Pantheon Report

Generated at 2018-03-15 14:28:16 (UTC).
Data path: China Ethernet (remote) → AWS Korea Ethernet (local).
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 ntp.nict.jp and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 82bbbf9ff4d941149b5cecc90f281dc69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d8ca143d28df70b6f6c4a2
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f26d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d838dc4dfe0eccdf90c0776e4d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0d350939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a04dd8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303ae82e808e6928eac4f1083a6681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b17eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db2674ccfcf993
third_party/pcc @ 1afcd958fa0d6618b623c091a55f9ec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c6f42
third_party/scream @ e3370fd7bd1726f5984e16e023f956688
third_party/sourdough @ f1a14bff749737437f61b1aeab30267cde681
third_party/sprung @ 6f2efe6e088d91066a9f23d3f375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sprungbt2.cc
  M src/network/sprungconn.cc
third_party/verus @ d4b447ea74c6c0a261141af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webRTC @ a488197dd041ace68a42849b2540ad834825f42
test from China Ethernet to AWS Korea Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
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<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<td>33.38</td>
<td>20.41</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>51.42</td>
<td>25.54</td>
<td>21.41</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-03-15 05:49:28
End at: 2018-03-15 05:49:58
Local clock offset: 4.554 ms
Remote clock offset: 35.077 ms

# Below is generated by plot.py at 2018-03-15 14:07:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.38 Mbit/s
95th percentile per-packet one-way delay: 145.571 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 55.46 Mbit/s
95th percentile per-packet one-way delay: 144.227 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 38.28 Mbit/s
95th percentile per-packet one-way delay: 146.532 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 147.166 ms
Loss rate: 3.00%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-03-15 06:14:24
End at: 2018-03-15 06:14:54
Local clock offset: 3.726 ms
Remote clock offset: 19.024 ms

# Below is generated by plot.py at 2018-03-15 14:07:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.85 Mbit/s
  95th percentile per-packet one-way delay: 151.860 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 56.17 Mbit/s
  95th percentile per-packet one-way delay: 150.317 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 39.44 Mbit/s
  95th percentile per-packet one-way delay: 151.838 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 29.20 Mbit/s
  95th percentile per-packet one-way delay: 155.760 ms
  Loss rate: 2.21%
Run 2: Report of TCP BBR — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 56.10 Mbps)
  - Flow 1 egress (mean 56.17 Mbps)
  - Flow 2 ingress (mean 39.34 Mbps)
  - Flow 2 egress (mean 39.44 Mbps)
  - Flow 3 ingress (mean 29.28 Mbps)
  - Flow 3 egress (mean 29.20 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 150.32 ms)
  - Flow 2 (95th percentile 151.84 ms)
  - Flow 3 (95th percentile 155.76 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-03-15 06:40:58
End at: 2018-03-15 06:41:28
Local clock offset: 1.235 ms
Remote clock offset: 32.566 ms

# Below is generated by plot.py at 2018-03-15 14:07:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.25 Mbit/s
95th percentile per-packet one-way delay: 148.961 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 56.29 Mbit/s
95th percentile per-packet one-way delay: 148.164 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 37.77 Mbit/s
95th percentile per-packet one-way delay: 151.467 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: 143.647 ms
Loss rate: 1.94%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-03-15 07:07:38
End at: 2018-03-15 07:08:08
Local clock offset: 1.513 ms
Remote clock offset: 56.41 ms

# Below is generated by plot.py at 2018-03-15 14:07:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.26 Mbit/s
95th percentile per-packet one-way delay: 246.050 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 237.892 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 39.12 Mbit/s
95th percentile per-packet one-way delay: 247.251 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 257.912 ms
Loss rate: 2.77%
Run 4: Report of TCP BBR — Data Link

**Throughput (Mbps):**
- Flow 1 ingress (mean 50.59 Mbps)
- Flow 1 egress (mean 50.50 Mbps)
- Flow 2 ingress (mean 39.02 Mbps)
- Flow 2 egress (mean 39.12 Mbps)
- Flow 3 ingress (mean 27.67 Mbps)
- Flow 3 egress (mean 27.55 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 237.89 ms)
- Flow 2 (95th percentile 247.25 ms)
- Flow 3 (95th percentile 257.91 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-03-15 07:34:17
End at: 2018-03-15 07:34:47
Local clock offset: 3.215 ms
Remote clock offset: 16.943 ms

# Below is generated by plot.py at 2018-03-15 14:07:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.38 Mbit/s
95th percentile per-packet one-way delay: 143.096 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 56.08 Mbit/s
95th percentile per-packet one-way delay: 142.085 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 38.28 Mbit/s
95th percentile per-packet one-way delay: 143.682 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 144.059 ms
Loss rate: 2.02%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-03-15 07:59:07
End at: 2018-03-15 07:59:37
Local clock offset: 9.286 ms
Remote clock offset: 47.844 ms

# Below is generated by plot.py at 2018-03-15 14:07:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 139.276 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 55.89 Mbit/s
95th percentile per-packet one-way delay: 138.272 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.04 Mbit/s
95th percentile per-packet one-way delay: 139.482 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 140.359 ms
Loss rate: 2.18%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-03-15 08:24:12
End at: 2018-03-15 08:24:42
Local clock offset: 12.139 ms
Remote clock offset: 36.346 ms

# Below is generated by plot.py at 2018-03-15 14:07:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.29 Mbit/s
  95th percentile per-packet one-way delay: 186.444 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 54.40 Mbit/s
  95th percentile per-packet one-way delay: 185.370 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 38.69 Mbit/s
  95th percentile per-packet one-way delay: 186.609 ms
  Loss rate: 0.93%
-- Flow 3:
  Average throughput: 28.48 Mbit/s
  95th percentile per-packet one-way delay: 187.311 ms
  Loss rate: 2.60%
Run 7: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 54.36 Mbit/s)
- Flow 1 egress (mean 54.40 Mbit/s)
- Flow 2 ingress (mean 38.69 Mbit/s)
- Flow 2 egress (mean 38.69 Mbit/s)
- Flow 3 ingress (mean 28.58 Mbit/s)
- Flow 3 egress (mean 28.48 Mbit/s)
Run 8: Statistics of TCP BBR

Start at: 2018-03-15 08:50:36
End at: 2018-03-15 08:51:06
Local clock offset: 2.872 ms
Remote clock offset: 37.763 ms

# Below is generated by plot.py at 2018-03-15 14:07:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.16 Mbit/s
95th percentile per-packet one-way delay: 183.674 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 182.070 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 38.06 Mbit/s
95th percentile per-packet one-way delay: 183.760 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 28.82 Mbit/s
95th percentile per-packet one-way delay: 184.691 ms
Loss rate: 2.66%
Run 8: Report of TCP BBR — Data Link

![Graph of Throughput and Per-Packet One Way Delay vs. Time for Flow 1, Flow 2, and Flow 3]
Run 9: Statistics of TCP BBR

Start at: 2018-03-15 09:15:19
End at: 2018-03-15 09:15:49
Local clock offset: -3.058 ms
Remote clock offset: 25.495 ms

# Below is generated by plot.py at 2018-03-15 14:08:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 155.955 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 56.91 Mbit/s
95th percentile per-packet one-way delay: 155.542 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 38.95 Mbit/s
95th percentile per-packet one-way delay: 155.765 ms
Loss rate: 0.80%
-- Flow 3:
Average throughput: 29.21 Mbit/s
95th percentile per-packet one-way delay: 159.356 ms
Loss rate: 2.12%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-03-15 09:42:15
End at: 2018-03-15 09:42:45
Local clock offset: 0.746 ms
Remote clock offset: 35.969 ms

# Below is generated by plot.py at 2018-03-15 14:08:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.31 Mbit/s
  95th percentile per-packet one-way delay: 128.367 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 56.09 Mbit/s
  95th percentile per-packet one-way delay: 127.101 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 39.86 Mbit/s
  95th percentile per-packet one-way delay: 128.314 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 29.91 Mbit/s
  95th percentile per-packet one-way delay: 129.894 ms
  Loss rate: 2.18%
Run 10: Report of TCP BBR — Data Link

![Graph 1](image1.png)

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

Start at: 2018-03-15 05:31:17
End at: 2018-03-15 05:31:47
Local clock offset: 3.249 ms
Remote clock offset: 56.217 ms

# Below is generated by plot.py at 2018-03-15 14:08:36
# Datalink statistics
 -- Total of 3 flows:
 Average throughput: 92.94 Mbit/s
 95th percentile per-packet one-way delay: 139.934 ms
 Loss rate: 0.63%
 -- Flow 1:
 Average throughput: 57.37 Mbit/s
 95th percentile per-packet one-way delay: 138.483 ms
 Loss rate: 0.33%
 -- Flow 2:
 Average throughput: 39.23 Mbit/s
 95th percentile per-packet one-way delay: 140.739 ms
 Loss rate: 0.81%
 -- Flow 3:
 Average throughput: 29.24 Mbit/s
 95th percentile per-packet one-way delay: 141.237 ms
 Loss rate: 1.93%
Run 1: Report of TCP Cubic — Data Link

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**Throughput vs. Time (s)**

- **Flow 1 ingress** (mean 57.25 Mbit/s)
- **Flow 1 egress** (mean 57.37 Mbit/s)
- **Flow 2 ingress** (mean 39.26 Mbit/s)
- **Flow 2 egress** (mean 39.23 Mbit/s)
- **Flow 3 ingress** (mean 29.25 Mbit/s)
- **Flow 3 egress** (mean 29.24 Mbit/s)

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

- **Flow 1** (99th percentile 138.48 ms)
- **Flow 2** (99th percentile 140.74 ms)
- **Flow 3** (99th percentile 141.24 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-03-15 05:55:54
End at: 2018-03-15 05:56:24
Local clock offset: 3.792 ms
Remote clock offset: 38.746 ms

# Below is generated by plot.py at 2018-03-15 14:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.51 Mbit/s
95th percentile per-packet one-way delay: 141.656 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 56.97 Mbit/s
95th percentile per-packet one-way delay: 139.648 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 39.19 Mbit/s
95th percentile per-packet one-way delay: 141.946 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 29.20 Mbit/s
95th percentile per-packet one-way delay: 145.480 ms
Loss rate: 2.12%
Run 2: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 56.86 Mbps)**
- **Flow 1 egress (mean 56.97 Mbps)**
- **Flow 2 ingress (mean 39.18 Mbps)**
- **Flow 2 egress (mean 39.19 Mbps)**
- **Flow 3 ingress (mean 29.25 Mbps)**
- **Flow 3 egress (mean 29.20 Mbps)**

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

- **Flow 1 (95th percentile 139.65 ms)**
- **Flow 2 (95th percentile 141.95 ms)**
- **Flow 3 (95th percentile 145.48 ms)**
Run 3: Statistics of TCP Cubic

Start at: 2018-03-15 06:20:58
End at: 2018-03-15 06:21:28
Local clock offset: 3.713 ms
Remote clock offset: 12.271 ms
Run 3: Report of TCP Cubic — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](chart2)
Run 4: Statistics of TCP Cubic

Start at: 2018-03-15 06:47:27
End at: 2018-03-15 06:47:57
Local clock offset: 0.895 ms
Remote clock offset: 26.405 ms

# Below is generated by plot.py at 2018-03-15 14:08:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.23 Mbit/s
  95th percentile per-packet one-way delay: 187.654 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 50.42 Mbit/s
  95th percentile per-packet one-way delay: 186.687 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 38.77 Mbit/s
  95th percentile per-packet one-way delay: 187.699 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 27.70 Mbit/s
  95th percentile per-packet one-way delay: 188.884 ms
  Loss rate: 2.22%
Run 4: Report of TCP Cubic — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 Ingress**: Mean 50.49 Mbit/s
- **Flow 1 Egress**: Mean 50.42 Mbit/s
- **Flow 2 Ingress**: Mean 38.81 Mbit/s
- **Flow 2 Egress**: Mean 38.77 Mbit/s
- **Flow 3 Ingress**: Mean 27.86 Mbit/s
- **Flow 3 Egress**: Mean 27.70 Mbit/s

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

- **Flow 1 (95th Percentile)**: 186.69 ms
- **Flow 2 (95th Percentile)**: 187.70 ms
- **Flow 3 (95th Percentile)**: 188.88 ms
Run 5: Statistics of TCP Cubic

Start at: 2018-03-15 07:14:20
End at: 2018-03-15 07:14:50
Local clock offset: 1.399 ms
Remote clock offset: 45.464 ms

# Below is generated by plot.py at 2018-03-15 14:08:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.02 Mbit/s
95th percentile per-packet one-way delay: 157.060 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 155.683 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 36.88 Mbit/s
95th percentile per-packet one-way delay: 157.034 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 159.085 ms
Loss rate: 2.27%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-03-15 07:40:46
End at: 2018-03-15 07:41:16
Local clock offset: 6.004 ms
Remote clock offset: 16.0 ms

# Below is generated by plot.py at 2018-03-15 14:08:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.14 Mbit/s
  95th percentile per-packet one-way delay: 134.030 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 52.60 Mbit/s
  95th percentile per-packet one-way delay: 134.192 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 27.55 Mbit/s
  95th percentile per-packet one-way delay: 132.698 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 7.03 Mbit/s
  95th percentile per-packet one-way delay: 129.540 ms
  Loss rate: 1.11%
Run 6: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 52.41 Mbps)
- Flow 1 egress (mean 52.60 Mbps)
- Flow 2 ingress (mean 27.37 Mbps)
- Flow 2 egress (mean 27.55 Mbps)
- Flow 3 ingress (mean 7.00 Mbps)
- Flow 3 egress (mean 7.03 Mbps)

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

- Flow 1 (95th percentile 134.19 ms)
- Flow 2 (95th percentile 132.70 ms)
- Flow 3 (95th percentile 129.54 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-03-15 08:05:35
End at: 2018-03-15 08:06:05
Local clock offset: 10.057 ms
Remote clock offset: 44.743 ms

# Below is generated by plot.py at 2018-03-15 14:09:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.42 Mbit/s
95th percentile per-packet one-way delay: 153.943 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 58.83 Mbit/s
95th percentile per-packet one-way delay: 152.285 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: 154.320 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 155.796 ms
Loss rate: 2.22%
Run 8: Statistics of TCP Cubic

Start at: 2018-03-15 08:30:59
End at: 2018-03-15 08:31:29
Local clock offset: 12.316 ms
Remote clock offset: 33.246 ms

# Below is generated by plot.py at 2018-03-15 14:09:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.31 Mbit/s
95th percentile per-packet one-way delay: 217.746 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 217.745 ms
Loss rate: 1.53%
-- Flow 2:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 217.752 ms
Loss rate: 5.14%
-- Flow 3:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 217.974 ms
Loss rate: 28.93%
Run 8: Report of TCP Cubic — Data Link

![Graph showing throughput and packet delay over time with labels for different flows and their mean throughputs.]
Run 9: Statistics of TCP Cubic

Start at: 2018-03-15 08:57:07
End at: 2018-03-15 08:57:37
Local clock offset: -2.693 ms
Remote clock offset: 42.856 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.32 Mbit/s
  95th percentile per-packet one-way delay: 149.869 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 53.76 Mbit/s
  95th percentile per-packet one-way delay: 140.684 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 48.87 Mbit/s
  95th percentile per-packet one-way delay: 153.120 ms
  Loss rate: 0.99%
-- Flow 3:
  Average throughput: 15.66 Mbit/s
  95th percentile per-packet one-way delay: 158.491 ms
  Loss rate: 1.73%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-03-15 09:22:07
End at: 2018-03-15 09:22:37
Local clock offset: 0.93 ms
Remote clock offset: 44.001 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 190.140 ms
Loss rate: 7.62%
-- Flow 1:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 190.424 ms
Loss rate: 8.07%
-- Flow 2:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 189.893 ms
Loss rate: 3.20%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 189.992 ms
Loss rate: 3.82%
Run 10: Report of TCP Cubic — Data Link

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

- **Throughput (Mb/s)**
  - Flow 1 ingress (mean 4.89 Mb/s)
  - Flow 1 egress (mean 4.52 Mb/s)
  - Flow 2 ingress (mean 0.55 Mb/s)
  - Flow 2 egress (mean 0.54 Mb/s)
  - Flow 3 ingress (mean 0.48 Mb/s)
  - Flow 3 egress (mean 0.47 Mb/s)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 190.42 ms)
  - Flow 2 (95th percentile 189.89 ms)
  - Flow 3 (95th percentile 189.99 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-03-15 05:46:53
End at: 2018-03-15 05:47:23
Local clock offset: 4.079 ms
Remote clock offset: 36.482 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 28.81 Mbit/s
  95th percentile per-packet one-way delay: 103.396 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 18.31 Mbit/s
  95th percentile per-packet one-way delay: 103.297 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 12.58 Mbit/s
  95th percentile per-packet one-way delay: 103.384 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 6.73 Mbit/s
  95th percentile per-packet one-way delay: 104.739 ms
  Loss rate: 2.68%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-03-15 06:11:43
End at: 2018-03-15 06:12:13
Local clock offset: 3.522 ms
Remote clock offset: 25.283 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.22 Mbit/s
95th percentile per-packet one-way delay: 102.962 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 103.083 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 102.904 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 4.27 Mbit/s
95th percentile per-packet one-way delay: 102.511 ms
Loss rate: 2.21%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput over time for different flows, with legends for ingress and egress throughput.](image-url)

![Graph showing per-packet one-way delay over time for different flows, with legends for 95th percentile delay.](image-url)
Run 3: Statistics of LEDBAT

Start at: 2018-03-15 06:38:23
End at: 2018-03-15 06:38:53
Local clock offset: 1.441 ms
Remote clock offset: 22.987 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.53 Mbit/s
95th percentile per-packet one-way delay: 102.387 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 21.13 Mbit/s
95th percentile per-packet one-way delay: 102.674 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 13.95 Mbit/s
95th percentile per-packet one-way delay: 101.772 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 101.599 ms
Loss rate: 2.68%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 21.22 Mbps)
- Flow 1 egress (mean 21.13 Mbps)
- Flow 2 ingress (mean 14.04 Mbps)
- Flow 2 egress (mean 13.95 Mbps)
- Flow 3 ingress (mean 6.79 Mbps)
- Flow 3 egress (mean 6.69 Mbps)

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

- Flow 1 (95th percentile 102.67 ms)
- Flow 2 (95th percentile 101.77 ms)
- Flow 3 (95th percentile 101.60 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-03-15 07:05:02
End at: 2018-03-15 07:05:32
Local clock offset: 1.451 ms
Remote clock offset: 64.963 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.74 Mbit/s
95th percentile per-packet one-way delay: 94.378 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 94.587 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 93.735 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 95.073 ms
Loss rate: 2.64%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-03-15 07:31:37
End at: 2018-03-15 07:32:07
Local clock offset: 1.741 ms
Remote clock offset: 17.257 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 26.60 Mbit/s
95th percentile per-packet one-way delay: 103.844 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 102.993 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 14.06 Mbit/s
95th percentile per-packet one-way delay: 105.462 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 6.80 Mbit/s
95th percentile per-packet one-way delay: 102.563 ms
Loss rate: 2.65%
Run 5: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 15.13 Mbit/s)
- Flow 1 egress (mean 15.12 Mbit/s)
- Flow 2 ingress (mean 14.15 Mbit/s)
- Flow 2 egress (mean 14.06 Mbit/s)
- Flow 3 ingress (mean 6.90 Mbit/s)
- Flow 3 egress (mean 6.80 Mbit/s)

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

- Flow 1 (95th percentile 102.99 ms)
- Flow 2 (95th percentile 105.46 ms)
- Flow 3 (95th percentile 102.56 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-03-15 07:56:30
End at: 2018-03-15 07:57:00
Local clock offset: 8.983 ms
Remote clock offset: 36.897 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.44 Mbit/s
95th percentile per-packet one-way delay: 107.864 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 108.309 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 13.91 Mbit/s
95th percentile per-packet one-way delay: 107.214 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 6.69 Mbit/s
95th percentile per-packet one-way delay: 109.165 ms
Loss rate: 2.68%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-03-15 08:21:37
End at: 2018-03-15 08:22:07
Local clock offset: 11.607 ms
Remote clock offset: 39.585 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.31 Mbit/s
95th percentile per-packet one-way delay: 117.093 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 20.96 Mbit/s
95th percentile per-packet one-way delay: 117.040 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 13.84 Mbit/s
95th percentile per-packet one-way delay: 117.099 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 6.64 Mbit/s
95th percentile per-packet one-way delay: 117.453 ms
Loss rate: 2.68%
Run 7: Report of LEDBAT — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 21.05 Mbit/s)
- Flow 1 egress (mean 20.96 Mbit/s)
- Flow 2 ingress (mean 13.94 Mbit/s)
- Flow 2 egress (mean 13.84 Mbit/s)
- Flow 3 ingress (mean 6.73 Mbit/s)
- Flow 3 egress (mean 6.64 Mbit/s)

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

- Flow 1 (95th percentile 117.04 ms)
- Flow 2 (95th percentile 117.10 ms)
- Flow 3 (95th percentile 117.45 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-03-15 08:48:01
End at: 2018-03-15 08:48:31
Local clock offset: 4.307 ms
Remote clock offset: 34.274 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 31.79 Mbit/s
  95th percentile per-packet one-way delay: 115.334 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 20.91 Mbit/s
  95th percentile per-packet one-way delay: 115.274 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 13.72 Mbit/s
  95th percentile per-packet one-way delay: 115.806 ms
  Loss rate: 1.31%
-- Flow 3:
  Average throughput: 5.48 Mbit/s
  95th percentile per-packet one-way delay: 114.295 ms
  Loss rate: 2.00%
Run 8: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 21.00 Mbit/s)**
- **Flow 1 egress (mean 20.91 Mbit/s)**
- **Flow 2 ingress (mean 13.81 Mbit/s)**
- **Flow 2 egress (mean 13.72 Mbit/s)**
- **Flow 3 ingress (mean 5.52 Mbit/s)**
- **Flow 3 egress (mean 5.46 Mbit/s)**

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

- **Flow 1 (95th percentile 115.27 ms)**
- **Flow 2 (95th percentile 115.81 ms)**
- **Flow 3 (95th percentile 114.30 ms)**
Run 9: Statistics of LEDBAT

Start at: 2018-03-15 09:12:44
End at: 2018-03-15 09:13:14
Local clock offset: -6.434 ms
Remote clock offset: 32.096 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.69 Mbit/s
95th percentile per-packet one-way delay: 98.477 ms
Loss rate: 1.11%

-- Flow 1:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 98.434 ms
Loss rate: 0.86%

-- Flow 2:
Average throughput: 14.07 Mbit/s
95th percentile per-packet one-way delay: 98.426 ms
Loss rate: 1.30%

-- Flow 3:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 100.155 ms
Loss rate: 2.68%
Run 9: Report of LEDBAT — Data Link

Run 9: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet round trip delay](image2)

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Run 10: Statistics of LEDBAT

Start at: 2018-03-15 09:39:38
End at: 2018-03-15 09:40:08
Local clock offset: 3.402 ms
Remote clock offset: 33.871 ms

# Below is generated by plot.py at 2018-03-15 14:09:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.42 Mbit/s
95th percentile per-packet one-way delay: 92.919 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 21.08 Mbit/s
95th percentile per-packet one-way delay: 93.065 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 92.530 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 6.71 Mbit/s
95th percentile per-packet one-way delay: 91.764 ms
Loss rate: 2.68%
Run 10: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay]

- Flow 1 ingress (mean 21.17 Mbit/s)
- Flow 1 egress (mean 21.08 Mbit/s)
- Flow 2 ingress (mean 13.96 Mbit/s)
- Flow 2 egress (mean 13.86 Mbit/s)
- Flow 3 ingress (mean 6.80 Mbit/s)
- Flow 3 egress (mean 6.71 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 93.06 ms)
- Flow 2 (95th percentile 92.53 ms)
- Flow 3 (95th percentile 91.76 ms)
Run 1: Statistics of PCC

Start at: 2018-03-15 05:27:26  
End at: 2018-03-15 05:27:56  
Local clock offset: 2.924 ms  
Remote clock offset: 59.039 ms

# Below is generated by plot.py at 2018-03-15 14:10:22  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 83.49 Mbit/s  
  95th percentile per-packet one-way delay: 132.888 ms  
  Loss rate: 0.65%  
-- Flow 1:  
  Average throughput: 62.50 Mbit/s  
  95th percentile per-packet one-way delay: 131.841 ms  
  Loss rate: 0.44%  
-- Flow 2:  
  Average throughput: 16.38 Mbit/s  
  95th percentile per-packet one-way delay: 133.360 ms  
  Loss rate: 0.83%  
-- Flow 3:  
  Average throughput: 31.02 Mbit/s  
  95th percentile per-packet one-way delay: 135.461 ms  
  Loss rate: 1.78%
Run 1: Report of PCC — Data Link

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**Throughput (kbps)**

- Flow 1 ingress (mean 62.48 Mbit/s)
- Flow 2 ingress (mean 16.40 Mbit/s)
- Flow 3 ingress (mean 31.14 Mbit/s)
- Flow 1 egress (mean 62.50 Mbit/s)
- Flow 2 egress (mean 16.38 Mbit/s)
- Flow 3 egress (mean 31.02 Mbit/s)

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

- Flow 1 (95th percentile 131.94 ms)
- Flow 2 (95th percentile 133.36 ms)
- Flow 3 (95th percentile 135.46 ms)
Run 2: Statistics of PCC

Start at: 2018-03-15 05:52:02
End at: 2018-03-15 05:52:32
Local clock offset: 4.332 ms
Remote clock offset: 40.442 ms

# Below is generated by plot.py at 2018-03-15 14:10:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.51 Mbit/s
95th percentile per-packet one-way delay: 140.926 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 55.28 Mbit/s
95th percentile per-packet one-way delay: 139.828 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 141.533 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 29.39 Mbit/s
95th percentile per-packet one-way delay: 142.446 ms
Loss rate: 2.09%
Run 2: Report of PCC — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress (mean 55.17 Mbps)**
- **Flow 1 egress (mean 55.28 Mbps)**
- **Flow 2 ingress (mean 32.74 Mbps)**
- **Flow 2 egress (mean 32.71 Mbps)**
- **Flow 3 ingress (mean 29.52 Mbps)**
- **Flow 3 egress (mean 29.39 Mbps)**

**Per-packet one-way delay (ms):**
- **Flow 1 (95th percentile 139.83 ms)**
- **Flow 2 (95th percentile 141.53 ms)**
- **Flow 3 (95th percentile 142.45 ms)**
Run 3: Statistics of PCC

Start at: 2018-03-15 06:17:02
End at: 2018-03-15 06:17:32
Local clock offset: 3.122 ms
Remote clock offset: 14.124 ms

# Below is generated by plot.py at 2018-03-15 14:10:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.87 Mbit/s
95th percentile per-packet one-way delay: 144.885 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 141.935 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 65.67 Mbit/s
95th percentile per-packet one-way delay: 145.243 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 16.63 Mbit/s
95th percentile per-packet one-way delay: 144.475 ms
Loss rate: 1.31%
Run 3: Report of PCC — Data Link
Run 4: Statistics of PCC

Start at: 2018-03-15 06:43:34
End at: 2018-03-15 06:44:04
Local clock offset: 1.287 ms
Remote clock offset: 28.766 ms

# Below is generated by plot.py at 2018-03-15 14:10:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.41 Mbit/s
95th percentile per-packet one-way delay: 136.464 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 79.07 Mbit/s
95th percentile per-packet one-way delay: 136.206 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 137.145 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 8.10 Mbit/s
95th percentile per-packet one-way delay: 138.559 ms
Loss rate: 1.60%
Run 4: Report of PCC — Data Link

[Graph showing throughput and packet inter-packet delay for different flows over time]
Run 5: Statistics of PCC

Start at: 2018-03-15 07:10:18
End at: 2018-03-15 07:10:48
Local clock offset: 1.405 ms
Remote clock offset: 67.894 ms

# Below is generated by plot.py at 2018-03-15 14:10:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.39 Mbit/s
  95th percentile per-packet one-way delay: 192.473 ms
  Loss rate: 0.85%
-- Flow 1:
  Average throughput: 56.86 Mbit/s
  95th percentile per-packet one-way delay: 192.962 ms
  Loss rate: 0.75%
-- Flow 2:
  Average throughput: 31.50 Mbit/s
  95th percentile per-packet one-way delay: 190.316 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 2.18 Mbit/s
  95th percentile per-packet one-way delay: 195.493 ms
  Loss rate: 1.96%
Run 5: Report of PCC — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 6: Statistics of PCC

Start at: 2018-03-15 07:36:50
End at: 2018-03-15 07:37:20
Local clock offset: 4.219 ms
Remote clock offset: 16.636 ms

# Below is generated by plot.py at 2018-03-15 14:10:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.46 Mbit/s
  95th percentile per-packet one-way delay: 130.351 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 41.34 Mbit/s
  95th percentile per-packet one-way delay: 130.024 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 38.16 Mbit/s
  95th percentile per-packet one-way delay: 130.509 ms
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 8.54 Mbit/s
  95th percentile per-packet one-way delay: 137.977 ms
  Loss rate: 1.32%
Run 6: Report of PCC — Data Link
Run 7: Statistics of PCC

Start at: 2018-03-15 08:01:43
End at: 2018-03-15 08:02:13
Local clock offset: 9.75 ms
Remote clock offset: 44.4 ms

# Below is generated by plot.py at 2018-03-15 14:10:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.46 Mbit/s
95th percentile per-packet one-way delay: 118.716 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 118.135 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 5.10 Mbit/s
95th percentile per-packet one-way delay: 119.807 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 8.13 Mbit/s
95th percentile per-packet one-way delay: 121.967 ms
Loss rate: 1.37%
Run 7: Report of PCC — Data Link

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

- Flow 1 ingress (mean 74.46 Mbit/s)
- Flow 1 egress (mean 74.42 Mbit/s)
- Flow 2 ingress (mean 5.11 Mbit/s)
- Flow 2 egress (mean 5.10 Mbit/s)
- Flow 3 ingress (mean 8.13 Mbit/s)
- Flow 3 egress (mean 8.13 Mbit/s)

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

- Flow 1 (95th percentile 118.14 ms)
- Flow 2 (95th percentile 119.81 ms)
- Flow 3 (95th percentile 121.97 ms)
Run 8: Statistics of PCC

Start at: 2018-03-15 08:26:50
End at: 2018-03-15 08:27:20
Local clock offset: 12.318 ms
Remote clock offset: 34.708 ms

# Below is generated by plot.py at 2018-03-15 14:11:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.36 Mbit/s
  95th percentile per-packet one-way delay: 146.522 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 74.94 Mbit/s
  95th percentile per-packet one-way delay: 146.302 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 8.38 Mbit/s
  95th percentile per-packet one-way delay: 146.848 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 8.76 Mbit/s
  95th percentile per-packet one-way delay: 148.590 ms
  Loss rate: 1.30%
Run 8: Report of PCC — Data Link

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

![Graph 2: Per-packet one way delay (ms)](image2)
Run 9: Statistics of PCC

Start at: 2018-03-15 08:53:16
End at: 2018-03-15 08:53:46
Local clock offset: 1.549 ms
Remote clock offset: 41.282 ms

# Below is generated by plot.py at 2018-03-15 14:11:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.55 Mbit/s
95th percentile per-packet one-way delay: 158.809 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 63.01 Mbit/s
95th percentile per-packet one-way delay: 153.729 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 15.94 Mbit/s
95th percentile per-packet one-way delay: 161.280 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 165.581 ms
Loss rate: 2.08%
Run 9: Report of PCC — Data Link

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

- Flow 1 ingress (mean 63.05 Mbit/s)
- Flow 1 egress (mean 63.01 Mbit/s)
- Flow 2 ingress (mean 16.60 Mbit/s)
- Flow 2 egress (mean 15.94 Mbit/s)
- Flow 3 ingress (mean 30.71 Mbit/s)
- Flow 3 egress (mean 30.53 Mbit/s)
Run 10: Statistics of PCC

Start at: 2018-03-15 09:17:54
End at: 2018-03-15 09:18:24
Local clock offset: -0.637 ms
Remote clock offset: 37.027 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.77 Mbit/s
  95th percentile per-packet one-way delay: 147.480 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 63.80 Mbit/s
  95th percentile per-packet one-way delay: 147.520 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 17.71 Mbit/s
  95th percentile per-packet one-way delay: 147.901 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 31.30 Mbit/s
  95th percentile per-packet one-way delay: 145.113 ms
  Loss rate: 2.14%
Run 10: Report of PCC — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 63.76 Mbps)
  - Flow 1 egress (mean 63.80 Mbps)
  - Flow 2 ingress (mean 17.77 Mbps)
  - Flow 2 egress (mean 17.71 Mbps)
  - Flow 3 ingress (mean 31.31 Mbps)
  - Flow 3 egress (mean 31.30 Mbps)

- **Per packet one-way delay (ms)**
  - Flow 1 (95th percentile 147.52 ms)
  - Flow 2 (95th percentile 147.90 ms)
  - Flow 3 (95th percentile 145.11 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-15 05:26:08
End at: 2018-03-15 05:26:38
Local clock offset: 2.985 ms
Remote clock offset: 57.035 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.17 Mbit/s
95th percentile per-packet one-way delay: 142.565 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 48.23 Mbit/s
95th percentile per-packet one-way delay: 141.116 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 143.035 ms
Loss rate: 0.89%
-- Flow 3:
Average throughput: 28.17 Mbit/s
95th percentile per-packet one-way delay: 143.884 ms
Loss rate: 2.07%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-03-15 05:50:47
End at: 2018-03-15 05:51:17
Local clock offset: 1.695 ms
Remote clock offset: 37.017 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.76 Mbit/s
95th percentile per-packet one-way delay: 122.647 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 97.669 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 121.911 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 13.29 Mbit/s
95th percentile per-packet one-way delay: 131.835 ms
Loss rate: 0.86%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-03-15 06:15:46
End at: 2018-03-15 06:16:16
Local clock offset: 3.589 ms
Remote clock offset: 24.338 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 28.77 Mbit/s
  95th percentile per-packet one-way delay: 130.756 ms
  Loss rate: 1.67%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 100.159 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 35.16 Mbit/s
  95th percentile per-packet one-way delay: 129.942 ms
  Loss rate: 1.81%
-- Flow 3:
  Average throughput: 16.86 Mbit/s
  95th percentile per-packet one-way delay: 136.035 ms
  Loss rate: 1.11%
Run 3: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.05 Mbit/s) — Flow 1 egress (mean 0.05 Mbit/s)
Flow 2 ingress (mean 35.55 Mbit/s) — Flow 2 egress (mean 35.16 Mbit/s)
Flow 3 ingress (mean 16.76 Mbit/s) — Flow 3 egress (mean 16.86 Mbit/s)

Per-packet round-trip delay (ms)

Time (s)

Flow 1 (95th percentile 100.16 ms) — Flow 2 (95th percentile 129.94 ms) — Flow 3 (95th percentile 136.03 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-03-15 06:42:17
End at: 2018-03-15 06:42:47
Local clock offset: 1.293 ms
Remote clock offset: 27.355 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.06 Mbit/s
95th percentile per-packet one-way delay: 156.074 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 156.030 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 19.23 Mbit/s
95th percentile per-packet one-way delay: 155.446 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 156.934 ms
Loss rate: 2.21%
Run 4: Report of QUIC Cubic — Data Link

![Graph of throughput and per-packet end-to-end delay over time for different flows.](image-url)
Run 5: Statistics of QUIC Cubic

Start at: 2018-03-15 07:08:59
End at: 2018-03-15 07:09:29
Local clock offset: 1.504 ms
Remote clock offset: 63.968 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 191.334 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 193.463 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 7.08 Mbit/s
95th percentile per-packet one-way delay: 193.367 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 44.70 Mbit/s
95th percentile per-packet one-way delay: 188.492 ms
Loss rate: 2.37%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-03-15 07:35:35
End at: 2018-03-15 07:36:05
Local clock offset: 3.804 ms
Remote clock offset: 30.046 ms

# Below is generated by plot.py at 2018-03-15 14:11:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 24.48 Mbit/s
  95th percentile per-packet one-way delay: 107.976 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 86.166 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 30.04 Mbit/s
  95th percentile per-packet one-way delay: 107.509 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 13.90 Mbit/s
  95th percentile per-packet one-way delay: 110.294 ms
  Loss rate: 1.90%
Run 6: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 29.91 Mbit/s)
- Flow 2 egress (mean 30.04 Mbit/s)
- Flow 3 ingress (mean 13.97 Mbit/s)
- Flow 3 egress (mean 13.90 Mbit/s)

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

- Flow 1 (95th percentile 86.17 ms)
- Flow 2 (95th percentile 107.51 ms)
- Flow 3 (95th percentile 110.29 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-03-15 08:00:26
End at: 2018-03-15 08:00:56
Local clock offset: 9.5 ms
Remote clock offset: 47.46 ms

# Below is generated by plot.py at 2018-03-15 14:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.13 Mbit/s
95th percentile per-packet one-way delay: 130.042 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 30.62 Mbit/s
95th percentile per-packet one-way delay: 129.934 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 46.62 Mbit/s
95th percentile per-packet one-way delay: 129.985 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 131.042 ms
Loss rate: 2.53%
Run 7: Report of QUIC Cubic — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 8: Statistics of QUIC Cubic

Start at: 2018-03-15 08:25:35
End at: 2018-03-15 08:26:05
Local clock offset: 12.042 ms
Remote clock offset: 35.069 ms

# Below is generated by plot.py at 2018-03-15 14:12:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 143.823 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 0.04 Mbit/s
95th percentile per-packet one-way delay: 114.286 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.41 Mbit/s
95th percentile per-packet one-way delay: 144.287 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 49.07 Mbit/s
95th percentile per-packet one-way delay: 143.404 ms
Loss rate: 1.75%
Run 8: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 0.04 Mbit/s)
- Flow 1 egress (mean 0.04 Mbit/s)
- Flow 2 ingress (mean 25.57 Mbit/s)
- Flow 2 egress (mean 25.41 Mbit/s)
- Flow 3 ingress (mean 49.10 Mbit/s)
- Flow 3 egress (mean 49.07 Mbit/s)

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

- Flow 1 (95th percentile 114.29 ms)
- Flow 2 (95th percentile 144.29 ms)
- Flow 3 (95th percentile 143.40 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-03-15 08:51:59
End at: 2018-03-15 08:52:29
Local clock offset: 2.241 ms
Remote clock offset: 43.894 ms

# Below is generated by plot.py at 2018-03-15 14:12:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.35 Mbit/s
  95th percentile per-packet one-way delay: 148.882 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 41.61 Mbit/s
  95th percentile per-packet one-way delay: 141.036 ms
  Loss rate: 0.89%
-- Flow 2:
  Average throughput: 12.61 Mbit/s
  95th percentile per-packet one-way delay: 153.081 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 22.53 Mbit/s
  95th percentile per-packet one-way delay: 153.537 ms
  Loss rate: 0.39%
Run 9: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 41.81 Mbit/s)
- **Flow 1 egress** (mean 41.61 Mbit/s)
- **Flow 2 ingress** (mean 12.58 Mbit/s)
- **Flow 2 egress** (mean 12.61 Mbit/s)
- **Flow 3 ingress** (mean 22.31 Mbit/s)
- **Flow 3 egress** (mean 22.53 Mbit/s)
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-15 09:16:38
End at: 2018-03-15 09:17:08
Local clock offset: -1.568 ms
Remote clock offset: 32.38 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.34 Mbit/s
95th percentile per-packet one-way delay: 138.552 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 42.19 Mbit/s
95th percentile per-packet one-way delay: 137.861 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 24.19 Mbit/s
95th percentile per-packet one-way delay: 139.375 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 139.923 ms
Loss rate: 2.41%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-03-15 05:35:16
End at: 2018-03-15 05:35:46
Local clock offset: 0.785 ms
Remote clock offset: 49.694 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 95.156 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 95.176 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 95.129 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 94.909 ms
  Loss rate: 1.10%
Run 1: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for three flows.](image)
Run 2: Statistics of SCReAM

Start at: 2018-03-15 05:59:54
End at: 2018-03-15 06:00:24
Local clock offset: 1.013 ms
Remote clock offset: 34.84 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 98.199 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.213 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.177 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 98.127 ms
Loss rate: 1.10%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-03-15 06:26:37
End at: 2018-03-15 06:27:07
Local clock offset: 3.004 ms
Remote clock offset: 21.849 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 99.054 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 99.005 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 99.120 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 99.053 ms
  Loss rate: 1.10%
Run 3: Report of SCReAM — Data Link

![Graph showing throughput and delay over time]
Run 4: Statistics of SCReAM

Start at: 2018-03-15 06:51:45
End at: 2018-03-15 06:52:15
Local clock offset: 0.75 ms
Remote clock offset: 31.851 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 116.055 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 116.083 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 116.030 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 115.671 ms
  Loss rate: 1.11%
Run 4: Report of SCReAM — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 0.22 Mbps)
  - Flow 2 ingress (mean 0.22 Mbps)
  - Flow 3 ingress (mean 0.22 Mbps)
  - Flow 1 egress (mean 0.22 Mbps)
  - Flow 2 egress (mean 0.22 Mbps)
  - Flow 3 egress (mean 0.22 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 116.08 ms)
  - Flow 2 (95th percentile 116.03 ms)
  - Flow 3 (95th percentile 116.67 ms)
Run 5: Statistics of SCReAM

Start at: 2018-03-15 07:18:24
End at: 2018-03-15 07:18:54
Local clock offset: 1.648 ms
Remote clock offset: 34.908 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 204.986 ms
Loss rate: 1.76%
-- Flow 1:
Average throughput: 0.11 Mbit/s
95th percentile per-packet one-way delay: 204.841 ms
Loss rate: 1.43%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 205.111 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 204.963 ms
Loss rate: 2.43%
Run 6: Statistics of SCReAM

Start at: 2018-03-15 07:44:43
End at: 2018-03-15 07:45:13
Local clock offset: 6.998 ms
Remote clock offset: 8.918 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.39 Mbit/s
  95th percentile per-packet one-way delay: 104.585 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 0.20 Mbit/s
  95th percentile per-packet one-way delay: 104.413 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 104.627 ms
  Loss rate: 0.83%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 104.654 ms
  Loss rate: 1.10%
Run 6: Report of SCReAM — Data Link

Throughput (Mbps)

0.12 0.14 0.16 0.18 0.20 0.22 0.24 0.26 0.28

Time (s) 0 5 10 15 20 25 30

Flow 1 ingress (mean 0.20 Mbps)  Flow 1 egress (mean 0.20 Mbps)
Flow 2 ingress (mean 0.18 Mbps)  Flow 2 egress (mean 0.18 Mbps)
Flow 3 ingress (mean 0.22 Mbps)  Flow 3 egress (mean 0.22 Mbps)

Packet one way delay (ms)

105 110 115 120 125

0 5 10 15 20 25 30

Flow 1 (95th percentile 104.41 ms)  Flow 2 (95th percentile 104.63 ms)  Flow 3 (95th percentile 104.65 ms)
Run 7: Statistics of SCReAM

Start at: 2018-03-15 08:09:31
End at: 2018-03-15 08:10:01
Local clock offset: 10.388 ms
Remote clock offset: 48.531 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.38 Mbit/s
  95th percentile per-packet one-way delay: 103.682 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 103.492 ms
  Loss rate: 0.60%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 103.731 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 103.705 ms
  Loss rate: 1.10%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-03-15 08:36:18
End at: 2018-03-15 08:36:48
Local clock offset: 13.044 ms
Remote clock offset: 45.744 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 99.988 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 99.515 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 99.418 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 100.079 ms
Loss rate: 1.10%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-03-15 09:01:07
End at: 2018-03-15 09:01:37
Local clock offset: -1.353 ms
Remote clock offset: 40.433 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 97.463 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 97.243 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 97.510 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 97.448 ms
Loss rate: 1.10%
Run 9: Report of SCReAM — Data Link

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

- **Throughput Graph**
  - X-axis: Time (s)
  - Y-axis: Throughput (Mbps)
  - Lines represent:
    - Flow 1 ingress (mean 0.22 Mbps)
    - Flow 1 egress (mean 0.22 Mbps)
    - Flow 2 ingress (mean 0.22 Mbps)
    - Flow 2 egress (mean 0.22 Mbps)
    - Flow 3 ingress (mean 0.22 Mbps)
    - Flow 3 egress (mean 0.22 Mbps)

- **Packet Delay Graph**
  - X-axis: Time (s)
  - Y-axis: Per-packet one-way delay (ms)
  - Symbols represent:
    - Flow 1 (95th percentile 97.24 ms)
    - Flow 2 (95th percentile 97.51 ms)
    - Flow 3 (95th percentile 97.45 ms)
Run 10: Statistics of SCReAM

Start at: 2018-03-15 09:27:56
End at: 2018-03-15 09:28:26
Local clock offset: 2.33 ms
Remote clock offset: 30.46 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 97.875 ms
  Loss rate: 0.65%
  -- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 97.755 ms
  Loss rate: 0.38%
  -- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 97.894 ms
  Loss rate: 0.63%
  -- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 97.904 ms
  Loss rate: 1.50%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-03-15 05:30:03
End at: 2018-03-15 05:30:33
Local clock offset: 3.452 ms
Remote clock offset: 55.404 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.46 Mbit/s
  95th percentile per-packet one-way delay: 101.681 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 2.41 Mbit/s
  95th percentile per-packet one-way delay: 101.590 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 1.58 Mbit/s
  95th percentile per-packet one-way delay: 101.754 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 0.66 Mbit/s
  95th percentile per-packet one-way delay: 101.972 ms
  Loss rate: 1.43%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-03-15 05:54:40
End at: 2018-03-15 05:55:10
Local clock offset: 3.964 ms
Remote clock offset: 32.435 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.09 Mbit/s
95th percentile per-packet one-way delay: 105.463 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 105.460 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: 105.493 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 105.421 ms
Loss rate: 1.43%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-03-15 06:19:40
End at: 2018-03-15 06:20:10
Local clock offset: 3.636 ms
Remote clock offset: 9.753 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.47 Mbit/s
95th percentile per-packet one-way delay: 114.269 ms
Loss rate: 0.73%

-- Flow 1:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 113.927 ms
Loss rate: 0.66%

-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 114.457 ms
Loss rate: 0.57%

-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 114.568 ms
Loss rate: 1.45%
Run 4: Statistics of WebRTC media

Start at: 2018-03-15 06:46:14
End at: 2018-03-15 06:46:44
Local clock offset: 0.983 ms
Remote clock offset: 44.661 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.44 Mbit/s
  95th percentile per-packet one-way delay: 97.192 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 2.42 Mbit/s
  95th percentile per-packet one-way delay: 97.184 ms
  Loss rate: 0.60%
-- Flow 2:
  Average throughput: 1.63 Mbit/s
  95th percentile per-packet one-way delay: 97.034 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.62 Mbit/s
  95th percentile per-packet one-way delay: 97.444 ms
  Loss rate: 1.64%
Run 4: Report of WebRTC media — Data Link

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

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Run 5: Statistics of WebRTC media

Start at: 2018-03-15 07:13:03
End at: 2018-03-15 07:13:33
Local clock offset: 1.022 ms
Remote clock offset: 53.064 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 182.564 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: 179.612 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 186.727 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 186.286 ms
Loss rate: 2.63%
Run 5: Report of WebRTC media — Data Link

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

Start at: 2018-03-15 07:39:32
End at: 2018-03-15 07:40:02
Local clock offset: 5.449 ms
Remote clock offset: 24.573 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 91.421 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 2.61 Mbit/s
95th percentile per-packet one-way delay: 91.485 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 91.226 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 91.462 ms
Loss rate: 2.90%
Run 6: Report of WebRTC media — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 7: Statistics of WebRTC media

Start at: 2018-03-15 08:04:21
End at: 2018-03-15 08:04:51
Local clock offset: 10.13 ms
Remote clock offset: 53.167 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.47 Mbit/s
  95th percentile per-packet one-way delay: 96.673 ms
  Loss rate: 0.99%
-- Flow 1:
  Average throughput: 2.47 Mbit/s
  95th percentile per-packet one-way delay: 96.621 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 1.62 Mbit/s
  95th percentile per-packet one-way delay: 96.992 ms
  Loss rate: 0.97%
-- Flow 3:
  Average throughput: 0.63 Mbit/s
  95th percentile per-packet one-way delay: 96.461 ms
  Loss rate: 1.75%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-03-15 08:29:30
End at: 2018-03-15 08:30:00
Local clock offset: 12.515 ms
Remote clock offset: 44.225 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.80 Mbit/s
  95th percentile per-packet one-way delay: 207.719 ms
  Loss rate: 4.74%
-- Flow 1:
  Average throughput: 2.99 Mbit/s
  95th percentile per-packet one-way delay: 207.625 ms
  Loss rate: 3.96%
-- Flow 2:
  Average throughput: 1.69 Mbit/s
  95th percentile per-packet one-way delay: 207.838 ms
  Loss rate: 3.96%
-- Flow 3:
  Average throughput: 0.18 Mbit/s
  95th percentile per-packet one-way delay: 207.875 ms
  Loss rate: 22.77%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-03-15 08:55:54
End at: 2018-03-15 08:56:24
Local clock offset: 0.444 ms
Remote clock offset: 39.855 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 104.696 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 2.48 Mbit/s
95th percentile per-packet one-way delay: 104.464 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 1.59 Mbit/s
95th percentile per-packet one-way delay: 104.886 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 104.877 ms
Loss rate: 1.46%
Run 10: Statistics of WebRTC media

Start at: 2018-03-15 09:20:35
End at: 2018-03-15 09:21:05
Local clock offset: 0.504 ms
Remote clock offset: 40.889 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.46 Mbit/s
95th percentile per-packet one-way delay: 193.253 ms
Loss rate: 5.70%
-- Flow 1:
Average throughput: 2.85 Mbit/s
95th percentile per-packet one-way delay: 193.273 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 192.973 ms
Loss rate: 16.34%
-- Flow 3:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 193.099 ms
Loss rate: 17.01%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-03-15 05:45:40
End at: 2018-03-15 05:46:10
Local clock offset: 4.4 ms
Remote clock offset: 39.255 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.72 Mbit/s
95th percentile per-packet one-way delay: 105.252 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 6.09 Mbit/s
95th percentile per-packet one-way delay: 105.548 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.79 Mbit/s
95th percentile per-packet one-way delay: 105.043 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 5.52 Mbit/s
95th percentile per-packet one-way delay: 104.138 ms
Loss rate: 1.79%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-03-15 06:10:29
End at: 2018-03-15 06:10:59
Local clock offset: 3.769 ms
Remote clock offset: 28.361 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 104.959 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 105.182 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 5.58 Mbit/s
95th percentile per-packet one-way delay: 104.782 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 104.497 ms
Loss rate: 1.83%
Run 2: Report of Sprout — Data Link

![Graph showing network performance metrics for different flows over time. The graphs depict throughput and packet round-trip delay for three different flows. Flow 1 shows a maximum throughput of 8 Mbit/s, Flow 2 shows a peak of 7 Mbit/s, and Flow 3 reaches up to 6 Mbit/s. The packet round-trip delay for Flow 1 is around 105 ms, Flow 2 is slightly lower at 104.78 ms, and Flow 3 has a delay of 104.50 ms.]

Flow 1 ingress (mean 6.19 Mbit/s)  Flow 1 egress (mean 6.17 Mbit/s)
Flow 2 ingress (mean 5.59 Mbit/s)  Flow 2 egress (mean 5.58 Mbit/s)
Flow 3 ingress (mean 5.40 Mbit/s)  Flow 3 egress (mean 5.38 Mbit/s)
Run 3: Statistics of Sprout

Start at: 2018-03-15 06:37:10
End at: 2018-03-15 06:37:40
Local clock offset: 1.471 ms
Remote clock offset: 26.917 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 97.266 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 96.492 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 98.519 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 5.69 Mbit/s
95th percentile per-packet one-way delay: 97.408 ms
Loss rate: 1.67%
Run 3: Report of Sprout — Data Link

Graphs showing throughput and delay data over time.
Run 4: Statistics of Sprout

Start at: 2018-03-15 07:03:48
End at: 2018-03-15 07:04:18
Local clock offset: 1.205 ms
Remote clock offset: 56.482 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 12.10 Mbit/s
  95th percentile per-packet one-way delay: 105.809 ms
  Loss rate: 0.80%
-- Flow 1:
  Average throughput: 6.18 Mbit/s
  95th percentile per-packet one-way delay: 105.588 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 6.22 Mbit/s
  95th percentile per-packet one-way delay: 106.612 ms
  Loss rate: 0.80%
-- Flow 3:
  Average throughput: 5.50 Mbit/s
  95th percentile per-packet one-way delay: 104.606 ms
  Loss rate: 1.72%
Run 5: Statistics of Sprout

Start at: 2018-03-15 07:30:23
End at: 2018-03-15 07:30:53
Local clock offset: 1.435 ms
Remote clock offset: 14.657 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.83 Mbit/s
95th percentile per-packet one-way delay: 110.264 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 110.284 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 110.209 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 5.34 Mbit/s
95th percentile per-packet one-way delay: 110.327 ms
Loss rate: 1.35%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-03-15 07:55:16
End at: 2018-03-15 07:55:46
Local clock offset: 8.889 ms
Remote clock offset: 38.295 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 11.91 Mbit/s
  95th percentile per-packet one-way delay: 106.548 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 6.21 Mbit/s
  95th percentile per-packet one-way delay: 105.497 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 5.76 Mbit/s
  95th percentile per-packet one-way delay: 107.476 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 5.81 Mbit/s
  95th percentile per-packet one-way delay: 107.157 ms
  Loss rate: 1.72%
Run 6: Report of Sprout — Data Link

The first graph shows the throughput over time for different flows, with each line representing a specific flow (Ingress and Egress) and the mean throughput rate. The second graph illustrates the per-packet one-way delay distribution over time, with markers indicating the 95th percentile delay for each flow.
Run 7: Statistics of Sprout

Start at: 2018-03-15 08:20:23
End at: 2018-03-15 08:20:53
Local clock offset: 11.716 ms
Remote clock offset: 41.785 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 119.678 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 6.17 Mbit/s
95th percentile per-packet one-way delay: 119.896 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 119.716 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 5.11 Mbit/s
95th percentile per-packet one-way delay: 118.538 ms
Loss rate: 1.93%
Run 7: Report of Sprout — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress (mean 6.17 Mbps)**
- **Flow 1 egress (mean 6.17 Mbps)**
- **Flow 2 ingress (mean 5.96 Mbps)**
- **Flow 2 egress (mean 5.97 Mbps)**
- **Flow 3 ingress (mean 5.14 Mbps)**
- **Flow 3 egress (mean 5.11 Mbps)**

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

- **Flow 1 (95th percentile 119.90 ms)**
- **Flow 2 (95th percentile 119.72 ms)**
- **Flow 3 (95th percentile 118.54 ms)**
Run 8: Statistics of Sprout

Start at: 2018-03-15 08:46:47
End at: 2018-03-15 08:47:17
Local clock offset: 5.578 ms
Remote clock offset: 31.062 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 12.18 Mbit/s
  95th percentile per-packet one-way delay: 121.611 ms
  Loss rate: 0.54%
  -- Flow 1:
  Average throughput: 6.30 Mbit/s
  95th percentile per-packet one-way delay: 121.486 ms
  Loss rate: 0.51%
  -- Flow 2:
  Average throughput: 6.17 Mbit/s
  95th percentile per-packet one-way delay: 121.390 ms
  Loss rate: 0.14%
  -- Flow 3:
  Average throughput: 5.47 Mbit/s
  95th percentile per-packet one-way delay: 122.431 ms
  Loss rate: 1.57%
Run 8: Report of Sprout — Data Link

![Graph of throughput over time](image1)

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

Start at: 2018-03-15 09:11:30
End at: 2018-03-15 09:12:00
Local clock offset: -3.122 ms
Remote clock offset: 30.433 ms

# Below is generated by plot.py at 2018-03-15 14:12:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 108.021 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 6.11 Mbit/s
95th percentile per-packet one-way delay: 107.751 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 6.02 Mbit/s
95th percentile per-packet one-way delay: 108.324 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 108.146 ms
Loss rate: 1.75%
Run 9: Report of Sprout — Data Link

![Graph showing throughput and packet per delay]

- **Flow 1 ingress** (mean 6.12 Mbit/s)
- **Flow 1 egress** (mean 6.11 Mbit/s)
- **Flow 2 ingress** (mean 6.00 Mbit/s)
- **Flow 2 egress** (mean 6.02 Mbit/s)
- **Flow 3 ingress** (mean 5.65 Mbit/s)
- **Flow 3 egress** (mean 5.64 Mbit/s)
Run 10: Statistics of Sprout

Start at: 2018-03-15 09:38:25
End at: 2018-03-15 09:38:55
Local clock offset: 3.621 ms
Remote clock offset: 22.81 ms

# Below is generated by plot.py at 2018-03-15 14:12:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.99 Mbit/s
95th percentile per-packet one-way delay: 108.350 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 6.13 Mbit/s
95th percentile per-packet one-way delay: 107.876 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 109.196 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 5.64 Mbit/s
95th percentile per-packet one-way delay: 107.322 ms
Loss rate: 1.72%
Run 10: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 6.12 Mbps)
  - Flow 2 ingress (mean 6.06 Mbps)
  - Flow 3 ingress (mean 5.67 Mbps)
  - Flow 1 egress (mean 6.13 Mbps)
  - Flow 2 egress (mean 6.06 Mbps)
  - Flow 3 egress (mean 5.64 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 107.88 ms)
  - Flow 2 (95th percentile 109.20 ms)
  - Flow 3 (95th percentile 107.32 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-15 05:28:42  
End at: 2018-03-15 05:29:12  
Local clock offset: 3.097 ms  
Remote clock offset: 57.899 ms

# Below is generated by plot.py at 2018-03-15 14:14:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.46 Mbit/s
95th percentile per-packet one-way delay: 132.719 ms
Loss rate: 3.49%
-- Flow 1:
Average throughput: 51.71 Mbit/s
95th percentile per-packet one-way delay: 132.083 ms
Loss rate: 2.61%
-- Flow 2:
Average throughput: 34.40 Mbit/s
95th percentile per-packet one-way delay: 132.798 ms
Loss rate: 5.51%
-- Flow 3:
Average throughput: 30.21 Mbit/s
95th percentile per-packet one-way delay: 133.880 ms
Loss rate: 3.25%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-15 05:53:18
End at: 2018-03-15 05:53:48
Local clock offset: 4.086 ms
Remote clock offset: 37.917 ms

# Below is generated by plot.py at 2018-03-15 14:14:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.05 Mbit/s
95th percentile per-packet one-way delay: 130.251 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 53.66 Mbit/s
95th percentile per-packet one-way delay: 129.461 ms
Loss rate: 1.33%
-- Flow 2:
Average throughput: 36.88 Mbit/s
95th percentile per-packet one-way delay: 130.157 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 131.638 ms
Loss rate: 2.95%
Run 2: Report of TaoVA-100x — Data Link

[Graphs showing throughput and packet delay over time for different flows with mean values and 95th percentile delays]
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-15 06:18:18
End at: 2018-03-15 06:18:48
Local clock offset: 3.736 ms
Remote clock offset: 19.994 ms

# Below is generated by plot.py at 2018-03-15 14:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.75 Mbit/s
95th percentile per-packet one-way delay: 136.570 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 135.177 ms
Loss rate: 1.48%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 136.959 ms
Loss rate: 2.64%
-- Flow 3:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: 138.623 ms
Loss rate: 4.21%
Run 3: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet delay over time for different flows.]
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-15 06:44:51
End at: 2018-03-15 06:45:21
Local clock offset: 0.56 ms
Remote clock offset: 32.136 ms

# Below is generated by plot.py at 2018-03-15 14:14:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.51 Mbit/s
  95th percentile per-packet one-way delay: 138.881 ms
  Loss rate: 1.97%
-- Flow 1:
  Average throughput: 53.73 Mbit/s
  95th percentile per-packet one-way delay: 136.216 ms
  Loss rate: 1.56%
-- Flow 2:
  Average throughput: 33.72 Mbit/s
  95th percentile per-packet one-way delay: 139.186 ms
  Loss rate: 2.01%
-- Flow 3:
  Average throughput: 31.61 Mbit/s
  95th percentile per-packet one-way delay: 142.311 ms
  Loss rate: 3.90%
Run 4: Report of TaoVA-100x — Data Link

![Graph of throughput over time for different flows with varying mean Mbit/s and 95th percentile delay in milliseconds.](image)

Legend:
- Flow 1 ingress (mean 54.35 Mbit/s)
- Flow 1 egress (mean 53.73 Mbit/s)
- Flow 2 ingress (mean 34.19 Mbit/s)
- Flow 2 egress (mean 33.72 Mbit/s)
- Flow 3 ingress (mean 32.44 Mbit/s)
- Flow 3 egress (mean 31.61 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 136.22 ms)
- Flow 2 (95th percentile 139.19 ms)
- Flow 3 (95th percentile 142.31 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-15 07:11:39
End at: 2018-03-15 07:12:09
Local clock offset: 0.952 ms
Remote clock offset: 66.339 ms

# Below is generated by plot.py at 2018-03-15 14:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.24 Mbit/s
95th percentile per-packet one-way delay: 174.428 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 20.79 Mbit/s
95th percentile per-packet one-way delay: 172.012 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 173.892 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 23.19 Mbit/s
95th percentile per-packet one-way delay: 177.390 ms
Loss rate: 1.17%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-03-15 07:38:06
End at: 2018-03-15 07:38:36
Local clock offset: 5.13 ms
Remote clock offset: 13.08 ms

# Below is generated by plot.py at 2018-03-15 14:15:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.65 Mbit/s
95th percentile per-packet one-way delay: 132.892 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 53.62 Mbit/s
95th percentile per-packet one-way delay: 132.098 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: 133.083 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 134.590 ms
Loss rate: 3.36%
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-15 08:03:00  
End at: 2018-03-15 08:03:30  
Local clock offset: 9.921 ms  
Remote clock offset: 50.561 ms

# Below is generated by plot.py at 2018-03-15 14:15:00  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 87.07 Mbit/s
95th percentile per-packet one-way delay: 132.576 ms
Loss rate: 1.81%

-- Flow 1:
Average throughput: 53.43 Mbit/s
95th percentile per-packet one-way delay: 130.786 ms
Loss rate: 1.24%

-- Flow 2:
Average throughput: 36.06 Mbit/s
95th percentile per-packet one-way delay: 132.948 ms
Loss rate: 2.29%

-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 134.680 ms
Loss rate: 3.71%
Run 7: Report of TaoVA-100x — Data Link

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Graph 1: Throughput vs Time (Mbps/s)
- Flow 1 ingress (mean 53.87 Mbps/s)
- Flow 1 egress (mean 53.43 Mbps/s)
- Flow 2 ingress (mean 36.64 Mbps/s)
- Flow 2 egress (mean 36.06 Mbps/s)
- Flow 3 ingress (mean 30.20 Mbps/s)
- Flow 3 egress (mean 29.54 Mbps/s)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 130.79 ms)
- Flow 2 (95th percentile 132.95 ms)
- Flow 3 (95th percentile 134.68 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-03-15 08:28:07
End at: 2018-03-15 08:28:37
Local clock offset: 12.556 ms
Remote clock offset: 40.804 ms

# Below is generated by plot.py at 2018-03-15 14:15:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.38 Mbit/s
95th percentile per-packet one-way delay: 138.637 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 53.58 Mbit/s
95th percentile per-packet one-way delay: 136.949 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 36.95 Mbit/s
95th percentile per-packet one-way delay: 139.527 ms
Loss rate: 2.84%
-- Flow 3:
Average throughput: 25.22 Mbit/s
95th percentile per-packet one-way delay: 143.990 ms
Loss rate: 4.89%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-15 08:54:32
End at: 2018-03-15 08:55:02
Local clock offset: 1.018 ms
Remote clock offset: 45.429 ms

# Below is generated by plot.py at 2018-03-15 14:15:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.75 Mbit/s
95th percentile per-packet one-way delay: 131.447 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 130.302 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 131.831 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 27.33 Mbit/s
95th percentile per-packet one-way delay: 133.234 ms
Loss rate: 3.72%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-15 09:19:11
End at: 2018-03-15 09:19:41
Local clock offset: -0.282 ms
Remote clock offset: 33.854 ms

# Below is generated by plot.py at 2018-03-15 14:15:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.62 Mbit/s
95th percentile per-packet one-way delay: 213.695 ms
Loss rate: 4.54%
-- Flow 1:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: 204.563 ms
Loss rate: 3.04%
-- Flow 2:
Average throughput: 45.16 Mbit/s
95th percentile per-packet one-way delay: 212.815 ms
Loss rate: 4.53%
-- Flow 3:
Average throughput: 13.72 Mbit/s
95th percentile per-packet one-way delay: 219.007 ms
Loss rate: 6.36%
Run 10: Report of TaoVA-100x — Data Link

![Graph of throughput vs time]

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

*Flow 1 ingress (mean 5.51 Mbit/s)*
*Flow 1 egress (mean 5.37 Mbit/s)*
*Flow 2 ingress (mean 46.75 Mbit/s)*
*Flow 2 egress (mean 45.16 Mbit/s)*
*Flow 3 ingress (mean 14.30 Mbit/s)*
*Flow 3 egress (mean 13.72 Mbit/s)*

Flow 1 (95th percentile 204.56 ms)
Flow 2 (95th percentile 212.81 ms)
Flow 3 (95th percentile 219.01 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-03-15 05:44:22
End at: 2018-03-15 05:44:52
Local clock offset: 4.511 ms
Remote clock offset: 45.666 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.66 Mbit/s
95th percentile per-packet one-way delay: 120.900 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 50.90 Mbit/s
95th percentile per-packet one-way delay: 120.169 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 42.92 Mbit/s
95th percentile per-packet one-way delay: 121.702 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 9.95 Mbit/s
95th percentile per-packet one-way delay: 123.855 ms
Loss rate: 1.68%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-03-15 06:09:08
End at: 2018-03-15 06:09:38
Local clock offset: 3.605 ms
Remote clock offset: 28.176 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.81 Mbit/s
95th percentile per-packet one-way delay: 114.549 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 11.50 Mbit/s
95th percentile per-packet one-way delay: 104.484 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 110.816 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 17.05 Mbit/s
95th percentile per-packet one-way delay: 116.769 ms
Loss rate: 0.54%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-03-15 06:35:53
End at: 2018-03-15 06:36:23
Local clock offset: 1.78 ms
Remote clock offset: 19.57 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.22 Mbit/s
95th percentile per-packet one-way delay: 110.175 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 37.98 Mbit/s
95th percentile per-packet one-way delay: 110.127 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 45.16 Mbit/s
95th percentile per-packet one-way delay: 110.288 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 16.04 Mbit/s
95th percentile per-packet one-way delay: 110.667 ms
Loss rate: 1.61%
Run 3: Report of TCP Vegas — Data Link

[Graphs showing network performance metrics over time, including throughput and packet error rates for different flows.]
Run 4: Statistics of TCP Vegas

Start at: 2018-03-15 07:02:30
End at: 2018-03-15 07:03:00
Local clock offset: 1.34 ms
Remote clock offset: 66.337 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.50 Mbit/s
95th percentile per-packet one-way delay: 115.474 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 33.31 Mbit/s
95th percentile per-packet one-way delay: 116.604 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 115.845 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 35.18 Mbit/s
95th percentile per-packet one-way delay: 100.229 ms
Loss rate: 1.27%
Run 4: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress** (mean 33.28 Mbps/s)
- **Flow 1 egress** (mean 33.31 Mbps/s)
- **Flow 2 ingress** (mean 26.51 Mbps/s)
- **Flow 2 egress** (mean 26.52 Mbps/s)
- **Flow 3 ingress** (mean 35.16 Mbps/s)
- **Flow 3 egress** (mean 35.18 Mbps/s)

![Graph of Per-packet round-trip delay (ms) over time]

- **Flow 1** (95th percentile 116.60 ms)
- **Flow 2** (95th percentile 115.84 ms)
- **Flow 3** (95th percentile 100.23 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-03-15 07:29:07
End at: 2018-03-15 07:29:37
Local clock offset: -1.263 ms
Remote clock offset: 17.231 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 131.893 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 114.727 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 36.55 Mbit/s
95th percentile per-packet one-way delay: 133.090 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 4.48 Mbit/s
95th percentile per-packet one-way delay: 101.304 ms
Loss rate: 2.36%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-03-15 07:53:58
End at: 2018-03-15 07:54:28
Local clock offset: 8.637 ms
Remote clock offset: 37.156 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 68.30 Mbit/s
  95th percentile per-packet one-way delay: 115.125 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 31.20 Mbit/s
  95th percentile per-packet one-way delay: 113.622 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 49.26 Mbit/s
  95th percentile per-packet one-way delay: 116.103 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 13.36 Mbit/s
  95th percentile per-packet one-way delay: 113.979 ms
  Loss rate: 1.68%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-03-15 08:19:09
End at: 2018-03-15 08:19:39
Local clock offset: 11.698 ms
Remote clock offset: 42.306 ms

# Below is generated by plot.py at 2018-03-15 14:16:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.19 Mbit/s
  95th percentile per-packet one-way delay: 121.572 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 4.79 Mbit/s
  95th percentile per-packet one-way delay: 116.302 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 5.86 Mbit/s
  95th percentile per-packet one-way delay: 116.199 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 13.74 Mbit/s
  95th percentile per-packet one-way delay: 127.260 ms
  Loss rate: 0.31%
Run 7: Report of TCP Vegas — Data Link

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

**Throughput (Mbps)**

**Time (s)**

- Flow 1 ingress (mean 4.79 Mbps)
- Flow 1 egress (mean 4.79 Mbps)
- Flow 2 ingress (mean 5.85 Mbps)
- Flow 2 egress (mean 5.86 Mbps)
- Flow 3 ingress (mean 13.60 Mbps)
- Flow 3 egress (mean 13.74 Mbps)

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

**Time (s)**

- Flow 1 (95th percentile 116.30 ms)
- Flow 2 (95th percentile 116.20 ms)
- Flow 3 (95th percentile 127.26 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-03-15 08:45:30
End at: 2018-03-15 08:46:00
Local clock offset: 6.657 ms
Remote clock offset: 38.813 ms

# Below is generated by plot.py at 2018-03-15 14:16:39
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 84.16 Mbit/s
   95th percentile per-packet one-way delay: 120.673 ms
   Loss rate: 0.51%
-- Flow 1:
   Average throughput: 64.38 Mbit/s
   95th percentile per-packet one-way delay: 120.486 ms
   Loss rate: 0.43%
-- Flow 2:
   Average throughput: 24.42 Mbit/s
   95th percentile per-packet one-way delay: 120.939 ms
   Loss rate: 0.62%
-- Flow 3:
   Average throughput: 10.88 Mbit/s
   95th percentile per-packet one-way delay: 123.641 ms
   Loss rate: 1.48%
Run 8: Report of TCP Vegas — Data Link

![Graph of Throughput and Latency]

- Flow 1 ingress (mean 64.38 Mbit/s)
- Flow 1 egress (mean 64.38 Mbit/s)
- Flow 2 ingress (mean 24.40 Mbit/s)
- Flow 2 egress (mean 24.42 Mbit/s)
- Flow 3 ingress (mean 10.87 Mbit/s)
- Flow 3 egress (mean 10.68 Mbit/s)

![Graph of End-to-End Delay]

- Flow 1 (95th percentile 120.49 ms)
- Flow 2 (95th percentile 120.94 ms)
- Flow 3 (95th percentile 123.64 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-03-15 09:10:13
End at: 2018-03-15 09:10:43
Local clock offset: -3.318 ms
Remote clock offset: 33.025 ms

# Below is generated by plot.py at 2018-03-15 14:16:55
# Datalink statistics
   -- Total of 3 flows:
      Average throughput: 79.75 Mbit/s
      95th percentile per-packet one-way delay: 120.359 ms
      Loss rate: 0.42%
   -- Flow 1:
      Average throughput: 42.86 Mbit/s
      95th percentile per-packet one-way delay: 120.437 ms
      Loss rate: 0.27%
   -- Flow 2:
      Average throughput: 44.61 Mbit/s
      95th percentile per-packet one-way delay: 120.593 ms
      Loss rate: 0.38%
   -- Flow 3:
      Average throughput: 22.12 Mbit/s
      95th percentile per-packet one-way delay: 115.457 ms
      Loss rate: 1.44%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-03-15 09:37:07
End at: 2018-03-15 09:37:37
Local clock offset: 3.497 ms
Remote clock offset: 48.686 ms

# Below is generated by plot.py at 2018-03-15 14:17:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.50 Mbit/s
95th percentile per-packet one-way delay: 115.325 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 49.06 Mbit/s
95th percentile per-packet one-way delay: 114.779 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 114.845 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 34.95 Mbit/s
95th percentile per-packet one-way delay: 116.514 ms
Loss rate: 1.88%
Run 10: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 49.06 Mbps)
- Flow 1 egress (mean 49.06 Mbps)
- Flow 2 ingress (mean 30.02 Mbps)
- Flow 2 egress (mean 30.05 Mbps)
- Flow 3 ingress (mean 35.13 Mbps)
- Flow 3 egress (mean 34.95 Mbps)

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

- Flow 1 (95th percentile 114.78 ms)
- Flow 2 (95th percentile 114.84 ms)
- Flow 3 (95th percentile 116.51 ms)
Run 1: Statistics of Verus

Start at: 2018-03-15 05:32:35
End at: 2018-03-15 05:33:05
Local clock offset: 3.481 ms
Remote clock offset: 47.947 ms

# Below is generated by plot.py at 2018-03-15 14:17:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.40 Mbit/s
95th percentile per-packet one-way delay: 144.043 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 43.25 Mbit/s
95th percentile per-packet one-way delay: 142.030 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 144.654 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 21.48 Mbit/s
95th percentile per-packet one-way delay: 145.911 ms
Loss rate: 2.56%
Run 1: Report of Verus — Data Link

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

![Graph 2: Packet Delay vs Time](image2.png)
Run 2: Statistics of Verus

Start at: 2018-03-15 05:57:12
End at: 2018-03-15 05:57:42
Local clock offset: 3.858 ms
Remote clock offset: 35.496 ms

# Below is generated by plot.py at 2018-03-15 14:17:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.91 Mbit/s
95th percentile per-packet one-way delay: 142.533 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 50.20 Mbit/s
95th percentile per-packet one-way delay: 140.548 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 26.84 Mbit/s
95th percentile per-packet one-way delay: 143.597 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 33.22 Mbit/s
95th percentile per-packet one-way delay: 143.684 ms
Loss rate: 1.67%
Run 2: Report of Verus — Data Link

![Graph showing data link performance over time](image)

- **Flow 1 ingress** (mean 50.17 Mbit/s)
- **Flow 1 egress** (mean 50.20 Mbit/s)
- **Flow 2 ingress** (mean 26.89 Mbit/s)
- **Flow 2 egress** (mean 26.84 Mbit/s)
- **Flow 3 ingress** (mean 33.19 Mbit/s)
- **Flow 3 egress** (mean 33.22 Mbit/s)

![Graph showing per-packet round-trip delay](image)

- **Flow 1** (95th percentile 140.55 ms)
- **Flow 2** (95th percentile 143.60 ms)
- **Flow 3** (95th percentile 143.68 ms)
Run 3: Statistics of Verus

Start at: 2018-03-15 06:23:53
End at: 2018-03-15 06:24:23
Local clock offset: 3.502 ms
Remote clock offset: 29.163 ms

# Below is generated by plot.py at 2018-03-15 14:17:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 27.97 Mbit/s
  95th percentile per-packet one-way delay: 206.479 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 11.12 Mbit/s
  95th percentile per-packet one-way delay: 213.576 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 21.79 Mbit/s
  95th percentile per-packet one-way delay: 200.053 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 7.41 Mbit/s
  95th percentile per-packet one-way delay: 198.569 ms
  Loss rate: 4.47%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-03-15 06:48:45
End at: 2018-03-15 06:49:15
Local clock offset: 0.122 ms
Remote clock offset: 28.321 ms

# Below is generated by plot.py at 2018-03-15 14:17:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.18 Mbit/s
95th percentile per-packet one-way delay: 149.418 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 42.45 Mbit/s
95th percentile per-packet one-way delay: 148.472 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: 150.567 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 28.73 Mbit/s
95th percentile per-packet one-way delay: 153.966 ms
Loss rate: 0.01%
Run 5: Statistics of Verus

Start at: 2018-03-15 07:15:44
End at: 2018-03-15 07:16:14
Local clock offset: 0.985 ms
Remote clock offset: 40.819 ms

# Below is generated by plot.py at 2018-03-15 14:17:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.43 Mbit/s
95th percentile per-packet one-way delay: 144.382 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 41.95 Mbit/s
95th percentile per-packet one-way delay: 143.185 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 35.72 Mbit/s
95th percentile per-packet one-way delay: 144.570 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 24.86 Mbit/s
95th percentile per-packet one-way delay: 145.783 ms
Loss rate: 3.37%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-03-15 07:42:03
End at: 2018-03-15 07:42:33
Local clock offset: 6.258 ms
Remote clock offset: 20.173 ms

# Below is generated by plot.py at 2018-03-15 14:17:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.91 Mbit/s
95th percentile per-packet one-way delay: 134.594 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 40.39 Mbit/s
95th percentile per-packet one-way delay: 131.836 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 133.763 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 15.72 Mbit/s
95th percentile per-packet one-way delay: 138.350 ms
Loss rate: 1.74%
Run 6: Report of Verus — Data Link

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

- **Flow 1 ingress** (mean 40.43 Mbit/s)
- **Flow 1 egress** (mean 40.39 Mbit/s)
- **Flow 2 ingress** (mean 39.66 Mbit/s)
- **Flow 2 egress** (mean 39.64 Mbit/s)
- **Flow 3 ingress** (mean 15.95 Mbit/s)
- **Flow 3 egress** (mean 15.72 Mbit/s)

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

- **Flow 1** (95th percentile 131.84 ms)
- **Flow 2** (95th percentile 133.76 ms)
- **Flow 3** (95th percentile 138.35 ms)
Run 7: Statistics of Verus

Start at: 2018-03-15 08:06:53
End at: 2018-03-15 08:07:23
Local clock offset: 10.214 ms
Remote clock offset: 51.504 ms

# Below is generated by plot.py at 2018-03-15 14:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.12 Mbit/s
95th percentile per-packet one-way delay: 142.770 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 51.33 Mbit/s
95th percentile per-packet one-way delay: 140.212 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 24.37 Mbit/s
95th percentile per-packet one-way delay: 145.027 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 26.21 Mbit/s
95th percentile per-packet one-way delay: 145.321 ms
Loss rate: 1.62%
Run 7: Report of Verus — Data Link
Run 8: Statistics of Verus

Start at: 2018-03-15 08:32:19
End at: 2018-03-15 08:32:49
Local clock offset: 12.845 ms
Remote clock offset: 35.891 ms

# Below is generated by plot.py at 2018-03-15 14:18:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.54 Mbit/s
  95th percentile per-packet one-way delay: 153.512 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 51.59 Mbit/s
  95th percentile per-packet one-way delay: 152.900 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 22.44 Mbit/s
  95th percentile per-packet one-way delay: 150.622 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 18.58 Mbit/s
  95th percentile per-packet one-way delay: 229.819 ms
  Loss rate: 4.87%
Run 8: Report of Verus — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- Flow 1 ingress (mean 51.74 Mbps)
- Flow 1 egress (mean 51.59 Mbps)
- Flow 2 ingress (mean 22.51 Mbps)
- Flow 2 egress (mean 22.44 Mbps)
- Flow 3 ingress (mean 19.81 Mbps)
- Flow 3 egress (mean 18.58 Mbps)

![Graph 2: Per-packet one-way delay (ms) vs Time (s)]
- Flow 1 (95th percentile 152.90 ms)
- Flow 2 (95th percentile 150.62 ms)
- Flow 3 (95th percentile 229.82 ms)
Run 9: Statistics of Verus

Start at: 2018-03-15 08:58:29
End at: 2018-03-15 08:58:59
Local clock offset: -0.306 ms
Remote clock offset: 37.117 ms

# Below is generated by plot.py at 2018-03-15 14:18:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.34 Mbit/s
95th percentile per-packet one-way delay: 154.616 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 152.380 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 154.717 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 16.53 Mbit/s
95th percentile per-packet one-way delay: 157.805 ms
Loss rate: 3.57%
Run 10: Statistics of Verus

Start at: 2018-03-15 09:23:29
End at: 2018-03-15 09:23:59
Local clock offset: 1.598 ms
Remote clock offset: 47.992 ms

# Below is generated by plot.py at 2018-03-15 14:18:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 45.58 Mbit/s
  95th percentile per-packet one-way delay: 212.120 ms
  Loss rate: 2.10%
-- Flow 1:
  Average throughput: 23.60 Mbit/s
  95th percentile per-packet one-way delay: 212.215 ms
  Loss rate: 2.54%
-- Flow 2:
  Average throughput: 16.62 Mbit/s
  95th percentile per-packet one-way delay: 212.071 ms
  Loss rate: 1.90%
-- Flow 3:
  Average throughput: 34.15 Mbit/s
  95th percentile per-packet one-way delay: 211.923 ms
  Loss rate: 1.33%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-03-15 05:39:08
End at: 2018-03-15 05:39:38
Local clock offset: 4.275 ms
Remote clock offset: 46.962 ms

# Below is generated by plot.py at 2018-03-15 14:19:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.78 Mbit/s
95th percentile per-packet one-way delay: 109.320 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 51.83 Mbit/s
95th percentile per-packet one-way delay: 109.994 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 28.73 Mbit/s
95th percentile per-packet one-way delay: 110.376 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 21.73 Mbit/s
95th percentile per-packet one-way delay: 100.303 ms
Loss rate: 2.13%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-03-15 06:03:48
End at: 2018-03-15 06:04:18
Local clock offset: 3.797 ms
Remote clock offset: 33.461 ms

# Below is generated by plot.py at 2018-03-15 14:19:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.38 Mbit/s
95th percentile per-packet one-way delay: 109.607 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 32.12 Mbit/s
95th percentile per-packet one-way delay: 108.153 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 21.19 Mbit/s
95th percentile per-packet one-way delay: 110.347 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 110.884 ms
Loss rate: 1.18%
Run 2: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 32.02 Mbit/s)
Flow 1 egress (mean 32.12 Mbit/s)
Flow 2 ingress (mean 21.12 Mbit/s)
Flow 2 egress (mean 21.19 Mbit/s)
Flow 3 ingress (mean 9.68 Mbit/s)
Flow 3 egress (mean 9.69 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 108.15 ms)
Flow 2 (95th percentile 110.35 ms)
Flow 3 (95th percentile 110.88 ms)
Run 3: Statistics of Copa

Start at: 2018-03-15 06:30:32
End at: 2018-03-15 06:31:02
Local clock offset: 1.668 ms
Remote clock offset: 25.019 ms

# Below is generated by plot.py at 2018-03-15 14:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.02 Mbit/s
95th percentile per-packet one-way delay: 99.507 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 57.08 Mbit/s
95th percentile per-packet one-way delay: 99.289 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 28.52 Mbit/s
95th percentile per-packet one-way delay: 99.882 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 18.30 Mbit/s
95th percentile per-packet one-way delay: 101.079 ms
Loss rate: 2.39%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 57.18 Mbps)
- Flow 1 egress (mean 57.08 Mbps)
- Flow 2 ingress (mean 28.74 Mbps)
- Flow 2 egress (mean 28.52 Mbps)
- Flow 3 ingress (mean 18.49 Mbps)
- Flow 3 egress (mean 16.30 Mbps)

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

- Flow 1 (95th percentile 99.29 ms)
- Flow 2 (95th percentile 99.88 ms)
- Flow 3 (95th percentile 101.08 ms)
Run 4: Statistics of Copa

End at: 2018-03-15 06:56:25
Local clock offset: 0.385 ms
Remote clock offset: 35.377 ms

# Below is generated by plot.py at 2018-03-15 14:19:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.36 Mbit/s
95th percentile per-packet one-way delay: 127.779 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 54.85 Mbit/s
95th percentile per-packet one-way delay: 125.611 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 20.46 Mbit/s
95th percentile per-packet one-way delay: 170.597 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 8.93 Mbit/s
95th percentile per-packet one-way delay: 198.556 ms
Loss rate: 0.64%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-03-15 07:23:43
End at: 2018-03-15 07:24:13
Local clock offset: 1.7 ms
Remote clock offset: 23.724 ms

# Below is generated by plot.py at 2018-03-15 14:19:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.26 Mbit/s
95th percentile per-packet one-way delay: 105.870 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 41.34 Mbit/s
95th percentile per-packet one-way delay: 105.531 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 29.24 Mbit/s
95th percentile per-packet one-way delay: 106.219 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 16.71 Mbit/s
95th percentile per-packet one-way delay: 106.811 ms
Loss rate: 2.56%
Run 5: Report of Copa — Data Link

Legend:
- Flow 1 ingress (mean 41.28 Mbit/s)
- Flow 2 ingress (mean 29.32 Mbit/s)
- Flow 3 ingress (mean 16.93 Mbit/s)
- Flow 1 egress (mean 41.34 Mbit/s)
- Flow 2 egress (mean 29.24 Mbit/s)
- Flow 3 egress (mean 16.71 Mbit/s)
Run 6: Statistics of Copa

Start at: 2018-03-15 07:48:38  
End at: 2018-03-15 07:49:08  
Local clock offset: 7.041 ms  
Remote clock offset: 22.606 ms

# Below is generated by plot.py at 2018-03-15 14:19:52  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 74.06 Mbit/s  
95th percentile per-packet one-way delay: 106.685 ms  
Loss rate: 0.78%  
-- Flow 1:  
Average throughput: 51.71 Mbit/s  
95th percentile per-packet one-way delay: 105.920 ms  
Loss rate: 0.50%  
-- Flow 2:  
Average throughput: 26.50 Mbit/s  
95th percentile per-packet one-way delay: 108.632 ms  
Loss rate: 1.23%  
-- Flow 3:  
Average throughput: 14.52 Mbit/s  
95th percentile per-packet one-way delay: 106.755 ms  
Loss rate: 2.09%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-03-15 08:13:41
End at: 2018-03-15 08:14:11
Local clock offset: 10.819 ms
Remote clock offset: 54.298 ms

# Below is generated by plot.py at 2018-03-15 14:19:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.51 Mbit/s
95th percentile per-packet one-way delay: 105.845 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 41.20 Mbit/s
95th percentile per-packet one-way delay: 105.076 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 28.92 Mbit/s
95th percentile per-packet one-way delay: 106.824 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 12.46 Mbit/s
95th percentile per-packet one-way delay: 107.910 ms
Loss rate: 2.22%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-03-15 08:40:10
End at: 2018-03-15 08:40:40
Local clock offset: 13.368 ms
Remote clock offset: 35.961 ms

# Below is generated by plot.py at 2018-03-15 14:20:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.84 Mbit/s
  95th percentile per-packet one-way delay: 116.460 ms
  Loss rate: 0.80%
-- Flow 1:
  Average throughput: 55.07 Mbit/s
  95th percentile per-packet one-way delay: 116.329 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 27.86 Mbit/s
  95th percentile per-packet one-way delay: 116.849 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 16.04 Mbit/s
  95th percentile per-packet one-way delay: 116.261 ms
  Loss rate: 2.05%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-03-15 09:04:58
End at: 2018-03-15 09:05:28
Local clock offset: -1.944 ms
Remote clock offset: 49.018 ms

# Below is generated by plot.py at 2018-03-15 14:20:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.53 Mbit/s
95th percentile per-packet one-way delay: 89.378 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: 88.908 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 32.09 Mbit/s
95th percentile per-packet one-way delay: 90.227 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 22.66 Mbit/s
95th percentile per-packet one-way delay: 89.666 ms
Loss rate: 1.74%
Run 9: Report of Copa — Data Link

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

- Flow 1 Ingress (mean 43.73 Mbps/s)
- Flow 1 Egress (mean 43.79 Mbps/s)
- Flow 2 Ingress (mean 32.13 Mbps/s)
- Flow 2 Egress (mean 32.09 Mbps/s)
- Flow 3 Ingress (mean 22.76 Mbps/s)
- Flow 3 Egress (mean 22.66 Mbps/s)

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

- Flow 1 (95th percentile 88.91 ms)
- Flow 2 (95th percentile 90.23 ms)
- Flow 3 (95th percentile 89.67 ms)
Run 10: Statistics of Copa

Start at: 2018-03-15 09:31:48
End at: 2018-03-15 09:32:18
Local clock offset: 3.113 ms
Remote clock offset: 27.446 ms

# Below is generated by plot.py at 2018-03-15 14:21:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.74 Mbit/s
95th percentile per-packet one-way delay: 104.654 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 46.19 Mbit/s
95th percentile per-packet one-way delay: 104.011 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 105.450 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 22.44 Mbit/s
95th percentile per-packet one-way delay: 106.119 ms
Loss rate: 2.08%
Run 10: Report of Copa — Data Link

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

- Flow 1 Ingress (mean 46.26 Mbit/s)
- Flow 1 Egress (mean 46.19 Mbit/s)
- Flow 2 Ingress (mean 32.08 Mbit/s)
- Flow 2 Egress (mean 31.91 Mbit/s)
- Flow 3 Ingress (mean 22.60 Mbit/s)
- Flow 3 Egress (mean 22.44 Mbit/s)

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

- Flow 1 (95th percentile 104.01 ms)
- Flow 2 (95th percentile 105.45 ms)
- Flow 3 (95th percentile 106.12 ms)
Run 1: Statistics of FillP

Start at: 2018-03-15 05:40:28  
End at: 2018-03-15 05:40:58  
Local clock offset: 4.056 ms  
Remote clock offset: 47.113 ms

# Below is generated by plot.py at 2018-03-15 14:21:19  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 95.38 Mbit/s  
95th percentile per-packet one-way delay: 143.230 ms  
Loss rate: 0.62%
-- Flow 1:
Average throughput: 59.69 Mbit/s  
95th percentile per-packet one-way delay: 142.864 ms  
Loss rate: 0.36%
-- Flow 2:
Average throughput: 39.20 Mbit/s  
95th percentile per-packet one-way delay: 145.118 ms  
Loss rate: 0.72%
-- Flow 3:
Average throughput: 30.01 Mbit/s  
95th percentile per-packet one-way delay: 135.299 ms  
Loss rate: 1.92%
Run 1: Report of FillP — Data Link

![Graph of Throughput vs Time](image1)

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

Start at: 2018-03-15 06:05:06
End at: 2018-03-15 06:05:36
Local clock offset: 3.272 ms
Remote clock offset: 39.168 ms

# Below is generated by plot.py at 2018-03-15 14:21:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.92 Mbit/s
95th percentile per-packet one-way delay: 166.942 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 59.35 Mbit/s
95th percentile per-packet one-way delay: 163.037 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 39.20 Mbit/s
95th percentile per-packet one-way delay: 168.009 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 170.290 ms
Loss rate: 2.92%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 59.38 Mbps)
- Flow 1 egress (mean 59.35 Mbps)
- Flow 2 ingress (mean 39.26 Mbps)
- Flow 2 egress (mean 39.20 Mbps)
- Flow 3 ingress (mean 29.97 Mbps)
- Flow 3 egress (mean 29.62 Mbps)

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

- Flow 1 (95th percentile 163.04 ms)
- Flow 2 (95th percentile 168.01 ms)
- Flow 3 (95th percentile 170.29 ms)
Run 3: Statistics of FillP

Start at: 2018-03-15 06:31:53  
End at: 2018-03-15 06:32:23  
Local clock offset: 2.005 ms  
Remote clock offset: 17.262 ms  

# Below is generated by plot.py at 2018-03-15 14:21:19  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 95.40 Mbit/s  
95th percentile per-packet one-way delay: 139.840 ms  
Loss rate: 0.58%  
-- Flow 1:  
Average throughput: 59.38 Mbit/s  
95th percentile per-packet one-way delay: 138.171 ms  
Loss rate: 0.33%  
-- Flow 2:  
Average throughput: 39.63 Mbit/s  
95th percentile per-packet one-way delay: 140.071 ms  
Loss rate: 0.70%  
-- Flow 3:  
Average throughput: 30.07 Mbit/s  
95th percentile per-packet one-way delay: 142.264 ms  
Loss rate: 1.77%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-03-15 06:58:04
End at: 2018-03-15 06:58:34
Local clock offset: 0.036 ms
Remote clock offset: 49.236 ms

# Below is generated by plot.py at 2018-03-15 14:21:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.45 Mbit/s
95th percentile per-packet one-way delay: 242.855 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 59.42 Mbit/s
95th percentile per-packet one-way delay: 240.713 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 37.50 Mbit/s
95th percentile per-packet one-way delay: 243.965 ms
Loss rate: 4.59%
-- Flow 3:
Average throughput: 28.81 Mbit/s
95th percentile per-packet one-way delay: 246.004 ms
Loss rate: 6.43%
Run 4: Report of FillP — Data Link

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

- Flow 1 ingress (mean 59.71 Mbps)
- Flow 1 egress (mean 59.42 Mbps)
- Flow 2 ingress (mean 38.80 Mbps)
- Flow 2 egress (mean 37.50 Mbps)
- Flow 3 ingress (mean 30.06 Mbps)
- Flow 3 egress (mean 28.81 Mbps)

![Graph 2: Per-packet error rate over time (ms)]

- Flow 1 (95th percentile 240.71 ms)
- Flow 2 (95th percentile 243.97 ms)
- Flow 3 (95th percentile 246.00 ms)
Run 5: Statistics of FillP

Start at: 2018-03-15 07:25:07
End at: 2018-03-15 07:25:37
Local clock offset: 1.62 ms
Remote clock offset: 21.392 ms

# Below is generated by plot.py at 2018-03-15 14:21:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 143.921 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 59.32 Mbit/s
95th percentile per-packet one-way delay: 141.913 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.64 Mbit/s
95th percentile per-packet one-way delay: 144.999 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 30.05 Mbit/s
95th percentile per-packet one-way delay: 148.357 ms
Loss rate: 1.71%
Run 5: Report of FillP — Data Link

![Graph showing throughput over time for different flows]

- Flow 1 ingress (mean 59.21 Mbit/s)
- Flow 1 egress (mean 59.32 Mbit/s)
- Flow 2 ingress (mean 39.55 Mbit/s)
- Flow 2 egress (mean 39.64 Mbit/s)
- Flow 3 ingress (mean 29.99 Mbit/s)
- Flow 3 egress (mean 30.05 Mbit/s)

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

- Flow 1 (95th percentile 141.91 ms)
- Flow 2 (95th percentile 145.00 ms)
- Flow 3 (95th percentile 148.36 ms)

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Run 6: Statistics of FillP

Start at: 2018-03-15 07:50:01
End at: 2018-03-15 07:50:31
Local clock offset: 8.21 ms
Remote clock offset: 29.369 ms

# Below is generated by plot.py at 2018-03-15 14:21:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.35 Mbit/s
95th percentile per-packet one-way delay: 141.791 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 59.37 Mbit/s
95th percentile per-packet one-way delay: 138.309 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 143.070 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 30.24 Mbit/s
95th percentile per-packet one-way delay: 146.434 ms
Loss rate: 1.87%
Run 6: Report of FillP — Data Link
Run 7: Statistics of FillP

Start at: 2018-03-15 08:15:09
End at: 2018-03-15 08:15:39
Local clock offset: 11.098 ms
Remote clock offset: 58.464 ms

# Below is generated by plot.py at 2018-03-15 14:21:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 136.274 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 59.40 Mbit/s
95th percentile per-packet one-way delay: 135.100 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 39.48 Mbit/s
95th percentile per-packet one-way delay: 136.713 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 137.896 ms
Loss rate: 1.94%
Run 7: Report of FillP — Data Link

![Throughput and Delay Graphs]

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 59.30 Mbps)
- Flow 1 egress (mean 59.40 Mbps)
- Flow 2 ingress (mean 39.40 Mbps)
- Flow 2 egress (mean 39.48 Mbps)
- Flow 3 ingress (mean 30.16 Mbps)
- Flow 3 egress (mean 30.12 Mbps)

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

- Flow 1 (95th percentile 135.10 ms)
- Flow 2 (95th percentile 136.71 ms)
- Flow 3 (95th percentile 137.90 ms)
Run 8: Statistics of FillP

Start at: 2018-03-15 08:41:31
End at: 2018-03-15 08:42:01
Local clock offset: 11.163 ms
Remote clock offset: 30.67 ms

# Below is generated by plot.py at 2018-03-15 14:22:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 154.940 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 153.689 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 39.51 Mbit/s
95th percentile per-packet one-way delay: 155.126 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 156.826 ms
Loss rate: 1.87%
Run 8: Report of FillP — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 9: Statistics of FillP

Start at: 2018-03-15 09:06:18
End at: 2018-03-15 09:06:48
Local clock offset: -2.113 ms
Remote clock offset: 34.729 ms

# Below is generated by plot.py at 2018-03-15 14:22:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.39 Mbit/s
95th percentile per-packet one-way delay: 150.030 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 59.80 Mbit/s
95th percentile per-packet one-way delay: 150.586 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 148.786 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 30.12 Mbit/s
95th percentile per-packet one-way delay: 141.825 ms
Loss rate: 2.13%
Run 9: Report of FillP — Data Link

![Graph of Throughput and Per-packet one-way delay]

Legend:
- Flow 1 ingress (mean 59.74 Mbit/s)
- Flow 1 egress (mean 59.80 Mbit/s)
- Flow 2 ingress (mean 38.66 Mbit/s)
- Flow 2 egress (mean 39.00 Mbit/s)
- Flow 3 ingress (mean 30.17 Mbit/s)
- Flow 3 egress (mean 30.12 Mbit/s)
Run 10: Statistics of FillP

Start at: 2018-03-15 09:33:08
End at: 2018-03-15 09:33:38
Local clock offset: 3.094 ms
Remote clock offset: 30.366 ms

# Below is generated by plot.py at 2018-03-15 14:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.40 Mbit/s
95th percentile per-packet one-way delay: 138.822 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 59.17 Mbit/s
95th percentile per-packet one-way delay: 135.875 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 39.76 Mbit/s
95th percentile per-packet one-way delay: 139.581 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 30.26 Mbit/s
95th percentile per-packet one-way delay: 142.460 ms
Loss rate: 1.78%
Run 10: Report of FillIP — Data Link

![Graph showing throughput and per-packet one-way delay](image_url)

- Flow 1 ingress (mean 59.04 Mbit/s)
- Flow 1 egress (mean 59.17 Mbit/s)
- Flow 2 ingress (mean 39.74 Mbit/s)
- Flow 2 egress (mean 39.76 Mbit/s)
- Flow 3 ingress (mean 30.20 Mbit/s)
- Flow 3 egress (mean 30.26 Mbit/s)
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-15 05:48:09
End at: 2018-03-15 05:48:39
Local clock offset: 4.531 ms
Remote clock offset: 39.23 ms

# Below is generated by plot.py at 2018-03-15 14:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.45 Mbit/s
95th percentile per-packet one-way delay: 129.632 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 128.675 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 130.977 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 16.77 Mbit/s
95th percentile per-packet one-way delay: 131.211 ms
Loss rate: 1.46%
Run 1: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 63.49 Mbps)
  - Flow 1 egress (mean 63.57 Mbps)
  - Flow 2 ingress (mean 35.47 Mbps)
  - Flow 2 egress (mean 35.47 Mbps)
  - Flow 3 ingress (mean 16.76 Mbps)
  - Flow 3 egress (mean 16.77 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 128.68 ms)
  - Flow 2 (95th percentile 130.98 ms)
  - Flow 3 (95th percentile 131.21 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-15 06:12:59
End at: 2018-03-15 06:13:29
Local clock offset: 3.696 ms
Remote clock offset: 17.203 ms

# Below is generated by plot.py at 2018-03-15 14:22:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.25 Mbit/s
95th percentile per-packet one-way delay: 133.652 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 78.97 Mbit/s
95th percentile per-packet one-way delay: 132.037 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 137.560 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 14.29 Mbit/s
95th percentile per-packet one-way delay: 138.746 ms
Loss rate: 1.47%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-03-15 06:39:39
End at: 2018-03-15 06:40:09
Local clock offset: 1.371 ms
Remote clock offset: 24.024 ms

# Below is generated by plot.py at 2018-03-15 14:22:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.55 Mbit/s
  95th percentile per-packet one-way delay: 130.335 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 70.30 Mbit/s
  95th percentile per-packet one-way delay: 129.130 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 20.79 Mbit/s
  95th percentile per-packet one-way delay: 132.781 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 23.05 Mbit/s
  95th percentile per-packet one-way delay: 130.187 ms
  Loss rate: 1.46%
Run 3: Report of Indigo-1-32 — Data Link

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

**Throughput (Mbit/s):**
- Flow 1 ingress (mean 70.25 Mbit/s)
- Flow 1 egress (mean 70.30 Mbit/s)
- Flow 2 ingress (mean 20.79 Mbit/s)
- Flow 2 egress (mean 20.79 Mbit/s)
- Flow 3 ingress (mean 23.06 Mbit/s)
- Flow 3 egress (mean 23.05 Mbit/s)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 129.13 ms)
- Flow 2 (95th percentile 132.78 ms)
- Flow 3 (95th percentile 130.19 ms)
Run 4: Statistics of Indigo-1-32

Start at: 2018-03-15 07:06:17
End at: 2018-03-15 07:06:47
Local clock offset: 1.498 ms
Remote clock offset: 60.262 ms

# Below is generated by plot.py at 2018-03-15 14:23:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.05 Mbit/s
95th percentile per-packet one-way delay: 139.172 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 83.62 Mbit/s
95th percentile per-packet one-way delay: 138.458 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 8.16 Mbit/s
95th percentile per-packet one-way delay: 146.246 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 129.132 ms
Loss rate: 1.27%
Run 4: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 83.66 Mbit/s)
Flow 1 egress (mean 83.62 Mbit/s)
Flow 2 ingress (mean 8.14 Mbit/s)
Flow 2 egress (mean 8.16 Mbit/s)
Flow 3 ingress (mean 6.33 Mbit/s)
Flow 3 egress (mean 6.34 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 138.46 ms)
Flow 2 (95th percentile 146.25 ms)
Flow 3 (95th percentile 129.13 ms)
Run 5: Statistics of Indigo-1-32

Start at: 2018-03-15 07:32:52
End at: 2018-03-15 07:33:22
Local clock offset: 2.278 ms
Remote clock offset: 21.061 ms

# Below is generated by plot.py at 2018-03-15 14:23:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.29 Mbit/s
  95th percentile per-packet one-way delay: 129.723 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 81.52 Mbit/s
  95th percentile per-packet one-way delay: 128.507 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 5.93 Mbit/s
  95th percentile per-packet one-way delay: 129.860 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 27.20 Mbit/s
  95th percentile per-packet one-way delay: 134.519 ms
  Loss rate: 1.62%
Run 5: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - **Flow 1 ingress (mean: 81.45 Mbps)**
  - **Flow 1 egress (mean: 81.52 Mbps)**
  - **Flow 2 ingress (mean: 5.92 Mbps)**
  - **Flow 2 egress (mean: 5.93 Mbps)**
  - **Flow 3 ingress (mean: 27.25 Mbps)**
  - **Flow 3 egress (mean: 27.20 Mbps)**

- **Delay (ms):**
  - **Flow 1 (95th percentile: 128.51 ms)**
  - **Flow 2 (95th percentile: 129.86 ms)**
  - **Flow 3 (95th percentile: 134.52 ms)**
Run 6: Statistics of Indigo-1-32

Start at: 2018-03-15 07:57:46
End at: 2018-03-15 07:58:16
Local clock offset: 6.273 ms
Remote clock offset: 34.48 ms

# Below is generated by plot.py at 2018-03-15 14:24:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 132.245 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 72.13 Mbit/s
95th percentile per-packet one-way delay: 131.714 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 25.60 Mbit/s
95th percentile per-packet one-way delay: 133.533 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 11.84 Mbit/s
95th percentile per-packet one-way delay: 133.073 ms
Loss rate: 1.48%
Run 6: Report of Indigo-1-32 — Data Link
Run 7: Statistics of Indigo-1-32

Start at: 2018-03-15 08:22:52
End at: 2018-03-15 08:23:22
Local clock offset: 11.848 ms
Remote clock offset: 37.93 ms

# Below is generated by plot.py at 2018-03-15 14:24:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.26 Mbit/s
95th percentile per-packet one-way delay: 139.770 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 75.76 Mbit/s
95th percentile per-packet one-way delay: 139.136 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 17.30 Mbit/s
95th percentile per-packet one-way delay: 143.501 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 12.44 Mbit/s
95th percentile per-packet one-way delay: 134.718 ms
Loss rate: 1.47%
Run 7: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 8: Statistics of Indigo-1-32

Start at: 2018-03-15 08:49:16
End at: 2018-03-15 08:49:46
Local clock offset: 3.751 ms
Remote clock offset: 38.403 ms

# Below is generated by plot.py at 2018-03-15 14:24:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.82 Mbit/s
95th percentile per-packet one-way delay: 153.843 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 81.21 Mbit/s
95th percentile per-packet one-way delay: 152.959 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 8.26 Mbit/s
95th percentile per-packet one-way delay: 152.931 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 15.95 Mbit/s
95th percentile per-packet one-way delay: 160.528 ms
Loss rate: 1.20%
Run 8: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 81.20 Mbit/s)  Flow 1 egress (mean 81.21 Mbit/s)
Flow 2 ingress (mean 8.24 Mbit/s)  Flow 2 egress (mean 8.26 Mbit/s)
Flow 3 ingress (mean 15.90 Mbit/s)  Flow 3 egress (mean 15.95 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 152.96 ms)  Flow 2 (95th percentile 152.93 ms)  Flow 3 (95th percentile 160.53 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-03-15 09:13:59
End at: 2018-03-15 09:14:29
Local clock offset: -3.862 ms
Remote clock offset: 40.349 ms

# Below is generated by plot.py at 2018-03-15 14:24:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.20 Mbit/s
95th percentile per-packet one-way delay: 117.994 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 71.29 Mbit/s
95th percentile per-packet one-way delay: 117.878 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 20.40 Mbit/s
95th percentile per-packet one-way delay: 118.262 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 16.65 Mbit/s
95th percentile per-packet one-way delay: 119.133 ms
Loss rate: 1.48%
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-15 09:40:54
End at: 2018-03-15 09:41:24
Local clock offset: 3.582 ms
Remote clock offset: 36.466 ms

# Below is generated by plot.py at 2018-03-15 14:24:11
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 92.47 Mbit/s
   95th percentile per-packet one-way delay: 109.567 ms
   Loss rate: 0.45%
-- Flow 1:
   Average throughput: 70.71 Mbit/s
   95th percentile per-packet one-way delay: 109.133 ms
   Loss rate: 0.34%
-- Flow 2:
   Average throughput: 25.74 Mbit/s
   95th percentile per-packet one-way delay: 111.817 ms
   Loss rate: 0.66%
-- Flow 3:
   Average throughput: 14.63 Mbit/s
   95th percentile per-packet one-way delay: 109.243 ms
   Loss rate: 1.36%
Run 10: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 70.65 Mbit/s)
- Flow 1 egress (mean 70.71 Mbit/s)
- Flow 2 ingress (mean 25.73 Mbit/s)
- Flow 2 egress (mean 25.74 Mbit/s)
- Flow 3 ingress (mean 14.62 Mbit/s)
- Flow 3 egress (mean 14.63 Mbit/s)
Run 1: Statistics of Vivace-latency

Start at: 2018-03-15 05:43:04
End at: 2018-03-15 05:43:34
Local clock offset: 4.197 ms
Remote clock offset: 37.41 ms

# Below is generated by plot.py at 2018-03-15 14:24:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.38 Mbit/s
95th percentile per-packet one-way delay: 127.563 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 67.67 Mbit/s
95th percentile per-packet one-way delay: 127.100 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 10.53 Mbit/s
95th percentile per-packet one-way delay: 128.307 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 128.975 ms
Loss rate: 2.26%
Run 1: Report of Vivace-latency — Data Link

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

Legend:
- Flow 1 ingress (mean 67.60 Mbit/s)
- Flow 1 egress (mean 67.67 Mbit/s)
- Flow 2 ingress (mean 10.56 Mbit/s)
- Flow 2 egress (mean 10.53 Mbit/s)
- Flow 3 ingress (mean 11.50 Mbit/s)
- Flow 3 egress (mean 11.42 Mbit/s)
Run 2: Statistics of Vivace-latency

Start at: 2018-03-15 06:07:49
End at: 2018-03-15 06:08:19
Local clock offset: 3.665 ms
Remote clock offset: 22.657 ms

# Below is generated by plot.py at 2018-03-15 14:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.90 Mbit/s
95th percentile per-packet one-way delay: 117.248 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 53.88 Mbit/s
95th percentile per-packet one-way delay: 117.306 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 8.03 Mbit/s
95th percentile per-packet one-way delay: 116.347 ms
Loss rate: 1.16%
-- Flow 3:
Average throughput: 14.39 Mbit/s
95th percentile per-packet one-way delay: 118.066 ms
Loss rate: 1.68%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

Start at: 2018-03-15 06:34:29
End at: 2018-03-15 06:34:59
Local clock offset: 1.559 ms
Remote clock offset: 16.084 ms

# Below is generated by plot.py at 2018-03-15 14:24:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.13 Mbit/s
95th percentile per-packet one-way delay: 120.315 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 65.46 Mbit/s
95th percentile per-packet one-way delay: 120.560 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 113.417 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 4.78 Mbit/s
95th percentile per-packet one-way delay: 111.858 ms
Loss rate: 2.45%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-03-15 07:01:10
End at: 2018-03-15 07:01:40
Local clock offset: 0.905 ms
Remote clock offset: 50.537 ms

# Below is generated by plot.py at 2018-03-15 14:25:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.49 Mbit/s
95th percentile per-packet one-way delay: 114.770 ms
Loss rate: 0.50%

-- Flow 1:
Average throughput: 72.07 Mbit/s
95th percentile per-packet one-way delay: 114.765 ms
Loss rate: 0.46%

-- Flow 2:
Average throughput: 6.38 Mbit/s
95th percentile per-packet one-way delay: 115.299 ms
Loss rate: 0.87%

-- Flow 3:
Average throughput: 3.70 Mbit/s
95th percentile per-packet one-way delay: 113.089 ms
Loss rate: 1.46%
Run 4: Report of Vivace-latency — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 72.08 Mbit/s) • Flow 1 egress (mean 72.07 Mbit/s)
Flow 2 ingress (mean 6.39 Mbit/s) • Flow 2 egress (mean 6.38 Mbit/s)
Flow 3 ingress (mean 3.70 Mbit/s) • Flow 3 egress (mean 3.70 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 114.77 ms) • Flow 2 (95th percentile 115.30 ms) • Flow 3 (95th percentile 113.09 ms)
Run 5: Statistics of Vivace-latency

Start at: 2018-03-15 07:27:48
End at: 2018-03-15 07:28:18
Local clock offset: 1.57 ms
Remote clock offset: 18.132 ms

# Below is generated by plot.py at 2018-03-15 14:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.15 Mbit/s
95th percentile per-packet one-way delay: 133.240 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 64.29 Mbit/s
95th percentile per-packet one-way delay: 132.851 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 14.23 Mbit/s
95th percentile per-packet one-way delay: 133.591 ms
Loss rate: 1.19%
-- Flow 3:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 134.757 ms
Loss rate: 1.61%
Run 5: Report of Vivace-latency — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 64.25 Mbit/s)**
- **Flow 1 egress (mean 64.29 Mbit/s)**
- **Flow 2 ingress (mean 14.31 Mbit/s)**
- **Flow 2 egress (mean 14.23 Mbit/s)**
- **Flow 3 ingress (mean 13.64 Mbit/s)**
- **Flow 3 egress (mean 13.59 Mbit/s)**

![Graph 2](image2)

- **Flow 1 (95th percentile 132.85 ms)**
- **Flow 2 (95th percentile 133.59 ms)**
- **Flow 3 (95th percentile 134.76 ms)**
Run 6: Statistics of Vivace-latency

Start at: 2018-03-15 07:52:38
End at: 2018-03-15 07:53:08
Local clock offset: 8.334 ms
Remote clock offset: 27.123 ms

# Below is generated by plot.py at 2018-03-15 14:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.31 Mbit/s
  95th percentile per-packet one-way delay: 114.928 ms
  Loss rate: 0.67%
  -- Flow 1:
  Average throughput: 63.54 Mbit/s
  95th percentile per-packet one-way delay: 115.036 ms
  Loss rate: 0.57%
  -- Flow 2:
  Average throughput: 5.81 Mbit/s
  95th percentile per-packet one-way delay: 113.699 ms
  Loss rate: 1.24%
  -- Flow 3:
  Average throughput: 11.99 Mbit/s
  95th percentile per-packet one-way delay: 114.720 ms
  Loss rate: 1.73%
Run 6: Report of Vivace-latency — Data Link

![Graph of throughput and latency data for different flows.](image)

- Flow 1 ingress (mean 63.63 Mbit/s)
- Flow 1 egress (mean 63.54 Mbit/s)
- Flow 2 ingress (mean 5.85 Mbit/s)
- Flow 2 egress (mean 5.81 Mbit/s)
- Flow 3 ingress (mean 12.05 Mbit/s)
- Flow 3 egress (mean 11.99 Mbit/s)

![Graph of per-packet one-way delay for different flows.](image)

- Flow 1 (95th percentile 115.04 ms)
- Flow 2 (95th percentile 113.70 ms)
- Flow 3 (95th percentile 114.72 ms)
Run 7: Statistics of Vivace-latency

Start at: 2018-03-15 08:17:51
End at: 2018-03-15 08:18:21
Local clock offset: 10.783 ms
Remote clock offset: 45.441 ms

# Below is generated by plot.py at 2018-03-15 14:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.39 Mbit/s
  95th percentile per-packet one-way delay: 123.962 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 66.67 Mbit/s
  95th percentile per-packet one-way delay: 124.113 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 4.18 Mbit/s
  95th percentile per-packet one-way delay: 123.154 ms
  Loss rate: 0.93%
-- Flow 3:
  Average throughput: 2.91 Mbit/s
  95th percentile per-packet one-way delay: 120.374 ms
  Loss rate: 2.83%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-03-15 08:44:11
End at: 2018-03-15 08:44:41
Local clock offset: 8.021 ms
Remote clock offset: 30.938 ms

# Below is generated by plot.py at 2018-03-15 14:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.96 Mbit/s
  95th percentile per-packet one-way delay: 131.540 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 56.91 Mbit/s
  95th percentile per-packet one-way delay: 130.501 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 15.72 Mbit/s
  95th percentile per-packet one-way delay: 134.659 ms
  Loss rate: 1.18%
-- Flow 3:
  Average throughput: 1.92 Mbit/s
  95th percentile per-packet one-way delay: 136.422 ms
  Loss rate: 3.14%
Run 8: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 56.92 Mbit/s)
- Flow 1 egress (mean 56.91 Mbit/s)
- Flow 2 ingress (mean 15.80 Mbit/s)
- Flow 2 egress (mean 15.72 Mbit/s)
- Flow 3 ingress (mean 1.96 Mbit/s)
- Flow 3 egress (mean 1.92 Mbit/s)

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

- Flow 1 (95th percentile 130.50 ms)
- Flow 2 (95th percentile 134.66 ms)
- Flow 3 (95th percentile 136.42 ms)
Run 9: Statistics of Vivace-latency

Start at: 2018-03-15 09:08:54
End at: 2018-03-15 09:09:24
Local clock offset: -2.841 ms
Remote clock offset: 35.955 ms

# Below is generated by plot.py at 2018-03-15 14:25:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.90 Mbit/s
  95th percentile per-packet one-way delay: 151.432 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 60.27 Mbit/s
  95th percentile per-packet one-way delay: 150.849 ms
  Loss rate: 0.73%
-- Flow 2:
  Average throughput: 19.14 Mbit/s
  95th percentile per-packet one-way delay: 152.539 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 2.90 Mbit/s
  95th percentile per-packet one-way delay: 152.785 ms
  Loss rate: 4.32%
Run 9: Report of Vivace-latency — Data Link
Run 10: Statistics of Vivace-latency

Start at: 2018-03-15 09:35:44
End at: 2018-03-15 09:36:14
Local clock offset: 3.313 ms
Remote clock offset: 42.279 ms

# Below is generated by plot.py at 2018-03-15 14:25:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.20 Mbit/s
  95th percentile per-packet one-way delay: 102.554 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 64.96 Mbit/s
  95th percentile per-packet one-way delay: 102.749 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 7.04 Mbit/s
  95th percentile per-packet one-way delay: 95.099 ms
  Loss rate: 0.92%
-- Flow 3:
  Average throughput: 4.81 Mbit/s
  95th percentile per-packet one-way delay: 94.399 ms
  Loss rate: 2.06%
Run 10: Report of Vivace-latency — Data Link
Run 1: Statistics of Vivace-loss

Start at: 2018-03-15 05:41:45
End at: 2018-03-15 05:42:15
Local clock offset: 4.285 ms
Remote clock offset: 45.721 ms

# Below is generated by plot.py at 2018-03-15 14:25:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.69 Mbit/s
95th percentile per-packet one-way delay: 142.080 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 42.81 Mbit/s
95th percentile per-packet one-way delay: 139.418 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 142.434 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 145.758 ms
Loss rate: 2.59%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-03-15 06:06:28
End at: 2018-03-15 06:06:58
Local clock offset: 3.48 ms
Remote clock offset: 28.985 ms

# Below is generated by plot.py at 2018-03-15 14:26:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.23 Mbit/s
95th percentile per-packet one-way delay: 151.199 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 53.90 Mbit/s
95th percentile per-packet one-way delay: 148.549 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 152.086 ms
Loss rate: 2.39%
-- Flow 3:
Average throughput: 12.09 Mbit/s
95th percentile per-packet one-way delay: 144.379 ms
Loss rate: 5.50%
Run 2: Report of Vivace-loss — Data Link
Run 3: Statistics of Vivace-loss

Start at: 2018-03-15 06:33:11
End at: 2018-03-15 06:33:41
Local clock offset: -1.032 ms
Remote clock offset: 14.541 ms

# Below is generated by plot.py at 2018-03-15 14:26:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.22 Mbit/s
95th percentile per-packet one-way delay: 146.298 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 47.87 Mbit/s
95th percentile per-packet one-way delay: 144.205 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 146.882 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 25.63 Mbit/s
95th percentile per-packet one-way delay: 149.166 ms
Loss rate: 2.23%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-03-15 06:59:45
End at: 2018-03-15 07:00:15
Local clock offset: 0.86 ms
Remote clock offset: 55.331 ms

# Below is generated by plot.py at 2018-03-15 14:26:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.87 Mbit/s
  95th percentile per-packet one-way delay: 140.252 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 52.48 Mbit/s
  95th percentile per-packet one-way delay: 138.735 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 31.74 Mbit/s
  95th percentile per-packet one-way delay: 140.800 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 25.77 Mbit/s
  95th percentile per-packet one-way delay: 141.800 ms
  Loss rate: 2.10%
Run 4: Report of Vivace-loss — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 52.41 Mbps)  Flow 1 egress (mean 52.48 Mbps)
Flow 2 ingress (mean 31.76 Mbps)  Flow 2 egress (mean 31.74 Mbps)
Flow 3 ingress (mean 25.85 Mbps)  Flow 3 egress (mean 25.77 Mbps)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 138.74 ms)  Flow 2 (95th percentile 140.80 ms)
Flow 3 (95th percentile 141.80 ms)
Run 5: Statistics of Vivace-loss

Start at: 2018-03-15 07:26:25
End at: 2018-03-15 07:26:55
Local clock offset: 1.524 ms
Remote clock offset: 26.178 ms

# Below is generated by plot.py at 2018-03-15 14:26:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 141.070 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 140.801 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 41.82 Mbit/s
95th percentile per-packet one-way delay: 141.333 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 141.139 ms
Loss rate: 3.00%
Run 5: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 33.65 Mbit/s)
- Flow 1 egress (mean 33.61 Mbit/s)
- Flow 2 ingress (mean 41.89 Mbit/s)
- Flow 2 egress (mean 41.82 Mbit/s)
- Flow 3 ingress (mean 7.68 Mbit/s)
- Flow 3 egress (mean 7.56 Mbit/s)

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

- Flow 1 (95th percentile 140.80 ms)
- Flow 2 (95th percentile 141.33 ms)
- Flow 3 (95th percentile 141.14 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-03-15 07:51:18
End at: 2018-03-15 07:51:48
Local clock offset: 8.362 ms
Remote clock offset: 29.308 ms

# Below is generated by plot.py at 2018-03-15 14:26:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.97 Mbit/s
  95th percentile per-packet one-way delay: 161.781 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 53.65 Mbit/s
  95th percentile per-packet one-way delay: 158.070 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 30.46 Mbit/s
  95th percentile per-packet one-way delay: 162.618 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 25.04 Mbit/s
  95th percentile per-packet one-way delay: 156.343 ms
  Loss rate: 2.38%
Run 6: Report of Vivace-loss — Data Link
Run 7: Statistics of Vivace-loss

Start at: 2018-03-15 08:16:27
End at: 2018-03-15 08:16:57
Local clock offset: 11.159 ms
Remote clock offset: 53.532 ms

# Below is generated by plot.py at 2018-03-15 14:26:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.42 Mbit/s
95th percentile per-packet one-way delay: 145.818 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 50.90 Mbit/s
95th percentile per-packet one-way delay: 144.554 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 31.97 Mbit/s
95th percentile per-packet one-way delay: 146.086 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 25.61 Mbit/s
95th percentile per-packet one-way delay: 147.134 ms
Loss rate: 2.36%
Run 7: Report of Vivace-loss — Data Link

![Graph of network throughput and latency](image)

- Flow 1 ingress (mean 50.89 Mbit/s)
- Flow 1 egress (mean 50.90 Mbit/s)
- Flow 2 ingress (mean 32.00 Mbit/s)
- Flow 2 egress (mean 31.97 Mbit/s)
- Flow 3 ingress (mean 25.71 Mbit/s)
- Flow 3 egress (mean 25.61 Mbit/s)
Run 8: Statistics of Vivace-loss

Start at: 2018-03-15 08:42:52
End at: 2018-03-15 08:43:22
Local clock offset: 9.289 ms
Remote clock offset: 30.983 ms

# Below is generated by plot.py at 2018-03-15 14:26:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.50 Mbit/s
95th percentile per-packet one-way delay: 181.716 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 52.14 Mbit/s
95th percentile per-packet one-way delay: 180.955 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 181.961 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 24.84 Mbit/s
95th percentile per-packet one-way delay: 182.777 ms
Loss rate: 2.95%
Run 8: Report of Vivace-loss — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 52.21 Mbps)
- Flow 1 egress (mean 52.14 Mbps)
- Flow 2 ingress (mean 32.35 Mbps)
- Flow 2 egress (mean 32.18 Mbps)
- Flow 3 ingress (mean 25.06 Mbps)
- Flow 3 egress (mean 24.84 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 180.96 ms)
- Flow 2 (95th percentile 181.96 ms)
- Flow 3 (95th percentile 182.78 ms)

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Run 9: Statistics of Vivace-loss

Start at: 2018-03-15 09:07:35
End at: 2018-03-15 09:08:05
Local clock offset: -2.63 ms
Remote clock offset: 31.141 ms

# Below is generated by plot.py at 2018-03-15 14:26:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.61 Mbit/s
95th percentile per-packet one-way delay: 156.230 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 50.25 Mbit/s
95th percentile per-packet one-way delay: 151.281 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 159.562 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 163.019 ms
Loss rate: 6.18%
Run 9: Report of Vivace-loss — Data Link

![Data Link Throughput Graph](image1)

![Data Link Delay Graph](image2)

<table>
<thead>
<tr>
<th>Flow 1 ingress (mean 30.36 Mbit/s)</th>
<th>Flow 1 egress (mean 50.25 Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 2 ingress (mean 37.11 Mbit/s)</td>
<td>Flow 2 egress (mean 36.89 Mbit/s)</td>
</tr>
<tr>
<td>Flow 3 ingress (mean 6.11 Mbit/s)</td>
<td>Flow 3 egress (mean 5.84 Mbit/s)</td>
</tr>
</tbody>
</table>

| Flow 1 (95th percentile 151.28 ms) | Flow 2 (95th percentile 159.56 ms) | Flow 3 (95th percentile 163.02 ms) |

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Run 10: Statistics of Vivace-loss

Start at: 2018-03-15 09:34:25
End at: 2018-03-15 09:34:55
Local clock offset: 3.373 ms
Remote clock offset: 32.141 ms

# Below is generated by plot.py at 2018-03-15 14:27:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.77 Mbit/s
  95th percentile per-packet one-way delay: 134.723 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 50.93 Mbit/s
  95th percentile per-packet one-way delay: 133.672 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 32.63 Mbit/s
  95th percentile per-packet one-way delay: 135.088 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 25.23 Mbit/s
  95th percentile per-packet one-way delay: 136.319 ms
  Loss rate: 2.41%
Run 10: Report of Vivace-loss — Data Link

![Graphs showing network performance metrics over time.](image-url)
Run 1: Statistics of Vivace-LTE

Start at: 2018-03-15 05:36:29
End at: 2018-03-15 05:36:59
Local clock offset: 3.926 ms
Remote clock offset: 55.908 ms

# Below is generated by plot.py at 2018-03-15 14:27:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.18 Mbit/s
95th percentile per-packet one-way delay: 130.484 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 52.59 Mbit/s
95th percentile per-packet one-way delay: 129.268 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 29.71 Mbit/s
95th percentile per-packet one-way delay: 131.022 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 24.21 Mbit/s
95th percentile per-packet one-way delay: 132.147 ms
Loss rate: 2.09%
Run 1: Report of Vivace-LTE — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 52.58 Mbit/s) — Flow 1 egress (mean 52.59 Mbit/s)
Flow 2 ingress (mean 29.71 Mbit/s) — Flow 2 egress (mean 29.71 Mbit/s)
Flow 3 ingress (mean 24.35 Mbit/s) — Flow 3 egress (mean 24.21 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 129.27 ms) — Flow 2 (95th percentile 131.02 ms) — Flow 3 (95th percentile 132.15 ms)
Run 2: Statistics of Vivace-LTE

Start at: 2018-03-15 06:01:07
End at: 2018-03-15 06:01:37
Local clock offset: 0.957 ms
Remote clock offset: 33.958 ms

# Below is generated by plot.py at 2018-03-15 14:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.03 Mbit/s
95th percentile per-packet one-way delay: 142.487 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 52.46 Mbit/s
95th percentile per-packet one-way delay: 141.061 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 28.89 Mbit/s
95th percentile per-packet one-way delay: 149.935 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 22.81 Mbit/s
95th percentile per-packet one-way delay: 141.825 ms
Loss rate: 2.44%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-03-15 06:27:50
End at: 2018-03-15 06:28:20
Local clock offset: 2.668 ms
Remote clock offset: 19.274 ms

# Below is generated by plot.py at 2018-03-15 14:27:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.38 Mbit/s
95th percentile per-packet one-way delay: 141.250 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 48.28 Mbit/s
95th percentile per-packet one-way delay: 140.892 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 34.03 Mbit/s
95th percentile per-packet one-way delay: 141.652 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 4.69 Mbit/s
95th percentile per-packet one-way delay: 139.809 ms
Loss rate: 2.31%
Run 3: Report of Vivace-LTE — Data Link

![Graph showing throughput and delay over time for different flows]
Run 4: Statistics of Vivace-LTE

Start at: 2018-03-15 06:52:59
End at: 2018-03-15 06:53:29
Local clock offset: 0.754 ms
Remote clock offset: 33.096 ms

# Below is generated by plot.py at 2018-03-15 14:27:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.95 Mbit/s
  95th percentile per-packet one-way delay: 165.960 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 56.86 Mbit/s
  95th percentile per-packet one-way delay: 163.419 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 28.28 Mbit/s
  95th percentile per-packet one-way delay: 166.906 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 22.58 Mbit/s
  95th percentile per-packet one-way delay: 168.108 ms
  Loss rate: 2.44%
Run 4: Report of Vivace-LTE — Data Link

[Diagram: Throughput vs Time for different flows showing varying patterns and values.]

[Diagram: Per-packet one-way delay vs Time for different flows showing fluctuations.]

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Run 5: Statistics of Vivace-LTE

Start at: 2018-03-15 07:19:44
End at: 2018-03-15 07:20:14
Local clock offset: 1.555 ms
Remote clock offset: 40.921 ms

# Below is generated by plot.py at 2018-03-15 14:27:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 44.42 Mbit/s
  95th percentile per-packet one-way delay: 247.357 ms
  Loss rate: 2.62%
-- Flow 1:
  Average throughput: 20.04 Mbit/s
  95th percentile per-packet one-way delay: 245.147 ms
  Loss rate: 1.91%
-- Flow 2:
  Average throughput: 27.19 Mbit/s
  95th percentile per-packet one-way delay: 246.741 ms
  Loss rate: 2.94%
-- Flow 3:
  Average throughput: 19.58 Mbit/s
  95th percentile per-packet one-way delay: 249.728 ms
  Loss rate: 3.91%
Run 5: Report of Vivace-LTE — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 20.26 Mbps/s)
Flow 1 egress (mean 20.04 Mbps/s)
Flow 2 ingress (mean 27.72 Mbps/s)
Flow 2 egress (mean 27.19 Mbps/s)
Flow 3 ingress (mean 19.89 Mbps/s)
Flow 3 egress (mean 19.58 Mbps/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 245.15 ms)
Flow 2 (95th percentile 246.74 ms)
Flow 3 (95th percentile 249.73 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-03-15 07:45:56
End at: 2018-03-15 07:46:26
Local clock offset: 7.356 ms
Remote clock offset: 30.605 ms

# Below is generated by plot.py at 2018-03-15 14:27:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.69 Mbit/s
  95th percentile per-packet one-way delay: 121.484 ms
  Loss rate: 0.79%
-- Flow 1:
  Average throughput: 61.58 Mbit/s
  95th percentile per-packet one-way delay: 120.142 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 14.20 Mbit/s
  95th percentile per-packet one-way delay: 121.838 ms
  Loss rate: 1.31%
-- Flow 3:
  Average throughput: 26.63 Mbit/s
  95th percentile per-packet one-way delay: 123.096 ms
  Loss rate: 2.44%
Run 6: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress (mean 61.59 Mbit/s)**
- **Flow 1 egress (mean 61.58 Mbit/s)**
- **Flow 2 ingress (mean 14.29 Mbit/s)**
- **Flow 2 egress (mean 14.20 Mbit/s)**
- **Flow 3 ingress (mean 26.90 Mbit/s)**
- **Flow 3 egress (mean 26.63 Mbit/s)**
Run 7: Statistics of Vivace-LTE

Start at: 2018-03-15 08:10:44
End at: 2018-03-15 08:11:14
Local clock offset: 10.575 ms
Remote clock offset: 63.78 ms

# Below is generated by plot.py at 2018-03-15 14:28:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.68 Mbit/s
95th percentile per-packet one-way delay: 130.469 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 51.84 Mbit/s
95th percentile per-packet one-way delay: 129.449 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 32.08 Mbit/s
95th percentile per-packet one-way delay: 130.923 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 23.30 Mbit/s
95th percentile per-packet one-way delay: 131.733 ms
Loss rate: 2.42%
Run 7: Report of Vivace-LTE — Data Link

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

Throughput in Mbit/s:
- Flow 1 ingress (mean 51.82 Mbit/s)
- Flow 1 egress (mean 51.84 Mbit/s)
- Flow 2 ingress (mean 32.12 Mbit/s)
- Flow 2 egress (mean 32.08 Mbit/s)
- Flow 3 ingress (mean 23.54 Mbit/s)
- Flow 3 egress (mean 23.30 Mbit/s)

Packet delay in ms:
- Flow 1 (95th percentile 129.45 ms)
- Flow 2 (95th percentile 130.92 ms)
- Flow 3 (95th percentile 131.73 ms)
Run 8: Statistics of Vivace-LTE

Start at: 2018-03-15 08:37:31
End at: 2018-03-15 08:38:01
Local clock offset: 13.327 ms
Remote clock offset: 50.515 ms

# Below is generated by plot.py at 2018-03-15 14:28:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.18 Mbit/s
95th percentile per-packet one-way delay: 156.093 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 53.70 Mbit/s
95th percentile per-packet one-way delay: 144.264 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 157.452 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 23.92 Mbit/s
95th percentile per-packet one-way delay: 159.876 ms
Loss rate: 3.31%
Run 8: Report of Vivace-LTE — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 53.67 Mbps)
- Flow 1 egress (mean 53.70 Mbps)
- Flow 2 ingress (mean 31.35 Mbps)
- Flow 2 egress (mean 31.24 Mbps)
- Flow 3 ingress (mean 24.26 Mbps)
- Flow 3 egress (mean 23.92 Mbps)

Per-packet one way delay (ms):

- Flow 1 (95th percentile 144.26 ms)
- Flow 2 (95th percentile 157.45 ms)
- Flow 3 (95th percentile 159.88 ms)
Run 9: Statistics of Vivace-LTE

Start at: 2018-03-15 09:02:20
End at: 2018-03-15 09:02:50
Local clock offset: -1.462 ms
Remote clock offset: 35.809 ms

# Below is generated by plot.py at 2018-03-15 14:28:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.46 Mbit/s
  95th percentile per-packet one-way delay: 159.825 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 64.53 Mbit/s
  95th percentile per-packet one-way delay: 156.852 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 0.00 Mbit/s
  95th percentile per-packet one-way delay: 156.286 ms
  Loss rate: 3.75%
-- Flow 3:
  Average throughput: 24.30 Mbit/s
  95th percentile per-packet one-way delay: 170.187 ms
  Loss rate: 2.54%
Run 9: Report of Vivace-LTE — Data Link

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

- **Flow 1 Ingress** (mean 64.61 Mbps/s)
- **Flow 1 Egress** (mean 64.53 Mbps/s)
- **Flow 2 Ingress** (mean 0.00 Mbps/s)
- **Flow 2 Egress** (mean 0.00 Mbps/s)
- **Flow 3 Ingress** (mean 24.54 Mbps/s)
- **Flow 3 Egress** (mean 24.30 Mbps/s)

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

- **Flow 1 (95th percentile 156.85 ms)**
- **Flow 2 (95th percentile 156.29 ms)**
- **Flow 3 (95th percentile 170.19 ms)**

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Run 10: Statistics of Vivace-LTE

Start at: 2018-03-15 09:29:09
End at: 2018-03-15 09:29:39
Local clock offset: 2.215 ms
Remote clock offset: 27.567 ms

# Below is generated by plot.py at 2018-03-15 14:28:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.32 Mbit/s
95th percentile per-packet one-way delay: 138.325 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 52.33 Mbit/s
95th percentile per-packet one-way delay: 135.749 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 29.82 Mbit/s
95th percentile per-packet one-way delay: 139.257 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 141.612 ms
Loss rate: 1.63%
Run 10: Report of Vivace-LTE — Data Link

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

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