Pantheon Report

Generated at 2018-02-05 03:44:23 (UTC).
Data path: AWS India 1 Ethernet (local) → India Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
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 nets.org.sg and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 70217998b3c9a7166a95460a70c0854d1326e100
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrup/sender.cc
third_party/fillp @ fb9c9ab842e5614ad52911a76fb9bd1c1b0dca86
third_party/generalCC @ 80b516c448f795fd6e9675f7177b69c622ff07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db748450f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0e0cd6f90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ 0f02e693303ae8e808e6928eac4f1083a6681
  M datagrup/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db2674ccfcff93
third_party/pcc @ 1afc958fa0d66d18b623c091a55fesc872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cffe
third_party/scream @ c3370f7bd7b17265a79aeb34e4016ad23f9565885
third_party/sourdough @ 1f14abfffe7497374f3f161beaeeb30b267cd6e81
third_party/sprout @ 6f2e6e6e088d91066a9f023df375ee2665089ce
  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 @ 7a4ba531e75b4af6f66f5c458019212041784ce3
third_party/webrtc @ a488197ddd041ace66a42849b2540ad834825f42
test from AWS India 1 Ethernet to India Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<tbody>
<tr>
<td></td>
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<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<tr>
<td>TCP BBR</td>
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<td>45.19</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>74.34</td>
<td>15.36</td>
<td>9.47</td>
</tr>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-02-04 23:07:39
End at: 2018-02-04 23:08:09
Local clock offset: -0.936 ms
Remote clock offset: 10.229 ms

# Below is generated by plot.py at 2018-02-05 03:21:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.59 Mbit/s
  95th percentile per-packet one-way delay: 30.509 ms
  Loss rate: 9.76%
-- Flow 1:
  Average throughput: 53.40 Mbit/s
  95th percentile per-packet one-way delay: 29.908 ms
  Loss rate: 9.07%
-- Flow 2:
  Average throughput: 36.63 Mbit/s
  95th percentile per-packet one-way delay: 31.037 ms
  Loss rate: 10.63%
-- Flow 3:
  Average throughput: 26.56 Mbit/s
  95th percentile per-packet one-way delay: 32.097 ms
  Loss rate: 11.45%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-02-04 23:32:38
End at: 2018-02-04 23:33:08
Local clock offset: 0.967 ms
Remote clock offset: 13.362 ms

# Below is generated by plot.py at 2018-02-05 03:21:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.68 Mbit/s
  95th percentile per-packet one-way delay: 27.663 ms
  Loss rate: 8.99%
-- Flow 1:
  Average throughput: 58.78 Mbit/s
  95th percentile per-packet one-way delay: 27.299 ms
  Loss rate: 8.37%
-- Flow 2:
  Average throughput: 35.69 Mbit/s
  95th percentile per-packet one-way delay: 28.286 ms
  Loss rate: 10.51%
-- Flow 3:
  Average throughput: 9.50 Mbit/s
  95th percentile per-packet one-way delay: 28.758 ms
  Loss rate: 9.02%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-02-04 23:57:14  
End at: 2018-02-04 23:57:44  
Local clock offset: -0.767 ms  
Remote clock offset: 2.538 ms

# Below is generated by plot.py at 2018-02-05 03:21:30  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 86.72 Mbit/s  
95th percentile per-packet one-way delay: 26.719 ms  
Loss rate: 8.53%  
-- Flow 1:  
Average throughput: 59.84 Mbit/s  
95th percentile per-packet one-way delay: 26.393 ms  
Loss rate: 8.01%  
-- Flow 2:  
Average throughput: 27.26 Mbit/s  
95th percentile per-packet one-way delay: 27.236 ms  
Loss rate: 8.31%  
-- Flow 3:  
Average throughput: 26.48 Mbit/s  
95th percentile per-packet one-way delay: 27.228 ms  
Loss rate: 12.37%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-02-05 00:21:53
End at: 2018-02-05 00:22:23
Local clock offset: 3.079 ms
Remote clock offset: 4.497 ms

# Below is generated by plot.py at 2018-02-05 03:21:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.03 Mbit/s
95th percentile per-packet one-way delay: 29.103 ms
Loss rate: 9.51%
-- Flow 1:
Average throughput: 58.25 Mbit/s
95th percentile per-packet one-way delay: 28.519 ms
Loss rate: 8.26%
-- Flow 2:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 29.579 ms
Loss rate: 10.40%
-- Flow 3:
Average throughput: 32.64 Mbit/s
95th percentile per-packet one-way delay: 30.664 ms
Loss rate: 14.45%
Run 4: Report of TCP BBR — Data Link

![Graph showing network performance metrics over time.](image-url)

- **Throughput (Mbps)**
  - **Flow 1 ingress (mean 63.51 Mbps)**
  - **Flow 1 egress (mean 58.25 Mbps)**
  - **Flow 2 ingress (mean 28.41 Mbps)**
  - **Flow 2 egress (mean 25.45 Mbps)**
  - **Flow 3 ingress (mean 38.31 Mbps)**
  - **Flow 3 egress (mean 32.64 Mbps)**

- **Per packet one way delay (ms)**
  - **Flow 1 (95th percentile 28.52 ms)**
  - **Flow 2 (95th percentile 29.58 ms)**
  - **Flow 3 (95th percentile 30.66 ms)**
Run 5: Statistics of TCP BBR

Start at: 2018-02-05 00:47:04
End at: 2018-02-05 00:47:34
Local clock offset: 2.528 ms
Remote clock offset: 3.613 ms

# Below is generated by plot.py at 2018-02-05 03:21:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 30.738 ms
Loss rate: 9.63%
-- Flow 1:
Average throughput: 53.71 Mbit/s
95th percentile per-packet one-way delay: 30.084 ms
Loss rate: 8.79%
-- Flow 2:
Average throughput: 37.14 Mbit/s
95th percentile per-packet one-way delay: 30.923 ms
Loss rate: 10.36%
-- Flow 3:
Average throughput: 23.40 Mbit/s
95th percentile per-packet one-way delay: 32.431 ms
Loss rate: 12.92%
Run 5: Report of TCP BBR — Data Link

![Graph of Throughput and Delay](image)

Flow 1 ingress (mean 58.96 Mbit/s)  
Flow 1 egress (mean 53.71 Mbit/s)  
Flow 2 ingress (mean 41.52 Mbit/s)  
Flow 2 egress (mean 37.14 Mbit/s)  
Flow 3 ingress (mean 26.95 Mbit/s)  
Flow 3 egress (mean 23.40 Mbit/s)

Flow 1 (95th percentile 30.08 ms)  
Flow 2 (95th percentile 30.92 ms)  
Flow 3 (95th percentile 32.43 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-02-05 01:12:05
End at: 2018-02-05 01:12:35
Local clock offset: -0.981 ms
Remote clock offset: 2.166 ms

# Below is generated by plot.py at 2018-02-05 03:21:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.64 Mbit/s
95th percentile per-packet one-way delay: 31.762 ms
Loss rate: 10.02%
-- Flow 1:
Average throughput: 49.52 Mbit/s
95th percentile per-packet one-way delay: 30.720 ms
Loss rate: 8.66%
-- Flow 2:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 31.443 ms
Loss rate: 10.63%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: 34.085 ms
Loss rate: 14.47%
Run 6: Report of TCP BBR — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 54.22 Mbit/s)
- Flow 1 egress (mean 49.52 Mbit/s)
- Flow 2 ingress (mean 40.59 Mbit/s)
- Flow 2 egress (mean 36.27 Mbit/s)
- Flow 3 ingress (mean 38.56 Mbit/s)
- Flow 3 egress (mean 32.97 Mbit/s)

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

- Flow 1 (95th percentile 30.72 ms)
- Flow 2 (95th percentile 31.44 ms)
- Flow 3 (95th percentile 34.09 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-02-05 01:36:29  
End at: 2018-02-05 01:36:59  
Local clock offset: 3.355 ms  
Remote clock offset: 4.024 ms

# Below is generated by plot.py at 2018-02-05 03:21:32  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.25 Mbit/s  
95th percentile per-packet one-way delay: 27.557 ms  
Loss rate: 9.66%  
-- Flow 1:
Average throughput: 53.72 Mbit/s  
95th percentile per-packet one-way delay: 27.265 ms  
Loss rate: 8.95%  
-- Flow 2:
Average throughput: 35.88 Mbit/s  
95th percentile per-packet one-way delay: 27.696 ms  
Loss rate: 10.22%  
-- Flow 3:
Average throughput: 28.92 Mbit/s  
95th percentile per-packet one-way delay: 29.019 ms  
Loss rate: 12.38%
Run 7: Report of TCP BBR — Data Link

![Graph showing network traffic and round-trip time over time.]
Run 8: Statistics of TCP BBR

Start at: 2018-02-05 02:01:21
End at: 2018-02-05 02:01:51
Local clock offset: 3.275 ms
Remote clock offset: 2.932 ms

# Below is generated by plot.py at 2018-02-05 03:21:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.11 Mbit/s
95th percentile per-packet one-way delay: 27.888 ms
Loss rate: 7.60%
-- Flow 1:
Average throughput: 59.16 Mbit/s
95th percentile per-packet one-way delay: 27.531 ms
Loss rate: 7.12%
-- Flow 2:
Average throughput: 33.13 Mbit/s
95th percentile per-packet one-way delay: 28.459 ms
Loss rate: 8.71%
-- Flow 3:
Average throughput: 14.73 Mbit/s
95th percentile per-packet one-way delay: 28.924 ms
Loss rate: 8.28%
Run 8: Report of TCP BBR — Data Link

![Throughput Graph](image1)

![Per-packet round-trip latency](image2)
Run 9: Statistics of TCP BBR

Start at: 2018-02-05 02:26:31
End at: 2018-02-05 02:27:01
Local clock offset: 1.718 ms
Remote clock offset: 2.122 ms

# Below is generated by plot.py at 2018-02-05 03:22:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.08 Mbit/s
95th percentile per-packet one-way delay: 30.772 ms
Loss rate: 11.12%
-- Flow 1:
Average throughput: 52.06 Mbit/s
95th percentile per-packet one-way delay: 29.733 ms
Loss rate: 9.91%
-- Flow 2:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 31.361 ms
Loss rate: 12.53%
-- Flow 3:
Average throughput: 34.43 Mbit/s
95th percentile per-packet one-way delay: 31.112 ms
Loss rate: 13.78%
Run 9: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 57.82 Mbps)**
- **Flow 1 egress (mean 52.06 Mbps)**
- **Flow 2 ingress (mean 37.67 Mbps)**
- **Flow 2 egress (mean 32.39 Mbps)**
- **Flow 3 ingress (mean 40.00 Mbps)**
- **Flow 3 egress (mean 34.43 Mbps)**

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

- **Flow 1 (95th percentile 29.73 ms)**
- **Flow 2 (95th percentile 31.36 ms)**
- **Flow 3 (95th percentile 31.11 ms)**
Run 10: Statistics of TCP BBR

Start at: 2018-02-05 02:51:18
End at: 2018-02-05 02:51:48
Local clock offset: 3.298 ms
Remote clock offset: 3.222 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.55 Mbit/s
95th percentile per-packet one-way delay: 29.663 ms
Loss rate: 10.01%
-- Flow 1:
Average throughput: 56.39 Mbit/s
95th percentile per-packet one-way delay: 29.045 ms
Loss rate: 8.89%
-- Flow 2:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 30.653 ms
Loss rate: 11.86%
-- Flow 3:
Average throughput: 23.98 Mbit/s
95th percentile per-packet one-way delay: 30.559 ms
Loss rate: 12.42%
Run 10: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 61.97 Mbps)
- Flow 1 egress (mean 56.39 Mbps)
- Flow 2 ingress (mean 37.92 Mbps)
- Flow 2 egress (mean 33.35 Mbps)
- Flow 3 ingress (mean 27.39 Mbps)
- Flow 3 egress (mean 23.98 Mbps)

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

- Flow 1 (95th percentile 29.05 ms)
- Flow 2 (95th percentile 30.65 ms)
- Flow 3 (95th percentile 30.56 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-02-04 23:06:19
End at: 2018-02-04 23:06:49
Local clock offset: -0.813 ms
Remote clock offset: 11.908 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.33 Mbit/s
95th percentile per-packet one-way delay: 33.120 ms
Loss rate: 2.96%
-- Flow 1:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 29.606 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 44.56 Mbit/s
95th percentile per-packet one-way delay: 33.304 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 34.59 Mbit/s
95th percentile per-packet one-way delay: 33.817 ms
Loss rate: 3.45%
Run 1: Report of TCP Cubic — Data Link

![Graph showing throughputs and delays over time for different flows.](image)

Legend:
- Flow 1 ingress (mean 31.08 Mbit/s)
- Flow 1 egress (mean 30.15 Mbit/s)
- Flow 2 ingress (mean 45.95 Mbit/s)
- Flow 2 egress (mean 44.56 Mbit/s)
- Flow 3 ingress (mean 35.96 Mbit/s)
- Flow 3 egress (mean 34.59 Mbit/s)

![Graph showing per-packet delay over time for different flows.](image)

Legend:
- Flow 1 (95th percentile 29.61 ms)
- Flow 2 (95th percentile 33.30 ms)
- Flow 3 (95th percentile 33.82 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-02-04 23:31:16
End at: 2018-02-04 23:31:46
Local clock offset: 0.228 ms
Remote clock offset: 12.632 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.57 Mbit/s
  95th percentile per-packet one-way delay: 26.093 ms
  Loss rate: 2.17%
-- Flow 1:
  Average throughput: 36.29 Mbit/s
  95th percentile per-packet one-way delay: 23.708 ms
  Loss rate: 2.04%
-- Flow 2:
  Average throughput: 56.44 Mbit/s
  95th percentile per-packet one-way delay: 26.897 ms
  Loss rate: 2.20%
-- Flow 3:
  Average throughput: 8.30 Mbit/s
  95th percentile per-packet one-way delay: 28.130 ms
  Loss rate: 3.42%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-02-04 23:55:54
End at: 2018-02-04 23:56:24
Local clock offset: 3.186 ms
Remote clock offset: 9.948 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 27.544 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 50.03 Mbit/s
95th percentile per-packet one-way delay: 25.022 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 40.03 Mbit/s
95th percentile per-packet one-way delay: 28.662 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 31.064 ms
Loss rate: 1.86%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 51.11 Mbit/s)
- Flow 1 egress (mean 50.03 Mbit/s)
- Flow 2 ingress (mean 40.47 Mbit/s)
- Flow 2 egress (mean 40.03 Mbit/s)
- Flow 3 ingress (mean 17.44 Mbit/s)
- Flow 3 egress (mean 17.12 Mbit/s)
Run 4: Statistics of TCP Cubic

Start at: 2018-02-05 00:20:22
End at: 2018-02-05 00:20:52
Local clock offset: 1.309 ms
Remote clock offset: 4.986 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.64 Mbit/s
95th percentile per-packet one-way delay: 30.853 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 50.22 Mbit/s
95th percentile per-packet one-way delay: 30.682 ms
Loss rate: 1.86%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 31.912 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 14.99 Mbit/s
95th percentile per-packet one-way delay: 32.457 ms
Loss rate: 1.03%
Run 4: Report of TCP Cubic — Data Link

[Graph showing throughput over time for different flows with annotations for mean throughputs of each flow.]

[Graph showing per-packet one-way delay over time for different flows with annotations for 95th percentile delay of each flow.]
Run 5: Statistics of TCP Cubic

Start at: 2018-02-05 00:45:44
End at: 2018-02-05 00:46:14
Local clock offset: 0.939 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.79 Mbit/s
95th percentile per-packet one-way delay: 24.665 ms
Loss rate: 2.13%
-- Flow 1:
Average throughput: 35.51 Mbit/s
95th percentile per-packet one-way delay: 22.334 ms
Loss rate: 2.58%
-- Flow 2:
Average throughput: 58.14 Mbit/s
95th percentile per-packet one-way delay: 25.735 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 10.92 Mbit/s
95th percentile per-packet one-way delay: 29.559 ms
Loss rate: 0.99%
Run 5: Report of TCP Cubic — Data Link

![Graph showing network performance metrics]

- **Throughput (Mbps)** over time for different flows.
  - **Flow 1 ingress** (mean 36.45 Mbps).
  - **Flow 1 egress** (mean 35.51 Mbps).
  - **Flow 2 ingress** (mean 59.27 Mbps).
  - **Flow 2 egress** (mean 58.34 Mbps).
  - **Flow 3 ingress** (mean 11.01 Mbps).
  - **Flow 3 egress** (mean 10.92 Mbps).

- **Per packet one way delay (ms)**:
  - **Flow 1** (95th percentile 22.33 ms).
  - **Flow 2** (95th percentile 25.73 ms).
  - **Flow 3** (95th percentile 29.56 ms).

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33
Run 6: Statistics of TCP Cubic

Start at: 2018-02-05 01:10:46
End at: 2018-02-05 01:11:16
Local clock offset: 1.998 ms
Remote clock offset: -0.774 ms

# Below is generated by plot.py at 2018-02-05 03:22:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.91 Mbit/s
95th percentile per-packet one-way delay: 8.372 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 32.14 Mbit/s
95th percentile per-packet one-way delay: 7.962 ms
Loss rate: 3.02%
-- Flow 2:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: 8.725 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 8.013 ms
Loss rate: 3.10%
Run 6: Report of TCP Cubic — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 33.16 Mbps/s)
- Blue solid line: Flow 1 egress (mean 32.14 Mbps/s)
- Green dashed line: Flow 2 ingress (mean 41.09 Mbps/s)
- Green solid line: Flow 2 egress (mean 39.94 Mbps/s)
- Red dashed line: Flow 3 ingress (mean 38.15 Mbps/s)
- Red solid line: Flow 3 egress (mean 36.91 Mbps/s)

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

- Blue circles: Flow 1 (95th percentile 7.96 ms)
- Green circles: Flow 2 (95th percentile 8.72 ms)
- Red circles: Flow 3 (95th percentile 8.01 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-02-05 01:35:07
End at: 2018-02-05 01:35:37
Local clock offset: -0.05 ms
Remote clock offset: 3.483 ms

# Below is generated by plot.py at 2018-02-05 03:23:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.49 Mbit/s
95th percentile per-packet one-way delay: 20.980 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 49.05 Mbit/s
95th percentile per-packet one-way delay: 16.898 ms
Loss rate: 1.81%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: 21.860 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 25.46 Mbit/s
95th percentile per-packet one-way delay: 27.923 ms
Loss rate: 2.50%
Run 7: Report of TCP Cubic — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 49.97 Mbps)
- Flow 1 egress (mean 49.65 Mbps)
- Flow 2 ingress (mean 38.28 Mbps)
- Flow 2 egress (mean 37.52 Mbps)
- Flow 3 ingress (mean 26.13 Mbps)
- Flow 3 egress (mean 25.46 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 16.90 ms)
- Flow 2 (95th percentile 21.86 ms)
- Flow 3 (95th percentile 27.92 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-02-05 01:59:58
End at: 2018-02-05 02:00:28
Local clock offset: 0.637 ms
Remote clock offset: 2.962 ms

# Below is generated by plot.py at 2018-02-05 03:23:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.32 Mbit/s
95th percentile per-packet one-way delay: 29.227 ms
Loss rate: 2.26%
-- Flow 1:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 26.066 ms
Loss rate: 2.76%
-- Flow 2:
Average throughput: 58.53 Mbit/s
95th percentile per-packet one-way delay: 30.017 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 32.336 ms
Loss rate: 0.48%
Run 8: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 32.59 Mbit/s)
- Flow 1 egress (mean 31.67 Mbit/s)
- Flow 2 ingress (mean 59.81 Mbit/s)
- Flow 2 egress (mean 58.53 Mbit/s)
- Flow 3 ingress (mean 17.22 Mbit/s)
- Flow 3 egress (mean 17.12 Mbit/s)

![Graph of Packet Delay vs Time]

- Flow 1 (95th percentile 26.07 ms)
- Flow 2 (95th percentile 30.02 ms)
- Flow 3 (95th percentile 32.34 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-02-05 02:25:10
End at: 2018-02-05 02:25:40
Local clock offset: 3.633 ms
Remote clock offset: 0.259 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 86.01 Mbit/s
   95th percentile per-packet one-way delay: 25.201 ms
   Loss rate: 1.77%
-- Flow 1:
   Average throughput: 56.24 Mbit/s
   95th percentile per-packet one-way delay: 25.528 ms
   Loss rate: 1.78%
-- Flow 2:
   Average throughput: 38.11 Mbit/s
   95th percentile per-packet one-way delay: 23.595 ms
   Loss rate: 1.93%
-- Flow 3:
   Average throughput: 13.27 Mbit/s
   95th percentile per-packet one-way delay: 25.089 ms
   Loss rate: 0.64%
Run 9: Report of TCP Cubic — Data Link

Graphs showing throughput and packet delay over time for different flows.
Run 10: Statistics of TCP Cubic

Start at: 2018-02-05 02:49:56
End at: 2018-02-05 02:50:26
Local clock offset: 2.702 ms
Remote clock offset: 4.494 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.00 Mbit/s
95th percentile per-packet one-way delay: 27.561 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: 23.583 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 40.34 Mbit/s
95th percentile per-packet one-way delay: 29.169 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 17.63 Mbit/s
95th percentile per-packet one-way delay: 30.999 ms
Loss rate: 0.03%
Run 10: Report of TCP Cubic — Data Link

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Run 1: Statistics of LEDBAT

Start at: 2018-02-04 22:52:35
End at: 2018-02-04 22:53:05
Local clock offset: -0.976 ms
Remote clock offset: 11.346 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 17.30 Mbit/s
  95th percentile per-packet one-way delay: 0.797 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 11.26 Mbit/s
  95th percentile per-packet one-way delay: -0.138 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.42 Mbit/s
  95th percentile per-packet one-way delay: 2.323 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.34 Mbit/s
  95th percentile per-packet one-way delay: 0.040 ms
  Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph of throughput over time showing data for three flows with different ingest and egress data rates.]

![Graph of per-packet one-way delay over time showing 95th percentile delays for each flow.]

*Flow 1 (95th percentile: 0.14 ms)  Flow 2 (95th percentile: 2.32 ms)  Flow 3 (95th percentile: 0.04 ms)*
Run 2: Statistics of LEDBAT

Start at: 2018-02-04 23:17:31
End at: 2018-02-04 23:18:01
Local clock offset: -0.868 ms
Remote clock offset: 13.886 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.44 Mbit/s
95th percentile per-packet one-way delay: -2.605 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: -2.385 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.39 Mbit/s
95th percentile per-packet one-way delay: -2.808 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: -3.793 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-02-04 23:42:17
End at: 2018-02-04 23:42:47
Local clock offset: -2.851 ms
Remote clock offset: 9.258 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 17.32 Mbit/s
  95th percentile per-packet one-way delay: -3.268 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 11.20 Mbit/s
  95th percentile per-packet one-way delay: -4.117 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.44 Mbit/s
  95th percentile per-packet one-way delay: -2.754 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.60 Mbit/s
  95th percentile per-packet one-way delay: -2.471 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)
Run 4: Statistics of LEDBAT

Start at: 2018-02-05 00:06:40
End at: 2018-02-05 00:07:10
Local clock offset: 3.135 ms
Remote clock offset: 6.339 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 17.34 Mbit/s
  95th percentile per-packet one-way delay: -7.627 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 11.22 Mbit/s
  95th percentile per-packet one-way delay: -7.276 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.42 Mbit/s
  95th percentile per-packet one-way delay: -8.075 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.61 Mbit/s
  95th percentile per-packet one-way delay: -7.949 ms
  Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 11.22 Mbit/s)
- **Flow 1 egress** (mean 11.22 Mbit/s)
- **Flow 2 ingress** (mean 7.43 Mbit/s)
- **Flow 2 egress** (mean 7.42 Mbit/s)
- **Flow 3 ingress** (mean 3.61 Mbit/s)
- **Flow 3 egress** (mean 3.61 Mbit/s)

![Graph showing packet one-way delay over time for different flows.]

- **Flow 1** (95th percentile -7.28 ms)
- **Flow 2** (95th percentile -8.97 ms)
- **Flow 3** (95th percentile -7.95 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-02-05 00:31:47
End at: 2018-02-05 00:32:17
Local clock offset: 0.294 ms
Remote clock offset: 3.97 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.54 Mbit/s
95th percentile per-packet one-way delay: -2.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: -2.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: -2.434 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: -2.505 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet one-way delay](image2)
Run 6: Statistics of LEDBAT

Start at: 2018-02-05 00:56:59
End at: 2018-02-05 00:57:29
Local clock offset: 3.847 ms
Remote clock offset: 3.005 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.18 Mbit/s
95th percentile per-packet one-way delay: -5.161 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 11.02 Mbit/s
95th percentile per-packet one-way delay: -5.550 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: -4.632 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: -4.397 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

![Graphs showing throughput and packet one-way delay over time for different flows.]

Flow 1 ingress (mean 11.02 Mbit/s)  
Flow 1 egress (mean 11.02 Mbit/s)  
Flow 2 ingress (mean 7.47 Mbit/s)  
Flow 2 egress (mean 7.47 Mbit/s)  
Flow 3 ingress (mean 3.62 Mbit/s)  
Flow 3 egress (mean 3.62 Mbit/s)
Run 7: Statistics of LEDBAT

Start at: 2018-02-05 01:21:33
End at: 2018-02-05 01:22:03
Local clock offset: 1.906 ms
Remote clock offset: 2.125 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 17.59 Mbit/s
  95th percentile per-packet one-way delay: -4.869 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 11.45 Mbit/s
  95th percentile per-packet one-way delay: -4.785 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.43 Mbit/s
  95th percentile per-packet one-way delay: -5.321 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.59 Mbit/s
  95th percentile per-packet one-way delay: -5.040 ms
  Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 11.45 Mbit/s)
- Flow 1 egress (mean 11.45 Mbit/s)
- Flow 2 ingress (mean 7.43 Mbit/s)
- Flow 2 egress (mean 7.43 Mbit/s)
- Flow 3 ingress (mean 3.59 Mbit/s)
- Flow 3 egress (mean 3.59 Mbit/s)

![Graph showing packet delay over time for different flows.]

- Flow 1 (95th percentile -4.79 ms)
- Flow 2 (95th percentile -5.32 ms)
- Flow 3 (95th percentile -5.04 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-02-05 01:46:13
End at: 2018-02-05 01:46:43
Local clock offset: 1.469 ms
Remote clock offset: 2.925 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.43 Mbit/s
95th percentile per-packet one-way delay: -4.496 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.31 Mbit/s
95th percentile per-packet one-way delay: -4.736 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 7.43 Mbit/s
95th percentile per-packet one-way delay: -4.337 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: -3.859 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

![Throughput vs Time Graph](image1)

![Packet Delay vs Time Graph](image2)
Run 9: Statistics of LEDBAT

Start at: 2018-02-05 02:11:29
End at: 2018-02-05 02:11:59
Local clock offset: 2.555 ms
Remote clock offset: 1.027 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.58 Mbit/s
95th percentile per-packet one-way delay: -6.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: -6.667 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.44 Mbit/s
95th percentile per-packet one-way delay: -7.258 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.63 Mbit/s
95th percentile per-packet one-way delay: -7.577 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

![Diagram showing network performance metrics over time.](image-url)
Run 10: Statistics of LEDBAT

Start at: 2018-02-05 02:35:59
End at: 2018-02-05 02:36:29
Local clock offset: -0.61 ms
Remote clock offset: 2.728 ms

# Below is generated by plot.py at 2018-02-05 03:23:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.29 Mbit/s
95th percentile per-packet one-way delay: -2.915 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 11.18 Mbit/s
95th percentile per-packet one-way delay: -3.116 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: -2.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.62 Mbit/s
95th percentile per-packet one-way delay: -2.918 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Start at: 2018-02-04 22:59:26
End at: 2018-02-04 22:59:56
Local clock offset: 1.15 ms
Remote clock offset: 10.529 ms

# Below is generated by plot.py at 2018-02-05 03:24:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.24 Mbit/s
95th percentile per-packet one-way delay: 30.060 ms
Loss rate: 4.11%
-- Flow 1:
Average throughput: 59.38 Mbit/s
95th percentile per-packet one-way delay: 29.629 ms
Loss rate: 4.04%
-- Flow 2:
Average throughput: 31.83 Mbit/s
95th percentile per-packet one-way delay: 30.759 ms
Loss rate: 4.29%
-- Flow 3:
Average throughput: 8.17 Mbit/s
95th percentile per-packet one-way delay: 31.526 ms
Loss rate: 4.25%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-02-04 23:24:25
End at: 2018-02-04 23:24:55
Local clock offset: ~0.834 ms
Remote clock offset: 12.461 ms

# Below is generated by plot.py at 2018-02-05 03:24:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.47 Mbit/s
  95th percentile per-packet one-way delay: 30.243 ms
  Loss rate: 4.72%
-- Flow 1:
  Average throughput: 61.74 Mbit/s
  95th percentile per-packet one-way delay: 29.651 ms
  Loss rate: 4.52%
-- Flow 2:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: 31.065 ms
  Loss rate: 5.17%
-- Flow 3:
  Average throughput: 7.79 Mbit/s
  95th percentile per-packet one-way delay: 32.344 ms
  Loss rate: 6.13%
Run 2: Report of PCC — Data Link
Run 3: Statistics of PCC

Start at: 2018-02-04 23:49:09
End at: 2018-02-04 23:49:39
Local clock offset: -0.627 ms
Remote clock offset: 10.318 ms

# Below is generated by plot.py at 2018-02-05 03:24:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.62 Mbit/s
95th percentile per-packet one-way delay: 22.817 ms
Loss rate: 3.28%
-- Flow 1:
Average throughput: 69.27 Mbit/s
95th percentile per-packet one-way delay: 21.457 ms
Loss rate: 3.30%
-- Flow 2:
Average throughput: 17.55 Mbit/s
95th percentile per-packet one-way delay: 25.208 ms
Loss rate: 2.66%
-- Flow 3:
Average throughput: 8.14 Mbit/s
95th percentile per-packet one-way delay: 30.375 ms
Loss rate: 5.36%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-02-05 00:13:32
End at: 2018-02-05 00:14:02
Local clock offset: 3.789 ms
Remote clock offset: 5.739 ms

# Below is generated by plot.py at 2018-02-05 03:24:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.94 Mbit/s
  95th percentile per-packet one-way delay: 26.641 ms
  Loss rate: 4.03%
-- Flow 1:
  Average throughput: 76.79 Mbit/s
  95th percentile per-packet one-way delay: 26.133 ms
  Loss rate: 3.96%
-- Flow 2:
  Average throughput: 8.32 Mbit/s
  95th percentile per-packet one-way delay: 27.940 ms
  Loss rate: 3.56%
-- Flow 3:
  Average throughput: 7.91 Mbit/s
  95th percentile per-packet one-way delay: 30.141 ms
  Loss rate: 6.99%
Run 4: Report of PCC — Data Link

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

- **Flow 1 ingress** (mean 80.06 Mbit/s)
- **Flow 1 egress** (mean 76.79 Mbit/s)
- **Flow 2 ingress** (mean 8.64 Mbit/s)
- **Flow 2 egress** (mean 8.32 Mbit/s)
- **Flow 3 ingress** (mean 8.53 Mbit/s)
- **Flow 3 egress** (mean 7.91 Mbit/s)

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

- **Flow 1** (95th percentile: 26.13 ms)
- **Flow 2** (95th percentile: 27.94 ms)
- **Flow 3** (95th percentile: 30.14 ms)
Run 5: Statistics of PCC

Start at: 2018-02-05 00:38:38
End at: 2018-02-05 00:39:08
Local clock offset: 1.896 ms
Remote clock offset: 3.025 ms

# Below is generated by plot.py at 2018-02-05 03:25:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.57 Mbit/s
95th percentile per-packet one-way delay: 28.725 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 78.38 Mbit/s
95th percentile per-packet one-way delay: 28.242 ms
Loss rate: 3.21%
-- Flow 2:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 30.376 ms
Loss rate: 2.55%
-- Flow 3:
Average throughput: 7.91 Mbit/s
95th percentile per-packet one-way delay: 31.444 ms
Loss rate: 4.75%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

Start at: 2018-02-05 01:03:51
End at: 2018-02-05 01:04:21
Local clock offset: 1.091 ms
Remote clock offset: 1.258 ms

# Below is generated by plot.py at 2018-02-05 03:25:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.91 Mbit/s
  95th percentile per-packet one-way delay: 22.883 ms
  Loss rate: 2.44%
-- Flow 1:
  Average throughput: 77.65 Mbit/s
  95th percentile per-packet one-way delay: 22.270 ms
  Loss rate: 2.49%
-- Flow 2:
  Average throughput: 8.35 Mbit/s
  95th percentile per-packet one-way delay: 24.409 ms
  Loss rate: 1.53%
-- Flow 3:
  Average throughput: 8.18 Mbit/s
  95th percentile per-packet one-way delay: 26.554 ms
  Loss rate: 2.74%
Run 6: Report of PCC — Data Link

![Graph showing data link performance metrics over time]

- Flow 1 ingress (mean 79.67 Mbit/s) vs. Flow 1 egress (mean 77.65 Mbit/s)
- Flow 2 ingress (mean 8.48 Mbit/s) vs. Flow 2 egress (mean 8.35 Mbit/s)
- Flow 3 ingress (mean 8.62 Mbit/s) vs. Flow 3 egress (mean 8.18 Mbit/s)

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

- Flow 1 (95th percentile 22.27 ms)
- Flow 2 (95th percentile 24.41 ms)
- Flow 3 (95th percentile 26.55 ms)
Run 7: Statistics of PCC

Start at: 2018-02-05 01:28:11
End at: 2018-02-05 01:28:41
Local clock offset: 1.715 ms
Remote clock offset: 0.842 ms

# Below is generated by plot.py at 2018-02-05 03:25:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.72 Mbit/s
  95th percentile per-packet one-way delay: 27.127 ms
  Loss rate: 4.01%
-- Flow 1:
  Average throughput: 71.49 Mbit/s
  95th percentile per-packet one-way delay: 26.955 ms
  Loss rate: 4.02%
-- Flow 2:
  Average throughput: 15.97 Mbit/s
  95th percentile per-packet one-way delay: 28.127 ms
  Loss rate: 4.01%
-- Flow 3:
  Average throughput: 7.97 Mbit/s
  95th percentile per-packet one-way delay: 28.207 ms
  Loss rate: 3.94%
Run 7: Report of PCC — Data Link

![Graph showing network throughput and packet delay over time for different flows.](image)
Run 8: Statistics of PCC

Start at: 2018-02-05 01:53:15
End at: 2018-02-05 01:53:45
Local clock offset: 3.946 ms
Remote clock offset: 2.231 ms

# Below is generated by plot.py at 2018-02-05 03:25:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.00 Mbit/s
95th percentile per-packet one-way delay: 26.529 ms
Loss rate: 4.33%
-- Flow 1:
Average throughput: 76.98 Mbit/s
95th percentile per-packet one-way delay: 26.155 ms
Loss rate: 4.23%
-- Flow 2:
Average throughput: 8.21 Mbit/s
95th percentile per-packet one-way delay: 27.498 ms
Loss rate: 4.36%
-- Flow 3:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 29.284 ms
Loss rate: 7.35%
Run 8: Report of PCC — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows.]

- Flow 1 ingress (mean 80.40 Mbit/s) and egress (mean 76.98 Mbit/s)
- Flow 2 ingress (mean 8.59 Mbit/s) and egress (mean 8.21 Mbit/s)
- Flow 3 ingress (mean 8.39 Mbit/s) and egress (mean 7.76 Mbit/s)

[Graph showing per-packet one-way delay for different flows.]

- Flow 1 (95th percentile 26.16 ms)
- Flow 2 (95th percentile 27.50 ms)
- Flow 3 (95th percentile 29.28 ms)
Run 9: Statistics of PCC

Start at: 2018-02-05 02:18:13
End at: 2018-02-05 02:18:43
Local clock offset: 3.065 ms
Remote clock offset: 3.834 ms

# Below is generated by plot.py at 2018-02-05 03:26:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 31.280 ms
Loss rate: 2.90%
-- Flow 1:
Average throughput: 71.09 Mbit/s
95th percentile per-packet one-way delay: 31.248 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 17.65 Mbit/s
95th percentile per-packet one-way delay: 31.563 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 28.054 ms
Loss rate: 3.70%
Run 9: Report of PCC — Data Link
Run 10: Statistics of PCC

Start at: 2018-02-05 02:42:49
End at: 2018-02-05 02:43:19
Local clock offset: 3.155 ms
Remote clock offset: 3.267 ms

# Below is generated by plot.py at 2018-02-05 03:26:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.54 Mbit/s
  95th percentile per-packet one-way delay: 30.396 ms
  Loss rate: 8.40%
-- Flow 1:
  Average throughput: 64.25 Mbit/s
  95th percentile per-packet one-way delay: 30.077 ms
  Loss rate: 7.80%
-- Flow 2:
  Average throughput: 28.64 Mbit/s
  95th percentile per-packet one-way delay: 31.054 ms
  Loss rate: 10.35%
-- Flow 3:
  Average throughput: 3.74 Mbit/s
  95th percentile per-packet one-way delay: 31.138 ms
  Loss rate: 9.08%
Run 10: Report of PCC — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-02-04 23:10:22
End at: 2018-02-04 23:10:52
Local clock offset: 1.01 ms
Remote clock offset: 9.117 ms

# Below is generated by plot.py at 2018-02-05 03:26:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.63 Mbit/s
  95th percentile per-packet one-way delay: 25.979 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 54.28 Mbit/s
  95th percentile per-packet one-way delay: 26.066 ms
  Loss rate: 1.38%
-- Flow 2:
  Average throughput: 12.03 Mbit/s
  95th percentile per-packet one-way delay: 25.751 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 16.59 Mbit/s
  95th percentile per-packet one-way delay: 25.607 ms
  Loss rate: 1.31%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-02-04 23:35:26
End at: 2018-02-04 23:35:56
Local clock offset: 0.609 ms
Remote clock offset: 15.285 ms

# Below is generated by plot.py at 2018-02-05 03:26:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.90 Mbit/s
95th percentile per-packet one-way delay: 18.729 ms
Loss rate: 3.35%
-- Flow 1:
Average throughput: 51.40 Mbit/s
95th percentile per-packet one-way delay: 15.195 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 25.46 Mbit/s
95th percentile per-packet one-way delay: 18.605 ms
Loss rate: 2.75%
-- Flow 3:
Average throughput: 17.45 Mbit/s
95th percentile per-packet one-way delay: 26.406 ms
Loss rate: 16.35%
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 52.39 Mbps/s)
- **Flow 1 egress** (mean 51.40 Mbps/s)
- **Flow 2 ingress** (mean 26.18 Mbps/s)
- **Flow 2 egress** (mean 25.46 Mbps/s)
- **Flow 3 ingress** (mean 20.82 Mbps/s)
- **Flow 3 egress** (mean 17.45 Mbps/s)

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

- **Flow 1** (95th percentile 15.20 ms)
- **Flow 2** (95th percentile 18.61 ms)
- **Flow 3** (95th percentile 26.41 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-02-04 23:59:57
End at: 2018-02-05 00:00:27
Local clock offset: 0.16 ms
Remote clock offset: 9.297 ms

# Below is generated by plot.py at 2018-02-05 03:26:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.14 Mbit/s
95th percentile per-packet one-way delay: 29.619 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 54.87 Mbit/s
95th percentile per-packet one-way delay: 29.479 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 24.05 Mbit/s
95th percentile per-packet one-way delay: 29.908 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 32.694 ms
Loss rate: 1.46%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 55.60 Mbit/s)
- Flow 1 egress (mean 54.87 Mbit/s)
- Flow 2 ingress (mean 24.26 Mbit/s)
- Flow 2 egress (mean 24.05 Mbit/s)
- Flow 3 ingress (mean 4.35 Mbit/s)
- Flow 3 egress (mean 4.30 Mbit/s)
Run 4: Statistics of QUIC Cubic

Start at: 2018-02-05 00:24:58
End at: 2018-02-05 00:25:28
Local clock offset: 0.349 ms
Remote clock offset: 2.804 ms

# Below is generated by plot.py at 2018-02-05 03:26:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.92 Mbit/s
95th percentile per-packet one-way delay: 21.591 ms
Loss rate: 2.06%
-- Flow 1:
Average throughput: 48.82 Mbit/s
95th percentile per-packet one-way delay: 22.110 ms
Loss rate: 2.06%
-- Flow 2:
Average throughput: 13.55 Mbit/s
95th percentile per-packet one-way delay: 19.525 ms
Loss rate: 1.61%
-- Flow 3:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 18.796 ms
Loss rate: 2.53%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-02-05 00:50:03
End at: 2018-02-05 00:50:33
Local clock offset: 3.551 ms
Remote clock offset: 1.822 ms

# Below is generated by plot.py at 2018-02-05 03:26:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.87 Mbit/s
95th percentile per-packet one-way delay: 28.276 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 41.44 Mbit/s
95th percentile per-packet one-way delay: 28.035 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 39.03 Mbit/s
95th percentile per-packet one-way delay: 28.571 ms
Loss rate: 2.34%
-- Flow 3:
Average throughput: 4.95 Mbit/s
95th percentile per-packet one-way delay: 28.683 ms
Loss rate: 1.10%
Run 5: Report of QUIC Cubic — Data Link

[Graph depicting throughput and per-packet one-way delay for flows 1, 2, and 3, with mean speeds and 95th percentile delays provided.]
Run 6: Statistics of QUIC Cubic

Start at: 2018-02-05 01:14:51
End at: 2018-02-05 01:15:21
Local clock offset: -0.593 ms
Remote clock offset: 1.939 ms

# Below is generated by plot.py at 2018-02-05 03:26:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.44 Mbit/s
95th percentile per-packet one-way delay: 28.566 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 51.75 Mbit/s
95th percentile per-packet one-way delay: 28.327 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 30.65 Mbit/s
95th percentile per-packet one-way delay: 28.897 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 4.20 Mbit/s
95th percentile per-packet one-way delay: 30.286 ms
Loss rate: 0.39%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-02-05 01:39:15
End at: 2018-02-05 01:39:45
Local clock offset: 0.669 ms
Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2018-02-05 03:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.56 Mbit/s
95th percentile per-packet one-way delay: 23.850 ms
Loss rate: 2.87%
-- Flow 1:
Average throughput: 43.87 Mbit/s
95th percentile per-packet one-way delay: 23.199 ms
Loss rate: 2.78%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 23.750 ms
Loss rate: 3.44%
-- Flow 3:
Average throughput: 17.25 Mbit/s
95th percentile per-packet one-way delay: 26.485 ms
Loss rate: 1.05%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-02-05 02:04:19
End at: 2018-02-05 02:04:49
Local clock offset: 1.038 ms
Remote clock offset: 3.713 ms

# Below is generated by plot.py at 2018-02-05 03:27:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.68 Mbit/s
95th percentile per-packet one-way delay: 27.828 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 48.10 Mbit/s
95th percentile per-packet one-way delay: 27.769 ms
Loss rate: 1.66%
-- Flow 2:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 27.968 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 28.053 ms
Loss rate: 0.75%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-02-05 02:29:14
End at: 2018-02-05 02:29:44
Local clock offset: -0.2 ms
Remote clock offset: 4.232 ms

# Below is generated by plot.py at 2018-02-05 03:27:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.85 Mbit/s
95th percentile per-packet one-way delay: 22.733 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 52.32 Mbit/s
95th percentile per-packet one-way delay: 21.708 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 17.96 Mbit/s
95th percentile per-packet one-way delay: 20.833 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 17.44 Mbit/s
95th percentile per-packet one-way delay: 29.240 ms
Loss rate: 15.36%
Run 9: Report of QUIC Cubic — Data Link

[Graph showing throughput (Mbps) over time with data points for different flows, and another graph showing per-packet one-way delay (ms) with annotations for 95th percentile values for each flow.]
Run 10: Statistics of QUIC Cubic

Start at: 2018-02-05 02:54:03
End at: 2018-02-05 02:54:33
Local clock offset: 2.932 ms
Remote clock offset: 3.353 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.81 Mbit/s
  95th percentile per-packet one-way delay: 16.890 ms
  Loss rate: 3.33%
-- Flow 1:
  Average throughput: 51.66 Mbit/s
  95th percentile per-packet one-way delay: 16.486 ms
  Loss rate: 2.14%
-- Flow 2:
  Average throughput: 19.62 Mbit/s
  95th percentile per-packet one-way delay: 15.250 ms
  Loss rate: 2.06%
-- Flow 3:
  Average throughput: 16.04 Mbit/s
  95th percentile per-packet one-way delay: 24.199 ms
  Loss rate: 16.25%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-02-04 23:03:40
End at: 2018-02-04 23:04:11
Local clock offset: -2.837 ms
Remote clock offset: 9.099 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -5.081 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.097 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.093 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.038 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

```plaintext

Flow 1 ingress (mean 0.22 Mbit/s)  Flow 1 egress (mean 0.22 Mbit/s)
Flow 2 ingress (mean 0.22 Mbit/s)  Flow 2 egress (mean 0.22 Mbit/s)
Flow 3 ingress (mean 0.22 Mbit/s)  Flow 3 egress (mean 0.22 Mbit/s)

Flow 1 (95th percentile -5.10 ms)  Flow 2 (95th percentile -5.09 ms)  Flow 3 (95th percentile -5.04 ms)
```

105
Run 2: Statistics of SCReAM

End at: 2018-02-04 23:29:05
Local clock offset: 0.187 ms
Remote clock offset: 14.0 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -5.869 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.876 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.884 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.834 ms
Loss rate: 0.00%
Run 3: Statistics of SCReAM

Start at: 2018-02-04 23:53:16
End at: 2018-02-04 23:53:46
Local clock offset: -3.053 ms
Remote clock offset: 9.236 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -2.382 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -2.408 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -2.366 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -2.349 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

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

![Graph 2: Per-packet one-way delay vs Time (s)]
Run 4: Statistics of SCReAM

Start at: 2018-02-05 00:17:44
End at: 2018-02-05 00:18:14
Local clock offset: 1.717 ms
Remote clock offset: 2.488 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -7.920 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -7.964 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -7.910 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -7.899 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph showing throughput and packet delay vs time for different flow types and their ingress and egress data rates.](image-url)
Run 5: Statistics of SCReAM

Start at: 2018-02-05 00:43:06
End at: 2018-02-05 00:43:36
Local clock offset: 0.072 ms
Remote clock offset: 1.139 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -5.243 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.292 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.252 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -5.204 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

![Graph showing throughput and per-packet end-to-end delay over time for different flows.](image-url)
Run 6: Statistics of SCReAM

Start at: 2018-02-05 01:08:01
End at: 2018-02-05 01:08:31
Local clock offset: 0.986 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -7.382 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -7.327 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -7.432 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -7.404 ms
Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

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

Start at: 2018-02-05 01:32:26
End at: 2018-02-05 01:32:56
Local clock offset: 1.753 ms
Remote clock offset: 2.891 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -6.960 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -6.996 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -6.944 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -6.910 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graph of Throughput and Per-Packet Round Trip Time](image-url)
Run 8: Statistics of SCReAM

Start at: 2018-02-05 01:57:20
End at: 2018-02-05 01:57:50
Local clock offset: 2.767 ms
Remote clock offset: 2.608 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 0.44 Mbit/s
 95th percentile per-packet one-way delay: -7.423 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 0.22 Mbit/s
 95th percentile per-packet one-way delay: -7.432 ms
 Loss rate: 0.00%
-- Flow 2:
 Average throughput: 0.22 Mbit/s
 95th percentile per-packet one-way delay: -7.424 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 0.22 Mbit/s
 95th percentile per-packet one-way delay: -7.404 ms
 Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-02-05 02:22:29
End at: 2018-02-05 02:22:59
Local clock offset: 1.824 ms
Remote clock offset: 2.723 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -5.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.763 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.751 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -5.677 ms
Loss rate: 0.00%
Run 10: Statistics of SCReAM

Start at: 2018-02-05 02:47:10
End at: 2018-02-05 02:47:40
Local clock offset: 1.338 ms
Remote clock offset: 3.857 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -4.825 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -4.865 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -4.806 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -4.805 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-02-04 22:56:36
End at: 2018-02-04 22:57:06
Local clock offset: 2.25 ms
Remote clock offset: 9.251 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: -7.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -7.974 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: -6.616 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -6.247 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Graph of WebRTC media throughput and packet loss rate over time]

- Flow 1 ingress (mean 2.11 Mbit/s)
- Flow 1 egress (mean 2.11 Mbit/s)
- Flow 2 ingress (mean 1.31 Mbit/s)
- Flow 2 egress (mean 1.31 Mbit/s)
- Flow 3 ingress (mean 0.46 Mbit/s)
- Flow 3 egress (mean 0.46 Mbit/s)

![Graph of packet loss rate over time]

- Flow 1 (95th percentile -7.97 ms)
- Flow 2 (95th percentile -6.62 ms)
- Flow 3 (95th percentile -6.25 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-02-04 23:21:36
End at: 2018-02-04 23:22:06
Local clock offset: -3.501 ms
Remote clock offset: 10.736 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: -3.663 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: -3.863 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: -3.823 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: -2.677 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 2.12 Mbps)  Flow 1 egress (mean 2.12 Mbps)
Flow 2 ingress (mean 1.31 Mbps)  Flow 2 egress (mean 1.31 Mbps)
Flow 3 ingress (mean 0.47 Mbps)  Flow 3 egress (mean 0.47 Mbps)

Per packet one way delay (ms)

Time (s)

- Flow 1 (95th percentile -3.86 ms)
- Flow 2 (95th percentile -3.82 ms)
- Flow 3 (95th percentile -2.68 ms)
Run 3: Statistics of WebRTC media

End at: 2018-02-04 23:46:53
Local clock offset: -0.976 ms
Remote clock offset: 7.341 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: -6.470 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -6.817 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: -6.246 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -5.938 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows, with labels for each flow's mean throughput and delay.]
Run 4: Statistics of WebRTC media

Start at: 2018-02-05 00:10:40
End at: 2018-02-05 00:11:10
Local clock offset: 1.54 ms
Remote clock offset: 6.355 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
- Average throughput: 3.85 Mbit/s
- 95th percentile per-packet one-way delay: -5.236 ms
- Loss rate: 0.00%
-- Flow 1:
- Average throughput: 2.11 Mbit/s
- 95th percentile per-packet one-way delay: -5.623 ms
- Loss rate: 0.00%
-- Flow 2:
- Average throughput: 1.31 Mbit/s
- 95th percentile per-packet one-way delay: -5.108 ms
- Loss rate: 0.00%
-- Flow 3:
- Average throughput: 0.46 Mbit/s
- 95th percentile per-packet one-way delay: -4.039 ms
- Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

![Graph showing round-trip delay over time for different flows.](image)

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131
Run 5: Statistics of WebRTC media

Start at: 2018-02-05 00:35:52
End at: 2018-02-05 00:36:22
Local clock offset: 2.882 ms
Remote clock offset: 2.827 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: -5.470 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -5.874 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: -5.224 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: -4.408 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 2.11 Mbps) — Flow 1 egress (mean 2.11 Mbps)
Flow 2 ingress (mean 1.32 Mbps) — Flow 2 egress (mean 1.32 Mbps)
Flow 3 ingress (mean 0.47 Mbps) — Flow 3 egress (mean 0.47 Mbps)

Delay (ms)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile -5.87 ms) — Flow 2 (95th percentile -5.29 ms) — Flow 3 (95th percentile -4.41 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-02-05 01:00:57
End at: 2018-02-05 01:01:27
Local clock offset: 0.782 ms
Remote clock offset: 1.836 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.66 Mbit/s
  95th percentile per-packet one-way delay: -4.223 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: -4.354 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: -4.044 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.25 Mbit/s
  95th percentile per-packet one-way delay: -3.259 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-02-05 01:25:31
End at: 2018-02-05 01:26:01
Local clock offset: 1.52 ms
Remote clock offset: 2.226 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: -5.698 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -6.009 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: -5.579 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -4.476 ms
Loss rate: 0.30%
Run 7: Report of WebRTC media — Data Link

- Throughput (Mbps)
- Time (s)

- Flow 1 ingress (mean 2.11 Mbps)
- Flow 2 ingress (mean 1.31 Mbps)
- Flow 3 ingress (mean 0.46 Mbps)
- Flow 1 egress (mean 2.11 Mbps)
- Flow 2 egress (mean 1.31 Mbps)
- Flow 3 egress (mean 0.46 Mbps)

- Per-packet one-way delay (ms)
- Time (s)

- Flow 1 (95th percentile -6.01 ms)
- Flow 2 (95th percentile -5.58 ms)
- Flow 3 (95th percentile -4.48 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-02-05 01:50:28
End at: 2018-02-05 01:50:58
Local clock offset: 3.76 ms
Remote clock offset: 2.398 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: -7.848 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: -8.075 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: -7.854 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -7.431 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss for different flows.](image)

- Flow 1 ingress (mean 2.12 Mbit/s)
- Flow 1 egress (mean 2.12 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.32 Mbit/s)
- Flow 3 ingress (mean 0.46 Mbit/s)
- Flow 3 egress (mean 0.46 Mbit/s)

![Graph showing one-way delay for different flows.](image)

- Flow 1 (95th percentile 8.07 ms)
- Flow 2 (95th percentile 7.85 ms)
- Flow 3 (95th percentile 7.43 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-02-05 02:15:32
End at: 2018-02-05 02:16:02
Local clock offset: 2.125 ms
Remote clock offset: 1.868 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: -5.884 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -6.205 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: -5.310 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -5.558 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-02-05 02:39:59
End at: 2018-02-05 02:40:29
Local clock offset: 1.823 ms
Remote clock offset: 2.097 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: -5.779 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: -6.045 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: -5.968 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -4.433 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-02-04 23:14:39
End at: 2018-02-04 23:15:09
Local clock offset: -2.558 ms
Remote clock offset: 9.623 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.27 Mbit/s
95th percentile per-packet one-way delay: 0.084 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.55 Mbit/s
95th percentile per-packet one-way delay: 0.331 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.71 Mbit/s
95th percentile per-packet one-way delay: 0.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.81 Mbit/s
95th percentile per-packet one-way delay: -0.856 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

End at: 2018-02-04 23:40:05
Local clock offset: -1.249 ms
Remote clock offset: 11.859 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.00 Mbit/s
  95th percentile per-packet one-way delay: 2.646 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.23 Mbit/s
  95th percentile per-packet one-way delay: 2.633 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.34 Mbit/s
  95th percentile per-packet one-way delay: 2.854 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.67 Mbit/s
  95th percentile per-packet one-way delay: 1.574 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-02-05 00:04:01
End at: 2018-02-05 00:04:31
Local clock offset: 3.281 ms
Remote clock offset: 7.843 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 7.37 Mbit/s
  95th percentile per-packet one-way delay: -0.765 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.64 Mbit/s
  95th percentile per-packet one-way delay: -0.976 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.95 Mbit/s
  95th percentile per-packet one-way delay: -0.621 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.36 Mbit/s
  95th percentile per-packet one-way delay: -0.546 ms
  Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 3.64 Mbit/s)
- Flow 1 egress (mean 3.64 Mbit/s)
- Flow 2 ingress (mean 3.95 Mbit/s)
- Flow 2 egress (mean 3.95 Mbit/s)
- Flow 3 ingress (mean 3.36 Mbit/s)
- Flow 3 egress (mean 3.36 Mbit/s)

Packet delay (ms):

- Flow 1 (95th percentile -0.98 ms)
- Flow 2 (95th percentile -0.62 ms)
- Flow 3 (95th percentile -0.55 ms)

149
Run 4: Statistics of Sprout

Start at: 2018-02-05 00:29:03
End at: 2018-02-05 00:29:33
Local clock offset: 2.036 ms
Remote clock offset: 2.392 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.42 Mbit/s
95th percentile per-packet one-way delay: -0.311 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: -1.612 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.76 Mbit/s
95th percentile per-packet one-way delay: -0.911 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.68 Mbit/s
95th percentile per-packet one-way delay: 1.602 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

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

Legend:
- Flow 1 ingress (mean 2.37 Mbps/s)
- Flow 1 egress (mean 2.37 Mbps/s)
- Flow 2 ingress (mean 2.76 Mbps/s)
- Flow 2 egress (mean 2.76 Mbps/s)
- Flow 3 ingress (mean 3.68 Mbps/s)
- Flow 3 egress (mean 3.68 Mbps/s)

Legend for delay graph:
- Flow 1 (95th percentile -1.61 ms)
- Flow 2 (95th percentile -0.91 ms)
- Flow 3 (95th percentile 1.60 ms)
Run 5: Statistics of Sprout

Start at: 2018-02-05 00:54:15
End at: 2018-02-05 00:54:45
Local clock offset: 1.825 ms
Remote clock offset: 1.47 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.56 Mbit/s
  95th percentile per-packet one-way delay: 1.289 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.60 Mbit/s
  95th percentile per-packet one-way delay: 1.430 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.07 Mbit/s
  95th percentile per-packet one-way delay: 1.104 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.80 Mbit/s
  95th percentile per-packet one-way delay: 1.211 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 4.60 Mbps)
- Flow 1 egress (mean 4.60 Mbps)
- Flow 2 ingress (mean 4.07 Mbps)
- Flow 2 egress (mean 4.07 Mbps)
- Flow 3 ingress (mean 3.80 Mbps)
- Flow 3 egress (mean 3.80 Mbps)

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

- Flow 1 (95th percentile 1.43 ms)
- Flow 2 (95th percentile 1.10 ms)
- Flow 3 (95th percentile 1.21 ms)
Run 6: Statistics of Sprout

Start at: 2018-02-05 01:18:55
End at: 2018-02-05 01:19:25
Local clock offset: 1.493 ms
Remote clock offset: 1.659 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.91 Mbit/s
  95th percentile per-packet one-way delay: 0.725 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 3.75 Mbit/s
  95th percentile per-packet one-way delay: 0.836 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.82 Mbit/s
  95th percentile per-packet one-way delay: 0.492 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.89 Mbit/s
  95th percentile per-packet one-way delay: 0.508 ms
  Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

![Graph showing network performance metrics over time]

**Throughput (Mbps)**
- Flow 1 ingress (mean 1.82 Mbps)
- Flow 2 ingress (mean 1.82 Mbps)
- Flow 3 ingress (mean 2.89 Mbps)
- Flow 1 egress (mean 3.75 Mbps)
- Flow 2 egress (mean 3.75 Mbps)
- Flow 3 egress (mean 2.89 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 0.84 ms)
- Flow 2 (95th percentile 0.49 ms)
- Flow 3 (95th percentile 0.51 ms)
Run 7: Statistics of Sprout

Start at: 2018-02-05 01:43:28
End at: 2018-02-05 01:43:58
Local clock offset: -0.643 ms
Remote clock offset: 1.804 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.02 Mbit/s
95th percentile per-packet one-way delay: 2.573 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 2.959 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.86 Mbit/s
95th percentile per-packet one-way delay: 2.050 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.75 Mbit/s
95th percentile per-packet one-way delay: 1.840 ms
Loss rate: 0.79%
Run 8: Statistics of Sprout

Start at: 2018-02-05 02:08:42
End at: 2018-02-05 02:09:12
Local clock offset: 3.199 ms
Remote clock offset: 1.354 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.22 Mbit/s
  95th percentile per-packet one-way delay: -0.264 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 4.31 Mbit/s
  95th percentile per-packet one-way delay: -0.452 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 4.15 Mbit/s
  95th percentile per-packet one-way delay: -0.184 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.50 Mbit/s
  95th percentile per-packet one-way delay: 0.147 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

![Throughput Data](chart1.png)

![Delay Data](chart2.png)
Run 9: Statistics of Sprout

Start at: 2018-02-05 02:33:19
End at: 2018-02-05 02:33:49
Local clock offset: 0.863 ms
Remote clock offset: 0.301 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 0.344 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 3.60 Mbit/s
95th percentile per-packet one-way delay: 0.346 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.57 Mbit/s
95th percentile per-packet one-way delay: 0.772 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.15 Mbit/s
95th percentile per-packet one-way delay: -1.794 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 3.60 Mbps)
  - Flow 1 egress (mean 3.60 Mbps)
  - Flow 2 ingress (mean 3.57 Mbps)
  - Flow 2 egress (mean 3.57 Mbps)
  - Flow 3 ingress (mean 2.14 Mbps)
  - Flow 3 egress (mean 2.15 Mbps)

- **Delay (ms)**
  - Flow 1 95th percentile 0.35 ms
  - Flow 2 95th percentile 0.77 ms
  - Flow 3 95th percentile 1.79 ms

161
Run 10: Statistics of Sprout

Start at: 2018-02-05 02:58:15
End at: 2018-02-05 02:58:45
Local clock offset: 2.593 ms
Remote clock offset: 6.117 ms

# Below is generated by plot.py at 2018-02-05 03:27:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 3.157 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 2.196 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 3.885 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.69 Mbit/s
95th percentile per-packet one-way delay: 3.256 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.80 Mbps/s)
- Flow 1 egress (mean 2.80 Mbps/s)
- Flow 2 ingress (mean 3.67 Mbps/s)
- Flow 2 egress (mean 3.67 Mbps/s)
- Flow 3 ingress (mean 2.69 Mbps/s)
- Flow 3 egress (mean 2.69 Mbps/s)

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

- Flow 1 (95th percentile 2.20 ms)
- Flow 2 (95th percentile 3.88 ms)
- Flow 3 (95th percentile 3.26 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-02-04 22:57:51
End at: 2018-02-04 22:58:21
Local clock offset: 1.893 ms
Remote clock offset: 9.647 ms

# Below is generated by plot.py at 2018-02-05 03:29:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.31 Mbit/s
95th percentile per-packet one-way delay: 23.446 ms
Loss rate: 10.89%
-- Flow 1:
Average throughput: 48.11 Mbit/s
95th percentile per-packet one-way delay: 22.169 ms
Loss rate: 8.34%
-- Flow 2:
Average throughput: 30.32 Mbit/s
95th percentile per-packet one-way delay: 24.022 ms
Loss rate: 14.45%
-- Flow 3:
Average throughput: 36.77 Mbit/s
95th percentile per-packet one-way delay: 25.672 ms
Loss rate: 14.72%
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbit/s) vs Time (s)
- Flow 1 ingress (mean 52.52 Mbit/s)
- Flow 1 egress (mean 48.11 Mbit/s)
- Flow 2 ingress (mean 35.29 Mbit/s)
- Flow 2 egress (mean 30.32 Mbit/s)
- Flow 3 ingress (mean 43.19 Mbit/s)
- Flow 3 egress (mean 36.77 Mbit/s)

Per-packet one-way delay (ms) vs Time (s)
- Flow 1 (95th percentile 22.17 ms)
- Flow 2 (95th percentile 24.02 ms)
- Flow 3 (95th percentile 25.67 ms)
Run 2: Statistics of TaoVA-100x

Local clock offset: 1.664 ms
Remote clock offset: 13.931 ms

# Below is generated by plot.py at 2018-02-05 03:29:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.65 Mbit/s
  95th percentile per-packet one-way delay: 25.402 ms
  Loss rate: 11.55%
-- Flow 1:
  Average throughput: 49.04 Mbit/s
  95th percentile per-packet one-way delay: 23.525 ms
  Loss rate: 8.10%
-- Flow 2:
  Average throughput: 38.13 Mbit/s
  95th percentile per-packet one-way delay: 27.091 ms
  Loss rate: 14.76%
-- Flow 3:
  Average throughput: 16.12 Mbit/s
  95th percentile per-packet one-way delay: 27.271 ms
  Loss rate: 24.21%
Run 2: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 53.36 Mbit/s)
Flow 1 egress (mean 49.04 Mbit/s)
Flow 2 ingress (mean 44.75 Mbit/s)
Flow 2 egress (mean 38.13 Mbit/s)
Flow 3 ingress (mean 21.22 Mbit/s)
Flow 3 egress (mean 16.12 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 23.32 ms)
Flow 2 (95th percentile 27.09 ms)
Flow 3 (95th percentile 27.27 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-02-04 23:47:37
End at: 2018-02-04 23:48:07
Local clock offset: -1.475 ms
Remote clock offset: 9.898 ms

# Below is generated by plot.py at 2018-02-05 03:29:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.83 Mbit/s
95th percentile per-packet one-way delay: 27.622 ms
Loss rate: 8.57%
-- Flow 1:
Average throughput: 55.62 Mbit/s
95th percentile per-packet one-way delay: 26.590 ms
Loss rate: 6.41%
-- Flow 2:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 29.254 ms
Loss rate: 12.23%
-- Flow 3:
Average throughput: 8.61 Mbit/s
95th percentile per-packet one-way delay: 29.845 ms
Loss rate: 17.45%
Run 3: Report of TaoVA-100x — Data Link

Graphs showing the throughput and per-packet one-way delay for different flows between times 0 and 30 seconds.
Run 4: Statistics of TaoVA-100x

Start at: 2018-02-05 00:11:54
End at: 2018-02-05 00:12:24
Local clock offset: 2.641 ms
Remote clock offset: 6.906 ms

# Below is generated by plot.py at 2018-02-05 03:29:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.57 Mbit/s
95th percentile per-packet one-way delay: 25.454 ms
Loss rate: 11.82%
-- Flow 1:
Average throughput: 52.13 Mbit/s
95th percentile per-packet one-way delay: 24.029 ms
Loss rate: 8.83%
-- Flow 2:
Average throughput: 33.15 Mbit/s
95th percentile per-packet one-way delay: 27.794 ms
Loss rate: 15.38%
-- Flow 3:
Average throughput: 19.40 Mbit/s
95th percentile per-packet one-way delay: 26.001 ms
Loss rate: 21.46%
Run 4: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 57.18 Mbit/s)
- **Flow 1 egress** (mean 52.13 Mbit/s)
- **Flow 2 ingress** (mean 39.23 Mbit/s)
- **Flow 2 egress** (mean 33.15 Mbit/s)
- **Flow 3 ingress** (mean 24.66 Mbit/s)
- **Flow 3 egress** (mean 19.40 Mbit/s)

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

- **Flow 1** (95th percentile 24.03 ms)
- **Flow 2** (95th percentile 27.79 ms)
- **Flow 3** (95th percentile 26.00 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-02-05 00:37:06
End at: 2018-02-05 00:37:36
Local clock offset: 3.382 ms
Remote clock offset: 1.586 ms

# Below is generated by plot.py at 2018-02-05 03:29:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.00 Mbit/s
  95th percentile per-packet one-way delay: 24.096 ms
  Loss rate: 12.98%
-- Flow 1:
  Average throughput: 51.08 Mbit/s
  95th percentile per-packet one-way delay: 22.820 ms
  Loss rate: 9.10%
-- Flow 2:
  Average throughput: 30.46 Mbit/s
  95th percentile per-packet one-way delay: 25.538 ms
  Loss rate: 17.59%
-- Flow 3:
  Average throughput: 29.61 Mbit/s
  95th percentile per-packet one-way delay: 25.593 ms
  Loss rate: 21.42%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-02-05 01:02:19
End at: 2018-02-05 01:02:49
Local clock offset: 0.081 ms
Remote clock offset: 0.663 ms

# Below is generated by plot.py at 2018-02-05 03:29:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 27.458 ms
Loss rate: 12.61%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 26.260 ms
Loss rate: 8.92%
-- Flow 2:
Average throughput: 36.79 Mbit/s
95th percentile per-packet one-way delay: 28.711 ms
Loss rate: 16.63%
-- Flow 3:
Average throughput: 15.01 Mbit/s
95th percentile per-packet one-way delay: 28.708 ms
Loss rate: 25.58%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-02-05 01:26:46
End at: 2018-02-05 01:27:16
Local clock offset: 2.356 ms
Remote clock offset: 0.576 ms

# Below is generated by plot.py at 2018-02-05 03:29:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.83 Mbit/s
  95th percentile per-packet one-way delay: 23.382 ms
  Loss rate: 11.85%
-- Flow 1:
  Average throughput: 46.64 Mbit/s
  95th percentile per-packet one-way delay: 22.495 ms
  Loss rate: 8.77%
-- Flow 2:
  Average throughput: 34.22 Mbit/s
  95th percentile per-packet one-way delay: 24.392 ms
  Loss rate: 16.37%
-- Flow 3:
  Average throughput: 31.35 Mbit/s
  95th percentile per-packet one-way delay: 24.158 ms
  Loss rate: 14.67%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-02-05 01:51:43
End at: 2018-02-05 01:52:13
Local clock offset: 0.112 ms
Remote clock offset: 2.832 ms

# Below is generated by plot.py at 2018-02-05 03:29:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.08 Mbit/s
  95th percentile per-packet one-way delay: 27.990 ms
  Loss rate: 12.69%
-- Flow 1:
  Average throughput: 47.31 Mbit/s
  95th percentile per-packet one-way delay: 27.180 ms
  Loss rate: 9.05%
-- Flow 2:
  Average throughput: 36.20 Mbit/s
  95th percentile per-packet one-way delay: 28.706 ms
  Loss rate: 16.43%
-- Flow 3:
  Average throughput: 26.37 Mbit/s
  95th percentile per-packet one-way delay: 29.144 ms
  Loss rate: 20.15%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-02-05 02:16:46
End at: 2018-02-05 02:17:16
Local clock offset: 2.105 ms
Remote clock offset: 3.12 ms

# Below is generated by plot.py at 2018-02-05 03:31:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.99 Mbit/s
95th percentile per-packet one-way delay: 26.307 ms
Loss rate: 11.98%
-- Flow 1:
Average throughput: 52.42 Mbit/s
95th percentile per-packet one-way delay: 24.934 ms
Loss rate: 8.70%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 27.932 ms
Loss rate: 16.60%
-- Flow 3:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 27.807 ms
Loss rate: 27.08%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-02-05 02:41:14
End at: 2018-02-05 02:41:44
Local clock offset: 3.356 ms
Remote clock offset: 1.653 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.73 Mbit/s
  95th percentile per-packet one-way delay: 22.794 ms
  Loss rate: 12.14%
-- Flow 1:
  Average throughput: 40.99 Mbit/s
  95th percentile per-packet one-way delay: 19.467 ms
  Loss rate: 6.80%
-- Flow 2:
  Average throughput: 42.12 Mbit/s
  95th percentile per-packet one-way delay: 24.571 ms
  Loss rate: 14.13%
-- Flow 3:
  Average throughput: 32.32 Mbit/s
  95th percentile per-packet one-way delay: 24.655 ms
  Loss rate: 24.23%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 44.00 Mbit/s)
- Flow 1 egress (mean 40.99 Mbit/s)
- Flow 2 ingress (mean 49.07 Mbit/s)
- Flow 2 egress (mean 42.12 Mbit/s)
- Flow 3 ingress (mean 42.65 Mbit/s)
- Flow 3 egress (mean 32.32 Mbit/s)

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

- Flow 1 (95th percentile 19.47 ms)
- Flow 2 (95th percentile 24.57 ms)
- Flow 3 (95th percentile 24.66 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-02-04 22:53:52
End at: 2018-02-04 22:54:22
Local clock offset: 1.168 ms
Remote clock offset: 8.934 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 59.67 Mbit/s
  95th percentile per-packet one-way delay: -2.193 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 39.02 Mbit/s
  95th percentile per-packet one-way delay: -2.870 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 12.51 Mbit/s
  95th percentile per-packet one-way delay: -1.023 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 37.20 Mbit/s
  95th percentile per-packet one-way delay: 0.009 ms
  Loss rate: 1.73%
Run 1: Report of TCP Vegas — Data Link

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**Graphs**

**Throughput (Mb/s)**
- **Flow 1 Ingress** (mean 39.16 Mb/s)
- **Flow 1 Egress** (mean 39.02 Mb/s)
- **Flow 2 Ingress** (mean 12.57 Mb/s)
- **Flow 2 Egress** (mean 12.51 Mb/s)
- **Flow 3 Ingress** (mean 37.85 Mb/s)
- **Flow 3 Egress** (mean 37.20 Mb/s)

**Per packet one way delay (ms)**
- **Flow 1 99th percentile** -2.87 ms
- **Flow 2 99th percentile** -1.02 ms
- **Flow 3 95th percentile** 0.01 ms
Run 2: Statistics of TCP Vegas

Start at: 2018-02-04 23:18:49
End at: 2018-02-04 23:19:19
Local clock offset: -1.482 ms
Remote clock offset: 11.529 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.91 Mbit/s
  95th percentile per-packet one-way delay: -1.155 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 29.75 Mbit/s
  95th percentile per-packet one-way delay: -0.680 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 43.06 Mbit/s
  95th percentile per-packet one-way delay: -1.460 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 19.57 Mbit/s
  95th percentile per-packet one-way delay: -2.072 ms
  Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 29.99 Mbit/s)
- Flow 1 egress (mean 29.75 Mbit/s)
- Flow 2 ingress (mean 43.40 Mbit/s)
- Flow 2 egress (mean 43.06 Mbit/s)
- Flow 3 ingress (mean 19.57 Mbit/s)
- Flow 3 egress (mean 19.57 Mbit/s)

![Graph showing packet delay over time for different flows.]

- Flow 1 (95th percentile -0.68 ms)
- Flow 2 (95th percentile -1.46 ms)
- Flow 3 (95th percentile -2.07 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-02-04 23:43:35
End at: 2018-02-04 23:44:05
Local clock offset: -1.12 ms
Remote clock offset: 10.124 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.54 Mbit/s
95th percentile per-packet one-way delay: -2.143 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 10.30 Mbit/s
95th percentile per-packet one-way delay: -4.151 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: -3.072 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 2.302 ms
Loss rate: 2.32%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-02-05 00:07:57
End at: 2018-02-05 00:08:27
Local clock offset: 2.977 ms
Remote clock offset: 5.956 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.76 Mbit/s
95th percentile per-packet one-way delay: 0.977 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 38.80 Mbit/s
95th percentile per-packet one-way delay: 1.795 ms
Loss rate: 1.25%
-- Flow 2:
Average throughput: 33.04 Mbit/s
95th percentile per-packet one-way delay: 0.964 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 20.91 Mbit/s
95th percentile per-packet one-way delay: -4.276 ms
Loss rate: 0.80%
Run 5: Statistics of TCP Vegas

Start at: 2018-02-05 00:33:10
End at: 2018-02-05 00:33:40
Local clock offset: 2.908 ms
Remote clock offset: 4.182 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.69 Mbit/s
95th percentile per-packet one-way delay: 10.273 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 6.678 ms
Loss rate: 2.73%
-- Flow 2:
Average throughput: 16.16 Mbit/s
95th percentile per-packet one-way delay: 13.551 ms
Loss rate: 3.27%
-- Flow 3:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 15.038 ms
Loss rate: 5.63%
Run 5: Report of TCP Vegas — Data Link

[Graphs showing throughput and packet inter-packet delay over time for different flows.]


Flow 1 (95th percentile 6.60 ms), Flow 2 (95th percentile 13.55 ms), Flow 3 (95th percentile 15.04 ms).
Run 6: Statistics of TCP Vegas

Start at: 2018-02-05 00:58:16
End at: 2018-02-05 00:58:46
Local clock offset: 0.46 ms
Remote clock offset: 0.461 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.44 Mbit/s
95th percentile per-packet one-way delay: 1.255 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 1.582 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 1.227 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 38.17 Mbit/s
95th percentile per-packet one-way delay: 1.016 ms
Loss rate: 2.02%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-02-05 01:22:49
End at: 2018-02-05 01:23:19
Local clock offset: 0.291 ms
Remote clock offset: 2.489 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.89 Mbit/s
95th percentile per-packet one-way delay: 6.574 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 9.002 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 33.18 Mbit/s
95th percentile per-packet one-way delay: 5.826 ms
Loss rate: 1.50%
-- Flow 3:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 5.788 ms
Loss rate: 1.55%
Run 7: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress** (mean 40.55 Mbit/s)
- **Flow 1 egress** (mean 39.99 Mbit/s)
- **Flow 2 ingress** (mean 33.71 Mbit/s)
- **Flow 2 egress** (mean 33.18 Mbit/s)
- **Flow 3 ingress** (mean 33.26 Mbit/s)
- **Flow 3 egress** (mean 32.74 Mbit/s)
Run 8: Statistics of TCP Vegas

Start at: 2018-02-05 01:47:41
End at: 2018-02-05 01:48:11
Local clock offset: -1.555 ms
Remote clock offset: 2.24 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.47 Mbit/s
  95th percentile per-packet one-way delay: 27.720 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 62.43 Mbit/s
  95th percentile per-packet one-way delay: 27.252 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 20.75 Mbit/s
  95th percentile per-packet one-way delay: 28.069 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.70 Mbit/s
  95th percentile per-packet one-way delay: 28.967 ms
  Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-02-05 02:12:46
End at: 2018-02-05 02:13:16
Local clock offset: 3.388 ms
Remote clock offset: 3.6 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 50.94 Mbit/s
  95th percentile per-packet one-way delay: 5.847 ms
  Loss rate: 1.93%
-- Flow 1:
  Average throughput: 31.38 Mbit/s
  95th percentile per-packet one-way delay: 7.402 ms
  Loss rate: 2.12%
-- Flow 2:
  Average throughput: 18.71 Mbit/s
  95th percentile per-packet one-way delay: 4.666 ms
  Loss rate: 2.51%
-- Flow 3:
  Average throughput: 21.49 Mbit/s
  95th percentile per-packet one-way delay: -1.198 ms
  Loss rate: 0.04%
Run 9: Report of TCP Vegas — Data Link

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

- **Flow 1 Ingress** (mean 32.06 Mbit/s)
- **Flow 1 Egress** (mean 31.38 Mbit/s)
- **Flow 2 Ingress** (mean 19.19 Mbit/s)
- **Flow 2 Egress** (mean 18.71 Mbit/s)
- **Flow 3 Ingress** (mean 21.49 Mbit/s)
- **Flow 3 Egress** (mean 21.49 Mbit/s)

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

- **Flow 1 (95th percentile 7.40 ms)**
- **Flow 2 (95th percentile 4.67 ms)**
- **Flow 3 (95th percentile -1.20 ms)**
Run 10: Statistics of TCP Vegas

Start at: 2018-02-05 02:37:15
End at: 2018-02-05 02:37:45
Local clock offset: 0.988 ms
Remote clock offset: 3.23 ms

# Below is generated by plot.py at 2018-02-05 03:31:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.67 Mbit/s
  95th percentile per-packet one-way delay: 6.047 ms
  Loss rate: 1.41%
-- Flow 1:
  Average throughput: 26.70 Mbit/s
  95th percentile per-packet one-way delay: 5.852 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 30.94 Mbit/s
  95th percentile per-packet one-way delay: 7.977 ms
  Loss rate: 1.07%
-- Flow 3:
  Average throughput: 43.30 Mbit/s
  95th percentile per-packet one-way delay: 5.232 ms
  Loss rate: 2.68%
Run 10: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)](Image1)

- **Flow 1 ingress (mean 26.97 Mbps)**
- **Flow 1 egress (mean 26.70 Mbps)**
- **Flow 2 ingress (mean 31.28 Mbps)**
- **Flow 2 egress (mean 30.94 Mbps)**
- **Flow 3 ingress (mean 44.52 Mbps)**
- **Flow 3 egress (mean 43.30 Mbps)**

![Graph 2: Per-packet one-way delay (ms)](Image2)

- **Flow 1 (95th percentile 5.85 ms)**
- **Flow 2 (95th percentile 7.98 ms)**
- **Flow 3 (95th percentile 5.23 ms)**

203
Run 1: Statistics of Verus

End at: 2018-02-04 22:55:42
Local clock offset: 0.392 ms
Remote clock offset: 10.235 ms

# Below is generated by plot.py at 2018-02-05 03:32:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 56.33 Mbit/s
  95th percentile per-packet one-way delay: 43.042 ms
  Loss rate: 73.69%
-- Flow 1:
  Average throughput: 38.08 Mbit/s
  95th percentile per-packet one-way delay: 43.990 ms
  Loss rate: 71.85%
-- Flow 2:
  Average throughput: 29.52 Mbit/s
  95th percentile per-packet one-way delay: 41.221 ms
  Loss rate: 76.76%
-- Flow 3:
  Average throughput: 0.04 Mbit/s
  95th percentile per-packet one-way delay: -5.623 ms
  Loss rate: 77.78%
Run 1: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 135.56 Mbit/s)  Flow 1 egress (mean 36.08 Mbit/s)
Flow 2 ingress (mean 120.61 Mbit/s)  Flow 2 egress (mean 29.52 Mbit/s)
Flow 3 ingress (mean 0.02 Mbit/s)    Flow 3 egress (mean 0.04 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 43.39 ms)  Flow 2 (95th percentile 41.22 ms)  Flow 3 (95th percentile -5.62 ms)
Run 2: Statistics of Verus

Start at: 2018-02-04 23:20:15
End at: 2018-02-04 23:20:45
Local clock offset: -0.221 ms
Remote clock offset: 12.724 ms

# Below is generated by plot.py at 2018-02-05 03:32:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.13 Mbit/s
  95th percentile per-packet one-way delay: 30.727 ms
  Loss rate: 52.60%
-- Flow 1:
  Average throughput: 26.74 Mbit/s
  95th percentile per-packet one-way delay: 31.848 ms
  Loss rate: 62.40%
-- Flow 2:
  Average throughput: 33.90 Mbit/s
  95th percentile per-packet one-way delay: 28.781 ms
  Loss rate: 33.03%
-- Flow 3:
  Average throughput: 13.31 Mbit/s
  95th percentile per-packet one-way delay: 31.225 ms
  Loss rate: 47.16%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 71.14 Mbit/s)
- Flow 1 egress (mean 26.74 Mbit/s)
- Flow 2 ingress (mean 50.59 Mbit/s)
- Flow 2 egress (mean 33.90 Mbit/s)
- Flow 3 ingress (mean 22.61 Mbit/s)
- Flow 3 egress (mean 13.31 Mbit/s)

![Graph showing packet delay (one-way) over time for different flows.](image-url)

- Flow 1 (95th percentile 31.85 ms)
- Flow 2 (95th percentile 28.78 ms)
- Flow 3 (95th percentile 31.23 ms)
Run 3: Statistics of Verus

Start at: 2018-02-04 23:44:55
End at: 2018-02-04 23:45:25
Local clock offset: 1.088 ms
Remote clock offset: 10.439 ms

# Below is generated by plot.py at 2018-02-05 03:32:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.01 Mbit/s
95th percentile per-packet one-way delay: 31.711 ms
Loss rate: 51.83%
-- Flow 1:
Average throughput: 29.87 Mbit/s
95th percentile per-packet one-way delay: 33.029 ms
Loss rate: 58.06%
-- Flow 2:
Average throughput: 8.07 Mbit/s
95th percentile per-packet one-way delay: 27.755 ms
Loss rate: 23.84%
-- Flow 3:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 23.292 ms
Loss rate: 16.14%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-02-05 00:09:17
End at: 2018-02-05 00:09:47
Local clock offset: -0.022 ms
Remote clock offset: 8.563 ms

# Below is generated by plot.py at 2018-02-05 03:32:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.55 Mbit/s
  95th percentile per-packet one-way delay: 46.555 ms
  Loss rate: 65.25%
-- Flow 1:
  Average throughput: 33.80 Mbit/s
  95th percentile per-packet one-way delay: 35.035 ms
  Loss rate: 54.12%
-- Flow 2:
  Average throughput: 18.35 Mbit/s
  95th percentile per-packet one-way delay: 33.375 ms
  Loss rate: 31.25%
-- Flow 3:
  Average throughput: 17.33 Mbit/s
  95th percentile per-packet one-way delay: 73.302 ms
  Loss rate: 89.53%
Run 4: Report of Verus — Data Link

![Graph of data link performance with throughput and per-packet one-way delay metrics over time.](image-url)
Run 5: Statistics of Verus

Start at: 2018-02-05 00:34:30
End at: 2018-02-05 00:35:00
Local clock offset: 3.093 ms
Remote clock offset: 1.326 ms

# Below is generated by plot.py at 2018-02-05 03:32:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.20 Mbit/s
95th percentile per-packet one-way delay: 27.454 ms
Loss rate: 45.43%
-- Flow 1:
Average throughput: 21.10 Mbit/s
95th percentile per-packet one-way delay: 24.662 ms
Loss rate: 20.27%
-- Flow 2:
Average throughput: 33.86 Mbit/s
95th percentile per-packet one-way delay: 28.775 ms
Loss rate: 55.43%
-- Flow 3:
Average throughput: 11.15 Mbit/s
95th percentile per-packet one-way delay: 28.912 ms
Loss rate: 65.84%
Run 5: Report of Verus — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 6: Statistics of Verus

Start at: 2018-02-05 00:59:35  
End at: 2018-02-05 01:00:05  
Local clock offset: 2.045 ms  
Remote clock offset: 3.527 ms

# Below is generated by plot.py at 2018-02-05 03:33:20  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 44.84 Mbit/s  
  95th percentile per-packet one-way delay: 51.342 ms  
  Loss rate: 83.54%  
-- Flow 1:  
  Average throughput: 42.23 Mbit/s  
  95th percentile per-packet one-way delay: 51.833 ms  
  Loss rate: 84.27%  
-- Flow 2:  
  Average throughput: 0.33 Mbit/s  
  95th percentile per-packet one-way delay: 26.781 ms  
  Loss rate: 17.14%  
-- Flow 3:  
  Average throughput: 7.35 Mbit/s  
  95th percentile per-packet one-way delay: 31.199 ms  
  Loss rate: 35.71%
Run 7: Statistics of Verus

Start at: 2018-02-05 01:24:09
End at: 2018-02-05 01:24:39
Local clock offset: 1.653 ms
Remote clock offset: 2.399 ms

# Below is generated by plot.py at 2018-02-05 03:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 34.118 ms
Loss rate: 79.44%
-- Flow 1:
Average throughput: 44.24 Mbit/s
95th percentile per-packet one-way delay: 34.373 ms
Loss rate: 80.30%
-- Flow 2:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 5.470 ms
Loss rate: 61.90%
-- Flow 3:
Average throughput: 9.50 Mbit/s
95th percentile per-packet one-way delay: 29.529 ms
Loss rate: 41.04%
Run 7: Report of Verus — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 224.66 Mbit/s)
- Flow 1 egress (mean 44.24 Mbit/s)
- Flow 2 ingress (mean 0.05 Mbit/s)
- Flow 2 egress (mean 0.02 Mbit/s)
- Flow 3 ingress (mean 16.11 Mbit/s)
- Flow 3 egress (mean 9.50 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 34.37 ms)
- Flow 2 (95th percentile 5.47 ms)
- Flow 3 (95th percentile 29.53 ms)
Run 8: Statistics of Verus

Start at: 2018-02-05 01:49:08
End at: 2018-02-05 01:49:38
Local clock offset: 1.624 ms
Remote clock offset: 3.116 ms

# Below is generated by plot.py at 2018-02-05 03:33:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 48.94 Mbit/s
  95th percentile per-packet one-way delay: 29.021 ms
  Loss rate: 27.93%
-- Flow 1:
  Average throughput: 34.37 Mbit/s
  95th percentile per-packet one-way delay: 28.821 ms
  Loss rate: 29.01%
-- Flow 2:
  Average throughput: 15.60 Mbit/s
  95th percentile per-packet one-way delay: 29.442 ms
  Loss rate: 22.90%
-- Flow 3:
  Average throughput: 14.38 Mbit/s
  95th percentile per-packet one-way delay: 29.500 ms
  Loss rate: 30.35%
Run 8: Report of Verus — Data Link

![Graph of Throughput (Mbps) vs Time (s) for different flows and their ingress and egress rates.]

![Graph of Per-packet one-way delay (ms) vs Time (s) for different flows and their 95th percentile delays.]

Flow 1 ingress (mean 48.46 Mbps)
Flow 1 egress (mean 34.37 Mbps)
Flow 2 ingress (mean 20.07 Mbps)
Flow 2 egress (mean 15.60 Mbps)
Flow 3 ingress (mean 20.24 Mbps)
Flow 3 egress (mean 14.38 Mbps)

Flow 1 (95th percentile 28.82 ms)
Flow 2 (95th percentile 29.44 ms)
Flow 3 (95th percentile 29.50 ms)
Run 9: Statistics of Verus

Start at: 2018-02-05 02:14:06
End at: 2018-02-05 02:14:36
Local clock offset: 0.955 ms
Remote clock offset: 3.833 ms

# Below is generated by plot.py at 2018-02-05 03:33:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 44.33 Mbit/s
95th percentile per-packet one-way delay: 34.831 ms
Loss rate: 59.00%
-- Flow 1:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 35.518 ms
Loss rate: 62.65%
-- Flow 2:
Average throughput: 7.10 Mbit/s
95th percentile per-packet one-way delay: 28.818 ms
Loss rate: 21.86%
-- Flow 3:
Average throughput: 15.02 Mbit/s
95th percentile per-packet one-way delay: 32.869 ms
Loss rate: 39.62%
Run 10: Statistics of Verus

Start at: 2018-02-05 02:38:36
End at: 2018-02-05 02:39:06
Local clock offset: 2.21 ms
Remote clock offset: 2.566 ms

# Below is generated by plot.py at 2018-02-05 03:33:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 47.89 Mbit/s
  95th percentile per-packet one-way delay: 51.170 ms
  Loss rate: 75.30%
-- Flow 1:
  Average throughput: 41.81 Mbit/s
  95th percentile per-packet one-way delay: 53.151 ms
  Loss rate: 77.48%
-- Flow 2:
  Average throughput: 6.86 Mbit/s
  95th percentile per-packet one-way delay: 21.925 ms
  Loss rate: 26.09%
-- Flow 3:
  Average throughput: 5.60 Mbit/s
  95th percentile per-packet one-way delay: 28.235 ms
  Loss rate: 25.50%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-02-04 23:02:20
End at: 2018-02-04 23:02:50
Local clock offset: 0.183 ms
Remote clock offset: 10.779 ms

# Below is generated by plot.py at 2018-02-05 03:33:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.88 Mbit/s
95th percentile per-packet one-way delay: -6.030 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.91 Mbit/s
95th percentile per-packet one-way delay: -6.056 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.23 Mbit/s
95th percentile per-packet one-way delay: -6.015 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: -5.929 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

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

- Flow 1 ingress (mean 23.92 Mbit/s)
- Flow 1 egress (mean 23.91 Mbit/s)
- Flow 2 ingress (mean 24.23 Mbit/s)
- Flow 2 egress (mean 24.23 Mbit/s)
- Flow 3 ingress (mean 5.51 Mbit/s)
- Flow 3 egress (mean 5.51 Mbit/s)
Run 2: Statistics of Copa

Start at: 2018-02-04 23:27:14
End at: 2018-02-04 23:27:44
Local clock offset: -1.838 ms
Remote clock offset: 14.901 ms

# Below is generated by plot.py at 2018-02-05 03:33:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 35.61 Mbit/s
  95th percentile per-packet one-way delay: -2.722 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 32.92 Mbit/s
  95th percentile per-packet one-way delay: -2.730 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.29 Mbit/s
  95th percentile per-packet one-way delay: -2.641 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 3.49 Mbit/s
  95th percentile per-packet one-way delay: -2.632 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 32.92 Mbps/s)
- Flow 1 egress (mean 32.92 Mbps/s)
- Flow 2 ingress (mean 2.29 Mbps/s)
- Flow 2 egress (mean 2.29 Mbps/s)
- Flow 3 ingress (mean 3.49 Mbps/s)
- Flow 3 egress (mean 3.49 Mbps/s)

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

- Flow 1 (95th percentile -2.73 ms)
- Flow 2 (95th percentile -2.64 ms)
- Flow 3 (95th percentile -2.63 ms)
Run 3: Statistics of Copa

Start at: 2018-02-04 23:51:55
End at: 2018-02-04 23:52:26
Local clock offset: -1.337 ms
Remote clock offset: 8.75 ms

# Below is generated by plot.py at 2018-02-05 03:33:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.41 Mbit/s
95th percentile per-packet one-way delay: -4.991 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: -4.995 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: -4.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.70 Mbit/s
95th percentile per-packet one-way delay: -4.910 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

![Graph showing throughput and packet delay over time for different flows with mean values.]
Run 4: Statistics of Copa

Start at: 2018-02-05 00:16:24
End at: 2018-02-05 00:16:54
Local clock offset: 1.24 ms
Remote clock offset: 4.612 ms

# Below is generated by plot.py at 2018-02-05 03:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: -5.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 19.85 Mbit/s
95th percentile per-packet one-way delay: -5.574 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.08 Mbit/s
95th percentile per-packet one-way delay: -5.486 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 22.24 Mbit/s
95th percentile per-packet one-way delay: -5.509 ms
Loss rate: 0.01%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 19.85 Mbit/s)
- Flow 2 ingress (mean 18.08 Mbit/s)
- Flow 3 ingress (mean 22.24 Mbit/s)
- Flow 1 egress (mean 19.85 Mbit/s)
- Flow 2 egress (mean 18.08 Mbit/s)
- Flow 3 egress (mean 22.24 Mbit/s)
Run 5: Statistics of Copa

Start at: 2018-02-05 00:41:36
End at: 2018-02-05 00:42:06
Local clock offset: 2.271 ms
Remote clock offset: 3.939 ms

# Below is generated by plot.py at 2018-02-05 03:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.69 Mbit/s
  95th percentile per-packet one-way delay: -4.331 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 30.95 Mbit/s
  95th percentile per-packet one-way delay: -4.480 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 34.17 Mbit/s
  95th percentile per-packet one-way delay: -4.294 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 24.04 Mbit/s
  95th percentile per-packet one-way delay: -3.044 ms
  Loss rate: 0.00%
Run 5: Report of Copa — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 30.95 Mbit/s)
- Flow 1 egress (mean 30.95 Mbit/s)
- Flow 2 ingress (mean 34.17 Mbit/s)
- Flow 2 egress (mean 34.17 Mbit/s)
- Flow 3 ingress (mean 24.05 Mbit/s)
- Flow 3 egress (mean 24.04 Mbit/s)

![Per-packet one-way delay Graph]

- Flow 1 (95th percentile -4.48 ms)
- Flow 2 (95th percentile -4.29 ms)
- Flow 3 (95th percentile -3.04 ms)
Run 6: Statistics of Copa

Start at: 2018-02-05 01:06:35
End at: 2018-02-05 01:07:05
Local clock offset: 2.929 ms
Remote clock offset: 1.55 ms

# Below is generated by plot.py at 2018-02-05 03:34:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.39 Mbit/s
  95th percentile per-packet one-way delay: -5.021 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 37.37 Mbit/s
  95th percentile per-packet one-way delay: -7.279 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 33.97 Mbit/s
  95th percentile per-packet one-way delay: -3.960 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 19.25 Mbit/s
  95th percentile per-packet one-way delay: -0.269 ms
  Loss rate: 0.00%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-02-05 01:31:04
End at: 2018-02-05 01:31:34
Local clock offset: -0.266 ms
Remote clock offset: 2.503 ms

# Below is generated by plot.py at 2018-02-05 03:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.31 Mbit/s
95th percentile per-packet one-way delay: -5.054 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: -5.094 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: -5.022 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 18.63 Mbit/s
95th percentile per-packet one-way delay: -5.071 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 21.12 Mbps)
- Flow 1 egress (mean 21.12 Mbps)
- Flow 2 ingress (mean 28.54 Mbps)
- Flow 2 egress (mean 28.53 Mbps)
- Flow 3 ingress (mean 18.63 Mbps)
- Flow 3 egress (mean 16.63 Mbps)

**Packet Delay (ms)**
- Flow 1 (95th percentile -5.09 ms)
- Flow 2 (95th percentile -5.02 ms)
- Flow 3 (95th percentile -5.07 ms)
Run 8: Statistics of Copa

Start at: 2018-02-05 01:55:59
End at: 2018-02-05 01:56:29
Local clock offset: 0.841 ms
Remote clock offset: 3.914 ms

# Below is generated by plot.py at 2018-02-05 03:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.46 Mbit/s
95th percentile per-packet one-way delay: -4.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: -4.149 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: -4.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: -4.113 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

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

Throughput (Mbit/s)

Time (s)

0 5 10 15 20 25 30

- Flow 1 ingress (mean 10.53 Mbit/s)
- Flow 1 egress (mean 10.53 Mbit/s)
- Flow 2 ingress (mean 29.15 Mbit/s)
- Flow 2 egress (mean 29.16 Mbit/s)
- Flow 3 ingress (mean 13.60 Mbit/s)
- Flow 3 egress (mean 13.60 Mbit/s)

Packet one way delay (ms)

Time (s)

0 5 10 15 20 25 30

- Flow 1 (95th percentile -4.15 ms)
- Flow 2 (95th percentile -4.12 ms)
- Flow 3 (95th percentile -4.11 ms)
Run 9: Statistics of Copa

Start at: 2018-02-05 02:21:00
End at: 2018-02-05 02:21:30
Local clock offset: 0.704 ms
Remote clock offset: 2.151 ms

# Below is generated by plot.py at 2018-02-05 03:34:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.73 Mbit/s
  95th percentile per-packet one-way delay: -4.825 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 36.33 Mbit/s
  95th percentile per-packet one-way delay: -4.989 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.47 Mbit/s
  95th percentile per-packet one-way delay: -4.647 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 24.42 Mbit/s
  95th percentile per-packet one-way delay: -1.833 ms
  Loss rate: 0.00%
Run 9: Report of Copa — Data Link
Run 10: Statistics of Copa

Start at: 2018-02-05 02:45:48
End at: 2018-02-05 02:46:18
Local clock offset: 0.981 ms
Remote clock offset: 3.31 ms

# Below is generated by plot.py at 2018-02-05 03:34:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: -4.852 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 29.01 Mbit/s
95th percentile per-packet one-way delay: -4.902 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 16.25 Mbit/s
95th percentile per-packet one-way delay: -4.807 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.46 Mbit/s
95th percentile per-packet one-way delay: -4.800 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

The first graph shows the throughput over time for different flows. The blue line represents Flow 1 ingress (mean 29.01 Mbit/s), the blue dashed line represents Flow 1 egress (mean 29.01 Mbit/s), the green line represents Flow 2 ingress (mean 16.25 Mbit/s), the green dashed line represents Flow 2 egress (mean 16.25 Mbit/s), the red line represents Flow 3 ingress (mean 16.47 Mbit/s), and the red dashed line represents Flow 3 egress (mean 16.46 Mbit/s).

The second graph shows the per-packet one-way delay over time. The blue line represents Flow 1 (95th percentile -4.90 ms), the green line represents Flow 2 (95th percentile -4.81 ms), and the red line represents Flow 3 (95th percentile -4.80 ms).
Run 1: Statistics of FillP

Start at: 2018-02-04 23:00:52
End at: 2018-02-04 23:01:22
Local clock offset: -0.382 ms
Remote clock offset: 9.913 ms

# Below is generated by plot.py at 2018-02-05 03:35:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.04 Mbit/s
95th percentile per-packet one-way delay: 29.587 ms
Loss rate: 22.22%
-- Flow 1:
Average throughput: 49.06 Mbit/s
95th percentile per-packet one-way delay: 27.614 ms
Loss rate: 16.67%
-- Flow 2:
Average throughput: 40.87 Mbit/s
95th percentile per-packet one-way delay: 30.681 ms
Loss rate: 25.58%
-- Flow 3:
Average throughput: 38.48 Mbit/s
95th percentile per-packet one-way delay: 30.642 ms
Loss rate: 32.94%
Run 1: Report of FillP — Data Link

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

- Flow 1 ingress (mean 58.90 Mbit/s)
- Flow 1 egress (mean 49.06 Mbit/s)
- Flow 2 ingress (mean 54.94 Mbit/s)
- Flow 2 egress (mean 40.87 Mbit/s)
- Flow 3 ingress (mean 57.45 Mbit/s)
- Flow 3 egress (mean 38.48 Mbit/s)

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

- Flow 1 (95th percentile 27.61 ms)
- Flow 2 (95th percentile 30.68 ms)
- Flow 3 (95th percentile 30.64 ms)
Run 2: Statistics of FillP

Start at: 2018-02-04 23:25:49
End at: 2018-02-04 23:26:19
Local clock offset: 1.217 ms
Remote clock offset: 13.45 ms

# Below is generated by plot.py at 2018-02-05 03:35:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.09 Mbit/s
95th percentile per-packet one-way delay: 28.868 ms
Loss rate: 22.68%
-- Flow 1:
Average throughput: 51.53 Mbit/s
95th percentile per-packet one-way delay: 27.226 ms
Loss rate: 15.93%
-- Flow 2:
Average throughput: 36.20 Mbit/s
95th percentile per-packet one-way delay: 29.910 ms
Loss rate: 25.80%
-- Flow 3:
Average throughput: 40.51 Mbit/s
95th percentile per-packet one-way delay: 29.783 ms
Loss rate: 37.24%
Run 2: Report of FillP — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 61.35 Mbit/s)  Flow 1 egress (mean 51.53 Mbit/s)
Flow 2 ingress (mean 48.85 Mbit/s)  Flow 2 egress (mean 36.20 Mbit/s)
Flow 3 ingress (mean 64.70 Mbit/s)  Flow 3 egress (mean 40.51 Mbit/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 27.23 ms)  Flow 2 (95th percentile 29.91 ms)  Flow 3 (95th percentile 29.78 ms)
Run 3: Statistics of FillP

Start at: 2018-02-04 23:50:29
End at: 2018-02-04 23:50:59
Local clock offset: -0.265 ms
Remote clock offset: 9.396 ms

# Below is generated by plot.py at 2018-02-05 03:36:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 30.195 ms
Loss rate: 21.91%
-- Flow 1:
Average throughput: 50.55 Mbit/s
95th percentile per-packet one-way delay: 28.279 ms
Loss rate: 16.80%
-- Flow 2:
Average throughput: 38.65 Mbit/s
95th percentile per-packet one-way delay: 31.271 ms
Loss rate: 26.68%
-- Flow 3:
Average throughput: 38.00 Mbit/s
95th percentile per-packet one-way delay: 31.196 ms
Loss rate: 29.89%
Run 3: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-02-05 00:14:56
End at: 2018-02-05 00:15:26
Local clock offset: 2.878 ms
Remote clock offset: 8.335 ms

# Below is generated by plot.py at 2018-02-05 03:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 32.039 ms
Loss rate: 23.18%
-- Flow 1:
Average throughput: 51.20 Mbit/s
95th percentile per-packet one-way delay: 30.220 ms
Loss rate: 17.59%
-- Flow 2:
Average throughput: 38.17 Mbit/s
95th percentile per-packet one-way delay: 33.014 ms
Loss rate: 27.04%
-- Flow 3:
Average throughput: 37.54 Mbit/s
95th percentile per-packet one-way delay: 33.262 ms
Loss rate: 34.45%
Run 4: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

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

Legend:
- Flow 1 ingress (mean 62.16 Mbps)
- Flow 1 egress (mean 51.20 Mbps)
- Flow 2 ingress (mean 52.36 Mbps)
- Flow 2 egress (mean 38.17 Mbps)
- Flow 3 ingress (mean 57.15 Mbps)
- Flow 3 egress (mean 37.54 Mbps)

Throughout (Mbps)

Time (s)

Per packet one way delay (ms)

Time (s)
Run 5: Statistics of FillP

Start at: 2018-02-05 00:40:05
End at: 2018-02-05 00:40:35
Local clock offset: 2.064 ms
Remote clock offset: 2.698 ms

# Below is generated by plot.py at 2018-02-05 03:37:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.98 Mbit/s
95th percentile per-packet one-way delay: 29.994 ms
Loss rate: 18.64%
-- Flow 1:
Average throughput: 54.30 Mbit/s
95th percentile per-packet one-way delay: 28.530 ms
Loss rate: 14.37%
-- Flow 2:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 30.887 ms
Loss rate: 20.53%
-- Flow 3:
Average throughput: 34.98 Mbit/s
95th percentile per-packet one-way delay: 31.412 ms
Loss rate: 31.46%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-02-05 01:05:10
End at: 2018-02-05 01:05:40
Local clock offset: 2.007 ms
Remote clock offset: 3.286 ms

# Below is generated by plot.py at 2018-02-05 03:37:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.48 Mbit/s
  95th percentile per-packet one-way delay: 30.578 ms
  Loss rate: 20.40%
-- Flow 1:
  Average throughput: 49.90 Mbit/s
  95th percentile per-packet one-way delay: 28.221 ms
  Loss rate: 14.50%
-- Flow 2:
  Average throughput: 38.25 Mbit/s
  95th percentile per-packet one-way delay: 31.836 ms
  Loss rate: 22.44%
-- Flow 3:
  Average throughput: 39.57 Mbit/s
  95th percentile per-packet one-way delay: 32.432 ms
  Loss rate: 34.30%
Run 6: Report of FillP — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 58.40 Mbps)
- Flow 1 egress (mean 49.90 Mbps)
- Flow 2 ingress (mean 49.37 Mbps)
- Flow 2 egress (mean 38.25 Mbps)
- Flow 3 ingress (mean 60.21 Mbps)
- Flow 3 egress (mean 39.57 Mbps)

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

- Flow 1 (95th percentile 28.22 ms)
- Flow 2 (95th percentile 31.84 ms)
- Flow 3 (95th percentile 32.43 ms)
Run 7: Statistics of FillP

Start at: 2018-02-05 01:29:34
End at: 2018-02-05 01:30:04
Local clock offset: -0.341 ms
Remote clock offset: 3.04 ms

# Below is generated by plot.py at 2018-02-05 03:37:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.89 Mbit/s
  95th percentile per-packet one-way delay: 31.773 ms
  Loss rate: 22.15%
-- Flow 1:
  Average throughput: 51.15 Mbit/s
  95th percentile per-packet one-way delay: 30.002 ms
  Loss rate: 16.64%
-- Flow 2:
  Average throughput: 35.17 Mbit/s
  95th percentile per-packet one-way delay: 32.800 ms
  Loss rate: 26.57%
-- Flow 3:
  Average throughput: 43.36 Mbit/s
  95th percentile per-packet one-way delay: 33.038 ms
  Loss rate: 31.56%

256
Run 7: Report of FillP — Data Link

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

- Flow 1 ingress (mean 61.38 Mbit/s)
- Flow 1 egress (mean 51.15 Mbit/s)
- Flow 2 ingress (mean 47.91 Mbit/s)
- Flow 2 egress (mean 35.17 Mbit/s)
- Flow 3 ingress (mean 63.27 Mbit/s)
- Flow 3 egress (mean 43.36 Mbit/s)
Run 8: Statistics of FillP

Start at: 2018-02-05 01:54:34
End at: 2018-02-05 01:55:04
Local clock offset: 2.912 ms
Remote clock offset: 1.736 ms

# Below is generated by plot.py at 2018-02-05 03:37:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.09 Mbit/s
  95th percentile per-packet one-way delay: 27.509 ms
  Loss rate: 21.45%
-- Flow 1:
  Average throughput: 52.58 Mbit/s
  95th percentile per-packet one-way delay: 25.898 ms
  Loss rate: 15.98%
-- Flow 2:
  Average throughput: 36.54 Mbit/s
  95th percentile per-packet one-way delay: 28.496 ms
  Loss rate: 26.23%
-- Flow 3:
  Average throughput: 36.95 Mbit/s
  95th percentile per-packet one-way delay: 28.732 ms
  Loss rate: 31.76%
Run 8: Report of FillP — Data Link

![Graph of Throughput](image1)

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

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259
Run 9: Statistics of FillP

Start at: 2018-02-05 02:19:32
End at: 2018-02-05 02:20:02
Local clock offset: 1.494 ms
Remote clock offset: 2.455 ms

# Below is generated by plot.py at 2018-02-05 03:38:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.49 Mbit/s
95th percentile per-packet one-way delay: 30.417 ms
Loss rate: 20.63%
-- Flow 1:
Average throughput: 46.71 Mbit/s
95th percentile per-packet one-way delay: 28.308 ms
Loss rate: 15.55%
-- Flow 2:
Average throughput: 41.70 Mbit/s
95th percentile per-packet one-way delay: 31.137 ms
Loss rate: 24.38%
-- Flow 3:
Average throughput: 42.35 Mbit/s
95th percentile per-packet one-way delay: 31.749 ms
Loss rate: 28.00%
Run 9: Report of FillP — Data Link

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

![Graph 2: Per packet one way delay](image2.png)
Run 10: Statistics of FillP

Start at: 2018-02-05 02:44:17
End at: 2018-02-05 02:44:47
Local clock offset: 4.068 ms
Remote clock offset: 2.126 ms

# Below is generated by plot.py at 2018-02-05 03:38:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.97 Mbit/s
  95th percentile per-packet one-way delay: 26.323 ms
  Loss rate: 19.37%
-- Flow 1:
  Average throughput: 48.60 Mbit/s
  95th percentile per-packet one-way delay: 24.168 ms
  Loss rate: 15.36%
-- Flow 2:
  Average throughput: 40.21 Mbit/s
  95th percentile per-packet one-way delay: 27.442 ms
  Loss rate: 23.08%
-- Flow 3:
  Average throughput: 41.02 Mbit/s
  95th percentile per-packet one-way delay: 27.755 ms
  Loss rate: 24.96%
Run 10: Report of FillIP — Data Link

![Graph showing throughput and per-packet end-to-end delay over time for different flows.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 57.46 Mbps)
  - Flow 1 egress (mean 48.60 Mbps)
  - Flow 2 ingress (mean 52.34 Mbps)
  - Flow 2 egress (mean 40.21 Mbps)
  - Flow 3 ingress (mean 54.72 Mbps)
  - Flow 3 egress (mean 41.02 Mbps)

- **Per-packet end-to-end delay (ms):**
  - Flow 1 (95th percentile 24.17 ms)
  - Flow 2 (95th percentile 27.44 ms)
  - Flow 3 (95th percentile 27.75 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-02-04 22:51:06
End at: 2018-02-04 22:51:36
Local clock offset: 0.433 ms
Remote clock offset: 9.034 ms

# Below is generated by plot.py at 2018-02-05 03:38:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.56 Mbit/s
  95th percentile per-packet one-way delay: 28.373 ms
  Loss rate: 27.47%
-- Flow 1:
  Average throughput: 38.96 Mbit/s
  95th percentile per-packet one-way delay: 26.413 ms
  Loss rate: 24.96%
-- Flow 2:
  Average throughput: 49.18 Mbit/s
  95th percentile per-packet one-way delay: 29.776 ms
  Loss rate: 31.27%
-- Flow 3:
  Average throughput: 16.30 Mbit/s
  95th percentile per-packet one-way delay: 27.328 ms
  Loss rate: 19.47%
Run 2: Statistics of Indigo-1-32

Start at: 2018-02-04 23:15:56
End at: 2018-02-04 23:16:26
Local clock offset: -3.269 ms
Remote clock offset: 12.546 ms

# Below is generated by plot.py at 2018-02-05 03:38:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.24 Mbit/s
95th percentile per-packet one-way delay: 32.277 ms
Loss rate: 36.06%
-- Flow 1:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 30.182 ms
Loss rate: 30.71%
-- Flow 2:
Average throughput: 35.69 Mbit/s
95th percentile per-packet one-way delay: 34.182 ms
Loss rate: 38.03%
-- Flow 3:
Average throughput: 27.40 Mbit/s
95th percentile per-packet one-way delay: 33.144 ms
Loss rate: 54.85%
Run 2: Report of Indigo-1-32 — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 3: Statistics of Indigo-1-32

Start at: 2018-02-04 23:40:51
End at: 2018-02-04 23:41:21
Local clock offset: -0.603 ms
Remote clock offset: 11.381 ms

# Below is generated by plot.py at 2018-02-05 03:38:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.74 Mbit/s
  95th percentile per-packet one-way delay: 28.377 ms
  Loss rate: 30.19%
-- Flow 1:
  Average throughput: 56.09 Mbit/s
  95th percentile per-packet one-way delay: 25.274 ms
  Loss rate: 14.19%
-- Flow 2:
  Average throughput: 32.57 Mbit/s
  95th percentile per-packet one-way delay: 31.250 ms
  Loss rate: 45.86%
-- Flow 3:
  Average throughput: 12.77 Mbit/s
  95th percentile per-packet one-way delay: 32.561 ms
  Loss rate: 65.55%
Run 4: Statistics of Indigo-1-32

Start at: 2018-02-05 00:05:16
End at: 2018-02-05 00:05:46
Local clock offset: 4.254 ms
Remote clock offset: 8.164 ms

# Below is generated by plot.py at 2018-02-05 03:38:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.62 Mbit/s
95th percentile per-packet one-way delay: 25.820 ms
Loss rate: 30.93%
-- Flow 1:
Average throughput: 57.48 Mbit/s
95th percentile per-packet one-way delay: 24.647 ms
Loss rate: 31.58%
-- Flow 2:
Average throughput: 44.48 Mbit/s
95th percentile per-packet one-way delay: 27.061 ms
Loss rate: 29.77%
-- Flow 3:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 22.442 ms
Loss rate: 28.40%
Run 4: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 84.10 Mbps)
- Flow 1 egress (mean 57.48 Mbps)
- Flow 2 ingress (mean 65.44 Mbps)
- Flow 2 egress (mean 44.48 Mbps)
- Flow 3 ingress (mean 7.46 Mbps)
- Flow 3 egress (mean 5.34 Mbps)

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

- Flow 1 (95th percentile 24.65 ms)
- Flow 2 (95th percentile 27.06 ms)
- Flow 3 (95th percentile 22.44 ms)
Run 5: Statistics of Indigo-1-32

Start at: 2018-02-05 00:30:18
End at: 2018-02-05 00:30:48
Local clock offset: 2.98 ms
Remote clock offset: 4.466 ms

# Below is generated by plot.py at 2018-02-05 03:38:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.00 Mbit/s
95th percentile per-packet one-way delay: 28.457 ms
Loss rate: 25.97%
-- Flow 1:
Average throughput: 65.56 Mbit/s
95th percentile per-packet one-way delay: 27.822 ms
Loss rate: 25.55%
-- Flow 2:
Average throughput: 25.41 Mbit/s
95th percentile per-packet one-way delay: 27.894 ms
Loss rate: 18.53%
-- Flow 3:
Average throughput: 17.64 Mbit/s
95th percentile per-packet one-way delay: 32.785 ms
Loss rate: 44.53%
Run 5: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 88.06 Mbps)
- Flow 1 egress (mean 65.56 Mbps)
- Flow 2 ingress (mean 31.19 Mbps)
- Flow 2 egress (mean 25.41 Mbps)
- Flow 3 ingress (mean 31.79 Mbps)
- Flow 3 egress (mean 17.64 Mbps)

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

- Flow 1 (95th percentile 27.82 ms)
- Flow 2 (95th percentile 27.89 ms)
- Flow 3 (95th percentile 32.78 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-02-05 00:55:31
End at: 2018-02-05 00:56:01
Local clock offset: 2.202 ms
Remote clock offset: 3.194 ms

# Below is generated by plot.py at 2018-02-05 03:39:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.87 Mbit/s
95th percentile per-packet one-way delay: 29.615 ms
Loss rate: 28.32%
-- Flow 1:
Average throughput: 63.26 Mbit/s
95th percentile per-packet one-way delay: 28.456 ms
Loss rate: 27.03%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 31.210 ms
Loss rate: 26.61%
-- Flow 3:
Average throughput: 2.49 Mbit/s
95th percentile per-packet one-way delay: 32.159 ms
Loss rate: 77.34%
Run 6: Report of Indigo-1-32 — Data Link

![Graph showing network performance metrics over time.](image-url)
Run 7: Statistics of Indigo-1-32

Start at: 2018-02-05 01:20:10
End at: 2018-02-05 01:20:40
Local clock offset: 2.655 ms
Remote clock offset: 3.183 ms

# Below is generated by plot.py at 2018-02-05 03:39:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.05 Mbit/s
  95th percentile per-packet one-way delay: 28.549 ms
  Loss rate: 32.94%
-- Flow 1:
  Average throughput: 60.52 Mbit/s
  95th percentile per-packet one-way delay: 28.068 ms
  Loss rate: 30.97%
-- Flow 2:
  Average throughput: 35.26 Mbit/s
  95th percentile per-packet one-way delay: 29.442 ms
  Loss rate: 31.91%
-- Flow 3:
  Average throughput: 19.80 Mbit/s
  95th percentile per-packet one-way delay: 29.809 ms
  Loss rate: 49.37%
Run 7: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 87.70 Mbps)
- Flow 1 egress (mean 60.52 Mbps)
- Flow 2 ingress (mean 51.79 Mbps)
- Flow 2 egress (mean 35.26 Mbps)
- Flow 3 ingress (mean 39.03 Mbps)
- Flow 3 egress (mean 19.80 Mbps)

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

- Flow 1 (95th percentile 28.07 ms)
- Flow 2 (95th percentile 29.44 ms)
- Flow 3 (95th percentile 29.81 ms)
Run 8: Statistics of Indigo-1-32

Start at: 2018-02-05 01:44:46
End at: 2018-02-05 01:45:16
Local clock offset: -0.877 ms
Remote clock offset: 1.396 ms

# Below is generated by plot.py at 2018-02-05 03:39:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.81 Mbit/s
95th percentile per-packet one-way delay: 29.791 ms
Loss rate: 28.41%
-- Flow 1:
Average throughput: 60.42 Mbit/s
95th percentile per-packet one-way delay: 29.021 ms
Loss rate: 28.68%
-- Flow 2:
Average throughput: 35.63 Mbit/s
95th percentile per-packet one-way delay: 30.917 ms
Loss rate: 26.78%
-- Flow 3:
Average throughput: 16.93 Mbit/s
95th percentile per-packet one-way delay: 31.365 ms
Loss rate: 32.55%
Run 8: Report of Indigo-1-32 — Data Link

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

- **Throughput:**
  - Flow 1 ingress (mean 84.74 Mbit/s)
  - Flow 1 egress (mean 60.42 Mbit/s)
  - Flow 2 ingress (mean 48.65 Mbit/s)
  - Flow 2 egress (mean 35.65 Mbit/s)
  - Flow 3 ingress (mean 22.48 Mbit/s)
  - Flow 3 egress (mean 16.93 Mbit/s)

- **Packet Delay:**
  - Flow 1 (95th percentile 29.02 ms)
  - Flow 2 (95th percentile 30.92 ms)
  - Flow 3 (95th percentile 31.36 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-02-05 02:09:58
End at: 2018-02-05 02:10:28
Local clock offset: 1.148 ms
Remote clock offset: 1.467 ms

# Below is generated by plot.py at 2018-02-05 03:40:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.88 Mbit/s
  95th percentile per-packet one-way delay: 28.143 ms
  Loss rate: 32.34%
-- Flow 1:
  Average throughput: 62.78 Mbit/s
  95th percentile per-packet one-way delay: 26.388 ms
  Loss rate: 23.73%
-- Flow 2:
  Average throughput: 28.17 Mbit/s
  95th percentile per-packet one-way delay: 30.310 ms
  Loss rate: 42.57%
-- Flow 3:
  Average throughput: 20.04 Mbit/s
  95th percentile per-packet one-way delay: 31.288 ms
  Loss rate: 59.74%
Run 9: Report of Indigo-1-32 — Data Link

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 82.40 Mbit/s)
- Flow 1 egress (mean 62.78 Mbit/s)
- Flow 2 ingress (mean 49.13 Mbit/s)
- Flow 2 egress (mean 28.17 Mbit/s)
- Flow 3 ingress (mean 44.51 Mbit/s)
- Flow 3 egress (mean 20.04 Mbit/s)

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

- Flow 1 (95th percentile 26.39 ms)
- Flow 2 (95th percentile 30.33 ms)
- Flow 3 (95th percentile 31.29 ms)
Run 10: Statistics of Indigo-1-32

Start at: 2018-02-05 02:34:34
End at: 2018-02-05 02:35:04
Local clock offset: 3.114 ms
Remote clock offset: 1.905 ms

# Below is generated by plot.py at 2018-02-05 03:40:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.53 Mbit/s
  95th percentile per-packet one-way delay: 26.653 ms
  Loss rate: 34.81%
-- Flow 1:
  Average throughput: 66.45 Mbit/s
  95th percentile per-packet one-way delay: 24.893 ms
  Loss rate: 27.39%
-- Flow 2:
  Average throughput: 31.86 Mbit/s
  95th percentile per-packet one-way delay: 28.733 ms
  Loss rate: 50.69%
-- Flow 3:
  Average throughput: 0.00 Mbit/s
  95th percentile per-packet one-way delay: -7.999 ms
  Loss rate: 96.44%
Run 10: Report of Indigo-1-32 — Data Link

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

Legend:
- Flow 1 ingress (mean 91.57 Mbit/s)
- Flow 1 egress (mean 66.45 Mbit/s)
- Flow 2 ingress (mean 64.61 Mbit/s)
- Flow 2 egress (mean 31.86 Mbit/s)
- Flow 3 ingress (mean 0.04 Mbit/s)
- Flow 3 egress (mean 0.00 Mbit/s)

Per-packet one-way delay (ms)

Legend:
- Flow 1 (95th percentile 24.89 ms)
- Flow 2 (95th percentile 28.73 ms)
- Flow 3 (95th percentile -8.00 ms)
Run 1: Statistics of Vivace-latency

Start at: 2018-02-04 23:13:12
End at: 2018-02-04 23:13:42
Local clock offset: -2.618 ms
Remote clock offset: 11.804 ms

# Below is generated by plot.py at 2018-02-05 03:40:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.66 Mbit/s
95th percentile per-packet one-way delay: 24.476 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 62.30 Mbit/s
95th percentile per-packet one-way delay: 24.299 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 11.32 Mbit/s
95th percentile per-packet one-way delay: 25.176 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 25.117 ms
Loss rate: 0.66%
Run 1: Report of Vivace-latency — Data Link
Run 2: Statistics of Vivace-latency

Start at: 2018-02-04 23:38:10
End at: 2018-02-04 23:38:40
Local clock offset: 1.221 ms
Remote clock offset: 12.743 ms

# Below is generated by plot.py at 2018-02-05 03:40:15
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 76.45 Mbit/s
   95th percentile per-packet one-way delay: 19.265 ms
   Loss rate: 1.18%
-- Flow 1:
   Average throughput: 59.97 Mbit/s
   95th percentile per-packet one-way delay: 20.075 ms
   Loss rate: 1.22%
-- Flow 2:
   Average throughput: 21.67 Mbit/s
   95th percentile per-packet one-way delay: 17.066 ms
   Loss rate: 1.09%
-- Flow 3:
   Average throughput: 6.28 Mbit/s
   95th percentile per-packet one-way delay: 14.502 ms
   Loss rate: 0.79%
Run 2: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 60.73 Mbit/s)
- Flow 1 egress (mean 59.97 Mbit/s)
- Flow 2 ingress (mean 21.91 Mbit/s)
- Flow 2 egress (mean 21.67 Mbit/s)
- Flow 3 ingress (mean 6.33 Mbit/s)
- Flow 3 egress (mean 6.28 Mbit/s)

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

- Flow 1 (95th percentile 20.07 ms)
- Flow 2 (95th percentile 17.07 ms)
- Flow 3 (95th percentile 14.50 ms)
Run 3: Statistics of Vivace-latency

Start at: 2018-02-05 00:02:39
End at: 2018-02-05 00:03:09
Local clock offset: 2.279 ms
Remote clock offset: 9.509 ms

# Below is generated by plot.py at 2018-02-05 03:40:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.75 Mbit/s
  95th percentile per-packet one-way delay: 16.872 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 66.44 Mbit/s
  95th percentile per-packet one-way delay: 16.927 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 12.70 Mbit/s
  95th percentile per-packet one-way delay: 16.607 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 2.65 Mbit/s
  95th percentile per-packet one-way delay: 16.423 ms
  Loss rate: 0.00%
Run 3: Report of Vivace-latency — Data Link

![Graph 1: Throughput](image1)

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

*Flow 1 ingress (mean 66.53 Mbit/s)*
*Flow 1 egress (mean 66.44 Mbit/s)*
*Flow 2 ingress (mean 12.70 Mbit/s)*
*Flow 2 egress (mean 12.70 Mbit/s)*
*Flow 3 ingress (mean 2.63 Mbit/s)*
*Flow 3 egress (mean 2.65 Mbit/s)*
Run 4: Statistics of Vivace-latency

Start at: 2018-02-05 00:27:48  
End at: 2018-02-05 00:28:18  
Local clock offset: 2.546 ms  
Remote clock offset: 4.52 ms  

# Below is generated by plot.py at 2018-02-05 03:40:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 8.21 Mbit/s
  95th percentile per-packet one-way delay: -5.047 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.77 Mbit/s
  95th percentile per-packet one-way delay: -5.008 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 5.81 Mbit/s
  95th percentile per-packet one-way delay: -5.090 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 4.80 Mbit/s
  95th percentile per-packet one-way delay: -5.047 ms
  Loss rate: 0.00%
Run 5: Statistics of Vivace-latency

Start at: 2018-02-05 00:52:52
End at: 2018-02-05 00:53:22
Local clock offset: 1.704 ms
Remote clock offset: 1.966 ms

# Below is generated by plot.py at 2018-02-05 03:40:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.88 Mbit/s
95th percentile per-packet one-way delay: 26.690 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 64.66 Mbit/s
95th percentile per-packet one-way delay: 26.354 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 15.67 Mbit/s
95th percentile per-packet one-way delay: 27.416 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 8.49 Mbit/s
95th percentile per-packet one-way delay: 28.287 ms
Loss rate: 0.55%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-02-05 01:17:33
End at: 2018-02-05 01:18:03
Local clock offset: 0.48 ms
Remote clock offset: 1.078 ms

# Below is generated by plot.py at 2018-02-05 03:40:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.29 Mbit/s
95th percentile per-packet one-way delay: 11.204 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 68.68 Mbit/s
95th percentile per-packet one-way delay: 10.929 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 10.82 Mbit/s
95th percentile per-packet one-way delay: 12.737 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 14.743 ms
Loss rate: 0.33%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-02-05 01:42:03
End at: 2018-02-05 01:42:33
Local clock offset: 1.892 ms
Remote clock offset: 3.712 ms

# Below is generated by plot.py at 2018-02-05 03:41:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.37 Mbit/s
95th percentile per-packet one-way delay: 11.967 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 12.310 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 26.62 Mbit/s
95th percentile per-packet one-way delay: 11.788 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: -0.004 ms
Loss rate: 0.00%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-02-05 02:07:16
End at: 2018-02-05 02:07:46
Local clock offset: 1.269 ms
Remote clock offset: 3.248 ms

# Below is generated by plot.py at 2018-02-05 03:41:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.55 Mbit/s
95th percentile per-packet one-way delay: 24.009 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 66.29 Mbit/s
95th percentile per-packet one-way delay: 24.318 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: 23.016 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 8.50 Mbit/s
95th percentile per-packet one-way delay: 18.438 ms
Loss rate: 0.00%
Run 8: Report of Vivace-latency — Data Link

![Graph showing throughput and packet loss over time for different flows. The graphs display the throughput in Mbps and latency in ms, with distinct lines for each flow, highlighting the mean values in Mbps and the 95th percentile latency in ms.]
Run 9: Statistics of Vivace-latency

Start at: 2018-02-05 02:31:57
End at: 2018-02-05 02:32:27
Local clock offset: -0.023 ms
Remote clock offset: 3.073 ms

# Below is generated by plot.py at 2018-02-05 03:41:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.63 Mbit/s
95th percentile per-packet one-way delay: 21.166 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 65.59 Mbit/s
95th percentile per-packet one-way delay: 21.275 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 14.52 Mbit/s
95th percentile per-packet one-way delay: 21.400 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 10.143 ms
Loss rate: 0.00%
Run 9: Report of Vivace-latency — Data Link

[Graphs showing throughput and per-packet one-way delay for different flows, with details on mean and percentile values.]
Run 10: Statistics of Vivace-latency

Start at: 2018-02-05 02:56:50
End at: 2018-02-05 02:57:20
Local clock offset: 2.059 ms
Remote clock offset: 4.211 ms

# Below is generated by plot.py at 2018-02-05 03:41:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.12 Mbit/s
95th percentile per-packet one-way delay: -4.596 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: -4.543 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 16.10 Mbit/s
95th percentile per-packet one-way delay: -4.693 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: -4.183 ms
Loss rate: 0.00%
Run 10: Report of Vivace-latency — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 56.20 Mbps)**
- **Flow 1 egress (mean 56.13 Mbps)**
- **Flow 2 ingress (mean 16.10 Mbps)**
- **Flow 2 egress (mean 16.10 Mbps)**
- **Flow 3 ingress (mean 3.90 Mbps)**
- **Flow 3 egress (mean 3.90 Mbps)**

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

- **Flow 1 (95th percentile -4.54 ms)**
- **Flow 2 (95th percentile -4.69 ms)**
- **Flow 3 (95th percentile -4.18 ms)**
Run 1: Statistics of Vivace-loss

Start at: 2018-02-04 23:11:50
End at: 2018-02-04 23:12:20
Local clock offset: -0.566 ms
Remote clock offset: 11.747 ms

# Below is generated by plot.py at 2018-02-05 03:41:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 30.518 ms
Loss rate: 6.34%
-- Flow 1:
Average throughput: 80.90 Mbit/s
95th percentile per-packet one-way delay: 30.507 ms
Loss rate: 6.40%
-- Flow 2:
Average throughput: 9.71 Mbit/s
95th percentile per-packet one-way delay: 30.652 ms
Loss rate: 5.86%
-- Flow 3:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 30.578 ms
Loss rate: 4.96%
Run 1: Report of Vivace-loss — Data Link

**Throughput (Mbps) vs Time (s)**

- **Flow 1 ingress (mean 86.47 Mbps)**
- **Flow 1 egress (mean 80.90 Mbps)**
- **Flow 2 ingress (mean 10.32 Mbps)**
- **Flow 2 egress (mean 9.71 Mbps)**
- **Flow 3 ingress (mean 4.01 Mbps)**
- **Flow 3 egress (mean 3.62 Mbps)**

**Per-packet one-way delay (ms) vs Time (s)**

- **Flow 1 (95th percentile 30.51 ms)**
- **Flow 2 (95th percentile 30.65 ms)**
- **Flow 3 (95th percentile 30.58 ms)**
Run 2: Statistics of Vivace-loss

Start at: 2018-02-04 23:36:46
End at: 2018-02-04 23:37:16
Local clock offset: -0.563 ms
Remote clock offset: 12.118 ms

# Below is generated by plot.py at 2018-02-05 03:41:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.14 Mbit/s
  95th percentile per-packet one-way delay: 29.373 ms
  Loss rate: 6.48%
-- Flow 1:
  Average throughput: 73.86 Mbit/s
  95th percentile per-packet one-way delay: 29.313 ms
  Loss rate: 6.60%
-- Flow 2:
  Average throughput: 18.00 Mbit/s
  95th percentile per-packet one-way delay: 29.546 ms
  Loss rate: 5.90%
-- Flow 3:
  Average throughput: 3.98 Mbit/s
  95th percentile per-packet one-way delay: 30.474 ms
  Loss rate: 5.23%
Run 2: Report of Vivace-loss — Data Link
Run 3: Statistics of Vivace-loss

Start at: 2018-02-05 00:01:17
End at: 2018-02-05 00:01:47
Local clock offset: 2.173 ms
Remote clock offset: 7.588 ms

# Below is generated by plot.py at 2018-02-05 03:41:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.01 Mbit/s
95th percentile per-packet one-way delay: 28.928 ms
Loss rate: 6.52%
-- Flow 1:
Average throughput: 83.13 Mbit/s
95th percentile per-packet one-way delay: 28.906 ms
Loss rate: 6.54%
-- Flow 2:
Average throughput: 6.57 Mbit/s
95th percentile per-packet one-way delay: 29.183 ms
Loss rate: 5.94%
-- Flow 3:
Average throughput: 4.61 Mbit/s
95th percentile per-packet one-way delay: 29.252 ms
Loss rate: 7.10%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-02-05 00:26:20
End at: 2018-02-05 00:26:50
Local clock offset: 1.703 ms
Remote clock offset: 4.364 ms

# Below is generated by plot.py at 2018-02-05 03:42:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.24 Mbit/s
  95th percentile per-packet one-way delay: 31.653 ms
  Loss rate: 6.30%
-- Flow 1:
  Average throughput: 81.13 Mbit/s
  95th percentile per-packet one-way delay: 31.657 ms
  Loss rate: 6.44%
-- Flow 2:
  Average throughput: 11.03 Mbit/s
  95th percentile per-packet one-way delay: 31.577 ms
  Loss rate: 4.98%
-- Flow 3:
  Average throughput: 2.45 Mbit/s
  95th percentile per-packet one-way delay: 31.700 ms
  Loss rate: 4.45%
Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-02-05 00:51:25
End at: 2018-02-05 00:51:55
Local clock offset: 1.31 ms
Remote clock offset: 3.854 ms

# Below is generated by plot.py at 2018-02-05 03:42:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.29 Mbit/s
95th percentile per-packet one-way delay: 32.251 ms
Loss rate: 5.83%
-- Flow 1:
Average throughput: 75.71 Mbit/s
95th percentile per-packet one-way delay: 32.052 ms
Loss rate: 5.76%
-- Flow 2:
Average throughput: 8.60 Mbit/s
95th percentile per-packet one-way delay: 32.731 ms
Loss rate: 5.63%
-- Flow 3:
Average throughput: 20.86 Mbit/s
95th percentile per-packet one-way delay: 32.958 ms
Loss rate: 6.77%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

Start at: 2018-02-05 01:16:11
End at: 2018-02-05 01:16:41
Local clock offset: 2.0 ms
Remote clock offset: 1.842 ms

# Below is generated by plot.py at 2018-02-05 03:42:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.36 Mbit/s
95th percentile per-packet one-way delay: 28.764 ms
Loss rate: 5.27%
-- Flow 1:
Average throughput: 77.47 Mbit/s
95th percentile per-packet one-way delay: 28.795 ms
Loss rate: 5.43%
-- Flow 2:
Average throughput: 11.16 Mbit/s
95th percentile per-packet one-way delay: 28.526 ms
Loss rate: 3.88%
-- Flow 3:
Basic throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 28.773 ms
Loss rate: 4.56%
Run 6: Report of Vivace-loss — Data Link

![Image of throughput and per-packet one-way delay graphs with legend.

Legend:
- Flow 1 ingress (mean 81.09 Mbit/s)
- Flow 1 egress (mean 77.47 Mbit/s)
- Flow 2 ingress (mean 11.62 Mbit/s)
- Flow 2 egress (mean 11.16 Mbit/s)
- Flow 3 ingress (mean 7.85 Mbit/s)
- Flow 3 egress (mean 7.49 Mbit/s)
Run 7: Statistics of Vivace-loss

Start at: 2018-02-05 01:40:36
End at: 2018-02-05 01:41:06
Local clock offset: 1.506 ms
Remote clock offset: 4.059 ms

# Below is generated by plot.py at 2018-02-05 03:42:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.42 Mbit/s
  95th percentile per-packet one-way delay: 30.853 ms
  Loss rate: 6.85%
-- Flow 1:
  Average throughput: 75.42 Mbit/s
  95th percentile per-packet one-way delay: 30.768 ms
  Loss rate: 6.83%
-- Flow 2:
  Average throughput: 14.28 Mbit/s
  95th percentile per-packet one-way delay: 31.154 ms
  Loss rate: 6.72%
-- Flow 3:
  Average throughput: 10.62 Mbit/s
  95th percentile per-packet one-way delay: 31.378 ms
  Loss rate: 7.70%
Run 7: Report of Vivace-loss — Data Link
Run 8: Statistics of Vivace-loss

Start at: 2018-02-05 02:05:48
End at: 2018-02-05 02:06:18
Local clock offset: 2.511 ms
Remote clock offset: 2.682 ms

# Below is generated by plot.py at 2018-02-05 03:42:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.51 Mbit/s
  95th percentile per-packet one-way delay: 29.495 ms
  Loss rate: 5.35%
-- Flow 1:
  Average throughput: 80.20 Mbit/s
  95th percentile per-packet one-way delay: 29.412 ms
  Loss rate: 5.41%
-- Flow 2:
  Average throughput: 11.39 Mbit/s
  95th percentile per-packet one-way delay: 30.096 ms
  Loss rate: 4.75%
-- Flow 3:
  Average throughput: 2.23 Mbit/s
  95th percentile per-packet one-way delay: 30.754 ms
  Loss rate: 5.63%
Run 8: Report of Vivace-loss — Data Link

![Graph showing network throughput and packet loss](image-url)
Run 9: Statistics of Vivace-loss

Start at: 2018-02-05 02:30:33
End at: 2018-02-05 02:31:03
Local clock offset: 0.007 ms
Remote clock offset: 2.472 ms

# Below is generated by plot.py at 2018-02-05 03:43:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.58 Mbit/s
95th percentile per-packet one-way delay: 31.605 ms
Loss rate: 7.86%
-- Flow 1:
Average throughput: 77.60 Mbit/s
95th percentile per-packet one-way delay: 31.591 ms
Loss rate: 7.97%
-- Flow 2:
Average throughput: 15.27 Mbit/s
95th percentile per-packet one-way delay: 31.750 ms
Loss rate: 7.38%
-- Flow 3:
Average throughput: 2.59 Mbit/s
95th percentile per-packet one-way delay: 31.344 ms
Loss rate: 4.02%
Run 9: Report of Vivace-loss — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 84.39 Mbps)**
- **Flow 1 egress (mean 77.60 Mbps)**
- **Flow 2 ingress (mean 16.49 Mbps)**
- **Flow 2 egress (mean 15.27 Mbps)**
- **Flow 3 ingress (mean 2.52 Mbps)**
- **Flow 3 egress (mean 2.59 Mbps)**

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

- **Flow 1 (95th percentile 31.59 ms)**
- **Flow 2 (95th percentile 31.75 ms)**
- **Flow 3 (95th percentile 31.34 ms)**
Run 10: Statistics of Vivace-loss

Start at: 2018-02-05 02:55:24
End at: 2018-02-05 02:55:54
Local clock offset: 2.839 ms
Remote clock offset: 1.876 ms

# Below is generated by plot.py at 2018-02-05 03:43:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.29 Mbit/s
95th percentile per-packet one-way delay: 27.638 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 78.95 Mbit/s
95th percentile per-packet one-way delay: 27.568 ms
Loss rate: 6.47%
-- Flow 2:
Average throughput: 8.62 Mbit/s
95th percentile per-packet one-way delay: 28.044 ms
Loss rate: 6.88%
-- Flow 3:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 28.548 ms
Loss rate: 10.50%
Run 10: Report of Vivace-loss — Data Link
Run 1: Statistics of Vivace-LTE

Start at: 2018-02-04 23:09:00
End at: 2018-02-04 23:09:30
Local clock offset: -1.524 ms
Remote clock offset: 12.135 ms

# Below is generated by plot.py at 2018-02-05 03:43:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.14 Mbit/s
95th percentile per-packet one-way delay: 29.502 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 75.39 Mbit/s
95th percentile per-packet one-way delay: 29.479 ms
Loss rate: 3.54%
-- Flow 2:
Average throughput: 14.42 Mbit/s
95th percentile per-packet one-way delay: 29.520 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 6.62 Mbit/s
95th percentile per-packet one-way delay: 29.856 ms
Loss rate: 1.75%
Run 1: Report of Vivace-LTE — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress** (mean 78.17 Mbps)
- **Flow 1 egress** (mean 75.39 Mbps)
- **Flow 2 ingress** (mean 14.65 Mbps)
- **Flow 2 egress** (mean 14.42 Mbps)
- **Flow 3 ingress** (mean 6.75 Mbps)
- **Flow 3 egress** (mean 6.62 Mbps)

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

- **Flow 1** (95th percentile 29.48 ms)
- **Flow 2** (95th percentile 29.52 ms)
- **Flow 3** (95th percentile 29.86 ms)
Run 2: Statistics of Vivace-LTE

Start at: 2018-02-04 23:34:01
End at: 2018-02-04 23:34:31
Local clock offset: -3.362 ms
Remote clock offset: 14.441 ms

# Below is generated by plot.py at 2018-02-05 03:43:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.70 Mbit/s
95th percentile per-packet one-way delay: 30.747 ms
Loss rate: 3.35%
-- Flow 1:
Average throughput: 74.05 Mbit/s
95th percentile per-packet one-way delay: 30.766 ms
Loss rate: 3.58%
-- Flow 2:
Average throughput: 19.28 Mbit/s
95th percentile per-packet one-way delay: 30.429 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 31.050 ms
Loss rate: 2.18%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-02-04 23:58:34
End at: 2018-02-04 23:59:04
Local clock offset: -1.099 ms
Remote clock offset: 6.807 ms

# Below is generated by plot.py at 2018-02-05 03:43:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.03 Mbit/s
  95th percentile per-packet one-way delay: 28.708 ms
  Loss rate: 3.71%
-- Flow 1:
  Average throughput: 75.79 Mbit/s
  95th percentile per-packet one-way delay: 28.681 ms
  Loss rate: 3.91%
-- Flow 2:
  Average throughput: 14.00 Mbit/s
  95th percentile per-packet one-way delay: 28.916 ms
  Loss rate: 2.42%
-- Flow 3:
  Average throughput: 5.86 Mbit/s
  95th percentile per-packet one-way delay: 28.628 ms
  Loss rate: 1.88%
Run 3: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 78.90 Mbit/s)
- Flow 1 egress (mean 75.79 Mbit/s)
- Flow 2 ingress (mean 14.34 Mbit/s)
- Flow 2 egress (mean 14.00 Mbit/s)
- Flow 3 ingress (mean 5.97 Mbit/s)
- Flow 3 egress (mean 5.86 Mbit/s)

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

- Flow 1 (99th percentile 28.68 ms)
- Flow 2 (99th percentile 28.92 ms)
- Flow 3 (99th percentile 28.63 ms)
Run 4: Statistics of Vivace-LTE

Start at: 2018-02-05 00:23:22
End at: 2018-02-05 00:23:53
Local clock offset: 4.054 ms
Remote clock offset: 5.071 ms

# Below is generated by plot.py at 2018-02-05 03:43:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.45 Mbit/s
95th percentile per-packet one-way delay: 28.981 ms
Loss rate: 4.64%
-- Flow 1:
Average throughput: 73.43 Mbit/s
95th percentile per-packet one-way delay: 28.842 ms
Loss rate: 4.97%
-- Flow 2:
Average throughput: 16.83 Mbit/s
95th percentile per-packet one-way delay: 29.196 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 11.65 Mbit/s
95th percentile per-packet one-way delay: 29.593 ms
Loss rate: 3.30%
Run 4: Report of Vivace-LTE — Data Link

![Graph of Throughput](image1)

![Graph of Per-packet one-way delay](image2)
Run 5: Statistics of Vivace-LTE

Start at: 2018-02-05 00:48:36
End at: 2018-02-05 00:49:06
Local clock offset: 2.084 ms
Remote clock offset: 3.857 ms

# Below is generated by plot.py at 2018-02-05 03:44:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.75 Mbit/s
95th percentile per-packet one-way delay: 28.267 ms
Loss rate: 5.29%
-- Flow 1:
Average throughput: 72.08 Mbit/s
95th percentile per-packet one-way delay: 27.502 ms
Loss rate: 4.90%
-- Flow 2:
Average throughput: 13.48 Mbit/s
95th percentile per-packet one-way delay: 28.692 ms
Loss rate: 4.85%
-- Flow 3:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 31.165 ms
Loss rate: 9.91%
Run 5: Report of Vivace-LTE — Data Link

1. Throughput (Mbps):
   - Flow 1 ingress (mean 75.80 Mbit/s)
   - Flow 1 egress (mean 72.08 Mbit/s)
   - Flow 2 ingress (mean 14.17 Mbit/s)
   - Flow 2 egress (mean 13.45 Mbit/s)
   - Flow 3 ingress (mean 22.57 Mbit/s)
   - Flow 3 egress (mean 20.37 Mbit/s)

2. Per-packet one-way delay (ms):
   - Flow 1 (95th percentile 27.50 ms)
   - Flow 2 (95th percentile 28.69 ms)
   - Flow 3 (95th percentile 31.16 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-02-05 01:13:27
End at: 2018-02-05 01:13:57
Local clock offset: 0.819 ms
Remote clock offset: 0.732 ms

# Below is generated by plot.py at 2018-02-05 03:44:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.24 Mbit/s
95th percentile per-packet one-way delay: 28.689 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 75.92 Mbit/s
95th percentile per-packet one-way delay: 28.431 ms
Loss rate: 4.16%
-- Flow 2:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 29.586 ms
Loss rate: 3.57%
-- Flow 3:
Average throughput: 4.98 Mbit/s
95th percentile per-packet one-way delay: 30.168 ms
Loss rate: 5.22%
Run 6: Report of Vivace-LTE — Data Link
Run 7: Statistics of Vivace-LTE

Start at: 2018-02-05 01:37:51
End at: 2018-02-05 01:38:21
Local clock offset: 0.827 ms
Remote clock offset: 3.477 ms

# Below is generated by plot.py at 2018-02-05 03:44:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.83 Mbit/s
95th percentile per-packet one-way delay: 29.488 ms
Loss rate: 4.20%
-- Flow 1:
Average throughput: 74.11 Mbit/s
95th percentile per-packet one-way delay: 29.520 ms
Loss rate: 4.33%
-- Flow 2:
Average throughput: 14.11 Mbit/s
95th percentile per-packet one-way delay: 29.136 ms
Loss rate: 3.42%
-- Flow 3:
Average throughput: 13.15 Mbit/s
95th percentile per-packet one-way delay: 29.899 ms
Loss rate: 3.63%
Run 7: Report of Vivace-LTE — Data Link

![Graph of throughput and packet delay over time for different flows.]
Run 8: Statistics of Vivace-LTE

Start at: 2018-02-05 02:02:51
End at: 2018-02-05 02:03:21
Local clock offset: 1.41 ms
Remote clock offset: 1.969 ms

# Below is generated by plot.py at 2018-02-05 03:44:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.50 Mbit/s
95th percentile per-packet one-way delay: 28.285 ms
Loss rate: 3.60%
-- Flow 1:
Average throughput: 74.49 Mbit/s
95th percentile per-packet one-way delay: 28.211 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 15.82 Mbit/s
95th percentile per-packet one-way delay: 28.533 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 29.163 ms
Loss rate: 2.79%
Run 9: Statistics of Vivace-LTE

Start at: 2018-02-05 02:27:51
End at: 2018-02-05 02:28:21
Local clock offset: 1.491 ms
Remote clock offset: 2.198 ms

# Below is generated by plot.py at 2018-02-05 03:44:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.76 Mbit/s
95th percentile per-packet one-way delay: 27.814 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 74.56 Mbit/s
95th percentile per-packet one-way delay: 28.060 ms
Loss rate: 3.79%
-- Flow 2:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 24.296 ms
Loss rate: 2.25%
-- Flow 3:
Average throughput: 11.96 Mbit/s
95th percentile per-packet one-way delay: 27.369 ms
Loss rate: 4.19%
Run 9: Report of Vivace-LTE — Data Link
Run 10: Statistics of Vivace-LTE

Start at: 2018-02-05 02:52:39
End at: 2018-02-05 02:53:09
Local clock offset: 0.688 ms
Remote clock offset: 3.202 ms

# Below is generated by plot.py at 2018-02-05 03:44:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.39 Mbit/s
95th percentile per-packet one-way delay: 29.293 ms
Loss rate: 3.64%
-- Flow 1:
Average throughput: 73.63 Mbit/s
95th percentile per-packet one-way delay: 29.173 ms
Loss rate: 3.78%
-- Flow 2:
Average throughput: 15.71 Mbit/s
95th percentile per-packet one-way delay: 29.754 ms
Loss rate: 2.51%
-- Flow 3:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 30.151 ms
Loss rate: 4.00%
Run 10: Report of Vivace-LTE — Data Link

[Graph showing throughput and delay over time for different flows]