Mbps)
- Flow 1 egress (mean 810.06 Mbps)

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

One-way delay ms vs. Time (s)
- Flow 1 (99th percentile 127.63 ms)
Run 8: Statistics of FillP

Start at: 2018-06-20 19:06:59
End at: 2018-06-20 19:07:29
Local clock offset: -0.017 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-20 20:53:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 846.89 Mbit/s
95th percentile per-packet one-way delay: 127.423 ms
Loss rate: 3.06%
-- Flow 1:
Average throughput: 846.89 Mbit/s
95th percentile per-packet one-way delay: 127.423 ms
Loss rate: 3.06%
Run 8: Report of FillP — Data Link

![Graph of Throughput and Delay]
Run 9: Statistics of FillP

Start at: 2018-06-20 19:27:50  
End at: 2018-06-20 19:28:20  
Local clock offset: 0.009 ms  
Remote clock offset: 1.241 ms

# Below is generated by plot.py at 2018-06-20 21:05:41  
# Datalink statistics
-- Total of 1 flow:  
  Average throughput: 793.19 Mbit/s  
  95th percentile per-packet one-way delay: 128.534 ms  
  Loss rate: 4.57%  
-- Flow 1:  
  Average throughput: 793.19 Mbit/s  
  95th percentile per-packet one-way delay: 128.534 ms  
  Loss rate: 4.57%
Run 9: Report of FillP — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 828.14 Mbps)**
- **Flow 1 egress (mean 793.19 Mbps)**

**Per-packet end-to-end delay (ms)**

- **Flow 1 (95th percentile 128.53 ms)**
Run 10: Statistics of FillP

End at: 2018-06-20 19:48:58
Local clock offset: 0.278 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 863.79 Mbit/s
95th percentile per-packet one-way delay: 118.630 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 863.79 Mbit/s
95th percentile per-packet one-way delay: 118.630 ms
Loss rate: 2.50%
Run 10: Report of FillP — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 852.81 Mbps)  Flow 1 egress (mean 863.79 Mbps)

Per packet one way delay (ms)

Flow 1 (95th percentile 118.63 ms)
Run 1: Statistics of Indigo

Start at: 2018-06-20 16:49:49
End at: 2018-06-20 16:50:19
Local clock offset: -0.087 ms
Remote clock offset: -0.166 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.22 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 221.22 Mbit/s
95th percentile per-packet one-way delay: 50.679 ms
Loss rate: 0.38%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-06-20 17:10:15
End at: 2018-06-20 17:10:45
Local clock offset: -0.01 ms
Remote clock offset: -1.498 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.40 Mbit/s
95th percentile per-packet one-way delay: 55.355 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 198.40 Mbit/s
95th percentile per-packet one-way delay: 55.355 ms
Loss rate: 0.40%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-06-20 17:31:04
End at: 2018-06-20 17:31:34
Local clock offset: 0.118 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.85 Mbit/s
95th percentile per-packet one-way delay: 54.196 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 222.85 Mbit/s
95th percentile per-packet one-way delay: 54.196 ms
Loss rate: 0.36%
Run 3: Report of Indigo — Data Link

![Graph 1: Throughput Over Time]

- Flow 1 ingress (mean 222.87 Mb/s)
- Flow 1 egress (mean 222.85 Mb/s)

![Graph 2: Packet Delay Over Time]

- Flow 1 (95th percentile 54.20 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-20 17:51:36
End at: 2018-06-20 17:52:06
Local clock offset: -0.054 ms
Remote clock offset: -1.139 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.44 Mbit/s
95th percentile per-packet one-way delay: 55.240 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 186.44 Mbit/s
95th percentile per-packet one-way delay: 55.240 ms
Loss rate: 0.37%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2018-06-20 18:11:59
End at: 2018-06-20 18:12:29
Local clock offset: -0.007 ms
Remote clock offset: 1.361 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.29 Mbit/s
95th percentile per-packet one-way delay: 52.688 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 226.29 Mbit/s
95th percentile per-packet one-way delay: 52.688 ms
Loss rate: 0.35%
Run 5: Report of Indigo — Data Link

[Graph showing throughput over time with two curves: Flow 1 ingress and Flow 1 egress.]

[Graph showing packet delay time with a single curve for Flow 1.]
Run 6: Statistics of Indigo

Start at: 2018-06-20 18:32:49
End at: 2018-06-20 18:33:19
Local clock offset: -0.195 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 166.52 Mbit/s
  95th percentile per-packet one-way delay: 53.620 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 166.52 Mbit/s
  95th percentile per-packet one-way delay: 53.620 ms
  Loss rate: 0.41%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

Start at: 2018-06-20 18:52:58
End at: 2018-06-20 18:53:28
Local clock offset: 0.053 ms
Remote clock offset: -0.274 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 178.26 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 178.26 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.40%
Run 7: Report of Indigo — Data Link

![Graph of throughput and packet delay over time]

- Flow 1 ingress (mean 178.35 Mbit/s)
- Flow 1 egress (mean 178.26 Mbit/s)

![Graph of packet delay over time]

- Flow 1 (95th percentile 54.01 ms)
Run 8: Statistics of Indigo

End at: 2018-06-20 19:14:16
Local clock offset: -0.064 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 53.777 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 53.777 ms
Loss rate: 0.36%
Run 8: Report of Indigo — Data Link

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

- **Flow 1 ingress** (mean 176.20 Mbit/s)
- **Flow 1 egress** (mean 176.17 Mbit/s)

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

- **Flow 1** (95th percentile 53.78 ms)
Run 9: Statistics of Indigo

Start at: 2018-06-20 19:34:35
End at: 2018-06-20 19:35:05
Local clock offset: -0.084 ms
Remote clock offset: 1.267 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.36 Mbit/s
95th percentile per-packet one-way delay: 52.309 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 223.36 Mbit/s
95th percentile per-packet one-way delay: 52.309 ms
Loss rate: 0.33%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Local clock offset: -0.161 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 198.90 Mbit/s
95th percentile per-packet one-way delay: 53.640 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 198.90 Mbit/s
95th percentile per-packet one-way delay: 53.640 ms
Loss rate: 0.43%
Run 10: Report of Indigo — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress** (mean 199.14 Mbit/s)
- **Flow 1 egress** (mean 198.90 Mbit/s)

![Graph 2: Delay vs Time]

- **Flow 1** (95th percentile 53.64 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-06-20 16:40:38
End at: 2018-06-20 16:41:08
Local clock offset: -0.112 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 30.59 Mbit/s
  95th percentile per-packet one-way delay: 55.228 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 30.59 Mbit/s
  95th percentile per-packet one-way delay: 55.228 ms
  Loss rate: 0.71%
Run 1: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 30.70 Mbit/s)
- Flow 1 egress (mean 30.59 Mbit/s)

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

- Flow 1 (95th percentile 55.23 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-06-20 17:01:12
End at: 2018-06-20 17:01:42
Local clock offset: 0.171 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 54.721 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 33.42 Mbit/s
95th percentile per-packet one-way delay: 54.721 ms
Loss rate: 0.69%
Run 2: Report of LEDBAT — Data Link

![Graph of Throughput vs. Time](image1)

- Flow 1 ingress (mean 33.53 Mbit/s)
- Flow 1 egress (mean 33.42 Mbit/s)

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

- Flow 1 (95th percentile 54.72 ms)
Run 3: Statistics of LEDBAT

Start at: 2018-06-20 17:21:53
End at: 2018-06-20 17:22:23
Local clock offset: -0.146 ms
Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 55.367 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 30.06 Mbit/s
95th percentile per-packet one-way delay: 55.367 ms
Loss rate: 0.72%
Run 3: Report of LEDBAT — Data Link

![Graph of data link throughput over time showing two lines: one for Flow 1 ingress (mean 30.18 Mbit/s) and one for Flow 1 egress (mean 30.06 Mbit/s).]

![Graph of packet delay over time showing a distribution with a 95th percentile of 55.37 ms for Flow 1.]
Run 4: Statistics of LEDBAT

Start at: 2018-06-20 17:42:44
End at: 2018-06-20 17:43:14
Local clock offset: -0.03 ms
Remote clock offset: -1.134 ms

# Below is generated by plot.py at 2018-06-20 21:07:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 56.460 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 56.460 ms
Loss rate: 0.39%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 30.57 Mbit/s)**
- **Flow 1 egress (mean 30.55 Mbit/s)**

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

- **Flow 1 95th percentile 56.46 ms**
Run 5: Statistics of LEDBAT

Start at: 2018-06-20 18:03:00
End at: 2018-06-20 18:03:30
Local clock offset: 0.086 ms
Remote clock offset: -0.941 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 26.29 Mbit/s
  95th percentile per-packet one-way delay: 56.259 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 26.29 Mbit/s
  95th percentile per-packet one-way delay: 56.259 ms
  Loss rate: 0.55%
Run 5: Report of LEDBAT — Data Link

Graphs showing throughput and per-packet round-trip delay over time.
Run 6: Statistics of LEDBAT

Start at: 2018-06-20 18:23:34
End at: 2018-06-20 18:24:05
Local clock offset: -0.142 ms
Remote clock offset: 1.499 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 32.66 Mbit/s
  95th percentile per-packet one-way delay: 53.746 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 32.66 Mbit/s
  95th percentile per-packet one-way delay: 53.746 ms
  Loss rate: 0.69%
Run 6: Report of LEDBAT — Data Link

![Graph: Throughput vs Time]

- **Flow 1 ingress (mean 32.78 Mbit/s)**
- **Flow 1 egress (mean 32.66 Mbit/s)**

![Graph: Packet round-trip delay vs Time]

- **Flow 1 (95th percentile 53.75 ms)**
Run 7: Statistics of LEDBAT

Start at: 2018-06-20 18:44:09
End at: 2018-06-20 18:44:39
Local clock offset: -0.119 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 55.043 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 32.38 Mbit/s
95th percentile per-packet one-way delay: 55.043 ms
Loss rate: 0.70%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-06-20 19:04:45
End at: 2018-06-20 19:05:15
Local clock offset: -0.164 ms
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 31.91 Mbit/s
  95th percentile per-packet one-way delay: 54.514 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 31.91 Mbit/s
  95th percentile per-packet one-way delay: 54.514 ms
  Loss rate: 0.70%
Run 8: Report of LEDBAT — Data Link

![Graph of throughput over time showing two lines representing Flow 1 ingress (mean 32.03 Mbit/s) and Flow 1 egress (mean 31.91 Mbit/s).]

![Graph of per-packet one-way delay over time showing data points for Flow 1 (95th percentile 54.51 ms).]
Run 9: Statistics of LEDBAT

Start at: 2018-06-20 19:25:36
End at: 2018-06-20 19:26:06
Local clock offset: -0.079 ms
Remote clock offset: 1.276 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 53.592 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 53.592 ms
Loss rate: 0.73%
Run 9: Report of LEDBAT — Data Link

Graphs showing throughput and packet delay over time.
Run 10: Statistics of LEDBAT

End at: 2018-06-20 19:46:44
Local clock offset: 0.226 ms
Remote clock offset: 0.15 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 54.882 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 54.882 ms
Loss rate: 0.71%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-20 16:57:10
End at: 2018-06-20 16:57:40
Local clock offset: -0.063 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 519.13 Mbit/s
95th percentile per-packet one-way delay: 167.200 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 519.13 Mbit/s
95th percentile per-packet one-way delay: 167.200 ms
Loss rate: 0.71%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-20 17:17:38
End at: 2018-06-20 17:18:08
Local clock offset: -0.013 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2018-06-20 21:07:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 525.02 Mbit/s
95th percentile per-packet one-way delay: 80.723 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 525.02 Mbit/s
95th percentile per-packet one-way delay: 80.723 ms
Loss rate: 0.72%
Run 2: Report of PCC-Allegro — Data Link

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

![Graph 2: Packet Delay over time](image2)
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-20 17:38:34
End at: 2018-06-20 17:39:04
Local clock offset: -0.019 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2018-06-20 21:08:04
# Datalink statistics
  -- Total of 1 flow:
  Average throughput: 566.22 Mbit/s
  95th percentile per-packet one-way delay: 165.951 ms
  Loss rate: 1.50%
  -- Flow 1:
  Average throughput: 566.22 Mbit/s
  95th percentile per-packet one-way delay: 165.951 ms
  Loss rate: 1.50%
Run 3: Report of PCC-Allegro — Data Link

![Throughput Graph]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 572.83 Mbit/s)  Flow 1 egress (mean 566.22 Mbit/s)

![Delay Graph]

Per-packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 165.95 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-20 17:59:00
End at: 2018-06-20 17:59:30
Local clock offset: -0.032 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-06-20 21:08:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 501.83 Mbit/s
95th percentile per-packet one-way delay: 190.394 ms
Loss rate: 2.86%
-- Flow 1:
Average throughput: 501.83 Mbit/s
95th percentile per-packet one-way delay: 190.394 ms
Loss rate: 2.86%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 514.81 Mbit/s)
- Flow 1 egress (mean 501.83 Mbit/s)

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

- Flow 1 (95th percentile 190.39 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-20 18:19:22
End at: 2018-06-20 18:19:52
Local clock offset: 0.011 ms
Remote clock offset: 0.441 ms

# Below is generated by plot.py at 2018-06-20 21:08:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 575.94 Mbit/s
95th percentile per-packet one-way delay: 89.594 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 575.94 Mbit/s
95th percentile per-packet one-way delay: 89.594 ms
Loss rate: 0.63%
Run 5: Report of PCC-Allegro — Data Link

![Graph showing data link throughput and delay over time](image_url)
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-20 18:40:08  
End at: 2018-06-20 18:40:38  
Local clock offset: -0.008 ms  
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-06-20 21:09:12  
# Datalink statistics

-- Total of 1 flow:
Average throughput: 559.39 Mbit/s  
95th percentile per-packet one-way delay: 138.506 ms  
Loss rate: 0.56%

-- Flow 1:
Average throughput: 559.39 Mbit/s  
95th percentile per-packet one-way delay: 138.506 ms  
Loss rate: 0.56%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-20 19:00:20
End at: 2018-06-20 19:00:50
Local clock offset: -0.067 ms
Remote clock offset: -1.49 ms

# Below is generated by plot.py at 2018-06-20 21:16:09
# Datalink statistics
  -- Total of 1 flow:
  Average throughput: 582.76 Mbit/s
  95th percentile per-packet one-way delay: 108.555 ms
  Loss rate: 0.92%
  -- Flow 1:
  Average throughput: 582.76 Mbit/s
  95th percentile per-packet one-way delay: 108.555 ms
  Loss rate: 0.92%
Run 7: Report of PCC-Allegro — Data Link

[Graph showing throughput and packet delay over time for two flows, labeled 'Flow 1 ingress (mean 586.05 Mbit/s)' and 'Flow 1 egress (mean 582.76 Mbit/s).']
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-20 19:21:06
End at: 2018-06-20 19:21:36
Local clock offset: 0.02 ms
Remote clock offset: 1.327 ms

# Below is generated by plot.py at 2018-06-20 21:16:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 575.06 Mbit/s
95th percentile per-packet one-way delay: 190.079 ms
Loss rate: 2.28%
-- Flow 1:
Average throughput: 575.06 Mbit/s
95th percentile per-packet one-way delay: 190.079 ms
Loss rate: 2.28%
Run 8: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet delay over time for Flow 1. The graph includes lines for flow ingress and egress with mean speeds of 586.40 Mbit/s and 575.06 Mbit/s, respectively. Additionally, a line indicating the 95th percentile delay of 190.80 ms is shown.]
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-20 19:41:58
End at: 2018-06-20 19:42:28
Local clock offset: -0.099 ms
Remote clock offset: 0.289 ms

# Below is generated by plot.py at 2018-06-20 21:16:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 551.04 Mbit/s
95th percentile per-packet one-way delay: 98.014 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 551.04 Mbit/s
95th percentile per-packet one-way delay: 98.014 ms
Loss rate: 0.96%
Run 9: Report of PCC-Allegro — Data Link

![Throughput vs Time Graph]

![Packet Delay vs Time Graph]

Flow 1 ingress (mean 554.42 Mbit/s) vs Flow 1 egress (mean 551.04 Mbit/s)

Flow 1 [95th percentile 98.01 ms]
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-20 20:02:30
End at: 2018-06-20 20:03:00
Local clock offset: -0.079 ms
Remote clock offset: 0.242 ms

# Below is generated by plot.py at 2018-06-20 21:16:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 518.65 Mbit/s
95th percentile per-packet one-way delay: 186.721 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 518.65 Mbit/s
95th percentile per-packet one-way delay: 186.721 ms
Loss rate: 2.54%
Run 10: Report of PCC-Allegro — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 ingress (mean 530.24 Mbit/s)**
- **Flow 1 egress (mean 518.55 Mbit/s)**

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

- **Flow 1 (95th percentile 106.72 ms)**
Run 1: Statistics of PCC-Expr

Start at: 2018-06-20 16:58:34
End at: 2018-06-20 16:59:04
Local clock offset: -0.204 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-06-20 21:16:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.19 Mbit/s
95th percentile per-packet one-way delay: 192.734 ms
Loss rate: 5.52%
-- Flow 1:
Average throughput: 258.19 Mbit/s
95th percentile per-packet one-way delay: 192.734 ms
Loss rate: 5.52%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 272.30 Mbit/s)
- Flow 1 egress (mean 258.19 Mbit/s)
- Flow 1 (95th percentile 192.73 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-06-20 17:19:02
End at: 2018-06-20 17:19:32
Local clock offset: -0.123 ms
Remote clock offset: -0.466 ms

# Below is generated by plot.py at 2018-06-20 21:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 310.33 Mbit/s
95th percentile per-packet one-way delay: 190.127 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 310.33 Mbit/s
95th percentile per-packet one-way delay: 190.127 ms
Loss rate: 1.08%
Run 2: Report of PCC-Expr — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 312.60 Mbit/s)
- Flow 1 egress (mean 310.33 Mbit/s)

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

- Flow 1 (95th percentile 190.13 ms)
Run 3: Statistics of PCC-Expr

Start at: 2018-06-20 17:39:59  
End at: 2018-06-20 17:40:29  
Local clock offset: 0.164 ms  
Remote clock offset: 1.166 ms

# Below is generated by plot.py at 2018-06-20 21:17:55  
# Datalink statistics

-- Total of 1 flow:
Average throughput: 105.53 Mbit/s
95th percentile per-packet one-way delay: 52.878 ms
Loss rate: 0.36%

-- Flow 1:
Average throughput: 105.53 Mbit/s
95th percentile per-packet one-way delay: 52.878 ms
Loss rate: 0.36%
Run 3: Report of PCC-Expr — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with mean speeds of 105.54 Mbit/s and 105.53 Mbit/s, respectively.]

![Graph showing per-packet end-to-end delay over time for Flow 1 with 95th percentile of 52.88 ms.]

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Run 4: Statistics of PCC-Expr

Start at: 2018-06-20 18:00:23
End at: 2018-06-20 18:00:53
Local clock offset: -0.111 ms
Remote clock offset: 0.315 ms

# Below is generated by plot.py at 2018-06-20 21:17:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.90 Mbit/s
95th percentile per-packet one-way delay: 130.955 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 162.90 Mbit/s
95th percentile per-packet one-way delay: 130.955 ms
Loss rate: 1.49%
Run 4: Report of PCC-Expr — Data Link

![Graph showing throughput over time for different flows.](image)

- Flow 1 ingress (mean 164.79 Mbit/s)
- Flow 1 egress (mean 162.90 Mbit/s)

![Graph showing RTT over time for flow 1.](image)

- Flow 1 (95th percentile 130.96 ms)
Run 5: Statistics of PCC-Expr

Start at: 2018-06-20 18:20:47
End at: 2018-06-20 18:21:17
Local clock offset: 0.051 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-20 21:24:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 334.98 Mbit/s
95th percentile per-packet one-way delay: 129.397 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 334.98 Mbit/s
95th percentile per-packet one-way delay: 129.397 ms
Loss rate: 2.39%
Run 5: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 341.94 Mbit/s)**
- **Flow 1 egress (mean 334.98 Mbit/s)**

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

- **Flow 1 (95th percentile 129.40 ms)**
Run 6: Statistics of PCC-Expr

Start at: 2018-06-20 18:41:35  
End at: 2018-06-20 18:42:05  
Local clock offset: 0.004 ms  
Remote clock offset: -1.427 ms

# Below is generated by plot.py at 2018-06-20 21:24:37  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 256.94 Mbit/s  
95th percentile per-packet one-way delay: 132.229 ms  
Loss rate: 0.99%
-- Flow 1:
Average throughput: 256.94 Mbit/s  
95th percentile per-packet one-way delay: 132.229 ms  
Loss rate: 0.99%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 258.61 Mbit/s)
- Flow 1 egress (mean 256.94 Mbit/s)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-20 19:01:46
End at: 2018-06-20 19:02:16
Local clock offset: 0.11 ms
Remote clock offset: -0.374 ms

# Below is generated by plot.py at 2018-06-20 21:26:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 325.04 Mbit/s
95th percentile per-packet one-way delay: 122.527 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 325.04 Mbit/s
95th percentile per-packet one-way delay: 122.527 ms
Loss rate: 1.71%
Run 7: Report of PCC-Expr — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 329.50 Mbit/s)
- Flow 1 egress (mean 325.04 Mbit/s)

![Packet Delay Graph](image)

- Flow 1 (95th percentile 122.53 ms)
Run 8: Statistics of PCC-Expr

End at: 2018-06-20 19:23:02
Local clock offset: 0.086 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-20 21:27:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.11 Mbit/s
95th percentile per-packet one-way delay: 149.828 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 333.11 Mbit/s
95th percentile per-packet one-way delay: 149.828 ms
Loss rate: 0.55%
Run 8: Report of PCC-Expr — Data Link

![Graph of Throughput Over Time](image1)

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

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Run 9: Statistics of PCC-Expr

Local clock offset: -0.014 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 374.26 Mbit/s
95th percentile per-packet one-way delay: 152.045 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 374.26 Mbit/s
95th percentile per-packet one-way delay: 152.045 ms
Loss rate: 2.20%
Run 9: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 381.31 Mbit/s)
- Flow 1 egress (mean 374.26 Mbit/s)

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

- Flow 1 (95th percentile 152.04 ms)
Run 10: Statistics of PCC-Expr

Start at: 2018-06-20 20:03:53
End at: 2018-06-20 20:04:23
Local clock offset: 0.043 ms
Remote clock offset: -1.308 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.05 Mbit/s
95th percentile per-packet one-way delay: 162.786 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 203.05 Mbit/s
95th percentile per-packet one-way delay: 162.786 ms
Loss rate: 1.11%
Run 10: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay over time for Flow 1. The graph indicates a spike in throughput and packet delay around the 15-second mark, with a mean throughput of 204.63 Mbit/s and a 95th percentile delay of 162.79 ms.](image-url)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-20 16:53:37
End at: 2018-06-20 16:54:07
Local clock offset: 0.062 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 53.951 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 58.62 Mbit/s
95th percentile per-packet one-way delay: 53.951 ms
Loss rate: 0.59%
Run 1: Report of QUIC Cubic — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 58.75 Mbit/s)
- Flow 1 egress (mean 58.62 Mbit/s)

![Round-trip Time Graph]

- Flow 1 (95th percentile 53.95 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-20 17:14:03
End at: 2018-06-20 17:14:33
Local clock offset: ~0.06 ms
Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.16%
Run 2: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet round-trip delay over time for Flow 1 with ingress and egress data rates of 40.41 Mbit/s and 40.49 Mbit/s respectively. The graphs display oscillations in throughput and packet delay during the test period.]
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-20 17:34:54
End at: 2018-06-20 17:35:24
Local clock offset: -0.048 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.41 Mbit/s
95th percentile per-packet one-way delay: 50.492 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 67.41 Mbit/s
95th percentile per-packet one-way delay: 50.492 ms
Loss rate: 0.50%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 67.52 Mbit/s)
- Flow 1 egress (mean 67.41 Mbit/s)

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

- Flow 1 (95th percentile 50.49 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-20 17:55:25
End at: 2018-06-20 17:55:55
Local clock offset: -0.032 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 60.74 Mbit/s
  95th percentile per-packet one-way delay: 53.814 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 60.74 Mbit/s
  95th percentile per-packet one-way delay: 53.814 ms
  Loss rate: 0.52%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-20 18:15:45
End at: 2018-06-20 18:16:15
Local clock offset: 0.374 ms
Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
    Average throughput: 68.35 Mbit/s
    95th percentile per-packet one-way delay: 50.672 ms
    Loss rate: 0.51%
-- Flow 1:
    Average throughput: 68.35 Mbit/s
    95th percentile per-packet one-way delay: 50.672 ms
    Loss rate: 0.51%
Run 5: Report of QUIC Cubic — Data Link

![Graph of throughput and packet delay over time](image1)

- **Flow 1 ingress (mean 68.46 Mbit/s)**
- **Flow 1 egress (mean 68.35 Mbit/s)**

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

- **Flow 1 (95th percentile 50.67 ms)**
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-20 18:36:31
End at: 2018-06-20 18:37:01
Local clock offset: -0.092 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 53.419 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 62.90 Mbit/s
95th percentile per-packet one-way delay: 53.419 ms
Loss rate: 0.49%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-20 18:56:45
End at: 2018-06-20 18:57:15
Local clock offset: -0.129 ms
Remote clock offset: -0.291 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 41.95 Mbit/s
  95th percentile per-packet one-way delay: 53.763 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 41.95 Mbit/s
  95th percentile per-packet one-way delay: 53.763 ms
  Loss rate: 0.77%
Run 7: Report of QUIC Cubic — Data Link

[Graphs showing throughput and packet delivery time.]
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-20 19:17:34
End at: 2018-06-20 19:18:04
Local clock offset: 0.02 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.61 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 52.61 Mbit/s
95th percentile per-packet one-way delay: 50.506 ms
Loss rate: 0.52%
Run 8: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 52.70 Mbps)
- Flow 1 egress (mean 52.61 Mbps)

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

- Flow 1 (95th percentile 50.51 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-20 19:38:24
End at: 2018-06-20 19:38:54
Local clock offset: 0.202 ms
Remote clock offset: -1.309 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 55.294 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 63.54 Mbit/s
95th percentile per-packet one-way delay: 55.294 ms
Loss rate: 0.56%
Run 9: Report of QUIC Cubic — Data Link

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

![Graph showing packet delivery time for Flow 1 with 95th percentile](image)
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-20 19:58:56
End at: 2018-06-20 19:59:26
Local clock offset: -0.034 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.75 Mbit/s
95th percentile per-packet one-way delay: 53.828 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 63.75 Mbit/s
95th percentile per-packet one-way delay: 53.828 ms
Loss rate: 0.51%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-06-20 16:52:32
End at: 2018-06-20 16:53:02
Local clock offset: ~0.26 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.504 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.504 ms
Loss rate: 0.38%
Run 1: Report of SCReAM — Data Link

![Throughput Graph](image1)

![Ping Graph](image2)

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Run 2: Statistics of SCReAM

Start at: 2018-06-20 17:12:57
End at: 2018-06-20 17:13:27
Local clock offset: -0.2 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.612 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.612 ms
Loss rate: 0.39%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-06-20 17:33:48
End at: 2018-06-20 17:34:18
Local clock offset: -0.175 ms
Remote clock offset: -1.311 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 55.042 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 55.042 ms
Loss rate: 0.38%
Run 3: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mb/s)
- Flow 1 egress (mean 0.21 Mb/s)

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

- Flow 1 (95th percentile 55.04 ms)
Run 4: Statistics of SCReAM

Start at: 2018-06-20 17:54:19
End at: 2018-06-20 17:54:49
Local clock offset: -0.055 ms
Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.528 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.528 ms
  Loss rate: 0.39%
Run 4: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mbps)
- Flow 1 egress (mean 0.21 Mbps)

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

- Flow 1 (95th percentile 53.53 ms)
Run 5: Statistics of SCReAM

Start at: 2018-06-20 18:14:40
End at: 2018-06-20 18:15:10
Local clock offset: 0.139 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.008 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.008 ms
Loss rate: 0.38%
Run 5: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 51.01 ms)
Run 6: Statistics of SCReAM

Start at: 2018-06-20 18:35:25
End at: 2018-06-20 18:35:55
Local clock offset: 0.032 ms
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.244 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.244 ms
Loss rate: 0.38%
Run 6: Report of SCReAM — Data Link

![Graph of throughput over time]

- **Flow 1 ingress (mean 0.21 Mbit/s)**
- **Flow 1 egress (mean 0.21 Mbit/s)**

![Graph of packet one way delay over time]

- **Flow 1 (95th percentile 54.24 ms)**
Run 7: Statistics of SCReAM

End at: 2018-06-20 18:56:09
Local clock offset: -0.215 ms
Remote clock offset: -0.347 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.748 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 50.748 ms
Loss rate: 0.38%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

End at: 2018-06-20 19:16:58
Local clock offset: 0.169 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.642 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.642 ms
  Loss rate: 0.26%
Run 8: Report of SCReAM — Data Link

![Throughput Graph]

![Packet Delay Graph]

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

Flow 1 (95th percentile 50.64 ms)
Run 9: Statistics of SCReAM

Start at: 2018-06-20 19:37:19
End at: 2018-06-20 19:37:49
Local clock offset: 0.179 ms
Remote clock offset: 0.297 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.704 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.704 ms
Loss rate: 0.26%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-06-20 19:57:50
End at: 2018-06-20 19:58:20
Local clock offset: -0.176 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
 Average throughput: 0.21 Mbit/s
 95th percentile per-packet one-way delay: 53.934 ms
 Loss rate: 0.38%
-- Flow 1:
 Average throughput: 0.21 Mbit/s
 95th percentile per-packet one-way delay: 53.934 ms
 Loss rate: 0.38%
Run 10: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)

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

- Flow 1 (95th percentile 53.93 ms)
Run 1: Statistics of Sprout

Start at: 2018-06-20 16:41:46
End at: 2018-06-20 16:42:16
Local clock offset: -0.226 ms
Remote clock offset: -1.27 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 55.886 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 55.886 ms
Loss rate: 0.23%
Run 1: Report of Sprout — Data Link

![Graph of Throughput vs Time (Mbps)]

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

Start at: 2018-06-20 17:02:21
End at: 2018-06-20 17:02:51
Local clock offset: -0.083 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 54.863 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 54.863 ms
Loss rate: 0.20%
Run 2: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 6.62 Mb/s)**
- **Flow 1 egress (mean 6.62 Mb/s)**

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

- **Flow 1 95th percentile 54.86 ms**

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Run 3: Statistics of Sprout

Start at: 2018-06-20 17:23:01
End at: 2018-06-20 17:23:31
Local clock offset: 0.212 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
   -- Total of 1 flow:
      Average throughput: 5.98 Mbit/s
      95th percentile per-packet one-way delay: 54.802 ms
      Loss rate: 0.10%
   -- Flow 1:
      Average throughput: 5.98 Mbit/s
      95th percentile per-packet one-way delay: 54.802 ms
      Loss rate: 0.10%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-06-20 17:43:52
End at: 2018-06-20 17:44:22
Local clock offset: -0.053 ms
Remote clock offset: 1.219 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 53.415 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 53.415 ms
Loss rate: 0.12%
Run 4: Report of Sprout — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 6.12 Mbps)
  - Flow 1 egress (mean 6.13 Mbps)

- Packet one-way delay (ms):
  - Flow 1 (95th percentile 53.41 ms)
Run 5: Statistics of Sprout

Start at: 2018-06-20 18:04:07
End at: 2018-06-20 18:04:37
Local clock offset: -0.15 ms
Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 54.592 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 6.63 Mbit/s
95th percentile per-packet one-way delay: 54.592 ms
Loss rate: 0.44%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-06-20 18:24:42
End at: 2018-06-20 18:25:12
Local clock offset: 0.128 ms
Remote clock offset: -1.159 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 55.983 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 7.48 Mbit/s
95th percentile per-packet one-way delay: 55.983 ms
Loss rate: 0.45%
Run 6: Report of Sprout — Data Link

![Graph showing throughput and one-way delay over time for Flow 1 ingress and egress.]
Run 7: Statistics of Sprout

Start at: 2018-06-20 18:45:17
End at: 2018-06-20 18:45:47
Local clock offset: -0.042 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 54.567 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 7.24 Mbit/s
95th percentile per-packet one-way delay: 54.567 ms
Loss rate: 0.17%
Run 7: Report of Sprout — Data Link

![Graph 1: Throughput vs Time (Mbps)]
- Flow 1 ingress (mean 7.23 Mbit/s)
- Flow 1 egress (mean 7.24 Mbit/s)

![Graph 2: Per packet one way delay (ms)]
- Flow 1 95th percentile 54.57 ms
Run 8: Statistics of Sprout

Start at: 2018-06-20 19:05:53
End at: 2018-06-20 19:06:23
Local clock offset: -0.095 ms
Remote clock offset: -0.441 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 54.661 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 54.661 ms
Loss rate: 0.22%
Run 8: Report of Sprout — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 6.93 Mbit/s)
- Flow 1 egress (mean 6.95 Mbit/s)

![Graph 2](image2.png)

- Flow 1 95th percentile 54.66 ms
Run 9: Statistics of Sprout

Start at: 2018-06-20 19:26:43
Local clock offset: 0.083 ms
Remote clock offset: -0.215 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 6.00 Mbit/s
  95th percentile per-packet one-way delay: 54.265 ms
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 6.00 Mbit/s
  95th percentile per-packet one-way delay: 54.265 ms
  Loss rate: 0.64%
Run 9: Report of Sprout — Data Link

![Graph of Throughput (Mb/s)]

![Graph of Per-packet one-way delay (ms)]
Run 10: Statistics of Sprout

Start at: 2018-06-20 19:47:21
End at: 2018-06-20 19:47:51
Local clock offset: -0.144 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-20 21:28:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 54.210 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 6.29 Mbit/s
95th percentile per-packet one-way delay: 54.210 ms
Loss rate: 0.30%
Run 10: Report of Sprout — Data Link

![Graph of throughput over time]

- Flow 1 ingress (mean 6.26 Mbit/s)
- Flow 1 egress (mean 6.26 Mbit/s)

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

- Flow 1 (95th percentile 54.21 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-20 16:44:28
End at: 2018-06-20 16:44:58
Local clock offset: -0.147 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 242.44 Mbit/s
  95th percentile per-packet one-way delay: 53.685 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 242.44 Mbit/s
  95th percentile per-packet one-way delay: 53.685 ms
  Loss rate: 0.37%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-20 17:05:09
End at: 2018-06-20 17:05:39
Local clock offset: -0.018 ms
Remote clock offset: -0.335 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 121.90 Mbit/s
95th percentile per-packet one-way delay: 54.340 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 121.90 Mbit/s
95th percentile per-packet one-way delay: 54.340 ms
Loss rate: 0.79%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-20 17:25:45
End at: 2018-06-20 17:26:15
Local clock offset: -0.074 ms
Remote clock offset: 1.318 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 238.57 Mbit/s
  95th percentile per-packet one-way delay: 52.665 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 238.57 Mbit/s
  95th percentile per-packet one-way delay: 52.665 ms
  Loss rate: 0.34%
Run 3: Report of TaoVA-100x — Data Link

![Graph 1](Image 1)

![Graph 2](Image 2)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-20 17:46:35
End at: 2018-06-20 17:47:05
Local clock offset: 0.063 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 54.262 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 12.02 Mbit/s
95th percentile per-packet one-way delay: 54.262 ms
Loss rate: 0.38%
Run 4: Report of TaoVA-100x — Data Link

[Graphs showing throughput and delay over time]
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-20 18:06:54
End at: 2018-06-20 18:07:24
Local clock offset: 0.197 ms
Remote clock offset: 1.373 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.59 Mbit/s
95th percentile per-packet one-way delay: 52.938 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 134.59 Mbit/s
95th percentile per-packet one-way delay: 52.938 ms
Loss rate: 0.19%
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-20 18:27:30
End at: 2018-06-20 18:28:00
Local clock offset: 0.199 ms
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.01 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 225.01 Mbit/s
95th percentile per-packet one-way delay: 54.140 ms
Loss rate: 0.35%
Run 6: Report of TaoVA-100x — Data Link

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

- **Throughput**: The graph illustrates the throughput for two flows (ingress and egress) over time. The throughput is measured in Mbit/s.
- **Packet Delay**: The second graph displays the packet delay for Flow 1, showing the 95th percentile delay.
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-20 18:48:02
End at: 2018-06-20 18:48:32
Local clock offset: -0.229 ms
Remote clock offset: -0.247 ms
Run 7: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 114.38 Mbit/s)
- Flow 1 egress (mean 114.39 Mbit/s)

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

- Flow 1 (95th percentile 53.83 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-20 19:08:40
End at: 2018-06-20 19:09:10
Local clock offset: -0.04 ms
Remote clock offset: -0.296 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 113.86 Mbit/s
95th percentile per-packet one-way delay: 52.079 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 113.86 Mbit/s
95th percentile per-packet one-way delay: 52.079 ms
Loss rate: 0.02%
Run 8: Report of TaoVA-100x — Data Link

Two graphs are shown:

1. A graph showing throughput (Mbps) over time (s). The x-axis represents time in seconds, ranging from 0 to 30. The y-axis represents throughput in Mbps, ranging from 0 to 250. There are two lines: one for Flow 1 ingress (mean 113.49 Mbps) and another for Flow 1 egress (mean 113.86 Mbps).

2. A graph showing packet one-way delay (ms) over time (s). The x-axis represents time in seconds, ranging from 0 to 30. The y-axis represents packet delay in milliseconds, ranging from 50.0 to 70.0. The graph shows the 95th percentile delay as 52.08 ms.
Run 9: Statistics of TaoVA-100x

End at: 2018-06-20 19:29:58
Local clock offset: -0.03 ms
Remote clock offset: -0.224 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 106.65 Mbit/s
95th percentile per-packet one-way delay: 53.793 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 106.65 Mbit/s
95th percentile per-packet one-way delay: 53.793 ms
Loss rate: 0.27%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-20 19:50:08
End at: 2018-06-20 19:50:38
Local clock offset: 0.064 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.11 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 14.11 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.36%
Run 10: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 14.11 Mbit/s)**
- **Flow 1 egress (mean 14.11 Mbit/s)**

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

- **Flow 1 (95th percentile 53.92 ms)**
Run 1: Statistics of TCP Vegas

Start at: 2018-06-20 16:56:01
End at: 2018-06-20 16:56:31
Local clock offset: -0.078 ms
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 55.674 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 55.674 ms
Loss rate: 0.32%
Run 1: Report of TCP Vegas — Data Link

![Graph 1](image1)

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

Start at: 2018-06-20 17:16:26
End at: 2018-06-20 17:16:56
Local clock offset: -0.237 ms
Remote clock offset: 1.123 ms

# Below is generated by plot.py at 2018-06-20 21:31:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.76 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 134.76 Mbit/s
95th percentile per-packet one-way delay: 53.830 ms
Loss rate: 0.31%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-06-20 17:37:18
End at: 2018-06-20 17:37:48
Local clock offset: -0.091 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-20 21:33:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.79 Mbit/s
95th percentile per-packet one-way delay: 61.598 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 222.79 Mbit/s
95th percentile per-packet one-way delay: 61.598 ms
Loss rate: 0.36%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-06-20 17:57:49
End at: 2018-06-20 17:58:19
Local clock offset: -0.008 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2018-06-20 21:33:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 128.48 Mbit/s
95th percentile per-packet one-way delay: 54.763 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 128.48 Mbit/s
95th percentile per-packet one-way delay: 54.763 ms
Loss rate: 0.37%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-06-20 18:18:09
End at: 2018-06-20 18:18:39
Local clock offset: -0.045 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-06-20 21:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 144.77 Mbit/s
95th percentile per-packet one-way delay: 61.341 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 144.77 Mbit/s
95th percentile per-packet one-way delay: 61.341 ms
Loss rate: 0.15%
Run 5: Report of TCP Vegas — Data Link

![Graph of throughput and packet delay over time]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 144.46 Mbit/s)  Flow 1 egress (mean 144.77 Mbit/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 61.34 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-06-20 18:38:56
End at: 2018-06-20 18:39:26
Local clock offset: -0.121 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-06-20 21:34:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 153.20 Mbit/s
95th percentile per-packet one-way delay: 54.381 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 153.20 Mbit/s
95th percentile per-packet one-way delay: 54.381 ms
Loss rate: 0.34%
Run 6: Report of TCP Vegas — Data Link

![Throughput (Mbps)](image)

- **Flow 1 ingress (mean 153.18 Mbit/s)**
- **Flow 1 egress (mean 153.20 Mbit/s)**

![Packet transmission delay (ms)](image)

- **Flow 1 (95th percentile 54.38 ms)**
Run 7: Statistics of TCP Vegas

Start at: 2018-06-20 18:59:09
End at: 2018-06-20 18:59:39
Local clock offset: -0.082 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2018-06-20 21:34:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 103.71 Mbit/s
95th percentile per-packet one-way delay: 54.794 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 103.71 Mbit/s
95th percentile per-packet one-way delay: 54.794 ms
Loss rate: 0.31%
Run 7: Report of TCP Vegas — Data Link

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

![Graph 2: Packet delay over time](image2)

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Flow 1 ingress (mean 103.67 Mbit/s)  Flow 1 egress (mean 103.71 Mbit/s)

Flow 1 (95th percentile 54.79 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-06-20 19:19:57
End at: 2018-06-20 19:20:27
Local clock offset: -0.07 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2018-06-20 21:34:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 54.988 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 54.988 ms
Loss rate: 0.30%
Run 8: Report of TCP Vegas — Data Link

![Throughput vs Time Graph](image1)

- Flow 1 ingress (mean 59.29 Mbit/s)
- Flow 1 egress (mean 59.32 Mbit/s)

![Packet Delay vs Time Graph](image2)

- Flow 1 (95th percentile 54.99 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-06-20 19:40:49
End at: 2018-06-20 19:41:19
Local clock offset: -0.026 ms
Remote clock offset: 0.358 ms

# Below is generated by plot.py at 2018-06-20 21:34:00
# Datalink statistics
---
Total of 1 flow:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 54.570 ms
Loss rate: 0.40%
--- Flow 1:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 54.570 ms
Loss rate: 0.40%
Run 9: Report of TCP Vegas — Data Link

![Graph 1: TCP Vegas Throughput](image1)

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

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Run 10: Statistics of TCP Vegas

Start at: 2018-06-20 20:01:21
End at: 2018-06-20 20:01:51
Local clock offset: -0.093 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-20 21:34:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.12 Mbit/s
95th percentile per-packet one-way delay: 54.788 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 79.12 Mbit/s
95th percentile per-packet one-way delay: 54.788 ms
Loss rate: 0.33%
Run 10: Report of TCP Vegas — Data Link

![Graph of throughput and packet delay over time]

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 79.11 Mbps)
  - Flow 1 egress (mean 79.12 Mbps)

- **Packet delay (ms)**
  - Flow 1 (99th percentile 54.79 ms)
Run 1: Statistics of Verus

Start at: 2018-06-20 16:51:08
End at: 2018-06-20 16:51:38
Local clock offset: -0.026 ms
Remote clock offset: 1.157 ms

# Below is generated by plot.py at 2018-06-20 21:36:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.59 Mbit/s
95th percentile per-packet one-way delay: 153.634 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 282.59 Mbit/s
95th percentile per-packet one-way delay: 153.634 ms
Loss rate: 0.17%
Run 1: Report of Verus — Data Link

![Graph of throughput and packet delay over time]

- Flow 1 ingress (mean 283.76 Mbit/s)
- Flow 1 egress (mean 282.59 Mbit/s)

- Flow 1 (95th percentile 153.63 ms)
Run 2: Statistics of Verus

Start at: 2018-06-20 17:11:33
End at: 2018-06-20 17:12:03
Local clock offset: -0.034 ms
Remote clock offset: -0.188 ms

# Below is generated by plot.py at 2018-06-20 21:37:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.47 Mbit/s
95th percentile per-packet one-way delay: 228.309 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 276.47 Mbit/s
95th percentile per-packet one-way delay: 228.309 ms
Loss rate: 1.40%
Run 2: Report of Verus — Data Link

---

**Graph 1:**
- X-axis: Time (s)
- Y-axis: Throughput (Mbps)
- Legend:
  - Flow 1 ingress (mean 281.54 Mbps)
  - Flow 1 egress (mean 276.47 Mbps)

**Graph 2:**
- X-axis: Time (s)
- Y-axis: Per-packet one-way delay (ms)
- Legend:
  - Flow 1 (95th percentile 228.31 ms)
Run 3: Statistics of Verus

Start at: 2018-06-20 17:32:24
End at: 2018-06-20 17:32:54
Local clock offset: -0.066 ms
Remote clock offset: -1.195 ms

# Below is generated by plot.py at 2018-06-20 21:38:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 298.64 Mbit/s
95th percentile per-packet one-way delay: 72.949 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 298.64 Mbit/s
95th percentile per-packet one-way delay: 72.949 ms
Loss rate: 0.26%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 298.72 Mbit/s)
- Flow 1 egress (mean 298.64 Mbit/s)

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

- Flow 1 (95th percentile 72.95 ms)
Run 4: Statistics of Verus

Start at: 2018-06-20 17:52:53
End at: 2018-06-20 17:53:23
Local clock offset: -0.21 ms
Remote clock offset: 0.184 ms

# Below is generated by plot.py at 2018-06-20 21:38:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 323.95 Mbit/s
  95th percentile per-packet one-way delay: 201.620 ms
  Loss rate: 0.78%
-- Flow 1:
  Average throughput: 323.95 Mbit/s
  95th percentile per-packet one-way delay: 201.620 ms
  Loss rate: 0.78%
Run 4: Report of Verus — Data Link

![Graph of throughput and packet delay over time](image-url)
Run 5: Statistics of Verus

Start at: 2018-06-20 18:13:19
End at: 2018-06-20 18:13:49
Local clock offset: -0.039 ms
Remote clock offset: -1.122 ms

# Below is generated by plot.py at 2018-06-20 21:38:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 234.11 Mbit/s
  95th percentile per-packet one-way delay: 116.133 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 234.11 Mbit/s
  95th percentile per-packet one-way delay: 116.133 ms
  Loss rate: 0.12%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-06-20 18:34:05
End at: 2018-06-20 18:34:35
Local clock offset: 0.004 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-06-20 21:38:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.83 Mbit/s
95th percentile per-packet one-way delay: 115.310 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 216.83 Mbit/s
95th percentile per-packet one-way delay: 115.310 ms
Loss rate: 0.10%
Run 6: Report of Verus — Data Link

![Graph of throughput and delay over time for Flow 1 with ingress and egress mean values.]
Run 7: Statistics of Verus

Start at: 2018-06-20 18:54:16
End at: 2018-06-20 18:54:46
Local clock offset: -0.109 ms
Remote clock offset: -0.419 ms

# Below is generated by plot.py at 2018-06-20 21:38:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.53 Mbit/s
95th percentile per-packet one-way delay: 121.231 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 279.53 Mbit/s
95th percentile per-packet one-way delay: 121.231 ms
Loss rate: 0.21%
Run 7: Report of Verus — Data Link

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

- **Flow 1 ingress** (mean 279.81 Mbit/s)
- **Flow 1 egress** (mean 279.53 Mbit/s)

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

- **Flow 1** (95th percentile 121.23 ms)
Run 8: Statistics of Verus

Start at: 2018-06-20 19:15:02
End at: 2018-06-20 19:15:32
Local clock offset: -0.081 ms
Remote clock offset: 1.145 ms

# Below is generated by plot.py at 2018-06-20 21:39:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 311.19 Mbit/s
95th percentile per-packet one-way delay: 221.939 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 311.19 Mbit/s
95th percentile per-packet one-way delay: 221.939 ms
Loss rate: 0.60%
Run 8: Report of Verus — Data Link

![Graph showing throughput and delay over time]

- **Flow 1 ingress** (mean 315.12 Mbit/s)
- **Flow 1 egress** (mean 311.19 Mbit/s)

- **First packet one way delay** (mean 221.94 ms)
Run 9: Statistics of Verus

Start at: 2018-06-20 19:35:55
End at: 2018-06-20 19:36:25
Local clock offset: 0.057 ms
Remote clock offset: 0.171 ms

# Below is generated by plot.py at 2018-06-20 21:41:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.93 Mbit/s
95th percentile per-packet one-way delay: 163.456 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 279.93 Mbit/s
95th percentile per-packet one-way delay: 163.456 ms
Loss rate: 0.95%
Run 9: Report of Verus — Data Link

![Graph showing throughput and packet delay over time for a network flow. The graph illustrates the variations in throughput and delay, with two distinct data flows indicated by different lines, showing the mean values and 95th percentile delay.]
Run 10: Statistics of Verus

Start at: 2018-06-20 19:56:25
End at: 2018-06-20 19:56:55
Local clock offset: -0.124 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-20 21:42:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 313.41 Mbit/s
95th percentile per-packet one-way delay: 198.945 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 313.41 Mbit/s
95th percentile per-packet one-way delay: 198.945 ms
Loss rate: 0.35%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 315.57 Mbps)
- Flow 1 egress (mean 313.41 Mbps)

![Graph 2: Ping 1 (mean)]

- Flow 1 (95th percentile 198.94 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-20 16:48:19
End at: 2018-06-20 16:48:49
Local clock offset: -0.12 ms
Remote clock offset: 1.262 ms

# Below is generated by plot.py at 2018-06-20 21:43:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.10 Mbit/s
95th percentile per-packet one-way delay: 54.766 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 357.10 Mbit/s
95th percentile per-packet one-way delay: 54.766 ms
Loss rate: 0.34%
Run 1: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 357.09 Mbit/s)  Flow 1 egress (mean 357.10 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 54.77 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-20 17:08:47
End at: 2018-06-20 17:09:17
Local clock offset: -0.032 ms
Remote clock offset: 1.054 ms

# Below is generated by plot.py at 2018-06-20 21:43:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 322.57 Mbit/s
95th percentile per-packet one-way delay: 54.177 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 322.57 Mbit/s
95th percentile per-packet one-way delay: 54.177 ms
Loss rate: 0.41%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-20 17:29:34
End at: 2018-06-20 17:30:04
Local clock offset: 0.11 ms
Remote clock offset: 0.181 ms

# Below is generated by plot.py at 2018-06-20 21:45:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 385.88 Mbit/s
95th percentile per-packet one-way delay: 54.326 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 385.88 Mbit/s
95th percentile per-packet one-way delay: 54.326 ms
Loss rate: 0.33%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-20 17:50:03
End at: 2018-06-20 17:50:34
Local clock offset: 0.125 ms
Remote clock offset: -1.049 ms

# Below is generated by plot.py at 2018-06-20 21:45:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 405.57 Mbit/s
95th percentile per-packet one-way delay: 54.206 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 405.57 Mbit/s
95th percentile per-packet one-way delay: 54.206 ms
Loss rate: 0.38%
Run 4: Report of PCC-Vivace — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 405.68 Mbit/s)  Flow 1 egress (mean 405.57 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 54.21 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-20 18:10:30
End at: 2018-06-20 18:11:00
Local clock offset: -0.072 ms
Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2018-06-20 21:45:43
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 366.59 Mbit/s
  95th percentile per-packet one-way delay: 51.656 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 366.59 Mbit/s
  95th percentile per-packet one-way delay: 51.656 ms
  Loss rate: 0.37%
Run 5: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 366.69 Mbit/s)
- Flow 1 egress (mean 366.59 Mbit/s)

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

- Flow 1 (95th percentile 51.66 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-20 18:31:17
End at: 2018-06-20 18:31:47
Local clock offset: 0.006 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2018-06-20 21:46:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 399.77 Mbit/s
95th percentile per-packet one-way delay: 132.824 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 399.77 Mbit/s
95th percentile per-packet one-way delay: 132.824 ms
Loss rate: 0.41%
Run 6: Report of PCC-Vivace — Data Link

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![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 399.98 Mbit/s)**
- **Flow 1 egress (mean 399.77 Mbit/s)**

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

- **Flow 1 (95th percentile 132.82 ms)**
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-20 18:51:29
End at: 2018-06-20 18:51:59
Local clock offset: -0.212 ms
Remote clock offset: -1.504 ms

# Below is generated by plot.py at 2018-06-20 21:46:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 345.28 Mbit/s
95th percentile per-packet one-way delay: 79.142 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 345.28 Mbit/s
95th percentile per-packet one-way delay: 79.142 ms
Loss rate: 0.45%
Run 7: Report of PCC-Vivace — Data Link
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-20 19:12:17
End at: 2018-06-20 19:12:47
Local clock offset: -0.071 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2018-06-20 21:47:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 343.87 Mbit/s
95th percentile per-packet one-way delay: 55.984 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 343.87 Mbit/s
95th percentile per-packet one-way delay: 55.984 ms
Loss rate: 0.35%
Run 8: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 343.85 Mbps)
- Flow 1 egress (mean 343.87 Mbps)

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

- Flow 1 (95th percentile 55.98 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-20 19:33:05
End at: 2018-06-20 19:33:35
Local clock offset: -0.013 ms
Remote clock offset: -1.329 ms

# Below is generated by plot.py at 2018-06-20 21:47:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 358.58 Mbit/s
95th percentile per-packet one-way delay: 67.678 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 358.58 Mbit/s
95th percentile per-packet one-way delay: 67.678 ms
Loss rate: 0.38%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-20 19:53:37  
End at: 2018-06-20 19:54:07  
Local clock offset: 0.087 ms  
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2018-06-20 21:47:31  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 373.20 Mbit/s  
95th percentile per-packet one-way delay: 56.724 ms  
Loss rate: 0.39%  
-- Flow 1:  
Average throughput: 373.20 Mbit/s  
95th percentile per-packet one-way delay: 56.724 ms  
Loss rate: 0.39%
Run 10: Report of PCC-Vivace — Data Link

![Graph of throughput and latency over time]

**Throughput (kb/s):**
- Flow 1 ingress (mean 373.36 Mbit/s)
- Flow 1 egress (mean 373.20 Mbit/s)

**Packet delay (ms):**
- Flow 1 (95th percentile 56.72 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-20 16:47:13
End at: 2018-06-20 16:47:43
Local clock offset: 0.119 ms
Remote clock offset: -0.284 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 54.383 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 54.383 ms
Loss rate: 0.43%
Run 1: Report of WebRTC media — Data Link

![Throughput Graph]

- **Flow 1 ingress (mean 1.65 Mbit/s)**
- **Flow 1 egress (mean 1.65 Mbit/s)**

![Delay Graph]

- **Flow 1 (95th percentile 54.38 ms)**

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Run 2: Statistics of WebRTC media

Start at: 2018-06-20 17:07:42
End at: 2018-06-20 17:08:12
Local clock offset: 0.0 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.475 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.475 ms
Loss rate: 0.43%
Run 2: Report of WebRTC media — Data Link

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

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

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

- **Flow 1 (95th percentile 50.48 ms)**
Run 3: Statistics of WebRTC media

Start at: 2018-06-20 17:28:28
End at: 2018-06-20 17:28:58
Local clock offset: -0.03 ms
Remote clock offset: -0.168 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.081 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.081 ms
Loss rate: 0.43%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-06-20 17:48:58
End at: 2018-06-20 17:49:28
Local clock offset: -0.014 ms
Remote clock offset: 0.073 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 53.916 ms
Loss rate: 0.36%
Run 4: Report of WebRTC media — Data Link

![Graph of throughput and delay over time for WebRTC media flow 1.](image-url)
Run 5: Statistics of WebRTC media

Start at: 2018-06-20 18:09:25
End at: 2018-06-20 18:09:55
Local clock offset: -0.112 ms
Remote clock offset: 0.134 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 53.757 ms
Loss rate: 0.37%
Run 5: Report of WebRTC media — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 1.96 Mbit/s)
- Flow 1 egress (mean 1.96 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 53.76 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-06-20 18:30:11
End at: 2018-06-20 18:30:41
Local clock offset: -0.011 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 53.984 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 53.984 ms
Loss rate: 0.37%
Run 6: Report of WebRTC media — Data Link

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

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

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

- Flow 1 (95th percentile 53.98 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-06-20 18:50:23
End at: 2018-06-20 18:50:53
Local clock offset: 0.075 ms
Remote clock offset: 1.177 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 49.080 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 49.080 ms
Loss rate: 0.40%
Run 7: Report of WebRTC media — Data Link

![Graph showing throughput and delay over time for a webRTC media flow]

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

![Graph showing packet loss and delay over time]

- Flow 1 (95th percentile 49.08 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-06-20 19:11:11
End at: 2018-06-20 19:11:41
Local clock offset: 0.048 ms
Remote clock offset: 0.262 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.125 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 50.125 ms
Loss rate: 0.37%
Run 8: Report of WebRTC media — Data Link

![Graph showing throughput and delay over time](image_url)
Run 9: Statistics of WebRTC media

End at: 2018-06-20 19:32:29
Local clock offset: 0.062 ms
Remote clock offset: -0.221 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.229 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.229 ms
Loss rate: 0.43%
Run 9: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 1.96 Mbit/s)  Flow 1 egress (mean 1.96 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 54.23 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-06-20 19:52:31
End at: 2018-06-20 19:53:01
Local clock offset: -0.094 ms
Remote clock offset: 0.262 ms

# Below is generated by plot.py at 2018-06-20 21:47:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 53.737 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 53.737 ms
Loss rate: 0.37%
Run 10: Report of WebRTC media — Data Link