Pantheon Report

Data path: GCE Sydney Ethernet (local) → GCE London Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times.
each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the
default Linux qdisc (pfifo_fast).

Git summary:
branch: master @ eb420b5be9bafcc22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322c9fae446ae37a522e53227db50
M datagram/sender.cc
third_party/fillp @ 11f8e462a2bf1c797253db7e8ca04076272baa4
third_party/genericCC @ 92498233288475c4d8c9ca143d28df70b8f6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c70d9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f6d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/indigo-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/no-calib @ 7224f2202e8a044d8306fa0b983ad84360c538d9
third_party/koho_cc @ 9c2f2e693303aee82ea808e6928eac4f1083a6681
M datagram/sender.cc
third_party/libutp @ b3465b94e2826f2b179eaeb4a906ce6b7cf3c
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db2674ccf993
third_party/pcc @ 1ac958fa0d66d18b623c091a55f3c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 7796ff1a82733a86b42f1bc8143ecb978f3c4f2
third_party/scream @ c3370f7d7bd17265a79e6b9e4016ad23f5966585
third_party/sourdough @ 61a4bfee74973437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2e6e6e088d9016a9f023df375ee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutcomm.cc
third_party/verus @ d4b4477e47c60a261149af2629652939f9a49
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f6f5c458019212041784ce3
third_party/webRTC @ f271183af822ee5d0031620f4bebf38aedc5581
test from GCE Sydney Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
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<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>75.26</td>
<td>135.94</td>
<td>0.00</td>
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<td>TCP Cubic</td>
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<td>58.13</td>
<td>141.05</td>
<td>0.00</td>
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<td>LEDBAT</td>
<td>10</td>
<td>3.48</td>
<td>136.70</td>
<td>0.00</td>
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<td>PCC</td>
<td>10</td>
<td>528.05</td>
<td>226.65</td>
<td>1.39</td>
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<td>59.95</td>
<td>135.82</td>
<td>0.00</td>
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<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>136.20</td>
<td>0.00</td>
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<td>WebRTC media</td>
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<td>0.06</td>
<td>136.48</td>
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<td>136.34</td>
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<td>110.84</td>
<td>136.00</td>
<td>0.01</td>
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<td>TCP Vegas</td>
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<td>25.89</td>
<td>137.60</td>
<td>0.00</td>
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<td>Verus</td>
<td>10</td>
<td>164.33</td>
<td>193.00</td>
<td>0.30</td>
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<td>Copa</td>
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<td>78.56</td>
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<td>FillP</td>
<td>10</td>
<td>771.74</td>
<td>215.19</td>
<td>4.17</td>
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<td>Indigo-1-32</td>
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<td>168.43</td>
<td>135.98</td>
<td>0.00</td>
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<td>Vivace-latency</td>
<td>10</td>
<td>302.47</td>
<td>138.28</td>
<td>0.00</td>
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<td>Vivace-loss</td>
<td>10</td>
<td>297.50</td>
<td>139.34</td>
<td>0.00</td>
</tr>
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<td>Vivace-LTE</td>
<td>10</td>
<td>313.08</td>
<td>149.33</td>
<td>0.03</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-10 22:08:04  
End at: 2018-04-10 22:08:34

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 77.18 Mbit/s
  95th percentile per-packet one-way delay: 134.596 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 77.18 Mbit/s
  95th percentile per-packet one-way delay: 134.596 ms
  Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link

![Graph showing throughput over time with two curves representing flow ingress and egress.]
Run 2: Statistics of TCP BBR

Start at: 2018-04-10 22:24:06
End at: 2018-04-10 22:24:36

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.08 Mbit/s
95th percentile per-packet one-way delay: 136.031 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.08 Mbit/s
95th percentile per-packet one-way delay: 136.031 ms
Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

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

- **Flow 1 ingress** (mean 74.08 Mbit/s)
- **Flow 1 egress** (mean 74.08 Mbit/s)

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

- **Flow 1** (95th percentile 136.03 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-04-10 22:40:17
End at: 2018-04-10 22:40:47

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 77.17 Mbit/s
  95th percentile per-packet one-way delay: 136.018 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 77.17 Mbit/s
  95th percentile per-packet one-way delay: 136.018 ms
  Loss rate: 0.00%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-04-10 22:56:08
End at: 2018-04-10 22:56:38

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.94 Mbit/s
95th percentile per-packet one-way delay: 136.069 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 75.94 Mbit/s
95th percentile per-packet one-way delay: 136.069 ms
Loss rate: 0.00%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-04-10 23:12:03
End at: 2018-04-10 23:12:33

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 135.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.66 Mbit/s
95th percentile per-packet one-way delay: 135.971 ms
Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link

![Throughput Graph](image)

![Delay Graph](image)
Run 6: Statistics of TCP BBR

Start at: 2018-04-10 23:28:16
End at: 2018-04-10 23:28:46

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.64 Mbit/s
95th percentile per-packet one-way delay: 136.002 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.64 Mbit/s
95th percentile per-packet one-way delay: 136.002 ms
Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 73.64 Mbit/s)
- Flow 1 egress (mean 73.64 Mbit/s)

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

- Flow 1 (95th percentile 136.00 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-04-10 23:44:15
End at: 2018-04-10 23:44:45

# Below is generated by plot.py at 2018-04-11 01:49:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.27 Mbit/s
95th percentile per-packet one-way delay: 136.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 73.27 Mbit/s
95th percentile per-packet one-way delay: 136.013 ms
Loss rate: 0.00%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-04-10 23:59:53
End at: 2018-04-11 00:00:23

# Below is generated by plot.py at 2018-04-11 01:49:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 77.53 Mbit/s
  95th percentile per-packet one-way delay: 136.263 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 77.53 Mbit/s
  95th percentile per-packet one-way delay: 136.263 ms
  Loss rate: 0.00%
Run 8: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

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

- Flow 1 ingress (mean 77.53 Mbit/s)
- Flow 1 egress (mean 77.53 Mbit/s)

- Flow 1 (95th percentile 136.26 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-04-11 00:15:57
End at: 2018-04-11 00:16:27

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 136.258 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 136.258 ms
Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 76.10 Mbit/s)**
- **Flow 1 egress (mean 76.10 Mbit/s)**
Run 10: Statistics of TCP BBR

Start at: 2018-04-11 00:31:43
End at: 2018-04-11 00:32:13

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.05 Mbit/s
95th percentile per-packet one-way delay: 136.137 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.05 Mbit/s
95th percentile per-packet one-way delay: 136.137 ms
Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

End at: 2018-04-10 22:13:46

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 53.53 Mbit/s
  95th percentile per-packet one-way delay: 140.205 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 53.53 Mbit/s
  95th percentile per-packet one-way delay: 140.205 ms
  Loss rate: 0.00%
Run 1: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 53.55 Mbit/s)  Flow 1 egress (mean 53.53 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 140.21 ms)
Run 2: Statistics of TCP Cubic

End at: 2018-04-10 22:29:54

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 140.178 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.31 Mbit/s
95th percentile per-packet one-way delay: 140.178 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 22:45:17
End at: 2018-04-10 22:45:47

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 140.055 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.37 Mbit/s
95th percentile per-packet one-way delay: 140.055 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 64.37 Mbit/s)
- Flow 1 egress (mean 64.37 Mbit/s)

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

- Flow 1 (95th percentile 140.06 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-04-10 23:01:06
End at: 2018-04-10 23:01:36

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.98 Mbit/s
95th percentile per-packet one-way delay: 141.697 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.98 Mbit/s
95th percentile per-packet one-way delay: 141.697 ms
Loss rate: 0.00%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-04-10 23:17:21  
End at: 2018-04-10 23:17:51  

# Below is generated by plot.py at 2018-04-11 01:51:10  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 53.15 Mbit/s  
95th percentile per-packet one-way delay: 140.255 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 53.15 Mbit/s  
95th percentile per-packet one-way delay: 140.255 ms  
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

![Graph of throughput vs time with two lines representing different data streams.]

![Graph of packet delay vs time with a dot line representing the 95th percentile delay.]

Flow 1 ingress (mean 53.15 Mbit/s)
Flow 1 egress (mean 53.15 Mbit/s)
Flow 1 (95th percentile 140.25 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-04-10 23:33:15
End at: 2018-04-10 23:33:46

# Below is generated by plot.py at 2018-04-11 01:51:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.76 Mbit/s
95th percentile per-packet one-way delay: 141.262 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.76 Mbit/s
95th percentile per-packet one-way delay: 141.262 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-04-10 23:49:24
End at: 2018-04-10 23:49:54

# Below is generated by plot.py at 2018-04-11 01:51:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.03 Mbit/s
95th percentile per-packet one-way delay: 141.840 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 51.03 Mbit/s
95th percentile per-packet one-way delay: 141.840 ms
Loss rate: 0.00%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-04-11 00:05:04
End at: 2018-04-11 00:05:34

# Below is generated by plot.py at 2018-04-11 01:51:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 140.148 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 58.95 Mbit/s
95th percentile per-packet one-way delay: 140.148 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

[Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 58.94 Mbit/s)
- Flow 1 egress (mean 58.95 Mbit/s)

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

- Flow 1 (95th percentile 140.15 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-04-11 00:20:50
End at: 2018-04-11 00:21:20

# Below is generated by plot.py at 2018-04-11 01:51:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 141.341 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 141.341 ms
Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-04-11 00:36:42
End at: 2018-04-11 00:37:12

# Below is generated by plot.py at 2018-04-11 01:51:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.32 Mbit/s
95th percentile per-packet one-way delay: 143.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.32 Mbit/s
95th percentile per-packet one-way delay: 143.473 ms
Loss rate: 0.00%
Run 10: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 60.33 Mbit/s)
- Flow 1 egress (mean 60.32 Mbit/s)

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

- Flow 1 (95th percentile 143.47 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 22:12:35
End at: 2018-04-10 22:13:05

# Below is generated by plot.py at 2018-04-11 01:51:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 136.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 136.654 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph of throughput (megabits/s) over time for Flow 1 ingress and egress with mean 0.24 Mbit/s.]

![Graph of per-packet one-way delay (microseconds) over time for Flow 1 with 95th percentile 136.05 ms.]

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Run 2: Statistics of LEDBAT

End at: 2018-04-10 22:29:12

# Below is generated by plot.py at 2018-04-11 01:51:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 136.388 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 136.388 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-04-10 22:44:34
End at: 2018-04-10 22:45:05

# Below is generated by plot.py at 2018-04-11 01:51:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 4.84 Mbit/s
  95th percentile per-packet one-way delay: 136.572 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.84 Mbit/s
  95th percentile per-packet one-way delay: 136.572 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

[Graphs and data plots related to throughput and packet error rate are shown here.]

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Run 4: Statistics of LEDBAT

Start at: 2018-04-10 23:00:23
End at: 2018-04-10 23:00:53

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 3.68 Mbit/s
  95th percentile per-packet one-way delay: 136.089 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.68 Mbit/s
  95th percentile per-packet one-way delay: 136.089 ms
  Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-04-10 23:16:38
End at: 2018-04-10 23:17:08

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.65 Mbit/s
  95th percentile per-packet one-way delay: 136.393 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.65 Mbit/s
  95th percentile per-packet one-way delay: 136.393 ms
  Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 1.64 Mbit/s)
- Flow 1 egress (mean 1.65 Mbit/s)

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

- Flow 1 (95th percentile 136.39 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-04-10 23:32:33
End at: 2018-04-10 23:33:03

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 136.450 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 136.450 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

End at: 2018-04-10 23:49:11

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 3.61 Mbit/s
  95th percentile per-packet one-way delay: 136.429 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.61 Mbit/s
  95th percentile per-packet one-way delay: 136.429 ms
  Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-04-11 00:04:21
End at: 2018-04-11 00:04:51

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 137.386 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 137.386 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

![Graph of throughput over time](image1)

![Graph of per-packet one-way delay over time](image2)
Run 9: Statistics of LEDBAT

Start at: 2018-04-11 00:20:07
End at: 2018-04-11 00:20:37

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 4.83 Mbit/s
  95th percentile per-packet one-way delay: 137.358 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.83 Mbit/s
  95th percentile per-packet one-way delay: 137.358 ms
  Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-04-11 00:35:59
End at: 2018-04-11 00:36:29

# Below is generated by plot.py at 2018-04-11 01:52:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 137.266 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: 137.266 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

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

- **Throughput (Mbps)** vs **Time (s)**
  - Blue dashed line: Flow 1 ingress (mean 4.04 Mbps)
  - Blue solid line: Flow 1 egress (mean 4.04 Mbps)

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

- **Round-trip delay (ms)** vs **Time (s)**
  - Blue line: Flow 1 (95th percentile 137.27 ms)
Run 1: Statistics of PCC

Start at: 2018-04-10 22:20:14
End at: 2018-04-10 22:20:44

# Below is generated by plot.py at 2018-04-11 02:00:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 577.63 Mbit/s
95th percentile per-packet one-way delay: 185.066 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 577.63 Mbit/s
95th percentile per-packet one-way delay: 185.066 ms
Loss rate: 0.69%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-04-10 22:36:29
End at: 2018-04-10 22:36:59

# Below is generated by plot.py at 2018-04-11 02:00:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 544.46 Mbit/s
95th percentile per-packet one-way delay: 176.645 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 544.46 Mbit/s
95th percentile per-packet one-way delay: 176.645 ms
Loss rate: 0.44%
Run 3: Statistics of PCC

End at: 2018-04-10 22:52:50

# Below is generated by plot.py at 2018-04-11 02:00:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 554.67 Mbit/s
95th percentile per-packet one-way delay: 261.679 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 554.67 Mbit/s
95th percentile per-packet one-way delay: 261.679 ms
Loss rate: 2.33%
Run 3: Report of PCC — Data Link

![Throughput Plot]

- **Flow 1 ingress** (mean 567.94 Mbit/s)
- **Flow 1 egress** (mean 554.67 Mbit/s)

![Delay Plot]

- **Flow 1** (95th percentile 261.68 ms)
Run 4: Statistics of PCC

Start at: 2018-04-10 23:08:16
End at: 2018-04-10 23:08:46

# Below is generated by plot.py at 2018-04-10 23:08:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 482.52 Mbit/s
  95th percentile per-packet one-way delay: 268.701 ms
  Loss rate: 3.13%
-- Flow 1:
  Average throughput: 482.52 Mbit/s
  95th percentile per-packet one-way delay: 268.701 ms
  Loss rate: 3.13%
Run 4: Report of PCC — Data Link
Run 5: Statistics of PCC

Start at: 2018-04-10 23:24:28
End at: 2018-04-10 23:24:58

# Below is generated by plot.py at 2018-04-11 02:01:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 545.35 Mbit/s
95th percentile per-packet one-way delay: 254.143 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 545.35 Mbit/s
95th percentile per-packet one-way delay: 254.143 ms
Loss rate: 0.75%
Run 5: Report of PCC — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet Loss Delay (ms)]
Run 6: Statistics of PCC

Start at: 2018-04-10 23:40:27
End at: 2018-04-10 23:40:58

# Below is generated by plot.py at 2018-04-11 02:01:10
# Datalink statistics
  -- Total of 1 flow:
    Average throughput: 547.65 Mbit/s
    95th percentile per-packet one-way delay: 250.429 ms
    Loss rate: 0.86%
  -- Flow 1:
    Average throughput: 547.65 Mbit/s
    95th percentile per-packet one-way delay: 250.429 ms
    Loss rate: 0.86%
Run 6: Report of PCC — Data Link

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

- Flow 1 ingress (mean 552.39 Mbit/s)
- Flow 1 egress (mean 547.65 Mbit/s)

- Flow 1 (95th percentile 250.43 ms)
Run 7: Statistics of PCC

Start at: 2018-04-10 23:56:06
End at: 2018-04-10 23:56:36

# Below is generated by plot.py at 2018-04-11 02:01:10
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 501.11 Mbit/s
  95th percentile per-packet one-way delay: 192.872 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 501.11 Mbit/s
  95th percentile per-packet one-way delay: 192.872 ms
  Loss rate: 0.74%
Run 7: Report of PCC — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress** (mean 304.83 Mbits/s)
- **Flow 1 egress** (mean 501.11 Mbits/s)

![Graph 2: RTT vs Time]

- **Flow 1** (95th percentile 192.87 ms)
Run 8: Statistics of PCC

Start at: 2018-04-11 00:12:09  
End at: 2018-04-11 00:12:39

# Below is generated by plot.py at 2018-04-11 02:01:10
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 535.20 Mbit/s
  95th percentile per-packet one-way delay: 229.872 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 535.20 Mbit/s
  95th percentile per-packet one-way delay: 229.872 ms
  Loss rate: 0.76%
Run 8: Report of PCC — Data Link

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

- **Flow 1 ingress** (mean 539.32 Mbit/s)
- **Flow 1 egress** (mean 535.20 Mbit/s)

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

- **Flow 1** (95th percentile 229.87 ms)
Run 9: Statistics of PCC

Start at: 2018-04-11 00:27:56
End at: 2018-04-11 00:28:26

# Below is generated by plot.py at 2018-04-11 02:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 516.99 Mbit/s
95th percentile per-packet one-way delay: 275.396 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 516.99 Mbit/s
95th percentile per-packet one-way delay: 275.396 ms
Loss rate: 3.08%
Run 9: Report of PCC — Data Link

![Graphs showing throughput and packet per second delay over time for different flows.](image-url)
Run 10: Statistics of PCC

Start at: 2018-04-11 00:43:47
End at: 2018-04-11 00:44:17

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 474.94 Mbit/s
95th percentile per-packet one-way delay: 171.701 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 474.94 Mbit/s
95th percentile per-packet one-way delay: 171.701 ms
Loss rate: 1.08%
Run 10: Report of PCC — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 480.14 Mbit/s)**
- **Flow 1 egress (mean 474.94 Mbit/s)**

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

- **Flow 1 (95th percentile 171.70 ms)**
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-10 22:05:21
End at: 2018-04-10 22:05:51

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.42 Mbit/s
95th percentile per-packet one-way delay: 135.451 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.42 Mbit/s
95th percentile per-packet one-way delay: 135.451 ms
Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link

![Graph showing throughput over time with two lines, one for ingress and one for egress, both with a mean of 60.42 Mbps.](image1)

![Graph showing packet one-way delay with a 95th percentile of 135.45 ms.](image2)
Run 2: Statistics of QUIC Cubic

End at: 2018-04-10 22:21:52

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.60 Mbit/s
95th percentile per-packet one-way delay: 136.518 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 60.60 Mbit/s
95th percentile per-packet one-way delay: 136.518 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 22:37:34
End at: 2018-04-10 22:38:04

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 60.12 Mbit/s
  95th percentile per-packet one-way delay: 136.374 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 60.12 Mbit/s
  95th percentile per-packet one-way delay: 136.374 ms
  Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

End at: 2018-04-10 22:53:56

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 136.121 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 136.121 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-10 23:09:19
End at: 2018-04-10 23:09:49

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.38 Mbit/s
95th percentile per-packet one-way delay: 136.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.38 Mbit/s
95th percentile per-packet one-way delay: 136.549 ms
Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delivery delay over time. The graph illustrates the performance of QUIC Cubic for Data Link with two flows, one ingress and one egress, each with a mean of 61.38 Mbps. The plots show fluctuations in throughput and packet delivery delay over time.](image-url)
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-10 23:25:34
End at: 2018-04-10 23:26:04

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.66 Mbit/s
95th percentile per-packet one-way delay: 135.282 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 62.66 Mbit/s
95th percentile per-packet one-way delay: 135.282 ms
Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 62.66 Mbps/s)
- **Flow 1 egress** (mean 62.66 Mbps/s)

![Graph of RTT (ms) vs Time (s)]

- **Flow 1** (95th percentile 135.20 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-10 23:41:33
End at: 2018-04-10 23:42:03

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 135.253 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 59.55 Mbit/s
95th percentile per-packet one-way delay: 135.253 ms
Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link

![Graph showing throughput over time with two traces for flow ingress and egress with mean 59.55 Mbps](image1)

![Graph showing packet delay with 135.25 ms 95th percentile for flow 1](image2)
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-10 23:57:10
End at: 2018-04-10 23:57:40

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 55.01 Mbit/s
  95th percentile per-packet one-way delay: 135.168 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 55.01 Mbit/s
  95th percentile per-packet one-way delay: 135.168 ms
  Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet end-to-end delay over time. The graph includes two lines: one for flow ingress and another for flow egress, both with mean 55.01 Mbit/s. There are also markers indicating the 95th percentile end-to-end delay at 135.17 ms.](image-url)
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-11 00:13:14
End at: 2018-04-11 00:13:44

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 62.49 Mbit/s
  95th percentile per-packet one-way delay: 135.738 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 62.49 Mbit/s
  95th percentile per-packet one-way delay: 135.738 ms
  Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-11 00:29:00
End at: 2018-04-11 00:29:30

# Below is generated by plot.py at 2018-04-11 02:09:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 135.786 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: 135.786 ms
Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 55.22 Mbit/s)**
- **Flow 1 egress (mean 55.23 Mbit/s)**

![Graph 2: Per-Packet Round-Trip Time](image2.png)

- **Flow 1 (95th percentile 135.79 ms)**

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Run 1: Statistics of SCReAM

End at: 2018-04-10 22:19:18

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.497 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.497 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph 1](image1.png)

**Throughput (Mbps)**

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

![Graph 2](image2.png)

**Packet one-way delay (ms)**

- Flow 1 (95th percentile 136.50 ms)
Run 2: Statistics of SCReAM

Start at: 2018-04-10 22:35:02
End at: 2018-04-10 22:35:32

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.688 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.688 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per-packet one-way delay (ms)

Flow 1 (95th percentile 136.69 ms)
Run 3: Statistics of SCReAM

Start at: 2018-04-10 22:50:53
End at: 2018-04-10 22:51:23

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.946 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.946 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-04-10 23:06:50
End at: 2018-04-10 23:07:20

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.535 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.535 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph](image1)

![Graph](image2)
Run 5: Statistics of SCReAM

Start at: 2018-04-10 23:23:02
End at: 2018-04-10 23:23:32

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.454 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.454 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

![Graph of data link throughput over time with two traces labeled 'Flow 1 ingress (mean 0.22 Mbit/s)' and 'Flow 1 egress (mean 0.22 Mbit/s)'.]

![Graph of packet one-way delay over time with a trace labeled 'Flow 1 (95th percentile 135.45 ms)'.]
Run 6: Statistics of SCReAM

Start at: 2018-04-10 23:39:01
End at: 2018-04-10 23:39:31

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.359 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.359 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

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

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

**Packet Delay (ms):**
- Flow 1 (95th percentile 136.36 ms)
Run 7: Statistics of SCReAM

Start at: 2018-04-10 23:54:40
End at: 2018-04-10 23:55:10

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.702 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.702 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graph showing network performance metrics over time. The graphs display throughputs and packet inter-arrival times, with Legend: Flows 1 ingress (mean 0.22 Mbit/s), Flow 1 egress (mean 0.22 Mbit/s).]
Run 8: Statistics of SCReAM

Start at: 2018-04-11 00:10:43
End at: 2018-04-11 00:11:13

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.822 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 136.822 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

- Blue line: Flow 1 ingress (mean 0.22 Mbps)
- Blue line: Flow 1 egress (mean 0.22 Mbps)

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

- Blue line: Flow 1 (95th percentile 136.82 ms)
Run 9: Statistics of SCReAM

Start at: 2018-04-11 00:26:29
End at: 2018-04-11 00:26:59

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.990 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 135.990 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Graph showing throughput over time for two flows](image1)

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

![Graph showing packet one-way delay over time for Flow 1](image2)

Flow 1 (95th percentile 135.99 ms)
Run 10: Statistics of SCReAM

Start at: 2018-04-11 00:42:21
End at: 2018-04-11 00:42:51

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 136.056 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 136.056 ms
   Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

![Graph showing network performance metrics: throughput and per-packet one-way delay over time.](image-url)
Run 1: Statistics of WebRTC media

Start at: 2018-04-10 22:11:53
End at: 2018-04-10 22:12:23

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.189 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.189 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-04-10 22:28:00
End at: 2018-04-10 22:28:30

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.756 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.756 ms
  Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

![Graph of data link throughput and delay over time for two flows. The first flow has a sharp peak in throughput, while the second flow shows a steady increase in delay.](image-url)
Run 3: Statistics of WebRTC media

End at: 2018-04-10 22:44:23

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.079 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.079 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-04-10 22:59:41
End at: 2018-04-10 23:00:11

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.571 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

*Flow 1 ingress (mean 0.06 Mbit/s)  Flow 1 egress (mean 0.06 Mbit/s)*

*Flow 1 (95th percentile 136.57 ms)*
Run 5: Statistics of WebRTC media

Start at: 2018-04-10 23:15:57
End at: 2018-04-10 23:16:27

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.357 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.357 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-04-10 23:31:51
End at: 2018-04-10 23:32:21

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.423 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.423 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-04-10 23:48:00
End at: 2018-04-10 23:48:30

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.569 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 136.569 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

![Graph of Throughput (Mbps) over Time (s)](chart1)

Flow 1 ingress (mean 0.06 Mbit/s)  Flow 1 egress (mean 0.06 Mbit/s)

![Graph of Packet One-Way Delay (ms) over Time (s)](chart2)

Flow 1 (95th percentile 136.57 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-04-11 00:03:40
End at: 2018-04-11 00:04:10

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.933 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.933 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mb/s)](image1)

- Flow 1 ingress (mean 0.06 Mb/s)
- Flow 1 egress (mean 0.06 Mb/s)

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

- Flow 1 (90th percentile 136.93 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-04-11 00:19:25
End at: 2018-04-11 00:19:55

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.505 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-04-11 00:35:17
End at: 2018-04-11 00:35:47

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.392 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 136.392 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

![Graph of Per-packet one way delay (ms)](image2)
Run 1: Statistics of Sprout

Start at: 2018-04-10 22:06:08
End at: 2018-04-10 22:06:38

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 136.673 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 136.673 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 0.42 Mbit/s)**
- **Flow 1 egress (mean 0.42 Mbit/s)**

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

- **Flow 1 (95th percentile 136.67 ms)**

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Run 2: Statistics of Sprout


# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 136.096 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 136.096 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.39 Mbit/s)  Flow 1 egress (mean 0.39 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.10 ms)
Run 3: Statistics of Sprout

Start at: 2018-04-10 22:38:21
End at: 2018-04-10 22:38:51

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 136.008 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 136.008 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-04-10 22:54:12
End at: 2018-04-10 22:54:42

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 136.375 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 136.375 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.40 Mbit/s)  Flow 1 egress (mean 0.40 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 136.38 ms)
Run 5: Statistics of Sprout

Start at: 2018-04-10 23:10:06
End at: 2018-04-10 23:10:36

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 136.268 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 136.268 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 0.41 Mb/s)  Flow 1 egress (mean 0.41 Mb/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 136.27 ms)
Run 6: Statistics of Sprout

Start at: 2018-04-10 23:26:20
End at: 2018-04-10 23:26:51

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 136.387 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 136.387 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph of throughput and packet delay over time]

- Flow 1 ingress (mean 0.42 Mbit/s)
- Flow 1 egress (mean 0.42 Mbit/s)

![Graph of packet delay over time]

Flow 1 (95th percentile 136.39 ms)
Run 7: Statistics of Sprout

End at: 2018-04-10 23:42:50

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 136.419 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 136.419 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

[Graph showing throughput and packet delay over time]
Run 8: Statistics of Sprout

Start at: 2018-04-10 23:57:56
End at: 2018-04-10 23:58:27

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.734 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.734 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 0.43 Mbit/s)**
- **Flow 1 egress (mean 0.43 Mbit/s)**

![Graph showing packet delay over time.]

- **Flow 1 (90th percentile 136.73 ms)**
Run 9: Statistics of Sprout

Start at: 2018-04-11 00:14:01
End at: 2018-04-11 00:14:31

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.298 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 136.298 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.43 Mbit/s)
- Flow 1 egress (mean 0.43 Mbit/s)

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

- Flow 1 (90th percentile 136.30 ms)
Run 10: Statistics of Sprout

Start at: 2018-04-11 00:29:46
End at: 2018-04-11 00:30:16

# Below is generated by plot.py at 2018-04-11 02:09:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 136.185 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 136.185 ms
  Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 0.42 Mbit/s)
- Flow 1 egress (mean 0.42 Mbit/s)

Packet one-way delay (ms)

Flow 1 (95th percentile 136.19 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 22:09:54
End at: 2018-04-10 22:10:24

# Below is generated by plot.py at 2018-04-11 02:09:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 211.15 Mbit/s
95th percentile per-packet one-way delay: 135.869 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 211.15 Mbit/s
95th percentile per-packet one-way delay: 135.869 ms
Loss rate: 0.06%
Run 1: Report of TaoVA-100x — Data Link

Throughput in bps

Time (s)

Flow 1 ingress (mean 211.28 Mbit/s)  Flow 1 egress (mean 211.15 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 135.87 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 22:26:01
End at: 2018-04-10 22:26:31

# Below is generated by plot.py at 2018-04-11 02:09:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.99 Mbit/s
95th percentile per-packet one-way delay: 135.868 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 206.99 Mbit/s
95th percentile per-packet one-way delay: 135.868 ms
Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

End at: 2018-04-10 22:42:43

# Below is generated by plot.py at 2018-04-11 02:09:54
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 13.42 Mbit/s
  95th percentile per-packet one-way delay: 135.686 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.42 Mbit/s
  95th percentile per-packet one-way delay: 135.686 ms
  Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-04-10 22:58:02
End at: 2018-04-10 22:58:32

# Below is generated by plot.py at 2018-04-11 02:09:54
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 13.44 Mbit/s
  95th percentile per-packet one-way delay: 135.845 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.44 Mbit/s
  95th percentile per-packet one-way delay: 135.845 ms
  Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 13.44 Mbit/s)  Flow 1 egress (mean 13.44 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 135.84 ms)
Run 5: Statistics of TaoVA-100x

End at: 2018-04-10 23:14:28

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.37 Mbit/s
95th percentile per-packet one-way delay: 135.800 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.37 Mbit/s
95th percentile per-packet one-way delay: 135.800 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

Graph 1: Throughput (bits)

Graph 2: Per packet one way delay (ms)

Legend:
- Flow 1 ingress (mean 214.37 Mbit/s)
- Flow 1 egress (mean 214.37 Mbit/s)

Flow 1 (95th percentile 135.00 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-10 23:30:12
End at: 2018-04-10 23:30:42

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 13.26 Mbit/s
  95th percentile per-packet one-way delay: 135.897 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.26 Mbit/s
  95th percentile per-packet one-way delay: 135.897 ms
  Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

Throughput (Mbps)

0 5 10 15 20 25 30

Flow 1 ingress (mean 13.27 Mbit/s)  Flow 1 egress (mean 13.26 Mbit/s)

Per-packet one way delay (ms)

0 5 10 15 20 25 30

Flow 1 (95th percentile 135.90 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-10 23:46:02
End at: 2018-04-10 23:46:32

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.86 Mbit/s
95th percentile per-packet one-way delay: 136.223 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 201.86 Mbit/s
95th percentile per-packet one-way delay: 136.223 ms
Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 201.85 Mbps)
- Flow 1 egress (mean 201.86 Mbps)

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

- Flow 1 (95th percentile 136.22 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-11 00:01:42
End at: 2018-04-11 00:02:12

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.15 Mbit/s
95th percentile per-packet one-way delay: 136.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 207.15 Mbit/s
95th percentile per-packet one-way delay: 136.803 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 207.15 Mbit/s)
- **Flow 1 egress** (mean 207.15 Mbit/s)

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

- **Flow 1** (95th percentile 136.80 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-11 00:17:46
End at: 2018-04-11 00:18:16

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 13.37 Mbit/s
  95th percentile per-packet one-way delay: 135.973 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.37 Mbit/s
  95th percentile per-packet one-way delay: 135.973 ms
  Loss rate: 0.00%
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-11 00:33:39
End at: 2018-04-11 00:34:09

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 13.40 Mbit/s
  95th percentile per-packet one-way delay: 136.020 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.40 Mbit/s
  95th percentile per-packet one-way delay: 136.020 ms
  Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-04-10 22:19:30
End at: 2018-04-10 22:20:00

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 137.109 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 137.109 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 24.22 Mbps)
  - Flow 1 egress (mean 24.22 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 137.11 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 22:35:44
End at: 2018-04-10 22:36:14

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 25.81 Mbit/s
  95th percentile per-packet one-way delay: 136.951 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 25.81 Mbit/s
  95th percentile per-packet one-way delay: 136.951 ms
  Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 22:51:35
End at: 2018-04-10 22:52:05

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.85 Mbit/s
95th percentile per-packet one-way delay: 137.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.85 Mbit/s
95th percentile per-packet one-way delay: 137.366 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

![Graph showing throughput and delay over time.]

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 26.85 Mbps)
  - Flow 1 egress (mean 26.85 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 137.37 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 23:07:32
End at: 2018-04-10 23:08:02

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 137.084 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 137.084 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link

![Graph 1: Throughput over time for Flow 1 ingress and egress.]

- Flow 1 ingress (mean 25.63 Mbps)
- Flow 1 egress (mean 25.63 Mbps)

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

- Flow 1 (95th percentile 137.08 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-04-10 23:23:44
End at: 2018-04-10 23:24:14

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 136.99 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 136.99 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 33.03 Mbit/s)**
- **Flow 1 egress (mean 33.03 Mbit/s)**

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

- **Flow 1 (95th percentile 136.99 ms)**
Run 6: Statistics of TCP Vegas

Start at: 2018-04-10 23:39:43
End at: 2018-04-10 23:40:13

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
 Average throughput: 24.07 Mbit/s
 95th percentile per-packet one-way delay: 137.388 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 24.07 Mbit/s
 95th percentile per-packet one-way delay: 137.388 ms
 Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

End at: 2018-04-10 23:55:52

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 138.505 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 138.505 ms
Loss rate: 0.00%
Run 8: Statistics of TCP Vegas

Start at: 2018-04-11 00:11:25
End at: 2018-04-11 00:11:55

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 22.86 Mbit/s
95th percentile per-packet one-way delay: 137.576 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 22.86 Mbit/s
95th percentile per-packet one-way delay: 137.576 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

![Graph of throughput and delay over time]

- **Flow 1 ingress (mean 22.86 Mbit/s)**
- **Flow 1 egress (mean 22.86 Mbit/s)**

![Graph of per-packet delay over time]

- **Flow 1 (95th percentile 137.58 ms)**
Run 9: Statistics of TCP Vegas

Start at: 2018-04-11 00:27:11
End at: 2018-04-11 00:27:41

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.56 Mbit/s
95th percentile per-packet one-way delay: 137.588 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.56 Mbit/s
95th percentile per-packet one-way delay: 137.588 ms
Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 10: Statistics of TCP Vegas

Start at: 2018-04-11 00:43:03
End at: 2018-04-11 00:43:33

# Below is generated by plot.py at 2018-04-11 02:10:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 139.475 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 139.475 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 26.46 Mbit/s)**
- **Flow 1 egress (mean 26.46 Mbit/s)**

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

- **Flow 1 (95th percentile 139.47 ms)**
Run 1: Statistics of Verus

End at: 2018-04-10 22:15:26

# Below is generated by plot.py at 2018-04-11 02:12:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.46 Mbit/s
95th percentile per-packet one-way delay: 245.978 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 166.46 Mbit/s
95th percentile per-packet one-way delay: 245.978 ms
Loss rate: 1.20%
Run 2: Statistics of Verus

Start at: 2018-04-10 22:31:04
End at: 2018-04-10 22:31:34

# Below is generated by plot.py at 2018-04-11 02:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.53 Mbit/s
95th percentile per-packet one-way delay: 270.812 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 206.53 Mbit/s
95th percentile per-packet one-way delay: 270.812 ms
Loss rate: 0.09%
Run 3: Statistics of Verus

End at: 2018-04-10 22:47:27

# Below is generated by plot.py at 2018-04-11 02:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.33 Mbit/s
95th percentile per-packet one-way delay: 152.531 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.33 Mbit/s
95th percentile per-packet one-way delay: 152.531 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 70.33 Mbit/s)
- Flow 1 egress (mean 70.33 Mbit/s)

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

- Flow 1 (95th percentile 152.53 ms)
Run 4: Statistics of Verus

Start at: 2018-04-10 23:02:45
End at: 2018-04-10 23:03:15

# Below is generated by plot.py at 2018-04-11 02:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.78 Mbit/s
95th percentile per-packet one-way delay: 206.193 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 189.78 Mbit/s
95th percentile per-packet one-way delay: 206.193 ms
Loss rate: 0.04%
Run 4: Report of Verus — Data Link

![Graph showing throughput vs time for Flow 1 ingress and egress with mean throughputs of 189.60 Mbit/s and 189.78 Mbit/s respectively.]

![Graph showing per packet one-way delay vs time for Flow 1 with 95th percentile delay of 206.19 ms.]
Run 5: Statistics of Verus

Start at: 2018-04-10 23:19:00
End at: 2018-04-10 23:19:30

# Below is generated by plot.py at 2018-04-11 02:13:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.97 Mbit/s
95th percentile per-packet one-way delay: 171.089 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 177.97 Mbit/s
95th percentile per-packet one-way delay: 171.089 ms
Loss rate: 1.32%
Run 5: Report of Verus — Data Link

![Graph showing network performance metrics over time]
Run 6: Statistics of Verus

Start at: 2018-04-10 23:34:55
End at: 2018-04-10 23:35:25

# Below is generated by plot.py at 2018-04-11 02:14:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.19 Mbit/s
95th percentile per-packet one-way delay: 165.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 226.19 Mbit/s
95th percentile per-packet one-way delay: 165.229 ms
Loss rate: 0.00%
Run 6: Report of Verus — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 226.21 Mbit/s)
- **Flow 1 egress** (mean 226.19 Mbit/s)

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

- **Flow 1 (95th percentile 165.23 ms)**
Run 7: Statistics of Verus

Start at: 2018-04-10 23:51:03
End at: 2018-04-10 23:51:33

# Below is generated by plot.py at 2018-04-11 02:14:07
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 84.15 Mbit/s
  95th percentile per-packet one-way delay: 142.727 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 84.15 Mbit/s
  95th percentile per-packet one-way delay: 142.727 ms
  Loss rate: 0.01%
Run 7: Report of Verus — Data Link

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

![Graph 2: Per-packet end-to-end delay (ms)](image)
Run 8: Statistics of Verus

Start at: 2018-04-11 00:06:43
End at: 2018-04-11 00:07:13

# Below is generated by plot.py at 2018-04-11 02:14:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 131.12 Mbit/s
95th percentile per-packet one-way delay: 158.053 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 131.12 Mbit/s
95th percentile per-packet one-way delay: 158.053 ms
Loss rate: 0.30%
Run 8: Report of Verus — Data Link

![Throughput Graph](Image)

![Packet Delay Graph](Image)
Run 9: Statistics of Verus

Start at: 2018-04-11 00:22:29
End at: 2018-04-11 00:22:59

# Below is generated by plot.py at 2018-04-11 02:14:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.06 Mbit/s
95th percentile per-packet one-way delay: 214.754 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 169.06 Mbit/s
95th percentile per-packet one-way delay: 214.754 ms
Loss rate: 0.00%
Run 9: Report of Verus — Data Link

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Run 10: Statistics of Verus

Start at: 2018-04-11 00:38:21
End at: 2018-04-11 00:38:51

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.73 Mbit/s
95th percentile per-packet one-way delay: 202.648 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 221.73 Mbit/s
95th percentile per-packet one-way delay: 202.648 ms
Loss rate: 0.00%
Run 1: Statistics of Copa

Start at: 2018-04-10 22:15:50
End at: 2018-04-10 22:16:20

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 135.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 54.61 Mbit/s
95th percentile per-packet one-way delay: 135.886 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

Time (s)

0 5 10 15 20 25 30

Throughput (Mbps)

- Flow 1 ingress (mean 54.61 Mbit/s)
- Flow 1 egress (mean 54.61 Mbit/s)

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

Time (s)

0 5 10 15 20 25 30

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 135.89 ms)

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Run 2: Statistics of Copa

Start at: 2018-04-10 22:32:02
End at: 2018-04-10 22:32:32

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 76.21 Mbit/s
  95th percentile per-packet one-way delay: 135.789 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 76.21 Mbit/s
  95th percentile per-packet one-way delay: 135.789 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

[Graph showing throughput and latency over time with specific markers and trend lines.]

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Run 3: Statistics of Copa

Start at: 2018-04-10 22:47:45
End at: 2018-04-10 22:48:15

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.57 Mbit/s
95th percentile per-packet one-way delay: 135.752 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.57 Mbit/s
95th percentile per-packet one-way delay: 135.752 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

![Graph showing throughput and delay over time for flow 1-ingress and egress, with mean 82.57 Mbit/s for each.](image)

- Flow 1 ingress (mean 82.57 Mbit/s)
- Flow 1 egress (mean 82.57 Mbit/s)

![Graph showing packet delay distribution over time for flow 1, with 95th percentile 135.75 ms.](image)
Run 4: Statistics of Copa

Start at: 2018-04-10 23:03:41
End at: 2018-04-10 23:04:11

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 135.812 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 135.812 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

![Graph](image1)

![Graph](image2)
Run 5: Statistics of Copa

Start at: 2018-04-10 23:19:55
End at: 2018-04-10 23:20:25

# Below is generated by plot.py at 2018-04-11 02:15:56
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 81.16 Mbit/s
  95th percentile per-packet one-way delay: 135.762 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 81.16 Mbit/s
  95th percentile per-packet one-way delay: 135.762 ms
  Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-04-10 23:35:53
End at: 2018-04-10 23:36:23

# Below is generated by plot.py at 2018-04-11 02:16:26
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 73.90 Mbit/s
  95th percentile per-packet one-way delay: 136.114 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 73.90 Mbit/s
  95th percentile per-packet one-way delay: 136.114 ms
  Loss rate: 0.00%
Run 6: Report of Copa — Data Link

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

- **Throughput**: The graph shows the throughput in Mbps (Megabits per second) over time. The throughput fluctuates significantly, reaching peaks and troughs that suggest varying network conditions.

- **Packet Delay**: The second graph illustrates the one-way delay for packets. The delay is measured in ms (milliseconds) and shows spikes and drops that correspond to the throughput variations, indicating potential network latency issues during periods of high traffic or congestion.

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Run 7: Statistics of Copa

Start at: 2018-04-10 23:51:52
End at: 2018-04-10 23:52:22

# Below is generated by plot.py at 2018-04-11 02:16:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 80.42 Mbit/s
  95th percentile per-packet one-way delay: 136.551 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 80.42 Mbit/s
  95th percentile per-packet one-way delay: 136.551 ms
  Loss rate: 0.00%
Run 7: Report of Copa — Data Link

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

Start at: 2018-04-11 00:07:35
End at: 2018-04-11 00:08:05

# Below is generated by plot.py at 2018-04-11 02:16:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 136.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.80 Mbit/s
95th percentile per-packet one-way delay: 136.142 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-04-11 00:23:23
End at: 2018-04-11 00:23:54

# Below is generated by plot.py at 2018-04-11 02:17:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.61 Mbit/s
95th percentile per-packet one-way delay: 135.872 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 84.61 Mbit/s
95th percentile per-packet one-way delay: 135.872 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 84.61 Mbit/s)**
- **Flow 1 egress (mean 84.61 Mbit/s)**

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

- **Flow 1 (95th percentile 135.87 ms)**
Run 10: Statistics of Copa

Start at: 2018-04-11 00:39:20
End at: 2018-04-11 00:39:50

# Below is generated by plot.py at 2018-04-11 02:17:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 135.985 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 135.985 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-04-10 22:06:50
End at: 2018-04-10 22:07:20

# Below is generated by plot.py at 2018-04-11 02:30:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 764.30 Mbit/s
  95th percentile per-packet one-way delay: 216.590 ms
  Loss rate: 4.10%
-- Flow 1:
  Average throughput: 764.30 Mbit/s
  95th percentile per-packet one-way delay: 216.590 ms
  Loss rate: 4.10%
Run 1: Report of FillP — Data Link

Throughput (Mb/s)

Flow 1 ingress (mean 797.04 Mb/s)  Flow 1 egress (mean 764.30 Mb/s)

Delay (ms)

Flow 1 (95th percentile 216.59 ms)
Run 2: Statistics of FillP

End at: 2018-04-10 22:23:21

# Below is generated by plot.py at 2018-04-11 02:30:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 797.54 Mbit/s
95th percentile per-packet one-way delay: 207.033 ms
Loss rate: 2.08%
-- Flow 1:
Average throughput: 797.54 Mbit/s
95th percentile per-packet one-way delay: 207.033 ms
Loss rate: 2.08%
Run 2: Report of FillP — Data Link

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**Throughput vs Time**
- Flow 1 ingress (mean 814.48 Mbit/s)
- Flow 1 egress (mean 797.54 Mbit/s)

**Packet delay vs Time**
- Flow 1 (95th percentile 267.03 ms)
Run 3: Statistics of FillP

Start at: 2018-04-10 22:39:02
End at: 2018-04-10 22:39:32

# Below is generated by plot.py at 2018-04-11 02:30:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 768.69 Mbit/s
95th percentile per-packet one-way delay: 210.077 ms
Loss rate: 2.57%
-- Flow 1:
Average throughput: 768.69 Mbit/s
95th percentile per-packet one-way delay: 210.077 ms
Loss rate: 2.57%
Run 3: Report of FillP — Data Link

![Graph of throughput and delay over time]

- Flow 1 ingress (mean 788.93 Mbps)
- Flow 1 egress (mean 768.69 Mbps)

- Flow 1 (95th percentile 210.08 ms)
Run 4: Statistics of FillP

Start at: 2018-04-10 22:54:54

# Below is generated by plot.py at 2018-04-11 02:30:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 776.75 Mbit/s
95th percentile per-packet one-way delay: 213.121 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 776.75 Mbit/s
95th percentile per-packet one-way delay: 213.121 ms
Loss rate: 3.69%
Run 4: Report of FillP — Data Link

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

![Graph 2: Packet Delivery Delay vs Time](image2)
Run 5: Statistics of FillP

Start at: 2018-04-10 23:10:48
End at: 2018-04-10 23:11:18

# Below is generated by plot.py at 2018-04-11 02:31:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 786.91 Mbit/s
95th percentile per-packet one-way delay: 226.842 ms
Loss rate: 5.36%
-- Flow 1:
Average throughput: 786.91 Mbit/s
95th percentile per-packet one-way delay: 226.842 ms
Loss rate: 5.36%
Run 5: Report of FillP — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 831.45 Mbit/s)
- Flow 1 egress (mean 786.91 Mbit/s)

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

- Flow 1 (95th percentile 226.84 ms)
Run 6: Statistics of FillP

Start at: 2018-04-10 23:27:02
End at: 2018-04-10 23:27:32

# Below is generated by plot.py at 2018-04-11 02:31:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 773.10 Mbit/s
95th percentile per-packet one-way delay: 212.476 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 773.10 Mbit/s
95th percentile per-packet one-way delay: 212.476 ms
Loss rate: 3.44%
Run 6: Report of FillP — Data Link

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

- Flow 1 ingress (mean 800.61 Mbit/s)
- Flow 1 egress (mean 773.10 Mbit/s)

![Graph of per-packet one-way delay](image)

- Flow 1 (95th percentile 212.48 ms)
Run 7: Statistics of FillP

Start at: 2018-04-10 23:43:01
End at: 2018-04-10 23:43:31

# Below is generated by plot.py at 2018-04-11 02:32:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 761.79 Mbit/s
95th percentile per-packet one-way delay: 213.432 ms
Loss rate: 3.59%
-- Flow 1:
Average throughput: 761.79 Mbit/s
95th percentile per-packet one-way delay: 213.432 ms
Loss rate: 3.59%
Run 7: Report of FillP — Data Link

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

- **Flow 1 Ingress** (mean 790.13 Mbits/s)
- **Flow 1 Egress** (mean 761.79 Mbits/s)

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

- **Flow 1 (95th percentile 213.43 ms)**
Run 8: Statistics of FillP

Start at: 2018-04-10 23:58:38
End at: 2018-04-10 23:59:08

# Below is generated by plot.py at 2018-04-11 02:32:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 747.23 Mbit/s
95th percentile per-packet one-way delay: 218.623 ms
Loss rate: 6.35%
-- Flow 1:
Average throughput: 747.23 Mbit/s
95th percentile per-packet one-way delay: 218.623 ms
Loss rate: 6.35%
Run 8: Report of FillP — Data Link

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

- Flow 1 ingress (mean 797.89 Mb/s)
- Flow 1 egress (mean 747.23 Mb/s)

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

- Flow 1 (95th percentile 218.62 ms)
Run 9: Statistics of FillP

Start at: 2018-04-11 00:14:43
End at: 2018-04-11 00:15:13

# Below is generated by plot.py at 2018-04-11 02:43:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 747.71 Mbit/s
95th percentile per-packet one-way delay: 221.377 ms
Loss rate: 5.33%
-- Flow 1:
Average throughput: 747.71 Mbit/s
95th percentile per-packet one-way delay: 221.377 ms
Loss rate: 5.33%
Run 9: Report of FillP — Data Link

![Graph of throughput and packet loss over time for Flow 1 ingress and egress, with mean values and 95th percentile delay.](image-url)
Run 10: Statistics of FillP

Start at: 2018-04-11 00:30:28  
End at: 2018-04-11 00:30:58

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 793.38 Mbit/s
95th percentile per-packet one-way delay: 212.293 ms
Loss rate: 5.14%
-- Flow 1:
Average throughput: 793.38 Mbit/s
95th percentile per-packet one-way delay: 212.293 ms
Loss rate: 5.14%
Run 10: Report of FillP — Data Link
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-10 22:10:59
End at: 2018-04-10 22:11:29

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.03 Mbit/s
95th percentile per-packet one-way delay: 135.945 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.03 Mbit/s
95th percentile per-packet one-way delay: 135.945 ms
Loss rate: 0.00%
Run 1: Report of Indigo-1-32 — Data Link

![Plot 1](image1.png)

- Flow 1 ingress (mean 159.02 Mbit/s)
- Flow 1 egress (mean 159.03 Mbit/s)

![Plot 2](image2.png)

- Flow 1 (5th percentile 135.94 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 22:27:05
End at: 2018-04-10 22:27:36

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 163.87 Mbit/s
95th percentile per-packet one-way delay: 135.886 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.87 Mbit/s
95th percentile per-packet one-way delay: 135.886 ms
Loss rate: 0.00%
Run 2: Report of Indigo-1-32 — Data Link

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

- **Flow 1 ingress (mean 163.87 Mbit/s)**
- **Flow 1 egress (mean 163.87 Mbit/s)**

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

- **Flow 1 (95th percentile 135.89 ms)**
Run 3: Statistics of Indigo-1-32

End at: 2018-04-10 22:43:27

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 178.16 Mbit/s
  95th percentile per-packet one-way delay: 135.802 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 178.16 Mbit/s
  95th percentile per-packet one-way delay: 135.802 ms
  Loss rate: 0.00%
Run 3: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput](image1)

![Graph 2: Packet Delay](image2)
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 22:58:47
End at: 2018-04-10 22:59:17

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 171.16 Mbit/s
  95th percentile per-packet one-way delay: 135.826 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 171.16 Mbit/s
  95th percentile per-packet one-way delay: 135.826 ms
  Loss rate: 0.00%
Run 4: Report of Indigo-1-32 — Data Link

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

![Graph of Per-Packet End-to-End Delay vs. Time](image2)

Flow 1 ingress (mean 171.16 Mbps)  
Flow 1 egress (mean 171.16 Mbps)
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-10 23:15:02
End at: 2018-04-10 23:15:32

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 172.03 Mbit/s
95th percentile per-packet one-way delay: 135.859 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.03 Mbit/s
95th percentile per-packet one-way delay: 135.859 ms
Loss rate: 0.00%
Run 5: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 172.64 Mbps)
  - Flow 1 egress (mean 172.03 Mbps)

- **Per packet one way delay (ms):**
  - Flow 1 (95th percentile 135.86 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-10 23:30:57
End at: 2018-04-10 23:31:27

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 167.50 Mbit/s
95th percentile per-packet one-way delay: 135.835 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.50 Mbit/s
95th percentile per-packet one-way delay: 135.835 ms
Loss rate: 0.00%
Run 6: Report of Indigo-1-32 — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 167.49 Mbit/s)
- Flow 1 egress (mean 167.50 Mbit/s)

![Graph of Packet Delay vs Time]

- Flow 1 (95th percentile 135.84 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-10 23:47:04
End at: 2018-04-10 23:47:34

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.02 Mbit/s
95th percentile per-packet one-way delay: 136.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 177.02 Mbit/s
95th percentile per-packet one-way delay: 136.068 ms
Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link

![Graph of Throughput](image)

- **Throughput (Mbps)** vs **Time (s)**
- Flow 1 ingress (mean 177.02 Mbps)
- Flow 1 egress (mean 177.02 Mbps)

![Graph of Round-trip Time](image)

- **Per-packet one-way delay (ms)** vs **Time (s)**
- Flow 1 (95th percentile 136.07 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-11 00:02:45
End at: 2018-04-11 00:03:15

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.16 Mbit/s
95th percentile per-packet one-way delay: 136.087 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 157.16 Mbit/s
95th percentile per-packet one-way delay: 136.087 ms
Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

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

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 157.16 Mbit/s)
- Flow 1 egress (mean 157.16 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 136.09 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-11 00:18:30
End at: 2018-04-11 00:19:00

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.87 Mbit/s
95th percentile per-packet one-way delay: 136.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 171.87 Mbit/s
95th percentile per-packet one-way delay: 136.397 ms
Loss rate: 0.00%
Run 9: Report of Indigo-1-32 — Data Link
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-11 00:34:23
End at: 2018-04-11 00:34:53

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 166.53 Mbit/s
  95th percentile per-packet one-way delay: 136.060 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 166.53 Mbit/s
  95th percentile per-packet one-way delay: 136.060 ms
  Loss rate: 0.00%
Run 10: Report of Indigo-1-32 — Data Link

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

- **Flow 1 ingress (mean 166.53 Mbit/s)**
- **Flow 1 egress (mean 166.53 Mbit/s)**

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

- **Flow 1 (95th percentile 136.06 ms)**
Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 22:17:41
End at: 2018-04-10 22:18:11

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 321.24 Mbit/s
  95th percentile per-packet one-way delay: 136.649 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 321.24 Mbit/s
  95th percentile per-packet one-way delay: 136.649 ms
  Loss rate: 0.00%
Run 1: Report of Vivace-latency — Data Link

![Graph of throughput and latency over time for flow 1]
Run 2: Statistics of Vivace-latency

Start at: 2018-04-10 22:34:03
End at: 2018-04-10 22:34:33

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.95 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.95 Mbit/s
95th percentile per-packet one-way delay: 136.507 ms
Loss rate: 0.00%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

End at: 2018-04-10 22:50:15

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 342.64 Mbit/s
  95th percentile per-packet one-way delay: 136.111 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 342.64 Mbit/s
  95th percentile per-packet one-way delay: 136.111 ms
  Loss rate: 0.00%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 23:05:42
End at: 2018-04-10 23:06:12

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 330.21 Mbit/s
  95th percentile per-packet one-way delay: 136.431 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 330.21 Mbit/s
  95th percentile per-packet one-way delay: 136.431 ms
  Loss rate: 0.00%
Run 4: Report of Vivace-latency — Data Link

---

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 330.21 Mbit/s)
- Flow 1 egress (mean 330.21 Mbit/s)

---

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

- Flow 1 (95th percentile 136.43 ms)
Run 5: Statistics of Vivace-latency

End at: 2018-04-10 23:22:25

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 311.19 Mbit/s
  95th percentile per-packet one-way delay: 136.714 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 311.19 Mbit/s
  95th percentile per-packet one-way delay: 136.714 ms
  Loss rate: 0.00%
Run 5: Report of Vivace-latency — Data Link

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

- **Flow 1 ingress** (mean 311.20 Mbit/s)
- **Flow 1 egress** (mean 311.19 Mbit/s)

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

- **Flow 1 (95th percentile 138.71 ms)**
Run 6: Statistics of Vivace-latency

Start at: 2018-04-10 23:37:53
End at: 2018-04-10 23:38:23

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.86 Mbit/s
95th percentile per-packet one-way delay: 135.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 336.86 Mbit/s
95th percentile per-packet one-way delay: 135.463 ms
Loss rate: 0.00%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-04-10 23:53:38
End at: 2018-04-10 23:54:08

# Below is generated by plot.py at 2018-04-11 02:44:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 260.20 Mbit/s
95th percentile per-packet one-way delay: 142.498 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 260.20 Mbit/s
95th percentile per-packet one-way delay: 142.498 ms
Loss rate: 0.00%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-04-11 00:09:36
End at: 2018-04-11 00:10:06

# Below is generated by plot.py at 2018-04-11 02:46:45
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 310.54 Mbit/s
  95th percentile per-packet one-way delay: 136.023 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 310.54 Mbit/s
  95th percentile per-packet one-way delay: 136.023 ms
  Loss rate: 0.01%
Run 8: Report of Vivace-latency — Data Link
Run 9: Statistics of Vivace-latency

Start at: 2018-04-11 00:25:22
End at: 2018-04-11 00:25:52

# Below is generated by plot.py at 2018-04-11 02:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 324.85 Mbit/s
95th percentile per-packet one-way delay: 136.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 324.85 Mbit/s
95th percentile per-packet one-way delay: 136.608 ms
Loss rate: 0.00%
Run 9: Report of Vivace-latency — Data Link

[Graph showing throughput and latency over time]

- Flow 1 ingress (mean 324.85 Mbit/s)
- Flow 1 egress (mean 324.85 Mbit/s)

[Graph showing packet delay over time]

- Flow 1 (95th percentile 136.61 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-04-11 00:41:18
End at: 2018-04-11 00:41:48

# Below is generated by plot.py at 2018-04-11 02:47:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 269.03 Mbit/s
  95th percentile per-packet one-way delay: 149.770 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 269.03 Mbit/s
  95th percentile per-packet one-way delay: 149.770 ms
  Loss rate: 0.00%
Run 10: Report of Vivace-latency — Data Link
Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 22:08:52
End at: 2018-04-10 22:09:22

# Below is generated by plot.py at 2018-04-11 02:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 258.00 Mbit/s
95th percentile per-packet one-way delay: 136.138 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 258.00 Mbit/s
95th percentile per-packet one-way delay: 136.138 ms
Loss rate: 0.00%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

End at: 2018-04-10 22:25:23

# Below is generated by plot.py at 2018-04-11 02:49:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 136.421 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 326.02 Mbit/s
95th percentile per-packet one-way delay: 136.421 ms
Loss rate: 0.00%
Run 2: Report of Vivace-loss — Data Link

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

- **Flow 1 ingress (mean 326.03 Mbit/s)**
- **Flow 1 egress (mean 326.02 Mbit/s)**

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

- **Flow 1 (95th percentile 136.42 ms)**
Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 22:41:04
End at: 2018-04-10 22:41:34

# Below is generated by plot.py at 2018-04-11 02:49:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.35 Mbit/s
95th percentile per-packet one-way delay: 136.200 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 332.35 Mbit/s
95th percentile per-packet one-way delay: 136.200 ms
Loss rate: 0.00%
Run 3: Report of Vivace-loss — Data Link

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

- **Flow 1 ingress (mean 332.36 Mbit/s)**
- **Flow 1 egress (mean 332.35 Mbit/s)**

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

- **Flow 1 (95th percentile 136.20 ms)**
Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 22:56:56
End at: 2018-04-10 22:57:26

# Below is generated by plot.py at 2018-04-11 02:50:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.08 Mbit/s
95th percentile per-packet one-way delay: 138.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 319.08 Mbit/s
95th percentile per-packet one-way delay: 138.139 ms
Loss rate: 0.00%
Run 4: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 319.08 Mbit/s)
- Flow 1 egress (mean 319.08 Mbit/s)

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

- Flow 1 (95th percentile 138.14 ms)
Run 5: Statistics of Vivace-loss

Start at: 2018-04-10 23:12:50
End at: 2018-04-10 23:13:20

# Below is generated by plot.py at 2018-04-11 02:51:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 331.70 Mbit/s
95th percentile per-packet one-way delay: 136.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 331.70 Mbit/s
95th percentile per-packet one-way delay: 136.176 ms
Loss rate: 0.00%
Run 5: Report of Vivace-loss — Data Link

[Graph showing throughput in Mbps over time]

- Flow 1 ingress (mean 331.71 Mbit/s)
- Flow 1 egress (mean 331.70 Mbit/s)

[Graph showing per packet one-way delay in ms]

- Flow 1 (95th percentile 136.18 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-04-10 23:29:03
End at: 2018-04-10 23:29:33

# Below is generated by plot.py at 2018-04-11 02:53:08
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 345.56 Mbit/s
  95th percentile per-packet one-way delay: 135.851 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 345.56 Mbit/s
  95th percentile per-packet one-way delay: 135.851 ms
  Loss rate: 0.00%
Run 6: Report of Vivace-loss — Data Link
Run 7: Statistics of Vivace-loss

Start at: 2018-04-10 23:45:02
End at: 2018-04-10 23:45:32

# Below is generated by plot.py at 2018-04-11 02:53:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.46 Mbit/s
95th percentile per-packet one-way delay: 135.792 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 229.46 Mbit/s
95th percentile per-packet one-way delay: 135.792 ms
Loss rate: 0.00%
Run 7: Report of Vivace-loss — Data Link

![Graphs showing throughput and packet delay over time]

- Flow 1 ingress (mean 229.46 Mbit/s)
- Flow 1 egress (mean 229.46 Mbit/s)

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

- Flow 1 (95th percentile 135.79 ms)
Run 8: Statistics of Vivace-loss

Start at: 2018-04-11 00:00:40
End at: 2018-04-11 00:01:10

# Below is generated by plot.py at 2018-04-11 02:53:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.53 Mbit/s
95th percentile per-packet one-way delay: 136.437 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 249.53 Mbit/s
95th percentile per-packet one-way delay: 136.437 ms
Loss rate: 0.00%
Run 8: Report of Vivace-loss — Data Link
Run 9: Statistics of Vivace-loss

Start at: 2018-04-11 00:16:44
End at: 2018-04-11 00:17:14

# Below is generated by plot.py at 2018-04-11 02:53:08
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 246.99 Mbit/s
  95th percentile per-packet one-way delay: 158.730 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 246.99 Mbit/s
  95th percentile per-packet one-way delay: 158.730 ms
  Loss rate: 0.00%
Run 9: Report of Vivace-loss — Data Link

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 246.98 Mbit/s)
- Flow 1 egress (mean 246.99 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 158.73 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-04-11 00:32:30
End at: 2018-04-11 00:33:00

# Below is generated by plot.py at 2018-04-11 02:55:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 336.28 Mbit/s
95th percentile per-packet one-way delay: 143.547 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 336.28 Mbit/s
95th percentile per-packet one-way delay: 143.547 ms
Loss rate: 0.02%
Run 10: Report of Vivace-loss — Data Link
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 22:16:39
End at: 2018-04-10 22:17:09

# Below is generated by plot.py at 2018-04-11 02:55:38
# Datalog statistics
-- Total of 1 flow:
Average throughput: 247.53 Mbit/s
95th percentile per-packet one-way delay: 135.304 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.53 Mbit/s
95th percentile per-packet one-way delay: 135.304 ms
Loss rate: 0.00%
Run 1: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 247.51 Mbit/s)
- Flow 1 egress (mean 247.53 Mbit/s)

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

- Flow 1 (95th percentile 135.30 ns)
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 22:32:52
End at: 2018-04-10 22:33:22

# Below is generated by plot.py at 2018-04-11 02:56:52
# Datalink statistics
# Total of 1 flow:
Average throughput: 357.92 Mbit/s
95th percentile per-packet one-way delay: 135.226 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 357.92 Mbit/s
95th percentile per-packet one-way delay: 135.226 ms
Loss rate: 0.00%
Run 2: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress (mean 357.92 Mbit/s)**
- **Flow 1 egress (mean 357.92 Mbit/s)**

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

- **Flow 1 (95th percentile 135.23 ms)**
Run 3: Statistics of Vivace-LTE

End at: 2018-04-10 22:49:06

# Below is generated by plot.py at 2018-04-11 02:57:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.35 Mbit/s
95th percentile per-packet one-way delay: 135.397 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 332.35 Mbit/s
95th percentile per-packet one-way delay: 135.397 ms
Loss rate: 0.00%
Run 3: Report of Vivace-LTE — Data Link
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-10 23:04:33
End at: 2018-04-10 23:05:03

# Below is generated by plot.py at 2018-04-11 02:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 347.38 Mbit/s
95th percentile per-packet one-way delay: 135.307 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 347.38 Mbit/s
95th percentile per-packet one-way delay: 135.307 ms
Loss rate: 0.00%
Run 4: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 347.38 Mbit/s)
- Flow 1 egress (mean 347.38 Mbit/s)

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

- Flow 1 (95th percentile 135.31 ms)
Run 5: Statistics of Vivace-LTE

Start at: 2018-04-10 23:20:46
End at: 2018-04-10 23:21:16

# Below is generated by plot.py at 2018-04-11 02:57:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 342.29 Mbit/s
95th percentile per-packet one-way delay: 135.780 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 342.29 Mbit/s
95th percentile per-packet one-way delay: 135.780 ms
Loss rate: 0.00%
Run 5: Report of Vivace-LTE — Data Link

[Graph]

- Flow 1 ingress (mean 342.27 Mbit/s)
- Flow 1 egress (mean 342.29 Mbit/s)

[Graph]
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-10 23:36:43
End at: 2018-04-10 23:37:13

# Below is generated by plot.py at 2018-04-11 02:58:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 350.16 Mbit/s
95th percentile per-packet one-way delay: 135.694 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 350.16 Mbit/s
95th percentile per-packet one-way delay: 135.694 ms
Loss rate: 0.00%
Run 6: Report of Vivace-LTE — Data Link

[Graphs showing throughput and delay over time]
Run 7: Statistics of Vivace-LTE

Start at: 2018-04-10 23:52:43
End at: 2018-04-10 23:53:13

# Below is generated by plot.py at 2018-04-11 02:58:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.59 Mbit/s
95th percentile per-packet one-way delay: 136.459 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.59 Mbit/s
95th percentile per-packet one-way delay: 136.459 ms
Loss rate: 0.00%
Run 7: Report of Vivace-LTE — Data Link
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-11 00:08:27
End at: 2018-04-11 00:08:57

# Below is generated by plot.py at 2018-04-11 02:58:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 353.03 Mbit/s
95th percentile per-packet one-way delay: 181.603 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 353.03 Mbit/s
95th percentile per-packet one-way delay: 181.603 ms
Loss rate: 0.28%
Run 8: Report of Vivace-LTE — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 354.02 Mbit/s)
- Flow 1 egress (mean 353.03 Mbit/s)

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

- Flow 1 (95th percentile 181.60 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-11 00:24:15
End at: 2018-04-11 00:24:45

# Below is generated by plot.py at 2018-04-11 02:58:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 322.15 Mbit/s
95th percentile per-packet one-way delay: 170.416 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 322.15 Mbit/s
95th percentile per-packet one-way delay: 170.416 ms
Loss rate: 0.00%
Run 9: Report of Vivace-LTE — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 322.15 Mbit/s)
Flow 1 egress (mean 322.15 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 170.42 ms)
Run 10: Statistics of Vivace-LTE

Start at: 2018-04-11 00:40:11
End at: 2018-04-11 00:40:41

# Below is generated by plot.py at 2018-04-11 02:58:56
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 318.44 Mbit/s
  95th percentile per-packet one-way delay: 192.078 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 318.44 Mbit/s
  95th percentile per-packet one-way delay: 192.078 ms
  Loss rate: 0.00%
Run 10: Report of Vivace-LTE — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 318.44 Mb/s)  Flow 1 egress (mean 318.44 Mb/s)

Round trip one way delay (ms)

Flow 1 (95th percentile 192.08 ms)