Pantheon Report

Generated at 2018-04-11 03:58:03 (UTC).
Data path: AWS California 2 Ethernet (local) → Mexico Ethernet (remote).
Repeated the test of 17 congestion control schemes 10 times. Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ eb420b5be9bafccd22cf68b99ff5a2000462fc59
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bf1dc797253db7e8ca04076272b2a44
third_party/genericCC @ 9249e3238475c4d8ca144328df70bb6c4a2
third_party/indigo @ a9b2060d39e4a2e2a8937e8993e3eca2a6c7cd0a9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f6d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0edcbbf90c77e6d4
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b4113ed5b540c0f350939528e2a5f
third_party/indigo-no-calib @ 7224f220e2a8a4d8306fa0b98ad84360c53d89
third_party/koho_cc @ f0f2e693303ae82ea808e6928eac4f1083a681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906c6bb7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013d2674ccfcf93
third_party/pcc @ 1afc958fa0d66d18b623c091a55f9ec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc81436ecb978f3c9f42
third_party/scram @ c3370fd7bd17265a99eb3b4016ead2f35965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2e6e6e088d91066a9f023df3757e6265089ce
M src/examples/cellsim.cc
M src/examples/sproutb22.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a6f66f5c4580192120401784ce3
third_party/webrtc @ f271183af822ee5d0031620f4bebf38aedd5581
test from AWS California 2 Ethernet to Mexico 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>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<tr>
<td>Vivace-latency</td>
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<td>48.34</td>
<td>24.81</td>
<td>10.64</td>
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<td>Vivace-loss</td>
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<td>59.74</td>
<td>23.86</td>
<td>18.75</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>62.97</td>
<td>24.71</td>
<td>11.21</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-10 22:34:58
End at: 2018-04-10 22:35:28
Local clock offset: 0.51 ms
Remote clock offset: -5.643 ms

# Below is generated by plot.py at 2018-04-11 03:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 64.527 ms
Loss rate: 5.39%
-- Flow 1:
Average throughput: 65.58 Mbit/s
95th percentile per-packet one-way delay: 63.639 ms
Loss rate: 4.53%
-- Flow 2:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: 64.947 ms
Loss rate: 6.86%
-- Flow 3:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 66.739 ms
Loss rate: 8.07%
Run 2: Statistics of TCP BBR

Start at: 2018-04-10 23:01:04
End at: 2018-04-10 23:01:34
Local clock offset: 1.069 ms
Remote clock offset: -4.959 ms

# Below is generated by plot.py at 2018-04-11 03:28:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: 64.853 ms
Loss rate: 6.88%
-- Flow 1:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 63.227 ms
Loss rate: 5.59%
-- Flow 2:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 66.087 ms
Loss rate: 8.65%
-- Flow 3:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 66.063 ms
Loss rate: 9.34%
Run 2: Report of TCP BBR — Data Link

![Graph of Throughput and Per-packet round trip delay versus time for different flows]

- **Flow 1**: Ingress (mean 59.40 Mbit/s), Egress (mean 56.05 Mbit/s)
- **Flow 2**: Ingress (mean 40.11 Mbit/s), Egress (mean 36.59 Mbit/s)
- **Flow 3**: Ingress (mean 35.80 Mbit/s), Egress (mean 32.36 Mbit/s)
Run 3: Statistics of TCP BBR

Start at: 2018-04-10 23:28:18
End at: 2018-04-10 23:28:48
Local clock offset: 1.124 ms
Remote clock offset: -4.076 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.71 Mbit/s
95th percentile per-packet one-way delay: 64.910 ms
Loss rate: 7.21%
-- Flow 1:
Average throughput: 53.15 Mbit/s
95th percentile per-packet one-way delay: 62.716 ms
Loss rate: 5.85%
-- Flow 2:
Average throughput: 45.12 Mbit/s
95th percentile per-packet one-way delay: 66.309 ms
Loss rate: 9.20%
-- Flow 3:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 66.393 ms
Loss rate: 8.04%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-04-10 23:56:06
End at: 2018-04-10 23:56:36
Local clock offset: 1.655 ms
Remote clock offset: -3.406 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.25 Mbit/s
95th percentile per-packet one-way delay: 68.488 ms
Loss rate: 6.99%
-- Flow 1:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 67.533 ms
Loss rate: 5.60%
-- Flow 2:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 69.239 ms
Loss rate: 8.64%
-- Flow 3:
Average throughput: 30.99 Mbit/s
95th percentile per-packet one-way delay: 69.786 ms
Loss rate: 10.72%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-04-11 00:25:41
End at: 2018-04-11 00:26:11
Local clock offset: 2.359 ms
Remote clock offset: -5.208 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.20 Mbit/s
95th percentile per-packet one-way delay: 65.812 ms
Loss rate: 6.05%
-- Flow 1:
Average throughput: 51.66 Mbit/s
95th percentile per-packet one-way delay: 65.224 ms
Loss rate: 4.95%
-- Flow 2:
Average throughput: 44.62 Mbit/s
95th percentile per-packet one-way delay: 67.087 ms
Loss rate: 7.52%
-- Flow 3:
Average throughput: 38.46 Mbit/s
95th percentile per-packet one-way delay: 62.277 ms
Loss rate: 6.93%
Run 5: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 54.38 Mbps)**
- **Flow 1 egress (mean 51.66 Mbps)**
- **Flow 2 ingress (mean 48.29 Mbps)**
- **Flow 2 egress (mean 44.62 Mbps)**
- **Flow 3 ingress (mean 41.40 Mbps)**
- **Flow 3 egress (mean 38.46 Mbps)**

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

- **Flow 1 (95th percentile 65.22 ms)**
- **Flow 2 (95th percentile 67.09 ms)**
- **Flow 3 (95th percentile 62.28 ms)**
Run 6: Statistics of TCP BBR

Start at: 2018-04-11 00:54:49
End at: 2018-04-11 00:55:19
Local clock offset: 1.51 ms
Remote clock offset: -0.453 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 65.789 ms
Loss rate: 7.91%
-- Flow 1:
Average throughput: 61.60 Mbit/s
95th percentile per-packet one-way delay: 64.802 ms
Loss rate: 6.37%
-- Flow 2:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 67.499 ms
Loss rate: 10.99%
-- Flow 3:
Average throughput: 33.27 Mbit/s
95th percentile per-packet one-way delay: 66.681 ms
Loss rate: 10.04%
Run 6: Report of TCP BBR — Data Link

![Graph showing throughput and round-trip delay for three flows over time.]
Run 7: Statistics of TCP BBR

Start at: 2018-04-11 01:21:33
End at: 2018-04-11 01:22:03
Local clock offset: 0.684 ms
Remote clock offset: 6.864 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.07 Mbit/s
95th percentile per-packet one-way delay: 66.399 ms
Loss rate: 6.78%
-- Flow 1:
Average throughput: 57.13 Mbit/s
95th percentile per-packet one-way delay: 64.668 ms
Loss rate: 5.34%
-- Flow 2:
Average throughput: 45.28 Mbit/s
95th percentile per-packet one-way delay: 67.897 ms
Loss rate: 9.12%
-- Flow 3:
Average throughput: 23.47 Mbit/s
95th percentile per-packet one-way delay: 67.091 ms
Loss rate: 7.91%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-04-11 01:47:26
End at: 2018-04-11 01:47:56
Local clock offset: 0.614 ms
Remote clock offset: 9.015 ms

# Below is generated by plot.py at 2018-04-11 03:28:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.48 Mbit/s
95th percentile per-packet one-way delay: 63.341 ms
Loss rate: 5.35%
-- Flow 1:
Average throughput: 50.28 Mbit/s
95th percentile per-packet one-way delay: 60.128 ms
Loss rate: 4.40%
-- Flow 2:
Average throughput: 41.77 Mbit/s
95th percentile per-packet one-way delay: 64.468 ms
Loss rate: 5.42%
-- Flow 3:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 65.857 ms
Loss rate: 8.60%
Run 9: Statistics of TCP BBR

Start at: 2018-04-11 02:14:52
End at: 2018-04-11 02:15:22
Local clock offset: 0.345 ms
Remote clock offset: 3.716 ms

# Below is generated by plot.py at 2018-04-11 03:29:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.79 Mbit/s
95th percentile per-packet one-way delay: 65.738 ms
Loss rate: 6.85%
-- Flow 1:
Average throughput: 59.24 Mbit/s
95th percentile per-packet one-way delay: 64.777 ms
Loss rate: 6.02%
-- Flow 2:
Average throughput: 35.84 Mbit/s
95th percentile per-packet one-way delay: 66.599 ms
Loss rate: 8.35%
-- Flow 3:
Average throughput: 29.17 Mbit/s
95th percentile per-packet one-way delay: 67.960 ms
Loss rate: 8.11%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-04-11 02:42:19
End at: 2018-04-11 02:42:49
Local clock offset: 0.265 ms
Remote clock offset: -10.367 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.12 Mbit/s
95th percentile per-packet one-way delay: 65.659 ms
Loss rate: 7.74%
-- Flow 1:
Average throughput: 55.56 Mbit/s
95th percentile per-packet one-way delay: 63.926 ms
Loss rate: 5.93%
-- Flow 2:
Average throughput: 45.92 Mbit/s
95th percentile per-packet one-way delay: 66.517 ms
Loss rate: 10.89%
-- Flow 3:
Average throughput: 24.06 Mbit/s
95th percentile per-packet one-way delay: 67.967 ms
Loss rate: 7.65%
Run 10: Report of TCP BBR — Data Link

[Graph showing throughput and per-packet end-to-end delay over time for different flows with specified mean values for ingress and egress.]
Run 1: Statistics of TCP Cubic

Start at: 2018-04-10 22:33:27
End at: 2018-04-10 22:33:57
Local clock offset: 0.534 ms
Remote clock offset: -5.439 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.10 Mbit/s
  95th percentile per-packet one-way delay: 61.447 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 62.53 Mbit/s
  95th percentile per-packet one-way delay: 61.440 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 35.25 Mbit/s
  95th percentile per-packet one-way delay: 61.616 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 24.37 Mbit/s
  95th percentile per-packet one-way delay: 51.532 ms
  Loss rate: 0.59%
Run 1: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 62.83 Mbit/s)
- Flow 1 egress (mean 62.53 Mbit/s)
- Flow 2 ingress (mean 35.57 Mbit/s)
- Flow 2 egress (mean 35.25 Mbit/s)
- Flow 3 ingress (mean 24.53 Mbit/s)
- Flow 3 egress (mean 24.37 Mbit/s)
Run 2: Statistics of TCP Cubic

Start at: 2018-04-10 22:59:39
End at: 2018-04-10 23:00:09
Local clock offset: 1.018 ms
Remote clock offset: -2.479 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.09 Mbit/s
95th percentile per-packet one-way delay: 61.670 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 40.10 Mbit/s
95th percentile per-packet one-way delay: 60.857 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 26.78 Mbit/s
95th percentile per-packet one-way delay: 64.574 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 61.143 ms
Loss rate: 1.03%
Run 3: Statistics of TCP Cubic

Start at: 2018-04-10 23:26:49
End at: 2018-04-10 23:27:19
Local clock offset: 1.025 ms
Remote clock offset: -4.093 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.25 Mbit/s
95th percentile per-packet one-way delay: 62.797 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 25.22 Mbit/s
95th percentile per-packet one-way delay: 59.463 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 64.244 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 29.96 Mbit/s
95th percentile per-packet one-way delay: 41.468 ms
Loss rate: 0.91%
Run 3: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 4: Statistics of TCP Cubic

Start at: 2018-04-10 23:54:39
End at: 2018-04-10 23:55:09
Local clock offset: 1.512 ms
Remote clock offset: -2.962 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
--- Total of 3 flows:
Average throughput: 53.49 Mbit/s
95th percentile per-packet one-way delay: 44.788 ms
Loss rate: 0.40%
--- Flow 1:
Average throughput: 28.01 Mbit/s
95th percentile per-packet one-way delay: 42.438 ms
Loss rate: 0.42%
--- Flow 2:
Average throughput: 25.04 Mbit/s
95th percentile per-packet one-way delay: 45.768 ms
Loss rate: 0.24%
--- Flow 3:
Average throughput: 26.54 Mbit/s
95th percentile per-packet one-way delay: 59.752 ms
Loss rate: 0.61%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 28.13 Mbit/s)
- Flow 1 egress (mean 28.01 Mbit/s)
- Flow 2 ingress (mean 25.10 Mbit/s)
- Flow 2 egress (mean 25.04 Mbit/s)
- Flow 3 ingress (mean 26.70 Mbit/s)
- Flow 3 egress (mean 26.54 Mbit/s)
Run 5: Statistics of TCP Cubic

Start at: 2018-04-11 00:24:08
End at: 2018-04-11 00:24:38
Local clock offset: 2.511 ms
Remote clock offset: -7.767 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.32 Mbit/s
95th percentile per-packet one-way delay: 48.386 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 27.09 Mbit/s
95th percentile per-packet one-way delay: 48.637 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 35.46 Mbit/s
95th percentile per-packet one-way delay: 49.806 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 38.03 Mbit/s
95th percentile per-packet one-way delay: 40.562 ms
Loss rate: 1.14%
Run 5: Report of TCP Cubic — Data Link

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

- **Flow 1** (ingress: 27.20 Mbit/s, egress: 27.09 Mbit/s)
- **Flow 2** (ingress: 35.70 Mbit/s, egress: 35.46 Mbit/s)
- **Flow 3** (ingress: 38.48 Mbit/s, egress: 38.03 Mbit/s)
Run 6: Statistics of TCP Cubic

Start at: 2018-04-11 00:53:19
End at: 2018-04-11 00:53:49
Local clock offset: 1.446 ms
Remote clock offset: -2.636 ms

# Below is generated by plot.py at 2018-04-11 03:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.38 Mbit/s
95th percentile per-packet one-way delay: 46.637 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 27.88 Mbit/s
95th percentile per-packet one-way delay: 38.694 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 30.16 Mbit/s
95th percentile per-packet one-way delay: 47.753 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 55.41 Mbit/s
95th percentile per-packet one-way delay: 48.847 ms
Loss rate: 0.81%
Run 7: Statistics of TCP Cubic

Start at: 2018-04-11 01:20:01
End at: 2018-04-11 01:20:31
Local clock offset: 0.716 ms
Remote clock offset: 7.105 ms

# Below is generated by plot.py at 2018-04-11 03:29:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.10 Mbit/s
95th percentile per-packet one-way delay: 52.019 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 26.57 Mbit/s
95th percentile per-packet one-way delay: 54.683 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 23.00 Mbit/s
95th percentile per-packet one-way delay: 36.520 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 57.94 Mbit/s
95th percentile per-packet one-way delay: 39.394 ms
Loss rate: 0.27%
Run 7: Report of TCP Cubic — Data Link

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

**Throughput (Mbit/s)**
- Flow 1 ingress (mean 26.78 Mbit/s)
- Flow 1 egress (mean 26.57 Mbit/s)
- Flow 2 ingress (mean 23.06 Mbit/s)
- Flow 2 egress (mean 23.00 Mbit/s)
- Flow 3 ingress (mean 56.11 Mbit/s)
- Flow 3 egress (mean 57.94 Mbit/s)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 54.68 ms)
- Flow 2 (95th percentile 36.52 ms)
- Flow 3 (95th percentile 39.39 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-04-11 01:45:50
End at: 2018-04-11 01:46:20
Local clock offset: 0.627 ms
Remote clock offset: 10.878 ms

# Below is generated by plot.py at 2018-04-11 03:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.34 Mbit/s
95th percentile per-packet one-way delay: 65.022 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 33.87 Mbit/s
95th percentile per-packet one-way delay: 63.847 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 45.35 Mbit/s
95th percentile per-packet one-way delay: 64.855 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 36.89 Mbit/s
95th percentile per-packet one-way delay: 66.229 ms
Loss rate: 0.36%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-04-11 02:13:30
End at: 2018-04-11 02:14:00
Local clock offset: 0.444 ms
Remote clock offset: 5.267 ms

# Below is generated by plot.py at 2018-04-11 03:30:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 41.70 Mbit/s
  95th percentile per-packet one-way delay: 47.198 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 21.77 Mbit/s
  95th percentile per-packet one-way delay: 51.639 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 19.46 Mbit/s
  95th percentile per-packet one-way delay: 39.503 ms
  Loss rate: 0.75%
-- Flow 3:
  Average throughput: 21.04 Mbit/s
  95th percentile per-packet one-way delay: 48.180 ms
  Loss rate: 0.48%
Run 9: Report of TCP Cubic — Data Link

**Graph 1:**
Throughput (Mbps) vs. Time (s)
- **Flow 1 ingress (mean 21.82 Mbps)**
- **Flow 1 egress (mean 21.77 Mbps)**
- **Flow 2 ingress (mean 19.61 Mbps)**
- **Flow 2 egress (mean 19.46 Mbps)**
- **Flow 3 ingress (mean 21.14 Mbps)**
- **Flow 3 egress (mean 21.04 Mbps)**

**Graph 2:**
Per-packet one-way delay (ms) vs. Time (s)
- **Flow 1 (95th percentile 51.64 ms)**
- **Flow 2 (95th percentile 39.50 ms)**
- **Flow 3 (95th percentile 48.18 ms)**
Run 10: Statistics of TCP Cubic

Start at: 2018-04-11 02:40:54
End at: 2018-04-11 02:41:24
Local clock offset: 0.122 ms
Remote clock offset: -10.164 ms

# Below is generated by plot.py at 2018-04-11 03:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.97 Mbit/s
95th percentile per-packet one-way delay: 34.703 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 14.81 Mbit/s
95th percentile per-packet one-way delay: 32.853 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 35.923 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 20.30 Mbit/s
95th percentile per-packet one-way delay: 32.979 ms
Loss rate: 0.11%
Run 10: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 14.84 Mbps/s)
  - Flow 1 egress (mean 14.81 Mbps/s)
  - Flow 2 ingress (mean 33.78 Mbps/s)
  - Flow 2 egress (mean 33.67 Mbps/s)
  - Flow 3 ingress (mean 20.32 Mbps/s)
  - Flow 3 egress (mean 20.30 Mbps/s)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 32.85 ms)
  - Flow 2 (95th percentile 35.92 ms)
  - Flow 3 (95th percentile 32.98 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-04-10 22:32:03
End at: 2018-04-10 22:32:33
Local clock offset: 0.411 ms
Remote clock offset: -2.84 ms

# Below is generated by plot.py at 2018-04-11 03:30:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.85 Mbit/s
95th percentile per-packet one-way delay: 49.339 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 48.619 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 21.21 Mbit/s
95th percentile per-packet one-way delay: 51.071 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 12.85 Mbit/s
95th percentile per-packet one-way delay: 47.575 ms
Loss rate: 0.29%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-04-10 22:58:15
End at: 2018-04-10 22:58:45
Local clock offset: 0.906 ms
Remote clock offset: -5.071 ms

# Below is generated by plot.py at 2018-04-11 03:30:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.71 Mbit/s
95th percentile per-packet one-way delay: 40.218 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 31.71 Mbit/s
95th percentile per-packet one-way delay: 38.891 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 23.43 Mbit/s
95th percentile per-packet one-way delay: 41.651 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 13.27 Mbit/s
95th percentile per-packet one-way delay: 41.511 ms
Loss rate: 0.31%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time for different flows.]
Run 3: Statistics of LEDBAT

Start at: 2018-04-10 23:25:21
End at: 2018-04-10 23:25:51
Local clock offset: 1.129 ms
Remote clock offset: -1.692 ms

# Below is generated by plot.py at 2018-04-11 03:30:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 33.827 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 18.88 Mbit/s
95th percentile per-packet one-way delay: 33.859 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 33.474 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 16.65 Mbit/s
95th percentile per-packet one-way delay: 34.337 ms
Loss rate: 0.11%
Run 3: Report of LEDBAT — Data Link

- [Graph 1: Throughput (Mbps) vs Time (s)]
  - Blue dashed line: Flow 1 ingress (mean 18.94 Mbps/s)
  - Blue solid line: Flow 1 egress (mean 18.88 Mbps/s)
  - Green dashed line: Flow 2 ingress (mean 18.87 Mbps/s)
  - Green solid line: Flow 2 egress (mean 18.81 Mbps/s)
  - Red dashed line: Flow 3 ingress (mean 16.67 Mbps/s)
  - Red solid line: Flow 3 egress (mean 16.65 Mbps/s)

- [Graph 2: Per-packet one way delay (ms) vs Time (s)]
  - Circles: Flow 1 (95th percentile 33.86 ms)
  - Squares: Flow 2 (95th percentile 33.47 ms)
  - Triangles: Flow 3 (95th percentile 34.34 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-04-10 23:53:10
End at: 2018-04-10 23:53:40
Local clock offset: 1.475 ms
Remote clock offset: -4.407 ms

# Below is generated by plot.py at 2018-04-11 03:30:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 45.14 Mbit/s
  95th percentile per-packet one-way delay: 37.605 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 23.15 Mbit/s
  95th percentile per-packet one-way delay: 36.624 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 23.98 Mbit/s
  95th percentile per-packet one-way delay: 37.686 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 18.17 Mbit/s
  95th percentile per-packet one-way delay: 38.927 ms
  Loss rate: 0.02%
Run 4: Report of LEDBAT — Data Link

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Throughput (Mbps):

- **Flow 1 ingress** (mean 23.19 Mbps)
- **Flow 1 egress** (mean 23.15 Mbps)
- **Flow 2 ingress** (mean 24.01 Mbps)
- **Flow 2 egress** (mean 23.98 Mbps)
- **Flow 3 ingress** (mean 18.19 Mbps)
- **Flow 3 egress** (mean 16.17 Mbps)

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Per packet one way delay (ms):

- **Flow 1** (95th percentile 36.62 ms)
- **Flow 2** (95th percentile 37.69 ms)
- **Flow 3** (95th percentile 38.93 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-04-11 00:22:38
End at: 2018-04-11 00:23:08
Local clock offset: 2.44 ms
Remote clock offset: -5.647 ms

# Below is generated by plot.py at 2018-04-11 03:30:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 41.77 Mbit/s
  95th percentile per-packet one-way delay: 49.388 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 25.42 Mbit/s
  95th percentile per-packet one-way delay: 47.466 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 15.81 Mbit/s
  95th percentile per-packet one-way delay: 49.925 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 17.53 Mbit/s
  95th percentile per-packet one-way delay: 51.197 ms
  Loss rate: 0.03%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-04-11 00:51:49
End at: 2018-04-11 00:52:19
Local clock offset: 1.384 ms
Remote clock offset: -0.75 ms

# Below is generated by plot.py at 2018-04-11 03:30:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 33.40 Mbit/s
95th percentile per-packet one-way delay: 34.236 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 17.69 Mbit/s
95th percentile per-packet one-way delay: 33.686 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 15.96 Mbit/s
95th percentile per-packet one-way delay: 35.360 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 15.35 Mbit/s
95th percentile per-packet one-way delay: 34.016 ms
Loss rate: 0.15%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-04-11 01:18:25
End at: 2018-04-11 01:18:55
Local clock offset: 0.796 ms
Remote clock offset: 4.146 ms

# Below is generated by plot.py at 2018-04-11 03:30:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.56 Mbit/s
  95th percentile per-packet one-way delay: 34.139 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 31.70 Mbit/s
  95th percentile per-packet one-way delay: 32.602 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 24.86 Mbit/s
  95th percentile per-packet one-way delay: 34.867 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 16.07 Mbit/s
  95th percentile per-packet one-way delay: 36.815 ms
  Loss rate: 0.10%
Run 7: Report of LEDBAT — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 31.71 Mbit/s)
Flow 1 egress (mean 31.70 Mbit/s)
Flow 2 ingress (mean 24.87 Mbit/s)
Flow 2 egress (mean 24.86 Mbit/s)
Flow 3 ingress (mean 16.09 Mbit/s)
Flow 3 egress (mean 16.07 Mbit/s)

Per packet one-way delay (ms)

Flow 1 (95th percentile 32.60 ms)
Flow 2 (95th percentile 34.87 ms)
Flow 3 (95th percentile 36.81 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-04-11 01:44:25
End at: 2018-04-11 01:44:55
Local clock offset: 0.542 ms
Remote clock offset: 11.142 ms

# Below is generated by plot.py at 2018-04-11 03:30:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 46.86 Mbit/s
  95th percentile per-packet one-way delay: 46.980 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 26.95 Mbit/s
  95th percentile per-packet one-way delay: 46.734 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 21.00 Mbit/s
  95th percentile per-packet one-way delay: 49.050 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 17.90 Mbit/s
  95th percentile per-packet one-way delay: 37.635 ms
  Loss rate: 0.07%

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Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-04-11 02:12:09
End at: 2018-04-11 02:12:39
Local clock offset: 0.487 ms
Remote clock offset: 7.117 ms

# Below is generated by plot.py at 2018-04-11 03:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.56 Mbit/s
95th percentile per-packet one-way delay: 36.891 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 17.12 Mbit/s
95th percentile per-packet one-way delay: 36.742 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 30.342 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.41 Mbit/s
95th percentile per-packet one-way delay: 37.864 ms
Loss rate: 0.43%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-04-11 02:39:29
End at: 2018-04-11 02:39:59
Local clock offset: 0.138 ms
Remote clock offset: -7.771 ms

# Below is generated by plot.py at 2018-04-11 03:30:53

# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.45 Mbit/s
95th percentile per-packet one-way delay: 34.980 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 25.33 Mbit/s
95th percentile per-packet one-way delay: 34.555 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 16.03 Mbit/s
95th percentile per-packet one-way delay: 35.576 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 36.503 ms
Loss rate: 0.47%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Local clock offset: 0.603 ms
Remote clock offset: -5.906 ms

# Below is generated by plot.py at 2018-04-11 03:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 57.520 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 81.22 Mbit/s
95th percentile per-packet one-way delay: 57.529 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 60.458 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 8.11 Mbit/s
95th percentile per-packet one-way delay: 49.533 ms
Loss rate: 1.38%
Run 1: Report of PCC — Data Link

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

- Flow 1 ingress (mean 82.54 Mbps)
- Flow 1 egress (mean 81.22 Mbps)
- Flow 2 ingress (mean 8.57 Mbps)
- Flow 2 egress (mean 8.75 Mbps)
- Flow 3 ingress (mean 8.23 Mbps)
- Flow 3 egress (mean 8.11 Mbps)

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

- Flow 1 (95th percentile 57.53 ms)
- Flow 2 (95th percentile 60.46 ms)
- Flow 3 (95th percentile 49.53 ms)
Run 2: Statistics of PCC

Start at: 2018-04-10 23:08:34
End at: 2018-04-10 23:09:04
Local clock offset: 1.139 ms
Remote clock offset: -3.065 ms

# Below is generated by plot.py at 2018-04-11 03:31:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.34 Mbit/s
95th percentile per-packet one-way delay: 65.069 ms
Loss rate: 2.22%
-- Flow 1:
Average throughput: 82.72 Mbit/s
95th percentile per-packet one-way delay: 64.577 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 8.43 Mbit/s
95th percentile per-packet one-way delay: 67.387 ms
Loss rate: 2.49%
-- Flow 3:
Average throughput: 9.14 Mbit/s
95th percentile per-packet one-way delay: 68.607 ms
Loss rate: 1.08%
Run 2: Report of PCC — Data Link

![Graph of data link throughput and packet delay](image-url)
Run 3: Statistics of PCC

Start at: 2018-04-10 23:36:06
End at: 2018-04-10 23:36:36
Local clock offset: 1.195 ms
Remote clock offset: -3.864 ms

# Below is generated by plot.py at 2018-04-11 03:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.57 Mbit/s
95th percentile per-packet one-way delay: 59.437 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 78.45 Mbit/s
95th percentile per-packet one-way delay: 59.031 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 12.59 Mbit/s
95th percentile per-packet one-way delay: 60.493 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 8.35 Mbit/s
95th percentile per-packet one-way delay: 61.952 ms
Loss rate: 2.10%
Run 3: Report of PCC — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet end-to-end delay (ms)]
Run 4: Statistics of PCC

Start at: 2018-04-11 00:04:06
End at: 2018-04-11 00:04:36
Local clock offset: 1.959 ms
Remote clock offset: -7.045 ms

# Below is generated by plot.py at 2018-04-11 03:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.03 Mbit/s
95th percentile per-packet one-way delay: 65.744 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 60.54 Mbit/s
95th percentile per-packet one-way delay: 64.851 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 33.20 Mbit/s
95th percentile per-packet one-way delay: 66.647 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 4.29 Mbit/s
95th percentile per-packet one-way delay: 67.115 ms
Loss rate: 1.21%
Run 4: Report of PCC — Data Link
Run 5: Statistics of PCC

Start at: 2018-04-11 00:34:00
End at: 2018-04-11 00:34:30
Local clock offset: 1.682 ms
Remote clock offset: -3.262 ms

# Below is generated by plot.py at 2018-04-11 03:31:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.71 Mbit/s
  95th percentile per-packet one-way delay: 38.299 ms
  Loss rate: 1.16%
-- Flow 1:
  Average throughput: 80.17 Mbit/s
  95th percentile per-packet one-way delay: 38.202 ms
  Loss rate: 1.15%
-- Flow 2:
  Average throughput: 2.63 Mbit/s
  95th percentile per-packet one-way delay: 38.951 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 8.58 Mbit/s
  95th percentile per-packet one-way delay: 55.034 ms
  Loss rate: 1.65%
Run 5: Report of PCC — Data Link

![Graph showing network traffic over time for different flows. The graph includes two sub-plots: one for throughput (Mbit/s) and the other for per-packet one-way delay (ms). Each plot has multiple lines indicating different flows with their respective mean throughput and 95th percentile delay.](image-url)
Run 6: Statistics of PCC

Start at: 2018-04-11 01:02:29
End at: 2018-04-11 01:02:59
Local clock offset: 1.263 ms
Remote clock offset: 2.023 ms

# Below is generated by plot.py at 2018-04-11 03:32:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.48 Mbit/s
95th percentile per-packet one-way delay: 65.948 ms
Loss rate: 2.72%
-- Flow 1:
Average throughput: 79.47 Mbit/s
95th percentile per-packet one-way delay: 65.661 ms
Loss rate: 2.64%
-- Flow 2:
Average throughput: 9.76 Mbit/s
95th percentile per-packet one-way delay: 66.900 ms
Loss rate: 2.98%
-- Flow 3:
Average throughput: 7.67 Mbit/s
95th percentile per-packet one-way delay: 68.071 ms
Loss rate: 4.30%
Run 6: Report of PCC — Data Link

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

- **Flow 1 ingress** (mean 81.63 Mbit/s)
- **Flow 1 egress** (mean 79.47 Mbit/s)
- **Flow 2 ingress** (mean 10.03 Mbit/s)
- **Flow 2 egress** (mean 9.76 Mbit/s)
- **Flow 3 ingress** (mean 8.01 Mbit/s)
- **Flow 3 egress** (mean 7.67 Mbit/s)

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

- **Flow 1** (95th percentile 65.66 ms)
- **Flow 2** (95th percentile 66.90 ms)
- **Flow 3** (95th percentile 66.07 ms)
Run 7: Statistics of PCC

Start at: 2018-04-11 01:28:52
End at: 2018-04-11 01:29:22
Local clock offset: 0.642 ms
Remote clock offset: 8.639 ms

# Below is generated by plot.py at 2018-04-11 03:32:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.68 Mbit/s
95th percentile per-packet one-way delay: 65.611 ms
Loss rate: 3.14%
-- Flow 1:
Average throughput: 81.79 Mbit/s
95th percentile per-packet one-way delay: 65.583 ms
Loss rate: 3.21%
-- Flow 2:
Average throughput: 8.47 Mbit/s
95th percentile per-packet one-way delay: 66.173 ms
Loss rate: 3.62%
-- Flow 3:
Average throughput: 9.89 Mbit/s
95th percentile per-packet one-way delay: 64.802 ms
Loss rate: 0.37%
Run 7: Report of PCC — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per_packet_one_way_delay (ms)]
Run 8: Statistics of PCC

End at: 2018-04-11 01:55:58
Local clock offset: 0.544 ms
Remote clock offset: 12.453 ms

# Below is generated by plot.py at 2018-04-11 03:32:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.09 Mbit/s
95th percentile per-packet one-way delay: 66.603 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 33.39 Mbit/s
95th percentile per-packet one-way delay: 65.430 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 57.65 Mbit/s
95th percentile per-packet one-way delay: 66.734 ms
Loss rate: 2.72%
-- Flow 3:
Average throughput: 4.18 Mbit/s
95th percentile per-packet one-way delay: 68.627 ms
Loss rate: 1.09%
Run 8: Report of PCC — Data Link

![Graph 1: Throughput (Mbps)]

- Blue dashed line: Flow 1 ingress (mean 33.74 Mbps)
- Blue solid line: Flow 1 egress (mean 33.39 Mbps)
- Green dashed line: Flow 2 ingress (mean 59.28 Mbps)
- Green solid line: Flow 2 egress (mean 57.65 Mbps)
- Red dashed line: Flow 3 ingress (mean 4.22 Mbps)
- Red solid line: Flow 3 egress (mean 4.18 Mbps)

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

- Blue circles: Flow 1 (95th percentile 65.43 ms)
- Green circles: Flow 2 (95th percentile 66.73 ms)
- Red circles: Flow 3 (95th percentile 68.63 ms)
Run 9: Statistics of PCC

Start at: 2018-04-11 02:22:42
End at: 2018-04-11 02:23:12
Local clock offset: 0.257 ms
Remote clock offset: -4.463 ms

# Below is generated by plot.py at 2018-04-11 03:33:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.23 Mbit/s
95th percentile per-packet one-way delay: 36.774 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 69.90 Mbit/s
95th percentile per-packet one-way delay: 36.727 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 17.90 Mbit/s
95th percentile per-packet one-way delay: 37.107 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 37.332 ms
Loss rate: 1.10%
Run 9: Report of PCC — Data Link

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

- Flow 1 ingress (mean 71.08 Mbit/s)
- Flow 1 egress (mean 69.90 Mbit/s)
- Flow 2 ingress (mean 18.10 Mbit/s)
- Flow 2 egress (mean 17.90 Mbit/s)
- Flow 3 ingress (mean 4.37 Mbit/s)
- Flow 3 egress (mean 4.32 Mbit/s)

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

- Flow 1 (95th percentile 36.73 ms)
- Flow 2 (95th percentile 37.11 ms)
- Flow 3 (95th percentile 37.33 ms)
Run 10: Statistics of PCC

Start at: 2018-04-11 02:49:46  
End at: 2018-04-11 02:50:16  
Local clock offset: 0.614 ms  
Remote clock offset: -5.788 ms

# Below is generated by plot.py at 2018-04-11 03:33:10  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 72.86 Mbit/s  
95th percentile per-packet one-way delay: 58.573 ms  
Loss rate: 1.94%  
-- Flow 1:  
Average throughput: 48.37 Mbit/s  
95th percentile per-packet one-way delay: 57.769 ms  
Loss rate: 1.56%  
-- Flow 2:  
Average throughput: 33.01 Mbit/s  
95th percentile per-packet one-way delay: 60.083 ms  
Loss rate: 2.51%  
-- Flow 3:  
Average throughput: 7.73 Mbit/s  
95th percentile per-packet one-way delay: 66.455 ms  
Loss rate: 4.12%
Run 10: Report of PCC — Data Link

![Graph of network performance metrics over time]

- **Flow 1 Ingress** (mean 49.14 Mbit/s)
- **Flow 1 Egress** (mean 48.37 Mbit/s)
- **Flow 2 Ingress** (mean 33.86 Mbit/s)
- **Flow 2 Egress** (mean 33.01 Mbit/s)
- **Flow 3 Ingress** (mean 8.03 Mbit/s)
- **Flow 3 Egress** (mean 7.73 Mbit/s)

![Graph of packet loss over time]

- **Flow 1** (95th percentile 57.77 ms)
- **Flow 2** (95th percentile 60.08 ms)
- **Flow 3** (95th percentile 66.45 ms)

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Run 1: Statistics of QUIC Cubic

Start at: 2018-04-10 22:40:46
End at: 2018-04-10 22:41:16
Local clock offset: 0.485 ms
Remote clock offset: -3.781 ms

# Below is generated by plot.py at 2018-04-11 03:33:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 77.20 Mbit/s
  95th percentile per-packet one-way delay: 64.053 ms
  Loss rate: 1.53%
-- Flow 1:
  Average throughput: 40.07 Mbit/s
  95th percentile per-packet one-way delay: 63.235 ms
  Loss rate: 1.97%
-- Flow 2:
  Average throughput: 40.52 Mbit/s
  95th percentile per-packet one-way delay: 63.366 ms
  Loss rate: 1.10%
-- Flow 3:
  Average throughput: 31.07 Mbit/s
  95th percentile per-packet one-way delay: 66.113 ms
  Loss rate: 0.89%
Run 1: Report of QUIC Cubic — Data Link

Graphs showing throughput and per-packet one-way delay over time for different flows.
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-10 23:07:07
End at: 2018-04-10 23:07:37
Local clock offset: 1.113 ms
Remote clock offset: -5.107 ms

# Below is generated by plot.py at 2018-04-11 03:33:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.42 Mbit/s
95th percentile per-packet one-way delay: 64.355 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 35.34 Mbit/s
95th percentile per-packet one-way delay: 62.814 ms
Loss rate: 1.93%
-- Flow 2:
Average throughput: 43.48 Mbit/s
95th percentile per-packet one-way delay: 64.494 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 65.109 ms
Loss rate: 0.82%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-10 23:34:35
End at: 2018-04-10 23:35:05
Local clock offset: 1.162 ms
Remote clock offset: -1.784 ms

# Below is generated by plot.py at 2018-04-11 03:33:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.66 Mbit/s
  95th percentile per-packet one-way delay: 62.958 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 50.17 Mbit/s
  95th percentile per-packet one-way delay: 60.788 ms
  Loss rate: 1.10%
-- Flow 2:
  Average throughput: 31.45 Mbit/s
  95th percentile per-packet one-way delay: 63.754 ms
  Loss rate: 0.44%
-- Flow 3:
  Average throughput: 29.24 Mbit/s
  95th percentile per-packet one-way delay: 65.937 ms
  Loss rate: 0.58%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-04-11 00:02:29
End at: 2018-04-11 00:02:59
Local clock offset: 1.928 ms
Remote clock offset: -6.78 ms

# Below is generated by plot.py at 2018-04-11 03:33:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.30 Mbit/s
  95th percentile per-packet one-way delay: 62.164 ms
  Loss rate: 1.38%
-- Flow 1:
  Average throughput: 31.58 Mbit/s
  95th percentile per-packet one-way delay: 53.611 ms
  Loss rate: 1.03%
-- Flow 2:
  Average throughput: 45.19 Mbit/s
  95th percentile per-packet one-way delay: 63.229 ms
  Loss rate: 2.07%
-- Flow 3:
  Average throughput: 29.51 Mbit/s
  95th percentile per-packet one-way delay: 53.643 ms
  Loss rate: 0.30%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-11 00:32:27
End at: 2018-04-11 00:32:57
Local clock offset: 1.735 ms
Remote clock offset: -3.582 ms

# Below is generated by plot.py at 2018-04-11 03:33:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 66.364 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 47.16 Mbit/s
95th percentile per-packet one-way delay: 66.260 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 66.978 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 65.645 ms
Loss rate: 0.76%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-11 01:01:01
End at: 2018-04-11 01:01:31
Local clock offset: 1.255 ms
Remote clock offset: -1.331 ms

# Below is generated by plot.py at 2018-04-11 03:33:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 75.60 Mbit/s
  95th percentile per-packet one-way delay: 61.699 ms
  Loss rate: 1.49%
-- Flow 1:
  Average throughput: 33.98 Mbit/s
  95th percentile per-packet one-way delay: 61.738 ms
  Loss rate: 1.17%
-- Flow 2:
  Average throughput: 51.15 Mbit/s
  95th percentile per-packet one-way delay: 62.010 ms
  Loss rate: 1.91%
-- Flow 3:
  Average throughput: 23.28 Mbit/s
  95th percentile per-packet one-way delay: 60.039 ms
  Loss rate: 1.01%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-11 01:27:29
End at: 2018-04-11 01:27:59
Local clock offset: 0.648 ms
Remote clock offset: 7.928 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.68 Mbit/s
  95th percentile per-packet one-way delay: 60.165 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 59.41 Mbit/s
  95th percentile per-packet one-way delay: 60.029 ms
  Loss rate: 1.12%
-- Flow 2:
  Average throughput: 26.32 Mbit/s
  95th percentile per-packet one-way delay: 60.384 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 20.64 Mbit/s
  95th percentile per-packet one-way delay: 60.215 ms
  Loss rate: 0.11%
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 60.09 Mbps)
- Flow 1 egress (mean 59.41 Mbps)
- Flow 2 ingress (mean 26.62 Mbps)
- Flow 2 egress (mean 26.32 Mbps)
- Flow 3 ingress (mean 20.67 Mbps)
- Flow 3 egress (mean 20.64 Mbps)

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

- Flow 1 (95th percentile 60.03 ms)
- Flow 2 (95th percentile 60.38 ms)
- Flow 3 (95th percentile 60.22 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-11 01:53:52
End at: 2018-04-11 01:54:22
Local clock offset: 0.477 ms
Remote clock offset: 9.955 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.41 Mbit/s
95th percentile per-packet one-way delay: 55.376 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 39.71 Mbit/s
95th percentile per-packet one-way delay: 54.514 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 42.77 Mbit/s
95th percentile per-packet one-way delay: 56.720 ms
Loss rate: 1.97%
-- Flow 3:
Average throughput: 16.12 Mbit/s
95th percentile per-packet one-way delay: 41.369 ms
Loss rate: 0.23%
Run 8: Report of QUIC Cubic — Data Link

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 40.12 Mbit/s)
- Flow 2 ingress (mean 43.63 Mbit/s)
- Flow 3 ingress (mean 16.13 Mbit/s)
- Flow 1 egress (mean 39.71 Mbit/s)
- Flow 2 egress (mean 42.77 Mbit/s)
- Flow 3 egress (mean 16.12 Mbit/s)

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

- Flow 1 (95th percentile 54.51 ms)
- Flow 2 (95th percentile 56.72 ms)
- Flow 3 (95th percentile 41.37 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-11 02:21:07
End at: 2018-04-11 02:21:37
Local clock offset: 0.303 ms
Remote clock offset: -1.037 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.56 Mbit/s
95th percentile per-packet one-way delay: 63.666 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 32.62 Mbit/s
95th percentile per-packet one-way delay: 51.653 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 43.47 Mbit/s
95th percentile per-packet one-way delay: 64.868 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 30.61 Mbit/s
95th percentile per-packet one-way delay: 66.655 ms
Loss rate: 0.84%
Run 9: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 32.89 Mbps)
- Flow 1 egress (mean 32.62 Mbps)
- Flow 2 ingress (mean 44.04 Mbps)
- Flow 2 egress (mean 43.47 Mbps)
- Flow 3 ingress (mean 30.86 Mbps)
- Flow 3 egress (mean 30.61 Mbps)

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

- Flow 1 (95th percentile 51.65 ms)
- Flow 2 (95th percentile 64.87 ms)
- Flow 3 (95th percentile 66.66 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-11 02:48:15
End at: 2018-04-11 02:48:45
Local clock offset: 0.45 ms
Remote clock offset: -5.599 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.34 Mbit/s
95th percentile per-packet one-way delay: 51.419 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 42.78 Mbit/s
95th percentile per-packet one-way delay: 47.759 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 34.10 Mbit/s
95th percentile per-packet one-way delay: 51.698 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 27.03 Mbit/s
95th percentile per-packet one-way delay: 58.465 ms
Loss rate: 1.07%
Run 10: Report of QUIC Cubic — Data Link

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

Flow 1 ingress (mean 43.00 Mbit/s)
Flow 1 egress (mean 42.78 Mbit/s)
Flow 2 ingress (mean 34.23 Mbit/s)
Flow 2 egress (mean 34.30 Mbit/s)
Flow 3 ingress (mean 27.33 Mbit/s)
Flow 3 egress (mean 27.03 Mbit/s)

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

Flow 1 (95th percentile 47.76 ms)
Flow 2 (95th percentile 51.70 ms)
Flow 3 (95th percentile 58.47 ms)
Run 1: Statistics of SCReAM

Start at: 2018-04-10 22:30:44
End at: 2018-04-10 22:31:14
Local clock offset: 0.423 ms
Remote clock offset: -3.244 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 29.995 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.006 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.982 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.986 ms
Loss rate: 0.41%
Run 1: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)
- Flow 2 ingress (mean 0.21 Mbit/s)
- Flow 2 egress (mean 0.21 Mbit/s)
- Flow 3 ingress (mean 0.21 Mbit/s)
- Flow 3 egress (mean 0.21 Mbit/s)

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

- Flow 1 (95th percentile 30.01 ms)
- Flow 2 (95th percentile 29.98 ms)
- Flow 3 (95th percentile 29.99 ms)
Run 2: Statistics of SCReAM

Start at: 2018-04-10 22:56:57
End at: 2018-04-10 22:57:27
Local clock offset: 0.984 ms
Remote clock offset: -3.026 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.34 Mbit/s
95th percentile per-packet one-way delay: 30.440 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 29.835 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 29.776 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 30.626 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.13 Mbps)
Flow 1 egress (mean 0.13 Mbps)
Flow 2 ingress (mean 0.21 Mbps)
Flow 2 egress (mean 0.21 Mbps)
Flow 3 ingress (mean 0.22 Mbps)
Flow 3 egress (mean 0.22 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 29.84 ms)
Flow 2 (95th percentile 29.78 ms)
Flow 3 (95th percentile 30.63 ms)
Run 3: Statistics of SCReAM

Start at: 2018-04-10 23:24:03
End at: 2018-04-10 23:24:33
Local clock offset: 1.059 ms
Remote clock offset: -4.397 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.35 Mbit/s
95th percentile per-packet one-way delay: 28.459 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 28.471 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 28.462 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 27.852 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-04-10 23:51:51
End at: 2018-04-10 23:52:21
Local clock offset: 1.459 ms
Remote clock offset: -3.925 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 28.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 28.126 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 28.124 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 28.845 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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

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Run 5: Statistics of SCReAM

Start at: 2018-04-11 00:21:19
End at: 2018-04-11 00:21:49
Local clock offset: 2.334 ms
Remote clock offset: -7.752 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 27.902 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 27.901 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 27.900 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 27.904 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

![Graph showing network performance metrics]

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 0.21 Mbps)
- Flow 1 egress (mean 0.21 Mbps)
- Flow 2 ingress (mean 0.21 Mbps)
- Flow 2 egress (mean 0.21 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

Graph 2: Per packet one way delay (ms)
- Flow 1 (95th percentile 27.90 ms)
- Flow 2 (95th percentile 27.90 ms)
- Flow 3 (95th percentile 27.90 ms)
Run 6: Statistics of SCReAM

Start at: 2018-04-11 00:50:31
End at: 2018-04-11 00:51:01
Local clock offset: 1.504 ms
Remote clock offset: -0.869 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 30.871 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 30.526 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.145 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.759 ms
Loss rate: 0.50%
Run 6: Report of SCReAM — Data Link

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

- **Throughput**: The throughput is measured in Mbps (Megabits per second) and is illustrated on the y-axis. The data is represented for different flows with specific mean values indicated in the legend.
- **Per-packet one-way delay**: The per-packet one-way delay is measured in milliseconds (ms) and is shown on the y-axis. The data is also represented for different flows with specific 95th percentile values indicated in the legend.
Run 7: Statistics of SCReAM

Start at: 2018-04-11 01:17:06
End at: 2018-04-11 01:17:36
Local clock offset: 0.722 ms
Remote clock offset: 5.963 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 30.378 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 29.814 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 29.772 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 30.430 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for flows 1, 2, and 3.]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.21 Mbps)
Flow 1 egress (mean 0.21 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 per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 29.81 ms)
Flow 2 (95th percentile 29.77 ms)
Flow 3 (95th percentile 30.43 ms)
Run 8: Statistics of SCReAM

Start at: 2018-04-11 01:43:07
End at: 2018-04-11 01:43:37
Local clock offset: 0.541 ms
Remote clock offset: 10.46 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 31.684 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 31.684 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 32.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 30.529 ms
Loss rate: 0.67%
Run 8: Report of SCReAM — Data Link

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

![Graph 2: One-Way Delay over Time](image)
Run 9: Statistics of SCReAM

Start at: 2018-04-11 02:10:51
End at: 2018-04-11 02:11:21
Local clock offset: 0.481 ms
Remote clock offset: 9.594 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 33.524 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 34.281 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 33.139 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: 32.069 ms
Loss rate: 1.28%
Run 9: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.21 Mbps)
Flow 1 egress (mean 0.21 Mbps)
Flow 2 ingress (mean 0.21 Mbps)
Flow 2 egress (mean 0.21 Mbps)
Flow 3 ingress (mean 0.13 Mbps)
Flow 3 egress (mean 0.13 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 34.28 ms)
Flow 2 (95th percentile 33.14 ms)
Flow 3 (95th percentile 32.07 ms)
Run 10: Statistics of SCReAM

Start at: 2018-04-11 02:38:10
End at: 2018-04-11 02:38:40
Local clock offset: 0.234 ms
Remote clock offset: -7.042 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.31 Mbit/s
95th percentile per-packet one-way delay: 31.723 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 32.664 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 31.089 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 31.059 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for different flows.]
Run 1: Statistics of WebRTC media

End at: 2018-04-10 22:23:26  
Local clock offset: 0.467 ms  
Remote clock offset: -2.813 ms  

# Below is generated by plot.py at 2018-04-11 03:34:46  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 0.16 Mbit/s  
95th percentile per-packet one-way delay: 32.684 ms  
Loss rate: 0.08%  
-- Flow 1:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 32.620 ms  
Loss rate: 0.00%  
-- Flow 2:  
Average throughput: 0.06 Mbit/s  
95th percentile per-packet one-way delay: 32.879 ms  
Loss rate: 0.11%  
-- Flow 3:  
Average throughput: 0.05 Mbit/s  
95th percentile per-packet one-way delay: 32.625 ms  
Loss rate: 0.14%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

End at: 2018-04-10 22:49:58
Local clock offset: 0.814 ms
Remote clock offset: -3.236 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 32.996 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 32.329 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 31.676 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 37.630 ms
  Loss rate: 0.08%
Run 2: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 3: Statistics of WebRTC media

Start at: 2018-04-10 23:16:09
End at: 2018-04-10 23:16:39
Local clock offset: 1.16 ms
Remote clock offset: -2.57 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 32.925 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 33.006 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.586 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 33.227 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows. Each graph has multiple lines representing different ingress and egress flows with their respective mean and 95th percentile delays.]

- **Throughput (Mbit/s)**
  - Flow 1 ingress (mean 0.06 Mbit/s)
  - Flow 2 ingress (mean 0.06 Mbit/s)
  - Flow 3 ingress (mean 0.05 Mbit/s)
  - Flow 1 egress (mean 0.03 Mbit/s)
  - Flow 2 egress (mean 0.03 Mbit/s)
  - Flow 3 egress (mean 0.05 Mbit/s)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 33.01 ms)
  - Flow 2 (95th percentile 32.59 ms)
  - Flow 3 (95th percentile 31.23 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-04-10 23:43:44
End at: 2018-04-10 23:44:14
Local clock offset: 1.224 ms
Remote clock offset: -1.663 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 32.359 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.599 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 31.661 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 32.708 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-04-11 00:12:48
End at: 2018-04-11 00:13:18
Local clock offset: 2.129 ms
Remote clock offset: -5.544 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 32.190 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.018 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 31.804 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 32.475 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-04-11 00:42:05
End at: 2018-04-11 00:42:35
Local clock offset: 1.462 ms
Remote clock offset: -1.909 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 32.036 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 31.803 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 31.561 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 32.794 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 31.80 ms)
- Flow 2 (95th percentile 31.56 ms)
- Flow 3 (95th percentile 32.79 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-04-11 01:09:45  
End at: 2018-04-11 01:10:15  
Local clock offset: 0.855 ms  
Remote clock offset: 4.179 ms

# Below is generated by plot.py at 2018-04-11 03:34:46  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 33.495 ms
Loss rate: 0.02%
-- Flow 1:  
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 34.137 ms
Loss rate: 0.07%
-- Flow 2:  
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 34.346 ms
Loss rate: 0.00%
-- Flow 3:  
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 32.661 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 8: Statistics of WebRTC media

Start at: 2018-04-11 01:35:53  
End at: 2018-04-11 01:36:23  
Local clock offset: 0.696 ms  
Remote clock offset: 7.204 ms

# Below is generated by plot.py at 2018-04-11 03:34:46  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 0.16 Mbit/s  
  95th percentile per-packet one-way delay: 30.096 ms  
  Loss rate: 0.00%  
-- Flow 1:  
  Average throughput: 0.06 Mbit/s  
  95th percentile per-packet one-way delay: 33.318 ms  
  Loss rate: 0.00%  
-- Flow 2:  
  Average throughput: 0.06 Mbit/s  
  95th percentile per-packet one-way delay: 29.241 ms  
  Loss rate: 0.00%  
-- Flow 3:  
  Average throughput: 0.05 Mbit/s  
  95th percentile per-packet one-way delay: 29.701 ms  
  Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

[Graphs showing throughput and packet loss delay over time]

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 9: Statistics of WebRTC media

Start at: 2018-04-11 02:03:25
End at: 2018-04-11 02:03:55
Local clock offset: 0.532 ms
Remote clock offset: 13.668 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 32.435 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.705 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.435 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 32.043 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-04-11 02:30:15
End at: 2018-04-11 02:30:45
Local clock offset: 0.21 ms
Remote clock offset: -5.406 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 32.303 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 32.473 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 31.921 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 32.328 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

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

Start at: 2018-04-10 22:36:24
End at: 2018-04-10 22:36:54
Local clock offset: 0.467 ms
Remote clock offset: -3.093 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.19 Mbit/s
  95th percentile per-packet one-way delay: 36.528 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 11.67 Mbit/s
  95th percentile per-packet one-way delay: 36.323 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 11.64 Mbit/s
  95th percentile per-packet one-way delay: 36.670 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 11.41 Mbit/s
  95th percentile per-packet one-way delay: 36.775 ms
  Loss rate: 0.33%
Run 1: Report of Sprout — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 11.70 Mbps)
- Flow 1 egress (mean 11.67 Mbps)
- Flow 2 ingress (mean 11.69 Mbps)
- Flow 2 egress (mean 11.64 Mbps)
- Flow 3 ingress (mean 11.45 Mbps)
- Flow 3 egress (mean 11.41 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 36.32 ms)
- Flow 2 (95th percentile 36.67 ms)
- Flow 3 (95th percentile 36.77 ms)
Run 2: Statistics of Sprout

Start at: 2018-04-10 23:02:33
End at: 2018-04-10 23:03:03
Local clock offset: 0.986 ms
Remote clock offset: -5.013 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.12 Mbit/s
95th percentile per-packet one-way delay: 34.401 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 11.64 Mbit/s
95th percentile per-packet one-way delay: 34.427 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 34.234 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 11.50 Mbit/s
95th percentile per-packet one-way delay: 34.580 ms
Loss rate: 0.09%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-04-10 23:29:51
End at: 2018-04-10 23:30:21
Local clock offset: 1.114 ms
Remote clock offset: -1.424 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.88 Mbit/s
95th percentile per-packet one-way delay: 38.262 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 11.51 Mbit/s
95th percentile per-packet one-way delay: 38.044 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 11.46 Mbit/s
95th percentile per-packet one-way delay: 38.884 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 11.30 Mbit/s
95th percentile per-packet one-way delay: 37.316 ms
Loss rate: 0.07%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-04-10 23:57:38
End at: 2018-04-10 23:58:08
Local clock offset: 1.682 ms
Remote clock offset: -3.799 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 22.16 Mbit/s
  95th percentile per-packet one-way delay: 37.594 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 11.02 Mbit/s
  95th percentile per-packet one-way delay: 36.851 ms
  Loss rate: 0.57%
-- Flow 2:
  Average throughput: 11.20 Mbit/s
  95th percentile per-packet one-way delay: 38.082 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 11.18 Mbit/s
  95th percentile per-packet one-way delay: 39.050 ms
  Loss rate: 1.16%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-04-11 00:27:23
End at: 2018-04-11 00:27:53
Local clock offset: 2.249 ms
Remote clock offset: -4.654 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 22.94 Mbit/s
  95th percentile per-packet one-way delay: 36.539 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 11.64 Mbit/s
  95th percentile per-packet one-way delay: 36.108 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 11.42 Mbit/s
  95th percentile per-packet one-way delay: 36.559 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 11.22 Mbit/s
  95th percentile per-packet one-way delay: 37.440 ms
  Loss rate: 0.41%
Run 5: Report of Sprout — Data Link

![Graph showing network throughput over time for different flows. The first graph demonstrates the throughput in Mbps, with lines showing the data from different flows. The second graph shows the per-packet round-trip delay in ms for the same flows.]
Run 6: Statistics of Sprout

Start at: 2018-04-11 00:56:29
End at: 2018-04-11 00:56:59
Local clock offset: 1.422 ms
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.00 Mbit/s
95th percentile per-packet one-way delay: 37.032 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 36.627 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 36.952 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 11.21 Mbit/s
95th percentile per-packet one-way delay: 37.978 ms
Loss rate: 0.34%
Run 6: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 11.60 Mbit/s)
Flow 2 ingress (mean 11.63 Mbit/s)
Flow 3 ingress (mean 11.26 Mbit/s)
Flow 1 egress (mean 11.57 Mbit/s)
Flow 2 egress (mean 11.62 Mbit/s)
Flow 3 egress (mean 11.21 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 36.63 ms)
Flow 2 (95th percentile 36.95 ms)
Flow 3 (95th percentile 37.98 ms)
Run 7: Statistics of Sprout

Start at: 2018-04-11 01:23:12  
End at: 2018-04-11 01:23:42  
Local clock offset: 0.759 ms  
Remote clock offset: 5.094 ms  

# Below is generated by plot.py at 2018-04-11 03:34:46  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 23.31 Mbit/s  
  95th percentile per-packet one-way delay: 34.701 ms  
  Loss rate: 0.13%  
-- Flow 1:  
  Average throughput: 11.75 Mbit/s  
  95th percentile per-packet one-way delay: 34.025 ms  
  Loss rate: 0.20%  
-- Flow 2:  
  Average throughput: 11.62 Mbit/s  
  95th percentile per-packet one-way delay: 35.193 ms  
  Loss rate: 0.08%  
-- Flow 3:  
  Average throughput: 11.58 Mbit/s  
  95th percentile per-packet one-way delay: 35.215 ms  
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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**Graph 1:**
- **Y-axis:** Throughput (Mbit/s)
- **X-axis:** Time (s)
- Legend:
  - Blue dashed line: Flow 1 ingress (mean 11.77 Mbit/s)
  - Blue solid line: Flow 1 egress (mean 11.75 Mbit/s)
  - Green dashed line: Flow 2 ingress (mean 11.63 Mbit/s)
  - Green solid line: Flow 2 egress (mean 11.62 Mbit/s)
  - Red dashed line: Flow 3 ingress (mean 11.58 Mbit/s)
  - Red solid line: Flow 3 egress (mean 11.58 Mbit/s)

**Graph 2:**
- **Y-axis:** Per-packet one-way delay (ms)
- **X-axis:** Time (s)
- Legend:
  - Blue circles: Flow 1 (95th percentile 34.02 ms)
  - Green circles: Flow 2 (95th percentile 35.19 ms)
  - Red circles: Flow 3 (95th percentile 35.22 ms)
Run 8: Statistics of Sprout

Start at: 2018-04-11 01:49:04
End at: 2018-04-11 01:49:34
Local clock offset: 0.576 ms
Remote clock offset: 9.382 ms

# Below is generated by plot.py at 2018-04-11 03:34:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 22.86 Mbit/s
95th percentile per-packet one-way delay: 33.984 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 11.55 Mbit/s
95th percentile per-packet one-way delay: 34.279 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 11.44 Mbit/s
95th percentile per-packet one-way delay: 33.665 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 11.23 Mbit/s
95th percentile per-packet one-way delay: 33.631 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

![Graph showing data link throughput and delay over time.]

Legend:
- Flow 1 ingress (mean 11.59 Mbit/s)
- Flow 1 egress (mean 11.55 Mbit/s)
- Flow 2 ingress (mean 11.46 Mbit/s)
- Flow 2 egress (mean 11.44 Mbit/s)
- Flow 3 ingress (mean 11.23 Mbit/s)
- Flow 3 egress (mean 11.23 Mbit/s)

![Graph showing packet delay over time.]

Legend:
- Flow 1 (95th percentile 34.28 ms)
- Flow 2 (95th percentile 33.66 ms)
- Flow 3 (95th percentile 33.63 ms)
Run 9: Statistics of Sprout

Start at: 2018-04-11 02:16:22
End at: 2018-04-11 02:16:52
Local clock offset: 0.335 ms
Remote clock offset: 2.283 ms

# Below is generated by plot.py at 2018-04-11 03:34:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 22.69 Mbit/s
  95th percentile per-packet one-way delay: 38.668 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 11.45 Mbit/s
  95th percentile per-packet one-way delay: 38.732 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 11.29 Mbit/s
  95th percentile per-packet one-way delay: 37.934 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 11.28 Mbit/s
  95th percentile per-packet one-way delay: 39.572 ms
  Loss rate: 0.49%
Run 9: Report of Sprout — Data Link

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

Start at: 2018-04-11 02:43:47
End at: 2018-04-11 02:44:17
Local clock offset: 0.275 ms
Remote clock offset: -7.074 ms

# Below is generated by plot.py at 2018-04-11 03:34:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 23.09 Mbit/s
95th percentile per-packet one-way delay: 37.441 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 37.783 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 11.57 Mbit/s
95th percentile per-packet one-way delay: 36.903 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 11.26 Mbit/s
95th percentile per-packet one-way delay: 37.334 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 11.71 Mbit/s)
Flow 1 egress (mean 11.69 Mbit/s)
Flow 2 ingress (mean 11.56 Mbit/s)
Flow 2 egress (mean 11.57 Mbit/s)
Flow 3 ingress (mean 11.26 Mbit/s)
Flow 3 egress (mean 11.26 Mbit/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 37.78 ms)  Flow 2 (95th percentile 36.90 ms)  Flow 3 (95th percentile 37.33 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-10 22:39:12  
End at: 2018-04-10 22:39:42  
Local clock offset: 0.465 ms  
Remote clock offset: -5.727 ms

# Below is generated by plot.py at 2018-04-11 03:37:10
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 87.76 Mbit/s  
95th percentile per-packet one-way delay: 61.987 ms  
Loss rate: 15.96%  
-- Flow 1:  
Average throughput: 51.87 Mbit/s  
95th percentile per-packet one-way delay: 58.984 ms  
Loss rate: 12.16%  
-- Flow 2:  
Average throughput: 38.49 Mbit/s  
95th percentile per-packet one-way delay: 62.987 ms  
Loss rate: 21.54%  
-- Flow 3:  
Average throughput: 30.86 Mbit/s  
95th percentile per-packet one-way delay: 64.985 ms  
Loss rate: 19.28%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 59.13 Mbps/s)
- Flow 1 egress (mean 51.87 Mbps/s)
- Flow 2 ingress (mean 49.11 Mbps/s)
- Flow 2 egress (mean 38.49 Mbps/s)
- Flow 3 ingress (mean 38.37 Mbps/s)
- Flow 3 egress (mean 30.86 Mbps/s)

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

- Flow 1 (95th percentile 58.98 ms)
- Flow 2 (95th percentile 62.99 ms)
- Flow 3 (95th percentile 64.98 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-10 23:05:31
End at: 2018-04-10 23:06:01
Local clock offset: 1.027 ms
Remote clock offset: -2.522 ms

# Below is generated by plot.py at 2018-04-11 03:37:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.94 Mbit/s
95th percentile per-packet one-way delay: 61.907 ms
Loss rate: 15.95%
-- Flow 1:
Average throughput: 54.79 Mbit/s
95th percentile per-packet one-way delay: 59.845 ms
Loss rate: 13.01%
-- Flow 2:
Average throughput: 44.20 Mbit/s
95th percentile per-packet one-way delay: 64.164 ms
Loss rate: 20.86%
-- Flow 3:
Average throughput: 5.17 Mbit/s
95th percentile per-packet one-way delay: 62.305 ms
Loss rate: 16.98%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-04-10 23:32:49
End at: 2018-04-10 23:33:19
Local clock offset: 1.036 ms
Remote clock offset: -1.789 ms

# Below is generated by plot.py at 2018-04-11 03:37:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.44 Mbit/s
95th percentile per-packet one-way delay: 66.047 ms
Loss rate: 15.63%
-- Flow 1:
Average throughput: 51.46 Mbit/s
95th percentile per-packet one-way delay: 63.276 ms
Loss rate: 11.78%
-- Flow 2:
Average throughput: 38.39 Mbit/s
95th percentile per-packet one-way delay: 67.251 ms
Loss rate: 21.09%
-- Flow 3:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 69.053 ms
Loss rate: 19.37%
Run 3: Report of TaoVA-100x — Data Link

![Graph 1: Throughput Over Time]

- **Flow 1 ingress** (mean 58.33 Mbit/s)
- **Flow 1 egress** (mean 51.46 Mbit/s)
- **Flow 2 ingress** (mean 48.86 Mbit/s)
- **Flow 2 egress** (mean 38.39 Mbit/s)
- **Flow 3 ingress** (mean 38.97 Mbit/s)
- **Flow 3 egress** (mean 31.50 Mbit/s)

![Graph 2: Per-Packet Round-Trip Delay]

- **Flow 1** (95th percentile 63.28 ms)
- **Flow 2** (95th percentile 67.25 ms)
- **Flow 3** (95th percentile 69.05 ms)

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Run 4: Statistics of TaoVA-100x

Start at: 2018-04-11 00:00:41
End at: 2018-04-11 00:01:11
Local clock offset: 1.853 ms
Remote clock offset: -4.036 ms

# Below is generated by plot.py at 2018-04-11 03:37:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.62 Mbit/s
  95th percentile per-packet one-way delay: 64.903 ms
  Loss rate: 15.29%
  -- Flow 1:
    Average throughput: 52.01 Mbit/s
    95th percentile per-packet one-way delay: 62.230 ms
    Loss rate: 11.85%
  -- Flow 2:
    Average throughput: 39.47 Mbit/s
    95th percentile per-packet one-way delay: 65.878 ms
    Loss rate: 20.44%
  -- Flow 3:
    Average throughput: 25.05 Mbit/s
    95th percentile per-packet one-way delay: 68.514 ms
    Loss rate: 18.49%
Run 4: Report of TaoVA-100x — Data Link

**Throughput (Mb/s)**

- **Flow 1 ingress (mean 59.07 Mb/s)**
- **Flow 1 egress (mean 52.01 Mb/s)**
- **Flow 2 ingress (mean 49.67 Mb/s)**
- **Flow 2 egress (mean 39.47 Mb/s)**
- **Flow 3 ingress (mean 30.84 Mb/s)**
- **Flow 3 egress (mean 25.05 Mb/s)**

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

- **Flow 1 (95th percentile 62.23 ms)**
- **Flow 2 (95th percentile 65.88 ms)**
- **Flow 3 (95th percentile 68.51 ms)**
Run 5: Statistics of TaoVA-100x

Start at: 2018-04-11 00:30:32
End at: 2018-04-11 00:31:02
Local clock offset: 1.94 ms
Remote clock offset: -6.196 ms

# Below is generated by plot.py at 2018-04-11 03:37:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.52 Mbit/s
  95th percentile per-packet one-way delay: 62.640 ms
  Loss rate: 15.17%
-- Flow 1:
  Average throughput: 48.31 Mbit/s
  95th percentile per-packet one-way delay: 60.543 ms
  Loss rate: 11.51%
-- Flow 2:
  Average throughput: 39.13 Mbit/s
  95th percentile per-packet one-way delay: 63.496 ms
  Loss rate: 20.18%
-- Flow 3:
  Average throughput: 33.63 Mbit/s
  95th percentile per-packet one-way delay: 64.512 ms
  Loss rate: 17.85%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-11 00:59:25
End at: 2018-04-11 00:59:55
Local clock offset: 1.489 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-04-11 03:37:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.53 Mbit/s
  95th percentile per-packet one-way delay: 65.816 ms
  Loss rate: 15.57%
-- Flow 1:
  Average throughput: 52.94 Mbit/s
  95th percentile per-packet one-way delay: 62.558 ms
  Loss rate: 11.42%
-- Flow 2:
  Average throughput: 37.37 Mbit/s
  95th percentile per-packet one-way delay: 66.806 ms
  Loss rate: 22.38%
-- Flow 3:
  Average throughput: 32.27 Mbit/s
  95th percentile per-packet one-way delay: 68.743 ms
  Loss rate: 17.86%
Run 6: Report of TaoVA-100x — Data Link

**Throughput Chart**
- Flow 1 ingress (mean 59.78 Mbit/s)
- Flow 2 ingress (mean 48.16 Mbit/s)
- Flow 3 ingress (mean 39.32 Mbit/s)
- Flow 1 egress (mean 52.94 Mbit/s)
- Flow 2 egress (mean 37.37 Mbit/s)
- Flow 3 egress (mean 32.27 Mbit/s)

**Delay Chart**
- Flow 1 (95th percentile 62.56 ms)
- Flow 2 (95th percentile 66.81 ms)
- Flow 3 (95th percentile 68.74 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-11 01:25:59
End at: 2018-04-11 01:26:29
Local clock offset: 0.755 ms
Remote clock offset: 7.693 ms

# Below is generated by plot.py at 2018-04-11 03:37:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.15 Mbit/s
95th percentile per-packet one-way delay: 63.629 ms
Loss rate: 16.07%
-- Flow 1:
Average throughput: 52.31 Mbit/s
95th percentile per-packet one-way delay: 61.033 ms
Loss rate: 12.26%
-- Flow 2:
Average throughput: 38.35 Mbit/s
95th percentile per-packet one-way delay: 64.667 ms
Loss rate: 21.65%
-- Flow 3:
Average throughput: 31.00 Mbit/s
95th percentile per-packet one-way delay: 65.780 ms
Loss rate: 19.56%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-11 01:52:03
End at: 2018-04-11 01:52:33
Local clock offset: 0.59 ms
Remote clock offset: 9.726 ms

# Below is generated by plot.py at 2018-04-11 03:37:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.77 Mbit/s
95th percentile per-packet one-way delay: 62.170 ms
Loss rate: 14.90%
-- Flow 1:
Average throughput: 49.99 Mbit/s
95th percentile per-packet one-way delay: 59.636 ms
Loss rate: 11.34%
-- Flow 2:
Average throughput: 38.22 Mbit/s
95th percentile per-packet one-way delay: 63.665 ms
Loss rate: 19.63%
-- Flow 3:
Average throughput: 31.26 Mbit/s
95th percentile per-packet one-way delay: 64.107 ms
Loss rate: 18.91%
Run 8: Report of TaoVA-100x — Data Link

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

- **Flow 1 Ingress** (mean 56.4 Mbit/s)
- **Flow 1 Egress** (mean 49.9 Mbit/s)
- **Flow 2 Ingress** (mean 47.5 Mbit/s)
- **Flow 2 Egress** (mean 38.2 Mbit/s)
- **Flow 3 Ingress** (mean 38.4 Mbit/s)
- **Flow 3 Egress** (mean 31.2 Mbit/s)

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

- **Flow 1** (95th percentile 59.6 ms)
- **Flow 2** (95th percentile 63.6 ms)
- **Flow 3** (95th percentile 64.1 ms)

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Run 9: Statistics of TaoVA-100x

Start at: 2018-04-11 02:19:15
End at: 2018-04-11 02:19:45
Local clock offset: 0.318 ms
Remote clock offset: -2.192 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.31 Mbit/s
95th percentile per-packet one-way delay: 65.525 ms
Loss rate: 16.95%
-- Flow 1:
Average throughput: 52.57 Mbit/s
95th percentile per-packet one-way delay: 63.150 ms
Loss rate: 12.98%
-- Flow 2:
Average throughput: 38.00 Mbit/s
95th percentile per-packet one-way delay: 66.296 ms
Loss rate: 22.92%
-- Flow 3:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 68.657 ms
Loss rate: 20.27%
Run 9: Report of TaoVA-100x — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 60.43 Mbit/s)
- Flow 1 egress (mean 52.57 Mbit/s)
- Flow 2 ingress (mean 49.31 Mbit/s)
- Flow 2 egress (mean 38.00 Mbit/s)
- Flow 3 ingress (mean 39.43 Mbit/s)
- Flow 3 egress (mean 31.50 Mbit/s)

![Per-packet delay Graph](image2)

- Flow 1 (95th percentile 63.15 ms)
- Flow 2 (95th percentile 66.30 ms)
- Flow 3 (95th percentile 68.66 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-11 02:46:34
End at: 2018-04-11 02:47:04
Local clock offset: 0.412 ms
Remote clock offset: -8.659 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.53 Mbit/s
  95th percentile per-packet one-way delay: 64.987 ms
  Loss rate: 15.87%
-- Flow 1:
  Average throughput: 46.24 Mbit/s
  95th percentile per-packet one-way delay: 62.476 ms
  Loss rate: 12.55%
-- Flow 2:
  Average throughput: 38.82 Mbit/s
  95th percentile per-packet one-way delay: 65.094 ms
  Loss rate: 20.06%
-- Flow 3:
  Average throughput: 31.51 Mbit/s
  95th percentile per-packet one-way delay: 68.800 ms
  Loss rate: 18.95%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

End at: 2018-04-10 22:27:49
Local clock offset: 0.36 ms
Remote clock offset: -5.141 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 35.94 Mbit/s
  95th percentile per-packet one-way delay: 43.661 ms
  Loss rate: 1.70%
-- Flow 1:
  Average throughput: 18.87 Mbit/s
  95th percentile per-packet one-way delay: 40.510 ms
  Loss rate: 1.53%
-- Flow 2:
  Average throughput: 20.88 Mbit/s
  95th percentile per-packet one-way delay: 44.439 ms
  Loss rate: 2.26%
-- Flow 3:
  Average throughput: 9.58 Mbit/s
  95th percentile per-packet one-way delay: 29.332 ms
  Loss rate: 0.23%
Run 1: Report of TCP Vegas — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows. The graph includes lines representing Flow 1 ingress (mean 19.16 Mbit/s), Flow 1 egress (mean 18.87 Mbit/s), Flow 2 ingress (mean 21.36 Mbit/s), Flow 2 egress (mean 20.88 Mbit/s), Flow 3 ingress (mean 9.60 Mbit/s), and Flow 3 egress (mean 9.58 Mbit/s). The per-packet one-way delay is shown with Flow 1 (95th percentile 40.51 ms), Flow 2 (95th percentile 44.44 ms), and Flow 3 (95th percentile 29.33 ms).]
Run 2: Statistics of TCP Vegas

Start at: 2018-04-10 22:53:43
End at: 2018-04-10 22:54:13
Local clock offset: 0.916 ms
Remote clock offset: -5.137 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 56.73 Mbit/s
  95th percentile per-packet one-way delay: 41.398 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 26.13 Mbit/s
  95th percentile per-packet one-way delay: 36.077 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 21.29 Mbit/s
  95th percentile per-packet one-way delay: 55.737 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 49.49 Mbit/s
  95th percentile per-packet one-way delay: 33.211 ms
  Loss rate: 2.15%
Run 2: Report of TCP Vegas — Data Link

![Graph showing throughput over time for different flows]

![Graph showing per-packet one-way delay over time for different flows]
Run 3: Statistics of TCP Vegas

Start at: 2018-04-10 23:20:35
End at: 2018-04-10 23:21:05
Local clock offset: 1.159 ms
Remote clock offset: -4.752 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.42 Mbit/s
95th percentile per-packet one-way delay: 30.937 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 25.91 Mbit/s
95th percentile per-packet one-way delay: 29.831 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 29.76 Mbit/s
95th percentile per-packet one-way delay: 31.969 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 11.13 Mbit/s
95th percentile per-packet one-way delay: 31.687 ms
Loss rate: 0.12%
Run 3: Report of TCP Vegas — Data Link

Diagram 1: Throughput (Mbit/s) over time for different flows.

Diagram 2: Per packet one way delay (ms) over time for different flows.

Legend:
- Flow 1 ingress (mean 26.02 Mbit/s)
- Flow 1 egress (mean 25.91 Mbit/s)
- Flow 2 ingress (mean 29.84 Mbit/s)
- Flow 2 egress (mean 29.76 Mbit/s)
- Flow 3 ingress (mean 11.14 Mbit/s)
- Flow 3 egress (mean 11.13 Mbit/s)
Run 4: Statistics of TCP Vegas

Start at: 2018-04-10 23:48:07
End at: 2018-04-10 23:48:37
Local clock offset: 1.422 ms
Remote clock offset: -1.189 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.18 Mbit/s
95th percentile per-packet one-way delay: 42.441 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 10.65 Mbit/s
95th percentile per-packet one-way delay: 35.481 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: 42.988 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 26.73 Mbit/s
95th percentile per-packet one-way delay: 41.387 ms
Loss rate: 1.13%
Run 4: Report of TCP Vegas — Data Link

![Graph showing network throughput and packet delay over time for different flows.](image-url)
Run 5: Statistics of TCP Vegas

Start at: 2018-04-11 00:17:40
End at: 2018-04-11 00:18:10
Local clock offset: 2.22 ms
Remote clock offset: -5.684 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.24 Mbit/s
95th percentile per-packet one-way delay: 40.053 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 26.62 Mbit/s
95th percentile per-packet one-way delay: 39.302 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 25.77 Mbit/s
95th percentile per-packet one-way delay: 58.097 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 19.46 Mbit/s
95th percentile per-packet one-way delay: 32.231 ms
Loss rate: 0.01%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-04-11 00:46:50
End at: 2018-04-11 00:47:20
Local clock offset: 1.501 ms
Remote clock offset: -1.251 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.40 Mbit/s
95th percentile per-packet one-way delay: 44.942 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 23.29 Mbit/s
95th percentile per-packet one-way delay: 35.943 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 23.99 Mbit/s
95th percentile per-packet one-way delay: 49.895 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 36.54 Mbit/s
95th percentile per-packet one-way delay: 34.712 ms
Loss rate: 0.40%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 23.37 Mbit/s)
- Flow 1 egress (mean 23.29 Mbit/s)
- Flow 2 ingress (mean 24.45 Mbit/s)
- Flow 2 egress (mean 23.99 Mbit/s)
- Flow 3 ingress (mean 36.69 Mbit/s)
- Flow 3 egress (mean 36.54 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-04-11 01:14:09
End at: 2018-04-11 01:14:39
Local clock offset: 0.868 ms
Remote clock offset: 5.277 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.72 Mbit/s
95th percentile per-packet one-way delay: 38.706 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 27.05 Mbit/s
95th percentile per-packet one-way delay: 38.819 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 9.78 Mbit/s
95th percentile per-packet one-way delay: 34.710 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 45.72 Mbit/s
95th percentile per-packet one-way delay: 38.453 ms
Loss rate: 1.62%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-04-11 01:40:02
End at: 2018-04-11 01:40:32
Local clock offset: 0.569 ms
Remote clock offset: 10.423 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 59.38 Mbit/s
  95th percentile per-packet one-way delay: 42.809 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 17.52 Mbit/s
  95th percentile per-packet one-way delay: 42.266 ms
  Loss rate: 1.66%
-- Flow 2:
  Average throughput: 52.82 Mbit/s
  95th percentile per-packet one-way delay: 42.880 ms
  Loss rate: 0.89%
-- Flow 3:
  Average throughput: 20.17 Mbit/s
  95th percentile per-packet one-way delay: 41.388 ms
  Loss rate: 0.08%
Run 8: Report of TCP Vegas — Data Link

![Throughput Graph]

![Delay Graph]

Legend:
- Flow 1 ingress (mean 17.82 Mbit/s)
- Flow 1 egress (mean 17.52 Mbit/s)
- Flow 2 ingress (mean 55.29 Mbit/s)
- Flow 2 egress (mean 52.82 Mbit/s)
- Flow 3 ingress (mean 20.18 Mbit/s)
- Flow 3 egress (mean 20.17 Mbit/s)
Run 9: Statistics of TCP Vegas

Start at: 2018-04-11 02:07:42
End at: 2018-04-11 02:08:12
Local clock offset: 0.484 ms
Remote clock offset: 14.835 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.49 Mbit/s
95th percentile per-packet one-way delay: 42.918 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 45.530 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 25.42 Mbit/s
95th percentile per-packet one-way delay: 41.922 ms
Loss rate: 1.57%
-- Flow 3:
Average throughput: 30.09 Mbit/s
95th percentile per-packet one-way delay: 39.848 ms
Loss rate: 0.45%
Run 9: Report of TCP Vegas — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 15.89 Mbit/s)
- Flow 1 egress (mean 15.57 Mbit/s)
- Flow 2 ingress (mean 25.83 Mbit/s)
- Flow 2 egress (mean 25.42 Mbit/s)
- Flow 3 ingress (mean 30.23 Mbit/s)
- Flow 3 egress (mean 30.09 Mbit/s)

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

- Flow 1 (95th percentile 45.53 ms)
- Flow 2 (95th percentile 41.92 ms)
- Flow 3 (95th percentile 39.85 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-04-11 02:34:58
End at: 2018-04-11 02:35:28
Local clock offset: 0.293 ms
Remote clock offset: -8.663 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 31.000 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 14.34 Mbit/s
95th percentile per-packet one-way delay: 32.877 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 13.04 Mbit/s
95th percentile per-packet one-way delay: 29.976 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 12.76 Mbit/s
95th percentile per-packet one-way delay: 30.211 ms
Loss rate: 0.10%
Run 10: Report of TCP Vegas — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 14.37 Mbps)
- Flow 1 egress (mean 14.34 Mbps)
- Flow 2 ingress (mean 13.08 Mbps)
- Flow 2 egress (mean 13.04 Mbps)
- Flow 3 ingress (mean 12.77 Mbps)
- Flow 3 egress (mean 12.76 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 32.88 ms)
- Flow 2 (95th percentile 29.98 ms)
- Flow 3 (95th percentile 30.21 ms)
Run 1: Statistics of Verus

Start at: 2018-04-10 22:48:05
Local clock offset: 0.699 ms
Remote clock offset: -3.371 ms

# Below is generated by plot.py at 2018-04-11 03:39:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.02 Mbit/s
95th percentile per-packet one-way delay: 66.182 ms
Loss rate: 24.24%
-- Flow 1:
Average throughput: 44.88 Mbit/s
95th percentile per-packet one-way delay: 66.404 ms
Loss rate: 24.74%
-- Flow 2:
Average throughput: 16.40 Mbit/s
95th percentile per-packet one-way delay: 65.860 ms
Loss rate: 23.05%
-- Flow 3:
Average throughput: 25.57 Mbit/s
95th percentile per-packet one-way delay: 65.161 ms
Loss rate: 23.04%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-04-10 23:14:42
End at: 2018-04-10 23:15:12
Local clock offset: 1.257 ms
Remote clock offset: -5.153 ms

# Below is generated by plot.py at 2018-04-11 03:40:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.42 Mbit/s
95th percentile per-packet one-way delay: 76.276 ms
Loss rate: 80.86%
-- Flow 1:
Average throughput: 47.30 Mbit/s
95th percentile per-packet one-way delay: 76.917 ms
Loss rate: 81.88%
-- Flow 2:
Average throughput: 6.34 Mbit/s
95th percentile per-packet one-way delay: 67.179 ms
Loss rate: 45.40%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 65.126 ms
Loss rate: 43.52%
Run 2: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 261.50 Mbps)
- Flow 1 egress (mean 473.00 Mbps)
- Flow 2 ingress (mean 11.03 Mbps)
- Flow 2 egress (mean 6.34 Mbps)
- Flow 3 ingress (mean 0.89 Mbps)
- Flow 3 egress (mean 0.56 Mbps)

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

- Flow 1 (95th percentile 76.92 ms)
- Flow 2 (95th percentile 67.18 ms)
- Flow 3 (95th percentile 65.13 ms)
Run 3: Statistics of Verus

Start at: 2018-04-10 23:42:14
End at: 2018-04-10 23:42:44
Local clock offset: 1.174 ms
Remote clock offset: -3.683 ms

# Below is generated by plot.py at 2018-04-11 03:40:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 64.761 ms
Loss rate: 24.43%
-- Flow 1:
Average throughput: 46.80 Mbit/s
95th percentile per-packet one-way delay: 64.845 ms
Loss rate: 24.77%
-- Flow 2:
Average throughput: 22.09 Mbit/s
95th percentile per-packet one-way delay: 64.535 ms
Loss rate: 24.08%
-- Flow 3:
Average throughput: 20.89 Mbit/s
95th percentile per-packet one-way delay: 64.587 ms
Loss rate: 22.93%
Run 3: Report of Verus — Data Link

The graphs show the throughput and per-packet one-way delay over time for different flows. The throughput graph indicates the mean data rate in Mbit/s for each flow, while the per-packet delay graph shows the 95th percentile delay in milliseconds.
Run 4: Statistics of Verus

Start at: 2018-04-11 00:11:05
End at: 2018-04-11 00:11:35
Local clock offset: 2.032 ms
Remote clock offset: -5.516 ms

# Below is generated by plot.py at 2018-04-11 03:40:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 67.529 ms
Loss rate: 38.33%
-- Flow 1:
Average throughput: 28.43 Mbit/s
95th percentile per-packet one-way delay: 67.347 ms
Loss rate: 28.61%
-- Flow 2:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 68.487 ms
Loss rate: 50.79%
-- Flow 3:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 65.116 ms
Loss rate: 28.30%
Run 4: Report of Verus — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 39.84 Mbps)
- Flow 2 ingress (mean 60.21 Mbps)
- Flow 3 ingress (mean 33.79 Mbps)

**Flow 1 egress (mean 28.43 Mbps)**
- Flow 2 egress (mean 29.61 Mbps)
- Flow 3 egress (mean 24.22 Mbps)

**Packet delay (ms)**
- Flow 1 (95th percentile 67.35 ms)
- Flow 2 (95th percentile 68.49 ms)
- Flow 3 (95th percentile 65.12 ms)
Run 5: Statistics of Verus

Start at: 2018-04-11 00:40:22
End at: 2018-04-11 00:40:52
Local clock offset: 1.499 ms
Remote clock offset: -2.078 ms

# Below is generated by plot.py at 2018-04-11 03:40:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.07 Mbit/s
  95th percentile per-packet one-way delay: 69.381 ms
  Loss rate: 45.11%
-- Flow 1:
  Average throughput: 30.74 Mbit/s
  95th percentile per-packet one-way delay: 69.167 ms
  Loss rate: 40.98%
-- Flow 2:
  Average throughput: 45.40 Mbit/s
  95th percentile per-packet one-way delay: 69.731 ms
  Loss rate: 48.91%
-- Flow 3:
  Average throughput: 4.79 Mbit/s
  95th percentile per-packet one-way delay: 62.682 ms
  Loss rate: 40.54%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-04-11 01:08:17
End at: 2018-04-11 01:08:47
Local clock offset: 0.91 ms
Remote clock offset: 4.15 ms

# Below is generated by plot.py at 2018-04-11 03:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.07 Mbit/s
  95th percentile per-packet one-way delay: 70.889 ms
  Loss rate: 57.80%
-- Flow 1:
  Average throughput: 29.94 Mbit/s
  95th percentile per-packet one-way delay: 67.797 ms
  Loss rate: 26.59%
-- Flow 2:
  Average throughput: 34.16 Mbit/s
  95th percentile per-packet one-way delay: 74.432 ms
  Loss rate: 73.31%
-- Flow 3:
  Average throughput: 34.37 Mbit/s
  95th percentile per-packet one-way delay: 69.093 ms
  Loss rate: 55.76%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-04-11 01:34:28
End at: 2018-04-11 01:34:58
Local clock offset: 0.678 ms
Remote clock offset: 9.074 ms

# Below is generated by plot.py at 2018-04-11 03:40:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.85 Mbit/s
95th percentile per-packet one-way delay: 68.100 ms
Loss rate: 33.39%
-- Flow 1:
Average throughput: 39.56 Mbit/s
95th percentile per-packet one-way delay: 67.664 ms
Loss rate: 28.09%
-- Flow 2:
Average throughput: 25.93 Mbit/s
95th percentile per-packet one-way delay: 67.341 ms
Loss rate: 23.96%
-- Flow 3:
Average throughput: 34.20 Mbit/s
95th percentile per-packet one-way delay: 69.872 ms
Loss rate: 53.71%
Run 7: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 54.26 Mbps)
- Flow 1 egress (mean 39.56 Mbps)
- Flow 2 ingress (mean 34.13 Mbps)
- Flow 2 egress (mean 25.93 Mbps)
- Flow 3 ingress (mean 73.94 Mbps)
- Flow 3 egress (mean 34.20 Mbps)

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

- Flow 1 (95th percentile 67.66 ms)
- Flow 2 (95th percentile 67.34 ms)
- Flow 3 (95th percentile 69.87 ms)
Run 8: Statistics of Verus

Start at: 2018-04-11 02:01:54
End at: 2018-04-11 02:02:24
Local clock offset: 0.418 ms
Remote clock offset: 11.303 ms

# Below is generated by plot.py at 2018-04-11 03:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.67 Mbit/s
95th percentile per-packet one-way delay: 76.724 ms
Loss rate: 80.49%
-- Flow 1:
Average throughput: 22.45 Mbit/s
95th percentile per-packet one-way delay: 68.411 ms
Loss rate: 51.75%
-- Flow 2:
Average throughput: 38.93 Mbit/s
95th percentile per-packet one-way delay: 80.830 ms
Loss rate: 87.23%
-- Flow 3:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 59.679 ms
Loss rate: 13.75%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-04-11 02:28:46
End at: 2018-04-11 02:29:16
Local clock offset: 0.249 ms
Remote clock offset: -6.956 ms

# Below is generated by plot.py at 2018-04-11 03:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.48 Mbit/s
95th percentile per-packet one-way delay: 67.698 ms
Loss rate: 28.21%
-- Flow 1:
Average throughput: 44.16 Mbit/s
95th percentile per-packet one-way delay: 66.990 ms
Loss rate: 27.80%
-- Flow 2:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: 69.586 ms
Loss rate: 31.15%
-- Flow 3:
Average throughput: 23.51 Mbit/s
95th percentile per-packet one-way delay: 66.313 ms
Loss rate: 22.53%
Run 9: Report of Verus — Data Link

![Data Link Throughput Graph]

![Data Link Per-packet Delay Graph]

- Flow 1 ingress (mean 61.21 Mbit/s)
- Flow 1 egress (mean 44.16 Mbit/s)
- Flow 2 ingress (mean 35.71 Mbit/s)
- Flow 2 egress (mean 24.57 Mbit/s)
- Flow 3 ingress (mean 24.32 Mbit/s)
- Flow 3 egress (mean 23.51 Mbit/s)

Flow 1 (95th percentile 66.99 ms)
Flow 2 (95th percentile 69.59 ms)
Flow 3 (95th percentile 66.31 ms)
Run 10: Statistics of Verus

Start at: 2018-04-11 02:55:44  
End at: 2018-04-11 02:56:14  
Local clock offset: 0.656 ms  
Remote clock offset: -4.61 ms

# Below is generated by plot.py at 2018-04-11 03:41:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 63.96 Mbit/s  
95th percentile per-packet one-way delay: 70.994 ms  
Loss rate: 50.85%  
-- Flow 1:  
Average throughput: 43.31 Mbit/s  
95th percentile per-packet one-way delay: 73.376 ms  
Loss rate: 57.73%  
-- Flow 2:  
Average throughput: 15.06 Mbit/s  
95th percentile per-packet one-way delay: 66.921 ms  
Loss rate: 26.99%  
-- Flow 3:  
Average throughput: 32.23 Mbit/s  
95th percentile per-packet one-way delay: 66.080 ms  
Loss rate: 23.71%
Run 10: Report of Verus — Data Link

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

- Flow 1 ingress (mean 102.5 Mbit/s)
- Flow 1 egress (mean 43.31 Mbit/s)
- Flow 2 ingress (mean 20.64 Mbit/s)
- Flow 2 egress (mean 15.06 Mbit/s)
- Flow 3 ingress (mean 42.35 Mbit/s)
- Flow 3 egress (mean 32.23 Mbit/s)
Run 1: Statistics of Copa

Local clock offset: 0.379 ms  
Remote clock offset: -3.166 ms

# Below is generated by plot.py at 2018-04-11 03:47:36  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 90.36 Mbit/s  
95th percentile per-packet one-way delay: 59.032 ms  
Loss rate: 88.02%  
-- Flow 1:  
Average throughput: 90.35 Mbit/s  
95th percentile per-packet one-way delay: 59.032 ms  
Loss rate: 88.02%  
-- Flow 2:  
Average throughput: 0.02 Mbit/s  
95th percentile per-packet one-way delay: 58.705 ms  
Loss rate: 92.35%  
-- Flow 3:  
Average throughput: 0.00 Mbit/s  
95th percentile per-packet one-way delay: 59.658 ms  
Loss rate: 50.00%
Run 1: Report of Copa — Data Link

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

Legend:
- Flow 1 ingress (mean 754.60 Mbit/s)
- Flow 1 egress (mean 90.35 Mbit/s)
- Flow 2 ingress (mean 0.19 Mbit/s)
- Flow 2 egress (mean 0.02 Mbit/s)
- Flow 3 ingress (mean 0.00 Mbit/s)
- Flow 3 egress (mean 0.00 Mbit/s)

For packet delay:
- Flow 1 (95th percentile 59.03 ms)
- Flow 2 (95th percentile 58.70 ms)
- Flow 3 (95th percentile 59.66 ms)
Run 2: Statistics of Copa

Local clock offset: 0.846 ms
Remote clock offset: -3.026 ms

# Below is generated by plot.py at 2018-04-11 03:47:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.05 Mbit/s
  95th percentile per-packet one-way delay: 58.840 ms
  Loss rate: 87.82%
-- Flow 1:
  Average throughput: 89.05 Mbit/s
  95th percentile per-packet one-way delay: 58.840 ms
  Loss rate: 87.82%
-- Flow 2:
  Average throughput: 0.00 Mbit/s
  95th percentile per-packet one-way delay: 50.211 ms
  Loss rate: 66.67%
-- Flow 3:
  Average throughput: 0.00 Mbit/s
  95th percentile per-packet one-way delay: 47.028 ms
  Loss rate: 99.92%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 731.23 Mbps)
- Flow 1 egress (mean 89.05 Mbps)
- Flow 2 ingress (mean 0.00 Mbps)
- Flow 2 egress (mean 89.05 Mbps)
- Flow 3 ingress (mean 0.16 Mbps)
- Flow 3 egress (mean 0.00 Mbps)

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

- Flow 1 (95th percentile 58.84 ms)
- Flow 2 (95th percentile 50.21 ms)
- Flow 3 (95th percentile 47.03 ms)

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Run 3: Statistics of Copa

Start at: 2018-04-10 23:22:05
Local clock offset: 1.182 ms
Remote clock offset: -2.438 ms

# Below is generated by plot.py at 2018-04-11 03:47:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.45 Mbit/s
95th percentile per-packet one-way delay: 58.272 ms
Loss rate: 87.42%
-- Flow 1:
Average throughput: 84.44 Mbit/s
95th percentile per-packet one-way delay: 58.272 ms
Loss rate: 87.42%
-- Flow 2:
Average throughput: 0.02 Mbit/s
95th percentile per-packet one-way delay: 56.486 ms
Loss rate: 91.56%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 45.732 ms
Loss rate: 75.00%
Run 3: Report of Copa — Data Link

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

- **Flow 1 ingress** (mean 671.75 Mb/s)
- **Flow 1 egress** (mean 84.44 Mb/s)
- **Flow 2 ingress** (mean 0.19 Mb/s)
- **Flow 2 egress** (mean 0.02 Mb/s)
- **Flow 3 ingress** (mean 0.00 Mb/s)
- **Flow 3 egress** (mean 0.00 Mb/s)

**Per-packet one-way delay (ms):**
- **Flow 1** (95th percentile 58.27 ms)
- **Flow 2** (95th percentile 56.49 ms)
- **Flow 3** (95th percentile 45.73 ms)
Run 4: Statistics of Copa

Start at: 2018-04-10 23:49:36
End at: 2018-04-10 23:50:06
Local clock offset: 1.396 ms
Remote clock offset: -1.627 ms

# Below is generated by plot.py at 2018-04-11 03:47:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.43 Mbit/s
95th percentile per-packet one-way delay: 58.576 ms
Loss rate: 87.50%
-- Flow 1:
Average throughput: 87.43 Mbit/s
95th percentile per-packet one-way delay: 58.576 ms
Loss rate: 87.50%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 51.077 ms
Loss rate: 50.00%
-- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 54.918 ms
Loss rate: 92.97%
Run 4: Report of Copa — Data Link

[Graphs showing throughput and latency over time for different flow types with annotations for each type.]
Run 5: Statistics of Copa

Start at: 2018-04-11 00:19:12
End at: 2018-04-11 00:19:42
Local clock offset: 2.259 ms
Remote clock offset: -5.682 ms

# Below is generated by plot.py at 2018-04-11 03:49:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.30 Mbit/s
  95th percentile per-packet one-way delay: 58.418 ms
  Loss rate: 89.61%
-- Flow 1:
  Average throughput: 86.30 Mbit/s
  95th percentile per-packet one-way delay: 58.418 ms
  Loss rate: 89.61%
-- Flow 2:
    Average throughput: 0.00 Mbit/s
-- Flow 3:
    Average throughput: 0.00 Mbit/s
Run 5: Report of Copa — Data Link

---

**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 831.46 Mbit/s)
- **Flow 1 egress** (mean 86.30 Mbit/s)
- **Flow 2 ingress** (mean 0.00 Mbit/s)
- **Flow 2 egress** (mean 0.00 Mbit/s)
- **Flow 3 ingress** (mean 0.00 Mbit/s)
- **Flow 3 egress** (mean 0.00 Mbit/s)

---

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

- **Flow 1** (95th percentile 58.42 ms)
Run 6: Statistics of Copa

Start at: 2018-04-11 00:48:18
End at: 2018-04-11 00:48:48
Local clock offset: 1.428 ms
Remote clock offset: -1.121 ms

# Below is generated by plot.py at 2018-04-11 03:51:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.66 Mbit/s
  95th percentile per-packet one-way delay: 59.707 ms
  Loss rate: 93.06%
-- Flow 1:
  Average throughput: 46.54 Mbit/s
  95th percentile per-packet one-way delay: 59.194 ms
  Loss rate: 91.76%
-- Flow 2:
  Average throughput: 48.22 Mbit/s
  95th percentile per-packet one-way delay: 60.183 ms
  Loss rate: 94.36%
-- Flow 3:
  Average throughput: 0.00 Mbit/s
Run 6: Report of Copa — Data Link

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

- Flow 1 ingress (mean 563.00 Mbps)
- Flow 1 egress (mean 46.54 Mbps)
- Flow 2 ingress (mean 856.09 Mbps)
- Flow 2 egress (mean 48.22 Mbps)
- Flow 3 ingress (mean 0.00 Mbps)
- Flow 3 egress (mean 0.00 Mbps)

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

- Flow 1 (95th percentile 59.19 ms)
- Flow 2 (95th percentile 60.18 ms)
Run 7: Statistics of Copa

Start at: 2018-04-11 01:15:31
End at: 2018-04-11 01:16:01
Local clock offset: 0.742 ms
Remote clock offset: 6.095 ms

# Below is generated by plot.py at 2018-04-11 03:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 58.165 ms
Loss rate: 72.02%
-- Flow 1:
Average throughput: 77.46 Mbit/s
95th percentile per-packet one-way delay: 58.355 ms
Loss rate: 74.60%
-- Flow 2:
Average throughput: 19.22 Mbit/s
95th percentile per-packet one-way delay: 48.327 ms
Loss rate: 15.62%
-- Flow 3:
Average throughput: 1.65 Mbit/s
95th percentile per-packet one-way delay: 57.266 ms
Loss rate: 60.27%
Run 8: Statistics of Copa

Start at: 2018-04-11 01:41:23
End at: 2018-04-11 01:41:53
Local clock offset: 0.565 ms
Remote clock offset: 8.128 ms

# Below is generated by plot.py at 2018-04-11 03:51:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.30 Mbit/s
95th percentile per-packet one-way delay: 57.150 ms
Loss rate: 85.35%
-- Flow 1:
Average throughput: 87.21 Mbit/s
95th percentile per-packet one-way delay: 57.151 ms
Loss rate: 85.36%
-- Flow 2:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 55.808 ms
Loss rate: 62.55%
-- Flow 3:
Average throughput: 0.09 Mbit/s
95th percentile per-packet one-way delay: 54.569 ms
Loss rate: 90.13%
Run 8: Report of Copa — Data Link

![Graph](image)

- Flow 1 ingress (mean 595.93 Mbit/s)
- Flow 1 egress (mean 87.21 Mbit/s)
- Flow 2 ingress (mean 0.36 Mbit/s)
- Flow 2 egress (mean 0.15 Mbit/s)
- Flow 3 ingress (mean 0.25 Mbit/s)
- Flow 3 egress (mean 0.09 Mbit/s)

![Graph](image)

- Flow 1 (95th percentile 57.15 ms)
- Flow 2 (95th percentile 55.81 ms)
- Flow 3 (95th percentile 54.57 ms)
Run 9: Statistics of Copa

Start at: 2018-04-11 02:09:04
End at: 2018-04-11 02:09:34
Local clock offset: 0.368 ms
Remote clock offset: 12.657 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 59.471 ms
Loss rate: 88.78%
-- Flow 1:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 59.471 ms
Loss rate: 88.78%
-- Flow 2:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 49.276 ms
Loss rate: 75.00%
-- Flow 3:
Average throughput: 0.00 Mbit/s
95th percentile per-packet one-way delay: 48.558 ms
Loss rate: 50.00%
Run 9: Report of Copa — Data Link

![Graph of throughput and latency over time for different flows, with labels for each flow's ingress and egress rates and 95th percentile one-way delays.]
Run 10: Statistics of Copa

Start at: 2018-04-11 02:36:23
End at: 2018-04-11 02:36:53
Local clock offset: 0.261 ms
Remote clock offset: -7.102 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.98 Mbit/s
95th percentile per-packet one-way delay: 38.791 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 49.97 Mbit/s
95th percentile per-packet one-way delay: 37.860 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 27.55 Mbit/s
95th percentile per-packet one-way delay: 39.003 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 20.09 Mbit/s
95th percentile per-packet one-way delay: 44.291 ms
Loss rate: 0.22%
Run 10: Report of Copa — Data Link

![_graph1](image1)

- Flow 1 ingress (mean 50.04 Mbit/s)
- Flow 1 egress (mean 49.97 Mbit/s)
- Flow 2 ingress (mean 27.59 Mbit/s)
- Flow 2 egress (mean 27.55 Mbit/s)
- Flow 3 ingress (mean 20.14 Mbit/s)
- Flow 3 egress (mean 20.09 Mbit/s)

![_graph2](image2)

- Flow 1 (95th percentile 37.86 ms)
- Flow 2 (95th percentile 39.00 ms)
- Flow 3 (95th percentile 44.29 ms)
Run 1: Statistics of FillP

Start at: 2018-04-10 22:45:13
End at: 2018-04-10 22:45:43
Local clock offset: 0.703 ms
Remote clock offset: -3.112 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 68.850 ms
Loss rate: 18.51%
-- Flow 1:
Average throughput: 55.93 Mbit/s
95th percentile per-packet one-way delay: 67.463 ms
Loss rate: 13.87%
-- Flow 2:
Average throughput: 34.95 Mbit/s
95th percentile per-packet one-way delay: 70.501 ms
Loss rate: 24.36%
-- Flow 3:
Average throughput: 42.09 Mbit/s
95th percentile per-packet one-way delay: 69.098 ms
Loss rate: 25.00%
Run 1: Report of FillP — Data Link

![Graph of Throughput and Delay for Flows](image1.png)

Legend:
- Flow 1 ingress (mean 64.98 Mbit/s)
- Flow 1 egress (mean 55.93 Mbit/s)
- Flow 2 ingress (mean 46.23 Mbit/s)
- Flow 2 egress (mean 34.95 Mbit/s)
- Flow 3 ingress (mean 56.18 Mbit/s)
- Flow 3 egress (mean 42.09 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 67.46 ms)
- Flow 2 (95th percentile 70.50 ms)
- Flow 3 (95th percentile 69.10 ms)
Run 2: Statistics of FillP

Start at: 2018-04-10 23:11:36
End at: 2018-04-10 23:12:06
Local clock offset: 1.191 ms
Remote clock offset: -5.089 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.01 Mbit/s
95th percentile per-packet one-way delay: 65.460 ms
Loss rate: 17.87%
-- Flow 1:
Average throughput: 47.68 Mbit/s
95th percentile per-packet one-way delay: 64.295 ms
Loss rate: 14.81%
-- Flow 2:
Average throughput: 28.78 Mbit/s
95th percentile per-packet one-way delay: 68.096 ms
Loss rate: 27.31%
-- Flow 3:
Average throughput: 69.95 Mbit/s
95th percentile per-packet one-way delay: 55.037 ms
Loss rate: 15.04%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-04-10 23:39:07
End at: 2018-04-10 23:39:37
Local clock offset: 1.214 ms
Remote clock offset: -1.729 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.10 Mbit/s
95th percentile per-packet one-way delay: 68.248 ms
Loss rate: 19.50%
-- Flow 1:
Average throughput: 59.09 Mbit/s
95th percentile per-packet one-way delay: 66.980 ms
Loss rate: 14.32%
-- Flow 2:
Average throughput: 29.88 Mbit/s
95th percentile per-packet one-way delay: 69.722 ms
Loss rate: 27.80%
-- Flow 3:
Average throughput: 43.26 Mbit/s
95th percentile per-packet one-way delay: 69.168 ms
Loss rate: 26.22%
Run 3: Report of FillP — Data Link

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

<table>
<thead>
<tr>
<th>Flow 1 ingress (mean 69.02 Mbit/s)</th>
<th>Flow 1 egress (mean 59.09 Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 2 ingress (mean 41.41 Mbit/s)</td>
<td>Flow 2 egress (mean 29.88 Mbit/s)</td>
</tr>
<tr>
<td>Flow 3 ingress (mean 57.78 Mbit/s)</td>
<td>Flow 3 egress (mean 43.26 Mbit/s)</td>
</tr>
</tbody>
</table>

| Flow 1 (95th percentile 66.98 ms) | Flow 2 (95th percentile 69.72 ms) | Flow 3 (95th percentile 69.17 ms) |
Run 4: Statistics of FillP

Start at: 2018-04-11 00:07:33
End at: 2018-04-11 00:08:03
Local clock offset: 1.962 ms
Remote clock offset: -4.833 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 68.510 ms
Loss rate: 16.53%
-- Flow 1:
Average throughput: 59.65 Mbit/s
95th percentile per-packet one-way delay: 66.645 ms
Loss rate: 12.45%
-- Flow 2:
Average throughput: 42.85 Mbit/s
95th percentile per-packet one-way delay: 70.001 ms
Loss rate: 19.80%
-- Flow 3:
Average throughput: 14.19 Mbit/s
95th percentile per-packet one-way delay: 74.172 ms
Loss rate: 37.84%
Run 4: Report of FillP — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress (mean 68.19 Mbps):**
- **Flow 1 egress (mean 59.65 Mbps):**
- **Flow 2 ingress (mean 53.49 Mbps):**
- **Flow 2 egress (mean 42.85 Mbps):**
- **Flow 3 ingress (mean 22.89 Mbps):**
- **Flow 3 egress (mean 14.19 Mbps):**

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

- **Flow 1 (95th percentile 66.64 ms):**
- **Flow 2 (95th percentile 70.00 ms):**
- **Flow 3 (95th percentile 74.17 ms):**

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Run 5: Statistics of FillP

Start at: 2018-04-11 00:37:06
End at: 2018-04-11 00:37:36
Local clock offset: 1.574 ms
Remote clock offset: -4.692 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 67.117 ms
Loss rate: 19.16%
-- Flow 1:
Average throughput: 60.67 Mbit/s
95th percentile per-packet one-way delay: 66.433 ms
Loss rate: 14.92%
-- Flow 2:
Average throughput: 28.23 Mbit/s
95th percentile per-packet one-way delay: 67.645 ms
Loss rate: 27.86%
-- Flow 3:
Average throughput: 41.33 Mbit/s
95th percentile per-packet one-way delay: 68.420 ms
Loss rate: 23.45%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-04-11 01:05:22
End at: 2018-04-11 01:05:52
Local clock offset: 1.037 ms
Remote clock offset: 0.731 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.27 Mbit/s
95th percentile per-packet one-way delay: 65.231 ms
Loss rate: 15.00%
-- Flow 1:
Average throughput: 50.53 Mbit/s
95th percentile per-packet one-way delay: 64.924 ms
Loss rate: 13.21%
-- Flow 2:
Average throughput: 26.78 Mbit/s
95th percentile per-packet one-way delay: 67.680 ms
Loss rate: 26.97%
-- Flow 3:
Average throughput: 67.32 Mbit/s
95th percentile per-packet one-way delay: 51.471 ms
Loss rate: 7.04%
Run 6: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 58.22 Mbit/s)
- **Flow 1 egress** (mean 50.53 Mbit/s)
- **Flow 2 ingress** (mean 36.64 Mbit/s)
- **Flow 2 egress** (mean 26.78 Mbit/s)
- **Flow 3 ingress** (mean 71.12 Mbit/s)
- **Flow 3 egress** (mean 67.32 Mbit/s)

- **Flow 1** (95th percentile 64.92 ms)
- **Flow 2** (95th percentile 67.68 ms)
- **Flow 3** (95th percentile 51.47 ms)
Run 7: Statistics of FillP

Start at: 2018-04-11 01:31:40
End at: 2018-04-11 01:32:10
Local clock offset: 0.641 ms
Remote clock offset: 6.497 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.16 Mbit/s
95th percentile per-packet one-way delay: 64.777 ms
Loss rate: 14.12%
-- Flow 1:
Average throughput: 33.75 Mbit/s
95th percentile per-packet one-way delay: 53.317 ms
Loss rate: 10.27%
-- Flow 2:
Average throughput: 64.79 Mbit/s
95th percentile per-packet one-way delay: 64.522 ms
Loss rate: 13.72%
-- Flow 3:
Average throughput: 43.13 Mbit/s
95th percentile per-packet one-way delay: 67.793 ms
Loss rate: 23.00%
Run 7: Report of FillP — Data Link

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

- Flow 1 ingress (mean 37.63 Mbit/s)
- Flow 1 egress (mean 33.75 Mbit/s)
- Flow 2 ingress (mean 75.06 Mbit/s)
- Flow 2 egress (mean 64.79 Mbit/s)
- Flow 3 ingress (mean 56.07 Mbit/s)
- Flow 3 egress (mean 43.13 Mbit/s)

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

- Flow 1 (95th percentile 53.32 ms)
- Flow 2 (95th percentile 64.52 ms)
- Flow 3 (95th percentile 67.79 ms)
Run 8: Statistics of FillP

Start at: 2018-04-11 01:58:45
End at: 2018-04-11 01:59:15
Local clock offset: 0.439 ms
Remote clock offset: 10.85 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.38 Mbit/s
  95th percentile per-packet one-way delay: 65.177 ms
  Loss rate: 12.56%
-- Flow 1:
  Average throughput: 33.68 Mbit/s
  95th percentile per-packet one-way delay: 56.328 ms
  Loss rate: 11.53%
-- Flow 2:
  Average throughput: 64.53 Mbit/s
  95th percentile per-packet one-way delay: 65.666 ms
  Loss rate: 12.42%
-- Flow 3:
  Average throughput: 41.29 Mbit/s
  95th percentile per-packet one-way delay: 68.710 ms
  Loss rate: 15.41%
Run 8: Report of FillP — Data Link

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

- Flow 1 ingress (mean 38.12 Mbit/s)
- Flow 1 egress (mean 33.68 Mbit/s)
- Flow 2 ingress (mean 73.84 Mbit/s)
- Flow 2 egress (mean 64.53 Mbit/s)
- Flow 3 ingress (mean 49.02 Mbit/s)
- Flow 3 egress (mean 41.29 Mbit/s)

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

- Flow 1 (95th percentile 56.33 ms)
- Flow 2 (95th percentile 65.67 ms)
- Flow 3 (95th percentile 68.71 ms)
Run 9: Statistics of FillP

Start at: 2018-04-11 02:25:45
End at: 2018-04-11 02:26:15
Local clock offset: 0.261 ms
Remote clock offset: -3.184 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.01 Mbit/s
95th percentile per-packet one-way delay: 70.364 ms
Loss rate: 17.85%
-- Flow 1:
Average throughput: 57.47 Mbit/s
95th percentile per-packet one-way delay: 68.974 ms
Loss rate: 14.24%
-- Flow 2:
Average throughput: 36.63 Mbit/s
95th percentile per-packet one-way delay: 71.503 ms
Loss rate: 23.95%
-- Flow 3:
Average throughput: 33.70 Mbit/s
95th percentile per-packet one-way delay: 71.745 ms
Loss rate: 21.14%
Run 9: Report of FillP — Data Link
Run 10: Statistics of FillP

Start at: 2018-04-11 02:52:47
End at: 2018-04-11 02:53:17
Local clock offset: 0.621 ms
Remote clock offset: -7.419 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.76 Mbit/s
  95th percentile per-packet one-way delay: 65.926 ms
  Loss rate: 18.31%
-- Flow 1:
  Average throughput: 61.71 Mbit/s
  95th percentile per-packet one-way delay: 64.376 ms
  Loss rate: 13.70%
-- Flow 2:
  Average throughput: 27.10 Mbit/s
  95th percentile per-packet one-way delay: 68.092 ms
  Loss rate: 27.40%
-- Flow 3:
  Average throughput: 39.30 Mbit/s
  95th percentile per-packet one-way delay: 66.205 ms
  Loss rate: 24.35%
Run 10: Report of FillP — Data Link

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

- **Flow 1**
  - Ingress (mean 71.59 Mbit/s)
  - Egress (mean 61.71 Mbit/s)
- **Flow 2**
  - Ingress (mean 37.40 Mbit/s)
  - Egress (mean 27.10 Mbit/s)
- **Flow 3**
  - Ingress (mean 51.97 Mbit/s)
  - Egress (mean 39.30 Mbit/s)

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

- **Flow 1** (95th percentile 64.38 ms)
- **Flow 2** (95th percentile 68.09 ms)
- **Flow 3** (95th percentile 66.20 ms)
Run 1: Statistics of Indigo-1-32

End at: 2018-04-10 22:26:18
Local clock offset: 0.467 ms
Remote clock offset: -2.933 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.99 Mbit/s
  95th percentile per-packet one-way delay: 46.573 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 62.00 Mbit/s
  95th percentile per-packet one-way delay: 45.353 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 35.86 Mbit/s
  95th percentile per-packet one-way delay: 49.100 ms
  Loss rate: 0.16%
-- Flow 3:
  Average throughput: 22.19 Mbit/s
  95th percentile per-packet one-way delay: 47.004 ms
  Loss rate: 0.13%
Run 1: Report of Indigo-1-32 — Data Link

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

Legend:
- Flow 1 ingress (mean 62.25 Mbit/s)
- Flow 1 egress (mean 62.00 Mbit/s)
- Flow 2 ingress (mean 35.93 Mbit/s)
- Flow 2 egress (mean 35.86 Mbit/s)
- Flow 3 ingress (mean 22.23 Mbit/s)
- Flow 3 egress (mean 22.19 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 45.35 ms)
- Flow 2 (95th percentile 49.10 ms)
- Flow 3 (95th percentile 47.00 ms)
Run 2: Statistics of Indigo-1-32

Start at: 2018-04-10 22:52:11
End at: 2018-04-10 22:52:41
Local clock offset: 0.86 ms
Remote clock offset: -5.189 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.01 Mbit/s
  95th percentile per-packet one-way delay: 38.898 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 68.74 Mbit/s
  95th percentile per-packet one-way delay: 38.634 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 29.11 Mbit/s
  95th percentile per-packet one-way delay: 39.936 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 18.19 Mbit/s
  95th percentile per-packet one-way delay: 41.082 ms
  Loss rate: 0.26%
Run 2: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 68.95 Mbit/s)
- Flow 1 egress (mean 68.74 Mbit/s)
- Flow 2 ingress (mean 29.19 Mbit/s)
- Flow 2 egress (mean 29.11 Mbit/s)
- Flow 3 ingress (mean 18.25 Mbit/s)
- Flow 3 egress (mean 18.19 Mbit/s)
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-10 23:18:58
End at: 2018-04-10 23:19:28
Local clock offset: 1.2 ms
Remote clock offset: -2.389 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.97 Mbit/s
  95th percentile per-packet one-way delay: 49.477 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 60.79 Mbit/s
  95th percentile per-packet one-way delay: 46.781 ms
  Loss rate: 0.55%
-- Flow 2:
  Average throughput: 36.89 Mbit/s
  95th percentile per-packet one-way delay: 51.517 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 26.66 Mbit/s
  95th percentile per-packet one-way delay: 53.072 ms
  Loss rate: 0.92%

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Run 3: Report of Indigo-1-32 — Data Link
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-10 23:46:31
End at: 2018-04-10 23:47:01
Local clock offset: 1.382 ms
Remote clock offset: -1.688 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.18 Mbit/s
95th percentile per-packet one-way delay: 39.331 ms
Loss rate: 0.24%

-- Flow 1:
Average throughput: 49.50 Mbit/s
95th percentile per-packet one-way delay: 38.881 ms
Loss rate: 0.23%

-- Flow 2:
Average throughput: 31.64 Mbit/s
95th percentile per-packet one-way delay: 39.541 ms
Loss rate: 0.26%

-- Flow 3:
Average throughput: 32.73 Mbit/s
95th percentile per-packet one-way delay: 42.258 ms
Loss rate: 0.28%
Run 4: Report of Indigo-1-32 — Data Link

![Graph showing throughput and packet delay over time]
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-11 00:15:48
End at: 2018-04-11 00:16:18
Local clock offset: 2.297 ms
Remote clock offset: -7.693 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.64 Mbit/s
95th percentile per-packet one-way delay: 43.195 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 57.41 Mbit/s
95th percentile per-packet one-way delay: 39.307 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 32.50 Mbit/s
95th percentile per-packet one-way delay: 44.135 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 26.64 Mbit/s
95th percentile per-packet one-way delay: 48.014 ms
Loss rate: 0.64%
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-11 00:45:04
End at: 2018-04-11 00:45:34
Local clock offset: 1.471 ms
Remote clock offset: -1.022 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.96 Mbit/s
  95th percentile per-packet one-way delay: 42.348 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 45.68 Mbit/s
  95th percentile per-packet one-way delay: 40.518 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 38.28 Mbit/s
  95th percentile per-packet one-way delay: 43.827 ms
  Loss rate: 1.28%
-- Flow 3:
  Average throughput: 27.35 Mbit/s
  95th percentile per-packet one-way delay: 48.992 ms
  Loss rate: 2.84%
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-11 01:12:39
End at: 2018-04-11 01:13:09
Local clock offset: 0.858 ms
Remote clock offset: 5.365 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.89 Mbit/s
95th percentile per-packet one-way delay: 44.922 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 60.95 Mbit/s
95th percentile per-packet one-way delay: 43.450 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 30.48 Mbit/s
95th percentile per-packet one-way delay: 46.182 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 36.00 Mbit/s
95th percentile per-packet one-way delay: 57.254 ms
Loss rate: 0.71%
Run 7: Report of Indigo-1-32 — Data Link

![Graphs showing data link performance metrics for different flows over time.]
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-11 01:38:37
End at: 2018-04-11 01:39:07
Local clock offset: 0.597 ms
Remote clock offset: 9.721 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.31 Mbit/s
95th percentile per-packet one-way delay: 51.490 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 62.89 Mbit/s
95th percentile per-packet one-way delay: 48.332 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 32.88 Mbit/s
95th percentile per-packet one-way delay: 54.550 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 29.35 Mbit/s
95th percentile per-packet one-way delay: 54.744 ms
Loss rate: 0.06%
Run 8: Report of Indigo-1-32 — Data Link
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-11 02:06:14
End at: 2018-04-11 02:06:44
Local clock offset: 0.507 ms
Remote clock offset: 14.671 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.13 Mbit/s
  95th percentile per-packet one-way delay: 50.620 ms
  Loss rate: 0.29%
-- Flow 1:
  Average throughput: 59.53 Mbit/s
  95th percentile per-packet one-way delay: 47.314 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 34.08 Mbit/s
  95th percentile per-packet one-way delay: 51.720 ms
  Loss rate: 0.16%
-- Flow 3:
  Average throughput: 30.60 Mbit/s
  95th percentile per-packet one-way delay: 53.143 ms
  Loss rate: 0.35%
Run 9: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 59.74 Mbit/s)
- Flow 1 egress (mean 59.53 Mbit/s)
- Flow 2 ingress (mean 34.14 Mbit/s)
- Flow 2 egress (mean 34.08 Mbit/s)
- Flow 3 ingress (mean 30.71 Mbit/s)
- Flow 3 egress (mean 30.60 Mbit/s)

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

- Flow 1 (99th percentile 47.31 ms)
- Flow 2 (99th percentile 51.72 ms)
- Flow 3 (99th percentile 53.14 ms)
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-11 02:33:11
End at: 2018-04-11 02:33:41
Local clock offset: 0.3 ms
Remote clock offset: -6.277 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.82 Mbit/s
95th percentile per-packet one-way delay: 44.591 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 59.18 Mbit/s
95th percentile per-packet one-way delay: 41.153 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 31.23 Mbit/s
95th percentile per-packet one-way delay: 45.777 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 53.938 ms
Loss rate: 0.17%
Run 10: Report of Indigo-1-32 — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 59.50 Mbit/s)
Flow 1 egress (mean 59.18 Mbit/s)
Flow 2 ingress (mean 31.37 Mbit/s)
Flow 2 egress (mean 31.23 Mbit/s)
Flow 3 ingress (mean 27.34 Mbit/s)
Flow 3 egress (mean 27.28 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 41.15 ms)
Flow 2 (95th percentile 45.78 ms)
Flow 3 (95th percentile 53.94 ms)
Run 1: Statistics of Vivace-latency

Start at: 2018-04-10 22:24:14
End at: 2018-04-10 22:24:44
Local clock offset: 0.441 ms
Remote clock offset: -2.942 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.88 Mbit/s
95th percentile per-packet one-way delay: 45.577 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 51.85 Mbit/s
95th percentile per-packet one-way delay: 43.536 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: 47.226 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 15.12 Mbit/s
95th percentile per-packet one-way delay: 49.044 ms
Loss rate: 0.07%
Run 1: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 52.00 Mbit/s)
- Flow 1 egress (mean 51.85 Mbit/s)
- Flow 2 ingress (mean 21.18 Mbit/s)
- Flow 2 egress (mean 21.12 Mbit/s)
- Flow 3 ingress (mean 15.13 Mbit/s)
- Flow 3 egress (mean 15.12 Mbit/s)

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

- Flow 1 (95th percentile 43.54 ms)
- Flow 2 (95th percentile 47.23 ms)
- Flow 3 (95th percentile 49.04 ms)

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Run 2: Statistics of Vivace-latency

Start at: 2018-04-10 22:50:46
End at: 2018-04-10 22:51:16
Local clock offset: 0.79 ms
Remote clock offset: -5.242 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.14 Mbit/s
95th percentile per-packet one-way delay: 46.111 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 64.59 Mbit/s
95th percentile per-packet one-way delay: 41.738 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 19.98 Mbit/s
95th percentile per-packet one-way delay: 52.743 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 13.49 Mbit/s
95th percentile per-packet one-way delay: 55.535 ms
Loss rate: 1.05%
Run 2: Report of Vivace-latency — Data Link
Run 3: Statistics of Vivace-latency

Start at: 2018-04-10 23:17:27
End at: 2018-04-10 23:17:57
Local clock offset: 1.23 ms
Remote clock offset: -5.154 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.36 Mbit/s
95th percentile per-packet one-way delay: 50.617 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 60.83 Mbit/s
95th percentile per-packet one-way delay: 49.428 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 15.17 Mbit/s
95th percentile per-packet one-way delay: 53.117 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 55.434 ms
Loss rate: 1.70%
Run 3: Report of Vivace-latency — Data Link
Run 4: Statistics of Vivace-latency

Start at: 2018-04-10 23:45:02
End at: 2018-04-10 23:45:32
Local clock offset: 1.347 ms
Remote clock offset: -3.735 ms

# Below is generated by plot.py at 2018-04-11 03:53:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 32.99 Mbit/s
  95th percentile per-packet one-way delay: 34.758 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 22.61 Mbit/s
  95th percentile per-packet one-way delay: 34.823 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 11.45 Mbit/s
  95th percentile per-packet one-way delay: 34.714 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 8.38 Mbit/s
  95th percentile per-packet one-way delay: 34.479 ms
  Loss rate: 0.42%
Run 4: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time for different flows.]
Run 5: Statistics of Vivace-latency

Start at: 2018-04-11 00:14:06
End at: 2018-04-11 00:14:36
Local clock offset: 2.166 ms
Remote clock offset: -5.147 ms

# Below is generated by plot.py at 2018-04-11 03:54:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.60 Mbit/s
  95th percentile per-packet one-way delay: 37.915 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 50.83 Mbit/s
  95th percentile per-packet one-way delay: 35.653 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 13.15 Mbit/s
  95th percentile per-packet one-way delay: 42.084 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 15.23 Mbit/s
  95th percentile per-packet one-way delay: 45.605 ms
  Loss rate: 0.14%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-04-11 00:43:23
End at: 2018-04-11 00:43:53
Local clock offset: 1.539 ms
Remote clock offset: -1.238 ms

# Below is generated by plot.py at 2018-04-11 03:54:34
# Datalink statistics
   -- Total of 3 flows:
      Average throughput: 63.93 Mbit/s
      95th percentile per-packet one-way delay: 44.131 ms
      Loss rate: 0.51%
   -- Flow 1:
      Average throughput: 24.27 Mbit/s
      95th percentile per-packet one-way delay: 38.330 ms
      Loss rate: 0.40%
   -- Flow 2:
      Average throughput: 52.86 Mbit/s
      95th percentile per-packet one-way delay: 48.024 ms
      Loss rate: 0.58%
   -- Flow 3:
      Average throughput: 13.71 Mbit/s
      95th percentile per-packet one-way delay: 51.512 ms
      Loss rate: 0.43%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-04-11 01:11:04  
End at: 2018-04-11 01:11:34  
Local clock offset: 0.816 ms  
Remote clock offset: 4.964 ms

# Below is generated by plot.py at 2018-04-11 03:54:56  
# Datalink statistics
-- Total of 3 flows:  
  Average throughput: 80.60 Mbit/s  
  95th percentile per-packet one-way delay: 45.329 ms  
  Loss rate: 0.27%  
-- Flow 1:  
  Average throughput: 64.47 Mbit/s  
  95th percentile per-packet one-way delay: 44.382 ms  
  Loss rate: 0.30%  
-- Flow 2:  
  Average throughput: 19.42 Mbit/s  
  95th percentile per-packet one-way delay: 55.374 ms  
  Loss rate: 0.15%  
-- Flow 3:  
  Average throughput: 9.75 Mbit/s  
  95th percentile per-packet one-way delay: 43.941 ms  
  Loss rate: 0.12%
Run 7: Report of Vivace-latency — Data Link
Run 8: Statistics of Vivace-latency

Start at: 2018-04-11 01:37:11
End at: 2018-04-11 01:37:41
Local clock offset: 0.673 ms
Remote clock offset: 7.4 ms

# Below is generated by plot.py at 2018-04-11 03:54:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.48 Mbit/s
95th percentile per-packet one-way delay: 52.289 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 50.075 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 54.196 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 11.69 Mbit/s
95th percentile per-packet one-way delay: 41.237 ms
Loss rate: 0.00%
Run 8: Report of Vivace-latency — Data Link

[Graph 1: Throughput (Mbps) vs Time (s) for different flows with specified mean throughputs]

[Graph 2: Per-packet one-way delays for different flows with specified 95th percentiles]

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Run 9: Statistics of Vivace-latency

Start at: 2018-04-11 02:04:43
End at: 2018-04-11 02:05:13
Local clock offset: 0.444 ms
Remote clock offset: 13.893 ms

# Below is generated by plot.py at 2018-04-11 03:54:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 55.81 Mbit/s
  95th percentile per-packet one-way delay: 53.601 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 23.90 Mbit/s
  95th percentile per-packet one-way delay: 47.278 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 45.76 Mbit/s
  95th percentile per-packet one-way delay: 56.603 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 4.50 Mbit/s
  95th percentile per-packet one-way delay: 58.364 ms
  Loss rate: 0.67%
Run 9: Report of Vivace-latency — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 24.07 Mbps)
- Flow 1 egress (mean 23.90 Mbps)
- Flow 2 ingress (mean 46.25 Mbps)
- Flow 2 egress (mean 45.76 Mbps)
- Flow 3 ingress (mean 4.54 Mbps)
- Flow 3 egress (mean 4.50 Mbps)

Per packet one way delay (ms):

- Flow 1 (95th percentile 47.28 ms)
- Flow 2 (95th percentile 56.60 ms)
- Flow 3 (95th percentile 58.36 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-04-11 02:31:33
End at: 2018-04-11 02:32:03
Local clock offset: 0.337 ms
Remote clock offset: -5.261 ms

# Below is generated by plot.py at 2018-04-11 03:54:58
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 77.50 Mbit/s
    95th percentile per-packet one-way delay: 38.913 ms
    Loss rate: 0.49%
-- Flow 1:
    Average throughput: 63.27 Mbit/s
    95th percentile per-packet one-way delay: 38.901 ms
    Loss rate: 0.56%
-- Flow 2:
    Average throughput: 17.89 Mbit/s
    95th percentile per-packet one-way delay: 39.084 ms
    Loss rate: 0.23%
-- Flow 3:
    Average throughput: 7.07 Mbit/s
    95th percentile per-packet one-way delay: 38.627 ms
    Loss rate: 0.07%
Run 10: Report of Vivace-latency — Data Link

![Graph showing throughput and latency for different flows over time.]
Run 1: Statistics of Vivace-loss

Start at: 2018-04-10 22:37:43
End at: 2018-04-10 22:38:13
Local clock offset: 0.466 ms
Remote clock offset: -5.726 ms

# Below is generated by plot.py at 2018-04-11 03:55:13
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 91.42 Mbit/s
   95th percentile per-packet one-way delay: 64.601 ms
   Loss rate: 6.78%
-- Flow 1:
   Average throughput: 80.28 Mbit/s
   95th percentile per-packet one-way delay: 64.530 ms
   Loss rate: 6.74%
-- Flow 2:
   Average throughput: 13.64 Mbit/s
   95th percentile per-packet one-way delay: 65.225 ms
   Loss rate: 6.91%
-- Flow 3:
   Average throughput: 6.30 Mbit/s
   95th percentile per-packet one-way delay: 65.687 ms
   Loss rate: 8.06%
Run 1: Report of Vivace-loss — Data Link
Run 2: Statistics of Vivace-loss

Start at: 2018-04-10 23:03:52
End at: 2018-04-10 23:04:22
Local clock offset: 1.088 ms
Remote clock offset: -2.444 ms

# Below is generated by plot.py at 2018-04-11 03:55:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.34 Mbit/s
95th percentile per-packet one-way delay: 66.826 ms
Loss rate: 5.94%
-- Flow 1:
Average throughput: 67.50 Mbit/s
95th percentile per-packet one-way delay: 66.834 ms
Loss rate: 5.69%
-- Flow 2:
Average throughput: 11.21 Mbit/s
95th percentile per-packet one-way delay: 67.725 ms
Loss rate: 6.33%
-- Flow 3:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 66.174 ms
Loss rate: 6.84%
Run 2: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 71.57 Mbit/s)
- Flow 1 egress (mean 67.50 Mbit/s)
- Flow 2 ingress (mean 11.95 Mbit/s)
- Flow 2 egress (mean 11.21 Mbit/s)
- Flow 3 ingress (mean 50.17 Mbit/s)
- Flow 3 egress (mean 46.85 Mbit/s)
Run 3: Statistics of Vivace-loss

Start at: 2018-04-10 23:31:12
End at: 2018-04-10 23:31:42
Local clock offset: 1.041 ms
Remote clock offset: -1.427 ms

# Below is generated by plot.py at 2018-04-11 03:55:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.14 Mbit/s
95th percentile per-packet one-way delay: 65.906 ms
Loss rate: 5.68%
-- Flow 1:
Average throughput: 63.41 Mbit/s
95th percentile per-packet one-way delay: 65.872 ms
Loss rate: 5.73%
-- Flow 2:
Average throughput: 19.25 Mbit/s
95th percentile per-packet one-way delay: 66.557 ms
Loss rate: 5.88%
-- Flow 3:
Average throughput: 11.94 Mbit/s
95th percentile per-packet one-way delay: 61.441 ms
Loss rate: 4.03%
Run 3: Report of Vivace-loss — Data Link

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

- **Flow 1 ingress (mean 67.28 Mbps)**
- **Flow 2 ingress (mean 20.46 Mbps)**
- **Flow 3 ingress (mean 12.42 Mbps)**
- **Flow 1 egress (mean 63.41 Mbps)**
- **Flow 2 egress (mean 19.25 Mbps)**
- **Flow 3 egress (mean 11.94 Mbps)**

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

- **Flow 1 (95th percentile 65.87 ms)**
- **Flow 2 (95th percentile 66.56 ms)**
- **Flow 3 (95th percentile 61.44 ms)**
Run 4: Statistics of Vivace-loss

Start at: 2018-04-10 23:59:01
End at: 2018-04-10 23:59:31
Local clock offset: 1.709 ms
Remote clock offset: -3.674 ms

# Below is generated by plot.py at 2018-04-11 03:55:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.57 Mbit/s
  95th percentile per-packet one-way delay: 66.427 ms
  Loss rate: 6.82%
-- Flow 1:
  Average throughput: 47.75 Mbit/s
  95th percentile per-packet one-way delay: 66.581 ms
  Loss rate: 6.69%
-- Flow 2:
  Average throughput: 31.81 Mbit/s
  95th percentile per-packet one-way delay: 66.929 ms
  Loss rate: 7.61%
-- Flow 3:
  Average throughput: 41.54 Mbit/s
  95th percentile per-packet one-way delay: 64.487 ms
  Loss rate: 6.07%
Run 4: Report of Vivace-loss — Data Link

![Graph of Throughput](image1)

![Graph of Packet Delay](image2)
Run 5: Statistics of Vivace-loss

Start at: 2018-04-11 00:28:46
End at: 2018-04-11 00:29:16
Local clock offset: 2.127 ms
Remote clock offset: -4.152 ms

# Below is generated by plot.py at 2018-04-11 03:55:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.26 Mbit/s
95th percentile per-packet one-way delay: 65.544 ms
Loss rate: 5.64%

-- Flow 1:
Average throughput: 60.61 Mbit/s
95th percentile per-packet one-way delay: 65.287 ms
Loss rate: 5.27%

-- Flow 2:
Average throughput: 18.43 Mbit/s
95th percentile per-packet one-way delay: 66.653 ms
Loss rate: 7.21%

-- Flow 3:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 64.846 ms
Loss rate: 6.22%
Run 5: Report of Vivace-loss — Data Link

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

- Flow 1 ingress (mean 63.98 Mbps)
- Flow 1 egress (mean 60.61 Mbps)
- Flow 2 ingress (mean 19.85 Mbps)
- Flow 2 egress (mean 18.43 Mbps)
- Flow 3 ingress (mean 14.28 Mbps)
- Flow 3 egress (mean 13.42 Mbps)

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

- Flow 1 (95th percentile 65.29 ms)
- Flow 2 (95th percentile 66.65 ms)
- Flow 3 (95th percentile 64.85 ms)
Run 6: Statistics of Vivace-loss

Start at: 2018-04-11 00:57:51
End at: 2018-04-11 00:58:21
Local clock offset: 1.402 ms
Remote clock offset: 0.328 ms

# Below is generated by plot.py at 2018-04-11 03:56:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.00 Mbit/s
95th percentile per-packet one-way delay: 67.958 ms
Loss rate: 6.90%
-- Flow 1:
Average throughput: 65.92 Mbit/s
95th percentile per-packet one-way delay: 68.069 ms
Loss rate: 6.54%
-- Flow 2:
Average throughput: 35.47 Mbit/s
95th percentile per-packet one-way delay: 67.628 ms
Loss rate: 7.76%
-- Flow 3:
Average throughput: 4.72 Mbit/s
95th percentile per-packet one-way delay: 68.116 ms
Loss rate: 8.64%
Run 6: Report of Vivace-loss — Data Link

![Graph showing network performance metrics over time]

**Throughput (Mbps)**
- Flow 1 ingress (mean 70.54 Mbps)
- Flow 1 egress (mean 65.92 Mbps)
- Flow 2 ingress (mean 38.38 Mbps)
- Flow 2 egress (mean 35.47 Mbps)
- Flow 3 ingress (mean 5.16 Mbps)
- Flow 3 egress (mean 4.72 Mbps)

**Per packet one way delay (ms)**
- Flow 1 (95th percentile 68.07 ms)
- Flow 2 (95th percentile 67.63 ms)
- Flow 3 (95th percentile 68.12 ms)
Run 7: Statistics of Vivace-loss

Start at: 2018-04-11 01:24:32
End at: 2018-04-11 01:25:02
Local clock offset: 0.669 ms
Remote clock offset: 7.364 ms

# Below is generated by plot.py at 2018-04-11 03:56:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.56 Mbit/s
95th percentile per-packet one-way delay: 65.825 ms
Loss rate: 6.21%
-- Flow 1:
Average throughput: 64.47 Mbit/s
95th percentile per-packet one-way delay: 66.102 ms
Loss rate: 6.30%
-- Flow 2:
Average throughput: 20.84 Mbit/s
95th percentile per-packet one-way delay: 64.668 ms
Loss rate: 5.93%
-- Flow 3:
Average throughput: 22.59 Mbit/s
95th percentile per-packet one-way delay: 62.186 ms
Loss rate: 5.95%
Run 7: Report of Vivace-loss — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 68.81 Mbps)
- Flow 1 egress (mean 64.47 Mbps)
- Flow 2 ingress (mean 21.85 Mbps)
- Flow 2 egress (mean 20.84 Mbps)
- Flow 3 ingress (mean 23.94 Mbps)
- Flow 3 egress (mean 22.59 Mbps)

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

- Flow 1 (95th percentile 66.10 ms)
- Flow 2 (95th percentile 64.67 ms)
- Flow 3 (95th percentile 62.19 ms)
Run 8: Statistics of Vivace-loss

Start at: 2018-04-11 01:50:25
End at: 2018-04-11 01:50:55
Local clock offset: 0.51 ms
Remote clock offset: 9.484 ms

# Below is generated by plot.py at 2018-04-11 03:56:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.83 Mbit/s
  95th percentile per-packet one-way delay: 62.307 ms
  Loss rate: 4.06%
-- Flow 1:
  Average throughput: 62.89 Mbit/s
  95th percentile per-packet one-way delay: 61.873 ms
  Loss rate: 3.85%
-- Flow 2:
  Average throughput: 19.21 Mbit/s
  95th percentile per-packet one-way delay: 63.525 ms
  Loss rate: 4.61%
-- Flow 3:
  Average throughput: 9.63 Mbit/s
  95th percentile per-packet one-way delay: 63.519 ms
  Loss rate: 6.09%
Run 8: Report of Vivace-loss — Data Link
Run 9: Statistics of Vivace-loss

Start at: 2018-04-11 02:17:42
End at: 2018-04-11 02:18:12
Local clock offset: 0.325 ms
Remote clock offset: -1.2 ms

# Below is generated by plot.py at 2018-04-11 03:56:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.87 Mbit/s
  95th percentile per-packet one-way delay: 65.563 ms
  Loss rate: 5.47%
-- Flow 1:
  Average throughput: 47.78 Mbit/s
  95th percentile per-packet one-way delay: 63.620 ms
  Loss rate: 4.44%
-- Flow 2:
  Average throughput: 24.93 Mbit/s
  95th percentile per-packet one-way delay: 66.967 ms
  Loss rate: 6.95%
-- Flow 3:
  Average throughput: 19.74 Mbit/s
  95th percentile per-packet one-way delay: 69.268 ms
  Loss rate: 8.95%
Run 9: Report of Vivace-loss — Data Link

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

- **Flow 1 ingress** (mean 50.02 Mbit/s)
- **Flow 1 egress** (mean 47.78 Mbit/s)
- **Flow 2 ingress** (mean 26.81 Mbit/s)
- **Flow 2 egress** (mean 24.93 Mbit/s)
- **Flow 3 ingress** (mean 21.71 Mbit/s)
- **Flow 3 egress** (mean 19.74 Mbit/s)

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

- **Flow 1** (95th percentile 63.62 ms)
- **Flow 2** (95th percentile 66.97 ms)
- **Flow 3** (95th percentile 69.27 ms)
Run 10: Statistics of Vivace-loss

Start at: 2018-04-11 02:45:07
End at: 2018-04-11 02:45:37
Local clock offset: 0.423 ms
Remote clock offset: -9.075 ms

# Below is generated by plot.py at 2018-04-11 03:56:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.48 Mbit/s
  95th percentile per-packet one-way delay: 66.102 ms
  Loss rate: 8.47%
-- Flow 1:
  Average throughput: 36.84 Mbit/s
  95th percentile per-packet one-way delay: 65.409 ms
  Loss rate: 8.81%
-- Flow 2:
  Average throughput: 43.80 Mbit/s
  95th percentile per-packet one-way delay: 66.516 ms
  Loss rate: 7.81%
-- Flow 3:
  Average throughput: 10.80 Mbit/s
  95th percentile per-packet one-way delay: 65.768 ms
  Loss rate: 10.22%
Run 10: Report of Vivace-loss — Data Link

![Graph of throughput and packet delay](image-url)
Run 1: Statistics of Vivace-LTE

Start at: 2018-04-10 22:43:42
End at: 2018-04-10 22:44:12
Local clock offset: 0.669 ms
Remote clock offset: -5.876 ms

# Below is generated by plot.py at 2018-04-11 03:57:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.66 Mbit/s
95th percentile per-packet one-way delay: 57.650 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 69.45 Mbit/s
95th percentile per-packet one-way delay: 58.302 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 23.77 Mbit/s
95th percentile per-packet one-way delay: 55.811 ms
Loss rate: 1.94%
-- Flow 3:
Average throughput: 16.35 Mbit/s
95th percentile per-packet one-way delay: 56.797 ms
Loss rate: 2.20%
Run 1: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 71.37 Mb/s)
- Flow 1 egress (mean 69.45 Mb/s)
- Flow 2 ingress (mean 24.27 Mb/s)
- Flow 2 egress (mean 23.77 Mb/s)
- Flow 3 ingress (mean 16.77 Mb/s)
- Flow 3 egress (mean 16.35 Mb/s)

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

- Flow 1 (95th percentile 58.30 ms)
- Flow 2 (95th percentile 55.81 ms)
- Flow 3 (95th percentile 56.80 ms)
Run 2: Statistics of Vivace-LTE

Start at: 2018-04-10 23:10:00
End at: 2018-04-10 23:10:30
Local clock offset: 1.071 ms
Remote clock offset: -3.045 ms

# Below is generated by plot.py at 2018-04-11 03:57:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.88 Mbit/s
95th percentile per-packet one-way delay: 62.805 ms
Loss rate: 2.79%

-- Flow 1:
Average throughput: 60.89 Mbit/s
95th percentile per-packet one-way delay: 61.752 ms
Loss rate: 2.89%

-- Flow 2:
Average throughput: 34.80 Mbit/s
95th percentile per-packet one-way delay: 64.399 ms
Loss rate: 2.48%

-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 64.857 ms
Loss rate: 3.00%
Run 2: Report of Vivace-LTE — Data Link

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

- **Flow 1 (mean 62.72 Mbit/s)**
- **Flow 2 (mean 35.69 Mbit/s)**
- **Flow 3 (mean 12.02 Mbit/s)**

![Graph showing packet delay for three flows.]

- **Flow 1 (95th percentile 61.75 ms)**
- **Flow 2 (95th percentile 64.40 ms)**
- **Flow 3 (95th percentile 64.86 ms)**
Run 3: Statistics of Vivace-LTE

Start at: 2018-04-10 23:37:32
End at: 2018-04-10 23:38:02
Local clock offset: 1.192 ms
Remote clock offset: -3.782 ms

# Below is generated by plot.py at 2018-04-11 03:57:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.33 Mbit/s
95th percentile per-packet one-way delay: 61.946 ms
Loss rate: 2.55%
-- Flow 1:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 62.560 ms
Loss rate: 2.85%
-- Flow 2:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 58.973 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 10.34 Mbit/s
95th percentile per-packet one-way delay: 55.998 ms
Loss rate: 1.50%
Run 3: Report of Vivace-LTE — Data Link
Run 4: Statistics of Vivace-LTE

Start at: 2018-04-11 00:05:42
End at: 2018-04-11 00:06:12
Local clock offset: 1.908 ms
Remote clock offset: -4.699 ms

# Below is generated by plot.py at 2018-04-11 03:57:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.23 Mbit/s
95th percentile per-packet one-way delay: 65.637 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 63.75 Mbit/s
95th percentile per-packet one-way delay: 65.033 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 17.35 Mbit/s
95th percentile per-packet one-way delay: 66.893 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 21.16 Mbit/s
95th percentile per-packet one-way delay: 67.703 ms
Loss rate: 3.11%
Run 4: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress (mean 64.76 Mbit/s)**
- **Flow 1 egress (mean 63.75 Mbit/s)**
- **Flow 2 ingress (mean 17.87 Mbit/s)**
- **Flow 2 egress (mean 17.35 Mbit/s)**
- **Flow 3 ingress (mean 21.77 Mbit/s)**
- **Flow 3 egress (mean 21.16 Mbit/s)**

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

- **Flow 1 (95th percentile 65.03 ms)**
- **Flow 2 (95th percentile 66.89 ms)**
- **Flow 3 (95th percentile 67.70 ms)**

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Run 5: Statistics of Vivace-LTE

Start at: 2018-04-11 00:35:30
End at: 2018-04-11 00:36:00
Local clock offset: 1.689 ms
Remote clock offset: -2.459 ms

# Below is generated by plot.py at 2018-04-11 03:57:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 64.239 ms
Loss rate: 4.10%
-- Flow 1:
Average throughput: 58.82 Mbit/s
95th percentile per-packet one-way delay: 62.988 ms
Loss rate: 3.99%
-- Flow 2:
Average throughput: 26.39 Mbit/s
95th percentile per-packet one-way delay: 65.837 ms
Loss rate: 4.18%
-- Flow 3:
Average throughput: 11.35 Mbit/s
95th percentile per-packet one-way delay: 66.874 ms
Loss rate: 5.42%
Run 5: Report of Vivace-LTE — Data Link

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

- **Flow 1 ingress** (mean 61.28 Mbit/s)
- **Flow 1 egress** (mean 58.82 Mbit/s)
- **Flow 2 ingress** (mean 27.55 Mbit/s)
- **Flow 2 egress** (mean 26.39 Mbit/s)
- **Flow 3 ingress** (mean 11.97 Mbit/s)
- **Flow 3 egress** (mean 11.35 Mbit/s)

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

- **Flow 1** (95th percentile 62.99 ms)
- **Flow 2** (95th percentile 65.84 ms)
- **Flow 3** (95th percentile 66.87 ms)
Run 6: Statistics of Vivace-LTE

Start at: 2018-04-11 01:03:54
End at: 2018-04-11 01:04:24
Local clock offset: 1.117 ms
Remote clock offset: 2.215 ms

# Below is generated by plot.py at 2018-04-11 03:57:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.74 Mbit/s
  95th percentile per-packet one-way delay: 63.696 ms
  Loss rate: 2.68%
-- Flow 1:
  Average throughput: 60.34 Mbit/s
  95th percentile per-packet one-way delay: 62.969 ms
  Loss rate: 2.83%
-- Flow 2:
  Average throughput: 29.90 Mbit/s
  95th percentile per-packet one-way delay: 65.000 ms
  Loss rate: 2.24%
-- Flow 3:
  Average throughput: 7.62 Mbit/s
  95th percentile per-packet one-way delay: 66.682 ms
  Loss rate: 2.45%
Run 6: Report of Vivace-LTE — Data Link

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

Start at: 2018-04-11 01:30:14
End at: 2018-04-11 01:30:44
Local clock offset: 0.613 ms
Remote clock offset: 6.275 ms

# Below is generated by plot.py at 2018-04-11 03:57:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.43 Mbit/s
95th percentile per-packet one-way delay: 60.481 ms
Loss rate: 2.30%
-- Flow 1:
Average throughput: 72.89 Mbit/s
95th percentile per-packet one-way delay: 59.965 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 21.25 Mbit/s
95th percentile per-packet one-way delay: 62.518 ms
Loss rate: 2.31%
-- Flow 3:
Average throughput: 10.41 Mbit/s
95th percentile per-packet one-way delay: 64.840 ms
Loss rate: 3.23%
Run 7: Report of Vivace-LTE — Data Link

![Graph of throughput and per-packet one-way delay over time for different flows and ingress/egress data rates.](image-url)
Run 8: Statistics of Vivace-LTE

Start at: 2018-04-11 01:57:01
End at: 2018-04-11 01:57:31
Local clock offset: 0.474 ms
Remote clock offset: 10.531 ms

# Below is generated by plot.py at 2018-04-11 03:57:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 59.008 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 60.59 Mbit/s
95th percentile per-packet one-way delay: 58.282 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 26.64 Mbit/s
95th percentile per-packet one-way delay: 60.656 ms
Loss rate: 2.18%
-- Flow 3:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 57.975 ms
Loss rate: 1.56%
Run 8: Report of Vivace-LTE — Data Link
Run 9: Statistics of Vivace-LTE

Start at: 2018-04-11 02:24:12
End at: 2018-04-11 02:24:42
Local clock offset: 0.289 ms
Remote clock offset: -3.168 ms

# Below is generated by plot.py at 2018-04-11 03:58:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.21 Mbit/s
  95th percentile per-packet one-way delay: 64.240 ms
  Loss rate: 1.66%
-- Flow 1:
  Average throughput: 61.04 Mbit/s
  95th percentile per-packet one-way delay: 63.994 ms
  Loss rate: 1.62%
-- Flow 2:
  Average throughput: 17.76 Mbit/s
  95th percentile per-packet one-way delay: 64.985 ms
  Loss rate: 1.84%
-- Flow 3:
  Average throughput: 10.19 Mbit/s
  95th percentile per-packet one-way delay: 64.832 ms
  Loss rate: 1.93%
Run 9: Report of Vivace-LTE — Data Link

![Graph of Throughput and Packet Delay]

Throughput (Mbps) and Per-packet one-way delay (ms) graphs for different flows.

Flow 1 ingress (mean 62.06 Mbps) vs Flow 1 egress (mean 61.04 Mbps)
Flow 2 ingress (mean 18.10 Mbps) vs Flow 2 egress (mean 17.76 Mbps)
Flow 3 ingress (mean 10.39 Mbps) vs Flow 3 egress (mean 10.19 Mbps)

Flow 1 (95th percentile 63.99 ms) vs Flow 2 (95th percentile 64.98 ms) vs Flow 3 (95th percentile 64.83 ms)

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Run 10: Statistics of Vivace-LTE

Start at: 2018-04-11 02:51:14
End at: 2018-04-11 02:51:44
Local clock offset: 0.664 ms
Remote clock offset: -7.67 ms

# Below is generated by plot.py at 2018-04-11 03:58:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.35 Mbit/s
95th percentile per-packet one-way delay: 60.236 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 64.84 Mbit/s
95th percentile per-packet one-way delay: 58.121 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 20.89 Mbit/s
95th percentile per-packet one-way delay: 62.167 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 63.238 ms
Loss rate: 1.38%
Run 10: Report of Vivace-LTE — Data Link

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

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