Pantheon Report

Generated at 2018-03-07 01:24:27 (UTC).
Data path: GCE Tokyo Ethernet (remote) → GCE London Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).

Git summary:
branch: master @ f12c42a2c63fdd9a862eefa0468859bf379b6623
third_party/calibrated_koho @ 3cb73c0d1c0322cdfa446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ 828bbf95fd4941149b5cec90f281d1c69ae1a5c6
third_party/genericCC @ 9249eea3238475c4d88ca1443d28df70bff6c4a2
third_party/indigo @ a9b2060d3f4a2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfae0ecdfb90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd350593528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044e8306faa0b983ad82360c53d89
third_party/koho_cc @ f0f2e693303ae82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906c6b7cf3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1af958fa0d66d18b623c091a55f6c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3ccf42
third_party/scream @ c3370ff7db17265a79aeb34e4016ada23f5965885
third_party/sourdough @ f1a14bf7e749737437f61b1eaebe3b267cde681
third_party/sprout @ 6f2e6e6e08d91066a9f023df375ee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutcomm.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562539f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 7a4ba531e75b4a66f6f5c4580192120401784ce3
third_party/webrtc @ a488197dd041ace68a42849b2540ad834825f42
test from GCE Tokyo Ethernet to GCE London Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
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<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<td>284.92</td>
<td>192.35</td>
<td>127.07</td>
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<td>Vivace-loss</td>
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<td>283.65</td>
<td>233.99</td>
<td>134.04</td>
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<td>Vivace-LTE</td>
<td>10</td>
<td>273.01</td>
<td>214.24</td>
<td>141.57</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-03-06 17:15:43
End at: 2018-03-06 17:16:13

# Below is generated by plot.py at 2018-03-06 23:45:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 177.92 Mbit/s
  95th percentile per-packet one-way delay: 116.372 ms
  Loss rate: 1.22%
-- Flow 1:
  Average throughput: 91.05 Mbit/s
  95th percentile per-packet one-way delay: 114.624 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 88.79 Mbit/s
  95th percentile per-packet one-way delay: 116.102 ms
  Loss rate: 1.23%
-- Flow 3:
  Average throughput: 85.68 Mbit/s
  95th percentile per-packet one-way delay: 118.516 ms
  Loss rate: 2.55%
Run 1: Report of TCP BBR — Data Link

[Graph showing throughput and packet delay over time for different flows.
Flow 1 ingress (mean 91.11 Mbit/s), Flow 1 egress (mean 91.05 Mbit/s),
Flow 2 ingress (mean 88.88 Mbit/s), Flow 2 egress (mean 88.79 Mbit/s),
Flow 3 ingress (mean 85.91 Mbit/s), Flow 3 egress (mean 85.66 Mbit/s).]
Run 2: Statistics of TCP BBR

Start at: 2018-03-06 17:35:06
End at: 2018-03-06 17:35:36

# Below is generated by plot.py at 2018-03-06 23:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 183.26 Mbit/s
  95th percentile per-packet one-way delay: 115.522 ms
  Loss rate: 1.24%
-- Flow 1:
  Average throughput: 91.86 Mbit/s
  95th percentile per-packet one-way delay: 114.733 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 97.35 Mbit/s
  95th percentile per-packet one-way delay: 116.310 ms
  Loss rate: 1.26%
-- Flow 3:
  Average throughput: 82.29 Mbit/s
  95th percentile per-packet one-way delay: 114.898 ms
  Loss rate: 2.68%
Run 2: Report of TCP BBR — Data Link

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

![Graph 2: Per-Packet One-Way Delay vs Time](image2)
Run 3: Statistics of TCP BBR

Start at: 2018-03-06 17:54:22
End at: 2018-03-06 17:54:52

# Below is generated by plot.py at 2018-03-06 23:45:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 180.89 Mbit/s
  95th percentile per-packet one-way delay: 111.166 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 93.09 Mbit/s
  95th percentile per-packet one-way delay: 111.048 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 91.47 Mbit/s
  95th percentile per-packet one-way delay: 111.474 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 83.44 Mbit/s
  95th percentile per-packet one-way delay: 110.917 ms
  Loss rate: 2.90%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-03-06 18:13:55
End at: 2018-03-06 18:14:25

# Below is generated by plot.py at 2018-03-06 23:45:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.86 Mbit/s
95th percentile per-packet one-way delay: 112.717 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 96.18 Mbit/s
95th percentile per-packet one-way delay: 112.074 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 89.86 Mbit/s
95th percentile per-packet one-way delay: 112.480 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 89.31 Mbit/s
95th percentile per-packet one-way delay: 113.557 ms
Loss rate: 2.82%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-03-06 18:33:01
End at: 2018-03-06 18:33:31

# Below is generated by plot.py at 2018-03-06 23:45:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 181.93 Mbit/s
95th percentile per-packet one-way delay: 111.063 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 95.37 Mbit/s
95th percentile per-packet one-way delay: 111.035 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 89.22 Mbit/s
95th percentile per-packet one-way delay: 111.123 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 83.73 Mbit/s
95th percentile per-packet one-way delay: 111.049 ms
Loss rate: 2.64%
Run 5: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 6: Statistics of TCP BBR

Start at: 2018-03-06 18:52:24
End at: 2018-03-06 18:52:54

# Below is generated by plot.py at 2018-03-06 23:45:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 180.11 Mbit/s
  95th percentile per-packet one-way delay: 112.648 ms
  Loss rate: 1.31%
-- Flow 1:
  Average throughput: 93.63 Mbit/s
  95th percentile per-packet one-way delay: 112.565 ms
  Loss rate: 0.86%
-- Flow 2:
  Average throughput: 89.52 Mbit/s
  95th percentile per-packet one-way delay: 112.592 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 83.19 Mbit/s
  95th percentile per-packet one-way delay: 115.345 ms
  Loss rate: 2.91%
Run 6: Report of TCP BBR — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 93.69 Mbit/s) | Flow 1 egress (mean 93.63 Mbit/s)
Flow 2 ingress (mean 89.69 Mbit/s) | Flow 2 egress (mean 89.52 Mbit/s)
Flow 3 ingress (mean 83.60 Mbit/s) | Flow 3 egress (mean 83.19 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.56 ms) | Flow 2 (95th percentile 112.59 ms) | Flow 3 (95th percentile 115.34 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-03-06 19:11:42  
End at: 2018-03-06 19:12:12

# Below is generated by plot.py at 2018-03-06 23:45:13  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 179.84 Mbit/s  
95th percentile per-packet one-way delay: 113.316 ms  
Loss rate: 1.29%  
-- Flow 1:  
Average throughput: 93.47 Mbit/s  
95th percentile per-packet one-way delay: 112.931 ms  
Loss rate: 0.79%  
-- Flow 2:  
Average throughput: 89.41 Mbit/s  
95th percentile per-packet one-way delay: 112.950 ms  
Loss rate: 1.35%  
-- Flow 3:  
Average throughput: 83.16 Mbit/s  
95th percentile per-packet one-way delay: 115.954 ms  
Loss rate: 2.85%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-03-06 19:31:04
End at: 2018-03-06 19:31:34

# Below is generated by plot.py at 2018-03-06 23:45:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.81 Mbit/s
95th percentile per-packet one-way delay: 112.917 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 93.48 Mbit/s
95th percentile per-packet one-way delay: 112.828 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 89.37 Mbit/s
95th percentile per-packet one-way delay: 112.852 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 82.97 Mbit/s
95th percentile per-packet one-way delay: 117.716 ms
Loss rate: 2.60%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-03-06 19:50:24
End at: 2018-03-06 19:50:54

# Below is generated by plot.py at 2018-03-06 23:47:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 176.38 Mbit/s
  95th percentile per-packet one-way delay: 113.059 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 90.75 Mbit/s
  95th percentile per-packet one-way delay: 112.909 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 88.39 Mbit/s
  95th percentile per-packet one-way delay: 113.013 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 82.70 Mbit/s
  95th percentile per-packet one-way delay: 116.976 ms
  Loss rate: 2.65%
Run 9: Report of TCP BBR — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 90.80 Mbps)
  - Flow 1 egress (mean 90.75 Mbps)
  - Flow 2 ingress (mean 88.49 Mbps)
  - Flow 2 egress (mean 88.39 Mbps)
  - Flow 3 ingress (mean 83.03 Mbps)
  - Flow 3 egress (mean 82.70 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 112.91 ms)
  - Flow 2 (95th percentile 113.01 ms)
  - Flow 3 (95th percentile 116.98 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-03-06 20:09:45
End at: 2018-03-06 20:10:15

# Below is generated by plot.py at 2018-03-06 23:47:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 177.62 Mbit/s
  95th percentile per-packet one-way delay: 112.847 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 91.51 Mbit/s
  95th percentile per-packet one-way delay: 112.733 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 89.52 Mbit/s
  95th percentile per-packet one-way delay: 112.809 ms
  Loss rate: 1.35%
-- Flow 3:
  Average throughput: 81.89 Mbit/s
  95th percentile per-packet one-way delay: 116.178 ms
  Loss rate: 2.72%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-03-06 17:08:31
End at: 2018-03-06 17:09:01

# Below is generated by plot.py at 2018-03-06 23:47:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.42 Mbit/s
95th percentile per-packet one-way delay: 122.304 ms
Loss rate: 1.84%
-- Flow 1:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 121.116 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 122.393 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 63.81 Mbit/s
95th percentile per-packet one-way delay: 123.930 ms
Loss rate: 3.75%
Run 1: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 58.80 Mbit/s)
- Flow 1 egress (mean 58.61 Mbit/s)
- Flow 2 ingress (mean 77.75 Mbit/s)
- Flow 2 egress (mean 77.10 Mbit/s)
- Flow 3 ingress (mean 64.83 Mbit/s)
- Flow 3 egress (mean 63.81 Mbit/s)

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

- Flow 1 (95th percentile 121.12 ms)
- Flow 2 (95th percentile 122.39 ms)
- Flow 3 (95th percentile 123.93 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-03-06 17:28:00
End at: 2018-03-06 17:28:30

# Below is generated by plot.py at 2018-03-06 23:47:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.11 Mbit/s
95th percentile per-packet one-way delay: 123.699 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 84.70 Mbit/s
95th percentile per-packet one-way delay: 124.733 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 98.58 Mbit/s
95th percentile per-packet one-way delay: 121.905 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 90.48 Mbit/s
95th percentile per-packet one-way delay: 123.044 ms
Loss rate: 2.75%
Run 3: Statistics of TCP Cubic

Start at: 2018-03-06 17:47:09
End at: 2018-03-06 17:47:39

# Below is generated by plot.py at 2018-03-06 23:47:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 140.80 Mbit/s
  95th percentile per-packet one-way delay: 120.825 ms
  Loss rate: 1.33%
-- Flow 1:
  Average throughput: 72.05 Mbit/s
  95th percentile per-packet one-way delay: 120.615 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 59.22 Mbit/s
  95th percentile per-packet one-way delay: 120.913 ms
  Loss rate: 1.50%
-- Flow 3:
  Average throughput: 90.79 Mbit/s
  95th percentile per-packet one-way delay: 120.900 ms
  Loss rate: 2.75%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 71.97 Mbit/s)
- Flow 1 egress (mean 72.05 Mbit/s)
- Flow 2 ingress (mean 59.45 Mbit/s)
- Flow 2 egress (mean 59.22 Mbit/s)
- Flow 3 ingress (mean 91.25 Mbit/s)
- Flow 3 egress (mean 90.79 Mbit/s)

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

- Flow 1 (95th percentile 120.61 ms)
- Flow 2 (95th percentile 120.91 ms)
- Flow 3 (95th percentile 120.90 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-03-06 18:06:41
End at: 2018-03-06 18:07:11

# Below is generated by plot.py at 2018-03-06 23:47:53
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 179.92 Mbit/s
    95th percentile per-packet one-way delay: 121.363 ms
    Loss rate: 1.29%
-- Flow 1:
    Average throughput: 103.36 Mbit/s
    95th percentile per-packet one-way delay: 121.533 ms
    Loss rate: 0.79%
-- Flow 2:
    Average throughput: 71.45 Mbit/s
    95th percentile per-packet one-way delay: 122.342 ms
    Loss rate: 1.44%
-- Flow 3:
    Average throughput: 91.39 Mbit/s
    95th percentile per-packet one-way delay: 120.086 ms
    Loss rate: 2.75%
Run 4: Report of TCP Cubic — Data Link

![Graph showing network performance metrics]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 103.42 Mbps) — Flow 1 egress (mean 103.36 Mbps)
Flow 2 ingress (mean 71.68 Mbps) — Flow 2 egress (mean 71.45 Mbps)
Flow 3 ingress (mean 91.84 Mbps) — Flow 3 egress (mean 91.39 Mbps)

Packet per second per packet delay (ms)

Time (s)

Flow 1 (95th percentile 121.53 ms) — Flow 2 (95th percentile 122.34 ms) — Flow 3 (95th percentile 120.09 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-03-06 18:25:48
End at: 2018-03-06 18:26:18

# Below is generated by plot.py at 2018-03-06 23:47:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.55 Mbit/s
95th percentile per-packet one-way delay: 122.359 ms
Loss rate: 0.94%
-- Flow 1:
95th percentile per-packet one-way delay: 121.064 ms
Loss rate: 0.43%
-- Flow 2:
95th percentile per-packet one-way delay: 124.185 ms
Loss rate: 1.50%
-- Flow 3:
95th percentile per-packet one-way delay: 123.862 ms
Loss rate: 2.45%
Run 5: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

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

Start at: 2018-03-06 18:45:14
End at: 2018-03-06 18:45:44

# Below is generated by plot.py at 2018-03-06 23:48:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 187.85 Mbit/s
95th percentile per-packet one-way delay: 122.014 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 102.30 Mbit/s
95th percentile per-packet one-way delay: 120.803 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 84.63 Mbit/s
95th percentile per-packet one-way delay: 123.927 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 91.46 Mbit/s
95th percentile per-packet one-way delay: 121.524 ms
Loss rate: 2.71%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-03-06 19:04:30
End at: 2018-03-06 19:05:00

# Below is generated by plot.py at 2018-03-06 23:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.06 Mbit/s
95th percentile per-packet one-way delay: 120.367 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 76.11 Mbit/s
95th percentile per-packet one-way delay: 120.482 ms
Loss rate: 1.04%
-- Flow 2:
Average throughput: 52.20 Mbit/s
95th percentile per-packet one-way delay: 119.615 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 119.912 ms
Loss rate: 2.72%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-03-06 19:23:50
End at: 2018-03-06 19:24:20

# Below is generated by plot.py at 2018-03-06 23:49:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 162.12 Mbit/s
  95th percentile per-packet one-way delay: 120.820 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 81.49 Mbit/s
  95th percentile per-packet one-way delay: 119.547 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 99.67 Mbit/s
  95th percentile per-packet one-way delay: 121.255 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 45.37 Mbit/s
  95th percentile per-packet one-way delay: 120.602 ms
  Loss rate: 2.76%
Run 8: Report of TCP Cubic — Data Link

![Graph](image1)

![Graph](image2)

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Run 9: Statistics of TCP Cubic

Start at: 2018-03-06 19:43:16
End at: 2018-03-06 19:43:46

# Below is generated by plot.py at 2018-03-06 23:49:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.84 Mbit/s
  95th percentile per-packet one-way delay: 117.970 ms
  Loss rate: 1.70%
  -- Flow 1:
    Average throughput: 60.93 Mbit/s
    95th percentile per-packet one-way delay: 116.849 ms
    Loss rate: 0.65%
  -- Flow 2:
    Average throughput: 21.27 Mbit/s
    95th percentile per-packet one-way delay: 115.047 ms
    Loss rate: 4.96%
  -- Flow 3:
    Average throughput: 45.62 Mbit/s
    95th percentile per-packet one-way delay: 124.129 ms
    Loss rate: 2.74%
Run 10: Statistics of TCP Cubic

Start at: 2018-03-06 20:02:36
End at: 2018-03-06 20:03:06

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 137.77 Mbit/s
  95th percentile per-packet one-way delay: 121.123 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 102.40 Mbit/s
  95th percentile per-packet one-way delay: 121.056 ms
  Loss rate: 0.86%
-- Flow 2:
  Average throughput: 52.52 Mbit/s
  95th percentile per-packet one-way delay: 122.025 ms
  Loss rate: 1.48%
-- Flow 3:
  Average throughput: 1.76 Mbit/s
  95th percentile per-packet one-way delay: 115.422 ms
  Loss rate: 8.93%
Run 10: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 102.52 Mbit/s)
- Flow 1 egress (mean 102.40 Mbit/s)
- Flow 2 ingress (mean 52.71 Mbit/s)
- Flow 2 egress (mean 52.52 Mbit/s)
- Flow 3 ingress (mean 1.86 Mbit/s)
- Flow 3 egress (mean 1.76 Mbit/s)
Run 1: Statistics of LEDBAT

Start at: 2018-03-06 17:03:08
End at: 2018-03-06 17:03:38

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.74 Mbit/s
95th percentile per-packet one-way delay: 113.361 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 6.44 Mbit/s
95th percentile per-packet one-way delay: 113.337 ms
Loss rate: 1.58%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: 113.412 ms
Loss rate: 2.44%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 113.449 ms
Loss rate: 4.64%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-03-06 17:22:28
End at: 2018-03-06 17:22:58

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.27 Mbit/s
95th percentile per-packet one-way delay: 111.207 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 111.286 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 3.66 Mbit/s
95th percentile per-packet one-way delay: 110.872 ms
Loss rate: 2.54%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 110.663 ms
Loss rate: 4.70%
Run 2: Report of LEDBAT — Data Link

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

![Graph 2: One-Way Delay vs Time](image)
Run 3: Statistics of LEDBAT

Start at: 2018-03-06 17:41:44
End at: 2018-03-06 17:42:14

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 113.214 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 7.02 Mbit/s
95th percentile per-packet one-way delay: 113.303 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 112.998 ms
Loss rate: 2.26%
-- Flow 3:
Average throughput: 2.27 Mbit/s
95th percentile per-packet one-way delay: 112.829 ms
Loss rate: 4.55%
Run 3: Report of LEDBAT — Data Link

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

- **Throughput (Mb/s)**
  - Flow 1 ingress (mean 7.07 Mb/s)
  - Flow 1 egress (mean 7.02 Mb/s)
  - Flow 2 ingress (mean 4.76 Mb/s)
  - Flow 2 egress (mean 4.71 Mb/s)
  - Flow 3 ingress (mean 2.33 Mb/s)
  - Flow 3 egress (mean 2.27 Mb/s)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 113.30 ms)
  - Flow 2 (95th percentile 113.00 ms)
  - Flow 3 (95th percentile 112.83 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-03-06 18:01:19
End at: 2018-03-06 18:01:49

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.76 Mbit/s
  95th percentile per-packet one-way delay: 113.459 ms
  Loss rate: 1.93%
-- Flow 1:
  Average throughput: 7.05 Mbit/s
  95th percentile per-packet one-way delay: 113.523 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.57 Mbit/s
  95th percentile per-packet one-way delay: 113.415 ms
  Loss rate: 2.27%
-- Flow 3:
  Average throughput: 2.22 Mbit/s
  95th percentile per-packet one-way delay: 113.056 ms
  Loss rate: 4.58%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.11 Mbps)
- Flow 1 egress (mean 7.05 Mbps)
- Flow 2 ingress (mean 4.62 Mbps)
- Flow 2 egress (mean 4.57 Mbps)
- Flow 3 ingress (mean 2.28 Mbps)
- Flow 3 egress (mean 2.22 Mbps)

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

- Flow 1 (95th percentile 113.52 ms)
- Flow 2 (95th percentile 113.42 ms)
- Flow 3 (95th percentile 113.06 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-03-06 18:20:22
End at: 2018-03-06 18:20:52

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.51 Mbit/s
95th percentile per-packet one-way delay: 111.661 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 7.22 Mbit/s
95th percentile per-packet one-way delay: 111.723 ms
Loss rate: 1.49%
-- Flow 2:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 111.423 ms
Loss rate: 2.40%
-- Flow 3:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 111.088 ms
Loss rate: 5.18%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-03-06 18:39:44  
End at: 2018-03-06 18:40:14

# Below is generated by plot.py at 2018-03-06 23:49:50  
# Datalink statistics  
-- Total of 3 flows:  
   Average throughput: 10.51 Mbit/s  
   95th percentile per-packet one-way delay: 111.484 ms  
   Loss rate: 1.96%  
-- Flow 1:  
   Average throughput: 6.79 Mbit/s  
   95th percentile per-packet one-way delay: 111.511 ms  
   Loss rate: 1.52%  
-- Flow 2:  
   Average throughput: 4.52 Mbit/s  
   95th percentile per-packet one-way delay: 111.432 ms  
   Loss rate: 2.29%  
-- Flow 3:  
   Average throughput: 2.30 Mbit/s  
   95th percentile per-packet one-way delay: 111.222 ms  
   Loss rate: 4.54%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-03-06 18:59:07
End at: 2018-03-06 18:59:37

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.94 Mbit/s
  95th percentile per-packet one-way delay: 113.620 ms
  Loss rate: 1.93%
-- Flow 1:
  Average throughput: 7.11 Mbit/s
  95th percentile per-packet one-way delay: 113.732 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.65 Mbit/s
  95th percentile per-packet one-way delay: 113.595 ms
  Loss rate: 2.28%
-- Flow 3:
  Average throughput: 2.29 Mbit/s
  95th percentile per-packet one-way delay: 113.115 ms
  Loss rate: 4.57%
Run 7: Report of LEDBAT — Data Link

![Graph of Throughput vs Time for LEDBAT flows]

- Flow 1 ingress (mean 7.17 Mbps)
- Flow 1 egress (mean 7.11 Mbps)
- Flow 2 ingress (mean 4.70 Mbps)
- Flow 2 egress (mean 4.65 Mbps)
- Flow 3 ingress (mean 2.35 Mbps)
- Flow 3 egress (mean 2.29 Mbps)

![Graph of Per-Circuit One-Way Delay vs Time for LEDBAT flows]

- Flow 1 (95th percentile 113.73 ms)
- Flow 2 (95th percentile 113.59 ms)
- Flow 3 (95th percentile 113.11 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-03-06 19:18:30  
End at: 2018-03-06 19:19:00

# Below is generated by plot.py at 2018-03-06 23:49:50  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 113.544 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 7.18 Mbit/s
95th percentile per-packet one-way delay: 113.576 ms
Loss rate: 1.50%
-- Flow 2:
Average throughput: 4.52 Mbit/s
95th percentile per-packet one-way delay: 113.460 ms
Loss rate: 2.28%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 113.040 ms
Loss rate: 4.56%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-03-06 19:37:53
End at: 2018-03-06 19:38:23

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.67 Mbit/s
  95th percentile per-packet one-way delay: 113.273 ms
  Loss rate: 1.95%
-- Flow 1:
  Average throughput: 7.15 Mbit/s
  95th percentile per-packet one-way delay: 113.339 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 4.22 Mbit/s
  95th percentile per-packet one-way delay: 113.043 ms
  Loss rate: 2.40%
-- Flow 3:
  Average throughput: 2.27 Mbit/s
  95th percentile per-packet one-way delay: 111.078 ms
  Loss rate: 4.60%
Run 9: Report of LEDBAT — Data Link

![Graph 1: Throughput vs Time]

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

Flow 1 ingress (mean 7.21 Mbps) - Flow 1 egress (mean 7.15 Mbps)
Flow 2 ingress (mean 4.27 Mbps) - Flow 2 egress (mean 4.22 Mbps)
Flow 3 ingress (mean 2.32 Mbps) - Flow 3 egress (mean 2.27 Mbps)

Flow 1 (95th percentile 113.34 ms) - Flow 2 (95th percentile 113.04 ms) - Flow 3 (95th percentile 111.08 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-03-06 19:57:06
End at: 2018-03-06 19:57:36

# Below is generated by plot.py at 2018-03-06 23:49:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.89 Mbit/s
  95th percentile per-packet one-way delay: 113.514 ms
  Loss rate: 1.91%
-- Flow 1:
  Average throughput: 7.21 Mbit/s
  95th percentile per-packet one-way delay: 113.611 ms
  Loss rate: 1.48%
-- Flow 2:
  Average throughput: 4.44 Mbit/s
  95th percentile per-packet one-way delay: 113.301 ms
  Loss rate: 2.26%
-- Flow 3:
  Average throughput: 2.29 Mbit/s
  95th percentile per-packet one-way delay: 112.956 ms
  Loss rate: 4.54%
Run 10: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.27 Mbps)
- Flow 1 egress (mean 7.21 Mbps)
- Flow 2 ingress (mean 4.50 Mbps)
- Flow 2 egress (mean 4.44 Mbps)
- Flow 3 ingress (mean 2.34 Mbps)
- Flow 3 egress (mean 2.29 Mbps)
Run 1: Statistics of PCC

Start at: 2018-03-06 17:16:40
End at: 2018-03-06 17:17:10

# Below is generated by plot.py at 2018-03-06 23:55:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 470.60 Mbit/s
  95th percentile per-packet one-way delay: 247.860 ms
  Loss rate: 3.39%
-- Flow 1:
  Average throughput: 376.83 Mbit/s
  95th percentile per-packet one-way delay: 248.080 ms
  Loss rate: 3.28%
-- Flow 2:
  Average throughput: 110.74 Mbit/s
  95th percentile per-packet one-way delay: 246.560 ms
  Loss rate: 3.69%
-- Flow 3:
  Average throughput: 63.20 Mbit/s
  95th percentile per-packet one-way delay: 245.253 ms
  Loss rate: 4.38%
Run 1: Report of PCC — Data Link

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

- Flow 1 Ingress (mean 386.38 Mbit/s)
- Flow 1 Egress (mean 376.83 Mbit/s)
- Flow 2 Ingress (mean 113.70 Mbit/s)
- Flow 2 Egress (mean 110.74 Mbit/s)
- Flow 3 Ingress (mean 64.60 Mbit/s)
- Flow 3 Egress (mean 63.20 Mbit/s)

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

- Flow 1 (95th percentile 248.08 ms)
- Flow 2 (95th percentile 246.56 ms)
- Flow 3 (95th percentile 245.25 ms)
Run 2: Statistics of PCC

Start at: 2018-03-06 17:36:03
End at: 2018-03-06 17:36:33

# Below is generated by plot.py at 2018-03-06 23:55:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.66 Mbit/s
95th percentile per-packet one-way delay: 264.011 ms
Loss rate: 4.21%
-- Flow 1:
Average throughput: 336.31 Mbit/s
95th percentile per-packet one-way delay: 263.977 ms
Loss rate: 4.02%
-- Flow 2:
Average throughput: 118.71 Mbit/s
95th percentile per-packet one-way delay: 264.147 ms
Loss rate: 4.97%
-- Flow 3:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 264.573 ms
Loss rate: 8.84%
Run 2: Report of PCC — Data Link

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

- **Throughput:**
  - Flow 1 ingress: mean 347.77 Mbit/s
  - Flow 1 egress: mean 336.31 Mbit/s
  - Flow 2 ingress: mean 123.50 Mbit/s
  - Flow 2 egress: mean 118.71 Mbit/s
  - Flow 3 ingress: mean 2.37 Mbit/s
  - Flow 3 egress: mean 2.21 Mbit/s

- **Packet delay:**
  - Flow 1 (95th percentile: 263.98 ms)
  - Flow 2 (95th percentile: 264.15 ms)
  - Flow 3 (95th percentile: 264.57 ms)
Run 3: Statistics of PCC

Start at: 2018-03-06 17:55:19
End at: 2018-03-06 17:55:49

# Below is generated by plot.py at 2018-03-06 23:55:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.27 Mbit/s
95th percentile per-packet one-way delay: 242.638 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 274.03 Mbit/s
95th percentile per-packet one-way delay: 242.553 ms
Loss rate: 2.39%
-- Flow 2:
Average throughput: 230.28 Mbit/s
95th percentile per-packet one-way delay: 242.888 ms
Loss rate: 4.18%
-- Flow 3:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 231.605 ms
Loss rate: 2.84%
Run 3: Report of PCC — Data Link

![Graph of Throughput and Delay over Time]

**Throughput (Mbps)**
- Flow 1 ingress (mean 278.63 Mbps)
- Flow 1 egress (mean 274.03 Mbps)
- Flow 2 ingress (mean 237.63 Mbps)
- Flow 2 egress (mean 230.28 Mbps)
- Flow 3 ingress (mean 2.37 Mbps)
- Flow 3 egress (mean 2.35 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 242.55 ms)
- Flow 2 (95th percentile 242.89 ms)
- Flow 3 (95th percentile 231.60 ms)
Run 4: Statistics of PCC

Start at: 2018-03-06 18:14:52
End at: 2018-03-06 18:15:22

# Below is generated by plot.py at 2018-03-06 23:56:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 514.10 Mbit/s
  95th percentile per-packet one-way delay: 243.305 ms
  Loss rate: 4.07%
-- Flow 1:
  Average throughput: 469.74 Mbit/s
  95th percentile per-packet one-way delay: 243.295 ms
  Loss rate: 4.08%
-- Flow 2:
  Average throughput: 59.52 Mbit/s
  95th percentile per-packet one-way delay: 243.101 ms
  Loss rate: 3.55%
-- Flow 3:
  Average throughput: 15.69 Mbit/s
  95th percentile per-packet one-way delay: 244.361 ms
  Loss rate: 6.82%
Run 4: Report of PCC — Data Link

![Graph of network performance metrics over time](image1)

- **Throughput (Mbps)**
  - Flow 1 Ingress (mean 486.07 Mbps)
  - Flow 1 Egress (mean 469.74 Mbps)
  - Flow 2 Ingress (mean 61.03 Mbps)
  - Flow 2 Egress (mean 59.52 Mbps)
  - Flow 3 Ingress (mean 16.28 Mbps)
  - Flow 3 Egress (mean 15.69 Mbps)

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

- **Packet Delay (ms)**
  - Flow 1 (95th percentile 243.29 ms)
  - Flow 2 (95th percentile 243.10 ms)
  - Flow 3 (95th percentile 244.36 ms)
Run 5: Statistics of PCC

Start at: 2018-03-06 18:33:58
End at: 2018-03-06 18:34:28

# Below is generated by plot.py at 2018-03-06 23:56:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 506.52 Mbit/s
  95th percentile per-packet one-way delay: 185.686 ms
  Loss rate: 1.76%
-- Flow 1:
  Average throughput: 492.88 Mbit/s
  95th percentile per-packet one-way delay: 185.905 ms
  Loss rate: 1.75%
-- Flow 2:
  Average throughput: 4.40 Mbit/s
  95th percentile per-packet one-way delay: 180.593 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 33.06 Mbit/s
  95th percentile per-packet one-way delay: 184.144 ms
  Loss rate: 2.46%
Run 5: Report of PCC — Data Link
Run 6: Statistics of PCC

Start at: 2018-03-06 18:53:21
End at: 2018-03-06 18:53:51

# Below is generated by plot.py at 2018-03-06 23:56:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 438.65 Mbit/s
95th percentile per-packet one-way delay: 251.149 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 336.99 Mbit/s
95th percentile per-packet one-way delay: 250.539 ms
Loss rate: 2.99%
-- Flow 2:
Average throughput: 122.97 Mbit/s
95th percentile per-packet one-way delay: 251.768 ms
Loss rate: 3.91%
-- Flow 3:
Average throughput: 62.33 Mbit/s
95th percentile per-packet one-way delay: 252.428 ms
Loss rate: 5.38%
Run 6: Report of PCC — Data Link

![Graph 1: Throughput over time showing data for three flows with different ingress and egress rates.]

![Graph 2: Packet Delay distribution over time showing 95th percentile delays for three flows.]
Run 7: Statistics of PCC

Start at: 2018-03-06 19:12:39
End at: 2018-03-06 19:13:09

# Below is generated by plot.py at 2018-03-06 23:57:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 456.62 Mbit/s
  95th percentile per-packet one-way delay: 257.315 ms
  Loss rate: 4.63%
-- Flow 1:
  Average throughput: 379.92 Mbit/s
  95th percentile per-packet one-way delay: 265.248 ms
  Loss rate: 4.45%
-- Flow 2:
  Average throughput: 62.29 Mbit/s
  95th percentile per-packet one-way delay: 239.309 ms
  Loss rate: 3.24%
-- Flow 3:
  Average throughput: 109.92 Mbit/s
  95th percentile per-packet one-way delay: 237.040 ms
  Loss rate: 8.00%
Run 7: Report of PCC — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 394.63 Mbps)
- Flow 1 egress (mean 379.92 Mbps)
- Flow 2 ingress (mean 63.38 Mbps)
- Flow 2 egress (mean 62.29 Mbps)
- Flow 3 ingress (mean 116.74 Mbps)
- Flow 3 egress (mean 109.92 Mbps)

Per-packet delay (ms):
- Flow 1 (95th percentile 265.25 ms)
- Flow 2 (95th percentile 239.31 ms)
- Flow 3 (95th percentile 237.04 ms)
Run 8: Statistics of PCC

Start at: 2018-03-06 19:32:00
End at: 2018-03-06 19:32:30

# Below is generated by plot.py at 2018-03-06 23:57:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 446.64 Mbit/s
95th percentile per-packet one-way delay: 239.753 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 360.57 Mbit/s
95th percentile per-packet one-way delay: 239.560 ms
Loss rate: 1.34%
-- Flow 2:
Average throughput: 127.86 Mbit/s
95th percentile per-packet one-way delay: 240.406 ms
Loss rate: 2.37%
-- Flow 3:
Average throughput: 4.30 Mbit/s
95th percentile per-packet one-way delay: 240.571 ms
Loss rate: 2.72%
Run 8: Report of PCC — Data Link

![Graph showing throughput and per-packet end-to-end delay](image-url)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 362.77 Mbps)
  - Flow 1 egress (mean 360.57 Mbps)
  - Flow 2 ingress (mean 129.91 Mbps)
  - Flow 2 egress (mean 127.86 Mbps)
  - Flow 3 ingress (mean 4.32 Mbps)
  - Flow 3 egress (mean 4.30 Mbps)

- **Per-packet end-to-end delay (ms)**
  - Flow 1 (95th percentile 239.56 ms)
  - Flow 2 (95th percentile 240.41 ms)
  - Flow 3 (95th percentile 240.57 ms)
Run 9: Statistics of PCC

Start at: 2018-03-06 19:51:20
End at: 2018-03-06 19:51:50

# Below is generated by plot.py at 2018-03-07 00:02:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 432.63 Mbit/s
  95th percentile per-packet one-way delay: 239.017 ms
  Loss rate: 2.19%
  -- Flow 1:
    Average throughput: 252.37 Mbit/s
    95th percentile per-packet one-way delay: 238.779 ms
    Loss rate: 1.60%
  -- Flow 2:
    Average throughput: 241.78 Mbit/s
    95th percentile per-packet one-way delay: 239.194 ms
    Loss rate: 2.97%
  -- Flow 3:
    Average throughput: 62.29 Mbit/s
    95th percentile per-packet one-way delay: 239.552 ms
    Loss rate: 3.35%
Run 9: Report of PCC — Data Link
Run 10: Statistics of PCC

Start at: 2018-03-06 20:10:41
End at: 2018-03-06 20:11:11

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
--- Total of 3 flows:
Average throughput: 455.37 Mbit/s
95th percentile per-packet one-way delay: 235.113 ms
Loss rate: 2.47%
--- Flow 1:
Average throughput: 351.27 Mbit/s
95th percentile per-packet one-way delay: 234.992 ms
Loss rate: 2.24%
--- Flow 2:
Average throughput: 126.29 Mbit/s
95th percentile per-packet one-way delay: 235.811 ms
Loss rate: 3.07%
--- Flow 3:
Average throughput: 63.25 Mbit/s
95th percentile per-packet one-way delay: 235.124 ms
Loss rate: 3.98%
Run 10: Report of PCC — Data Link

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

Legend:
- Flow 1 ingress (mean 356.65 Mbit/s)
- Flow 1 egress (mean 351.27 Mbit/s)
- Flow 2 ingress (mean 128.84 Mbit/s)
- Flow 2 egress (mean 125.29 Mbit/s)
- Flow 3 ingress (mean 64.41 Mbit/s)
- Flow 3 egress (mean 63.25 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 234.99 ms)
- Flow 2 (95th percentile 235.81 ms)
- Flow 3 (95th percentile 235.12 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-03-06 17:13:27
End at: 2018-03-06 17:13:57

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 107.86 Mbit/s
  95th percentile per-packet one-way delay: 112.606 ms
  Loss rate: 1.36%
  -- Flow 1:
  Average throughput: 57.17 Mbit/s
  95th percentile per-packet one-way delay: 112.795 ms
  Loss rate: 0.64%
  -- Flow 2:
  Average throughput: 59.97 Mbit/s
  95th percentile per-packet one-way delay: 112.528 ms
  Loss rate: 1.13%
  -- Flow 3:
  Average throughput: 33.94 Mbit/s
  95th percentile per-packet one-way delay: 112.615 ms
  Loss rate: 5.69%
Run 1: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress**: Mean 57.12 Mbit/s
- **Flow 1 egress**: Mean 57.17 Mbit/s
- **Flow 2 ingress**: Mean 60.00 Mbit/s
- **Flow 2 egress**: Mean 59.97 Mbit/s
- **Flow 3 ingress**: Mean 35.17 Mbit/s
- **Flow 3 egress**: Mean 33.94 Mbit/s

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

- **Flow 1 (95th percentile)**: 112.80 ms
- **Flow 2 (95th percentile)**: 112.53 ms
- **Flow 3 (95th percentile)**: 112.61 ms
Run 2: Statistics of QUIC Cubic

Start at: 2018-03-06 17:32:50
End at: 2018-03-06 17:33:20

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 122.28 Mbit/s
  95th percentile per-packet one-way delay: 112.733 ms
  Loss rate: 0.95%
-- Flow 1:
  Average throughput: 64.24 Mbit/s
  95th percentile per-packet one-way delay: 112.294 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 61.41 Mbit/s
  95th percentile per-packet one-way delay: 112.776 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 53.53 Mbit/s
  95th percentile per-packet one-way delay: 111.835 ms
  Loss rate: 3.30%
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1**: Ingress (mean 64.25 Mbit/s), Egress (mean 64.24 Mbit/s)
- **Flow 2**: Ingress (mean 60.83 Mbit/s), Egress (mean 61.41 Mbit/s)
- **Flow 3**: Ingress (mean 54.06 Mbit/s), Egress (mean 53.53 Mbit/s)

![Graph showing packet delay over time for the same three flows]

- **Flow 1** (95th percentile 112.29 ms)
- **Flow 2** (95th percentile 112.78 ms)
- **Flow 3** (95th percentile 111.83 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-03-06 17:52:05
End at: 2018-03-06 17:52:35

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.50 Mbit/s
95th percentile per-packet one-way delay: 112.611 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 62.21 Mbit/s
95th percentile per-packet one-way delay: 111.293 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 54.23 Mbit/s
95th percentile per-packet one-way delay: 111.273 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 56.63 Mbit/s
95th percentile per-packet one-way delay: 112.727 ms
Loss rate: 2.62%
Run 4: Statistics of QUIC Cubic

Start at: 2018-03-06 18:11:42
End at: 2018-03-06 18:12:12

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.17 Mbit/s
  95th percentile per-packet one-way delay: 112.494 ms
  Loss rate: 2.01%
-- Flow 1:
  Average throughput: 42.08 Mbit/s
  95th percentile per-packet one-way delay: 112.407 ms
  Loss rate: 1.01%
-- Flow 2:
  Average throughput: 50.08 Mbit/s
  95th percentile per-packet one-way delay: 112.539 ms
  Loss rate: 2.27%
-- Flow 3:
  Average throughput: 52.25 Mbit/s
  95th percentile per-packet one-way delay: 112.500 ms
  Loss rate: 3.92%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-03-06 18:30:45
End at: 2018-03-06 18:31:15

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 121.62 Mbit/s
  95th percentile per-packet one-way delay: 111.959 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 60.46 Mbit/s
  95th percentile per-packet one-way delay: 111.948 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 60.65 Mbit/s
  95th percentile per-packet one-way delay: 111.993 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 64.70 Mbit/s
  95th percentile per-packet one-way delay: 110.756 ms
  Loss rate: 0.36%
Run 5: Report of QUIC Cubic — Data Link

![Graph 1: Network Throughput](image1)

![Graph 2: End-to-End Delay](image2)
Run 6: Statistics of QUIC Cubic

Start at: 2018-03-06 18:50:09
End at: 2018-03-06 18:50:39

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 115.68 Mbit/s
95th percentile per-packet one-way delay: 112.181 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 62.44 Mbit/s
95th percentile per-packet one-way delay: 112.206 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 61.47 Mbit/s
95th percentile per-packet one-way delay: 110.463 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 40.95 Mbit/s
95th percentile per-packet one-way delay: 111.634 ms
Loss rate: 3.51%
Run 6: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 62.66 Mbps/s)**
- **Flow 1 egress (mean 62.44 Mbps/s)**
- **Flow 2 ingress (mean 59.80 Mbps/s)**
- **Flow 2 egress (mean 61.47 Mbps/s)**
- **Flow 3 ingress (mean 41.49 Mbps/s)**
- **Flow 3 egress (mean 40.95 Mbps/s)**

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

- **Flow 1 (95th percentile 112.21 ms)**
- **Flow 2 (95th percentile 110.46 ms)**
- **Flow 3 (95th percentile 111.63 ms)**

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Run 7: Statistics of QUIC Cubic

Start at: 2018-03-06 19:09:26
End at: 2018-03-06 19:09:56

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 121.63 Mbit/s
  95th percentile per-packet one-way delay: 111.953 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 65.92 Mbit/s
  95th percentile per-packet one-way delay: 111.403 ms
  Loss rate: 0.90%
-- Flow 2:
  Average throughput: 53.13 Mbit/s
  95th percentile per-packet one-way delay: 111.943 ms
  Loss rate: 1.75%
-- Flow 3:
  Average throughput: 63.36 Mbit/s
  95th percentile per-packet one-way delay: 112.050 ms
  Loss rate: 0.91%
Run 7: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 65.04 Mbit/s)
- Flow 1 egress (mean 65.92 Mbit/s)
- Flow 2 ingress (mean 53.48 Mbit/s)
- Flow 2 egress (mean 53.13 Mbit/s)
- Flow 3 ingress (mean 62.52 Mbit/s)
- Flow 3 egress (mean 63.36 Mbit/s)
Run 8: Statistics of QUIC Cubic

Start at: 2018-03-06 19:28:49
End at: 2018-03-06 19:29:19

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 119.08 Mbit/s
95th percentile per-packet one-way delay: 112.992 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 113.019 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 60.98 Mbit/s
95th percentile per-packet one-way delay: 112.499 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 51.98 Mbit/s
95th percentile per-packet one-way delay: 111.971 ms
Loss rate: 2.72%
Run 8: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 62.02 Mbps)
- **Flow 1 egress** (mean 61.88 Mbps)
- **Flow 2 ingress** (mean 60.74 Mbps)
- **Flow 2 egress** (mean 60.98 Mbps)
- **Flow 3 ingress** (mean 52.24 Mbps)
- **Flow 3 egress** (mean 51.98 Mbps)

**Packet delay**

- **Flow 1 (95th percentile 113.02 ms)**
- **Flow 2 (95th percentile 112.50 ms)**
- **Flow 3 (95th percentile 111.97 ms)**
Run 9: Statistics of QUIC Cubic

Start at: 2018-03-06 19:48:07
End at: 2018-03-06 19:48:37

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 111.07 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 65.31 Mbit/s
95th percentile per-packet one-way delay: 112.311 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 47.91 Mbit/s
95th percentile per-packet one-way delay: 111.920 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 43.61 Mbit/s
95th percentile per-packet one-way delay: 111.220 ms
Loss rate: 4.11%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-03-06 20:07:28
End at: 2018-03-06 20:07:58

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 116.50 Mbit/s
95th percentile per-packet one-way delay: 111.783 ms
Loss rate: 1.28%
   -- Flow 1:
Average throughput: 66.73 Mbit/s
95th percentile per-packet one-way delay: 110.666 ms
Loss rate: 0.70%
   -- Flow 2:
Average throughput: 56.93 Mbit/s
95th percentile per-packet one-way delay: 110.052 ms
Loss rate: 1.49%
   -- Flow 3:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 111.874 ms
Loss rate: 3.79%
Run 10: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 66.70 Mbps)
- Flow 1 egress (mean 66.73 Mbps)
- Flow 2 ingress (mean 57.15 Mbps)
- Flow 2 egress (mean 56.93 Mbps)
- Flow 3 ingress (mean 37.77 Mbps)
- Flow 3 egress (mean 37.18 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 110.67 ms)
- Flow 2 (95th percentile 110.05 ms)
- Flow 3 (95th percentile 111.87 ms)
Run 1: Statistics of SCReAM

Start at: 2018-03-06 17:17:46
End at: 2018-03-06 17:18:16

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.507 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.529 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.660 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.745 ms
Loss rate: 2.25%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-03-06 17:37:06
End at: 2018-03-06 17:37:36

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.887 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.883 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.927 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.933 ms
  Loss rate: 2.26%
Run 2: Report of SCReAM — Data Link

Throughput (Mbps) vs Time (s)

Delay (ms) vs 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 0.22 Mbps), Flow 3 egress (mean 0.22 Mbps)

Flow 1 (95th percentile 112.88 ms), Flow 2 (95th percentile 112.93 ms), Flow 3 (95th percentile 110.93 ms)
Run 3: Statistics of SCReAM

Start at: 2018-03-06 17:56:23
End at: 2018-03-06 17:56:53

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 112.114 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.131 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 112.069 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 109.983 ms
Loss rate: 2.26%
Run 3: Report of SCReAM — Data Link

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

Start at: 2018-03-06 18:16:00
End at: 2018-03-06 18:16:30

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 112.541 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.554 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 110.764 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.556 ms
  Loss rate: 2.25%
Run 4: Report of SCReAM — Data Link

[Graphs showing throughput and packet delay over time for different flows: Flow 1 ingress (mean 0.22 Mbps), Flow 1 egress (mean 0.22 Mbps), Flow 2 ingress (mean 0.22 Mbps), Flow 2 egress (mean 0.22 Mbps), Flow 3 ingress (mean 0.22 Mbps), Flow 3 egress (mean 0.22 Mbps).]
Run 5: Statistics of SCReAM

Start at: 2018-03-06 18:35:05
End at: 2018-03-06 18:35:35

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 112.320 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.338 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.283 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 112.043 ms
Loss rate: 2.25%
Run 6: Statistics of SCReAM

Start at: 2018-03-06 18:54:26
End at: 2018-03-06 18:54:56

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.32 Mbit/s
  95th percentile per-packet one-way delay: 112.990 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 113.015 ms
  Loss rate: 0.73%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.015 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.495 ms
  Loss rate: 0.88%
Run 6: Report of SCReAM — Data Link

Throughput (Mbps)

0.05  0.10  0.15  0.20  0.25  0.30

0  5  10  15  20  25  30

Time (s)

Flow 1 ingress (mean 0.11 Mbps)  Flow 1 egress (mean 0.11 Mbps)
Flow 2 ingress (mean 0.22 Mbps)  Flow 2 egress (mean 0.22 Mbps)
Flow 3 ingress (mean 0.20 Mbps)  Flow 3 egress (mean 0.21 Mbps)

Per-packet one-way delay (ms)

0  100  200  300  400

0  5  10  15  20  25  30

Time (s)

Flow 1 (95th percentile 113.02 ms)  Flow 2 (95th percentile 111.02 ms)  Flow 3 (95th percentile 112.50 ms)
Run 7: Statistics of SCReAM

Start at: 2018-03-06 19:13:45
End at: 2018-03-06 19:14:15

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 113.280 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 112.754 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 113.024 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 0.13 Mbit/s
  95th percentile per-packet one-way delay: 113.322 ms
  Loss rate: 1.99%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-03-06 19:33:05
End at: 2018-03-06 19:33:35

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 113.167 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 112.750 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 113.197 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 110.113 ms
Loss rate: 2.26%
Run 8: Report of SCReAM — Data Link

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Run 9: Statistics of SCReAM

Start at: 2018-03-06 19:52:26
End at: 2018-03-06 19:52:56

# Below is generated by plot.py at 2018-03-07 00:02:32
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.43 Mbit/s
   95th percentile per-packet one-way delay: 112.887 ms
   Loss rate: 1.05%
-- Flow 1:
   Average throughput: 0.21 Mbit/s
   95th percentile per-packet one-way delay: 112.905 ms
   Loss rate: 0.64%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 112.462 ms
   Loss rate: 1.05%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: 110.088 ms
   Loss rate: 2.26%
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 0.22 Mbps)  Flow 2 egress (mean 0.22 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 112.91 ms)  Flow 2 (95th percentile 112.46 ms)  Flow 3 (95th percentile 110.09 ms)
Run 10: Statistics of SCReAM

Start at: 2018-03-06 20:11:47
End at: 2018-03-06 20:12:17

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 111.935 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 111.946 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.871 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.951 ms
Loss rate: 2.26%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-03-06 17:09:25
End at: 2018-03-06 17:09:55

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.89 Mbit/s
  95th percentile per-packet one-way delay: 112.965 ms
  Loss rate: 1.59%
-- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 112.990 ms
  Loss rate: 1.01%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 112.582 ms
  Loss rate: 1.83%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 112.644 ms
  Loss rate: 3.47%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 2: Statistics of WebRTC media

Start at: 2018-03-06 17:28:57
End at: 2018-03-06 17:29:27

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.88 Mbit/s
  95th percentile per-packet one-way delay: 113.125 ms
  Loss rate: 1.57%
-- Flow 1:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: 113.040 ms
  Loss rate: 0.92%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 113.171 ms
  Loss rate: 1.85%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 113.099 ms
  Loss rate: 3.65%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-03-06 17:48:03
End at: 2018-03-06 17:48:33

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.87 Mbit/s
  95th percentile per-packet one-way delay: 110.839 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 110.838 ms
  Loss rate: 0.96%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 110.601 ms
  Loss rate: 1.83%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 112.662 ms
  Loss rate: 3.37%
Run 3: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 2.11 Mbit/s)  Flow 2 ingress (mean 1.33 Mbit/s)  Flow 3 ingress (mean 0.50 Mbit/s)
Flow 1 egress (mean 2.11 Mbit/s)  Flow 2 egress (mean 1.33 Mbit/s)  Flow 3 egress (mean 0.49 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 110.84 ms)  Flow 2 (95th percentile 110.60 ms)  Flow 3 (95th percentile 112.66 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-03-06 18:07:38
End at: 2018-03-06 18:08:08

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.86 Mbit/s
  95th percentile per-packet one-way delay: 112.745 ms
  Loss rate: 1.53%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 112.751 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 111.274 ms
  Loss rate: 1.73%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 112.785 ms
  Loss rate: 4.08%
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.11 Mbps)
- Flow 1 egress (mean 2.10 Mbps)
- Flow 2 ingress (mean 1.31 Mbps)
- Flow 2 egress (mean 1.30 Mbps)
- Flow 3 ingress (mean 0.30 Mbps)
- Flow 3 egress (mean 0.49 Mbps)

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

- Flow 1 (95th percentile 112.75 ms)
- Flow 2 (95th percentile 111.27 ms)
- Flow 3 (95th percentile 112.78 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-03-06 18:26:43
End at: 2018-03-06 18:27:13

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 112.448 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 112.385 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 112.503 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 0.49 Mbit/s
95th percentile per-packet one-way delay: 110.477 ms
Loss rate: 4.01%
Run 5: Report of WebRTC media — Data Link

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

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 2.11 Mbps)
- Flow 1 egress (mean 2.11 Mbps)
- Flow 2 ingress (mean 1.33 Mbps)
- Flow 2 egress (mean 1.32 Mbps)
- Flow 3 ingress (mean 0.50 Mbps)
- Flow 3 egress (mean 0.49 Mbps)

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

Packet loss (percentage)

Time (s)

- Flow 1 (95th percentile 112.39 ms)
- Flow 2 (95th percentile 112.50 ms)
- Flow 3 (95th percentile 110.48 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-03-06 18:46:11
End at: 2018-03-06 18:46:41

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.89 Mbit/s
  95th percentile per-packet one-way delay: 112.551 ms
  Loss rate: 1.52%
-- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 112.122 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 111.518 ms
  Loss rate: 1.83%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 112.631 ms
  Loss rate: 3.66%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.12 Mbit/s)
- Flow 1 egress (mean 2.11 Mbit/s)
- Flow 2 ingress (mean 1.33 Mbit/s)
- Flow 2 egress (mean 1.32 Mbit/s)
- Flow 3 ingress (mean 0.50 Mbit/s)
- Flow 3 egress (mean 0.49 Mbit/s)
Run 7: Statistics of WebRTC media

Start at: 2018-03-06 19:05:24
End at: 2018-03-06 19:05:54

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 112.964 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 111.091 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 110.726 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 0.48 Mbit/s
95th percentile per-packet one-way delay: 113.057 ms
Loss rate: 4.20%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-03-06 19:24:46
End at: 2018-03-06 19:25:16

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 112.826 ms
Loss rate: 1.60%
  -- Flow 1:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 111.740 ms
  Loss rate: 1.00%
  -- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 112.842 ms
  Loss rate: 1.59%
  -- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 113.200 ms
  Loss rate: 4.19%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-03-06 19:44:08
End at: 2018-03-06 19:44:38

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.89 Mbit/s
  95th percentile per-packet one-way delay: 113.109 ms
  Loss rate: 1.49%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 112.822 ms
  Loss rate: 0.91%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 112.649 ms
  Loss rate: 1.72%
-- Flow 3:
  Average throughput: 0.49 Mbit/s
  95th percentile per-packet one-way delay: 113.220 ms
  Loss rate: 3.33%
Run 9: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

- Blue dashed line: Flow 1 ingress (mean 2.11 Mbps)
- Blue solid line: Flow 1 egress (mean 2.10 Mbps)
- Green dashed line: Flow 2 ingress (mean 1.33 Mbps)
- Green solid line: Flow 2 egress (mean 1.32 Mbps)
- Red dashed line: Flow 3 ingress (mean 0.51 Mbps)
- Red solid line: Flow 3 egress (mean 0.49 Mbps)

![Graph 2: Packet round-trip delay (ms)]

- Blue circle: Flow 1 (95th percentile 112.82 ms)
- Green circle: Flow 2 (95th percentile 112.65 ms)
- Red circle: Flow 3 (95th percentile 113.22 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-03-06 20:03:30
End at: 2018-03-06 20:04:00

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.53 Mbit/s
  95th percentile per-packet one-way delay: 112.994 ms
  Loss rate: 1.09%
-- Flow 1:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: 112.958 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 1.33 Mbit/s
  95th percentile per-packet one-way delay: 113.016 ms
  Loss rate: 1.66%
-- Flow 3:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 110.438 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]
Run 1: Statistics of Sprout

Start at: 2018-03-06 17:19:22
End at: 2018-03-06 17:19:52

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.32 Mbit/s
95th percentile per-packet one-way delay: 112.851 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 112.896 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 112.592 ms
Loss rate: 1.76%
-- Flow 3:
Average throughput: 2.62 Mbit/s
95th percentile per-packet one-way delay: 111.080 ms
Loss rate: 0.51%
Run 1: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.41 Mbit/s)
- Flow 1 egress (mean 2.39 Mbit/s)
- Flow 2 ingress (mean 1.64 Mbit/s)
- Flow 2 egress (mean 1.63 Mbit/s)
- Flow 3 ingress (mean 2.57 Mbit/s)
- Flow 3 egress (mean 2.62 Mbit/s)
Run 2: Statistics of Sprout

Start at: 2018-03-06 17:38:43
End at: 2018-03-06 17:39:13

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 113.507 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 113.584 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 113.448 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 1.53 Mbit/s
95th percentile per-packet one-way delay: 112.916 ms
Loss rate: 1.89%
Run 2: Report of Sprout — Data Link

![Graph showing network throughput and delay data over time for different flows.](image-url)
Run 3: Statistics of Sprout

Start at: 2018-03-06 17:58:01
End at: 2018-03-06 17:58:32

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 5.63 Mbit/s
  95th percentile per-packet one-way delay: 112.164 ms
  Loss rate: 1.33%
-- Flow 1:
  Average throughput: 3.30 Mbit/s
  95th percentile per-packet one-way delay: 112.147 ms
  Loss rate: 0.91%
-- Flow 2:
  Average throughput: 2.79 Mbit/s
  95th percentile per-packet one-way delay: 112.147 ms
  Loss rate: 1.85%
-- Flow 3:
  Average throughput: 1.46 Mbit/s
  95th percentile per-packet one-way delay: 112.773 ms
  Loss rate: 2.24%
Run 3: Report of Sprout — Data Link

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

![Graph 2: Per-packet One-Way Delay vs Time](image2)
Run 4: Statistics of Sprout

Start at: 2018-03-06 18:17:37
End at: 2018-03-06 18:18:07

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.90 Mbit/s
  95th percentile per-packet one-way delay: 113.280 ms
  Loss rate: 1.46%
-- Flow 1:
  Average throughput: 2.84 Mbit/s
  95th percentile per-packet one-way delay: 113.388 ms
  Loss rate: 0.99%
-- Flow 2:
  Average throughput: 2.26 Mbit/s
  95th percentile per-packet one-way delay: 112.812 ms
  Loss rate: 1.76%
-- Flow 3:
  Average throughput: 1.74 Mbit/s
  95th percentile per-packet one-way delay: 112.342 ms
  Loss rate: 2.93%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-03-06 18:36:42
End at: 2018-03-06 18:37:12

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.08 Mbit/s
  95th percentile per-packet one-way delay: 112.055 ms
  Loss rate: 1.51%
-- Flow 1:
  Average throughput: 1.88 Mbit/s
  95th percentile per-packet one-way delay: 112.195 ms
  Loss rate: 0.96%
-- Flow 2:
  Average throughput: 2.22 Mbit/s
  95th percentile per-packet one-way delay: 111.595 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 2.24 Mbit/s
  95th percentile per-packet one-way delay: 112.040 ms
  Loss rate: 3.13%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-03-06 18:56:01
End at: 2018-03-06 18:56:31

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.90 Mbit/s
95th percentile per-packet one-way delay: 112.935 ms
Loss rate: 1.34%
-- Flow 1:
Average throughput: 2.26 Mbit/s
95th percentile per-packet one-way delay: 113.097 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 1.44 Mbit/s
95th percentile per-packet one-way delay: 112.736 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 111.349 ms
Loss rate: 4.19%
Run 6: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.26 Mbit/s)
- Flow 1 egress (mean 2.26 Mbit/s)
- Flow 2 ingress (mean 1.44 Mbit/s)
- Flow 2 egress (mean 1.44 Mbit/s)
- Flow 3 ingress (mean 2.16 Mbit/s)
- Flow 3 egress (mean 2.12 Mbit/s)
Run 7: Statistics of Sprout

Start at: 2018-03-06 19:15:22
End at: 2018-03-06 19:15:52

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.74 Mbit/s
  95th percentile per-packet one-way delay: 113.401 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 2.00 Mbit/s
  95th percentile per-packet one-way delay: 113.407 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 1.70 Mbit/s
  95th percentile per-packet one-way delay: 113.322 ms
  Loss rate: 1.42%
-- Flow 3:
  Average throughput: 1.89 Mbit/s
  95th percentile per-packet one-way delay: 113.613 ms
  Loss rate: 3.00%
Run 7: Report of Sprout — Data Link

Throughput (Mbps):

Flow 1 ingress (mean 2.00 Mbit/s)  Flow 1 egress (mean 2.00 Mbit/s)
Flow 2 ingress (mean 1.71 Mbit/s)  Flow 2 egress (mean 1.70 Mbit/s)
Flow 3 ingress (mean 1.90 Mbit/s)  Flow 3 egress (mean 1.89 Mbit/s)

Packet delay (ms):

Flow 1 (95th percentile 113.41 ms)  Flow 2 (95th percentile 113.32 ms)  Flow 3 (95th percentile 113.61 ms)
Run 8: Statistics of Sprout

Start at: 2018-03-06 19:34:42
End at: 2018-03-06 19:35:12

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.88 Mbit/s
  95th percentile per-packet one-way delay: 113.534 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 2.73 Mbit/s
  95th percentile per-packet one-way delay: 113.586 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 2.38 Mbit/s
  95th percentile per-packet one-way delay: 113.499 ms
  Loss rate: 0.99%
-- Flow 3:
  Average throughput: 1.79 Mbit/s
  95th percentile per-packet one-way delay: 113.327 ms
  Loss rate: 2.40%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-03-06 19:54:05
End at: 2018-03-06 19:54:35

# Below is generated by plot.py at 2018-03-07 00:02:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 112.456 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 3.21 Mbit/s
95th percentile per-packet one-way delay: 112.458 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 2.42 Mbit/s
95th percentile per-packet one-way delay: 111.671 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 1.81 Mbit/s
95th percentile per-packet one-way delay: 113.087 ms
Loss rate: 5.30%
Run 9: Report of Sprout — Data Link

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

Throughput (MB/s)

Time (s)

Flow 1 ingress (mean 3.21 Mbit/s)
Flow 1 egress (mean 3.21 Mbit/s)
Flow 2 ingress (mean 2.43 Mbit/s)
Flow 2 egress (mean 2.42 Mbit/s)
Flow 3 ingress (mean 1.87 Mbit/s)
Flow 3 egress (mean 1.81 Mbit/s)

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

Per-packet round-trip delay (ms)

Time (s)

Flow 1 (95th percentile 112.46 ms)
Flow 2 (95th percentile 111.67 ms)
Flow 3 (95th percentile 113.09 ms)

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Run 10: Statistics of Sprout

Start at: 2018-03-06 20:13:26  
End at: 2018-03-06 20:13:56

# Below is generated by plot.py at 2018-03-07 00:02:33  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 4.95 Mbit/s  
95th percentile per-packet one-way delay: 112.788 ms  
Loss rate: 1.40%  
-- Flow 1:  
Average throughput: 2.61 Mbit/s  
95th percentile per-packet one-way delay: 112.926 ms  
Loss rate: 1.08%  
-- Flow 2:  
Average throughput: 2.70 Mbit/s  
95th percentile per-packet one-way delay: 111.760 ms  
Loss rate: 1.16%  
-- Flow 3:  
Average throughput: 1.71 Mbit/s  
95th percentile per-packet one-way delay: 110.608 ms  
Loss rate: 3.63%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-03-06 17:20:09
End at: 2018-03-06 17:20:39

# Below is generated by plot.py at 2018-03-07 00:05:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 211.80 Mbit/s
  95th percentile per-packet one-way delay: 113.729 ms
  Loss rate: 1.37%
-- Flow 1:
  Average throughput: 50.21 Mbit/s
  95th percentile per-packet one-way delay: 112.927 ms
  Loss rate: 0.79%
-- Flow 2:
  Average throughput: 162.57 Mbit/s
  95th percentile per-packet one-way delay: 113.801 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 165.31 Mbit/s
  95th percentile per-packet one-way delay: 114.219 ms
  Loss rate: 3.37%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-03-06 17:39:29
End at: 2018-03-06 17:39:59

# Below is generated by plot.py at 2018-03-07 00:05:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 172.29 Mbit/s
  95th percentile per-packet one-way delay: 112.736 ms
  Loss rate: 1.58%
-- Flow 1:
  Average throughput: 40.94 Mbit/s
  95th percentile per-packet one-way delay: 112.621 ms
  Loss rate: 1.02%
-- Flow 2:
  Average throughput: 110.97 Mbit/s
  95th percentile per-packet one-way delay: 112.685 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 177.10 Mbit/s
  95th percentile per-packet one-way delay: 113.360 ms
  Loss rate: 2.72%
Run 2: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 41.01 Mbit/s)
- Flow 1 egress (mean 40.94 Mbit/s)
- Flow 2 ingress (mean 110.80 Mbit/s)
- Flow 2 egress (mean 110.97 Mbit/s)
- Flow 3 ingress (mean 177.93 Mbit/s)
- Flow 3 egress (mean 177.10 Mbit/s)
Run 3: Statistics of TaoVA-100x

Start at: 2018-03-06 17:58:48
End at: 2018-03-06 17:59:18

# Below is generated by plot.py at 2018-03-07 00:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.95 Mbit/s
95th percentile per-packet one-way delay: 112.241 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 190.69 Mbit/s
95th percentile per-packet one-way delay: 112.170 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 154.50 Mbit/s
95th percentile per-packet one-way delay: 111.928 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 64.25 Mbit/s
95th percentile per-packet one-way delay: 122.916 ms
Loss rate: 3.50%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-03-06 18:18:24
End at: 2018-03-06 18:18:54

# Below is generated by plot.py at 2018-03-07 00:09:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 26.12 Mbit/s
  95th percentile per-packet one-way delay: 112.961 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 10.50 Mbit/s
  95th percentile per-packet one-way delay: 113.010 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 15.94 Mbit/s
  95th percentile per-packet one-way delay: 110.972 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 15.44 Mbit/s
  95th percentile per-packet one-way delay: 112.442 ms
  Loss rate: 2.36%
Run 4: Report of TaoVA-100x — Data Link

[Graph showing throughput and per-packet loss delay over time for different flows.]
Run 5: Statistics of TaoVA-100x

Start at: 2018-03-06 18:37:29
End at: 2018-03-06 18:37:59

# Below is generated by plot.py at 2018-03-07 00:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.64 Mbit/s
95th percentile per-packet one-way delay: 112.130 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 119.08 Mbit/s
95th percentile per-packet one-way delay: 112.130 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 18.03 Mbit/s
95th percentile per-packet one-way delay: 112.183 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 167.24 Mbit/s
95th percentile per-packet one-way delay: 111.780 ms
Loss rate: 2.31%
Run 5: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 118.30 Mbit/s)
Flow 1 egress (mean 119.08 Mbit/s)
Flow 2 ingress (mean 18.00 Mbit/s)
Flow 2 egress (mean 18.03 Mbit/s)
Flow 3 ingress (mean 167.31 Mbit/s)
Flow 3 egress (mean 167.24 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.13 ms)
Flow 2 (95th percentile 112.18 ms)
Flow 3 (95th percentile 111.78 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-03-06 18:56:48
End at: 2018-03-06 18:57:18

# Below is generated by plot.py at 2018-03-07 00:09:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 206.20 Mbit/s
  95th percentile per-packet one-way delay: 112.741 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 154.24 Mbit/s
  95th percentile per-packet one-way delay: 112.777 ms
  Loss rate: 1.09%
-- Flow 2:
  Average throughput: 32.40 Mbit/s
  95th percentile per-packet one-way delay: 119.082 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 150.53 Mbit/s
  95th percentile per-packet one-way delay: 112.523 ms
  Loss rate: 3.09%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-03-06 19:16:09
End at: 2018-03-06 19:16:39

# Below is generated by plot.py at 2018-03-07 00:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 211.14 Mbit/s
95th percentile per-packet one-way delay: 114.617 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 134.69 Mbit/s
95th percentile per-packet one-way delay: 113.774 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 95.48 Mbit/s
95th percentile per-packet one-way delay: 115.550 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 40.38 Mbit/s
95th percentile per-packet one-way delay: 122.893 ms
Loss rate: 0.19%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-03-06 19:35:28
End at: 2018-03-06 19:35:58

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 250.84 Mbit/s
  95th percentile per-packet one-way delay: 115.361 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 108.98 Mbit/s
  95th percentile per-packet one-way delay: 113.015 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 194.64 Mbit/s
  95th percentile per-packet one-way delay: 116.962 ms
  Loss rate: 1.44%
-- Flow 3:
  Average throughput: 40.03 Mbit/s
  95th percentile per-packet one-way delay: 130.017 ms
  Loss rate: 0.79%
Run 8: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet delay over time for different flows. The graphs display the throughput and packet delay for three flows labeled as Flow 1, Flow 2, and Flow 3, with data rates and delay metrics provided.](image-url)
Run 9: Statistics of TaoVA-100x

Start at: 2018-03-06 19:54:52
End at: 2018-03-06 19:55:22

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 149.63 Mbit/s
  95th percentile per-packet one-way delay: 112.797 ms
  Loss rate: 1.33%
-- Flow 1:
  Average throughput: 73.31 Mbit/s
  95th percentile per-packet one-way delay: 112.609 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 109.19 Mbit/s
  95th percentile per-packet one-way delay: 112.815 ms
  Loss rate: 2.51%
-- Flow 3:
  Average throughput: 12.82 Mbit/s
  95th percentile per-packet one-way delay: 112.878 ms
  Loss rate: 2.46%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-03-06 20:14:12
End at: 2018-03-06 20:14:42

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 102.02 Mbit/s
  95th percentile per-packet one-way delay: 114.977 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 82.00 Mbit/s
  95th percentile per-packet one-way delay: 114.989 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 13.50 Mbit/s
  95th percentile per-packet one-way delay: 112.980 ms
  Loss rate: 1.34%
-- Flow 3:
  Average throughput: 34.39 Mbit/s
  95th percentile per-packet one-way delay: 109.919 ms
  Loss rate: 3.56%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-03-06 17:18:32
End at: 2018-03-06 17:19:02

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 70.13 Mbit/s
    95th percentile per-packet one-way delay: 122.652 ms
    Loss rate: 1.06%
    -- Flow 1:
    Average throughput: 38.83 Mbit/s
    95th percentile per-packet one-way delay: 123.439 ms
    Loss rate: 0.63%
    -- Flow 2:
    Average throughput: 31.28 Mbit/s
    95th percentile per-packet one-way delay: 116.104 ms
    Loss rate: 1.23%
    -- Flow 3:
    Average throughput: 32.44 Mbit/s
    95th percentile per-packet one-way delay: 117.606 ms
    Loss rate: 2.27%
Run 1: Report of TCP Vegas — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 38.84 Mbit/s) — Flow 1 egress (mean 38.83 Mbit/s)
Flow 2 ingress (mean 31.29 Mbit/s) — Flow 2 egress (mean 31.28 Mbit/s)
Flow 3 ingress (mean 32.45 Mbit/s) — Flow 3 egress (mean 32.44 Mbit/s)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 123.44 ms) — Flow 2 (95th percentile 116.10 ms) — Flow 3 (95th percentile 117.61 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-03-06 17:37:52
End at: 2018-03-06 17:38:22

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.77 Mbit/s
  95th percentile per-packet one-way delay: 115.372 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 42.27 Mbit/s
  95th percentile per-packet one-way delay: 114.632 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 33.90 Mbit/s
  95th percentile per-packet one-way delay: 116.440 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 24.67 Mbit/s
  95th percentile per-packet one-way delay: 118.651 ms
  Loss rate: 2.46%
Run 2: Report of TCP Vegas — Data Link

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

Throughput (Mbit/s) vs. Time (s) for:
- Flow 1 ingress (mean 42.30 Mbit/s)
- Flow 1 egress (mean 42.27 Mbit/s)
- Flow 2 ingress (mean 33.95 Mbit/s)
- Flow 2 egress (mean 33.90 Mbit/s)
- Flow 3 ingress (mean 24.72 Mbit/s)
- Flow 3 egress (mean 24.67 Mbit/s)

Packet per second vs. Time (s) for:
- Flow 1 (95th percentile 114.63 ms)
- Flow 2 (95th percentile 116.44 ms)
- Flow 3 (95th percentile 118.65 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-03-06 17:57:09
End at: 2018-03-06 17:57:39

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 105.67 Mbit/s
  95th percentile per-packet one-way delay: 118.893 ms
  Loss rate: 1.38%
-- Flow 1:
  Average throughput: 56.61 Mbit/s
  95th percentile per-packet one-way delay: 112.978 ms
  Loss rate: 0.78%
-- Flow 2:
  Average throughput: 29.47 Mbit/s
  95th percentile per-packet one-way delay: 116.612 ms
  Loss rate: 1.15%
-- Flow 3:
  Average throughput: 90.83 Mbit/s
  95th percentile per-packet one-way delay: 120.216 ms
  Loss rate: 2.67%
Run 3: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 56.64 Mbit/s)
- Flow 1 egress (mean 56.61 Mbit/s)
- Flow 2 ingress (mean 29.48 Mbit/s)
- Flow 2 egress (mean 29.47 Mbit/s)
- Flow 3 ingress (mean 91.27 Mbit/s)
- Flow 3 egress (mean 90.83 Mbit/s)

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

- Flow 1 (95th percentile 112.98 ms)
- Flow 2 (95th percentile 116.61 ms)
- Flow 3 (95th percentile 120.22 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-03-06 18:16:45
End at: 2018-03-06 18:17:15

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 102.06 Mbit/s
  95th percentile per-packet one-way delay: 119.240 ms
  Loss rate: 1.46%
-- Flow 1:
  Average throughput: 35.81 Mbit/s
  95th percentile per-packet one-way delay: 115.432 ms
  Loss rate: 0.69%
-- Flow 2:
  Average throughput: 56.11 Mbit/s
  95th percentile per-packet one-way delay: 118.351 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 88.98 Mbit/s
  95th percentile per-packet one-way delay: 120.726 ms
  Loss rate: 2.72%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 35.79 Mbit/s)
- Flow 1 egress (mean 35.81 Mbit/s)
- Flow 2 ingress (mean 56.15 Mbit/s)
- Flow 2 egress (mean 56.11 Mbit/s)
- Flow 3 ingress (mean 89.43 Mbit/s)
- Flow 3 egress (mean 88.98 Mbit/s)

![Graph 2: Jitter vs Time](image2.png)

- Flow 1 (95th percentile 115.43 ms)
- Flow 2 (95th percentile 118.35 ms)
- Flow 3 (95th percentile 120.73 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-03-06 18:35:51
End at: 2018-03-06 18:36:21

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.60 Mbit/s
  95th percentile per-packet one-way delay: 118.014 ms
  Loss rate: 1.62%
-- Flow 1:
  Average throughput: 37.78 Mbit/s
  95th percentile per-packet one-way delay: 114.634 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 32.27 Mbit/s
  95th percentile per-packet one-way delay: 119.339 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 90.25 Mbit/s
  95th percentile per-packet one-way delay: 118.817 ms
  Loss rate: 2.90%
Run 5: Report of TCP Vegas — Data Link

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**Figure 1: Throughput (Mbps)**

- **Flow 1 ingress (mean 37.81 Mbps)**
- **Flow 1 egress (mean 37.78 Mbps)**
- **Flow 2 ingress (mean 32.30 Mbps)**
- **Flow 2 egress (mean 32.27 Mbps)**
- **Flow 3 ingress (mean 90.84 Mbps)**
- **Flow 3 egress (mean 90.25 Mbps)**

**Figure 2: Per-packet one-way delay (ms)**

- **Flow 1 (95th percentile 114.63 ms)**
- **Flow 2 (95th percentile 119.34 ms)**
- **Flow 3 (95th percentile 118.82 ms)**

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Run 6: Statistics of TCP Vegas

Start at: 2018-03-06 18:55:12
End at: 2018-03-06 18:55:42

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.72 Mbit/s
95th percentile per-packet one-way delay: 121.225 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 20.36 Mbit/s
95th percentile per-packet one-way delay: 115.406 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 2.52 Mbit/s
95th percentile per-packet one-way delay: 116.259 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 88.87 Mbit/s
95th percentile per-packet one-way delay: 122.705 ms
Loss rate: 2.75%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-03-06 19:14:31
End at: 2018-03-06 19:15:01

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.66 Mbit/s
95th percentile per-packet one-way delay: 124.566 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 31.63 Mbit/s
95th percentile per-packet one-way delay: 120.067 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 77.36 Mbit/s
95th percentile per-packet one-way delay: 127.567 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 125.408 ms
Loss rate: 1.91%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-03-06 19:33:51  
End at: 2018-03-06 19:34:21

# Below is generated by plot.py at 2018-03-07 00:09:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.56 Mbit/s
  95th percentile per-packet one-way delay: 115.150 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 42.38 Mbit/s
  95th percentile per-packet one-way delay: 113.960 ms
  Loss rate: 0.72%
-- Flow 2:
  Average throughput: 30.92 Mbit/s
  95th percentile per-packet one-way delay: 115.001 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 29.73 Mbit/s
  95th percentile per-packet one-way delay: 124.879 ms
  Loss rate: 2.31%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-03-06 19:53:12
End at: 2018-03-06 19:53:42

# Below is generated by plot.py at 2018-03-07 00:10:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 113.73 Mbit/s
  95th percentile per-packet one-way delay: 120.897 ms
  Loss rate: 1.32%
-- Flow 1:
  Average throughput: 31.71 Mbit/s
  95th percentile per-packet one-way delay: 122.015 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 98.73 Mbit/s
  95th percentile per-packet one-way delay: 121.130 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 50.98 Mbit/s
  95th percentile per-packet one-way delay: 116.269 ms
  Loss rate: 2.63%
Run 9: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 31.74 Mbit/s)
- Flow 1 egress (mean 31.71 Mbit/s)
- Flow 2 ingress (mean 98.64 Mbit/s)
- Flow 2 egress (mean 98.73 Mbit/s)
- Flow 3 ingress (mean 51.19 Mbit/s)
- Flow 3 egress (mean 50.98 Mbit/s)
Run 10: Statistics of TCP Vegas

Start at: 2018-03-06 20:12:33
End at: 2018-03-06 20:13:03

# Below is generated by plot.py at 2018-03-07 00:10:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 112.34 Mbit/s
95th percentile per-packet one-way delay: 117.812 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 118.004 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 43.91 Mbit/s
95th percentile per-packet one-way delay: 114.477 ms
Loss rate: 1.17%
-- Flow 3:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 118.883 ms
Loss rate: 2.65%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-03-06 17:03:55
End at: 2018-03-06 17:04:25

# Below is generated by plot.py at 2018-03-07 00:11:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 175.99 Mbit/s
95th percentile per-packet one-way delay: 223.830 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 91.39 Mbit/s
95th percentile per-packet one-way delay: 212.437 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 88.10 Mbit/s
95th percentile per-packet one-way delay: 226.026 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 80.17 Mbit/s
95th percentile per-packet one-way delay: 244.566 ms
Loss rate: 2.34%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-03-06 17:23:15
End at: 2018-03-06 17:23:45

# Below is generated by plot.py at 2018-03-07 00:12:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 241.69 Mbit/s
  95th percentile per-packet one-way delay: 181.474 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 183.22 Mbit/s
  95th percentile per-packet one-way delay: 176.026 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 71.82 Mbit/s
  95th percentile per-packet one-way delay: 164.726 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 34.30 Mbit/s
  95th percentile per-packet one-way delay: 266.049 ms
  Loss rate: 3.98%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 182.68 Mbit/s)
- Flow 1 egress (mean 183.22 Mbit/s)
- Flow 2 ingress (mean 71.72 Mbit/s)
- Flow 2 egress (mean 71.82 Mbit/s)
- Flow 3 ingress (mean 34.66 Mbit/s)
- Flow 3 egress (mean 34.30 Mbit/s)
Run 3: Statistics of Verus

Start at: 2018-03-06 17:42:31
End at: 2018-03-06 17:43:01

# Below is generated by plot.py at 2018-03-07 00:12:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 177.08 Mbit/s
  95th percentile per-packet one-way delay: 176.424 ms
  Loss rate: 1.44%
-- Flow 1:
  Average throughput: 76.61 Mbit/s
  95th percentile per-packet one-way delay: 151.593 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 78.27 Mbit/s
  95th percentile per-packet one-way delay: 185.265 ms
  Loss rate: 1.68%
-- Flow 3:
  Average throughput: 150.20 Mbit/s
  95th percentile per-packet one-way delay: 220.206 ms
  Loss rate: 3.36%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 76.03 Mbps)
- Flow 1 egress (mean 76.61 Mbps)
- Flow 2 ingress (mean 78.78 Mbps)
- Flow 2 egress (mean 78.27 Mbps)
- Flow 3 ingress (mean 151.66 Mbps)
- Flow 3 egress (mean 150.20 Mbps)

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

- Flow 1 (95th percentile 151.59 ms)
- Flow 2 (95th percentile 185.26 ms)
- Flow 3 (95th percentile 220.21 ms)
Run 4: Statistics of Verus

Start at: 2018-03-06 18:02:06
End at: 2018-03-06 18:02:36

# Below is generated by plot.py at 2018-03-07 00:12:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.89 Mbit/s
95th percentile per-packet one-way delay: 189.946 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 74.23 Mbit/s
95th percentile per-packet one-way delay: 130.371 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 163.611 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 90.73 Mbit/s
95th percentile per-packet one-way delay: 352.555 ms
Loss rate: 4.14%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-03-06 18:21:09
End at: 2018-03-06 18:21:39

# Below is generated by plot.py at 2018-03-07 00:12:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 214.99 Mbit/s
  95th percentile per-packet one-way delay: 209.712 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 111.64 Mbit/s
  95th percentile per-packet one-way delay: 159.216 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 87.69 Mbit/s
  95th percentile per-packet one-way delay: 202.713 ms
  Loss rate: 1.12%
-- Flow 3:
  Average throughput: 141.13 Mbit/s
  95th percentile per-packet one-way delay: 261.364 ms
  Loss rate: 4.00%
Run 5: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 111.56 Mbps)
- Flow 1 egress (mean 111.64 Mbps)
- Flow 2 ingress (mean 86.53 Mbps)
- Flow 2 egress (mean 87.69 Mbps)
- Flow 3 ingress (mean 141.69 Mbps)
- Flow 3 egress (mean 141.13 Mbps)

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

- Flow 1 (95th percentile 159.22 ms)
- Flow 2 (95th percentile 202.71 ms)
- Flow 3 (95th percentile 261.36 ms)
Run 6: Statistics of Verus

Start at: 2018-03-06 18:40:31
End at: 2018-03-06 18:41:01

# Below is generated by plot.py at 2018-03-07 00:13:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 259.51 Mbit/s
  95th percentile per-packet one-way delay: 162.595 ms
  Loss rate: 1.27%
-- Flow 1:
  Average throughput: 174.62 Mbit/s
  95th percentile per-packet one-way delay: 159.027 ms
  Loss rate: 0.96%
-- Flow 2:
  Average throughput: 116.67 Mbit/s
  95th percentile per-packet one-way delay: 169.856 ms
  Loss rate: 2.03%
-- Flow 3:
  Average throughput: 23.42 Mbit/s
  95th percentile per-packet one-way delay: 225.346 ms
  Loss rate: 0.53%
Run 6: Report of Verus — Data Link

![Graph 1](image1)

Flow 1 ingress (mean 175.00 Mb/s) vs. Flow 1 egress (mean 174.62 Mb/s)
Flow 2 ingress (mean 117.75 Mb/s) vs. Flow 2 egress (mean 116.67 Mb/s)
Flow 3 ingress (mean 23.00 Mb/s) vs. Flow 3 egress (mean 23.42 Mb/s)

![Graph 2](image2)

Per packet one-way delay (ms) for:
- Flow 1 (95th percentile 159.03 ms)
- Flow 2 (95th percentile 169.86 ms)
- Flow 3 (95th percentile 225.35 ms)
Run 7: Statistics of Verus

Start at: 2018-03-06 18:59:54
End at: 2018-03-06 19:00:24

# Below is generated by plot.py at 2018-03-07 00:13:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 212.99 Mbit/s
  95th percentile per-packet one-way delay: 276.874 ms
  Loss rate: 5.01%
-- Flow 1:
  Average throughput: 133.10 Mbit/s
  95th percentile per-packet one-way delay: 291.399 ms
  Loss rate: 5.73%
-- Flow 2:
  Average throughput: 83.46 Mbit/s
  95th percentile per-packet one-way delay: 239.141 ms
  Loss rate: 1.49%
-- Flow 3:
  Average throughput: 76.90 Mbit/s
  95th percentile per-packet one-way delay: 252.898 ms
  Loss rate: 8.48%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 140.63 Mbit/s)
- Flow 1 egress (mean 133.10 Mbit/s)
- Flow 2 ingress (mean 83.36 Mbit/s)
- Flow 2 egress (mean 83.45 Mbit/s)
- Flow 3 ingress (mean 82.96 Mbit/s)
- Flow 3 egress (mean 76.90 Mbit/s)

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

- Flow 1 (95th percentile 291.40 ms)
- Flow 2 (95th percentile 239.14 ms)
- Flow 3 (95th percentile 252.90 ms)
Run 8: Statistics of Verus

Start at: 2018-03-06 19:19:17
End at: 2018-03-06 19:19:47

# Below is generated by plot.py at 2018-03-07 00:13:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 185.06 Mbit/s
95th percentile per-packet one-way delay: 237.981 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 92.11 Mbit/s
95th percentile per-packet one-way delay: 205.383 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 80.59 Mbit/s
95th percentile per-packet one-way delay: 237.787 ms
Loss rate: 1.91%
-- Flow 3:
Average throughput: 120.89 Mbit/s
95th percentile per-packet one-way delay: 252.762 ms
Loss rate: 6.17%
Run 8: Report of Verus — Data Link

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

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

Start at: 2018-03-06 19:38:40  
End at: 2018-03-06 19:39:10

# Below is generated by plot.py at 2018-03-07 00:13:49
# Datalink statistics
# Total of 3 flows:
Average throughput: 146.68 Mbit/s
95th percentile per-packet one-way delay: 146.929 ms
Loss rate: 0.42%

-- Flow 1:
Average throughput: 79.77 Mbit/s
95th percentile per-packet one-way delay: 149.883 ms
Loss rate: 0.13%

-- Flow 2:
Average throughput: 82.40 Mbit/s
95th percentile per-packet one-way delay: 143.337 ms
Loss rate: 0.93%

-- Flow 3:
Average throughput: 38.24 Mbit/s
95th percentile per-packet one-way delay: 144.330 ms
Loss rate: 0.02%
Run 9: Report of Verus — Data Link

![Graph of network traffic over time]

**Throughput (Mbit/s)**
- Flow 1 ingress (mean 79.27 Mbit/s)
- Flow 1 egress (mean 79.77 Mbit/s)
- Flow 2 ingress (mean 82.21 Mbit/s)
- Flow 2 egress (mean 82.40 Mbit/s)
- Flow 3 ingress (mean 37.38 Mbit/s)
- Flow 3 egress (mean 38.24 Mbit/s)

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

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 149.88 ms)
- Flow 2 (95th percentile 143.34 ms)
- Flow 3 (95th percentile 144.33 ms)
Run 10: Statistics of Verus

Start at: 2018-03-06 19:57:53
End at: 2018-03-06 19:58:23

# Below is generated by plot.py at 2018-03-07 00:14:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 224.31 Mbit/s
  95th percentile per-packet one-way delay: 227.885 ms
  Loss rate: 2.50%
-- Flow 1:
  Average throughput: 187.12 Mbit/s
  95th percentile per-packet one-way delay: 226.947 ms
  Loss rate: 1.94%
-- Flow 2:
  Average throughput: 43.87 Mbit/s
  95th percentile per-packet one-way delay: 223.652 ms
  Loss rate: 1.15%
-- Flow 3:
  Average throughput: 25.28 Mbit/s
  95th percentile per-packet one-way delay: 238.746 ms
  Loss rate: 17.28%
Run 10: Report of Verus — Data Link
Run 1: Statistics of Copa

Start at: 2018-03-06 17:07:31
End at: 2018-03-06 17:08:01

# Below is generated by plot.py at 2018-03-07 00:15:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.59 Mbit/s
95th percentile per-packet one-way delay: 112.586 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 67.03 Mbit/s
95th percentile per-packet one-way delay: 112.618 ms
Loss rate: 1.24%
-- Flow 2:
Average throughput: 67.80 Mbit/s
95th percentile per-packet one-way delay: 112.319 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 66.01 Mbit/s
95th percentile per-packet one-way delay: 110.583 ms
Loss rate: 2.96%
Run 1: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-03-06 17:26:58
End at: 2018-03-06 17:27:28

# Below is generated by plot.py at 2018-03-07 00:16:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 134.23 Mbit/s
  95th percentile per-packet one-way delay: 112.828 ms
  Loss rate: 1.03%
-- Flow 1:
  Average throughput: 72.86 Mbit/s
  95th percentile per-packet one-way delay: 112.599 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 65.92 Mbit/s
  95th percentile per-packet one-way delay: 112.871 ms
  Loss rate: 1.43%
-- Flow 3:
  Average throughput: 54.06 Mbit/s
  95th percentile per-packet one-way delay: 112.862 ms
  Loss rate: 2.85%
Run 2: Report of Copa — Data Link

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

Legend:
- Flow 1 ingress (mean 72.56 Mbit/s)
- Flow 1 egress (mean 72.86 Mbit/s)
- Flow 2 ingress (mean 66.12 Mbit/s)
- Flow 2 egress (mean 65.92 Mbit/s)
- Flow 3 ingress (mean 54.39 Mbit/s)
- Flow 3 egress (mean 54.06 Mbit/s)
Run 3: Statistics of Copa

Start at: 2018-03-06 17:46:05
End at: 2018-03-06 17:46:35

# Below is generated by plot.py at 2018-03-07 00:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.08 Mbit/s
95th percentile per-packet one-way delay: 112.738 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 112.727 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 76.03 Mbit/s
95th percentile per-packet one-way delay: 112.731 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 69.66 Mbit/s
95th percentile per-packet one-way delay: 112.770 ms
Loss rate: 3.27%
Run 3: Report of Copa — Data Link

[Graph showing throughput and packet delay over time for different flows]
Run 4: Statistics of Copa

Start at: 2018-03-06 18:05:39
End at: 2018-03-06 18:06:09

# Below is generated by plot.py at 2018-03-07 00:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 138.16 Mbit/s
95th percentile per-packet one-way delay: 112.667 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 56.49 Mbit/s
95th percentile per-packet one-way delay: 112.699 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 82.47 Mbit/s
95th percentile per-packet one-way delay: 112.608 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 82.54 Mbit/s
95th percentile per-packet one-way delay: 111.191 ms
Loss rate: 3.28%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-03-06 18:24:51
End at: 2018-03-06 18:25:21

# Below is generated by plot.py at 2018-03-07 00:17:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.99 Mbit/s
95th percentile per-packet one-way delay: 112.363 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 43.84 Mbit/s
95th percentile per-packet one-way delay: 112.368 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 59.75 Mbit/s
95th percentile per-packet one-way delay: 112.336 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 112.387 ms
Loss rate: 3.60%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-03-06 18:44:13
End at: 2018-03-06 18:44:43

# Below is generated by plot.py at 2018-03-07 00:17:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 124.50 Mbit/s
  95th percentile per-packet one-way delay: 112.234 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 55.34 Mbit/s
  95th percentile per-packet one-way delay: 112.336 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 64.52 Mbit/s
  95th percentile per-packet one-way delay: 111.875 ms
  Loss rate: 1.44%
-- Flow 3:
  Average throughput: 80.66 Mbit/s
  95th percentile per-packet one-way delay: 111.307 ms
  Loss rate: 1.55%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-03-06 19:03:26  
End at: 2018-03-06 19:03:56

# Below is generated by plot.py at 2018-03-07 00:18:20  
# Datalink statistics
-- Total of 3 flows:  
  Average throughput: 152.87 Mbit/s  
  95th percentile per-packet one-way delay: 112.862 ms  
  Loss rate: 0.76%  
  -- Flow 1:  
  Average throughput: 81.88 Mbit/s  
  95th percentile per-packet one-way delay: 112.721 ms  
  Loss rate: 0.63%  
  -- Flow 2:  
  Average throughput: 73.76 Mbit/s  
  95th percentile per-packet one-way delay: 112.540 ms  
  Loss rate: 0.44%  
  -- Flow 3:  
  Average throughput: 67.69 Mbit/s  
  95th percentile per-packet one-way delay: 113.012 ms  
  Loss rate: 1.96%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-03-06 19:22:48
End at: 2018-03-06 19:23:18

# Below is generated by plot.py at 2018-03-07 00:19:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 158.89 Mbit/s
  95th percentile per-packet one-way delay: 112.598 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 87.46 Mbit/s
  95th percentile per-packet one-way delay: 112.602 ms
  Loss rate: 0.19%
-- Flow 2:
  Average throughput: 72.36 Mbit/s
  95th percentile per-packet one-way delay: 112.597 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 71.74 Mbit/s
  95th percentile per-packet one-way delay: 112.588 ms
  Loss rate: 2.50%
Run 8: Report of Copa — Data Link

![Throughput and Delay Graphs](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 86.99 Mbps)
  - Flow 1 egress (mean 87.46 Mbps)
  - Flow 2 ingress (mean 72.18 Mbps)
  - Flow 2 egress (mean 72.36 Mbps)
  - Flow 3 ingress (mean 71.94 Mbps)
  - Flow 3 egress (mean 71.74 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 112.60 ms)
  - Flow 2 (95th percentile 112.60 ms)
  - Flow 3 (95th percentile 112.59 ms)
Run 9: Statistics of Copa

Start at: 2018-03-06 19:42:14
End at: 2018-03-06 19:42:44

# Below is generated by plot.py at 2018-03-07 00:19:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.61 Mbit/s
95th percentile per-packet one-way delay: 113.017 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 80.69 Mbit/s
95th percentile per-packet one-way delay: 112.759 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 68.33 Mbit/s
95th percentile per-packet one-way delay: 113.064 ms
Loss rate: 1.31%
-- Flow 3:
Average throughput: 56.92 Mbit/s
95th percentile per-packet one-way delay: 112.575 ms
Loss rate: 3.17%
Run 9: Report of Copa — Data Link

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

- Flow 1 ingress (mean 80.59 Mbit/s)
- Flow 1 egress (mean 80.69 Mbit/s)
- Flow 2 ingress (mean 68.47 Mbit/s)
- Flow 2 egress (mean 68.33 Mbit/s)
- Flow 3 ingress (mean 57.48 Mbit/s)
- Flow 3 egress (mean 56.92 Mbit/s)

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

- Flow 1 (95th percentile 112.76 ms)
- Flow 2 (95th percentile 113.06 ms)
- Flow 3 (95th percentile 112.58 ms)
Run 10: Statistics of Copa

Start at: 2018-03-06 20:01:33
End at: 2018-03-06 20:02:03

# Below is generated by plot.py at 2018-03-07 00:20:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.37 Mbit/s
95th percentile per-packet one-way delay: 111.865 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 83.85 Mbit/s
95th percentile per-packet one-way delay: 110.743 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 65.40 Mbit/s
95th percentile per-packet one-way delay: 110.828 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 67.93 Mbit/s
95th percentile per-packet one-way delay: 111.940 ms
Loss rate: 2.67%
Run 10: Report of Copa — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 83.90 Mbit/s)
- Flow 1 egress (mean 83.85 Mbit/s)
- Flow 2 ingress (mean 65.05 Mbit/s)
- Flow 2 egress (mean 65.40 Mbit/s)
- Flow 3 ingress (mean 68.22 Mbit/s)
- Flow 3 egress (mean 67.93 Mbit/s)

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

- Flow 1 (95th percentile 110.74 ms)
- Flow 2 (95th percentile 110.83 ms)
- Flow 3 (95th percentile 111.94 ms)
Run 1: Statistics of FillP

Start at: 2018-03-06 17:10:12
End at: 2018-03-06 17:10:42

# Below is generated by plot.py at 2018-03-07 00:37:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1332.74 Mbit/s
95th percentile per-packet one-way delay: 405.884 ms
Loss rate: 6.25%
-- Flow 1:
Average throughput: 700.18 Mbit/s
95th percentile per-packet one-way delay: 409.725 ms
Loss rate: 5.08%
-- Flow 2:
Average throughput: 629.55 Mbit/s
95th percentile per-packet one-way delay: 417.881 ms
Loss rate: 7.50%
-- Flow 3:
Average throughput: 663.38 Mbit/s
95th percentile per-packet one-way delay: 221.433 ms
Loss rate: 7.56%
Run 1: Report of FillP — Data Link

![Graph showing data link performance for different flows and time intervals.](image-url)

Legend:
- Flow 1 ingress (mean 732.11 Mb/s)
- Flow 1 egress (mean 700.18 Mb/s)
- Flow 2 ingress (mean 671.14 Mb/s)
- Flow 2 egress (mean 629.55 Mb/s)
- Flow 3 ingress (mean 701.48 Mb/s)
- Flow 3 egress (mean 663.38 Mb/s)

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

Legend:
- Flow 1 (95th percentile 409.73 ms)
- Flow 2 (95th percentile 417.88 ms)
- Flow 3 (95th percentile 221.43 ms)
Run 2: Statistics of FillP

Start at: 2018-03-06 17:29:44
End at: 2018-03-06 17:30:14

# Below is generated by plot.py at 2018-03-07 00:41:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1529.87 Mbit/s
95th percentile per-packet one-way delay: 303.629 ms
Loss rate: 5.44%
-- Flow 1:
Average throughput: 823.39 Mbit/s
95th percentile per-packet one-way delay: 277.449 ms
Loss rate: 4.26%
-- Flow 2:
Average throughput: 754.46 Mbit/s
95th percentile per-packet one-way delay: 313.276 ms
Loss rate: 5.73%
-- Flow 3:
Average throughput: 630.80 Mbit/s
95th percentile per-packet one-way delay: 333.145 ms
Loss rate: 9.21%
Run 2: Report of FillP — Data Link

---

**Throughput (Mb/s):**

- **Flow 1 Ingress (mean 853.57 Mb/s)**
- **Flow 1 Egress (mean 823.39 Mb/s)**
- **Flow 2 Ingress (mean 793.42 Mb/s)**
- **Flow 2 Egress (mean 754.46 Mb/s)**
- **Flow 3 Ingress (mean 679.16 Mb/s)**
- **Flow 3 Egress (mean 630.80 Mb/s)**

**Packet Delay (ms):**

- **Flow 1 (95th percentile 277.45 ms)**
- **Flow 2 (95th percentile 313.28 ms)**
- **Flow 3 (95th percentile 333.14 ms)**

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Run 3: Statistics of FillP

Start at: 2018-03-06 17:48:50
End at: 2018-03-06 17:49:20

# Below is generated by plot.py at 2018-03-07 00:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1599.70 Mbit/s
95th percentile per-packet one-way delay: 210.979 ms
Loss rate: 5.20%
-- Flow 1:
Average throughput: 838.26 Mbit/s
95th percentile per-packet one-way delay: 205.454 ms
Loss rate: 5.62%
-- Flow 2:
Average throughput: 774.82 Mbit/s
95th percentile per-packet one-way delay: 229.461 ms
Loss rate: 3.41%
-- Flow 3:
Average throughput: 760.55 Mbit/s
95th percentile per-packet one-way delay: 209.594 ms
Loss rate: 7.37%
Run 3: Report of FillP — Data Link

---

**Throughput vs. Time (Mbps)**
- **Flow 1 Ingress** (mean 881.63 Mbps)
- **Flow 1 Egress** (mean 858.26 Mbps)
- **Flow 2 Ingress** (mean 793.15 Mbps)
- **Flow 2 Egress** (mean 774.82 Mbps)
- **Flow 3 Ingress** (mean 807.58 Mbps)
- **Flow 3 Egress** (mean 760.55 Mbps)

---

**Per-packet raw max delay (ms)**
- **Flow 1 (95th percentile 205.45 ms)**
- **Flow 2 (95th percentile 229.46 ms)**
- **Flow 3 (95th percentile 209.59 ms)**

---

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Run 4: Statistics of FillP

Start at: 2018-03-06 18:08:24
End at: 2018-03-06 18:08:54

# Below is generated by plot.py at 2018-03-07 00:43:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1593.47 Mbit/s
  95th percentile per-packet one-way delay: 228.421 ms
  Loss rate: 5.02%
-- Flow 1:
  Average throughput: 798.59 Mbit/s
  95th percentile per-packet one-way delay: 239.252 ms
  Loss rate: 5.60%
-- Flow 2:
  Average throughput: 841.82 Mbit/s
  95th percentile per-packet one-way delay: 201.475 ms
  Loss rate: 3.81%
-- Flow 3:
  Average throughput: 734.34 Mbit/s
  95th percentile per-packet one-way delay: 188.101 ms
  Loss rate: 5.84%
Run 4: Report of FillP — Data Link

**Throughput (Mb/s)**

- Flow 1 ingress (mean 836.79 Mb/s)
- Flow 1 egress (mean 798.59 Mb/s)
- Flow 2 ingress (mean 865.25 Mb/s)
- Flow 2 egress (mean 842.82 Mb/s)
- Flow 3 ingress (mean 762.07 Mb/s)
- Flow 3 egress (mean 734.34 Mb/s)

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

- Flow 1 (95th percentile 239.25 ms)
- Flow 2 (95th percentile 201.47 ms)
- Flow 3 (95th percentile 188.10 ms)
Run 5: Statistics of FillP

Start at: 2018-03-06 18:27:29
End at: 2018-03-06 18:27:59

# Below is generated by plot.py at 2018-03-07 00:43:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1504.93 Mbit/s
95th percentile per-packet one-way delay: 286.792 ms
Loss rate: 4.84%
-- Flow 1:
Average throughput: 818.31 Mbit/s
95th percentile per-packet one-way delay: 248.667 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 745.30 Mbit/s
95th percentile per-packet one-way delay: 226.634 ms
Loss rate: 6.77%
-- Flow 3:
Average throughput: 590.76 Mbit/s
95th percentile per-packet one-way delay: 342.812 ms
Loss rate: 11.71%
Run 5: Report of FillP — Data Link

Throughput (Mbps/s)

- Flow 1 ingress (mean 827.24 Mbps/s)
- Flow 1 egress (mean 818.31 Mbps/s)
- Flow 2 ingress (mean 790.36 Mbps/s)
- Flow 2 egress (mean 745.30 Mbps/s)
- Flow 3 ingress (mean 654.06 Mbps/s)
- Flow 3 egress (mean 590.76 Mbps/s)

Per-packet one way delay (ms)

- Flow 1 (95th percentile 248.67 ms)
- Flow 2 (95th percentile 226.63 ms)
- Flow 3 (95th percentile 342.81 ms)
Run 6: Statistics of FillP

Start at: 2018-03-06 18:46:58
End at: 2018-03-06 18:47:28

# Below is generated by plot.py at 2018-03-07 00:44:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1464.34 Mbit/s
  95th percentile per-packet one-way delay: 297.946 ms
  Loss rate: 6.37%
-- Flow 1:
  Average throughput: 778.86 Mbit/s
  95th percentile per-packet one-way delay: 285.056 ms
  Loss rate: 5.83%
-- Flow 2:
  Average throughput: 761.54 Mbit/s
  95th percentile per-packet one-way delay: 190.910 ms
  Loss rate: 5.02%
-- Flow 3:
  Average throughput: 553.47 Mbit/s
  95th percentile per-packet one-way delay: 377.722 ms
  Loss rate: 12.05%
Run 6: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 820.93 Mbps)
Flow 1 egress (mean 778.86 Mbps)
Flow 2 ingress (mean 792.67 Mbps)
Flow 2 egress (mean 763.54 Mbps)
Flow 3 ingress (mean 615.00 Mbps)
Flow 3 egress (mean 553.47 Mbps)

Packet drop rate as a delay (ms)

Time (s)

Flow 1 (95th percentile 285.06 ms)
Flow 2 (95th percentile 190.91 ms)
Flow 3 (95th percentile 377.72 ms)
Run 7: Statistics of FillP

Start at: 2018-03-06 19:06:10
End at: 2018-03-06 19:06:40

# Below is generated by plot.py at 2018-03-07 00:45:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1532.11 Mbit/s
95th percentile per-packet one-way delay: 278.597 ms
Loss rate: 3.91%
-- Flow 1:
Average throughput: 798.76 Mbit/s
95th percentile per-packet one-way delay: 239.536 ms
Loss rate: 2.74%
-- Flow 2:
Average throughput: 745.88 Mbit/s
95th percentile per-packet one-way delay: 297.815 ms
Loss rate: 5.83%
-- Flow 3:
Average throughput: 738.20 Mbit/s
95th percentile per-packet one-way delay: 192.301 ms
Loss rate: 3.70%
Run 7: Report of FillP — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 815.20 Mbps)
- Blue solid line: Flow 1 egress (mean 798.76 Mbps)
- Green dashed-dotted line: Flow 2 ingress (mean 780.94 Mbps)
- Green dashed line: Flow 2 egress (mean 745.88 Mbps)
- Red dashed line: Flow 3 ingress (mean 749.22 Mbps)
- Red solid line: Flow 3 egress (mean 738.20 Mbps)

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

- Blue dotted line: Flow 1 (95th percentile 239.54 ms)
- Green dotted line: Flow 2 (95th percentile 297.81 ms)
- Red dotted line: Flow 3 (95th percentile 192.30 ms)
Run 8: Statistics of FillP

Start at: 2018-03-06 19:25:32
End at: 2018-03-06 19:26:02

# Below is generated by plot.py at 2018-03-07 00:47:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1564.73 Mbit/s
  95th percentile per-packet one-way delay: 272.178 ms
  Loss rate: 3.65%
  -- Flow 1:
  Average throughput: 849.22 Mbit/s
  95th percentile per-packet one-way delay: 181.931 ms
  Loss rate: 3.25%
  -- Flow 2:
  Average throughput: 775.17 Mbit/s
  95th percentile per-packet one-way delay: 292.924 ms
  Loss rate: 4.43%
  -- Flow 3:
  Average throughput: 619.26 Mbit/s
  95th percentile per-packet one-way delay: 323.450 ms
  Loss rate: 3.34%
Run 8: Report of FillP — Data Link

![Graph showing data link performance](image-url)

![Graph showing per-packet one-way delay](image-url)
Run 9: Statistics of FillP

Start at: 2018-03-06 19:44:54
End at: 2018-03-06 19:45:24

# Below is generated by plot.py at 2018-03-07 01:04:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1447.65 Mbit/s
95th percentile per-packet one-way delay: 334.186 ms
Loss rate: 7.33%
-- Flow 1:
Average throughput: 743.00 Mbit/s
95th percentile per-packet one-way delay: 363.443 ms
Loss rate: 6.33%
-- Flow 2:
Average throughput: 751.05 Mbit/s
95th percentile per-packet one-way delay: 231.096 ms
Loss rate: 9.74%
-- Flow 3:
Average throughput: 633.43 Mbit/s
95th percentile per-packet one-way delay: 228.134 ms
Loss rate: 4.84%
Run 9: Report of FillP — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 787.40 Mbps)
- Flow 1 egress (mean 743.00 Mbps)
- Flow 2 ingress (mean 822.76 Mbps)
- Flow 2 egress (mean 753.05 Mbps)
- Flow 3 ingress (mean 650.77 Mbps)
- Flow 3 egress (mean 633.43 Mbps)

Delay (ms):
- Flow 1 (95th percentile 363.44 ms)
- Flow 2 (95th percentile 231.10 ms)
- Flow 3 (95th percentile 228.13 ms)
Run 10: Statistics of FillP

Start at: 2018-03-06 20:04:17
End at: 2018-03-06 20:04:47

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1491.58 Mbit/s
  95th percentile per-packet one-way delay: 336.205 ms
  Loss rate: 5.98%
-- Flow 1:
  Average throughput: 724.90 Mbit/s
  95th percentile per-packet one-way delay: 367.054 ms
  Loss rate: 6.58%
-- Flow 2:
  Average throughput: 818.95 Mbit/s
  95th percentile per-packet one-way delay: 301.161 ms
  Loss rate: 4.73%
-- Flow 3:
  Average throughput: 685.46 Mbit/s
  95th percentile per-packet one-way delay: 202.205 ms
  Loss rate: 7.00%
Run 10: Report of FillIP — Data Link

![Throughput vs Time Graph]

- Flow 1 ingress (mean 770.20 Mbit/s)
- Flow 1 egress (mean 724.90 Mbit/s)
- Flow 2 ingress (mean 849.90 Mbit/s)
- Flow 2 egress (mean 818.95 Mbit/s)
- Flow 3 ingress (mean 720.28 Mbit/s)
- Flow 3 egress (mean 685.46 Mbit/s)

![Packet Delay vs Time Graph]

- Flow 1 (95th percentile 367.05 ms)
- Flow 2 (95th percentile 301.16 ms)
- Flow 3 (95th percentile 202.21 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-03-06 17:01:57
End at: 2018-03-06 17:02:27

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.47 Mbit/s
95th percentile per-packet one-way delay: 114.706 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 152.13 Mbit/s
95th percentile per-packet one-way delay: 114.098 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 178.32 Mbit/s
95th percentile per-packet one-way delay: 116.272 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 128.25 Mbit/s
95th percentile per-packet one-way delay: 114.222 ms
Loss rate: 2.65%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

Start at: 2018-03-06 17:21:18
End at: 2018-03-06 17:21:48

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.44 Mbit/s
95th percentile per-packet one-way delay: 116.045 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 156.85 Mbit/s
95th percentile per-packet one-way delay: 114.863 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 141.91 Mbit/s
95th percentile per-packet one-way delay: 115.789 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 122.91 Mbit/s
95th percentile per-packet one-way delay: 121.195 ms
Loss rate: 2.79%
Run 2: Report of Indigo-1-32 — Data Link

![Graph 1](Run 2: Report of Indigo-1-32 — Data Link)

![Graph 2](Run 2: Report of Indigo-1-32 — Data Link)
Run 3: Statistics of Indigo-1-32

Start at: 2018-03-06 17:40:35
End at: 2018-03-06 17:41:05

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 293.76 Mbit/s
  95th percentile per-packet one-way delay: 118.272 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 156.67 Mbit/s
  95th percentile per-packet one-way delay: 116.109 ms
  Loss rate: 0.68%
-- Flow 2:
  Average throughput: 147.17 Mbit/s
  95th percentile per-packet one-way delay: 118.976 ms
  Loss rate: 1.11%
-- Flow 3:
  Average throughput: 123.88 Mbit/s
  95th percentile per-packet one-way delay: 120.358 ms
  Loss rate: 2.73%
Run 3: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mb/s):**
  - Flow 1 ingress (mean 156.55 Mb/s)
  - Flow 1 egress (mean 156.67 Mb/s)
  - Flow 2 ingress (mean 147.14 Mb/s)
  - Flow 2 egress (mean 147.17 Mb/s)
  - Flow 3 ingress (mean 124.43 Mb/s)
  - Flow 3 egress (mean 123.08 Mb/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 116.11 ms)
  - Flow 2 (95th percentile 118.98 ms)
  - Flow 3 (95th percentile 120.36 ms)
Run 4: Statistics of Indigo-1-32

Start at: 2018-03-06 18:00:07
End at: 2018-03-06 18:00:37

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.96 Mbit/s
95th percentile per-packet one-way delay: 113.271 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 180.97 Mbit/s
95th percentile per-packet one-way delay: 112.932 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 156.23 Mbit/s
95th percentile per-packet one-way delay: 114.179 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 131.38 Mbit/s
95th percentile per-packet one-way delay: 113.033 ms
Loss rate: 2.78%
Run 4: Report of Indigo-1-32 — Data Link
Run 5: Statistics of Indigo-1-32

Start at: 2018-03-06 18:19:14
End at: 2018-03-06 18:19:44

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 285.47 Mbit/s
  95th percentile per-packet one-way delay: 112.276 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 151.68 Mbit/s
  95th percentile per-packet one-way delay: 111.814 ms
  Loss rate: 0.73%
-- Flow 2:
  Average throughput: 140.08 Mbit/s
  95th percentile per-packet one-way delay: 112.579 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 127.39 Mbit/s
  95th percentile per-packet one-way delay: 113.066 ms
  Loss rate: 2.51%
Run 5: Report of Indigo-1-32 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 151.66 Mbps)  
Flow 1 egress (mean 151.68 Mbps)  
Flow 2 ingress (mean 140.23 Mbps)  
Flow 2 egress (mean 140.08 Mbps)  
Flow 3 ingress (mean 127.71 Mbps)  
Flow 3 egress (mean 127.99 Mbps)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 111.91 ms)  
Flow 2 (95th percentile 112.58 ms)  
Flow 3 (95th percentile 113.07 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-03-06 18:38:34
End at: 2018-03-06 18:39:04

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.04 Mbit/s
95th percentile per-packet one-way delay: 111.559 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 149.27 Mbit/s
95th percentile per-packet one-way delay: 111.118 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 162.46 Mbit/s
95th percentile per-packet one-way delay: 112.320 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 131.04 Mbit/s
95th percentile per-packet one-way delay: 111.847 ms
Loss rate: 2.48%
Run 6: Report of Indigo-1-32 — Data Link

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

**Throughput (Mbps):**
- Blue dashed line: Flow 1 ingress (mean 149.27 Mbps)
- Blue solid line: Flow 1 egress (mean 149.27 Mbps)
- Green dashed line: Flow 2 ingress (mean 162.30 Mbps)
- Green solid line: Flow 2 egress (mean 162.46 Mbps)
- Red dashed line: Flow 3 ingress (mean 131.29 Mbps)
- Red solid line: Flow 3 egress (mean 131.04 Mbps)

**Packet Delay (ms):**
- Blue small markers: Flow 1 (95th percentile 111.12 ms)
- Green small markers: Flow 2 (95th percentile 112.32 ms)
- Red small markers: Flow 3 (95th percentile 111.85 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-03-06 18:57:56
End at: 2018-03-06 18:58:26

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 323.48 Mbit/s
  95th percentile per-packet one-way delay: 113.224 ms
  Loss rate: 1.05%
-- Flow 1:
  Average throughput: 188.11 Mbit/s
  95th percentile per-packet one-way delay: 113.175 ms
  Loss rate: 0.62%
-- Flow 2:
  Average throughput: 144.99 Mbit/s
  95th percentile per-packet one-way delay: 113.424 ms
  Loss rate: 1.19%
-- Flow 3:
  Average throughput: 122.25 Mbit/s
  95th percentile per-packet one-way delay: 112.666 ms
  Loss rate: 2.71%
Run 7: Report of Indigo-1-32 — Data Link

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

- **Flow 1**: Ingress (mean 187.87 Mbit/s), Egress (mean 188.11 Mbit/s)
- **Flow 2**: Ingress (mean 145.10 Mbit/s), Egress (mean 144.99 Mbit/s)
- **Flow 3**: Ingress (mean 122.85 Mbit/s), Egress (mean 122.25 Mbit/s)
Run 8: Statistics of Indigo-1-32

Start at: 2018-03-06 19:17:18
End at: 2018-03-06 19:17:48

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.26 Mbit/s
95th percentile per-packet one-way delay: 114.821 ms
Loss rate: 1.01%

-- Flow 1:
Average throughput: 180.46 Mbit/s
95th percentile per-packet one-way delay: 114.058 ms
Loss rate: 0.65%

-- Flow 2:
Average throughput: 157.05 Mbit/s
95th percentile per-packet one-way delay: 115.589 ms
Loss rate: 1.02%

-- Flow 3:
Average throughput: 130.06 Mbit/s
95th percentile per-packet one-way delay: 117.171 ms
Loss rate: 2.57%
Run 8: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 180.28 Mbps)
- Flow 1 egress (mean 180.46 Mbps)
- Flow 2 ingress (mean 156.89 Mbps)
- Flow 2 egress (mean 157.05 Mbps)
- Flow 3 ingress (mean 130.45 Mbps)
- Flow 3 egress (mean 130.06 Mbps)

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

- Flow 1 (95th percentile 114.06 ms)
- Flow 2 (95th percentile 115.59 ms)
- Flow 3 (95th percentile 117.17 ms)

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Run 9: Statistics of Indigo-1-32

Start at: 2018-03-06 19:36:42
End at: 2018-03-06 19:37:12

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 317.41 Mbit/s
  95th percentile per-packet one-way delay: 113.092 ms
  Loss rate: 1.02%
-- Flow 1:
  Average throughput: 185.45 Mbit/s
  95th percentile per-packet one-way delay: 113.007 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 139.93 Mbit/s
  95th percentile per-packet one-way delay: 113.250 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 122.32 Mbit/s
  95th percentile per-packet one-way delay: 112.836 ms
  Loss rate: 2.72%
Run 9: Report of Indigo-1-32 — Data Link

![Graph showing throughput and packet delays over time for different flows with specified mean throughputs and 95th percentile delays.]

Throughput (Mbps)

Time (s)

Packet one-way delay (ms)

Flow 1 ingress (mean 185.15 Mbps)
Flow 1 egress (mean 185.45 Mbps)
Flow 2 ingress (mean 139.96 Mbps)
Flow 2 egress (mean 139.93 Mbps)
Flow 3 ingress (mean 122.88 Mbps)
Flow 3 egress (mean 122.32 Mbps)
Run 10: Statistics of Indigo-1-32

Start at: 2018-03-06 19:55:55
End at: 2018-03-06 19:56:25

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 321.17 Mbit/s
95th percentile per-packet one-way delay: 113.474 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 185.39 Mbit/s
95th percentile per-packet one-way delay: 113.145 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 142.72 Mbit/s
95th percentile per-packet one-way delay: 113.505 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 129.27 Mbit/s
95th percentile per-packet one-way delay: 114.495 ms
Loss rate: 2.74%
Run 10: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 185.15 Mbit/s)
- Flow 1 egress (mean 185.39 Mbit/s)
- Flow 2 ingress (mean 142.79 Mbit/s)
- Flow 2 egress (mean 142.72 Mbit/s)
- Flow 3 ingress (mean 129.93 Mbit/s)
- Flow 3 egress (mean 129.27 Mbit/s)
Run 1: Statistics of Vivace-latency

Start at: 2018-03-06 17:14:20
End at: 2018-03-06 17:14:50

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 459.98 Mbit/s
95th percentile per-packet one-way delay: 112.663 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 287.22 Mbit/s
95th percentile per-packet one-way delay: 111.210 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 195.33 Mbit/s
95th percentile per-packet one-way delay: 112.449 ms
Loss rate: 2.06%
-- Flow 3:
Average throughput: 133.76 Mbit/s
95th percentile per-packet one-way delay: 113.265 ms
Loss rate: 3.30%
Run 1: Report of Vivace-latency — Data Link
Run 2: Statistics of Vivace-latency

Start at: 2018-03-06 17:33:43
End at: 2018-03-06 17:34:13

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 452.89 Mbit/s
  95th percentile per-packet one-way delay: 113.066 ms
  Loss rate: 1.02%
-- Flow 1:
  Average throughput: 290.01 Mbit/s
  95th percentile per-packet one-way delay: 110.019 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 184.53 Mbit/s
  95th percentile per-packet one-way delay: 111.274 ms
  Loss rate: 1.44%
-- Flow 3:
  Average throughput: 125.58 Mbit/s
  95th percentile per-packet one-way delay: 113.961 ms
  Loss rate: 3.62%
Run 2: Report of Vivace-latency — Data Link

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

Legend:
- Flow 1 ingress (mean 289.19 Mbit/s)
- Flow 1 egress (mean 290.01 Mbit/s)
- Flow 2 ingress (mean 185.12 Mbit/s)
- Flow 2 egress (mean 184.53 Mbit/s)
- Flow 3 ingress (mean 127.33 Mbit/s)
- Flow 3 egress (mean 125.58 Mbit/s)

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Run 3: Statistics of Vivace-latency

Start at: 2018-03-06 17:52:58
End at: 2018-03-06 17:53:28

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 472.02 Mbit/s
95th percentile per-packet one-way delay: 113.240 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 300.96 Mbit/s
95th percentile per-packet one-way delay: 113.618 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 189.54 Mbit/s
95th percentile per-packet one-way delay: 111.696 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 141.01 Mbit/s
95th percentile per-packet one-way delay: 113.743 ms
Loss rate: 3.83%
Run 3: Report of Vivace-latency — Data Link

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

Legend:
- Flow 1 ingress (mean 300.80 Mbit/s)
- Flow 1 egress (mean 300.96 Mbit/s)
- Flow 2 ingress (mean 190.03 Mbit/s)
- Flow 2 egress (mean 189.54 Mbit/s)
- Flow 3 ingress (mean 143.38 Mbit/s)
- Flow 3 egress (mean 141.01 Mbit/s)

![Graph showing packet delay for different flows.]

Legend:
- Flow 1 (95th percentile 113.62 ms)
- Flow 2 (95th percentile 111.70 ms)
- Flow 3 (95th percentile 113.74 ms)
Run 4: Statistics of Vivace-latency

Start at: 2018-03-06 18:12:34
End at: 2018-03-06 18:13:04

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.86 Mbit/s
95th percentile per-packet one-way delay: 112.552 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 275.25 Mbit/s
95th percentile per-packet one-way delay: 111.159 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 181.76 Mbit/s
95th percentile per-packet one-way delay: 112.738 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 124.49 Mbit/s
95th percentile per-packet one-way delay: 117.456 ms
Loss rate: 3.20%
Run 4: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time for three distinct flows.][1]

[1]: https://example.com/graph.png
Run 5: Statistics of Vivace-latency

Start at: 2018-03-06 18:31:39
End at: 2018-03-06 18:32:09

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 460.14 Mbit/s
  95th percentile per-packet one-way delay: 113.530 ms
  Loss rate: 1.09%
-- Flow 1:
  Average throughput: 291.17 Mbit/s
  95th percentile per-packet one-way delay: 112.254 ms
  Loss rate: 0.88%
-- Flow 2:
  Average throughput: 189.25 Mbit/s
  95th percentile per-packet one-way delay: 176.227 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 134.64 Mbit/s
  95th percentile per-packet one-way delay: 111.751 ms
  Loss rate: 3.66%
Run 5: Report of Vivace-latency — Data Link
Run 6: Statistics of Vivace-latency

Start at: 2018-03-06 18:51:02
End at: 2018-03-06 18:51:32

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 440.41 Mbit/s
95th percentile per-packet one-way delay: 111.539 ms
Loss rate: 1.27%

-- Flow 1:
Average throughput: 260.66 Mbit/s
95th percentile per-packet one-way delay: 111.490 ms
Loss rate: 0.75%

-- Flow 2:
Average throughput: 205.93 Mbit/s
95th percentile per-packet one-way delay: 110.747 ms
Loss rate: 1.58%

-- Flow 3:
Average throughput: 134.06 Mbit/s
95th percentile per-packet one-way delay: 113.464 ms
Loss rate: 3.35%
Run 6: Report of Vivace-latency — Data Link
Run 7: Statistics of Vivace-latency

Start at: 2018-03-06 19:10:20
End at: 2018-03-06 19:10:50

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 446.41 Mbit/s
  95th percentile per-packet one-way delay: 113.421 ms
  Loss rate: 1.18%
-- Flow 1:
  Average throughput: 278.41 Mbit/s
  95th percentile per-packet one-way delay: 112.638 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 189.24 Mbit/s
  95th percentile per-packet one-way delay: 114.099 ms
  Loss rate: 1.40%
-- Flow 3:
  Average throughput: 131.68 Mbit/s
  95th percentile per-packet one-way delay: 113.600 ms
  Loss rate: 2.93%
Run 7: Report of Vivace-latency — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 8: Statistics of Vivace-latency

Start at: 2018-03-06 19:29:43
End at: 2018-03-06 19:30:13

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 436.05 Mbit/s
95th percentile per-packet one-way delay: 111.884 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 266.47 Mbit/s
95th percentile per-packet one-way delay: 111.996 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 208.44 Mbit/s
95th percentile per-packet one-way delay: 110.831 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 97.28 Mbit/s
95th percentile per-packet one-way delay: 112.015 ms
Loss rate: 2.52%
Run 8: Report of Vivace-latency — Data Link

![Graph showing throughput and latency over time for different flows.](image)
Run 9: Statistics of Vivace-latency

Start at: 2018-03-06 19:49:00
End at: 2018-03-06 19:49:30

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 469.17 Mbit/s
  95th percentile per-packet one-way delay: 114.136 ms
  Loss rate: 1.25%
-- Flow 1:
  Average throughput: 293.81 Mbit/s
  95th percentile per-packet one-way delay: 114.507 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 205.85 Mbit/s
  95th percentile per-packet one-way delay: 113.676 ms
  Loss rate: 1.36%
-- Flow 3:
  Average throughput: 120.58 Mbit/s
  95th percentile per-packet one-way delay: 115.592 ms
  Loss rate: 3.15%
Run 9: Report of Vivace-latency — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 294.35 Mbps)
  - Flow 1 egress (mean 293.81 Mbps)
  - Flow 2 ingress (mean 206.31 Mbps)
  - Flow 2 egress (mean 205.85 Mbps)
  - Flow 3 ingress (mean 121.64 Mbps)
  - Flow 3 egress (mean 120.58 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 114.51 ms)
  - Flow 2 (95th percentile 113.68 ms)
  - Flow 3 (95th percentile 115.59 ms)
Run 10: Statistics of Vivace-latency

Start at: 2018-03-06 20:08:22
End at: 2018-03-06 20:08:52

# Below is generated by plot.py at 2018-03-07 01:08:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 461.51 Mbit/s
  95th percentile per-packet one-way delay: 113.190 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 305.23 Mbit/s
  95th percentile per-packet one-way delay: 113.345 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 173.59 Mbit/s
  95th percentile per-packet one-way delay: 110.911 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 127.66 Mbit/s
  95th percentile per-packet one-way delay: 113.711 ms
  Loss rate: 4.02%
Run 10: Report of Vivace-latency — Data Link

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

- Flow 1 ingress (mean 305.53 Mbit/s)
- Flow 1 egress (mean 305.23 Mbit/s)
- Flow 2 ingress (mean 173.13 Mbit/s)
- Flow 2 egress (mean 173.59 Mbit/s)
- Flow 3 ingress (mean 126.96 Mbit/s)
- Flow 3 egress (mean 127.66 Mbit/s)
Run 1: Statistics of Vivace-loss

Start at: 2018-03-06 17:04:55
End at: 2018-03-06 17:05:25

# Below is generated by plot.py at 2018-03-07 01:08:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 500.47 Mbit/s
  95th percentile per-packet one-way delay: 113.258 ms
  Loss rate: 1.31%
-- Flow 1:
  Average throughput: 287.62 Mbit/s
  95th percentile per-packet one-way delay: 113.027 ms
  Loss rate: 0.95%
-- Flow 2:
  Average throughput: 252.41 Mbit/s
  95th percentile per-packet one-way delay: 111.059 ms
  Loss rate: 1.37%
-- Flow 3:
  Average throughput: 143.15 Mbit/s
  95th percentile per-packet one-way delay: 126.576 ms
  Loss rate: 3.32%
Run 1: Report of Vivace-loss — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 2: Statistics of Vivace-loss

Start at: 2018-03-06 17:24:20
End at: 2018-03-06 17:24:50

# Below is generated by plot.py at 2018-03-07 01:10:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 525.69 Mbit/s
  95th percentile per-packet one-way delay: 116.874 ms
  Loss rate: 1.31%
-- Flow 1:
  Average throughput: 304.03 Mbit/s
  95th percentile per-packet one-way delay: 124.191 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 268.87 Mbit/s
  95th percentile per-packet one-way delay: 114.732 ms
  Loss rate: 1.50%
-- Flow 3:
  Average throughput: 134.83 Mbit/s
  95th percentile per-packet one-way delay: 118.812 ms
  Loss rate: 3.46%
Run 2: Report of Vivace-loss — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 3: Statistics of Vivace-loss

Start at: 2018-03-06 17:43:31
End at: 2018-03-06 17:44:01

# Below is generated by plot.py at 2018-03-07 01:12:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 487.18 Mbit/s
95th percentile per-packet one-way delay: 113.611 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 277.44 Mbit/s
95th percentile per-packet one-way delay: 113.926 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 247.57 Mbit/s
95th percentile per-packet one-way delay: 113.723 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 141.42 Mbit/s
95th percentile per-packet one-way delay: 112.073 ms
Loss rate: 3.34%
Run 3: Report of Vivace-loss — Data Link
Run 4: Statistics of Vivace-loss

Start at: 2018-03-06 18:03:04
End at: 2018-03-06 18:03:34

# Below is generated by plot.py at 2018-03-07 01:13:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 500.57 Mbit/s
  95th percentile per-packet one-way delay: 115.025 ms
  Loss rate: 1.00%
-- Flow 1:
  Average throughput: 330.13 Mbit/s
  95th percentile per-packet one-way delay: 115.050 ms
  Loss rate: 0.85%
-- Flow 2:
  Average throughput: 211.33 Mbit/s
  95th percentile per-packet one-way delay: 113.728 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 94.37 Mbit/s
  95th percentile per-packet one-way delay: 119.805 ms
  Loss rate: 2.42%

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Run 4: Report of Vivace-loss — Data Link
Run 5: Statistics of Vivace-loss

Start at: 2018-03-06 18:22:14
End at: 2018-03-06 18:22:44

# Below is generated by plot.py at 2018-03-07 01:13:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 436.19 Mbit/s
  95th percentile per-packet one-way delay: 131.269 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 266.89 Mbit/s
  95th percentile per-packet one-way delay: 144.381 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 208.25 Mbit/s
  95th percentile per-packet one-way delay: 112.461 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 96.92 Mbit/s
  95th percentile per-packet one-way delay: 113.455 ms
  Loss rate: 2.53%
Run 5: Report of Vivace-loss — Data Link
Run 6: Statistics of Vivace-loss

Start at: 2018-03-06 18:41:37
End at: 2018-03-06 18:42:07

# Below is generated by plot.py at 2018-03-07 01:15:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 514.07 Mbit/s
  95th percentile per-packet one-way delay: 114.177 ms
  Loss rate: 1.38%
-- Flow 1:
  Average throughput: 290.69 Mbit/s
  95th percentile per-packet one-way delay: 114.077 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 267.00 Mbit/s
  95th percentile per-packet one-way delay: 115.009 ms
  Loss rate: 1.51%
-- Flow 3:
  Average throughput: 144.10 Mbit/s
  95th percentile per-packet one-way delay: 111.050 ms
  Loss rate: 3.00%
Run 6: Report of Vivace-loss — Data Link

![Graph of Throughput and Delay](image)

**Throughput (Mbps)**

- Flow 1 ingress (mean 291.53 Mbps)
- Flow 1 egress (mean 290.69 Mbps)
- Flow 2 ingress (mean 268.03 Mbps)
- Flow 2 egress (mean 267.00 Mbps)
- Flow 3 ingress (mean 144.95 Mbps)
- Flow 3 egress (mean 144.10 Mbps)

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

- Flow 1 (95th percentile 114.08 ms)
- Flow 2 (95th percentile 115.01 ms)
- Flow 3 (95th percentile 111.05 ms)
Run 7: Statistics of Vivace-loss

Start at: 2018-03-06 19:00:57
End at: 2018-03-06 19:01:27

# Below is generated by plot.py at 2018-03-07 01:15:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 418.37 Mbit/s
  95th percentile per-packet one-way delay: 113.313 ms
  Loss rate: 1.28%
-- Flow 1:
  Average throughput: 262.78 Mbit/s
  95th percentile per-packet one-way delay: 113.498 ms
  Loss rate: 0.98%
-- Flow 2:
  Average throughput: 198.53 Mbit/s
  95th percentile per-packet one-way delay: 110.699 ms
  Loss rate: 1.81%
-- Flow 3:
  Average throughput: 74.42 Mbit/s
  95th percentile per-packet one-way delay: 114.181 ms
  Loss rate: 1.67%
Run 7: Report of Vivace-loss — Data Link

![Throughput Graph]

![Delay Graph]

- Flow 1 ingress (mean 263.40 Mbit/s)
- Flow 1 egress (mean 262.78 Mbit/s)
- Flow 2 ingress (mean 199.93 Mbit/s)
- Flow 2 egress (mean 198.53 Mbit/s)
- Flow 3 ingress (mean 73.98 Mbit/s)
- Flow 3 egress (mean 74.42 Mbit/s)
Run 8: Statistics of Vivace-loss

Start at: 2018-03-06 19:20:18
End at: 2018-03-06 19:20:48

# Below is generated by plot.py at 2018-03-07 01:15:37
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 422.07 Mbit/s
  95th percentile per-packet one-way delay: 122.271 ms
  Loss rate: 1.45%
  -- Flow 1:
  Average throughput: 234.18 Mbit/s
  95th percentile per-packet one-way delay: 129.040 ms
  Loss rate: 1.06%
  -- Flow 2:
  Average throughput: 198.82 Mbit/s
  95th percentile per-packet one-way delay: 119.949 ms
  Loss rate: 0.93%
  -- Flow 3:
  Average throughput: 173.63 Mbit/s
  95th percentile per-packet one-way delay: 109.239 ms
  Loss rate: 4.17%
Run 8: Report of Vivace-loss — Data Link

![Graph of Throughput (Mbps)]

![Graph of Per-packet one-way delay (ms)]
Run 9: Statistics of Vivace-loss

Start at: 2018-03-06 19:39:38
End at: 2018-03-06 19:40:08

# Below is generated by plot.py at 2018-03-07 01:16:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 502.37 Mbit/s
  95th percentile per-packet one-way delay: 133.003 ms
  Loss rate: 1.59%
-- Flow 1:
  Average throughput: 304.67 Mbit/s
  95th percentile per-packet one-way delay: 129.876 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 199.95 Mbit/s
  95th percentile per-packet one-way delay: 112.870 ms
  Loss rate: 1.98%
-- Flow 3:
  Average throughput: 202.02 Mbit/s
  95th percentile per-packet one-way delay: 161.121 ms
  Loss rate: 4.26%
Run 9: Report of Vivace-loss — Data Link
Run 10: Statistics of Vivace-loss

Start at: 2018-03-06 19:58:57
End at: 2018-03-06 19:59:27

# Below is generated by plot.py at 2018-03-07 01:18:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 512.17 Mbit/s
  95th percentile per-packet one-way delay: 174.984 ms
  Loss rate: 1.46%
  -- Flow 1:
  Average throughput: 278.12 Mbit/s
  95th percentile per-packet one-way delay: 147.522 ms
  Loss rate: 0.95%
  -- Flow 2:
  Average throughput: 287.17 Mbit/s
  95th percentile per-packet one-way delay: 189.391 ms
  Loss rate: 1.73%
  -- Flow 3:
  Average throughput: 135.54 Mbit/s
  95th percentile per-packet one-way delay: 111.954 ms
  Loss rate: 3.50%
Run 10: Report of Vivace-loss — Data Link

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

Start at: 2018-03-06 17:12:02
End at: 2018-03-06 17:12:32

# Below is generated by plot.py at 2018-03-07 01:21:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 499.34 Mbit/s
  95th percentile per-packet one-way delay: 113.223 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 330.64 Mbit/s
  95th percentile per-packet one-way delay: 113.370 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 190.89 Mbit/s
  95th percentile per-packet one-way delay: 113.350 ms
  Loss rate: 1.65%
-- Flow 3:
  Average throughput: 130.75 Mbit/s
  95th percentile per-packet one-way delay: 109.410 ms
  Loss rate: 3.06%
Run 1: Report of Vivace-LTE — Data Link

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Throughput (Mbit/s)

- Flow 1 ingress (mean 330.90 Mbit/s)
- Flow 1 egress (mean 330.64 Mbit/s)
- Flow 2 ingress (mean 191.90 Mbit/s)
- Flow 2 egress (mean 190.89 Mbit/s)
- Flow 3 ingress (mean 131.89 Mbit/s)
- Flow 3 egress (mean 130.75 Mbit/s)

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Per-packet end-to-end delay (ms)

- Flow 1 (95th percentile 113.37 ms)
- Flow 2 (95th percentile 113.35 ms)
- Flow 3 (95th percentile 109.41 ms)

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Run 2: Statistics of Vivace-LTE

Start at: 2018-03-06 17:31:36
End at: 2018-03-06 17:32:06

# Below is generated by plot.py at 2018-03-07 01:21:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.74 Mbit/s
95th percentile per-packet one-way delay: 114.414 ms
Loss rate: 5.34%
-- Flow 1:
Average throughput: 97.19 Mbit/s
95th percentile per-packet one-way delay: 112.366 ms
Loss rate: 12.89%
-- Flow 2:
Average throughput: 277.14 Mbit/s
95th percentile per-packet one-way delay: 149.101 ms
Loss rate: 1.35%
-- Flow 3:
Average throughput: 142.54 Mbit/s
95th percentile per-packet one-way delay: 112.442 ms
Loss rate: 3.26%
Run 2: Report of Vivace-LTE — Data Link
Run 3: Statistics of Vivace-LTE

Start at: 2018-03-06 17:50:43
End at: 2018-03-06 17:51:13

# Below is generated by plot.py at 2018-03-07 01:21:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 450.22 Mbit/s
  95th percentile per-packet one-way delay: 113.490 ms
  Loss rate: 1.23%
-- Flow 1:
  Average throughput: 271.72 Mbit/s
  95th percentile per-packet one-way delay: 111.403 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 198.42 Mbit/s
  95th percentile per-packet one-way delay: 113.906 ms
  Loss rate: 1.35%
-- Flow 3:
  Average throughput: 145.55 Mbit/s
  95th percentile per-packet one-way delay: 120.325 ms
  Loss rate: 3.26%
Run 3: Report of Vivace-LTE — Data Link

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

- Flow 1 ingress (mean 271.91 Mbps)
- Flow 1 egress (mean 271.72 Mbps)
- Flow 2 ingress (mean 198.85 Mbps)
- Flow 2 egress (mean 198.42 Mbps)
- Flow 3 ingress (mean 147.03 Mbps)
- Flow 3 egress (mean 145.55 Mbps)

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

- Flow 1 (95th percentile 111.40 ms)
- Flow 2 (95th percentile 113.91 ms)
- Flow 3 (95th percentile 120.33 ms)
Run 4: Statistics of Vivace-LTE

Start at: 2018-03-06 18:10:17
End at: 2018-03-06 18:10:47

# Below is generated by plot.py at 2018-03-07 01:22:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.70 Mbit/s
95th percentile per-packet one-way delay: 113.276 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 303.09 Mbit/s
95th percentile per-packet one-way delay: 111.256 ms
Loss rate: 0.83%
-- Flow 2:
Average throughput: 251.08 Mbit/s
95th percentile per-packet one-way delay: 158.754 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 90.81 Mbit/s
95th percentile per-packet one-way delay: 112.720 ms
Loss rate: 2.63%
Run 4: Report of Vivace-LTE — Data Link

![Graph of throughput in Mbps over time](image)

![Graph of per-packet one-way delay in ms over time](image)

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Run 5: Statistics of Vivace-LTE

Start at: 2018-03-06 18:29:20
End at: 2018-03-06 18:29:50

# Below is generated by plot.py at 2018-03-07 01:22:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.77 Mbit/s
95th percentile per-packet one-way delay: 115.842 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 259.68 Mbit/s
95th percentile per-packet one-way delay: 114.513 ms
Loss rate: 0.95%
-- Flow 2:
Average throughput: 252.98 Mbit/s
95th percentile per-packet one-way delay: 114.552 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 215.02 Mbit/s
95th percentile per-packet one-way delay: 119.557 ms
Loss rate: 3.76%
Run 5: Report of Vivace-LTE — Data Link

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

Legend:
- Flow 1 ingress (mean 260.15 Mbit/s)
- Flow 1 egress (mean 259.68 Mbit/s)
- Flow 2 ingress (mean 253.64 Mbit/s)
- Flow 2 egress (mean 252.98 Mbit/s)
- Flow 3 ingress (mean 218.34 Mbit/s)
- Flow 3 egress (mean 215.02 Mbit/s)
Run 6: Statistics of Vivace-LTE

Start at: 2018-03-06 18:48:47
End at: 2018-03-06 18:49:17

# Below is generated by plot.py at 2018-03-07 01:22:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 443.25 Mbit/s
  95th percentile per-packet one-way delay: 112.591 ms
  Loss rate: 1.31%
  -- Flow 1:
    Average throughput: 274.12 Mbit/s
    95th percentile per-packet one-way delay: 111.422 ms
    Loss rate: 0.83%
  -- Flow 2:
    Average throughput: 187.74 Mbit/s
    95th percentile per-packet one-way delay: 112.721 ms
    Loss rate: 1.64%
  -- Flow 3:
    Average throughput: 138.12 Mbit/s
    95th percentile per-packet one-way delay: 112.668 ms
    Loss rate: 3.26%
Run 6: Report of Vivace-LTE — Data Link

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

Flow 1 (ingress mean 274.35 Mbps) vs Flow 1 (egress mean 274.12 Mbps)
Flow 2 (ingress mean 188.73 Mbps) vs Flow 2 (egress mean 187.74 Mbps)
Flow 3 (ingress mean 139.52 Mbps) vs Flow 3 (egress mean 138.32 Mbps)

Flow 1 (95th percentile 111.42 ms) vs Flow 2 (95th percentile 112.72 ms) vs Flow 3 (95th percentile 112.67 ms)
Run 7: Statistics of Vivace-LTE

Start at: 2018-03-06 19:08:00
End at: 2018-03-06 19:08:30

# Below is generated by plot.py at 2018-03-07 01:23:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 508.96 Mbit/s
  95th percentile per-packet one-way delay: 119.634 ms
  Loss rate: 1.20%
  -- Flow 1:
  Average throughput: 344.38 Mbit/s
  95th percentile per-packet one-way delay: 124.110 ms
  Loss rate: 0.80%
  -- Flow 2:
  Average throughput: 182.17 Mbit/s
  95th percentile per-packet one-way delay: 111.779 ms
  Loss rate: 1.56%
  -- Flow 3:
  Average throughput: 136.07 Mbit/s
  95th percentile per-packet one-way delay: 114.156 ms
  Loss rate: 3.22%
Run 7: Report of Vivace-LTE — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 344.58 Mbps)
- Flow 1 egress (mean 344.38 Mbps)
- Flow 2 ingress (mean 182.88 Mbps)
- Flow 2 egress (mean 182.17 Mbps)
- Flow 3 ingress (mean 137.50 Mbps)
- Flow 3 egress (mean 136.07 Mbps)

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

- Flow 1 (95th percentile 124.11 ms)
- Flow 2 (95th percentile 111.78 ms)
- Flow 3 (95th percentile 114.16 ms)
Run 8: Statistics of Vivace-LTE

Start at: 2018-03-06 19:27:24
End at: 2018-03-06 19:27:54

# Below is generated by plot.py at 2018-03-07 01:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.95 Mbit/s
95th percentile per-packet one-way delay: 112.712 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 303.97 Mbit/s
95th percentile per-packet one-way delay: 112.168 ms
Loss rate: 0.73%
-- Flow 2:
Average throughput: 206.94 Mbit/s
95th percentile per-packet one-way delay: 113.032 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 135.75 Mbit/s
95th percentile per-packet one-way delay: 116.361 ms
Loss rate: 3.60%
Run 8: Report of Vivace-LTE — Data Link
Run 9: Statistics of Vivace-LTE

Start at: 2018-03-06 19:46:44
End at: 2018-03-06 19:47:14

# Below is generated by plot.py at 2018-03-07 01:24:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 467.48 Mbit/s
  95th percentile per-packet one-way delay: 113.182 ms
  Loss rate: 1.07%
-- Flow 1:
  Average throughput: 295.92 Mbit/s
  95th percentile per-packet one-way delay: 111.349 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 191.68 Mbit/s
  95th percentile per-packet one-way delay: 113.662 ms
  Loss rate: 0.83%
-- Flow 3:
  Average throughput: 137.71 Mbit/s
  95th percentile per-packet one-way delay: 127.062 ms
  Loss rate: 3.34%
Run 9: Report of Vivace-LTE — Data Link
Run 10: Statistics of Vivace-LTE

Start at: 2018-03-06 20:06:08
End at: 2018-03-06 20:06:38

# Below is generated by plot.py at 2018-03-07 01:24:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.49 Mbit/s
95th percentile per-packet one-way delay: 128.052 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 249.41 Mbit/s
95th percentile per-packet one-way delay: 144.947 ms
Loss rate: 1.07%
-- Flow 2:
Average throughput: 203.33 Mbit/s
95th percentile per-packet one-way delay: 115.960 ms
Loss rate: 1.73%
-- Flow 3:
Average throughput: 143.41 Mbit/s
95th percentile per-packet one-way delay: 110.834 ms
Loss rate: 2.83%
Run 10: Report of Vivace-LTE — Data Link

![Throughput Graph]

![Delay Graph]