Pantheon Report

Generated at 2018-02-02 17:49:00 (UTC).

Data path: AWS Korea Ethernet (local) → China 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).

NTP offsets were measured against ntp.nict.jp and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1cb0dca86
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e8993e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d38dcd4fe0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd350539528e2a5f
third_party/indigo-no-calib @ 7224f2202ea044d8306fa0b98386306c53d89
third_party/koho_cc @ f0f2e693330ae82ea808e6928ec4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da0659ba013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d16b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cffe42
third_party/scream @ c3370fd7bd17265a79ab34e016ad23f5956885
third_party/sourdough @ f1a14bff749737437f61b1eaaeb30b267cde681
third_party/sprout @ 6f2efe6e008d91066a9f023d2375ee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ a488197ddd041ace68a42849b2540ad834825f42
test from AWS Korea Ethernet to China Ethernet, 10 runs of 30s each per scheme
(mean of all runs by scheme)
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<th>mean 95th-%ile delay (ms) flow 1</th>
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<td>Vivace-latency</td>
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<td>66.64</td>
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<td>Vivace-loss</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>19.74</td>
<td>68.27</td>
<td>8.44</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-02-02 13:06:49  
End at: 2018-02-02 13:07:19  
Local clock offset: -0.732 ms  
Remote clock offset: 1.089 ms

# Below is generated by plot.py at 2018-02-02 17:37:20
# Datalink statistics

-- Total of 1 flow:  
Average throughput: 51.86 Mbit/s  
95th percentile per-packet one-way delay: 71.326 ms  
Loss rate: 9.84%

-- Flow 1:  
Average throughput: 51.86 Mbit/s  
95th percentile per-packet one-way delay: 71.326 ms  
Loss rate: 9.84%
Run 1: Report of TCP BBR — Data Link

![Graph of throughput over time with dashed line for Flow 1 ingress (mean 57.52 Mbit/s) and solid line for Flow 1 egress (mean 51.86 Mbit/s)]

![Graph of packet delays with marker for Flow 1 (95th percentile 71.33 ms)]
Run 2: Statistics of TCP BBR

Start at: 2018-02-02 13:30:47
End at: 2018-02-02 13:31:17
Local clock offset: -0.773 ms
Remote clock offset: 1.785 ms

# Below is generated by plot.py at 2018-02-02 17:37:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 68.617 ms
Loss rate: 10.24%
-- Flow 1:
Average throughput: 48.75 Mbit/s
95th percentile per-packet one-way delay: 68.617 ms
Loss rate: 10.24%
Run 2: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 54.32 Mbps)
- **Flow 1 egress** (mean 48.75 Mbps)

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

- **Flow 1** (95th percentile 68.62 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-02-02 13:54:42
End at: 2018-02-02 13:55:12
Local clock offset: -0.694 ms
Remote clock offset: 2.504 ms

# Below is generated by plot.py at 2018-02-02 17:37:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 67.571 ms
Loss rate: 11.64%
-- Flow 1:
Average throughput: 50.16 Mbit/s
95th percentile per-packet one-way delay: 67.571 ms
Loss rate: 11.64%
Run 3: Report of TCP BBR — Data Link

![Graphs showing throughput and RTT over time for TCP BBR with flow 1 ingress (mean 55.77 Mbit/s) and flow 1 egress (mean 50.16 Mbit/s).]
Run 4: Statistics of TCP BBR

Start at: 2018-02-02 14:18:32
End at: 2018-02-02 14:19:02
Local clock offset: -0.297 ms
Remote clock offset: 3.135 ms

# Below is generated by plot.py at 2018-02-02 17:37:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.27 Mbit/s
95th percentile per-packet one-way delay: 69.493 ms
Loss rate: 9.47%
-- Flow 1:
Average throughput: 53.27 Mbit/s
95th percentile per-packet one-way delay: 69.493 ms
Loss rate: 9.47%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-02-02 14:42:35  
End at: 2018-02-02 14:43:05  
Local clock offset: ~0.367 ms  
Remote clock offset: 3.67 ms

# Below is generated by plot.py at 2018-02-02 17:37:28  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.91 Mbit/s
95th percentile per-packet one-way delay: 71.556 ms
Loss rate: 7.84%
-- Flow 1:
Average throughput: 56.91 Mbit/s
95th percentile per-packet one-way delay: 71.556 ms
Loss rate: 7.84%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-02-02 15:06:35
End at: 2018-02-02 15:07:05
Local clock offset: -3.366 ms
Remote clock offset: 3.9 ms

# Below is generated by plot.py at 2018-02-02 17:37:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.61 Mbit/s
95th percentile per-packet one-way delay: 74.923 ms
Loss rate: 6.43%
-- Flow 1:
Average throughput: 63.61 Mbit/s
95th percentile per-packet one-way delay: 74.923 ms
Loss rate: 6.43%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-02-02 15:30:24
End at: 2018-02-02 15:30:54
Local clock offset: -0.842 ms
Remote clock offset: 2.673 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 76.586 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 88.71 Mbit/s
95th percentile per-packet one-way delay: 76.586 ms
Loss rate: 2.95%
Run 7: Report of TCP BBR — Data Link

![Graph showing throughput and packet delay over time for TCP BBR.]
Run 8: Statistics of TCP BBR

Start at: 2018-02-02 15:54:27
End at: 2018-02-02 15:54:57
Local clock offset: -0.946 ms
Remote clock offset: 1.098 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 76.608 ms
Loss rate: 3.84%
-- Flow 1:
Average throughput: 87.89 Mbit/s
95th percentile per-packet one-way delay: 76.608 ms
Loss rate: 3.84%
Run 9: Statistics of TCP BBR

Start at: 2018-02-02 16:36:36
End at: 2018-02-02 16:37:06
Local clock offset: -0.911 ms
Remote clock offset: -0.294 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 66.082 ms
Loss rate: 23.14%
-- Flow 1:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 66.082 ms
Loss rate: 23.14%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-02-02 17:00:55
End at: 2018-02-02 17:01:25
Local clock offset: -0.295 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 19.02 Mbit/s
95th percentile per-packet one-way delay: 65.787 ms
Loss rate: 13.95%
-- Flow 1:
Average throughput: 19.02 Mbit/s
95th percentile per-packet one-way delay: 65.787 ms
Loss rate: 13.95%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-02-02 13:12:13
End at: 2018-02-02 13:12:43
Local clock offset: -1.067 ms
Remote clock offset: 1.22 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 67.265 ms
Loss rate: 8.74%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 67.265 ms
Loss rate: 8.74%
Run 1: Report of TCP Cubic — Data Link

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

**Flow 1 ingress (mean 0.46 Mbit/s)**

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

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

**Flow 1 (95th percentile 67.27 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2018-02-02 13:36:09
End at: 2018-02-02 13:36:39
Local clock offset: -0.378 ms
Remote clock offset: 2.043 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 66.575 ms
Loss rate: 8.99%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 66.575 ms
Loss rate: 8.99%
Run 2: Report of TCP Cubic — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)

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Run 3: Statistics of TCP Cubic

Start at: 2018-02-02 14:00:05
End at: 2018-02-02 14:00:35
Local clock offset: -0.683 ms
Remote clock offset: 2.653 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 66.653 ms
Loss rate: 10.06%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 66.653 ms
Loss rate: 10.06%
Run 3: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time]

- **Flow 1 ingress (mean 0.43 Mbit/s)**
- **Flow 1 egress (mean 0.39 Mbit/s)**

![Graph of Per Packet Round-Trip Delay vs Time]

- **Flow 1 (95th percentile 66.65 ms)**
Run 4: Statistics of TCP Cubic

Start at: 2018-02-02 14:24:02
End at: 2018-02-02 14:24:32
Local clock offset: -0.717 ms
Remote clock offset: 3.349 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 66.624 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 66.624 ms
Loss rate: 5.96%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-02-02 14:47:57
End at: 2018-02-02 14:48:27
Local clock offset: -0.787 ms
Remote clock offset: 3.707 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 70.334 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 70.334 ms
Loss rate: 4.74%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-02-02 15:11:53
End at: 2018-02-02 15:12:23
Local clock offset: ~0.348 ms
Remote clock offset: 3.96 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.85 Mbit/s
  95th percentile per-packet one-way delay: 66.955 ms
  Loss rate: 4.23%
-- Flow 1:
  Average throughput: 0.85 Mbit/s
  95th percentile per-packet one-way delay: 66.955 ms
  Loss rate: 4.23%
Run 6: Report of TCP Cubic — Data Link

![Graph of network performance metrics over time, showing throughput and packet delay data for two flows labeled as Flow 1 ingress and Flow 1 egress. The graphs indicate the mean throughput and 95th percentile packet delay for each flow.]
Run 7: Statistics of TCP Cubic

Start at: 2018-02-02 15:35:45
End at: 2018-02-02 15:36:15
Local clock offset: -0.754 ms
Remote clock offset: 2.196 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 66.861 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 12.15 Mbit/s
95th percentile per-packet one-way delay: 66.861 ms
Loss rate: 0.58%
Run 7: Report of TCP Cubic — Data Link

![Throughput and Delay Graphs](image-url)
Run 8: Statistics of TCP Cubic

Start at: 2018-02-02 15:59:49
End at: 2018-02-02 16:00:19
Local clock offset: ~0.79 ms
Remote clock offset: 0.947 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 67.161 ms
Loss rate: 62.14%
-- Flow 1:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 67.161 ms
Loss rate: 62.14%
Run 8: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.02 Mbit/s)

![Graph 2](image2.png)

- Flow 1 (95th percentile 67.16 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-02-02 16:42:07
End at: 2018-02-02 16:42:37
Local clock offset: -0.612 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 66.085 ms
  Loss rate: 18.78%
-- Flow 1:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 66.085 ms
  Loss rate: 18.78%
Run 9: Report of TCP Cubic — Data Link

[Graph showing throughput and packet delay over time]

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 0.25 Mb/s)  Flow 1 egress (mean 0.20 Mb/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 66.08 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-02-02 17:06:17
End at: 2018-02-02 17:06:47
Local clock offset: -0.844 ms
Remote clock offset: -0.151 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 66.458 ms
Loss rate: 11.90%
-- Flow 1:
Average throughput: 0.30 Mbit/s
95th percentile per-packet one-way delay: 66.458 ms
Loss rate: 11.90%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-02-02 12:56:01
End at: 2018-02-02 12:56:31
Local clock offset: -0.297 ms
Remote clock offset: 0.699 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 66.586 ms
Loss rate: 10.44%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 66.586 ms
Loss rate: 10.44%
Run 1: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 0.41 Mbit/s)
- Flow 1 egress (mean 0.37 Mbit/s)

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

- Flow 1 (95th percentile 66.59 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-02-02 13:20:11
End at: 2018-02-02 13:20:41
Local clock offset: -0.561 ms
Remote clock offset: 1.391 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 66.853 ms
  Loss rate: 12.09%
-- Flow 1:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 66.853 ms
  Loss rate: 12.09%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-02-02 13:44:08
End at: 2018-02-02 13:44:38
Local clock offset: -0.619 ms
Remote clock offset: 2.215 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 66.677 ms
Loss rate: 9.30%
-- Flow 1:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 66.677 ms
Loss rate: 9.30%
Run 3: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress** (mean 0.53 Mbps)
- **Flow 1 egress** (mean 0.48 Mbps)

- **Flow 1** (95th percentile 66.68 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-02-02 14:08:01
End at: 2018-02-02 14:08:31
Local clock offset: -0.498 ms
Remote clock offset: 2.773 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 66.704 ms
Loss rate: 8.49%
-- Flow 1:
Average throughput: 0.65 Mbit/s
95th percentile per-packet one-way delay: 66.704 ms
Loss rate: 8.49%
Run 4: Report of LEDBAT — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Time (s) 0 to 30
  - Flow 1 ingress (mean 0.70 Mbit/s)
  - Flow 1 egress (mean 0.65 Mbit/s)

**Graph 2:**
- **End-to-end one-way delay (ms):**
  - Time (s) 0 to 30
  - Flow 1 (95th percentile 66.70 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-02-02 14:31:59
End at: 2018-02-02 14:32:29
Local clock offset: -1.126 ms
Remote clock offset: 3.507 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 67.419 ms
Loss rate: 9.11%
-- Flow 1:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 67.419 ms
Loss rate: 9.11%
Run 5: Report of LEDBAT — Data Link

![Chart 1: Throughput (Mbps) over Time (s)]

- Flow 1 ingress (mean 0.49 Mbps)
- Flow 1 egress (mean 0.44 Mbps)

![Chart 2: Round-Trip Delay (ms) over Time (s)]

- Flow 1 (95th percentile 67.42 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-02-02 14:55:59
End at: 2018-02-02 14:56:29
Local clock offset: -0.463 ms
Remote clock offset: 3.769 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.83 Mbit/s
  95th percentile per-packet one-way delay: 66.728 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 2.83 Mbit/s
  95th percentile per-packet one-way delay: 66.728 ms
  Loss rate: 1.05%
Run 7: Statistics of LEDBAT

Start at: 2018-02-02 15:19:49
End at: 2018-02-02 15:20:19
Local clock offset: -0.712 ms
Remote clock offset: 3.576 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 67.083 ms
Loss rate: 4.79%
-- Flow 1:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 67.083 ms
Loss rate: 4.79%
Run 7: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 1.05 Mbit/s)**
- **Flow 1 egress (mean 1.00 Mbit/s)**

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

- **Flow 1 (95th percentile 67.08 ms)**
Run 8: Statistics of LEDBAT

Start at: 2018-02-02 15:43:47
End at: 2018-02-02 15:44:17
Local clock offset: ~1.15 ms
Remote clock offset: 1.472 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 68.634 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 68.634 ms
Loss rate: 0.47%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-02-02 16:25:06
End at: 2018-02-02 16:25:36
Local clock offset: -0.674 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.03 Mbit/s
  95th percentile per-packet one-way delay: 65.854 ms
  Loss rate: 46.78%
-- Flow 1:
  Average throughput: 0.03 Mbit/s
  95th percentile per-packet one-way delay: 65.854 ms
  Loss rate: 46.78%
Run 9: Report of LEDBAT — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- **Flow 1 ingress (mean 0.05 Mbit/s)**
- **Flow 1 egress (mean 0.03 Mbit/s)**

![Graph 2: Per packet one-way delay (ms) vs Time (s)]
- **Flow 1 (95th percentile 65.85 ms)**
Run 10: Statistics of LEDBAT

Start at: 2018-02-02 16:50:18
End at: 2018-02-02 16:50:48
Local clock offset: -0.291 ms
Remote clock offset: -0.228 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 66.283 ms
Loss rate: 18.51%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 66.283 ms
Loss rate: 18.51%
Run 10: Report of LEDBAT — Data Link

[Graph showing throughput and packet delay over time for two flow types: Flow 1 ingress (mean 0.13 Mbit/s) and Flow 1 egress (mean 0.11 Mbit/s).]

[Graph showing packet delay over time for Flow 1 with a 95th percentile of 66.28 ms.]
Run 1: Statistics of PCC

Start at: 2018-02-02 13:16:13
End at: 2018-02-02 13:16:43
Local clock offset: -0.396 ms
Remote clock offset: 1.343 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.01 Mbit/s
  95th percentile per-packet one-way delay: 65.891 ms
  Loss rate: 7.91%
-- Flow 1:
  Average throughput: 2.01 Mbit/s
  95th percentile per-packet one-way delay: 65.891 ms
  Loss rate: 7.91%
Run 1: Report of PCC — Data Link

![Graph showing throughput over time]

- Flow 1 ingress (mean 2.19 Mbit/s)
- Flow 1 egress (mean 2.01 Mbit/s)

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

- Flow 1 95th percentile 65.89 ms
Run 2: Statistics of PCC

Start at: 2018-02-02 13:40:08
End at: 2018-02-02 13:40:38
Local clock offset: -0.508 ms
Remote clock offset: 2.158 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 66.002 ms
Loss rate: 8.03%
-- Flow 1:
Average throughput: 3.58 Mbit/s
95th percentile per-packet one-way delay: 66.002 ms
Loss rate: 8.03%
Run 2: Report of PCC — Data Link

![Graph showing throughput and round trip time for Flow 1 ingresses and egresses.](image)

- Flow 1 ingress (mean 3.90 Mbit/s)
- Flow 1 egress (mean 3.58 Mbit/s)

![Graph showing round trip time for Flow 1.](image)

- Flow 1 95th percentile 66.00 ms
Run 3: Statistics of PCC

Start at: 2018-02-02 14:04:05
End at: 2018-02-02 14:04:35
Local clock offset: -3.217 ms
Remote clock offset: 2.722 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 68.835 ms
Loss rate: 3.85%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 68.835 ms
Loss rate: 3.85%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-02-02 14:28:01
End at: 2018-02-02 14:28:31
Local clock offset: -1.194 ms
Remote clock offset: 3.463 ms

# Below is generated by plot.py at 2018-02-02 17:38:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 3.83 Mbit/s
  95th percentile per-packet one-way delay: 66.913 ms
  Loss rate: 7.09%
-- Flow 1:
  Average throughput: 3.83 Mbit/s
  95th percentile per-packet one-way delay: 66.913 ms
  Loss rate: 7.09%
Run 4: Report of PCC — Data Link
Run 5: Statistics of PCC

Start at: 2018-02-02 14:51:54
End at: 2018-02-02 14:52:24
Local clock offset: -0.679 ms
Remote clock offset: 3.734 ms

# Below is generated by plot.py at 2018-02-02 17:39:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.37 Mbit/s
95th percentile per-packet one-way delay: 67.913 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 67.37 Mbit/s
95th percentile per-packet one-way delay: 67.913 ms
Loss rate: 3.47%
Run 5: Report of PCC — Data Link

![Graph showing throughput and delays over time for Flow 1, with mean ingress and egress speeds indicated.]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 69.79 Mbit/s)  Flow 1 egress (mean 67.37 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 67.91 ms)
Run 6: Statistics of PCC

Start at: 2018-02-02 15:15:50
End at: 2018-02-02 15:16:20
Local clock offset: -0.302 ms
Remote clock offset: 3.769 ms

# Below is generated by plot.py at 2018-02-02 17:39:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 65.997 ms
Loss rate: 4.69%
-- Flow 1:
Average throughput: 33.69 Mbit/s
95th percentile per-packet one-way delay: 65.997 ms
Loss rate: 4.69%
Run 6: Report of PCC — Data Link
Run 7: Statistics of PCC

Start at: 2018-02-02 15:39:42
End at: 2018-02-02 15:40:12
Local clock offset: -0.914 ms
Remote clock offset: 1.836 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.97 Mbit/s
95th percentile per-packet one-way delay: 76.141 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 84.97 Mbit/s
95th percentile per-packet one-way delay: 76.141 ms
Loss rate: 1.03%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-02-02 16:14:23
End at: 2018-02-02 16:14:53
Local clock offset: -0.506 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 74.738 ms
Loss rate: 57.61%
-- Flow 1:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 74.738 ms
Loss rate: 57.61%
Run 8: Report of PCC — Data Link
Run 9: Statistics of PCC

Start at: 2018-02-02 16:46:09
End at: 2018-02-02 16:46:39
Local clock offset: -1.134 ms
Remote clock offset: -0.231 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 66.217 ms
Loss rate: 20.56%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 66.217 ms
Loss rate: 20.56%
Run 9: Report of PCC — Data Link

---

**Throughput (Mbps):**

- **Flow 1 ingress (mean 1.98 Mbit/s)**
- **Flow 1 egress (mean 1.57 Mbit/s)**

---

**Packet round-trip delay (ms):**

- **Flow 1 (95th percentile 66.22 ms)**
Run 10: Statistics of PCC

Start at: 2018-02-02 17:10:15
End at: 2018-02-02 17:10:45
Local clock offset: -0.799 ms
Remote clock offset: -0.216 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 66.194 ms
Loss rate: 10.34%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 66.194 ms
Loss rate: 10.34%
Run 10: Report of PCC — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-02 13:04:14
End at: 2018-02-02 13:04:44
Local clock offset: -0.591 ms
Remote clock offset: 0.994 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 65.939 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 65.939 ms
Loss rate: 5.75%
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-02 13:28:11
End at: 2018-02-02 13:28:41
Local clock offset: -0.458 ms
Remote clock offset: 1.652 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 65.791 ms
Loss rate: 10.91%
-- Flow 1:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 65.791 ms
Loss rate: 10.91%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-02 13:52:07
End at: 2018-02-02 13:52:37
Local clock offset: -0.981 ms
Remote clock offset: 2.434 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 66.440 ms
Loss rate: 8.07%
-- Flow 1:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 66.440 ms
Loss rate: 8.07%
Run 3: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 1.06 Mbit/s)**
- **Flow 1 egress (mean 0.97 Mbit/s)**

![Graph 2: Per-packet end-to-end delay](image2)

- **Flow 1 (95th percentile 66.44 ms)**
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-02 14:15:57
End at: 2018-02-02 14:16:27
Local clock offset: -3.369 ms
Remote clock offset: 3.092 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 68.592 ms
Loss rate: 8.27%
-- Flow 1:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 68.592 ms
Loss rate: 8.27%
Run 4: Report of QUIC Cubic — Data Link

![Graph of Throughput vs. Time]

- Flow 1 ingress (mean 1.07 Mbit/s)
- Flow 1 egress (mean 0.99 Mbit/s)

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

- Flow 1 (95th percentile 68.59 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-02 14:39:58
End at: 2018-02-02 14:40:28
Local clock offset: -0.542 ms
Remote clock offset: 3.674 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 65.770 ms
Loss rate: 6.15%
-- Flow 1:
Average throughput: 1.13 Mbit/s
95th percentile per-packet one-way delay: 65.770 ms
Loss rate: 6.15%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-02 15:04:00
End at: 2018-02-02 15:04:30
Local clock offset: -0.996 ms
Remote clock offset: 3.876 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 66.626 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 66.626 ms
Loss rate: 1.33%
Run 6: Report of QUIC Cubic — Data Link

![Graph of Throughput and Delay over Time]

**Graph Information:**
- **Axes:**
  - Y-axis: Throughput (Mbps)
  - X-axis: Time (s)
- **Lines:**
  - Flow 1 ingress (mean 4.59 Mbps)
  - Flow 1 egress (mean 4.53 Mbps)
- **Points:**
  - Per-packet end-to-end delay (ms)

**Additional Details:**
- Flow 1 (95th percentile 66.63 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-02 15:27:48
End at: 2018-02-02 15:28:18
Local clock offset: -0.797 ms
Remote clock offset: 2.789 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 67.419 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 21.43 Mbit/s
95th percentile per-packet one-way delay: 67.419 ms
Loss rate: 0.92%
Run 7: Report of QUIC Cubic — Data Link

![Graph 1](image1.png)

**Flow 1 ingress (mean 21.63 Mbit/s)**

**Flow 1 egress (mean 21.43 Mbit/s)**

![Graph 2](image2.png)

**Flow 1 (95th percentile 67.42 ms)**

97
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-02 15:51:51
End at: 2018-02-02 15:52:21
Local clock offset: -0.809 ms
Remote clock offset: 1.101 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 66.806 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 28.37 Mbit/s
95th percentile per-packet one-way delay: 66.806 ms
Loss rate: 0.62%
Run 8: Report of QUIC Cubic — Data Link

---

**Throughput (Mb/s)**

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

- **Flow 1 ingress** (mean 28.55 Mb/s)
- **Flow 1 egress** (mean 28.37 Mb/s)

**Round-trip one-way delay (ms)**

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

- **Flow 1** (99th percentile 66.81 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-02 16:33:55
End at: 2018-02-02 16:34:25
Local clock offset: -0.407 ms
Remote clock offset: -0.32 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 65.231 ms
Loss rate: 25.68%
-- Flow 1:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 65.231 ms
Loss rate: 25.68%
Run 9: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delay over time for two flows.](image-url)

- Flow 1 ingress (mean 0.68 Mbit/s)
- Flow 1 egress (mean 0.51 Mbit/s)

- Flow 1 (95th percentile delay 65.23 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-02 16:58:20
End at: 2018-02-02 16:58:50
Local clock offset: -0.262 ms
Remote clock offset: -0.25 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 65.387 ms
Loss rate: 11.40%
-- Flow 1:
Average throughput: 0.85 Mbit/s
95th percentile per-packet one-way delay: 65.387 ms
Loss rate: 11.40%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-02-02 13:08:11
End at: 2018-02-02 13:08:41
Local clock offset: -0.296 ms
Remote clock offset: 1.077 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 65.518 ms
Loss rate: 6.38%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 65.518 ms
Loss rate: 6.38%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-02-02 13:32:08
End at: 2018-02-02 13:32:38
Local clock offset: -0.743 ms
Remote clock offset: 1.856 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 6.74%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 65.888 ms
Loss rate: 6.74%
Run 2: Report of SCReAM — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 0.08 Mbit/s)
  - Flow 1 egress (mean 0.08 Mbit/s)

- **Packet delay (ms)**
  - Flow 1 (95th percentile 65.99 ms)
Run 3: Statistics of SCReAM

Start at: 2018-02-02 13:56:03
End at: 2018-02-02 13:56:33
Local clock offset: -0.808 ms
Remote clock offset: 2.518 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.129 ms
Loss rate: 8.83%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.129 ms
Loss rate: 8.83%
Run 3: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress with mean values of 0.08 Mbit/s.]

![Graph showing packet delay for Flow 1 with 95th percentile delay of 66.13 ms.]
Run 4: Statistics of SCReAM

Start at: 2018-02-02 14:19:53
End at: 2018-02-02 14:20:23
Local clock offset: -0.563 ms
Remote clock offset: 3.212 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.029 ms
Loss rate: 9.16%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.029 ms
Loss rate: 9.16%
Run 4: Report of SCReAM — Data Link

[Graph showing throughput and packet delay over time for Flow 1 with labels for ingress and egress means]

[Graph showing packet delay distribution over time for Flow 1 with 95th percentile indicated]
Run 5: Statistics of SCReAM

Start at: 2018-02-02 14:43:57
End at: 2018-02-02 14:44:27
Local clock offset: -1.048 ms
Remote clock offset: 3.686 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 66.267 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 66.267 ms
Loss rate: 1.73%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-02-02 15:07:56
End at: 2018-02-02 15:08:26
Local clock offset: -0.811 ms
Remote clock offset: 3.898 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.215 ms
Loss rate: 5.19%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.215 ms
Loss rate: 5.19%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-02-02 15:31:45
End at: 2018-02-02 15:32:15
Local clock offset: -0.72 ms
Remote clock offset: 2.542 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 66.203 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 66.203 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

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

- Flow 1 (95th percentile 66.20 ms)
Run 8: Statistics of SCReAM

Start at: 2018-02-02 15:55:49
End at: 2018-02-02 15:56:19
Local clock offset: -0.799 ms
Remote clock offset: 1.067 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 66.242 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 66.242 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

Throughput vs Time (s)

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

Packet delay vs Time (s)

Flow 1 (95th percentile 66.24 ms)
Run 9: Statistics of SCReAM

Start at: 2018-02-02 16:37:59
End at: 2018-02-02 16:38:29
Local clock offset: -0.999 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.014 ms
Loss rate: 6.41%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.014 ms
Loss rate: 6.41%
Run 9: Report of SCReAM — Data Link

![Graph showing throughput over time](image1)

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

*Flow 1 ingress (mean 0.09 Mbit/s)*
*Flow 1 egress (mean 0.08 Mbit/s)*

*Flow 1 (95th percentile 66.01 ms)*
Run 10: Statistics of SCReAM

Start at: 2018-02-02 17:02:15
End at: 2018-02-02 17:02:45
Local clock offset: -0.866 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.012 ms
Loss rate: 11.71%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.012 ms
Loss rate: 11.71%
Run 10: Report of SCReAM — Data Link

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

- **Flow 1 ingress** (mean 0.08 Mbit/s)
- **Flow 1 egress** (mean 0.08 Mbit/s)

![Graph showing round-trip time](image)

- **Flow 1** (95th percentile 66.01 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-02-02 13:05:31
End at: 2018-02-02 13:06:01
Local clock offset: -0.493 ms
Remote clock offset: 0.992 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 66.223 ms
Loss rate: 7.94%
-- Flow 1:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 66.223 ms
Loss rate: 7.94%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput over time]

- **Flow 1 ingress (mean 4.25 Mbit/s)**
- **Flow 1 egress (mean 3.91 Mbit/s)**

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

- **Flow 1 (95th percentile 66.22 ms)**
Run 2: Statistics of WebRTC media

Start at: 2018-02-02 13:29:29
End at: 2018-02-02 13:29:59
Local clock offset: -0.602 ms
Remote clock offset: 1.754 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 66.548 ms
Loss rate: 9.59%
-- Flow 1:
Average throughput: 3.34 Mbit/s
95th percentile per-packet one-way delay: 66.548 ms
Loss rate: 9.59%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-02-02 13:53:24
End at: 2018-02-02 13:53:54
Local clock offset: -0.279 ms
Remote clock offset: 2.371 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 65.844 ms
Loss rate: 9.50%
-- Flow 1:
Average throughput: 1.22 Mbit/s
95th percentile per-packet one-way delay: 65.844 ms
Loss rate: 9.50%
Run 3: Report of WebRTC media — Data Link

![Graph showing throughput (Mbps) over time for Flow 1 ingress (mean 1.35 Mbps) and Flow 1 egress (mean 1.22 Mbps).]

![Graph showing per-packet end-to-end delay (ms) over time for Flow 1 (95th percentile 65.84 ms).]
Run 4: Statistics of WebRTC media

Start at: 2018-02-02 14:17:14
End at: 2018-02-02 14:17:44
Local clock offset: -0.493 ms
Remote clock offset: 3.096 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 65.867 ms
Loss rate: 8.06%
-- Flow 1:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 65.867 ms
Loss rate: 8.06%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-02-02 14:41:16
End at: 2018-02-02 14:41:46
Local clock offset: -0.633 ms
Remote clock offset: 3.648 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 66.241 ms
Loss rate: 6.80%
-- Flow 1:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 66.241 ms
Loss rate: 6.80%
Run 5: Report of WebRTC media — Data Link

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

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 3.94 Mbit/s)  Flow 1 egress (mean 3.68 Mbit/s)

Packet inter-packet delay (ms) vs Time (s)

Flow 1 (95th percentile 66.24 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-02-02 15:05:18
End at: 2018-02-02 15:05:48
Local clock offset: -0.697 ms
Remote clock offset: 3.898 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 66.548 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 3.27 Mbit/s
95th percentile per-packet one-way delay: 66.548 ms
Loss rate: 2.82%
Run 6: Report of WebRTC media — Data Link

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

[Graph showing per-packet one-way delay with a single line representing a flow with 95th percentile delay.]
Run 7: Statistics of WebRTC media

Start at: 2018-02-02 15:29:06
End at: 2018-02-02 15:29:36
Local clock offset: ~0.508 ms
Remote clock offset: 2.79 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 66.281 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: 66.281 ms
Loss rate: 0.27%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-02-02 15:53:10
End at: 2018-02-02 15:53:40
Local clock offset: -0.747 ms
Remote clock offset: 1.108 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 66.453 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.30 Mbit/s
95th percentile per-packet one-way delay: 66.453 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-02-02 16:35:16
End at: 2018-02-02 16:35:46
Local clock offset: -1.052 ms
Remote clock offset: -0.365 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 66.593 ms
Loss rate: 23.81%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 66.593 ms
Loss rate: 23.81%
Run 9: Report of WebRTC media — Data Link

![Graph 1]

![Graph 2]
Run 10: Statistics of WebRTC media

Start at: 2018-02-02 16:59:38
End at: 2018-02-02 17:00:08
Local clock offset: -0.84 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 66.162 ms
Loss rate: 12.17%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 66.162 ms
Loss rate: 12.17%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-02-02 13:13:31
End at: 2018-02-02 13:14:01
Local clock offset: -0.72 ms
Remote clock offset: 1.325 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 69.371 ms
Loss rate: 12.79%

-- Flow 1:
Average throughput: 1.26 Mbit/s
95th percentile per-packet one-way delay: 69.371 ms
Loss rate: 12.79%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-02-02 13:37:26
End at: 2018-02-02 13:37:56
Local clock offset: -1.023 ms
Remote clock offset: 1.974 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 69.747 ms
Loss rate: 12.30%
-- Flow 1:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 69.747 ms
Loss rate: 12.30%
Run 2: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 1.46 Mbit/s)
Flow 1 egress (mean 1.28 Mbit/s)

Per packet one-way delay (ms)

Flow 1 (95th percentile 69.75 ms)
Run 3: Statistics of Sprout

Start at: 2018-02-02 14:01:23
End at: 2018-02-02 14:01:53
Local clock offset: -0.449 ms
Remote clock offset: 2.628 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.61 Mbit/s
  95th percentile per-packet one-way delay: 69.031 ms
  Loss rate: 13.54%
-- Flow 1:
  Average throughput: 1.61 Mbit/s
  95th percentile per-packet one-way delay: 69.031 ms
  Loss rate: 13.54%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-02-02 14:25:20
End at: 2018-02-02 14:25:50
Local clock offset: -0.656 ms
Remote clock offset: 3.346 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.40 Mbit/s
  95th percentile per-packet one-way delay: 68.342 ms
  Loss rate: 11.39%
-- Flow 1:
  Average throughput: 1.40 Mbit/s
  95th percentile per-packet one-way delay: 68.342 ms
  Loss rate: 11.39%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-02-02 14:49:14
End at: 2018-02-02 14:49:44
Local clock offset: -0.529 ms
Remote clock offset: 3.724 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 70.877 ms
Loss rate: 4.87%
-- Flow 1:
Average throughput: 6.10 Mbit/s
95th percentile per-packet one-way delay: 70.877 ms
Loss rate: 4.87%
Run 5: Report of Sprout — Data Link

![Graph of Throughput (Mbit/s) over Time (s)]

- **Flow 1 ingress** (mean 6.42 Mbit/s)
- **Flow 1 egress** (mean 6.10 Mbit/s)

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

- **Flow 1** (95th percentile 70.08 ms)
Run 6: Statistics of Sprout

Start at: 2018-02-02 15:13:10
End at: 2018-02-02 15:13:40
Local clock offset: -0.639 ms
Remote clock offset: 3.858 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 70.042 ms
Loss rate: 9.40%
-- Flow 1:
Average throughput: 4.14 Mbit/s
95th percentile per-packet one-way delay: 70.042 ms
Loss rate: 9.40%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-02-02 15:37:03
End at: 2018-02-02 15:37:33
Local clock offset: -0.419 ms
Remote clock offset: 2.071 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 7.10 Mbit/s
  95th percentile per-packet one-way delay: 70.935 ms
  Loss rate: 1.62%
-- Flow 1:
  Average throughput: 7.10 Mbit/s
  95th percentile per-packet one-way delay: 70.935 ms
  Loss rate: 1.62%
Run 7: Report of Sprout — Data Link

![Graph of throughput and packet loss](image)

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 7.22 Mbps)
  - Flow 1 egress (mean 7.10 Mbps)

- **Per-packet transmission delay (ms)**:
  - Flow 1 (95th percentile 70.94 ms)
Run 8: Statistics of Sprout

Start at: 2018-02-02 16:08:08
End at: 2018-02-02 16:08:39
Local clock offset: -0.97 ms
Remote clock offset: 0.313 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.435 ms
Loss rate: 59.77%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 66.435 ms
Loss rate: 59.77%
Run 8: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.12 Mbit/s)  Flow 1 egress (mean 0.05 Mbit/s)

Time (s)

Peer packet end-to-end delay (ms)

Flow 1 (95th percentile 66.44 ms)
Run 9: Statistics of Sprout

Start at: 2018-02-02 16:43:26
End at: 2018-02-02 16:43:56
Local clock offset: -0.442 ms
Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 66.882 ms
Loss rate: 19.90%
-- Flow 1:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 66.882 ms
Loss rate: 19.90%
Run 9: Report of Sprout — Data Link

Graph 1: Throughput (Mbps)

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

<Graph1>

<Graph2>

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Run 10: Statistics of Sprout

Start at: 2018-02-02 17:07:34
End at: 2018-02-02 17:08:04
Local clock offset: -0.406 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-02-02 17:39:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 70.121 ms
Loss rate: 12.13%
-- Flow 1:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: 70.121 ms
Loss rate: 12.13%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-02 13:02:43
End at: 2018-02-02 13:03:13
Local clock offset: -0.522 ms
Remote clock offset: 0.899 ms

# Below is generated by plot.py at 2018-02-02 17:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.99 Mbit/s
95th percentile per-packet one-way delay: 79.369 ms
Loss rate: 9.82%
-- Flow 1:
Average throughput: 75.99 Mbit/s
95th percentile per-packet one-way delay: 79.369 ms
Loss rate: 9.82%
Run 1: Report of TaoVA-100x — Data Link

![Graph of network traffic over time]

- Flow 1 ingress (mean 84.28 Mbit/s)
- Flow 1 egress (mean 75.99 Mbit/s)

![Graph of packet delay over time]

- Flow 1 (95th percentile 79.37 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-02-02 13:26:46
End at: 2018-02-02 13:27:16
Local clock offset: -1.132 ms
Remote clock offset: 1.642 ms

# Below is generated by plot.py at 2018-02-02 17:40:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.24 Mbit/s
95th percentile per-packet one-way delay: 78.154 ms
Loss rate: 10.53%
-- Flow 1:
Average throughput: 72.24 Mbit/s
95th percentile per-packet one-way delay: 78.154 ms
Loss rate: 10.53%
Run 2: Report of TaoVA-100x — Data Link

[Diagram of throughput over time]

[Diagram of per-packet one-way delay over time]

Flow 1 ingress (mean 80.75 Mbit/s)  \hspace{1cm}  Flow 1 egress (mean 72.24 Mbit/s)

Flow 1 (95th percentile 78.15 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-02 13:50:42
End at: 2018-02-02 13:51:12
Local clock offset: -0.762 ms
Remote clock offset: 2.362 ms

# Below is generated by plot.py at 2018-02-02 17:41:02
# Datalink statistics
-- Total of 1 flow:
    Average throughput: 77.43 Mbit/s
    95th percentile per-packet one-way delay: 79.487 ms
    Loss rate: 10.94%
-- Flow 1:
    Average throughput: 77.43 Mbit/s
    95th percentile per-packet one-way delay: 79.487 ms
    Loss rate: 10.94%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 86.96 Mbit/s)**
- **Flow 1 egress (mean 77.43 Mbit/s)**

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

- **Flow 1 (95th percentile 79.49 ms)**
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-02 14:14:33
End at: 2018-02-02 14:15:03
Local clock offset: ~0.642 ms
Remote clock offset: 3.041 ms

# Below is generated by plot.py at 2018-02-02 17:41:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.20 Mbit/s
95th percentile per-packet one-way delay: 78.747 ms
Loss rate: 9.57%
-- Flow 1:
Average throughput: 79.20 Mbit/s
95th percentile per-packet one-way delay: 78.747 ms
Loss rate: 9.57%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 87.59 Mbit/s)
- Flow 1 egress (mean 79.20 Mbit/s)

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

- Flow 1 (95th percentile 78.75 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-02 14:38:34  
End at: 2018-02-02 14:39:04  
Local clock offset: -0.839 ms  
Remote clock offset: 3.647 ms

# Below is generated by plot.py at 2018-02-02 17:41:07  
# Datalink statistics  
-- Total of 1 flow:  
  Average throughput: 77.71 Mbit/s  
  95th percentile per-packet one-way delay: 77.598 ms  
  Loss rate: 9.50%  
-- Flow 1:  
  Average throughput: 77.71 Mbit/s  
  95th percentile per-packet one-way delay: 77.598 ms  
  Loss rate: 9.50%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-02 15:02:37
End at: 2018-02-02 15:03:07
Local clock offset: -0.753 ms
Remote clock offset: 3.759 ms

# Below is generated by plot.py at 2018-02-02 17:41:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.89 Mbit/s
95th percentile per-packet one-way delay: 78.303 ms
Loss rate: 5.48%
-- Flow 1:
Average throughput: 75.89 Mbit/s
95th percentile per-packet one-way delay: 78.303 ms
Loss rate: 5.48%
Run 6: Report of TaoVA-100x — Data Link

![Throughput vs Time Graph]

![Packet Delay vs Time Graph]
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-02 15:26:24
End at: 2018-02-02 15:26:54
Local clock offset: -0.711 ms
Remote clock offset: 3.052 ms

# Below is generated by plot.py at 2018-02-02 17:41:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 76.771 ms
Loss rate: 6.59%
-- Flow 1:
Average throughput: 78.56 Mbit/s
95th percentile per-packet one-way delay: 76.771 ms
Loss rate: 6.59%
Run 7: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 84.11 Mbit/s)
- **Flow 1 egress** (mean 78.56 Mbit/s)

![Graph 2: End-to-end delay (ms)](image2)

- **Flow 1** (95th percentile 76.77 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-02 15:50:28
End at: 2018-02-02 15:50:59
Local clock offset: -0.667 ms
Remote clock offset: 1.141 ms

# Below is generated by plot.py at 2018-02-02 17:41:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 79.096 ms
Loss rate: 4.91%
-- Flow 1:
Average throughput: 74.09 Mbit/s
95th percentile per-packet one-way delay: 79.096 ms
Loss rate: 4.91%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-02 16:32:30
End at: 2018-02-02 16:33:00
Local clock offset: -0.253 ms
Remote clock offset: -0.362 ms

# Below is generated by plot.py at 2018-02-02 17:41:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 65.292 ms
Loss rate: 27.54%
-- Flow 1:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 65.292 ms
Loss rate: 27.54%
Run 9: Report of TaoVA-100x — Data Link

![Graph 1: Throughput (Mbps)](chart1)

- Flow 1 ingress (mean 7.14 Mbps)
- Flow 1 egress (mean 5.17 Mbps)

![Graph 2: Per-packet one-way delay (ms)](chart2)

- Flow 1 (95th percentile 65.29 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-02 16:56:56
End at: 2018-02-02 16:57:26
Local clock offset: -0.348 ms
Remote clock offset: -0.248 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 77.08 Mbit/s
  95th percentile per-packet one-way delay: 76.038 ms
  Loss rate: 11.71%
-- Flow 1:
  Average throughput: 77.08 Mbit/s
  95th percentile per-packet one-way delay: 76.038 ms
  Loss rate: 11.71%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 87.30 Mbit/s)
- Flow 1 egress (mean 77.08 Mbit/s)

![Graph showing packet loss over time for Flow 1 with 95th percentile at 76.04 ms.]
Run 1: Statistics of TCP Vegas

Start at: 2018-02-02 13:00:06
End at: 2018-02-02 13:00:36
Local clock offset: -0.456 ms
Remote clock offset: 0.845 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 66.992 ms
Loss rate: 8.32%
-- Flow 1:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: 66.992 ms
Loss rate: 8.32%
Run 1: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 0.51 Mbit/s)**
- **Flow 1 egress (mean 0.46 Mbit/s)**

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

- **Flow 1 (95th percentile 66.99 ms)**
Run 2: Statistics of TCP Vegas

Start at: 2018-02-02 13:24:10
End at: 2018-02-02 13:24:40
Local clock offset: -0.235 ms
Remote clock offset: 1.567 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 66.315 ms
Loss rate: 8.89%
-- Flow 1:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 66.315 ms
Loss rate: 8.89%
Run 2: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress (mean 0.43 Mbit/s)**
- **Flow 1 egress (mean 0.39 Mbit/s)**

![Graph showing packet delay over time]

- **Flow 1 (95th percentile 66.31 ms)**
Run 3: Statistics of TCP Vegas

Start at: 2018-02-02 13:48:07
End at: 2018-02-02 13:48:37
Local clock offset: -3.467 ms
Remote clock offset: 2.342 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 69.337 ms
Loss rate: 8.90%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 69.337 ms
Loss rate: 8.90%
Run 3: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with ingress and egress rates]
Run 4: Statistics of TCP Vegas

Start at: 2018-02-02 14:11:58
End at: 2018-02-02 14:12:28
Local clock offset: -1.261 ms
Remote clock offset: 2.947 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 67.455 ms
Loss rate: 5.99%
-- Flow 1:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 67.455 ms
Loss rate: 5.99%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-02-02 14:35:57
End at: 2018-02-02 14:36:27
Local clock offset: -0.737 ms
Remote clock offset: 3.675 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 66.767 ms
Loss rate: 8.14%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 66.767 ms
Loss rate: 8.14%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-02-02 14:59:58
End at: 2018-02-02 15:00:28
Local clock offset: -0.625 ms
Remote clock offset: 3.781 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 68.666 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 68.666 ms
Loss rate: 1.96%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-02-02 15:23:48
End at: 2018-02-02 15:24:18
Local clock offset: -0.647 ms
Remote clock offset: 3.388 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 68.601 ms
Loss rate: 4.05%
-- Flow 1:
Average throughput: 1.03 Mbit/s
95th percentile per-packet one-way delay: 68.601 ms
Loss rate: 4.05%
Run 7: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**
  - X-axis: Time (s)
  - Y-axis: Throughput (Mbps)
  - Lines:
    - **Flow 1 ingress (mean 1.06 Mbit/s)**
    - **Flow 1 egress (mean 1.03 Mbit/s)**

- **Per-packet round-trip delay (ms)**
  - X-axis: Time (s)
  - Y-axis: Per-packet round-trip delay (ms)
  - Line:
    - **Flow 1 (95th percentile 68.60 ms)**
Run 8: Statistics of TCP Vegas

Start at: 2018-02-02 15:47:48
End at: 2018-02-02 15:48:18
Local clock offset: -0.869 ms
Remote clock offset: 1.237 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 66.909 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 16.91 Mbit/s
95th percentile per-packet one-way delay: 66.909 ms
Loss rate: 0.22%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-02-02 16:29:49
End at: 2018-02-02 16:30:19
Local clock offset: -0.53 ms
Remote clock offset: -0.321 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.102 ms
Loss rate: 29.57%
-- Flow 1:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 66.102 ms
Loss rate: 29.57%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-02-02 16:54:20
End at: 2018-02-02 16:54:50
Local clock offset: -0.239 ms
Remote clock offset: -0.252 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.963 ms
Loss rate: 17.92%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.963 ms
Loss rate: 17.92%
Run 10: Report of TCP Vegas — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 1: Statistics of Verus

Start at: 2018-02-02 13:18:50
End at: 2018-02-02 13:19:20
Local clock offset: -0.214 ms
Remote clock offset: 1.393 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 25.64 Mbit/s
95th percentile per-packet one-way delay: 72.905 ms
Loss rate: 83.36%
-- Flow 1:
Average throughput: 25.64 Mbit/s
95th percentile per-packet one-way delay: 72.905 ms
Loss rate: 83.36%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-02-02 13:42:44
End at: 2018-02-02 13:43:14
Local clock offset: -0.618 ms
Remote clock offset: 2.181 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.30 Mbit/s
95th percentile per-packet one-way delay: 78.148 ms
Loss rate: 88.46%
-- Flow 1:
Average throughput: 39.30 Mbit/s
95th percentile per-packet one-way delay: 78.148 ms
Loss rate: 88.46%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 340.79 Mbit/s)
- Flow 1 egress (mean 39.30 Mbit/s)

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

- Flow 1 (95th percentile 78.15 ms)
Run 3: Statistics of Verus

Start at: 2018-02-02 14:06:39
End at: 2018-02-02 14:07:10
Local clock offset: ~0.799 ms
Remote clock offset: 2.792 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.41 Mbit/s
95th percentile per-packet one-way delay: 81.012 ms
Loss rate: 83.39%
-- Flow 1:
Average throughput: 26.41 Mbit/s
95th percentile per-packet one-way delay: 81.012 ms
Loss rate: 83.39%
Run 3: Report of Verus — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 158.97 Mbps)
- Flow 1 egress (mean 26.41 Mbps)

![Delay Graph]

- Flow 1 (95th percentile 81.01 ms)
Run 4: Statistics of Verus

Start at: 2018-02-02 14:30:37
End at: 2018-02-02 14:31:07
Local clock offset: -0.634 ms
Remote clock offset: 3.504 ms

# Below is generated by plot.py at 2018-02-02 17:42:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 35.01 Mbit/s
  95th percentile per-packet one-way delay: 79.141 ms
  Loss rate: 84.66%
-- Flow 1:
  Average throughput: 35.01 Mbit/s
  95th percentile per-packet one-way delay: 79.141 ms
  Loss rate: 84.66%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-02-02 14:54:34  
End at: 2018-02-02 14:55:04  
Local clock offset: -0.665 ms  
Remote clock offset: 3.753 ms

# Below is generated by plot.py at 2018-02-02 17:43:21  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 38.43 Mbit/s  
95th percentile per-packet one-way delay: 104.701 ms  
Loss rate: 90.73%  
-- Flow 1:  
Average throughput: 38.43 Mbit/s  
95th percentile per-packet one-way delay: 104.701 ms  
Loss rate: 90.73%
Run 5: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 414.47 Mbit/s)  Flow 1 egress (mean 36.43 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 104.70 ms)
Run 6: Statistics of Verus

Start at: 2018-02-02 15:18:27
End at: 2018-02-02 15:18:57
Local clock offset: -0.424 ms
Remote clock offset: 3.556 ms

# Below is generated by plot.py at 2018-02-02 17:43:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 78.174 ms
Loss rate: 82.64%
-- Flow 1:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 78.174 ms
Loss rate: 82.64%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-02-02 15:42:25
End at: 2018-02-02 15:42:55
Local clock offset: -0.745 ms
Remote clock offset: 1.584 ms

# Below is generated by plot.py at 2018-02-02 17:43:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.87 Mbit/s
95th percentile per-packet one-way delay: 96.221 ms
Loss rate: 83.51%
-- Flow 1:
Average throughput: 35.87 Mbit/s
95th percentile per-packet one-way delay: 96.221 ms
Loss rate: 83.51%
Run 7: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 217.48 Mbit/s)**
- **Flow 1 egress (mean 35.87 Mbit/s)**

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

- **Flow 1 (95th percentile 96.22 ms)**
Run 8: Statistics of Verus

Start at: 2018-02-02 16:22:56
End at: 2018-02-02 16:23:26
Local clock offset: -0.669 ms
Remote clock offset: -0.262 ms

# Below is generated by plot.py at 2018-02-02 17:43:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 39.61 Mbit/s
95th percentile per-packet one-way delay: 73.010 ms
Loss rate: 73.55%
-- Flow 1:
Average throughput: 39.61 Mbit/s
95th percentile per-packet one-way delay: 73.010 ms
Loss rate: 73.55%
Run 8: Report of Verus — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 149.77 Mbit/s)
- Flow 1 egress (mean 39.61 Mbit/s)

![Packet Delay Graph](image2)

- Flow 1 (95th percentile 73.01 ms)
Run 9: Statistics of Verus

Start at: 2018-02-02 16:48:47
End at: 2018-02-02 16:49:17
Local clock offset: -0.577 ms
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 73.688 ms
Loss rate: 89.25%
-- Flow 1:
Average throughput: 38.25 Mbit/s
95th percentile per-packet one-way delay: 73.688 ms
Loss rate: 89.25%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-02-02 17:12:52
End at: 2018-02-02 17:13:22
Local clock offset: -0.749 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 77.674 ms
Loss rate: 83.09%
-- Flow 1:
Average throughput: 34.62 Mbit/s
95th percentile per-packet one-way delay: 77.674 ms
Loss rate: 83.09%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput (Mbits/s)]

- **Flow 1 ingress** (mean 204.81 Mbit/s)
- **Flow 1 egress** (mean 34.62 Mbit/s)

![Graph 2: Packet Loss (100%)]

- **Flow 1** (95th percentile 77.67 ms)
Run 1: Statistics of Copa

Start at: 2018-02-02 13:10:52
End at: 2018-02-02 13:11:22
Local clock offset: -0.455 ms
Remote clock offset: 1.171 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 66.210 ms
Loss rate: 8.29%
-- Flow 1:
Average throughput: 33.55 Mbit/s
95th percentile per-packet one-way delay: 66.210 ms
Loss rate: 8.29%
Run 1: Report of Copa — Data Link

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

- Flow 1 ingress (mean 36.58 Mbit/s)
- Flow 1 egress (mean 33.55 Mbit/s)

- Flow 1 (95th percentile 66.21 ms)
Run 2: Statistics of Copa

Start at: 2018-02-02 13:34:49
End at: 2018-02-02 13:35:19
Local clock offset: -0.597 ms
Remote clock offset: 1.958 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.62 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 7.68%
-- Flow 1:
Average throughput: 31.62 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 7.68%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-02-02 13:58:43
End at: 2018-02-02 13:59:14
Local clock offset: -0.672 ms
Remote clock offset: 2.584 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 66.084 ms
Loss rate: 8.24%
-- Flow 1:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 66.084 ms
Loss rate: 8.24%
Run 3: Report of Copa — Data Link

---

Graph 1: Throughput (Mbps) vs. Time (s)
- Blue dashed line: Flow 1 ingress (mean 37.01 Mbps)
- Blue solid line: Flow 1 egress (mean 33.96 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Blue dots: Flow 1 (95th percentile 66.08 ms)

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Run 4: Statistics of Copa

Start at: 2018-02-02 14:22:42
End at: 2018-02-02 14:23:12
Local clock offset: -0.688 ms
Remote clock offset: 3.259 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 30.11 Mbit/s
  95th percentile per-packet one-way delay: 66.057 ms
  Loss rate: 7.37%
-- Flow 1:
  Average throughput: 30.11 Mbit/s
  95th percentile per-packet one-way delay: 66.057 ms
  Loss rate: 7.37%
Run 4: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 32.50 Mbit/s)**
- **Flow 1 egress (mean 30.11 Mbit/s)**
Run 5: Statistics of Copa

Start at: 2018-02-02 14:46:37
End at: 2018-02-02 14:47:07
Local clock offset: -0.474 ms
Remote clock offset: 3.707 ms

# Below is generated by plot.py at 2018-02-02 17:43:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 66.109 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 66.109 ms
Loss rate: 2.06%
Run 5: Report of Copa — Data Link

![Graph showing throughput and delay over time.](image-url)
Run 6: Statistics of Copa

Start at: 2018-02-02 15:10:36
End at: 2018-02-02 15:11:06
Local clock offset: -0.425 ms
Remote clock offset: 3.993 ms
Run 6: Report of Copa — Data Link

![Graph showing data link performance metrics over time]
Run 7: Statistics of Copa

Start at: 2018-02-02 15:34:25
End at: 2018-02-02 15:34:55
Local clock offset: -0.888 ms
Remote clock offset: 2.37 ms

# Below is generated by plot.py at 2018-02-02 17:44:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 66.589 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 35.91 Mbit/s
95th percentile per-packet one-way delay: 66.589 ms
Loss rate: 0.12%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-02-02 15:58:28
End at: 2018-02-02 15:58:58
Local clock offset: -0.686 ms
Remote clock offset: 0.971 ms

# Below is generated by plot.py at 2018-02-02 17:44:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 34.51 Mbit/s
  95th percentile per-packet one-way delay: 65.999 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.51 Mbit/s
  95th percentile per-packet one-way delay: 65.999 ms
  Loss rate: 0.00%
Run 8: Report of Copa — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with mean 34.51 Mbps and Flow 1 (95th percentile 66.00 ms)]
Run 9: Statistics of Copa

Start at: 2018-02-02 16:40:44
End at: 2018-02-02 16:41:14
Local clock offset: -0.502 ms
Remote clock offset: -0.352 ms

# Below is generated by plot.py at 2018-02-02 17:44:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 65.762 ms
Loss rate: 20.12%
-- Flow 1:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 65.762 ms
Loss rate: 20.12%
Run 9: Report of Copa — Data Link

![Graph 1: Throughput vs Time]

Flow 1 ingress (mean 37.66 Mbit/s) Flow 1 egress (mean 30.10 Mbit/s)

![Graph 2: Per-packet round-trip delay vs Time]

Flow 1 (95th percentile 65.76 ms)
Run 10: Statistics of Copa

Start at: 2018-02-02 17:04:56
End at: 2018-02-02 17:05:26
Local clock offset: -1.001 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-02-02 17:44:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 66.212 ms
Loss rate: 10.04%
-- Flow 1:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 66.212 ms
Loss rate: 10.04%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

Start at: 2018-02-02 13:14:49
End at: 2018-02-02 13:15:19
Local clock offset: -0.609 ms
Remote clock offset: 1.312 ms

# Below is generated by plot.py at 2018-02-02 17:45:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.35 Mbit/s
95th percentile per-packet one-way delay: 72.482 ms
Loss rate: 12.06%
-- Flow 1:
Average throughput: 72.35 Mbit/s
95th percentile per-packet one-way delay: 72.482 ms
Loss rate: 12.06%
Run 1: Report of FillP — Data Link

![Throughput Graph]

![Delay Graph]
Run 2: Statistics of FillP

Start at: 2018-02-02 13:38:45
End at: 2018-02-02 13:39:15
Local clock offset: -0.503 ms
Remote clock offset: 2.087 ms

# Below is generated by plot.py at 2018-02-02 17:45:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.03 Mbit/s
95th percentile per-packet one-way delay: 73.152 ms
Loss rate: 11.05%
-- Flow 1:
Average throughput: 75.03 Mbit/s
95th percentile per-packet one-way delay: 73.152 ms
Loss rate: 11.05%
Run 2: Report of FillP — Data Link

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

Throughput (Mbps)

- Flow 1 ingress (mean 84.36 Mbit/s)
- Flow 1 egress (mean 75.03 Mbit/s)

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

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 73.15 ms)
Run 3: Statistics of FillP

Start at: 2018-02-02 14:02:41
End at: 2018-02-02 14:03:11
Local clock offset: -0.723 ms
Remote clock offset: 2.717 ms

# Below is generated by plot.py at 2018-02-02 17:45:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.23 Mbit/s
95th percentile per-packet one-way delay: 71.724 ms
Loss rate: 11.83%
-- Flow 1:
Average throughput: 73.23 Mbit/s
95th percentile per-packet one-way delay: 71.724 ms
Loss rate: 11.83%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-02-02 14:26:38
End at: 2018-02-02 14:27:08
Local clock offset: -1.187 ms
Remote clock offset: 3.398 ms

# Below is generated by plot.py at 2018-02-02 17:46:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.22 Mbit/s
95th percentile per-packet one-way delay: 72.156 ms
Loss rate: 10.12%
-- Flow 1:
Average throughput: 76.22 Mbit/s
95th percentile per-packet one-way delay: 72.156 ms
Loss rate: 10.12%
Run 4: Report of FillP — Data Link

![Graph of Throughput (Mbps) over time]

*Flow 1 ingress (mean 84.80 Mbit/s)*
*Flow 1 egress (mean 76.22 Mbit/s)*

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

*Flow 1 (95th percentile 72.16 ms)*
Run 5: Statistics of FillP

Start at: 2018-02-02 14:50:31
End at: 2018-02-02 14:51:01
Local clock offset: -0.66 ms
Remote clock offset: 3.725 ms

# Below is generated by plot.py at 2018-02-02 17:46:25
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 81.41 Mbit/s
  95th percentile per-packet one-way delay: 76.127 ms
  Loss rate: 6.23%
-- Flow 1:
  Average throughput: 81.41 Mbit/s
  95th percentile per-packet one-way delay: 76.127 ms
  Loss rate: 6.23%
Run 5: Report of FillP — Data Link

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**Graph 1:**
- **Throughput (Mbps):**
  - **Flow 1 ingress (mean 86.82 Mbit/s)**
  - **Flow 1 egress (mean 81.41 Mbit/s)**
- **Time (s):** 0 to 30

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - **Flow 1 (95th percentile 76.13 ms)**
- **Time (s):** 0 to 30

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Run 6: Statistics of FillP

Start at: 2018-02-02 15:14:27
End at: 2018-02-02 15:14:57
Local clock offset: -1.097 ms
Remote clock offset: 3.815 ms

# Below is generated by plot.py at 2018-02-02 17:46:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 74.165 ms
Loss rate: 9.61%
-- Flow 1:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 74.165 ms
Loss rate: 9.61%
Run 6: Report of FillP — Data Link
Run 7: Statistics of FillP

Start at: 2018-02-02 15:38:20
End at: 2018-02-02 15:38:50
Local clock offset: -0.745 ms
Remote clock offset: 1.936 ms

# Below is generated by plot.py at 2018-02-02 17:46:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.33 Mbit/s
95th percentile per-packet one-way delay: 75.934 ms
Loss rate: 5.16%
-- Flow 1:
Average throughput: 83.33 Mbit/s
95th percentile per-packet one-way delay: 75.934 ms
Loss rate: 5.16%
Run 7: Report of FillP — Data Link

![Graph of Throughput]

![Graph of Per-packet delay]

Flow 1 ingress (mean 87.87 Mbit/s) | Flow 1 egress (mean 83.33 Mbit/s)

Flow 1 (95th percentile 75.93 ms)
Run 8: Statistics of FillP

Start at: 2018-02-02 16:11:27
End at: 2018-02-02 16:11:57
Local clock offset: ~0.71 ms
Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-02-02 17:46:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 75.267 ms
Loss rate: 66.57%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 75.267 ms
Loss rate: 66.57%
Run 8: Report of FillP — Data Link

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

- Flow 1 ingress (mean 5.94 Mbit/s)
- Flow 1 egress (mean 2.02 Mbit/s)

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

- Flow 1 (95th percentile 75.27 ms)
Run 9: Statistics of FILLP

Start at: 2018-02-02 16:44:45
End at: 2018-02-02 16:45:15
Local clock offset: -0.237 ms
Remote clock offset: -0.287 ms

# Below is generated by plot.py at 2018-02-02 17:46:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 76.705 ms
Loss rate: 31.66%
-- Flow 1:
Average throughput: 9.41 Mbit/s
95th percentile per-packet one-way delay: 76.705 ms
Loss rate: 31.66%
Run 9: Report of FillP — Data Link
Run 10: Statistics of FillP

Start at: 2018-02-02 17:08:52
End at: 2018-02-02 17:09:22
Local clock offset: -0.466 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-02-02 17:46:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.66 Mbit/s
95th percentile per-packet one-way delay: 71.999 ms
Loss rate: 10.93%
-- Flow 1:
Average throughput: 74.66 Mbit/s
95th percentile per-packet one-way delay: 71.999 ms
Loss rate: 10.93%
Run 10: Report of FillP — Data Link

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

Flow 1 ingress (mean 83.83 Mbit/s)  Flow 1 egress (mean 74.66 Mbit/s)

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

Flow 1 (95th percentile 72.00 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-02 12:58:36
End at: 2018-02-02 12:59:06
Local clock offset: -0.337 ms
Remote clock offset: 0.827 ms

# Below is generated by plot.py at 2018-02-02 17:46:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 77.554 ms
Loss rate: 15.43%
-- Flow 1:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 77.554 ms
Loss rate: 15.43%
Run 1: Report of Indigo-1-32 — Data Link

![Throughput (Mbps) over time for Flow 1 ingress and egress](image1)

![Packet one-way delay (ms) over time for Flow 1](image2)
Run 2: Statistics of Indigo-1-32

End at: 2018-02-02 13:23:17
Local clock offset: -0.513 ms
Remote clock offset: 1.517 ms

# Below is generated by plot.py at 2018-02-02 17:47:12
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 90.90 Mbit/s
  95th percentile per-packet one-way delay: 81.478 ms
  Loss rate: 19.86%
-- Flow 1:
  Average throughput: 90.90 Mbit/s
  95th percentile per-packet one-way delay: 81.478 ms
  Loss rate: 19.86%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-02 13:46:45  
End at: 2018-02-02 13:47:15  
Local clock offset: -0.507 ms  
Remote clock offset: 2.302 ms

# Below is generated by plot.py at 2018-02-02 17:47:12  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 74.01 Mbit/s  
95th percentile per-packet one-way delay: 76.729 ms  
Loss rate: 11.64%  
-- Flow 1:  
Average throughput: 74.01 Mbit/s  
95th percentile per-packet one-way delay: 76.729 ms  
Loss rate: 11.64%
Run 3: Report of Indigo-1-32 — Data Link

---

![Graph 1](image1.png)

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

Start at: 2018-02-02 14:10:36
End at: 2018-02-02 14:11:06
Local clock offset: -0.938 ms
Remote clock offset: 2.889 ms

# Below is generated by plot.py at 2018-02-02 17:47:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 78.770 ms
Loss rate: 11.41%
-- Flow 1:
Average throughput: 82.71 Mbit/s
95th percentile per-packet one-way delay: 78.770 ms
Loss rate: 11.41%
Run 4: Report of Indigo-1-32 — Data Link

[Graph 1: Throughput vs. Time]

[Graph 2: Packet Delay vs. Time]

Flow 1 ingress (mean 93.37 Mbps)  Flow 1 egress (mean 82.71 Mbps)
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-02 14:34:34
End at: 2018-02-02 14:35:04
Local clock offset: -0.568 ms
Remote clock offset: 3.607 ms

# Below is generated by plot.py at 2018-02-02 17:47:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.41 Mbit/s
95th percentile per-packet one-way delay: 81.878 ms
Loss rate: 22.87%
-- Flow 1:
Average throughput: 90.41 Mbit/s
95th percentile per-packet one-way delay: 81.878 ms
Loss rate: 22.87%
Run 5: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 117.23 Mbit/s)
- Flow 1 egress (mean 90.41 Mbit/s)

![Graph 2: Packet Delay](image2)

- Flow 1 (95th percentile 81.88 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-02 14:58:35
End at: 2018-02-02 14:59:05
Local clock offset: -0.997 ms
Remote clock offset: 3.776 ms

# Below is generated by plot.py at 2018-02-02 17:47:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 90.54 Mbit/s
  95th percentile per-packet one-way delay: 82.576 ms
  Loss rate: 14.35%
-- Flow 1:
  Average throughput: 90.54 Mbit/s
  95th percentile per-packet one-way delay: 82.576 ms
  Loss rate: 14.35%
Run 6: Report of Indigo-1-32 — Data Link

[Graph showing throughput and packet loss over time]

Throughput: [Graph showing throughput over time with labels (Flow 1 ingress and egress)]

Packet loss: [Graph showing packet loss over time with labels (Flow 1)]

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Run 7: Statistics of Indigo-1-32

Start at: 2018-02-02 15:22:24
End at: 2018-02-02 15:22:54
Local clock offset: -3.514 ms
Remote clock offset: 3.378 ms

# Below is generated by plot.py at 2018-02-02 17:48:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 84.275 ms
Loss rate: 19.03%
-- Flow 1:
Average throughput: 91.91 Mbit/s
95th percentile per-packet one-way delay: 84.275 ms
Loss rate: 19.03%
Run 7: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 113.54 Mbps)
  - Flow 1 egress (mean 91.91 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 84.28 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-02 15:46:26
End at: 2018-02-02 15:46:56
Local clock offset: -0.859 ms
Remote clock offset: 1.27 ms

# Below is generated by plot.py at 2018-02-02 17:48:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.53 Mbit/s
95th percentile per-packet one-way delay: 77.842 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 84.53 Mbit/s
95th percentile per-packet one-way delay: 77.842 ms
Loss rate: 2.15%
Run 8: Report of Indigo-1-32 — Data Link
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-02 16:28:22
End at: 2018-02-02 16:28:52
Local clock offset: -0.343 ms
Remote clock offset: -0.352 ms

# Below is generated by plot.py at 2018-02-02 17:48:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 70.198 ms
Loss rate: 38.03%
-- Flow 1:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 70.198 ms
Loss rate: 38.03%
Run 9: Report of Indigo-1-32 — Data Link
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-02 16:52:56
End at: 2018-02-02 16:53:26
Local clock offset: -0.475 ms
Remote clock offset: -0.246 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.64 Mbit/s
95th percentile per-packet one-way delay: 71.786 ms
Loss rate: 24.33%
-- Flow 1:
Average throughput: 71.64 Mbit/s
95th percentile per-packet one-way delay: 71.786 ms
Loss rate: 24.33%
Run 10: Report of Indigo-1-32 — Data Link
Run 1: Statistics of Vivace-latency

Start at: 2018-02-02 12:57:19
End at: 2018-02-02 12:57:49
Local clock offset: -0.617 ms
Remote clock offset: 0.773 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 8.86%
-- Flow 1:
Average throughput: 1.40 Mbit/s
95th percentile per-packet one-way delay: 66.366 ms
Loss rate: 8.86%
Run 1: Report of Vivace-latency — Data Link

![Throughput and Delay Graphs](image)

Flow 1 ingress (mean 1.53 Mbit/s) vs. Flow 1 egress (mean 1.40 Mbit/s)

Flow 1 (95th percentile 66.37 ms)
Run 2: Statistics of Vivace-latency

Start at: 2018-02-02 13:21:29
End at: 2018-02-02 13:21:59
Local clock offset: -0.295 ms
Remote clock offset: 1.481 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 65.817 ms
Loss rate: 7.87%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 65.817 ms
Loss rate: 7.87%
Run 2: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time. The graph displays two traces: one for flow ingress and one for egress. The throughput fluctuates significantly, especially around the 20-second mark. The latency shows a consistent pattern with a 95th percentile of 65.82 ms.]
Run 3: Statistics of Vivace-latency

Start at: 2018-02-02 13:45:26
End at: 2018-02-02 13:45:56
Local clock offset: -0.434 ms
Remote clock offset: 2.333 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 66.186 ms
Loss rate: 7.44%
-- Flow 1:
Average throughput: 1.43 Mbit/s
95th percentile per-packet one-way delay: 66.186 ms
Loss rate: 7.44%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-02-02 14:09:18
End at: 2018-02-02 14:09:48
Local clock offset: -0.531 ms
Remote clock offset: 2.773 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 65.988 ms
Loss rate: 4.96%
-- Flow 1:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: 65.988 ms
Loss rate: 4.96%
Run 4: Report of Vivace-latency — Data Link
Run 5: Statistics of Vivace-latency

Start at: 2018-02-02 14:33:16
End at: 2018-02-02 14:33:46
Local clock offset: -0.36 ms
Remote clock offset: 3.56 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 65.980 ms
Loss rate: 7.98%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 65.980 ms
Loss rate: 7.98%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-02-02 14:57:16
End at: 2018-02-02 14:57:46
Local clock offset: -0.723 ms
Remote clock offset: 3.711 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 66.276 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: 66.276 ms
Loss rate: 0.99%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-02-02 15:21:06
End at: 2018-02-02 15:21:36
Local clock offset: -0.784 ms
Remote clock offset: 3.494 ms

# Below is generated by plot.py at 2018-02-02 17:48:18
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 14.71 Mbit/s
  95th percentile per-packet one-way delay: 66.396 ms
  Loss rate: 4.93%
-- Flow 1:
  Average throughput: 14.71 Mbit/s
  95th percentile per-packet one-way delay: 66.396 ms
  Loss rate: 4.93%
Run 7: Report of Vivace-latency — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 15.47 Mbit/s)  Flow 1 egress (mean 14.71 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 66.40 ms)
Run 8: Statistics of Vivace-latency

Start at: 2018-02-02 15:45:04
End at: 2018-02-02 15:45:35
Local clock offset: -1.185 ms
Remote clock offset: 1.386 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.13 Mbit/s
95th percentile per-packet one-way delay: 71.578 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 67.13 Mbit/s
95th percentile per-packet one-way delay: 71.578 ms
Loss rate: 0.26%
Run 8: Report of Vivace-latency — Data Link

![Graph of throughput vs time with latency measurements]

Flow 1 ingress (mean 67.30 Mbit/s)  Flow 1 egress (mean 67.13 Mbit/s)
Run 9: Statistics of Vivace-latency

Start at: 2018-02-02 16:26:40
End at: 2018-02-02 16:27:10
Local clock offset: -1.065 ms
Remote clock offset: -0.224 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 38.29%
-- Flow 1:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 38.29%
Run 9: Report of Vivace-latency — Data Link
Run 10: Statistics of Vivace-latency

Start at: 2018-02-02 16:51:39
End at: 2018-02-02 16:52:09
Local clock offset: -0.488 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.44 Mbit/s
  95th percentile per-packet one-way delay: 65.776 ms
  Loss rate: 15.61%
-- Flow 1:
  Average throughput: 1.44 Mbit/s
  95th percentile per-packet one-way delay: 65.776 ms
  Loss rate: 15.61%
Run 10: Report of Vivace-latency — Data Link

[Graph showing throughput over time]

[Graph showing per-packet one-way delay over time]
Run 1: Statistics of Vivace-loss

Start at: 2018-02-02 13:17:30
End at: 2018-02-02 13:18:00
Local clock offset: -0.748 ms
Remote clock offset: 1.382 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 66.246 ms
Loss rate: 9.38%
-- Flow 1:
Average throughput: 1.77 Mbit/s
95th percentile per-packet one-way delay: 66.246 ms
Loss rate: 9.38%
Run 1: Report of Vivace-loss — Data Link

![Graph](image1.png)

Flow 1 ingress (mean 1.93 Mbit/s)  Flow 1 egress (mean 1.77 Mbit/s)

![Graph](image2.png)

Flow 1 (95th percentile 66.25 ms)
Run 2: Statistics of Vivace-loss

Start at: 2018-02-02 13:41:26
End at: 2018-02-02 13:41:56
Local clock offset: -0.66 ms
Remote clock offset: 2.183 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.46 Mbit/s
  95th percentile per-packet one-way delay: 66.079 ms
  Loss rate: 7.27%
-- Flow 1:
  Average throughput: 1.46 Mbit/s
  95th percentile per-packet one-way delay: 66.079 ms
  Loss rate: 7.27%
Run 2: Report of Vivace-loss — Data Link

![Graph of Throughput (Mbps) vs Time (s) for Flow 1 ingress (mean 1.57 Mbit/s) and Flow 1 egress (mean 1.46 Mbit/s).]

![Graph of Packet Error Rate vs Time (s) showing Flow 1 (95th percentile 66.08 ms).]
Run 3: Statistics of Vivace-loss

Start at: 2018-02-02 14:05:22
End at: 2018-02-02 14:05:52
Local clock offset: ~0.673 ms
Remote clock offset: 2.829 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
   -- Total of 1 flow:
  Average throughput: 2.40 Mbit/s
  95th percentile per-packet one-way delay: 66.338 ms
  Loss rate: 4.32%
   -- Flow 1:
  Average throughput: 2.40 Mbit/s
  95th percentile per-packet one-way delay: 66.338 ms
  Loss rate: 4.32%
Run 3: Report of Vivace-loss — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean and 95th percentile values.]

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 2.51 Mbps)
- **Flow 1 egress** (mean 2.40 Mbps)

**Delay (ms)**

- **Flow 1** (95th percentile 66.34 ms)
Run 4: Statistics of Vivace-loss

Start at: 2018-02-02 14:29:18
End at: 2018-02-02 14:29:48
Local clock offset: -0.744 ms
Remote clock offset: 3.451 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 2.89 Mbit/s
95th percentile per-packet one-way delay: 66.080 ms
Loss rate: 6.63%
Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-02-02 14:53:13
End at: 2018-02-02 14:53:43
Local clock offset: -0.803 ms
Remote clock offset: 3.709 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 82.571 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 54.44 Mbit/s
95th percentile per-packet one-way delay: 82.571 ms
Loss rate: 1.78%
Run 5: Report of Vivace-loss — Data Link

![Graph 1](https://via.placeholder.com/150)

![Graph 2](https://via.placeholder.com/150)
Run 6: Statistics of Vivace-loss

Start at: 2018-02-02 15:17:09
End at: 2018-02-02 15:17:39
Local clock offset: -1.219 ms
Remote clock offset: 3.665 ms

# Below is generated by plot.py at 2018-02-02 17:48:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 66.803 ms
Loss rate: 4.20%
-- Flow 1:
Average throughput: 10.73 Mbit/s
95th percentile per-packet one-way delay: 66.803 ms
Loss rate: 4.20%
Run 7: Statistics of Vivace-loss

Start at: 2018-02-02 15:41:02
End at: 2018-02-02 15:41:32
Local clock offset: -0.74 ms
Remote clock offset: 1.71 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.17 Mbit/s
95th percentile per-packet one-way delay: 82.515 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 90.17 Mbit/s
95th percentile per-packet one-way delay: 82.515 ms
Loss rate: 2.01%
Run 7: Report of Vivace-loss — Data Link
Run 8: Statistics of Vivace-loss

Start at: 2018-02-02 16:21:32
End at: 2018-02-02 16:22:02
Local clock offset: -0.581 ms
Remote clock offset: -4.758 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 70.179 ms
Loss rate: 48.11%
-- Flow 1:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 70.179 ms
Loss rate: 48.11%
Run 8: Report of Vivace-loss — Data Link

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**Graph 1:**
- **Y-axis:** Throughput (Mbit/s)
- **X-axis:** Time (s)
- Legend:
  - Dashed line: Flow 1 ingress (mean 1.27 Mbit/s)
  - Solid line: Flow 1 egress (mean 0.66 Mbit/s)

**Graph 2:**
- **Y-axis:** Per-packet one-way delay (ms)
- **X-axis:** Time (s)
- Legend:
  - Dotted line: Flow 1 (90th percentile 70.18 ms)
Run 9: Statistics of Vivace-loss

Start at: 2018-02-02 16:47:28
End at: 2018-02-02 16:47:58
Local clock offset: -0.595 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 65.646 ms
Loss rate: 17.75%
-- Flow 1:
Average throughput: 1.11 Mbit/s
95th percentile per-packet one-way delay: 65.646 ms
Loss rate: 17.75%
Run 9: Report of Vivace-loss — Data Link
Run 10: Statistics of Vivace-loss

Start at: 2018-02-02 17:11:34
End at: 2018-02-02 17:12:04
Local clock offset: -0.327 ms
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 65.709 ms
Loss rate: 8.80%
-- Flow 1:
Average throughput: 1.82 Mbit/s
95th percentile per-packet one-way delay: 65.709 ms
Loss rate: 8.80%
Run 10: Report of Vivace-loss — Data Link

![Graph of throughput vs time for two flows with different mean rates: Flow 1 ingress (mean 2.00 Mbit/s) and Flow 1 egress (mean 1.82 Mbit/s).]

![Graph of per-packet one-way delay vs time for Flow 1 with 95th percentile delay of 65.71 ms.]
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-02 13:01:24
End at: 2018-02-02 13:01:54
Local clock offset: -1.101 ms
Remote clock offset: 0.981 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.62 Mbit/s
  95th percentile per-packet one-way delay: 66.927 ms
  Loss rate: 8.04%
-- Flow 1:
  Average throughput: 1.62 Mbit/s
  95th percentile per-packet one-way delay: 66.927 ms
  Loss rate: 8.04%
Run 1: Report of Vivace-LTE — Data Link

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

![Graph of packet round-trip delay over time for Flow 1 with 95th percentile](image)

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Run 2: Statistics of Vivace-LTE

Start at: 2018-02-02 13:25:28
End at: 2018-02-02 13:25:58
Local clock offset: -0.714 ms
Remote clock offset: 1.575 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.85 Mbit/s
  95th percentile per-packet one-way delay: 66.354 ms
  Loss rate: 7.03%
-- Flow 1:
  Average throughput: 1.85 Mbit/s
  95th percentile per-packet one-way delay: 66.354 ms
  Loss rate: 7.03%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-02 13:49:24
End at: 2018-02-02 13:49:54
Local clock offset: -0.583 ms
Remote clock offset: 2.331 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 66.209 ms
Loss rate: 8.39%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 66.209 ms
Loss rate: 8.39%
Run 3: Report of Vivace-LTE — Data Link
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-02 14:13:15
End at: 2018-02-02 14:13:45
Local clock offset: -0.857 ms
Remote clock offset: 2.963 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 66.209 ms
Loss rate: 7.61%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 66.209 ms
Loss rate: 7.61%
Run 4: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 2.08 Mbit/s)
- Flow 1 egress (mean 1.92 Mbit/s)
- Flow 1 (95th percentile 66.21 ms)
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-02 14:37:15
End at: 2018-02-02 14:37:45
Local clock offset: -0.719 ms
Remote clock offset: 3.665 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 66.357 ms
Loss rate: 6.90%
-- Flow 1:
Average throughput: 1.78 Mbit/s
95th percentile per-packet one-way delay: 66.357 ms
Loss rate: 6.90%
Run 5: Report of Vivace-LTE — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 1.92 Mbit/s)  Flow 1 egress (mean 1.78 Mbit/s)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 66.36 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-02 15:01:15
End at: 2018-02-02 15:01:45
Local clock offset: -0.379 ms
Remote clock offset: 3.815 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 76.104 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 78.46 Mbit/s
95th percentile per-packet one-way delay: 76.104 ms
Loss rate: 1.46%
Run 6: Report of Vivace-LTE — Data Link

![Graph](image1)

- Flow 1 ingress (mean 79.65 Mbit/s)
- Flow 1 egress (mean 78.46 Mbit/s)

![Graph](image2)

- Flow 1 (95th percentile 76.10 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-02 15:25:05
End at: 2018-02-02 15:25:35
Local clock offset: -0.711 ms
Remote clock offset: 3.208 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 21.02 Mbit/s
  95th percentile per-packet one-way delay: 66.413 ms
  Loss rate: 3.08%
-- Flow 1:
  Average throughput: 21.02 Mbit/s
  95th percentile per-packet one-way delay: 66.413 ms
  Loss rate: 3.08%
Run 7: Report of Vivace-LTE — Data Link

![Graph showing throughput over time and round trip times]

- **Flow 1 ingress** (mean 21.69 Mbit/s)
- **Flow 1 egress** (mean 21.02 Mbit/s)

![Flow 1 95th percentile 66.41 ms]
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-02 15:49:06
End at: 2018-02-02 15:49:36
Local clock offset: -0.787 ms
Remote clock offset: 1.176 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.55 Mbit/s
95th percentile per-packet one-way delay: 76.589 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 86.55 Mbit/s
95th percentile per-packet one-way delay: 76.589 ms
Loss rate: 1.36%
Run 8: Report of Vivace-LTE — Data Link
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-02 16:31:10
End at: 2018-02-02 16:31:41
Local clock offset: -0.343 ms
Remote clock offset: -0.301 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 65.567 ms
Loss rate: 31.00%
-- Flow 1:
Average throughput: 0.75 Mbit/s
95th percentile per-packet one-way delay: 65.567 ms
Loss rate: 31.00%
Run 9: Report of Vivace-LTE — Data Link
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-02 16:55:38
End at: 2018-02-02 16:56:08
Local clock offset: -0.65 ms
Remote clock offset: -0.258 ms

# Below is generated by plot.py at 2018-02-02 17:48:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 65.962 ms
Loss rate: 9.53%
-- Flow 1:
Average throughput: 1.48 Mbit/s
95th percentile per-packet one-way delay: 65.962 ms
Loss rate: 9.53%
Run 10: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress (mean 1.64 Mbit/s)**
- **Flow 1 egress (mean 1.48 Mbit/s)**

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

- **Flow 1 (95th percentile 65.96 ms)**