Pantheon Report

Data path: Colombia on p4p1 (remote) \(\rightarrow\) AWS Brazil 2 on ens5 (local).
Repeated the test of 21 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against \texttt{gps.ntp.br} and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1031-aws
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 0b8e9a949603c3842368430acf469e33b941f9f
third_party/fillp @ 0d6a1459332fcee56963885d7e6b17e6a2d4519
third_party/fillp-sheep @ 0e5bb722943babc2b0902d64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbfe58e562f4
third_party/indigo @ 02601c92e4aa95d838dc4dfe0edefbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179e9a06ce6bb7c3c3f
third_party/muses @ d95ee33091330ca25ed105ab2db634d5c40d
third_party/pantheon-tunnel @ f866df58d27af942717625ee3a354cc2e02bd
third_party/pcc @ 0af958fa0d661b623c091a55f6ec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac0d8fab92c4eb2f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c3f
third_party/scream-reproduce @ f099114d1421aa313bf11ff1964974e1da3dbb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4046ad18c74f9415f19a26
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from Colombia to AWS Brazil 2, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<td>36.71</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2019-01-25 19:28:02
Local clock offset: -7.727 ms
Remote clock offset: 5.366 ms

# Below is generated by plot.py at 2019-01-25 21:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 414.894 ms
Loss rate: 4.06%
-- Flow 1:
Average throughput: 55.32 Mbit/s
95th percentile per-packet one-way delay: 393.265 ms
Loss rate: 3.24%
-- Flow 2:
Average throughput: 38.72 Mbit/s
95th percentile per-packet one-way delay: 423.160 ms
Loss rate: 6.22%
-- Flow 3:
Average throughput: 29.63 Mbit/s
95th percentile per-packet one-way delay: 415.798 ms
Loss rate: 2.78%
Run 1: Report of TCP BBR — Data Link

![Graph showing throughput and packet delay over time for different flows with specified mean speeds and percentiles.](image-url)
Run 2: Statistics of TCP BBR

Start at: 2019-01-25 19:55:00
Local clock offset: -7.154 ms
Remote clock offset: 7.029 ms

# Below is generated by plot.py at 2019-01-25 21:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: 487.485 ms
Loss rate: 3.99%
-- Flow 1:
Average throughput: 53.85 Mbit/s
95th percentile per-packet one-way delay: 418.362 ms
Loss rate: 2.53%
-- Flow 2:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 568.203 ms
Loss rate: 4.97%
-- Flow 3:
Average throughput: 30.96 Mbit/s
95th percentile per-packet one-way delay: 376.091 ms
Loss rate: 8.89%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Local clock offset: -2.259 ms
Remote clock offset: 1.646 ms

# Below is generated by plot.py at 2019-01-25 21:28:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.68 Mbit/s
95th percentile per-packet one-way delay: 421.440 ms
Loss rate: 4.45%
-- Flow 1:
Average throughput: 55.18 Mbit/s
95th percentile per-packet one-way delay: 402.962 ms
Loss rate: 2.55%
-- Flow 2:
Average throughput: 37.51 Mbit/s
95th percentile per-packet one-way delay: 558.819 ms
Loss rate: 5.78%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 396.280 ms
Loss rate: 10.59%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

End at: 2019-01-25 20:49:26
Local clock offset: -3.108 ms
Remote clock offset: 1.882 ms

# Below is generated by plot.py at 2019-01-25 21:28:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.93 Mbit/s
95th percentile per-packet one-way delay: 456.784 ms
Loss rate: 4.61%
-- Flow 1:
Average throughput: 56.06 Mbit/s
95th percentile per-packet one-way delay: 456.430 ms
Loss rate: 2.79%
-- Flow 2:
Average throughput: 39.84 Mbit/s
95th percentile per-packet one-way delay: 523.724 ms
Loss rate: 7.32%
-- Flow 3:
Average throughput: 29.85 Mbit/s
95th percentile per-packet one-way delay: 422.269 ms
Loss rate: 7.29%
Run 4: Report of TCP BBR — Data Link

The first graph shows the throughput over time for different flows, with bandwidths and mean values indicated. The second graph displays the per-packet one-way delay for the same flows, with 95th percentile values shown.
Run 5: Statistics of TCP BBR

End at: 2019-01-25 21:16:26
Local clock offset: -6.798 ms
Remote clock offset: 6.295 ms

# Below is generated by plot.py at 2019-01-25 21:28:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.47 Mbit/s
95th percentile per-packet one-way delay: 448.340 ms
Loss rate: 3.24%
-- Flow 1:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 425.083 ms
Loss rate: 2.38%
-- Flow 2:
Average throughput: 38.79 Mbit/s
95th percentile per-packet one-way delay: 541.014 ms
Loss rate: 4.98%
-- Flow 3:
Average throughput: 29.09 Mbit/s
95th percentile per-packet one-way delay: 406.597 ms
Loss rate: 3.34%
Run 1: Statistics of Copa

Local clock offset: -6.632 ms
Remote clock offset: 2.115 ms

# Below is generated by plot.py at 2019-01-25 21:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.92 Mbit/s
95th percentile per-packet one-way delay: 212.603 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 47.36 Mbit/s
95th percentile per-packet one-way delay: 215.112 ms
Loss rate: 1.05%
-- Flow 2:
Average throughput: 37.95 Mbit/s
95th percentile per-packet one-way delay: 159.804 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 136.449 ms
Loss rate: 2.12%
Run 1: Report of Copa — Data Link

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

End at: 2019-01-25 19:41:21
Local clock offset: -6.308 ms
Remote clock offset: 5.837 ms

# Below is generated by plot.py at 2019-01-25 21:29:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.24 Mbit/s
  95th percentile per-packet one-way delay: 218.286 ms
  Loss rate: 0.78%
-- Flow 1:
  Average throughput: 51.07 Mbit/s
  95th percentile per-packet one-way delay: 219.658 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 27.66 Mbit/s
  95th percentile per-packet one-way delay: 101.064 ms
  Loss rate: 0.95%
-- Flow 3:
  Average throughput: 32.81 Mbit/s
  95th percentile per-packet one-way delay: 113.202 ms
  Loss rate: 2.43%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2019-01-25 20:07:48
End at: 2019-01-25 20:08:18
Local clock offset: -3.446 ms
Remote clock offset: 5.875 ms

# Below is generated by plot.py at 2019-01-25 21:29:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.22 Mbit/s
95th percentile per-packet one-way delay: 216.095 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 45.49 Mbit/s
95th percentile per-packet one-way delay: 217.282 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 160.571 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 25.14 Mbit/s
95th percentile per-packet one-way delay: 111.987 ms
Loss rate: 2.03%
Run 3: Report of Copa — Data Link

![Graph showing throughput and latency over time for three flows with different ingress and egress rates.]

- Flow 1 ingress (mean 45.47 Mbit/s)
- Flow 2 ingress (mean 32.39 Mbit/s)
- Flow 3 ingress (mean 25.21 Mbit/s)
- Flow 1 egress (mean 45.49 Mbit/s)
- Flow 2 egress (mean 32.33 Mbit/s)
- Flow 3 egress (mean 25.14 Mbit/s)
Run 4: Statistics of Copa

Start at: 2019-01-25 20:34:48
End at: 2019-01-25 20:35:18
Local clock offset: -2.49 ms
Remote clock offset: 1.884 ms

# Below is generated by plot.py at 2019-01-25 21:30:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.00 Mbit/s
95th percentile per-packet one-way delay: 247.885 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 42.57 Mbit/s
95th percentile per-packet one-way delay: 217.832 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 128.402 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 25.84 Mbit/s
95th percentile per-packet one-way delay: 331.902 ms
Loss rate: 1.95%
Run 4: Report of Copa — Data Link

![Throughput vs Time Graph]

![Packet Delay Graph]
Run 5: Statistics of Copa

Start at: 2019-01-25 21:01:46
End at: 2019-01-25 21:02:16
Local clock offset: -3.549 ms
Remote clock offset: 5.415 ms

# Below is generated by plot.py at 2019-01-25 21:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.14 Mbit/s
95th percentile per-packet one-way delay: 209.364 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: 211.013 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 32.71 Mbit/s
95th percentile per-packet one-way delay: 123.370 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 24.87 Mbit/s
95th percentile per-packet one-way delay: 181.212 ms
Loss rate: 2.03%
Run 5: Report of Copa — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 47.29 Mbit/s)
Flow 1 egress (mean 47.24 Mbit/s)
Flow 2 ingress (mean 32.74 Mbit/s)
Flow 2 egress (mean 32.71 Mbit/s)
Flow 3 ingress (mean 24.95 Mbit/s)
Flow 3 egress (mean 24.87 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 211.01 ms)
Flow 2 (95th percentile 123.37 ms)
Flow 3 (95th percentile 101.21 ms)
Run 1: Statistics of TCP Cubic

Local clock offset: -6.54 ms
Remote clock offset: 7.265 ms

# Below is generated by plot.py at 2019-01-25 21:30:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.68 Mbit/s
  95th percentile per-packet one-way delay: 147.155 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 48.82 Mbit/s
  95th percentile per-packet one-way delay: 146.800 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 38.61 Mbit/s
  95th percentile per-packet one-way delay: 150.323 ms
  Loss rate: 0.77%
-- Flow 3:
  Average throughput: 34.14 Mbit/s
  95th percentile per-packet one-way delay: 143.132 ms
  Loss rate: 1.43%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

End at: 2019-01-25 19:49:08
Local clock offset: -6.292 ms
Remote clock offset: 6.79 ms

# Below is generated by plot.py at 2019-01-25 21:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.87 Mbit/s
95th percentile per-packet one-way delay: 150.528 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 42.08 Mbit/s
95th percentile per-packet one-way delay: 185.826 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 126.748 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 34.38 Mbit/s
95th percentile per-packet one-way delay: 136.860 ms
Loss rate: 2.11%
Run 2: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 41.99 Mbit/s)
- Flow 1 egress (mean 42.08 Mbit/s)
- Flow 2 ingress (mean 35.36 Mbit/s)
- Flow 2 egress (mean 35.40 Mbit/s)
- Flow 3 ingress (mean 34.49 Mbit/s)
- Flow 3 egress (mean 34.38 Mbit/s)

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

- Flow 1 (95th percentile 185.83 ms)
- Flow 2 (95th percentile 126.75 ms)
- Flow 3 (95th percentile 136.86 ms)
Run 3: Statistics of TCP Cubic

End at: 2019-01-25 20:16:05
Local clock offset: -2.034 ms
Remote clock offset: 1.946 ms

# Below is generated by plot.py at 2019-01-25 21:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 152.325 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 42.55 Mbit/s
95th percentile per-packet one-way delay: 186.250 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 35.62 Mbit/s
95th percentile per-packet one-way delay: 133.142 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 33.90 Mbit/s
95th percentile per-packet one-way delay: 140.315 ms
Loss rate: 2.14%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2019-01-25 20:42:34
End at: 2019-01-25 20:43:04
Local clock offset: -3.003 ms
Remote clock offset: 1.903 ms

# Below is generated by plot.py at 2019-01-25 21:30:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.34 Mbit/s
95th percentile per-packet one-way delay: 142.412 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 42.17 Mbit/s
95th percentile per-packet one-way delay: 187.406 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 35.60 Mbit/s
95th percentile per-packet one-way delay: 121.218 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 137.964 ms
Loss rate: 2.03%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

End at: 2019-01-25 21:10:03
Local clock offset: -5.765 ms
Remote clock offset: 5.87 ms

# Below is generated by plot.py at 2019-01-25 21:30:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.39 Mbit/s
95th percentile per-packet one-way delay: 147.938 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 49.11 Mbit/s
95th percentile per-packet one-way delay: 148.186 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 38.31 Mbit/s
95th percentile per-packet one-way delay: 149.708 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 33.02 Mbit/s
95th percentile per-packet one-way delay: 137.310 ms
Loss rate: 2.07%
Run 5: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 49.04 Mbit/s)
- Flow 1 egress (mean 49.11 Mbit/s)
- Flow 2 ingress (mean 38.27 Mbit/s)
- Flow 2 egress (mean 38.31 Mbit/s)
- Flow 3 ingress (mean 33.14 Mbit/s)
- Flow 3 egress (mean 33.02 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 148.19 ms)
- Flow 2 (95th percentile 149.71 ms)
- Flow 3 (95th percentile 137.31 ms)
Run 1: Statistics of FillIP

End at: 2019-01-25 19:17:03
Local clock offset: -6.119 ms
Remote clock offset: 6.236 ms

# Below is generated by plot.py at 2019-01-25 21:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.28 Mbit/s
95th percentile per-packet one-way delay: 276.437 ms
Loss rate: 2.09%
-- Flow 1:
Average throughput: 57.20 Mbit/s
95th percentile per-packet one-way delay: 277.907 ms
Loss rate: 0.79%
-- Flow 2:
Average throughput: 39.59 Mbit/s
95th percentile per-packet one-way delay: 270.972 ms
Loss rate: 4.53%
-- Flow 3:
Average throughput: 29.87 Mbit/s
95th percentile per-packet one-way delay: 307.551 ms
Loss rate: 2.89%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

End at: 2019-01-25 19:44:02
Local clock offset: -6.287 ms
Remote clock offset: 6.8 ms

# Below is generated by plot.py at 2019-01-25 21:30:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.44 Mbit/s
  95th percentile per-packet one-way delay: 285.421 ms
  Loss rate: 2.11%
-- Flow 1:
  Average throughput: 57.36 Mbit/s
  95th percentile per-packet one-way delay: 282.796 ms
  Loss rate: 0.84%
-- Flow 2:
  Average throughput: 39.52 Mbit/s
  95th percentile per-packet one-way delay: 286.005 ms
  Loss rate: 3.76%
-- Flow 3:
  Average throughput: 29.98 Mbit/s
  95th percentile per-packet one-way delay: 309.346 ms
  Loss rate: 4.87%
Run 2: Report of FillP — Data Link

![Graph of throughput over time with legend for Flow 1 ingress and egress, Flow 2 ingress and egress, Flow 3 ingress and egress, indicating mean throughputs of 57.51 Mbit/s, 40.71 Mbit/s, 30.98 Mbit/s for ingress and 57.36 Mbit/s, 39.52 Mbit/s, 29.98 Mbit/s for egress.

![Graph of delay per packet over time with legend for Flow 1, Flow 2, Flow 3, indicating 95th percentile delays of 282.90 ms, 286.00 ms, 309.35 ms.]

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Run 3: Statistics of FillP

Start at: 2019-01-25 20:10:29
End at: 2019-01-25 20:10:59
Local clock offset: -2.791 ms
Remote clock offset: 2.244 ms

# Below is generated by plot.py at 2019-01-25 21:30:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.12 Mbit/s
  95th percentile per-packet one-way delay: 289.014 ms
  Loss rate: 1.86%
-- Flow 1:
  Average throughput: 57.10 Mbit/s
  95th percentile per-packet one-way delay: 316.743 ms
  Loss rate: 1.01%
-- Flow 2:
  Average throughput: 39.34 Mbit/s
  95th percentile per-packet one-way delay: 248.344 ms
  Loss rate: 2.90%
-- Flow 3:
  Average throughput: 30.09 Mbit/s
  95th percentile per-packet one-way delay: 326.569 ms
  Loss rate: 3.88%
Run 3: Report of FillP — Data Link

![Graph: Throughput vs Time](Image)

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

- Flow 1 ingress (mean 57.35 Mbit/s)
- Flow 1 egress (mean 57.10 Mbit/s)
- Flow 2 ingress (mean 40.19 Mbit/s)
- Flow 2 egress (mean 39.34 Mbit/s)
- Flow 3 ingress (mean 30.76 Mbit/s)
- Flow 3 egress (mean 30.09 Mbit/s)
Run 4: Statistics of FillP

End at: 2019-01-25 20:37:58
Local clock offset: -2.727 ms
Remote clock offset: 1.654 ms

# Below is generated by plot.py at 2019-01-25 21:30:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.28 Mbit/s
95th percentile per-packet one-way delay: 269.413 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 57.69 Mbit/s
95th percentile per-packet one-way delay: 284.802 ms
Loss rate: 1.61%
-- Flow 2:
Average throughput: 38.89 Mbit/s
95th percentile per-packet one-way delay: 232.780 ms
Loss rate: 1.81%
-- Flow 3:
Average throughput: 29.76 Mbit/s
95th percentile per-packet one-way delay: 299.462 ms
Loss rate: 2.84%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

End at: 2019-01-25 21:04:57
Local clock offset: -4.503 ms
Remote clock offset: 5.79 ms

# Below is generated by plot.py at 2019-01-25 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.20 Mbit/s
95th percentile per-packet one-way delay: 286.044 ms
Loss rate: 1.95%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 302.718 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 39.39 Mbit/s
95th percentile per-packet one-way delay: 244.935 ms
Loss rate: 2.22%
-- Flow 3:
Average throughput: 29.79 Mbit/s
95th percentile per-packet one-way delay: 231.194 ms
Loss rate: 5.15%
Run 5: Report of FillP — Data Link

![Graph 1](image1.png)

Throughput (Mbps)

Time (s)

![Graph 2](image2.png)

Packet error rate (error rate)

Time (s)

Legend:
- Flow 1 ingress (mean 57.69 Mbps)
- Flow 1 egress (mean 57.25 Mbps)
- Flow 2 ingress (mean 39.95 Mbps)
- Flow 2 egress (mean 39.39 Mbps)
- Flow 3 ingress (mean 30.88 Mbps)
- Flow 3 egress (mean 29.79 Mbps)

Legend:
- Flow 1 (95th percentile 302.72 ms)
- Flow 2 (95th percentile 244.94 ms)
- Flow 3 (95th percentile 231.19 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-25 19:34:34
End at: 2019-01-25 19:35:04
Local clock offset: -7.38 ms
Remote clock offset: 2.768 ms

# Below is generated by plot.py at 2019-01-25 21:31:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.01 Mbit/s
95th percentile per-packet one-way delay: 282.756 ms
Loss rate: 1.39%
-- Flow 1:
Average throughput: 57.43 Mbit/s
95th percentile per-packet one-way delay: 295.083 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 38.68 Mbit/s
95th percentile per-packet one-way delay: 235.965 ms
Loss rate: 1.58%
-- Flow 3:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 284.730 ms
Loss rate: 3.06%
Run 1: Report of FillP-Sheep — Data Link

The first graph shows the throughput (Mbps) over time for different flows. The legend indicates:
- Flow 1 ingress (mean 57.69 Mbps)
- Flow 1 egress (mean 57.43 Mbps)
- Flow 2 ingress (mean 38.97 Mbps)
- Flow 2 egress (mean 38.66 Mbps)
- Flow 3 ingress (mean 30.62 Mbps)
- Flow 3 egress (mean 30.13 Mbps)

The second graph displays the per-packet one-way delay (ms) over time for the same flows. The legend shows:
- Flow 1 (95th percentile 295.08 ms)
- Flow 2 (95th percentile 235.97 ms)
- Flow 3 (95th percentile 284.73 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-25 20:01:32
End at: 2019-01-25 20:02:02
Local clock offset: -6.217 ms
Remote clock offset: 2.464 ms

# Below is generated by plot.py at 2019-01-25 21:31:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.04 Mbit/s
95th percentile per-packet one-way delay: 250.276 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 56.78 Mbit/s
95th percentile per-packet one-way delay: 268.102 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 39.53 Mbit/s
95th percentile per-packet one-way delay: 229.818 ms
Loss rate: 2.46%
-- Flow 3:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 342.468 ms
Loss rate: 3.28%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

End at: 2019-01-25 20:29:00
Local clock offset: -1.778 ms
Remote clock offset: 5.941 ms

# Below is generated by plot.py at 2019-01-25 21:31:37
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 92.76 Mbit/s
    95th percentile per-packet one-way delay: 303.729 ms
    Loss rate: 1.71%
-- Flow 1:
    Average throughput: 57.16 Mbit/s
    95th percentile per-packet one-way delay: 315.811 ms
    Loss rate: 1.52%
-- Flow 2:
    Average throughput: 38.58 Mbit/s
    95th percentile per-packet one-way delay: 217.515 ms
    Loss rate: 1.46%
-- Flow 3:
    Average throughput: 30.48 Mbit/s
    95th percentile per-packet one-way delay: 359.536 ms
    Loss rate: 3.40%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Local clock offset: -3.136 ms
Remote clock offset: 1.915 ms

# Below is generated by plot.py at 2019-01-25 21:32:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.94 Mbit/s
95th percentile per-packet one-way delay: 241.786 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 56.56 Mbit/s
95th percentile per-packet one-way delay: 264.291 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 39.71 Mbit/s
95th percentile per-packet one-way delay: 210.605 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 30.48 Mbit/s
95th percentile per-packet one-way delay: 257.024 ms
Loss rate: 4.77%
Run 4: Report of FillP-Sheep — Data Link

![Graph of throughput and packet one-way delay over time with legends for Flow 1 ingress, egress, and Flow 2 ingress, egress, and Flow 3 ingress, egress, each with mean throughput and delay values.]
Run 5: Statistics of FillP-Sheep

Local clock offset: -7.427 ms
Remote clock offset: 6.364 ms

# Below is generated by plot.py at 2019-01-25 21:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.69 Mbit/s
95th percentile per-packet one-way delay: 299.494 ms
Loss rate: 1.58%
-- Flow 1:
Average throughput: 57.37 Mbit/s
95th percentile per-packet one-way delay: 315.558 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 224.572 ms
Loss rate: 1.83%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 336.063 ms
Loss rate: 3.13%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

End at: 2019-01-25 19:20:50
Local clock offset: -6.442 ms
Remote clock offset: 2.396 ms

# Below is generated by plot.py at 2019-01-25 21:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.66 Mbit/s
95th percentile per-packet one-way delay: 280.966 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 58.39 Mbit/s
95th percentile per-packet one-way delay: 287.173 ms
Loss rate: 2.26%
-- Flow 2:
Average throughput: 38.86 Mbit/s
95th percentile per-packet one-way delay: 146.460 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 29.19 Mbit/s
95th percentile per-packet one-way delay: 137.112 ms
Loss rate: 2.75%
Run 1: Report of Indigo — Data Link

![Graph 1](chart1.png)

- Flow 1 ingress (mean 59.40 Mbit/s)
- Flow 1 egress (mean 58.39 Mbit/s)
- Flow 2 ingress (mean 39.03 Mbit/s)
- Flow 2 egress (mean 38.86 Mbit/s)
- Flow 3 ingress (mean 29.50 Mbit/s)
- Flow 3 egress (mean 29.19 Mbit/s)

![Graph 2](chart2.png)

- Flow 1 (95th percentile 287.17 ms)
- Flow 2 (95th percentile 146.46 ms)
- Flow 3 (95th percentile 137.11 ms)
Run 2: Statistics of Indigo

Local clock offset: -6.285 ms
Remote clock offset: 3.366 ms

# Below is generated by plot.py at 2019-01-25 21:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.74 Mbit/s
95th percentile per-packet one-way delay: 292.359 ms
Loss rate: 4.20%
-- Flow 1:
Average throughput: 58.39 Mbit/s
95th percentile per-packet one-way delay: 329.911 ms
Loss rate: 5.39%
-- Flow 2:
Average throughput: 39.02 Mbit/s
95th percentile per-packet one-way delay: 251.034 ms
Loss rate: 1.87%
-- Flow 3:
Average throughput: 29.17 Mbit/s
95th percentile per-packet one-way delay: 127.388 ms
Loss rate: 2.92%
Run 2: Report of Indigo — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 61.37 Mbps)
  - Flow 1 egress (mean 58.39 Mbps)
  - Flow 2 ingress (mean 39.42 Mbps)
  - Flow 2 egress (mean 39.02 Mbps)
  - Flow 3 ingress (mean 29.50 Mbps)
  - Flow 3 egress (mean 29.17 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 329.91 ms)
  - Flow 2 (95th percentile 251.03 ms)
  - Flow 3 (95th percentile 127.39 ms)
Run 3: Statistics of Indigo

Start at: 2019-01-25 20:14:16
End at: 2019-01-25 20:14:46
Local clock offset: -2.997 ms
Remote clock offset: 2.095 ms

# Below is generated by plot.py at 2019-01-25 21:32:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.76 Mbit/s
  95th percentile per-packet one-way delay: 386.025 ms
  Loss rate: 6.63%
-- Flow 1:
  Average throughput: 58.47 Mbit/s
  95th percentile per-packet one-way delay: 423.292 ms
  Loss rate: 9.31%
-- Flow 2:
  Average throughput: 38.77 Mbit/s
  95th percentile per-packet one-way delay: 143.971 ms
  Loss rate: 1.27%
-- Flow 3:
  Average throughput: 29.52 Mbit/s
  95th percentile per-packet one-way delay: 154.659 ms
  Loss rate: 3.25%
Run 3: Report of Indigo — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 64.10 Mbps)
- **Flow 1 egress** (mean 58.47 Mbps)
- **Flow 2 ingress** (mean 38.92 Mbps)
- **Flow 2 egress** (mean 38.77 Mbps)
- **Flow 3 ingress** (mean 29.95 Mbps)
- **Flow 3 egress** (mean 29.52 Mbps)

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

- **Flow 1** (95th percentile 423.29 ms)
- **Flow 2** (95th percentile 143.97 ms)
- **Flow 3** (95th percentile 154.66 ms)
Run 4: Statistics of Indigo

Start at: 2019-01-25 20:41:15
End at: 2019-01-25 20:41:45
Local clock offset: -2.94 ms
Remote clock offset: 1.924 ms

# Below is generated by plot.py at 2019-01-25 21:32:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.58 Mbit/s
95th percentile per-packet one-way delay: 303.797 ms
Loss rate: 2.39%
-- Flow 1:
Average throughput: 58.52 Mbit/s
95th percentile per-packet one-way delay: 318.792 ms
Loss rate: 2.81%
-- Flow 2:
Average throughput: 38.57 Mbit/s
95th percentile per-packet one-way delay: 155.464 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 29.18 Mbit/s
95th percentile per-packet one-way delay: 131.714 ms
Loss rate: 2.65%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

End at: 2019-01-25 21:08:44
Local clock offset: -5.554 ms
Remote clock offset: 5.763 ms

# Below is generated by plot.py at 2019-01-25 21:32:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.78 Mbit/s
  95th percentile per-packet one-way delay: 417.541 ms
  Loss rate: 3.56%
-- Flow 1:
  Average throughput: 58.59 Mbit/s
  95th percentile per-packet one-way delay: 448.107 ms
  Loss rate: 4.65%
-- Flow 2:
  Average throughput: 38.91 Mbit/s
  95th percentile per-packet one-way delay: 134.771 ms
  Loss rate: 1.22%
-- Flow 3:
  Average throughput: 28.91 Mbit/s
  95th percentile per-packet one-way delay: 137.370 ms
  Loss rate: 2.93%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of Indigo-MusesC3

Local clock offset: -6.712 ms
Remote clock offset: 1.12 ms

# Below is generated by plot.py at 2019-01-25 21:32:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 163.039 ms
Loss rate: 2.26%
-- Flow 1:
Average throughput: 60.30 Mbit/s
95th percentile per-packet one-way delay: 152.299 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 161.061 ms
Loss rate: 2.40%
-- Flow 3:
Average throughput: 30.53 Mbit/s
95th percentile per-packet one-way delay: 171.108 ms
Loss rate: 2.91%
Run 1: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 61.23 Mbit/s)
- Flow 1 egress (mean 60.30 Mbit/s)
- Flow 2 ingress (mean 40.68 Mbit/s)
- Flow 2 egress (mean 40.07 Mbit/s)
- Flow 3 ingress (mean 30.74 Mbit/s)
- Flow 3 egress (mean 30.53 Mbit/s)

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

- Flow 1 (95th percentile 152.30 ms)
- Flow 2 (95th percentile 161.06 ms)
- Flow 3 (95th percentile 171.11 ms)
Run 2: Statistics of Indigo-MusesC3

Local clock offset: -7.144 ms
Remote clock offset: 7.099 ms

# Below is generated by plot.py at 2019-01-25 21:33:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 151.641 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 60.50 Mbit/s
95th percentile per-packet one-way delay: 147.107 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 40.35 Mbit/s
95th percentile per-packet one-way delay: 203.002 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 30.33 Mbit/s
95th percentile per-packet one-way delay: 146.673 ms
Loss rate: 2.76%
Run 2: Report of Indigo-MusesC3 — Data Link

[Graph showing throughput and delay over time]

- Flow 1 ingress (mean 61.44 Mbit/s)
- Flow 1 egress (mean 60.50 Mbit/s)
- Flow 2 ingress (mean 40.68 Mbit/s)
- Flow 2 egress (mean 40.35 Mbit/s)
- Flow 3 ingress (mean 30.54 Mbit/s)
- Flow 3 egress (mean 30.33 Mbit/s)

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

- Flow 1 (95th percentile 147.11 ms)
- Flow 2 (95th percentile 203.00 ms)
- Flow 3 (95th percentile 146.67 ms)
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-25 20:16:52
End at: 2019-01-25 20:17:22
Local clock offset: -2.729 ms
Remote clock offset: 1.943 ms

# Below is generated by plot.py at 2019-01-25 21:33:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.69 Mbit/s
95th percentile per-packet one-way delay: 202.448 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 60.39 Mbit/s
95th percentile per-packet one-way delay: 175.945 ms
Loss rate: 1.90%
-- Flow 2:
Average throughput: 39.93 Mbit/s
95th percentile per-packet one-way delay: 284.801 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 30.34 Mbit/s
95th percentile per-packet one-way delay: 158.894 ms
Loss rate: 2.80%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

End at: 2019-01-25 20:44:21
Local clock offset: -3.029 ms
Remote clock offset: 1.918 ms

# Below is generated by plot.py at 2019-01-25 21:33:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.75 Mbit/s
  95th percentile per-packet one-way delay: 149.649 ms
  Loss rate: 2.39%
-- Flow 1:
  Average throughput: 60.27 Mbit/s
  95th percentile per-packet one-way delay: 137.542 ms
  Loss rate: 1.81%
-- Flow 2:
  Average throughput: 39.97 Mbit/s
  95th percentile per-packet one-way delay: 160.438 ms
  Loss rate: 3.19%
-- Flow 3:
  Average throughput: 30.28 Mbit/s
  95th percentile per-packet one-way delay: 178.745 ms
  Loss rate: 3.95%
Run 4: Report of Indigo-MusesC3 — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 61.02 Mbps)
- Flow 1 egress (mean 60.27 Mbps)
- Flow 2 ingress (mean 40.90 Mbps)
- Flow 2 egress (mean 39.97 Mbps)
- Flow 3 ingress (mean 30.86 Mbps)
- Flow 3 egress (mean 30.29 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 137.54 ms)
- Flow 2 (95th percentile 160.44 ms)
- Flow 3 (95th percentile 170.75 ms)
Run 5: Statistics of Indigo-MusesC3

Local clock offset: -6.037 ms
Remote clock offset: 1.915 ms

# Below is generated by plot.py at 2019-01-25 21:33:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.32 Mbit/s
95th percentile per-packet one-way delay: 168.266 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 60.27 Mbit/s
95th percentile per-packet one-way delay: 136.509 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 39.89 Mbit/s
95th percentile per-packet one-way delay: 266.656 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 30.33 Mbit/s
95th percentile per-packet one-way delay: 155.104 ms
Loss rate: 3.32%
Run 5: Report of Indigo-MusesC3 — Data Link

![Graph 1: Throughput (Mbps) vs Time (s)]
- Flow 1 ingress (mean 61.10 Mbps)
- Flow 2 ingress (mean 40.08 Mbps)
- Flow 3 ingress (mean 30.71 Mbps)
- Flow 1 egress (mean 60.27 Mbps)
- Flow 2 egress (mean 39.89 Mbps)
- Flow 3 egress (mean 30.33 Mbps)

![Graph 2: Per-packet one-way latency (ms) vs Time (s)]
- Flow 1 (95th percentile 136.51 ms)
- Flow 2 (95th percentile 266.66 ms)
- Flow 3 (95th percentile 155.10 ms)
Run 1: Statistics of Indigo-MusesC5

Local clock offset: -7.494 ms
Remote clock offset: 2.276 ms

# Below is generated by plot.py at 2019-01-25 21:33:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.33 Mbit/s
95th percentile per-packet one-way delay: 236.006 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 60.82 Mbit/s
95th percentile per-packet one-way delay: 217.743 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 38.45 Mbit/s
95th percentile per-packet one-way delay: 251.432 ms
Loss rate: 5.12%
-- Flow 3:
Average throughput: 30.82 Mbit/s
95th percentile per-packet one-way delay: 261.251 ms
Loss rate: 6.53%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

Local clock offset: -6.332 ms
Remote clock offset: 7.215 ms

# Below is generated by plot.py at 2019-01-25 21:33:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.94 Mbit/s
95th percentile per-packet one-way delay: 252.048 ms
Loss rate: 4.41%
-- Flow 1:
Average throughput: 56.96 Mbit/s
95th percentile per-packet one-way delay: 242.856 ms
Loss rate: 4.53%
-- Flow 2:
Average throughput: 42.15 Mbit/s
95th percentile per-packet one-way delay: 284.009 ms
Loss rate: 3.80%
-- Flow 3:
Average throughput: 26.91 Mbit/s
95th percentile per-packet one-way delay: 205.470 ms
Loss rate: 5.65%
Run 2: Report of Indigo-MusesC5 — Data Link
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-25 20:18:09
End at: 2019-01-25 20:18:39
Local clock offset: -2.526 ms
Remote clock offset: 1.506 ms

# Below is generated by plot.py at 2019-01-25 21:33:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.54 Mbit/s
95th percentile per-packet one-way delay: 248.739 ms
Loss rate: 4.00%
-- Flow 1:
Average throughput: 56.88 Mbit/s
95th percentile per-packet one-way delay: 239.972 ms
Loss rate: 3.12%
-- Flow 2:
Average throughput: 43.55 Mbit/s
95th percentile per-packet one-way delay: 267.264 ms
Loss rate: 4.41%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 261.414 ms
Loss rate: 8.22%
Run 3: Report of Indigo-MusesC5 — Data Link

![Graph showing throughput over time for different flows](image1)

![Graph showing per-packet one-way delay for different flows](image2)
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-25 20:45:09
End at: 2019-01-25 20:45:39
Local clock offset: -3.049 ms
Remote clock offset: 5.9 ms

# Below is generated by plot.py at 2019-01-25 21:33:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.51 Mbit/s
95th percentile per-packet one-way delay: 253.159 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 58.03 Mbit/s
95th percentile per-packet one-way delay: 254.948 ms
Loss rate: 3.15%
-- Flow 2:
Average throughput: 38.61 Mbit/s
95th percentile per-packet one-way delay: 211.069 ms
Loss rate: 4.40%
-- Flow 3:
Average throughput: 29.81 Mbit/s
95th percentile per-packet one-way delay: 311.195 ms
Loss rate: 5.76%
Run 4: Report of Indigo-MusesC5 — Data Link

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

Legend:
- Flow 1 ingress (mean 59.56 Mbit/s)
- Flow 1 egress (mean 58.03 Mbit/s)
- Flow 2 ingress (mean 40.02 Mbit/s)
- Flow 2 egress (mean 38.61 Mbit/s)
- Flow 3 ingress (mean 30.99 Mbit/s)
- Flow 3 egress (mean 29.81 Mbit/s)

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 254.95 ms)
- Flow 2 (95th percentile 211.07 ms)
- Flow 3 (95th percentile 311.19 ms)
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-25 21:12:08
End at: 2019-01-25 21:12:38
Local clock offset: -6.288 ms
Remote clock offset: 1.854 ms

# Below is generated by plot.py at 2019-01-25 21:34:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.62 Mbit/s
95th percentile per-packet one-way delay: 253.064 ms
Loss rate: 3.36%
-- Flow 1:
Average throughput: 56.24 Mbit/s
95th percentile per-packet one-way delay: 234.497 ms
Loss rate: 2.56%
-- Flow 2:
Average throughput: 41.46 Mbit/s
95th percentile per-packet one-way delay: 335.637 ms
Loss rate: 3.55%
-- Flow 3:
Average throughput: 33.16 Mbit/s
95th percentile per-packet one-way delay: 274.042 ms
Loss rate: 7.26%
Run 5: Report of Indigo-MusesC5 — Data Link
Run 1: Statistics of Indigo-MusesD

Local clock offset: -7.642 ms
Remote clock offset: 7.598 ms

# Below is generated by plot.py at 2019-01-25 21:34:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.10 Mbit/s
95th percentile per-packet one-way delay: 288.321 ms
Loss rate: 5.57%
-- Flow 1:
Average throughput: 61.17 Mbit/s
95th percentile per-packet one-way delay: 296.487 ms
Loss rate: 4.95%
-- Flow 2:
Average throughput: 38.95 Mbit/s
95th percentile per-packet one-way delay: 190.414 ms
Loss rate: 6.60%
-- Flow 3:
Average throughput: 28.24 Mbit/s
95th percentile per-packet one-way delay: 178.373 ms
Loss rate: 6.96%
Run 1: Report of Indigo-MusesD — Data Link

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

---

Flow 1 ingress (mean 63.97 Mbit/s)
Flow 1 egress (mean 61.17 Mbit/s)
Flow 2 ingress (mean 41.31 Mbit/s)
Flow 2 egress (mean 38.95 Mbit/s)
Flow 3 ingress (mean 29.79 Mbit/s)
Flow 3 egress (mean 28.24 Mbit/s)

---

Flow 1 (95th percentile 296.49 ms)
Flow 2 (95th percentile 190.41 ms)
Flow 3 (95th percentile 170.37 ms)
Run 2: Statistics of Indigo-MusesD

End at: 2019-01-25 19:54:12
Local clock offset: -6.385 ms
Remote clock offset: 3.366 ms

# Below is generated by plot.py at 2019-01-25 21:34:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.92 Mbit/s
95th percentile per-packet one-way delay: 201.801 ms
Loss rate: 4.19%
-- Flow 1:
Average throughput: 60.20 Mbit/s
95th percentile per-packet one-way delay: 201.882 ms
Loss rate: 4.18%
-- Flow 2:
Average throughput: 40.31 Mbit/s
95th percentile per-packet one-way delay: 199.239 ms
Loss rate: 3.55%
-- Flow 3:
Average throughput: 27.56 Mbit/s
95th percentile per-packet one-way delay: 235.867 ms
Loss rate: 6.40%
Run 2: Report of Indigo-MusesD — Data Link

![Graphs showing throughput and per-packet one-way delay](image-url)
Run 3: Statistics of Indigo-MusesD

End at: 2019-01-25 20:21:09
Local clock offset: -1.546 ms
Remote clock offset: 5.712 ms

# Below is generated by plot.py at 2019-01-25 21:34:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.73 Mbit/s
  95th percentile per-packet one-way delay: 249.075 ms
  Loss rate: 3.87%
-- Flow 1:
  Average throughput: 63.40 Mbit/s
  95th percentile per-packet one-way delay: 245.071 ms
  Loss rate: 3.35%
-- Flow 2:
  Average throughput: 33.84 Mbit/s
  95th percentile per-packet one-way delay: 261.058 ms
  Loss rate: 3.90%
-- Flow 3:
  Average throughput: 29.57 Mbit/s
  95th percentile per-packet one-way delay: 174.013 ms
  Loss rate: 7.53%
Run 3: Report of Indigo-MusesD — Data Link

![Graphs showing network performance metrics for different flows. The first graph illustrates throughput in Mbps over time, with various lines representing different flows and their ingress and egress mean values. The second graph shows per-packet one way delay in ms over time, with markers indicating the 95th percentile for each flow.](image-url)
Run 4: Statistics of Indigo-MusesD

End at: 2019-01-25 20:48:08
Local clock offset: -2.352 ms
Remote clock offset: 6.016 ms

# Below is generated by plot.py at 2019-01-25 21:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 231.653 ms
Loss rate: 7.10%
-- Flow 1:
Average throughput: 60.03 Mbit/s
95th percentile per-packet one-way delay: 243.424 ms
Loss rate: 8.05%
-- Flow 2:
Average throughput: 39.71 Mbit/s
95th percentile per-packet one-way delay: 181.811 ms
Loss rate: 4.88%
-- Flow 3:
Average throughput: 27.97 Mbit/s
95th percentile per-packet one-way delay: 185.866 ms
Loss rate: 6.83%
Run 4: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 64.90 Mbit/s)
- Flow 1 egress (mean 60.03 Mbit/s)
- Flow 2 ingress (mean 41.37 Mbit/s)
- Flow 2 egress (mean 39.71 Mbit/s)
- Flow 3 ingress (mean 29.40 Mbit/s)
- Flow 3 egress (mean 27.97 Mbit/s)

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

- Flow 1 (95th percentile 243.42 ms)
- Flow 2 (95th percentile 181.81 ms)
- Flow 3 (95th percentile 185.87 ms)
Run 5: Statistics of Indigo-MusesD

End at: 2019-01-25 21:15:08
Local clock offset: -6.616 ms
Remote clock offset: 2.146 ms

# Below is generated by plot.py at 2019-01-25 21:34:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 284.637 ms
Loss rate: 3.90%
-- Flow 1:
Average throughput: 63.95 Mbit/s
95th percentile per-packet one-way delay: 290.167 ms
Loss rate: 3.45%
-- Flow 2:
Average throughput: 33.47 Mbit/s
95th percentile per-packet one-way delay: 284.438 ms
Loss rate: 3.57%
-- Flow 3:
Average throughput: 29.91 Mbit/s
95th percentile per-packet one-way delay: 182.320 ms
Loss rate: 7.89%
Run 5: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 65.78 Mbit/s)
- Flow 1 egress (mean 63.95 Mbit/s)
- Flow 2 ingress (mean 34.38 Mbit/s)
- Flow 2 egress (mean 33.47 Mbit/s)
- Flow 3 ingress (mean 31.82 Mbit/s)
- Flow 3 egress (mean 29.91 Mbit/s)

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

- Flow 1 (95th percentile 290.17 ms)
- Flow 2 (95th percentile 284.44 ms)
- Flow 3 (95th percentile 182.32 ms)
Run 1: Statistics of Indigo-MusesT

Local clock offset: -7.478 ms
Remote clock offset: 7.655 ms

# Below is generated by plot.py at 2019-01-25 21:34:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.77 Mbit/s
  95th percentile per-packet one-way delay: 411.004 ms
  Loss rate: 6.97%
-- Flow 1:
  Average throughput: 60.89 Mbit/s
  95th percentile per-packet one-way delay: 393.256 ms
  Loss rate: 7.26%
-- Flow 2:
  Average throughput: 39.01 Mbit/s
  95th percentile per-packet one-way delay: 445.882 ms
  Loss rate: 6.53%
-- Flow 3:
  Average throughput: 30.47 Mbit/s
  95th percentile per-packet one-way delay: 379.288 ms
  Loss rate: 6.18%
Run 1: Report of Indigo-MusesT — Data Link

The first graph shows the throughput (in Mb/s) over time for three flows:
- Flow 1 ingress (mean 65.41 Mb/s)
- Flow 1 egress (mean 60.89 Mb/s)
- Flow 2 ingress (mean 41.35 Mb/s)
- Flow 2 egress (mean 39.01 Mb/s)
- Flow 3 ingress (mean 31.83 Mb/s)
- Flow 3 egress (mean 30.47 Mb/s)

The second graph displays the per-packet one-way delay (in ms) over time for the same flows:
- Flow 1 (95th percentile 393.26 ms)
- Flow 2 (95th percentile 445.88 ms)
- Flow 3 (95th percentile 370.29 ms)
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-25 20:00:14
End at: 2019-01-25 20:00:44
Local clock offset: -6.854 ms
Remote clock offset: 2.514 ms

# Below is generated by plot.py at 2019-01-25 21:34:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.10 Mbit/s
95th percentile per-packet one-way delay: 466.196 ms
Loss rate: 5.32%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 440.333 ms
Loss rate: 4.79%
-- Flow 2:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 475.734 ms
Loss rate: 6.26%
-- Flow 3:
Average throughput: 27.18 Mbit/s
95th percentile per-packet one-way delay: 559.189 ms
Loss rate: 6.23%
Run 2: Report of Indigo-MusesT — Data Link
Run 3: Statistics of Indigo-MusesT

End at: 2019-01-25 20:27:42
Local clock offset: -1.841 ms
Remote clock offset: 1.74 ms

# Below is generated by plot.py at 2019-01-25 21:35:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 493.721 ms
Loss rate: 6.26%
-- Flow 1:
Average throughput: 56.11 Mbit/s
95th percentile per-packet one-way delay: 570.187 ms
Loss rate: 4.87%
-- Flow 2:
Average throughput: 41.48 Mbit/s
95th percentile per-packet one-way delay: 367.056 ms
Loss rate: 7.40%
-- Flow 3:
Average throughput: 29.86 Mbit/s
95th percentile per-packet one-way delay: 556.683 ms
Loss rate: 11.27%
Run 3: Report of Indigo-MusesT — Data Link

![Graph showing throughput and delay over time for different flows.](image-url)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-25 20:54:12
End at: 2019-01-25 20:54:42
Local clock offset: -2.441 ms
Remote clock offset: 1.544 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics

-- Total of 3 flows:
Average throughput: 95.18 Mbit/s
95th percentile per-packet one-way delay: 420.808 ms
Loss rate: 6.78%

-- Flow 1:
Average throughput: 61.02 Mbit/s
95th percentile per-packet one-way delay: 347.528 ms
Loss rate: 6.82%

-- Flow 2:
Average throughput: 38.73 Mbit/s
95th percentile per-packet one-way delay: 514.212 ms
Loss rate: 6.85%

-- Flow 3:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 502.373 ms
Loss rate: 6.27%
Run 4: Report of Indigo-MusesT — Data Link
Run 5: Statistics of Indigo-MusesT

Local clock offset: -7.391 ms
Remote clock offset: 2.502 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.97 Mbit/s
95th percentile per-packet one-way delay: 439.845 ms
Loss rate: 6.95%
-- Flow 1:
Average throughput: 60.72 Mbit/s
95th percentile per-packet one-way delay: 368.655 ms
Loss rate: 7.15%
-- Flow 2:
Average throughput: 38.10 Mbit/s
95th percentile per-packet one-way delay: 403.755 ms
Loss rate: 5.75%
-- Flow 3:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 531.474 ms
Loss rate: 8.86%
Run 5: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 65.81 Mb/s)
- Flow 1 egress (mean 60.72 Mb/s)
- Flow 2 ingress (mean 40.66 Mb/s)
- Flow 2 egress (mean 38.10 Mb/s)
- Flow 3 ingress (mean 32.71 Mb/s)
- Flow 3 egress (mean 30.46 Mb/s)

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

- Flow 1 (95th percentile 368.65 ms)
- Flow 2 (95th percentile 403.75 ms)
- Flow 3 (95th percentile 531.47 ms)
Run 1: Statistics of LEDBAT

Start at: 2019-01-25 19:17:50
Local clock offset: -6.27 ms
Remote clock offset: 6.356 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 18.17 Mbit/s
  95th percentile per-packet one-way delay: 89.272 ms
  Loss rate: 1.47%
-- Flow 1:
  Average throughput: 11.72 Mbit/s
  95th percentile per-packet one-way delay: 89.116 ms
  Loss rate: 1.12%
-- Flow 2:
  Average throughput: 7.87 Mbit/s
  95th percentile per-packet one-way delay: 89.579 ms
  Loss rate: 1.75%
-- Flow 3:
  Average throughput: 3.78 Mbit/s
  95th percentile per-packet one-way delay: 88.198 ms
  Loss rate: 3.53%
Run 1: Report of LEDBAT — Data Link

![Graph showing throughput over time for different flows]

![Graph showing packet delay over time for different flows]
Run 2: Statistics of LEDBAT

End at: 2019-01-25 19:45:19  
Local clock offset: -7.11 ms  
Remote clock offset: 3.133 ms

# Below is generated by plot.py at 2019-01-25 21:35:17  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 17.14 Mbit/s  
  95th percentile per-packet one-way delay: 98.371 ms  
  Loss rate: 1.55%  
-- Flow 1:  
  Average throughput: 11.03 Mbit/s  
  95th percentile per-packet one-way delay: 97.996 ms  
  Loss rate: 1.20%  
-- Flow 2:  
  Average throughput: 7.35 Mbit/s  
  95th percentile per-packet one-way delay: 99.197 ms  
  Loss rate: 1.81%  
-- Flow 3:  
  Average throughput: 3.80 Mbit/s  
  95th percentile per-packet one-way delay: 94.418 ms  
  Loss rate: 3.54%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2019-01-25 20:11:46
End at: 2019-01-25 20:12:16
Local clock offset: -3.399 ms
Remote clock offset: 5.804 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.14 Mbit/s
95th percentile per-packet one-way delay: 89.479 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 89.097 ms
Loss rate: 1.17%
-- Flow 2:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 90.155 ms
Loss rate: 1.74%
-- Flow 3:
Average throughput: 3.77 Mbit/s
95th percentile per-packet one-way delay: 89.672 ms
Loss rate: 3.54%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2019-01-25 20:38:45
End at: 2019-01-25 20:39:15
Local clock offset: -2.798 ms
Remote clock offset: 2.03 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 17.45 Mbit/s
95th percentile per-packet one-way delay: 98.167 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 11.00 Mbit/s
95th percentile per-packet one-way delay: 99.128 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 92.745 ms
Loss rate: 1.75%
-- Flow 3:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 92.598 ms
Loss rate: 3.54%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2019-01-25 21:05:44
End at: 2019-01-25 21:06:14
Local clock offset: -4.834 ms
Remote clock offset: 2.057 ms

# Below is generated by plot.py at 2019-01-25 21:35:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 93.554 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 11.98 Mbit/s
95th percentile per-packet one-way delay: 93.762 ms
Loss rate: 1.15%
-- Flow 2:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 93.223 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 3.80 Mbit/s
95th percentile per-packet one-way delay: 93.095 ms
Loss rate: 3.53%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-25 19:37:08
Local clock offset: -6.471 ms
Remote clock offset: 2.91 ms

# Below is generated by plot.py at 2019-01-25 21:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.68 Mbit/s
95th percentile per-packet one-way delay: 1468.884 ms
Loss rate: 23.52%
-- Flow 1:
Average throughput: 55.16 Mbit/s
95th percentile per-packet one-way delay: 1524.228 ms
Loss rate: 26.76%
-- Flow 2:
Average throughput: 34.61 Mbit/s
95th percentile per-packet one-way delay: 1139.625 ms
Loss rate: 15.87%
-- Flow 3:
Average throughput: 29.38 Mbit/s
95th percentile per-packet one-way delay: 1370.496 ms
Loss rate: 20.59%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-25 20:04:06
End at: 2019-01-25 20:04:36
Local clock offset: -4.551 ms
Remote clock offset: 2.554 ms

# Below is generated by plot.py at 2019-01-25 21:35:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.07 Mbit/s
95th percentile per-packet one-way delay: 1140.426 ms
Loss rate: 18.53%
-- Flow 1:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 845.742 ms
Loss rate: 18.63%
-- Flow 2:
Average throughput: 34.61 Mbit/s
95th percentile per-packet one-way delay: 1093.530 ms
Loss rate: 16.62%
-- Flow 3:
Average throughput: 29.45 Mbit/s
95th percentile per-packet one-way delay: 1391.851 ms
Loss rate: 22.28%
Run 2: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 64.18 Mbps)
- Flow 1 egress (mean 52.52 Mbps)
- Flow 2 ingress (mean 41.14 Mbps)
- Flow 2 egress (mean 34.61 Mbps)
- Flow 3 ingress (mean 37.24 Mbps)
- Flow 3 egress (mean 29.45 Mbps)

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

- Flow 1 (95th percentile 845.74 ms)
- Flow 2 (95th percentile 1093.53 ms)
- Flow 3 (95th percentile 1391.85 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-25 20:31:05
Local clock offset: -1.974 ms
Remote clock offset: 1.43 ms

# Below is generated by plot.py at 2019-01-25 21:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.94 Mbit/s
95th percentile per-packet one-way delay: 1472.565 ms
Loss rate: 24.40%
-- Flow 1:
Average throughput: 56.24 Mbit/s
95th percentile per-packet one-way delay: 1550.839 ms
Loss rate: 27.99%
-- Flow 2:
Average throughput: 34.76 Mbit/s
95th percentile per-packet one-way delay: 1161.049 ms
Loss rate: 15.06%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 1388.595 ms
Loss rate: 22.22%
Run 3: Report of PCC-Allegro — Data Link

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

![Graph 2: Packet Delay over Time](image2)
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-25 20:58:04
End at: 2019-01-25 20:58:34
Local clock offset: -2.382 ms
Remote clock offset: 1.855 ms

# Below is generated by plot.py at 2019-01-25 21:36:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.91 Mbit/s
95th percentile per-packet one-way delay: 1574.256 ms
Loss rate: 22.02%
-- Flow 1:
Average throughput: 56.05 Mbit/s
95th percentile per-packet one-way delay: 1414.879 ms
Loss rate: 27.04%
-- Flow 2:
Average throughput: 33.52 Mbit/s
95th percentile per-packet one-way delay: 484.719 ms
Loss rate: 6.36%
-- Flow 3:
Average throughput: 29.51 Mbit/s
95th percentile per-packet one-way delay: 1789.430 ms
Loss rate: 20.84%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Local clock offset: -8.395 ms
Remote clock offset: 2.669 ms

# Below is generated by plot.py at 2019-01-25 21:36:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.42 Mbit/s
  95th percentile per-packet one-way delay: 1434.111 ms
  Loss rate: 23.61%
-- Flow 1:
  Average throughput: 56.02 Mbit/s
  95th percentile per-packet one-way delay: 1487.255 ms
  Loss rate: 26.86%
-- Flow 2:
  Average throughput: 34.34 Mbit/s
  95th percentile per-packet one-way delay: 1168.140 ms
  Loss rate: 15.69%
-- Flow 3:
  Average throughput: 29.49 Mbit/s
  95th percentile per-packet one-way delay: 1353.345 ms
  Loss rate: 20.77%
Run 5: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 76.16 Mbit/s)
- Flow 1 egress (mean 56.02 Mbit/s)
- Flow 2 ingress (mean 40.38 Mbit/s)
- Flow 2 egress (mean 34.34 Mbit/s)
- Flow 3 ingress (mean 36.57 Mbit/s)
- Flow 3 egress (mean 29.49 Mbit/s)

![Graph showing packet delay for different flows]

- Flow 1 95th percentile 1487.26 ms
- Flow 2 95th percentile 1168.14 ms
- Flow 3 95th percentile 1353.35 ms
Run 1: Statistics of PCC-Expr

Local clock offset: -7.022 ms
Remote clock offset: 5.533 ms

# Below is generated by plot.py at 2019-01-25 21:37:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.79 Mbit/s
  95th percentile per-packet one-way delay: 977.226 ms
  Loss rate: 17.96%
-- Flow 1:
  Average throughput: 56.59 Mbit/s
  95th percentile per-packet one-way delay: 979.929 ms
  Loss rate: 24.12%
-- Flow 2:
  Average throughput: 38.85 Mbit/s
  95th percentile per-packet one-way delay: 977.777 ms
  Loss rate: 5.83%
-- Flow 3:
  Average throughput: 25.82 Mbit/s
  95th percentile per-packet one-way delay: 244.455 ms
  Loss rate: 3.33%
Run 1: Report of PCC-Expr — Data Link

![Throughput Graph]

![Delay Graph]

Legend:
- Flow 1 ingress (mean 74.32 Mbit/s)
- Flow 1 egress (mean 56.59 Mbit/s)
- Flow 2 ingress (mean 40.88 Mbit/s)
- Flow 2 egress (mean 38.85 Mbit/s)
- Flow 3 ingress (mean 26.25 Mbit/s)
- Flow 3 egress (mean 25.82 Mbit/s)

Legend:
- Flow 1 (95th percentile 979.93 ms)
- Flow 2 (95th percentile 977.78 ms)
- Flow 3 (95th percentile 244.46 ms)
Run 2: Statistics of PCC-Expr

End at: 2019-01-25 19:56:49
Local clock offset: -7.24 ms
Remote clock offset: 3.697 ms

# Below is generated by plot.py at 2019-01-25 21:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.83 Mbit/s
95th percentile per-packet one-way delay: 1239.405 ms
Loss rate: 10.16%
-- Flow 1:
Average throughput: 56.83 Mbit/s
95th percentile per-packet one-way delay: 1270.761 ms
Loss rate: 12.62%
-- Flow 2:
Average throughput: 38.57 Mbit/s
95th percentile per-packet one-way delay: 964.929 ms
Loss rate: 6.50%
-- Flow 3:
Average throughput: 25.76 Mbit/s
95th percentile per-packet one-way delay: 250.043 ms
Loss rate: 3.33%
Run 2: Report of PCC-Expr — Data Link

[Graph showing throughput over time for different flows with corresponding statistical measures for ingress and egress rates.]

[Graph showing per-packet one-way delay over time for different flows with 95th percentile values provided.]
Run 3: Statistics of PCC-Expr

End at: 2019-01-25 20:23:45
Local clock offset: -1.389 ms
Remote clock offset: 5.554 ms

# Below is generated by plot.py at 2019-01-25 21:37:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.46 Mbit/s
95th percentile per-packet one-way delay: 761.009 ms
Loss rate: 25.42%
-- Flow 1:
Average throughput: 56.44 Mbit/s
95th percentile per-packet one-way delay: 789.007 ms
Loss rate: 34.79%
-- Flow 2:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 670.190 ms
Loss rate: 2.05%
-- Flow 3:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 223.645 ms
Loss rate: 2.19%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2019-01-25 20:50:15
End at: 2019-01-25 20:50:45
Local clock offset: -3.139 ms
Remote clock offset: 1.577 ms

# Below is generated by plot.py at 2019-01-25 21:37:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.94 Mbit/s
95th percentile per-packet one-way delay: 851.316 ms
Loss rate: 22.81%

-- Flow 1:
Average throughput: 56.47 Mbit/s
95th percentile per-packet one-way delay: 821.754 ms
Loss rate: 29.90%

-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 873.572 ms
Loss rate: 8.55%

-- Flow 3:
Average throughput: 27.14 Mbit/s
95th percentile per-packet one-way delay: 265.110 ms
Loss rate: 4.33%
Run 4: Report of PCC-Expr — Data Link

![Graph showing data link performance metrics over time.](image1)

![Graph showing per-packet delay over time.](image2)
Run 5: Statistics of PCC-Expr

End at: 2019-01-25 21:17:44
Local clock offset: -7.678 ms
Remote clock offset: 6.591 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.49 Mbit/s
  95th percentile per-packet one-way delay: 844.175 ms
  Loss rate: 21.87%
-- Flow 1:
  Average throughput: 56.23 Mbit/s
  95th percentile per-packet one-way delay: 854.712 ms
  Loss rate: 29.45%
-- Flow 2:
  Average throughput: 38.93 Mbit/s
  95th percentile per-packet one-way delay: 818.515 ms
  Loss rate: 5.74%
-- Flow 3:
  Average throughput: 25.84 Mbit/s
  95th percentile per-packet one-way delay: 243.701 ms
  Loss rate: 3.33%
Run 5: Report of PCC-Expr — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 79.24 Mbit/s)
- Flow 1 egress (mean 56.23 Mbit/s)
- Flow 2 ingress (mean 40.95 Mbit/s)
- Flow 2 egress (mean 38.93 Mbit/s)
- Flow 3 ingress (mean 26.25 Mbit/s)
- Flow 3 egress (mean 25.84 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 854.71 ms)
- Flow 2 (95th percentile 818.51 ms)
- Flow 3 (95th percentile 242.70 ms)
Run 1: Statistics of QUIC Cubic

End at: 2019-01-25 19:19:34
Local clock offset: -7.183 ms
Remote clock offset: 2.3 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.48 Mbit/s
95th percentile per-packet one-way delay: 165.502 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 34.96 Mbit/s
95th percentile per-packet one-way delay: 140.804 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 18.92 Mbit/s
95th percentile per-packet one-way delay: 235.201 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 24.36 Mbit/s
95th percentile per-packet one-way delay: 143.928 ms
Loss rate: 2.57%
Run 1: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 34.95 Mbit/s)
- Flow 1 egress (mean 34.96 Mbit/s)
- Flow 2 ingress (mean 18.92 Mbit/s)
- Flow 2 egress (mean 18.92 Mbit/s)
- Flow 3 ingress (mean 24.58 Mbit/s)
- Flow 3 egress (mean 24.36 Mbit/s)

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

- Flow 1 (95th percentile 140.80 ms)
- Flow 2 (95th percentile 235.20 ms)
- Flow 3 (95th percentile 143.93 ms)
Run 2: Statistics of QUIC Cubic

End at: 2019-01-25 19:46:34
Local clock offset: -7.087 ms
Remote clock offset: 3.476 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.44 Mbit/s
95th percentile per-packet one-way delay: 212.593 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 29.82 Mbit/s
95th percentile per-packet one-way delay: 149.216 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 17.51 Mbit/s
95th percentile per-packet one-way delay: 296.056 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 252.042 ms
Loss rate: 2.82%
Run 2: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 29.83 Mbps)
- Flow 1 egress (mean 29.82 Mbps)
- Flow 2 ingress (mean 17.66 Mbps)
- Flow 2 egress (mean 17.51 Mbps)
- Flow 3 ingress (mean 21.67 Mbps)
- Flow 3 egress (mean 21.44 Mbps)

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

- Flow 1 (95th percentile 149.22 ms)
- Flow 2 (95th percentile 296.06 ms)
- Flow 3 (95th percentile 252.04 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-25 20:13:00
End at: 2019-01-25 20:13:30
Local clock offset: -2.447 ms
Remote clock offset: 5.679 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.70 Mbit/s
95th percentile per-packet one-way delay: 175.903 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 29.66 Mbit/s
95th percentile per-packet one-way delay: 139.722 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 180.962 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 13.80 Mbit/s
95th percentile per-packet one-way delay: 416.341 ms
Loss rate: 1.57%
Run 3: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one-way delay for Flow 1, Flow 2, and Flow 3.](image)
Run 4: Statistics of QUIC Cubic

End at: 2019-01-25 20:40:29
Local clock offset: -2.873 ms
Remote clock offset: 5.956 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.31 Mbit/s
  95th percentile per-packet one-way delay: 191.627 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 35.41 Mbit/s
  95th percentile per-packet one-way delay: 139.928 ms
  Loss rate: 0.54%
-- Flow 2:
  Average throughput: 22.51 Mbit/s
  95th percentile per-packet one-way delay: 217.948 ms
  Loss rate: 1.53%
-- Flow 3:
  Average throughput: 12.15 Mbit/s
  95th percentile per-packet one-way delay: 379.653 ms
  Loss rate: 2.77%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 5: Statistics of QUIC Cubic

Local clock offset: -5.257 ms
Remote clock offset: 5.511 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.04 Mbit/s
95th percentile per-packet one-way delay: 202.093 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 134.155 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 22.22 Mbit/s
95th percentile per-packet one-way delay: 217.842 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 14.73 Mbit/s
95th percentile per-packet one-way delay: 406.186 ms
Loss rate: 2.00%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

End at: 2019-01-25 19:26:02
Local clock offset: -6.797 ms
Remote clock offset: 7.615 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 92.990 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 87.225 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.044 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 93.010 ms
Loss rate: 1.85%
Run 1: Report of SCReAM — Data Link

[Graph showing throughput and packet delay over time for different flows and their ingress and egress data.]
Run 2: Statistics of SCReAM

Start at: 2019-01-25 19:52:30
End at: 2019-01-25 19:53:00
Local clock offset: -6.409 ms
Remote clock offset: 2.951 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 98.298 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 98.305 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 92.436 ms
  Loss rate: 1.04%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 91.921 ms
  Loss rate: 1.85%
Run 2: Report of SCReAM — Data Link

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

- 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)

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

- Flow 1 (95th percentile 98.31 ms)
- Flow 2 (95th percentile 92.44 ms)
- Flow 3 (95th percentile 91.92 ms)
Run 3: Statistics of SCReAM

End at: 2019-01-25 20:19:57
Local clock offset: -2.439 ms
Remote clock offset: 2.061 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 96.468 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 90.128 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 90.318 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 96.703 ms
  Loss rate: 1.84%
Run 3: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

*Flow 1 (95th percentile 90.13 ms)  *Flow 2 (95th percentile 90.32 ms)  *Flow 3 (95th percentile 96.70 ms)
Run 4: Statistics of SCReAM

End at: 2019-01-25 20:46:56
Local clock offset: -2.328 ms
Remote clock offset: 1.956 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.315 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.275 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.325 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.022 ms
Loss rate: 1.85%
Run 4: Report of SCReAM — Data Link

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

![Graph 2: Per-packet size vs. delay (ms)]
Run 5: Statistics of SCReAM

Local clock offset: -7.206 ms
Remote clock offset: 2.438 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 91.325 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 91.384 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.671 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 90.751 ms
Loss rate: 1.50%
Run 5: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Local clock offset: -6.556 ms
Remote clock offset: 6.063 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.02 Mbit/s
95th percentile per-packet one-way delay: 92.489 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 3.13 Mbit/s
95th percentile per-packet one-way delay: 92.769 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 92.176 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 1.47 Mbit/s
95th percentile per-packet one-way delay: 89.679 ms
Loss rate: 1.35%
Run 1: Report of Sprout — Data Link

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

**Graph Details:***
- **Throughput (Mbps):** Measured in time (s).
- **Flow 1 ingress (mean 3.12 Mbps):** Represented by a blue dashed line.
- **Flow 1 egress (mean 3.13 Mbps):** Represented by a blue solid line.
- **Flow 2 ingress (mean 2.12 Mbps):** Represented by a green dashed line.
- **Flow 2 egress (mean 2.12 Mbps):** Represented by a green solid line.
- **Flow 3 ingress (mean 1.46 Mbps):** Represented by a red dashed line.
- **Flow 3 egress (mean 1.47 Mbps):** Represented by a red solid line.

**Per-packet one-way delay (ms):**
- **Flow 1 (95th percentile 92.77 ms):** Represented by a blue dashed line.
- **Flow 2 (95th percentile 92.18 ms):** Represented by a green solid line.
- **Flow 3 (95th percentile 89.68 ms):** Represented by a red solid line.

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Run 2: Statistics of Sprout

End at: 2019-01-25 19:40:08
Local clock offset: -7.094 ms
Remote clock offset: 2.733 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.39 Mbit/s
  95th percentile per-packet one-way delay: 102.588 ms
  Loss rate: 2.01%
-- Flow 1:
  Average throughput: 1.41 Mbit/s
  95th percentile per-packet one-way delay: 95.789 ms
  Loss rate: 2.04%
-- Flow 2:
  Average throughput: 1.34 Mbit/s
  95th percentile per-packet one-way delay: 93.459 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 3.32 Mbit/s
  95th percentile per-packet one-way delay: 104.325 ms
  Loss rate: 2.79%
Run 2: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 1.43 Mbps)
- Flow 1 egress (mean 1.41 Mbps)
- Flow 2 ingress (mean 1.35 Mbps)
- Flow 2 egress (mean 1.34 Mbps)
- Flow 3 ingress (mean 3.37 Mbps)
- Flow 3 egress (mean 3.32 Mbps)

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

- Flow 1 (95th percentile 95.79 ms)
- Flow 2 (95th percentile 93.46 ms)
- Flow 3 (95th percentile 104.33 ms)
Run 3: Statistics of Sprout

Start at: 2019-01-25 20:06:35
End at: 2019-01-25 20:07:05
Local clock offset: -3.65 ms
Remote clock offset: 5.712 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 5.83 Mbit/s
95th percentile per-packet one-way delay: 101.796 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 4.41 Mbit/s
95th percentile per-packet one-way delay: 102.040 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 0.95 Mbit/s
95th percentile per-packet one-way delay: 89.201 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 2.44 Mbit/s
95th percentile per-packet one-way delay: 91.927 ms
Loss rate: 3.64%
Run 3: Report of Sprout — Data Link

[Graphs showing throughput and round-trip time data for different flows over time.]
Run 4: Statistics of Sprout

End at: 2019-01-25 20:34:05
Local clock offset: -2.327 ms
Remote clock offset: 5.438 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.34 Mbit/s
95th percentile per-packet one-way delay: 91.195 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 91.365 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 90.857 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 2.53 Mbit/s
95th percentile per-packet one-way delay: 90.935 ms
Loss rate: 1.31%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 2.38 Mbit/s)
- Flow 1 egress (mean 2.37 Mbit/s)
- Flow 2 ingress (mean 1.75 Mbit/s)
- Flow 2 egress (mean 1.74 Mbit/s)
- Flow 3 ingress (mean 2.52 Mbit/s)
- Flow 3 egress (mean 2.53 Mbit/s)

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

- Flow 1 (95th percentile 91.36 ms)
- Flow 2 (95th percentile 90.86 ms)
- Flow 3 (95th percentile 90.94 ms)
Run 5: Statistics of Sprout

Start at: 2019-01-25 21:00:33
End at: 2019-01-25 21:01:03
Local clock offset: -3.677 ms
Remote clock offset: 5.996 ms

# Below is generated by plot.py at 2019-01-25 21:37:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.35 Mbit/s
  95th percentile per-packet one-way delay: 89.718 ms
  Loss rate: 0.92%
-- Flow 1:
  Average throughput: 2.21 Mbit/s
  95th percentile per-packet one-way delay: 89.726 ms
  Loss rate: 0.77%
-- Flow 2:
  Average throughput: 0.88 Mbit/s
  95th percentile per-packet one-way delay: 88.734 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 1.70 Mbit/s
  95th percentile per-packet one-way delay: 90.096 ms
  Loss rate: 1.77%
Run 5: Report of Sprout — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 2.21 Mbps)
Flow 1 egress (mean 2.21 Mbps)
Flow 2 ingress (mean 0.88 Mbps)
Flow 2 egress (mean 0.88 Mbps)
Flow 3 ingress (mean 1.70 Mbps)
Flow 3 egress (mean 1.70 Mbps)

Per packet one-way delay [ms]

Time (s)

Flow 1 (95th percentile 89.73 ms)
Flow 2 (95th percentile 88.73 ms)
Flow 3 (95th percentile 90.10 ms)
Run 1: Statistics of TaoVA-100x

End at: 2019-01-25 19:15:43
Local clock offset: -6.778 ms
Remote clock offset: 6.37 ms

# Below is generated by plot.py at 2019-01-25 21:38:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.02 Mbit/s
95th percentile per-packet one-way delay: 156.397 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 49.13 Mbit/s
95th percentile per-packet one-way delay: 152.187 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 36.68 Mbit/s
95th percentile per-packet one-way delay: 163.560 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: 149.231 ms
Loss rate: 1.96%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 49.10 Mbit/s)
- Flow 1 egress (mean 49.13 Mbit/s)
- Flow 2 ingress (mean 36.72 Mbit/s)
- Flow 2 egress (mean 36.68 Mbit/s)
- Flow 3 ingress (mean 29.07 Mbit/s)
- Flow 3 egress (mean 29.00 Mbit/s)

![Graph showing packet delay distribution for different flows.]

- Flow 1 (95th percentile 152.19 ms)
- Flow 2 (95th percentile 163.56 ms)
- Flow 3 (95th percentile 149.23 ms)
Run 2: Statistics of TaoVA-100x

Local clock offset: -6.294 ms
Remote clock offset: 8.131 ms

# Below is generated by plot.py at 2019-01-25 21:39:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.36 Mbit/s
  95th percentile per-packet one-way delay: 154.327 ms
  Loss rate: 0.82%
-- Flow 1:
  Average throughput: 49.90 Mbit/s
  95th percentile per-packet one-way delay: 153.153 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 37.33 Mbit/s
  95th percentile per-packet one-way delay: 155.347 ms
  Loss rate: 0.95%
-- Flow 3:
  Average throughput: 29.37 Mbit/s
  95th percentile per-packet one-way delay: 154.592 ms
  Loss rate: 2.19%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2019-01-25 20:09:08
End at: 2019-01-25 20:09:38
Local clock offset: -3.856 ms
Remote clock offset: 2.354 ms

# Below is generated by plot.py at 2019-01-25 21:39:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.87 Mbit/s
  95th percentile per-packet one-way delay: 158.282 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 48.58 Mbit/s
  95th percentile per-packet one-way delay: 155.232 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 36.98 Mbit/s
  95th percentile per-packet one-way delay: 163.710 ms
  Loss rate: 0.84%
-- Flow 3:
  Average throughput: 29.55 Mbit/s
  95th percentile per-packet one-way delay: 156.025 ms
  Loss rate: 1.94%
Run 3: Report of TaoVA-100x — Data Link

Graphs showing throughput and per-packet end-to-end delay over time for different flows.
Run 4: Statistics of TaoVA-100x

Start at: 2019-01-25 20:36:07
End at: 2019-01-25 20:36:37
Local clock offset: -1.855 ms
Remote clock offset: 1.895 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.88 Mbit/s
95th percentile per-packet one-way delay: 159.594 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 49.44 Mbit/s
95th percentile per-packet one-way delay: 157.671 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 37.18 Mbit/s
95th percentile per-packet one-way delay: 163.873 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 152.993 ms
Loss rate: 1.87%
Run 4: Report of TaoVA-100x — Data Link

![Graph of throughput and packet round trip times for different flows over time.]

- Flow 1 ingress (mean 49.36 Mbit/s)
- Flow 1 egress (mean 49.44 Mbit/s)
- Flow 2 ingress (mean 37.15 Mbit/s)
- Flow 2 egress (mean 37.18 Mbit/s)
- Flow 3 ingress (mean 29.64 Mbit/s)
- Flow 3 egress (mean 29.59 Mbit/s)

![Graph of per packet round trip time for different flows over time.]

- Flow 1 (95th percentile 157.67 ms)
- Flow 2 (95th percentile 163.87 ms)
- Flow 3 (95th percentile 152.99 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-01-25 21:03:06
End at: 2019-01-25 21:03:36
Local clock offset: -3.94 ms
Remote clock offset: 5.909 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.73 Mbit/s
95th percentile per-packet one-way delay: 162.854 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 47.58 Mbit/s
95th percentile per-packet one-way delay: 156.349 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 37.83 Mbit/s
95th percentile per-packet one-way delay: 166.775 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 27.47 Mbit/s
95th percentile per-packet one-way delay: 176.344 ms
Loss rate: 2.05%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2019-01-25 19:30:42
Local clock offset: -6.891 ms
Remote clock offset: 5.228 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.58 Mbit/s
95th percentile per-packet one-way delay: 156.022 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 186.958 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 33.71 Mbit/s
95th percentile per-packet one-way delay: 112.898 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 20.82 Mbit/s
95th percentile per-packet one-way delay: 147.643 ms
Loss rate: 1.93%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

End at: 2019-01-25 19:58:10
Local clock offset: -6.452 ms
Remote clock offset: 3.444 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 64.03 Mbit/s
95th percentile per-packet one-way delay: 139.961 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 36.22 Mbit/s
95th percentile per-packet one-way delay: 125.915 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 32.65 Mbit/s
95th percentile per-packet one-way delay: 141.149 ms
Loss rate: 1.04%
-- Flow 3:
Average throughput: 18.63 Mbit/s
95th percentile per-packet one-way delay: 182.145 ms
Loss rate: 1.94%
Run 2: Report of TCP Vegas — Data Link

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

- **Flow 1** ingress (mean 36.10 Mbit/s)
- **Flow 1** egress (mean 36.22 Mbit/s)
- **Flow 2** ingress (mean 32.70 Mbit/s)
- **Flow 2** egress (mean 32.65 Mbit/s)
- **Flow 3** ingress (mean 18.68 Mbit/s)
- **Flow 3** egress (mean 18.63 Mbit/s)
Run 3: Statistics of TCP Vegas

End at: 2019-01-25 20:25:08
Local clock offset: -1.252 ms
Remote clock offset: 1.443 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.61 Mbit/s
95th percentile per-packet one-way delay: 198.198 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 197.020 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 33.43 Mbit/s
95th percentile per-packet one-way delay: 116.602 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 18.69 Mbit/s
95th percentile per-packet one-way delay: 299.785 ms
Loss rate: 2.46%
Run 3: Report of TCP Vegas — Data Link

![Graph showing network behavior over time]

- Flow 1 ingress (mean 33.20 Mbit/s)
- Flow 1 egress (mean 33.26 Mbit/s)
- Flow 2 ingress (mean 33.48 Mbit/s)
- Flow 2 egress (mean 33.43 Mbit/s)
- Flow 3 ingress (mean 18.83 Mbit/s)
- Flow 3 egress (mean 18.69 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 197.02 ms)
- Flow 2 (95th percentile 116.60 ms)
- Flow 1 (95th percentile 299.79 ms)
Run 4: Statistics of TCP Vegas

Start at: 2019-01-25 20:51:37
End at: 2019-01-25 20:52:07
Local clock offset: -2.373 ms
Remote clock offset: 5.476 ms

# Below is generated by plot.py at 2019-01-25 21:39:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.76 Mbit/s
  95th percentile per-packet one-way delay: 190.806 ms
  Loss rate: 0.80%
-- Flow 1:
  Average throughput: 35.16 Mbit/s
  95th percentile per-packet one-way delay: 183.406 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 31.94 Mbit/s
  95th percentile per-packet one-way delay: 107.928 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 19.42 Mbit/s
  95th percentile per-packet one-way delay: 304.275 ms
  Loss rate: 1.83%
Run 4: Report of TCP Vegas — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 35.10 Mbps)
- Flow 1 egress (mean 35.16 Mbps)
- Flow 2 ingress (mean 32.03 Mbps)
- Flow 2 egress (mean 31.94 Mbps)
- Flow 3 ingress (mean 19.45 Mbps)
- Flow 3 egress (mean 19.42 Mbps)

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

- Flow 1 (95th percentile 183.41 ms)
- Flow 2 (95th percentile 107.93 ms)
- Flow 3 (95th percentile 304.27 ms)
Run 5: Statistics of TCP Vegas

End at: 2019-01-25 21:19:06
Local clock offset: -7.064 ms
Remote clock offset: 6.227 ms

# Below is generated by plot.py at 2019-01-25 21:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.94 Mbit/s
95th percentile per-packet one-way delay: 162.851 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 37.09 Mbit/s
95th percentile per-packet one-way delay: 168.523 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 22.16 Mbit/s
95th percentile per-packet one-way delay: 151.523 ms
Loss rate: 1.86%
-- Flow 3:
Average throughput: 21.70 Mbit/s
95th percentile per-packet one-way delay: 188.752 ms
Loss rate: 1.98%
Run 5: Report of TCP Vegas — Data Link

![TCP Vegas Data Link Graph](image-url)
Run 1: Statistics of Verus

Start at: 2019-01-25 19:35:51
End at: 2019-01-25 19:36:21
Local clock offset: -7.231 ms
Remote clock offset: 6.998 ms

# Below is generated by plot.py at 2019-01-25 21:39:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.09 Mbit/s
  95th percentile per-packet one-way delay: 284.147 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 44.09 Mbit/s
  95th percentile per-packet one-way delay: 286.034 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 26.79 Mbit/s
  95th percentile per-packet one-way delay: 286.559 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 24.97 Mbit/s
  95th percentile per-packet one-way delay: 271.004 ms
  Loss rate: 2.20%
Run 2: Statistics of Verus

Start at: 2019-01-25 20:02:49
End at: 2019-01-25 20:03:19
Local clock offset: -4.92 ms
Remote clock offset: 6.117 ms

# Below is generated by plot.py at 2019-01-25 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.85 Mbit/s
95th percentile per-packet one-way delay: 281.087 ms
Loss rate: 1.24%
-- Flow 1:
Average throughput: 43.05 Mbit/s
95th percentile per-packet one-way delay: 283.948 ms
Loss rate: 0.85%
-- Flow 2:
Average throughput: 27.06 Mbit/s
95th percentile per-packet one-way delay: 267.801 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 20.84 Mbit/s
95th percentile per-packet one-way delay: 332.448 ms
Loss rate: 2.85%
Run 2: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 43.17 Mbps)  
Flow 1 egress (mean 43.05 Mbps)  
Flow 2 ingress (mean 27.25 Mbps)  
Flow 2 egress (mean 27.06 Mbps)  
Flow 3 ingress (mean 21.06 Mbps)  
Flow 3 egress (mean 20.84 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 283.95 ms)  
Flow 2 (95th percentile 267.80 ms)  
Flow 3 (95th percentile 332.45 ms)
Run 3: Statistics of Verus

End at: 2019-01-25 20:30:17
Local clock offset: -1.727 ms
Remote clock offset: 1.846 ms

# Below is generated by plot.py at 2019-01-25 21:39:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.61 Mbit/s
95th percentile per-packet one-way delay: 313.210 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 42.64 Mbit/s
95th percentile per-packet one-way delay: 248.901 ms
Loss rate: 1.16%
-- Flow 2:
Average throughput: 31.32 Mbit/s
95th percentile per-packet one-way delay: 422.429 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 22.21 Mbit/s
95th percentile per-packet one-way delay: 312.532 ms
Loss rate: 2.42%
Run 3: Report of Verus — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.](image_url)
Run 4: Statistics of Verus

Start at: 2019-01-25 20:56:46
End at: 2019-01-25 20:57:16
Local clock offset: -3.143 ms
Remote clock offset: 5.24 ms

# Below is generated by plot.py at 2019-01-25 21:39:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.72 Mbit/s
95th percentile per-packet one-way delay: 256.682 ms
Loss rate: 1.25%

-- Flow 1:
Average throughput: 40.87 Mbit/s
95th percentile per-packet one-way delay: 267.200 ms
Loss rate: 0.79%

-- Flow 2:
Average throughput: 28.40 Mbit/s
95th percentile per-packet one-way delay: 261.381 ms
Loss rate: 1.33%

-- Flow 3:
Average throughput: 21.64 Mbit/s
95th percentile per-packet one-way delay: 211.354 ms
Loss rate: 3.61%
Run 4: Report of Verus — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time.](image-url)
Run 5: Statistics of Verus

Local clock offset: -8.371 ms
Remote clock offset: 6.149 ms

# Below is generated by plot.py at 2019-01-25 21:39:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.74 Mbit/s
95th percentile per-packet one-way delay: 286.813 ms
Loss rate: 2.01%
-- Flow 1:
Average throughput: 45.51 Mbit/s
95th percentile per-packet one-way delay: 256.358 ms
Loss rate: 1.18%
-- Flow 2:
Average throughput: 27.54 Mbit/s
95th percentile per-packet one-way delay: 344.128 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 18.05 Mbit/s
95th percentile per-packet one-way delay: 317.963 ms
Loss rate: 7.96%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 45.79 Mbit/s)
- Flow 1 egress (mean 45.51 Mbit/s)
- Flow 2 ingress (mean 27.88 Mbit/s)
- Flow 2 egress (mean 27.54 Mbit/s)
- Flow 3 ingress (mean 19.28 Mbit/s)
- Flow 3 egress (mean 18.05 Mbit/s)

- Flow 1 (95th percentile 236.36 ms)
- Flow 2 (95th percentile 344.13 ms)
- Flow 3 (95th percentile 317.96 ms)
Run 1: Statistics of PCC-Vivace

Local clock offset: -6.754 ms
Remote clock offset: 2.718 ms

# Below is generated by plot.py at 2019-01-25 21:40:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.42 Mbit/s
  95th percentile per-packet one-way delay: 686.971 ms
  Loss rate: 2.22%
-- Flow 1:
  Average throughput: 50.17 Mbit/s
  95th percentile per-packet one-way delay: 703.566 ms
  Loss rate: 2.48%
-- Flow 2:
  Average throughput: 31.43 Mbit/s
  95th percentile per-packet one-way delay: 185.968 ms
  Loss rate: 1.41%
-- Flow 3:
  Average throughput: 22.69 Mbit/s
  95th percentile per-packet one-way delay: 239.493 ms
  Loss rate: 2.69%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Local clock offset: -6.483 ms
Remote clock offset: 3.215 ms

# Below is generated by plot.py at 2019-01-25 21:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.69 Mbit/s
95th percentile per-packet one-way delay: 536.946 ms
Loss rate: 2.05%

-- Flow 1:
Average throughput: 50.50 Mbit/s
95th percentile per-packet one-way delay: 543.556 ms
Loss rate: 1.58%

-- Flow 2:
Average throughput: 29.89 Mbit/s
95th percentile per-packet one-way delay: 535.331 ms
Loss rate: 2.86%

-- Flow 3:
Average throughput: 22.59 Mbit/s
95th percentile per-packet one-way delay: 342.761 ms
Loss rate: 3.02%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-25 20:25:54
End at: 2019-01-25 20:26:24
Local clock offset: -1.925 ms
Remote clock offset: 1.232 ms

# Below is generated by plot.py at 2019-01-25 21:40:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.91 Mbit/s
  95th percentile per-packet one-way delay: 1936.769 ms
  Loss rate: 4.71%
-- Flow 1:
  Average throughput: 52.32 Mbit/s
  95th percentile per-packet one-way delay: 2048.225 ms
  Loss rate: 5.50%
-- Flow 2:
  Average throughput: 30.61 Mbit/s
  95th percentile per-packet one-way delay: 554.382 ms
  Loss rate: 3.20%
-- Flow 3:
  Average throughput: 22.32 Mbit/s
  95th percentile per-packet one-way delay: 347.205 ms
  Loss rate: 3.09%
Run 3: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps):**
  - **Flow 1 ingress** (mean 55.05 Mbps)
  - **Flow 1 egress** (mean 52.32 Mbps)
  - **Flow 2 ingress** (mean 31.35 Mbps)
  - **Flow 2 egress** (mean 30.61 Mbps)
  - **Flow 3 ingress** (mean 22.63 Mbps)
  - **Flow 3 egress** (mean 22.32 Mbps)

- **Per-packet one-way delay (ms):**
  - **Flow 1** (95th percentile 2048.22 ms)
  - **Flow 2** (95th percentile 554.38 ms)
  - **Flow 3** (95th percentile 347.20 ms)
Run 4: Statistics of PCC-Vivace

Local clock offset: -2.452 ms
Remote clock offset: 5.431 ms

# Below is generated by plot.py at 2019-01-25 21:40:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.31 Mbit/s
  95th percentile per-packet one-way delay: 915.929 ms
  Loss rate: 3.73%
-- Flow 1:
  Average throughput: 49.77 Mbit/s
  95th percentile per-packet one-way delay: 634.670 ms
  Loss rate: 1.84%
-- Flow 2:
  Average throughput: 33.66 Mbit/s
  95th percentile per-packet one-way delay: 975.425 ms
  Loss rate: 7.95%
-- Flow 3:
  Average throughput: 22.10 Mbit/s
  95th percentile per-packet one-way delay: 375.327 ms
  Loss rate: 2.94%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Local clock offset: -7.955 ms
Remote clock offset: 6.68 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.65 Mbit/s
95th percentile per-packet one-way delay: 1492.494 ms
Loss rate: 5.07%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: 1616.922 ms
Loss rate: 6.62%
-- Flow 2:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 197.490 ms
Loss rate: 2.05%
-- Flow 3:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 331.858 ms
Loss rate: 2.74%
Run 5: Report of PCC-Vivace — Data Link

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**Throughput:**

- **Flow 1** ingress (mean 53.89 Mbit/s)
- **Flow 1** egress (mean 50.61 Mbit/s)
- **Flow 2** ingress (mean 32.62 Mbit/s)
- **Flow 2** egress (mean 32.23 Mbit/s)
- **Flow 3** ingress (mean 23.74 Mbit/s)
- **Flow 3** egress (mean 23.50 Mbit/s)

**Ping-Packet one-way delay:**

- **Flow 1** (95th percentile 1616.92 ms)
- **Flow 2** (95th percentile 197.49 ms)
- **Flow 3** (95th percentile 331.86 ms)
Run 1: Statistics of WebRTC media

End at: 2019-01-25 19:11:56
Local clock offset: -5.653 ms
Remote clock offset: 1.191 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 2.96 Mbit/s
 95th percentile per-packet one-way delay: 93.853 ms
 Loss rate: 0.62%
-- Flow 1:
 Average throughput: 1.69 Mbit/s
 95th percentile per-packet one-way delay: 93.170 ms
 Loss rate: 0.36%
-- Flow 2:
 Average throughput: 0.91 Mbit/s
 95th percentile per-packet one-way delay: 93.999 ms
 Loss rate: 0.76%
-- Flow 3:
 Average throughput: 0.38 Mbit/s
 95th percentile per-packet one-way delay: 93.947 ms
 Loss rate: 1.47%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Local clock offset: -6.448 ms
Remote clock offset: 6.91 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 88.583 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 88.586 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: 88.175 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 88.871 ms
Loss rate: 0.94%
Run 2: Report of WebRTC media — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows]
Run 3: Statistics of WebRTC media

Start at: 2019-01-25 20:05:22
End at: 2019-01-25 20:05:52
Local clock offset: -4.773 ms
Remote clock offset: 6.059 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.98 Mbit/s
95th percentile per-packet one-way delay: 87.751 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 1.70 Mbit/s
95th percentile per-packet one-way delay: 87.823 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.92 Mbit/s
95th percentile per-packet one-way delay: 87.006 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 87.666 ms
Loss rate: 1.82%
Run 3: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.69 Mbit/s)
- Flow 1 egress (mean 1.70 Mbit/s)
- Flow 2 ingress (mean 0.92 Mbit/s)
- Flow 2 egress (mean 0.92 Mbit/s)
- Flow 3 ingress (mean 0.39 Mbit/s)
- Flow 3 egress (mean 0.38 Mbit/s)

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

- Flow 1 (95th percentile 87.82 ms)
- Flow 2 (95th percentile 87.01 ms)
- Flow 3 (95th percentile 87.67 ms)
Run 4: Statistics of WebRTC media

End at: 2019-01-25 20:32:52  
Local clock offset: -1.42 ms  
Remote clock offset: 5.938 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.99 Mbit/s  
  95th percentile per-packet one-way delay: 88.510 ms  
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 1.70 Mbit/s  
  95th percentile per-packet one-way delay: 88.426 ms  
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 0.93 Mbit/s  
  95th percentile per-packet one-way delay: 88.507 ms  
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 0.38 Mbit/s  
  95th percentile per-packet one-way delay: 88.773 ms  
  Loss rate: 1.39%
Run 4: Report of WebRTC media — Data Link

\[\text{Flow 1 ingress (mean 1.70 Mbit/s)}\]
\[\text{Flow 1 egress (mean 1.70 Mbit/s)}\]
\[\text{Flow 2 ingress (mean 0.93 Mbit/s)}\]
\[\text{Flow 2 egress (mean 0.93 Mbit/s)}\]
\[\text{Flow 3 ingress (mean 0.38 Mbit/s)}\]
\[\text{Flow 3 egress (mean 0.38 Mbit/s)}\]
Run 5: Statistics of WebRTC media

End at: 2019-01-25 20:59:50
Local clock offset: -3.114 ms
Remote clock offset: 5.153 ms

# Below is generated by plot.py at 2019-01-25 21:40:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.89 Mbit/s
  95th percentile per-packet one-way delay: 93.999 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 1.64 Mbit/s
  95th percentile per-packet one-way delay: 88.064 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 0.91 Mbit/s
  95th percentile per-packet one-way delay: 88.676 ms
  Loss rate: 0.77%
-- Flow 3:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 94.464 ms
  Loss rate: 1.91%
Run 5: Report of WebRTC media — Data Link

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 1.64 Mbit/s)
- Flow 1 egress (mean 1.64 Mbit/s)
- Flow 2 ingress (mean 0.91 Mbit/s)
- Flow 2 egress (mean 0.91 Mbit/s)
- Flow 3 ingress (mean 0.37 Mbit/s)
- Flow 3 egress (mean 0.36 Mbit/s)

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

- Flow 1 (95th percentile 88.06 ms)
- Flow 2 (95th percentile 88.68 ms)
- Flow 3 (95th percentile 94.46 ms)