Pantheon Report

Generated at 2019-01-19 14:18:10 (UTC).
Data path: India on em1 (remote) → AWS India 1 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 nets.org.sg 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 @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a3d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d015f8e6594a89e93b032143cedbfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0cdebf90c077e6d4
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3ee875824760ec5b2fd207efe166e1afe2170
third_party/pantheon-tunnel @ f866d3f58d27afdf942717625ee3a354cc2e802bd
third_party/pcc @ 1afcf958fa0d66d19b623c091a55f24872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sprotunt2.cc
M src/network/sproutconn.cc
third_party/verus @ db447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
test from India to AWS India 1, 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<tr>
<td>TCP BBR</td>
<td>5</td>
<td>59.06</td>
<td>38.91</td>
<td>30.44</td>
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<tr>
<td>Copa</td>
<td>5</td>
<td>51.34</td>
<td>32.78</td>
<td>30.47</td>
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<tr>
<td>TCP Cubic</td>
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<td>44.38</td>
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<td>PCC-Vivace</td>
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<td>WebRTC media</td>
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<td>1.60</td>
<td>0.92</td>
<td>0.37</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2019-01-19 11:38:39
End at: 2019-01-19 11:39:09
Local clock offset: 0.109 ms
Remote clock offset: -3.991 ms

# Below is generated by plot.py at 2019-01-19 14:05:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.80 Mbit/s
  95th percentile per-packet one-way delay: 307.975 ms
  Loss rate: 2.71%
-- Flow 1:
  Average throughput: 57.86 Mbit/s
  95th percentile per-packet one-way delay: 233.283 ms
  Loss rate: 2.16%
-- Flow 2:
  Average throughput: 39.63 Mbit/s
  95th percentile per-packet one-way delay: 202.909 ms
  Loss rate: 3.38%
-- Flow 3:
  Average throughput: 31.98 Mbit/s
  95th percentile per-packet one-way delay: 485.500 ms
  Loss rate: 4.01%
Run 1: Report of TCP BBR — Data Link

![Throughput Graph]

![Packet Delay Graph]
Run 2: Statistics of TCP BBR

Start at: 2019-01-19 12:08:17  
End at: 2019-01-19 12:08:47  
Local clock offset: 1.878 ms  
Remote clock offset: -2.485 ms

# Below is generated by plot.py at 2019-01-19 14:05:40  
# Datalink statistics

-- Total of 3 flows:
Average throughput: 94.87 Mbit/s  
95th percentile per-packet one-way delay: 235.497 ms  
Loss rate: 3.08%

-- Flow 1:
Average throughput: 58.08 Mbit/s  
95th percentile per-packet one-way delay: 233.063 ms  
Loss rate: 2.89%

-- Flow 2:
Average throughput: 39.51 Mbit/s  
95th percentile per-packet one-way delay: 211.913 ms  
Loss rate: 3.52%

-- Flow 3:
Average throughput: 31.71 Mbit/s  
95th percentile per-packet one-way delay: 247.197 ms  
Loss rate: 3.05%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2019-01-19 12:38:26
End at: 2019-01-19 12:38:56
Local clock offset: -1.169 ms
Remote clock offset: -2.879 ms

# Below is generated by plot.py at 2019-01-19 14:05:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.27 Mbit/s
95th percentile per-packet one-way delay: 295.823 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 57.90 Mbit/s
95th percentile per-packet one-way delay: 224.672 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 39.67 Mbit/s
95th percentile per-packet one-way delay: 344.298 ms
Loss rate: 3.36%
-- Flow 3:
Average throughput: 33.19 Mbit/s
95th percentile per-packet one-way delay: 674.090 ms
Loss rate: 3.42%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2019-01-19 13:09:12
End at: 2019-01-19 13:09:42
Local clock offset: -1.202 ms
Remote clock offset: -4.547 ms

# Below is generated by plot.py at 2019-01-19 14:05:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.81 Mbit/s
95th percentile per-packet one-way delay: 285.727 ms
Loss rate: 2.69%
-- Flow 1:
Average throughput: 58.78 Mbit/s
95th percentile per-packet one-way delay: 281.380 ms
Loss rate: 2.54%
-- Flow 2:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 430.230 ms
Loss rate: 2.70%
-- Flow 3:
Average throughput: 31.35 Mbit/s
95th percentile per-packet one-way delay: 218.246 ms
Loss rate: 3.53%
Run 4: Report of TCP BBR — Data Link

[Graph showing throughput over time for different flows with various labels and key points indicating flow characteristics.]
Run 5: Statistics of TCP BBR

Local clock offset: -1.248 ms
Remote clock offset: -2.528 ms

# Below is generated by plot.py at 2019-01-19 14:05:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.30 Mbit/s
  95th percentile per-packet one-way delay: 273.678 ms
  Loss rate: 3.21%
-- Flow 1:
  Average throughput: 62.67 Mbit/s
  95th percentile per-packet one-way delay: 206.827 ms
  Loss rate: 3.23%
-- Flow 2:
  Average throughput: 35.64 Mbit/s
  95th percentile per-packet one-way delay: 285.543 ms
  Loss rate: 2.91%
-- Flow 3:
  Average throughput: 23.95 Mbit/s
  95th percentile per-packet one-way delay: 219.975 ms
  Loss rate: 3.96%
Run 5: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 64.60 Mbit/s)
- Flow 1 egress (mean 62.67 Mbit/s)
- Flow 2 ingress (mean 36.57 Mbit/s)
- Flow 2 egress (mean 35.64 Mbit/s)
- Flow 3 ingress (mean 24.75 Mbit/s)
- Flow 3 egress (mean 23.95 Mbit/s)
Run 1: Statistics of Copa

Local clock offset: 1.825 ms
Remote clock offset: -4.095 ms

# Below is generated by plot.py at 2019-01-19 14:06:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.96 Mbit/s
95th percentile per-packet one-way delay: 83.435 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 52.98 Mbit/s
95th percentile per-packet one-way delay: 83.261 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 27.43 Mbit/s
95th percentile per-packet one-way delay: 85.452 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 26.40 Mbit/s
95th percentile per-packet one-way delay: 79.532 ms
Loss rate: 0.91%
Run 1: Report of Copa — Data Link

![Graph 1](image1)

**Throughput (Mbps)**

![Graph 2](image2)

**Per-packet one-way delay (ms)**
Run 2: Statistics of Copa

End at: 2019-01-19 12:18:54
Local clock offset: 0.407 ms
Remote clock offset: -3.56 ms

# Below is generated by plot.py at 2019-01-19 14:06:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.79 Mbit/s
95th percentile per-packet one-way delay: 86.583 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 46.23 Mbit/s
95th percentile per-packet one-way delay: 89.711 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 37.36 Mbit/s
95th percentile per-packet one-way delay: 84.318 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 41.47 Mbit/s
95th percentile per-packet one-way delay: 81.379 ms
Loss rate: 0.97%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Local clock offset: 0.601 ms
Remote clock offset: -3.022 ms

# Below is generated by plot.py at 2019-01-19 14:06:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.21 Mbit/s
95th percentile per-packet one-way delay: 85.200 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 46.11 Mbit/s
95th percentile per-packet one-way delay: 89.347 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 79.198 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 24.55 Mbit/s
95th percentile per-packet one-way delay: 79.773 ms
Loss rate: 0.94%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Local clock offset: -0.865 ms
Remote clock offset: -4.496 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 80.346 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 58.59 Mbit/s
95th percentile per-packet one-way delay: 85.076 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 75.797 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 29.56 Mbit/s
95th percentile per-packet one-way delay: 71.461 ms
Loss rate: 0.90%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Local clock offset: 0.667 ms
Remote clock offset: -2.638 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.07 Mbit/s
  95th percentile per-packet one-way delay: 75.125 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 52.79 Mbit/s
  95th percentile per-packet one-way delay: 75.771 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 28.90 Mbit/s
  95th percentile per-packet one-way delay: 73.422 ms
  Loss rate: 0.17%
-- Flow 3:
  Average throughput: 30.39 Mbit/s
  95th percentile per-packet one-way delay: 74.035 ms
  Loss rate: 0.41%
Run 5: Report of Copa — Data Link

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

- Flow 1 ingress (mean 52.73 Mbit/s)
- Flow 1 egress (mean 52.79 Mbit/s)
- Flow 2 ingress (mean 28.84 Mbit/s)
- Flow 2 egress (mean 28.90 Mbit/s)
- Flow 3 ingress (mean 30.28 Mbit/s)
- Flow 3 egress (mean 30.39 Mbit/s)

![Graph showing per-packet end-to-end delay.]

- Flow 1 (95th percentile 75.77 ms)
- Flow 2 (95th percentile 73.42 ms)
- Flow 3 (95th percentile 74.03 ms)
Run 1: Statistics of TCP Cubic

Local clock offset: 1.137 ms
Remote clock offset: -3.447 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.13 Mbit/s
95th percentile per-packet one-way delay: 80.754 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 48.41 Mbit/s
95th percentile per-packet one-way delay: 82.704 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 81.600 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 30.25 Mbit/s
95th percentile per-packet one-way delay: 78.480 ms
Loss rate: 0.87%
Run 1: Report of TCP Cubic — Data Link

![Graph of throughput and per-packet one-way delay](image-url)
Run 2: Statistics of TCP Cubic

End at: 2019-01-19 12:26:23
Local clock offset: 0.56 ms
Remote clock offset: -2.865 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.48 Mbit/s
95th percentile per-packet one-way delay: 82.327 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: 89.851 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 33.84 Mbit/s
95th percentile per-packet one-way delay: 74.855 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 40.08 Mbit/s
95th percentile per-packet one-way delay: 80.775 ms
Loss rate: 0.75%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2019-01-19 12:56:14
End at: 2019-01-19 12:56:44
Local clock offset: 0.281 ms
Remote clock offset: -4.717 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.20 Mbit/s
95th percentile per-packet one-way delay: 80.515 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 52.61 Mbit/s
95th percentile per-packet one-way delay: 78.764 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 34.44 Mbit/s
95th percentile per-packet one-way delay: 79.825 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 47.39 Mbit/s
95th percentile per-packet one-way delay: 95.154 ms
Loss rate: 0.80%
Run 3: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 52.54 Mbps)  
- Flow 1 egress (mean 52.61 Mbps)
- Flow 2 ingress (mean 34.42 Mbps)  
- Flow 2 egress (mean 34.44 Mbps)
- Flow 3 ingress (mean 47.41 Mbps)  
- Flow 3 egress (mean 47.39 Mbps)

![Graph of Per Packet Loss vs Time](image2)

- Flow 1 (95th percentile 78.76 ms)  
- Flow 2 (95th percentile 79.83 ms)  
- Flow 3 (95th percentile 95.15 ms)
Run 4: Statistics of TCP Cubic

Local clock offset: -0.906 ms  
Remote clock offset: -2.626 ms

# Below is generated by plot.py at 2019-01-19 14:07:31  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 86.97 Mbit/s  
  95th percentile per-packet one-way delay: 79.798 ms  
  Loss rate: 0.31%  
-- Flow 1:  
  Average throughput: 53.60 Mbit/s  
  95th percentile per-packet one-way delay: 77.946 ms  
  Loss rate: 0.19%  
-- Flow 2:  
  Average throughput: 32.29 Mbit/s  
  95th percentile per-packet one-way delay: 78.316 ms  
  Loss rate: 0.41%  
-- Flow 3:  
  Average throughput: 35.93 Mbit/s  
  95th percentile per-packet one-way delay: 100.016 ms  
  Loss rate: 0.66%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

End at: 2019-01-19 13:54:08
Local clock offset: -0.444 ms
Remote clock offset: -2.329 ms

# Below is generated by plot.py at 2019-01-19 14:07:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 93.248 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 44.18 Mbit/s
95th percentile per-packet one-way delay: 87.378 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: 96.787 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 28.39 Mbit/s
95th percentile per-packet one-way delay: 125.433 ms
Loss rate: 0.98%
Run 5: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2019-01-19 12:02:25
End at: 2019-01-19 12:02:55
Local clock offset: 0.501 ms
Remote clock offset: -3.09 ms

# Below is generated by plot.py at 2019-01-19 14:07:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.35 Mbit/s
  95th percentile per-packet one-way delay: 145.736 ms
  Loss rate: 1.70%
-- Flow 1:
  Average throughput: 56.40 Mbit/s
  95th percentile per-packet one-way delay: 140.556 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 41.39 Mbit/s
  95th percentile per-packet one-way delay: 148.161 ms
  Loss rate: 3.84%
-- Flow 3:
  Average throughput: 31.57 Mbit/s
  95th percentile per-packet one-way delay: 140.210 ms
  Loss rate: 3.57%
Run 1: Report of FillP — Data Link

[Graph showing throughput and delay over time for different flows]
Run 2: Statistics of FillP

Start at: 2019-01-19 12:33:11
End at: 2019-01-19 12:33:41
Local clock offset: 1.161 ms
Remote clock offset: -2.833 ms

# Below is generated by plot.py at 2019-01-19 14:07:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.45 Mbit/s
  95th percentile per-packet one-way delay: 150.288 ms
  Loss rate: 1.77%
-- Flow 1:
  Average throughput: 54.00 Mbit/s
  95th percentile per-packet one-way delay: 154.327 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 48.89 Mbit/s
  95th percentile per-packet one-way delay: 138.209 ms
  Loss rate: 3.15%
-- Flow 3:
  Average throughput: 23.91 Mbit/s
  95th percentile per-packet one-way delay: 173.848 ms
  Loss rate: 5.62%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2019-01-19 13:04:03
End at: 2019-01-19 13:04:33
Local clock offset: 1.265 ms
Remote clock offset: -4.476 ms

# Below is generated by plot.py at 2019-01-19 14:07:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.51 Mbit/s
95th percentile per-packet one-way delay: 144.465 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 53.95 Mbit/s
95th percentile per-packet one-way delay: 149.531 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 49.12 Mbit/s
95th percentile per-packet one-way delay: 143.996 ms
Loss rate: 3.04%
-- Flow 3:
Average throughput: 23.82 Mbit/s
95th percentile per-packet one-way delay: 130.903 ms
Loss rate: 3.72%
Run 3: Report of FillP — Data Link

![Graph 1: Throughput vs. Time](chart1.png)

- **Flow 1 ingress (mean 54.07 Mbit/s)**
- **Flow 1 egress (mean 53.95 Mbit/s)**
- **Flow 2 ingress (mean 50.48 Mbit/s)**
- **Flow 2 egress (mean 49.12 Mbit/s)**
- **Flow 3 ingress (mean 24.57 Mbit/s)**
- **Flow 3 egress (mean 23.82 Mbit/s)**

![Graph 2: Per-packet one-way delay vs. Time](chart2.png)

- **Flow 1 (95th percentile 149.53 ms)**
- **Flow 2 (95th percentile 144.00 ms)**
- **Flow 3 (95th percentile 130.90 ms)**
Run 4: Statistics of FillP

Local clock offset: 0.645 ms
Remote clock offset: -2.904 ms

# Below is generated by plot.py at 2019-01-19 14:08:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.29 Mbit/s
95th percentile per-packet one-way delay: 154.966 ms
Loss rate: 1.65%
-- Flow 1:
Average throughput: 56.07 Mbit/s
95th percentile per-packet one-way delay: 134.887 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 41.74 Mbit/s
95th percentile per-packet one-way delay: 168.470 ms
Loss rate: 3.29%
-- Flow 3:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 136.144 ms
Loss rate: 4.53%
Run 4: Report of FillP — Data Link

Throughput (Mbps)

0 5 10 15 20 25 30
0 20 40 60 80 100

Time (s)

Flow 1 ingress (mean 56.06 Mbit/s)  Flow 1 egress (mean 56.07 Mbit/s)
Flow 2 ingress (mean 43.03 Mbit/s)  Flow 2 egress (mean 41.74 Mbit/s)
Flow 3 ingress (mean 32.93 Mbit/s)  Flow 3 egress (mean 31.67 Mbit/s)

Delay (μs)

0 5 10 15 20 25 30
0 100 200 300 400 500 600

Time (s)

Flow 1 (95th percentile 134.89 ms)  Flow 2 (95th percentile 168.47 ms)  Flow 3 (95th percentile 130.14 ms)
Run 5: Statistics of FillP

Start at: 2019-01-19 14:00:27
End at: 2019-01-19 14:00:57
Local clock offset: -1.061 ms
Remote clock offset: -3.578 ms

# Below is generated by plot.py at 2019-01-19 14:08:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.53 Mbit/s
95th percentile per-packet one-way delay: 143.160 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 56.12 Mbit/s
95th percentile per-packet one-way delay: 126.601 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 40.77 Mbit/s
95th percentile per-packet one-way delay: 151.365 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 31.22 Mbit/s
95th percentile per-packet one-way delay: 141.390 ms
Loss rate: 3.63%
Run 5: Report of FillP — Data Link

---

**Throughput (Mbps):**
- Flow 1 ingress (mean 56.15 Mbit/s)
- Flow 2 ingress (mean 41.49 Mbit/s)
- Flow 3 ingress (mean 32.15 Mbit/s)
- Flow 1 egress (mean 56.12 Mbit/s)
- Flow 2 egress (mean 40.77 Mbit/s)
- Flow 3 egress (mean 31.22 Mbit/s)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 126.60 ms)
- Flow 2 (95th percentile 151.37 ms)
- Flow 3 (95th percentile 141.39 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 11:42:52
End at: 2019-01-19 11:43:22
Local clock offset: 1.555 ms
Remote clock offset: -3.441 ms

# Below is generated by plot.py at 2019-01-19 14:08:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.83 Mbit/s
95th percentile per-packet one-way delay: 135.821 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 56.16 Mbit/s
95th percentile per-packet one-way delay: 119.817 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 41.53 Mbit/s
95th percentile per-packet one-way delay: 151.968 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: 107.871 ms
Loss rate: 1.43%
Run 1: Report of FillP-Sheep — Data Link

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

**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 56.13 Mbit/s)
- **Flow 1 egress** (mean 56.16 Mbit/s)
- **Flow 2 ingress** (mean 41.79 Mbit/s)
- **Flow 2 egress** (mean 41.53 Mbit/s)
- **Flow 3 ingress** (mean 30.66 Mbit/s)
- **Flow 3 egress** (mean 30.45 Mbit/s)

**Packet delay (ms)**

- **Flow 1** (95th percentile 119.82 ms)
- **Flow 2** (95th percentile 151.97 ms)
- **Flow 3** (95th percentile 107.87 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 12:12:38
End at: 2019-01-19 12:13:08
Local clock offset: 0.551 ms
Remote clock offset: -3.193 ms

# Below is generated by plot.py at 2019-01-19 14:08:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.59 Mbit/s
  95th percentile per-packet one-way delay: 195.766 ms
  Loss rate: 1.07%
-- Flow 1:
  Average throughput: 56.33 Mbit/s
  95th percentile per-packet one-way delay: 132.581 ms
  Loss rate: 0.43%
-- Flow 2:
  Average throughput: 35.53 Mbit/s
  95th percentile per-packet one-way delay: 144.705 ms
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 35.42 Mbit/s
  95th percentile per-packet one-way delay: 270.836 ms
  Loss rate: 4.61%
Run 2: Report of FillP-Sheep — Data Link

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

- **Throughput**: The graph on the top shows the throughput in Mbps (Megabits per second) over time. Each line represents a different flow, with distinct colors for ingress and egress. Flow 1 shows a higher initial peak, followed by a steady decline. Flow 2 and Flow 3 show similar patterns but with lower initial peaks.

- **Delay**: The graph on the bottom shows the per-packet end-to-end delay in ms (milliseconds) over time. The markers indicate the 95th percentile delay for each flow. Flow 1 has a lower delay, followed by Flow 2 and then Flow 3, which has the highest overall delay.
Run 3: Statistics of FillP-Sheep

End at: 2019-01-19 12:43:25
Local clock offset: 1.239 ms
Remote clock offset: -2.547 ms

# Below is generated by plot.py at 2019-01-19 14:08:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.93 Mbit/s
95th percentile per-packet one-way delay: 150.670 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 57.70 Mbit/s
95th percentile per-packet one-way delay: 164.313 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 135.206 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: 163.649 ms
Loss rate: 1.22%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Local clock offset: 0.571 ms
Remote clock offset: -4.434 ms

# Below is generated by plot.py at 2019-01-19 14:09:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.17 Mbit/s
95th percentile per-packet one-way delay: 139.813 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 58.40 Mbit/s
95th percentile per-packet one-way delay: 144.387 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 38.05 Mbit/s
95th percentile per-packet one-way delay: 127.581 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 31.57 Mbit/s
95th percentile per-packet one-way delay: 146.580 ms
Loss rate: 1.07%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2019-01-19 13:41:26
End at: 2019-01-19 13:41:56
Local clock offset: -1.859 ms
Remote clock offset: -2.014 ms

# Below is generated by plot.py at 2019-01-19 14:09:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.07 Mbit/s
  95th percentile per-packet one-way delay: 137.196 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 56.39 Mbit/s
  95th percentile per-packet one-way delay: 139.171 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 40.85 Mbit/s
  95th percentile per-packet one-way delay: 129.978 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 31.82 Mbit/s
  95th percentile per-packet one-way delay: 147.102 ms
  Loss rate: 1.34%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2019-01-19 11:51:02
End at: 2019-01-19 11:51:32
Local clock offset: 1.258 ms
Remote clock offset: -3.324 ms

# Below is generated by plot.py at 2019-01-19 14:09:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.25 Mbit/s
95th percentile per-packet one-way delay: 84.421 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 59.08 Mbit/s
95th percentile per-packet one-way delay: 86.695 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 39.38 Mbit/s
95th percentile per-packet one-way delay: 82.851 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 30.61 Mbit/s
95th percentile per-packet one-way delay: 83.688 ms
Loss rate: 0.82%
Run 1: Report of Indigo — Data Link

[Graph showing throughput over time with different flows and their ingress and egress rates.]

[Graph showing per-packet one-way delay over time with different flows and their 95th percentile delays.]
Run 2: Statistics of Indigo

End at: 2019-01-19 12:21:52
Local clock offset: 0.907 ms
Remote clock offset: -3.061 ms

# Below is generated by plot.py at 2019-01-19 14:09:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.09 Mbit/s
  95th percentile per-packet one-way delay: 84.814 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 58.54 Mbit/s
  95th percentile per-packet one-way delay: 88.950 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 38.83 Mbit/s
  95th percentile per-packet one-way delay: 83.205 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 29.89 Mbit/s
  95th percentile per-packet one-way delay: 76.951 ms
  Loss rate: 0.82%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2019-01-19 12:51:37
End at: 2019-01-19 12:52:07
Local clock offset: -1.446 ms
Remote clock offset: -3.971 ms

# Below is generated by plot.py at 2019-01-19 14:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.84 Mbit/s
95th percentile per-packet one-way delay: 80.960 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 58.61 Mbit/s
95th percentile per-packet one-way delay: 83.376 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 40.00 Mbit/s
95th percentile per-packet one-way delay: 80.635 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 29.62 Mbit/s
95th percentile per-packet one-way delay: 72.102 ms
Loss rate: 0.76%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Local clock offset: 0.945 ms
Remote clock offset: -4.133 ms

# Below is generated by plot.py at 2019-01-19 14:09:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.95 Mbit/s
95th percentile per-packet one-way delay: 81.445 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 58.13 Mbit/s
95th percentile per-packet one-way delay: 83.731 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 77.422 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 20.79 Mbit/s
95th percentile per-packet one-way delay: 77.663 ms
Loss rate: 1.75%
Run 4: Report of Indigo — Data Link

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**Graph 1:**

- **Throughput (Mbps)**
- **Time (s)**
- **Legend:**
  - Flow 1 ingress (mean 58.17 Mbps)
  - Flow 1 egress (mean 58.13 Mbps)
  - Flow 2 ingress (mean 31.80 Mbps)
  - Flow 2 egress (mean 31.69 Mbps)
  - Flow 3 ingress (mean 21.00 Mbps)
  - Flow 3 egress (mean 20.79 Mbps)

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**Graph 2:**

- **Per-packet one way delay (ms)**
- **Time (s)**
- **Legend:**
  - Flow 1 (95th percentile 83.73 ms)
  - Flow 2 (95th percentile 77.42 ms)
  - Flow 3 (95th percentile 77.66 ms)
Run 5: Statistics of Indigo

End at: 2019-01-19 13:49:52
Local clock offset: 0.524 ms
Remote clock offset: -2.516 ms

# Below is generated by plot.py at 2019-01-19 14:09:52
# Datalink statistics

-- Total of 3 flows:
Average throughput: 95.01 Mbit/s
95th percentile per-packet one-way delay: 82.889 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 58.65 Mbit/s
95th percentile per-packet one-way delay: 85.099 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 39.69 Mbit/s
95th percentile per-packet one-way delay: 82.160 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 30.56 Mbit/s
95th percentile per-packet one-way delay: 84.852 ms
Loss rate: 0.82%
Run 5: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 58.64 Mbit/s)
- Flow 1 egress (mean 58.65 Mbit/s)
- Flow 2 ingress (mean 39.66 Mbit/s)
- Flow 2 egress (mean 39.69 Mbit/s)
- Flow 3 ingress (mean 30.57 Mbit/s)
- Flow 3 egress (mean 30.56 Mbit/s)

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Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 12:00:57
End at: 2019-01-19 12:01:27
Local clock offset: -0.264 ms
Remote clock offset: -3.044 ms

# Below is generated by plot.py at 2019-01-19 14:09:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.31 Mbit/s
  95th percentile per-packet one-way delay: 79.410 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 57.99 Mbit/s
  95th percentile per-packet one-way delay: 82.877 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 31.74 Mbit/s
  95th percentile per-packet one-way delay: 76.262 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 17.55 Mbit/s
  95th percentile per-packet one-way delay: 73.641 ms
  Loss rate: 2.43%
Run 1: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 57.03 Mbit/s)
- Flow 1 egress (mean 57.99 Mbit/s)
- Flow 2 ingress (mean 31.62 Mbit/s)
- Flow 2 egress (mean 31.74 Mbit/s)
- Flow 3 ingress (mean 17.83 Mbit/s)
- Flow 3 egress (mean 17.55 Mbit/s)
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-01-19 12:31:40
End at: 2019-01-19 12:32:10
Local clock offset: 1.128 ms
Remote clock offset: -2.673 ms

# Below is generated by plot.py at 2019-01-19 14:10:07
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 86.02 Mbit/s
   95th percentile per-packet one-way delay: 91.453 ms
   Loss rate: 0.43%
-- Flow 1:
   Average throughput: 53.28 Mbit/s
   95th percentile per-packet one-way delay: 98.280 ms
   Loss rate: 0.34%
-- Flow 2:
   Average throughput: 40.56 Mbit/s
   95th percentile per-packet one-way delay: 84.957 ms
   Loss rate: 0.35%
-- Flow 3:
   Average throughput: 24.96 Mbit/s
   95th percentile per-packet one-way delay: 82.636 ms
   Loss rate: 1.43%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:02:37
End at: 2019-01-19 13:03:07
Local clock offset: -1.705 ms
Remote clock offset: -4.976 ms

# Below is generated by plot.py at 2019-01-19 14:10:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.28 Mbit/s
  95th percentile per-packet one-way delay: 79.449 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 61.88 Mbit/s
  95th percentile per-packet one-way delay: 78.897 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 35.20 Mbit/s
  95th percentile per-packet one-way delay: 80.294 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 21.79 Mbit/s
  95th percentile per-packet one-way delay: 78.671 ms
  Loss rate: 1.89%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:30:45
End at: 2019-01-19 13:31:15
Local clock offset: -1.112 ms
Remote clock offset: -2.572 ms

# Below is generated by plot.py at 2019-01-19 14:10:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.24 Mbit/s
95th percentile per-packet one-way delay: 79.845 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 61.63 Mbit/s
95th percentile per-packet one-way delay: 81.728 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 31.18 Mbit/s
95th percentile per-packet one-way delay: 75.604 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 24.61 Mbit/s
95th percentile per-packet one-way delay: 77.718 ms
Loss rate: 1.86%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:58:54
Local clock offset: -0.616 ms
Remote clock offset: -2.124 ms

# Below is generated by plot.py at 2019-01-19 14:10:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.12 Mbit/s
95th percentile per-packet one-way delay: 83.339 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 60.31 Mbit/s
95th percentile per-packet one-way delay: 86.636 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 38.18 Mbit/s
95th percentile per-packet one-way delay: 77.724 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 22.46 Mbit/s
95th percentile per-packet one-way delay: 81.114 ms
Loss rate: 1.57%
Run 5: Report of Indigo-MusesC3 — Data Link
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-01-19 11:56:48
End at: 2019-01-19 11:57:18
Local clock offset: 2.864 ms
Remote clock offset: -3.381 ms

# Below is generated by plot.py at 2019-01-19 14:10:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.32 Mbit/s
  95th percentile per-packet one-way delay: 159.691 ms
  Loss rate: 4.02%
-- Flow 1:
  Average throughput: 59.35 Mbit/s
  95th percentile per-packet one-way delay: 159.633 ms
  Loss rate: 3.23%
-- Flow 2:
  Average throughput: 36.75 Mbit/s
  95th percentile per-packet one-way delay: 164.085 ms
  Loss rate: 6.38%
-- Flow 3:
  Average throughput: 33.84 Mbit/s
  95th percentile per-packet one-way delay: 125.212 ms
  Loss rate: 2.93%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

End at: 2019-01-19 12:27:51
Local clock offset: -0.203 ms
Remote clock offset: -3.499 ms

# Below is generated by plot.py at 2019-01-19 14:10:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.80 Mbit/s
  95th percentile per-packet one-way delay: 154.963 ms
  Loss rate: 4.28%
-- Flow 1:
  Average throughput: 57.42 Mbit/s
  95th percentile per-packet one-way delay: 156.339 ms
  Loss rate: 2.10%
-- Flow 2:
  Average throughput: 38.43 Mbit/s
  95th percentile per-packet one-way delay: 148.025 ms
  Loss rate: 8.84%
-- Flow 3:
  Average throughput: 34.65 Mbit/s
  95th percentile per-packet one-way delay: 149.366 ms
  Loss rate: 4.78%
Run 2: Report of Indigo-MusesC5 — Data Link

![Graph of Throughput (Mb/s)]

- Flow 1 ingress (mean 58.50 Mb/s)
- Flow 1 egress (mean 57.42 Mb/s)
- Flow 2 ingress (mean 41.99 Mb/s)
- Flow 2 egress (mean 36.43 Mb/s)
- Flow 3 ingress (mean 36.09 Mb/s)
- Flow 3 egress (mean 34.65 Mb/s)

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

- Flow 1 (95th percentile 156.34 ms)
- Flow 2 (95th percentile 148.03 ms)
- Flow 3 (95th percentile 149.37 ms)
Run 3: Statistics of Indigo-MusesC5

End at: 2019-01-19 12:58:08
Local clock offset: -1.554 ms
Remote clock offset: -5.256 ms

# Below is generated by plot.py at 2019-01-19 14:10:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.81 Mbit/s
95th percentile per-packet one-way delay: 170.963 ms
Loss rate: 3.02%
-- Flow 1:
Average throughput: 57.06 Mbit/s
95th percentile per-packet one-way delay: 187.057 ms
Loss rate: 3.48%
-- Flow 2:
Average throughput: 45.59 Mbit/s
95th percentile per-packet one-way delay: 122.981 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 22.98 Mbit/s
95th percentile per-packet one-way delay: 153.354 ms
Loss rate: 7.25%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

End at: 2019-01-19 13:26:53
Local clock offset: 0.837 ms
Remote clock offset: -1.824 ms

# Below is generated by plot.py at 2019-01-19 14:11:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.31 Mbit/s
  95th percentile per-packet one-way delay: 166.046 ms
  Loss rate: 3.39%
-- Flow 1:
  Average throughput: 58.94 Mbit/s
  95th percentile per-packet one-way delay: 171.628 ms
  Loss rate: 3.02%
-- Flow 2:
  Average throughput: 38.22 Mbit/s
  95th percentile per-packet one-way delay: 140.364 ms
  Loss rate: 3.63%
-- Flow 3:
  Average throughput: 31.37 Mbit/s
  95th percentile per-packet one-way delay: 132.879 ms
  Loss rate: 5.21%
Run 4: Report of Indigo-MusesC5 — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 60.63 Mbps)
- Flow 1 egress (mean 58.94 Mbps)
- Flow 2 ingress (mean 39.55 Mbps)
- Flow 2 egress (mean 38.22 Mbps)
- Flow 3 ingress (mean 32.88 Mbps)
- Flow 3 egress (mean 31.37 Mbps)

Packet per-packet one-way delay (ms) vs Time (s)

- Flow 1 (95th percentile 171.63 ms)
- Flow 2 (95th percentile 140.36 ms)
- Flow 3 (95th percentile 132.88 ms)
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-01-19 13:54:56
Local clock offset: 1.386 ms
Remote clock offset: -1.975 ms

# Below is generated by plot.py at 2019-01-19 14:11:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.56 Mbit/s
95th percentile per-packet one-way delay: 162.831 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 58.38 Mbit/s
95th percentile per-packet one-way delay: 153.448 ms
Loss rate: 3.07%
-- Flow 2:
Average throughput: 39.87 Mbit/s
95th percentile per-packet one-way delay: 172.307 ms
Loss rate: 4.50%
-- Flow 3:
Average throughput: 29.54 Mbit/s
95th percentile per-packet one-way delay: 137.582 ms
Loss rate: 7.43%
Run 5: Report of Indigo-MusesC5 — Data Link
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 11:45:30
End at: 2019-01-19 11:46:00
Local clock offset: 2.011 ms
Remote clock offset: -4.088 ms

# Below is generated by plot.py at 2019-01-19 14:11:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.92 Mbit/s
95th percentile per-packet one-way delay: 77.012 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 36.62 Mbit/s
95th percentile per-packet one-way delay: 72.513 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 47.05 Mbit/s
95th percentile per-packet one-way delay: 79.259 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 71.993 ms
Loss rate: 1.10%
Run 1: Report of Indigo-MusesD — Data Link
Run 2: Statistics of Indigo-MusesD

End at: 2019-01-19 12:16:28
Local clock offset: 1.141 ms
Remote clock offset: -3.259 ms

# Below is generated by plot.py at 2019-01-19 14:11:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 76.503 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 70.962 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 46.28 Mbit/s
95th percentile per-packet one-way delay: 77.197 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 72.652 ms
Loss rate: 1.37%
Run 2: Report of Indigo-MusesD — Data Link

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

- **Flow 1 ingress (mean 9.11 Mbit/s)**
- **Flow 1 egress (mean 9.13 Mbit/s)**
- **Flow 2 ingress (mean 46.23 Mbit/s)**
- **Flow 2 egress (mean 46.28 Mbit/s)**
- **Flow 3 ingress (mean 4.39 Mbit/s)**
- **Flow 3 egress (mean 4.37 Mbit/s)**
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 12:45:42
End at: 2019-01-19 12:46:12
Local clock offset: 0.307 ms
Remote clock offset: -3.279 ms

# Below is generated by plot.py at 2019-01-19 14:11:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 37.39 Mbit/s
  95th percentile per-packet one-way delay: 76.591 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 14.66 Mbit/s
  95th percentile per-packet one-way delay: 72.124 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 33.95 Mbit/s
  95th percentile per-packet one-way delay: 78.552 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 5.18 Mbit/s
  95th percentile per-packet one-way delay: 72.690 ms
  Loss rate: 0.78%
Run 3: Report of Indigo-MusesD — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 4: Statistics of Indigo-MusesD

End at: 2019-01-19 13:16:19
Local clock offset: 0.929 ms
Remote clock offset: -4.428 ms

# Below is generated by plot.py at 2019-01-19 14:11:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.99 Mbit/s
95th percentile per-packet one-way delay: 74.495 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 38.21 Mbit/s
95th percentile per-packet one-way delay: 72.777 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 35.57 Mbit/s
95th percentile per-packet one-way delay: 76.665 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: 70.919 ms
Loss rate: 0.80%
Run 4: Report of Indigo-MusesD — Data Link

[Graphs showing throughput and packet loss over time for different flows.]
Run 5: Statistics of Indigo-MusesD

Local clock offset: -0.067 ms
Remote clock offset: -1.814 ms

# Below is generated by plot.py at 2019-01-19 14:11:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.09 Mbit/s
95th percentile per-packet one-way delay: 73.130 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 42.61 Mbit/s
95th percentile per-packet one-way delay: 73.371 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 70.471 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 4.80 Mbit/s
95th percentile per-packet one-way delay: 69.338 ms
Loss rate: 0.89%
Run 5: Report of Indigo-MusesD — Data Link
Run 1: Statistics of Indigo-MusesT

Start at: 2019-01-19 11:37:11
End at: 2019-01-19 11:37:41
Local clock offset: 3.089 ms
Remote clock offset: -3.443 ms

# Below is generated by plot.py at 2019-01-19 14:11:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.53 Mbit/s
  95th percentile per-packet one-way delay: 205.379 ms
  Loss rate: 3.07%
-- Flow 1:
  Average throughput: 60.45 Mbit/s
  95th percentile per-packet one-way delay: 164.993 ms
  Loss rate: 2.25%
-- Flow 2:
  Average throughput: 36.95 Mbit/s
  95th percentile per-packet one-way delay: 253.173 ms
  Loss rate: 4.52%
-- Flow 3:
  Average throughput: 41.74 Mbit/s
  95th percentile per-packet one-way delay: 123.238 ms
  Loss rate: 4.34%
Run 1: Report of Indigo-MusesT — Data Link
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 12:06:43
End at: 2019-01-19 12:07:13
Local clock offset: 2.322 ms
Remote clock offset: -3.658 ms

# Below is generated by plot.py at 2019-01-19 14:12:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.45 Mbit/s
  95th percentile per-packet one-way delay: 195.484 ms
  Loss rate: 3.49%
-- Flow 1:
  Average throughput: 60.38 Mbit/s
  95th percentile per-packet one-way delay: 195.002 ms
  Loss rate: 2.78%
-- Flow 2:
  Average throughput: 36.79 Mbit/s
  95th percentile per-packet one-way delay: 202.511 ms
  Loss rate: 4.59%
-- Flow 3:
  Average throughput: 42.80 Mbit/s
  95th percentile per-packet one-way delay: 145.396 ms
  Loss rate: 4.88%
Run 2: Report of Indigo-MusesT — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 61.95 Mbit/s)
Flow 1 egress (mean 60.38 Mbit/s)
Flow 2 ingress (mean 38.42 Mbit/s)
Flow 2 egress (mean 36.79 Mbit/s)
Flow 3 ingress (mean 44.56 Mbit/s)
Flow 3 egress (mean 42.80 Mbit/s)

Per-packet one way delay (ms)

Flow 1 (95th percentile 195.00 ms)
Flow 2 (95th percentile 202.51 ms)
Flow 3 (95th percentile 145.40 ms)
Run 3: Statistics of Indigo-MusesT

Start at: 2019-01-19 12:37:05
End at: 2019-01-19 12:37:35
Local clock offset: -0.165 ms
Remote clock offset: -3.139 ms

# Below is generated by plot.py at 2019-01-19 14:12:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.62 Mbit/s
95th percentile per-packet one-way delay: 156.098 ms
Loss rate: 3.00%
-- Flow 1:
Average throughput: 66.00 Mbit/s
95th percentile per-packet one-way delay: 134.985 ms
Loss rate: 1.99%
-- Flow 2:
Average throughput: 37.65 Mbit/s
95th percentile per-packet one-way delay: 219.950 ms
Loss rate: 6.05%
-- Flow 3:
Average throughput: 20.55 Mbit/s
95th percentile per-packet one-way delay: 91.305 ms
Loss rate: 1.30%
Run 3: Report of Indigo-MusesT — Data Link

![Graph](image-url)
Run 4: Statistics of Indigo-MusT

Start at: 2019-01-19 13:07:49
End at: 2019-01-19 13:08:19
Local clock offset: 0.482 ms
Remote clock offset: -4.461 ms

# Below is generated by plot.py at 2019-01-19 14:12:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.91 Mbit/s
95th percentile per-packet one-way delay: 168.069 ms
Loss rate: 3.31%
-- Flow 1:
Average throughput: 62.53 Mbit/s
95th percentile per-packet one-way delay: 147.256 ms
Loss rate: 2.62%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 233.988 ms
Loss rate: 5.39%
-- Flow 3:
Average throughput: 27.08 Mbit/s
95th percentile per-packet one-way delay: 95.789 ms
Loss rate: 1.78%
Run 4: Report of Indigo-MusesT — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 64.05 Mbit/s)
- Flow 1 egress (mean 62.53 Mbit/s)
- Flow 2 ingress (mean 42.83 Mbit/s)
- Flow 2 egress (mean 40.64 Mbit/s)
- Flow 3 ingress (mean 27.32 Mbit/s)
- Flow 3 egress (mean 27.08 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 147.76 ms)
- Flow 2 (95th percentile 233.99 ms)
- Flow 3 (95th percentile 95.79 ms)
Run 5: Statistics of Indigo-MusesT

Start at: 2019-01-19 13:36:04
End at: 2019-01-19 13:36:34
Local clock offset: 1.269 ms
Remote clock offset: -2.482 ms

# Below is generated by plot.py at 2019-01-19 14:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 167.103 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 60.13 Mbit/s
95th percentile per-packet one-way delay: 190.093 ms
Loss rate: 3.14%
-- Flow 2:
Average throughput: 46.58 Mbit/s
95th percentile per-packet one-way delay: 122.824 ms
Loss rate: 2.48%
-- Flow 3:
Average throughput: 21.79 Mbit/s
95th percentile per-packet one-way delay: 100.718 ms
Loss rate: 1.68%
Run 5: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 61.93 Mbit/s)
- Flow 1 egress (mean 60.13 Mbit/s)
- Flow 2 ingress (mean 47.57 Mbit/s)
- Flow 2 egress (mean 46.58 Mbit/s)
- Flow 3 ingress (mean 21.94 Mbit/s)
- Flow 3 egress (mean 21.79 Mbit/s)
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 11:44:12
End at: 2019-01-19 11:44:42
Local clock offset: 1.667 ms
Remote clock offset: -2.834 ms

# Below is generated by plot.py at 2019-01-19 14:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.02 Mbit/s
95th percentile per-packet one-way delay: 75.739 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 74.416 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 25.18 Mbit/s
95th percentile per-packet one-way delay: 80.103 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 16.28 Mbit/s
95th percentile per-packet one-way delay: 73.852 ms
Loss rate: 1.10%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2019-01-19 12:14:30
End at: 2019-01-19 12:15:00
Local clock offset: 2.424 ms
Remote clock offset: -2.981 ms

# Below is generated by plot.py at 2019-01-19 14:12:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.58 Mbit/s
95th percentile per-packet one-way delay: 78.352 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 35.82 Mbit/s
95th percentile per-packet one-way delay: 79.328 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: 75.717 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 15.39 Mbit/s
95th percentile per-packet one-way delay: 79.721 ms
Loss rate: 0.50%
Run 2: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 35.81 Mbit/s)
- Flow 1 egress (mean 35.82 Mbit/s)
- Flow 2 ingress (mean 29.64 Mbit/s)
- Flow 2 egress (mean 29.57 Mbit/s)
- Flow 3 ingress (mean 15.34 Mbit/s)
- Flow 3 egress (mean 15.39 Mbit/s)

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

- Flow 1 (95th percentile 79.33 ms)
- Flow 2 (95th percentile 75.72 ms)
- Flow 3 (95th percentile 79.72 ms)
Run 3: Statistics of LEDBAT

Start at: 2019-01-19 12:44:17
End at: 2019-01-19 12:44:47
Local clock offset: 0.295 ms
Remote clock offset: -3.169 ms

# Below is generated by plot.py at 2019-01-19 14:12:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.42 Mbit/s
95th percentile per-packet one-way delay: 77.828 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 34.87 Mbit/s
95th percentile per-packet one-way delay: 79.298 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 31.77 Mbit/s
95th percentile per-packet one-way delay: 74.141 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 16.34 Mbit/s
95th percentile per-packet one-way delay: 77.114 ms
Loss rate: 1.05%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

End at: 2019-01-19 13:15:01
Local clock offset: 0.918 ms
Remote clock offset: -3.629 ms

# Below is generated by plot.py at 2019-01-19 14:12:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.62 Mbit/s
95th percentile per-packet one-way delay: 77.184 ms
Loss rate: 0.29%
-- Flow 1:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 77.136 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 27.28 Mbit/s
95th percentile per-packet one-way delay: 76.884 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 17.16 Mbit/s
95th percentile per-packet one-way delay: 78.315 ms
Loss rate: 0.42%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Local clock offset: 0.816 ms
Remote clock offset: -1.721 ms

# Below is generated by plot.py at 2019-01-19 14:12:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.41 Mbit/s
95th percentile per-packet one-way delay: 75.855 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 39.09 Mbit/s
95th percentile per-packet one-way delay: 75.099 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 25.83 Mbit/s
95th percentile per-packet one-way delay: 77.964 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 15.54 Mbit/s
95th percentile per-packet one-way delay: 76.613 ms
Loss rate: 1.22%
Run 5: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 39.07 Mbps)
- Flow 1 egress (mean 39.09 Mbps)
- Flow 2 ingress (mean 25.87 Mbps)
- Flow 2 egress (mean 25.83 Mbps)
- Flow 3 ingress (mean 15.61 Mbps)
- Flow 3 egress (mean 15.54 Mbps)

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

- Flow 1 (95th percentile 75.10 ms)
- Flow 2 (95th percentile 77.96 ms)
- Flow 3 (95th percentile 76.61 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2019-01-19 11:54:04
End at: 2019-01-19 11:54:34
Local clock offset: 0.005 ms
Remote clock offset: -2.924 ms

# Below is generated by plot.py at 2019-01-19 14:13:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 2263.753 ms
Loss rate: 6.06%

-- Flow 1:
Average throughput: 55.06 Mbit/s
95th percentile per-packet one-way delay: 2357.853 ms
Loss rate: 7.36%

-- Flow 2:
Average throughput: 31.20 Mbit/s
95th percentile per-packet one-way delay: 86.674 ms
Loss rate: 1.37%

-- Flow 3:
Average throughput: 31.05 Mbit/s
95th percentile per-packet one-way delay: 1023.021 ms
Loss rate: 8.02%
Run 1: Report of PCC-Allegro — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 59.28 Mbit/s)
- Flow 1 egress (mean 55.06 Mbit/s)
- Flow 2 ingress (mean 31.51 Mbit/s)
- Flow 2 egress (mean 31.20 Mbit/s)
- Flow 3 ingress (mean 33.11 Mbit/s)
- Flow 3 egress (mean 31.05 Mbit/s)

![Packet Delay Graph]

- Flow 1 (95th percentile 2357.85 ms)
- Flow 2 (95th percentile 86.67 ms)
- Flow 3 (95th percentile 1023.02 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 12:24:26
End at: 2019-01-19 12:24:56
Local clock offset: -0.777 ms
Remote clock offset: -2.157 ms

# Below is generated by plot.py at 2019-01-19 14:13:03
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 84.39 Mbit/s
   95th percentile per-packet one-way delay: 2002.423 ms
   Loss rate: 6.45%
-- Flow 1:
   Average throughput: 53.17 Mbit/s
   95th percentile per-packet one-way delay: 2433.228 ms
   Loss rate: 7.32%
-- Flow 2:
   Average throughput: 32.07 Mbit/s
   95th percentile per-packet one-way delay: 149.934 ms
   Loss rate: 0.45%
-- Flow 3:
   Average throughput: 30.27 Mbit/s
   95th percentile per-packet one-way delay: 1170.131 ms
   Loss rate: 13.29%
Run 2: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 57.22 Mbps)
- Flow 1 egress (mean 53.17 Mbps)
- Flow 2 ingress (mean 32.68 Mbps)
- Flow 2 egress (mean 32.07 Mbps)
- Flow 3 ingress (mean 34.64 Mbps)
- Flow 3 egress (mean 30.27 Mbps)

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

- Flow 1 (95th percentile 2433.23 ms)
- Flow 2 (95th percentile 149.93 ms)
- Flow 3 (95th percentile 1170.13 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 12:54:46
Local clock offset: -1.472 ms
Remote clock offset: -4.075 ms

# Below is generated by plot.py at 2019-01-19 14:13:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.02 Mbit/s
  95th percentile per-packet one-way delay: 2093.437 ms
  Loss rate: 7.93%
-- Flow 1:
  Average throughput: 55.64 Mbit/s
  95th percentile per-packet one-way delay: 2120.917 ms
  Loss rate: 10.72%
-- Flow 2:
  Average throughput: 31.74 Mbit/s
  95th percentile per-packet one-way delay: 100.589 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 31.41 Mbit/s
  95th percentile per-packet one-way delay: 893.726 ms
  Loss rate: 6.09%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Local clock offset: -1.119 ms
Remote clock offset: -2.636 ms

# Below is generated by plot.py at 2019-01-19 14:13:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.03 Mbit/s
95th percentile per-packet one-way delay: 2151.030 ms
Loss rate: 8.25%
-- Flow 1:
Average throughput: 57.50 Mbit/s
95th percentile per-packet one-way delay: 2194.937 ms
Loss rate: 10.47%
-- Flow 2:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 140.485 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 30.70 Mbit/s
95th percentile per-packet one-way delay: 1009.327 ms
Loss rate: 9.13%
Run 4: Report of PCC-Allegro — Data Link

The first graph shows the throughput in Mbps against time in seconds. Each line represents a different flow, with different mean rates:
- Flow 1 ingress (mean 64.07 Mbps)
- Flow 2 ingress (mean 32.60 Mbps)
- Flow 3 ingress (mean 33.50 Mbps)
- Flow 1 egress (mean 37.50 Mbps)
- Flow 2 egress (mean 32.32 Mbps)
- Flow 3 egress (mean 30.70 Mbps)

The second graph shows the packet one-way delay in milliseconds against time in seconds. The legend indicates:
- Flow 1 (95th percentile 2194.94 ms)
- Flow 2 (95th percentile 140.49 ms)
- Flow 3 (95th percentile 1009.33 ms)
Run 5: Statistics of PCC-Allegro

End at: 2019-01-19 13:52:51
Local clock offset: 1.245 ms
Remote clock offset: -2.837 ms

# Below is generated by plot.py at 2019-01-19 14:13:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.84 Mbit/s
  95th percentile per-packet one-way delay: 2029.043 ms
  Loss rate: 5.75%
-- Flow 1:
  Average throughput: 53.66 Mbit/s
  95th percentile per-packet one-way delay: 2359.622 ms
  Loss rate: 7.43%
-- Flow 2:
  Average throughput: 31.46 Mbit/s
  95th percentile per-packet one-way delay: 123.976 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 31.36 Mbit/s
  95th percentile per-packet one-way delay: 989.563 ms
  Loss rate: 7.07%
Run 5: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 11:58:05
End at: 2019-01-19 11:58:35
Local clock offset: 1.669 ms
Remote clock offset: -3.698 ms

# Below is generated by plot.py at 2019-01-19 14:14:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.80 Mbit/s
95th percentile per-packet one-way delay: 1361.874 ms
Loss rate: 21.01%
-- Flow 1:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: 1001.793 ms
Loss rate: 22.57%
-- Flow 2:
Average throughput: 36.05 Mbit/s
95th percentile per-packet one-way delay: 1436.113 ms
Loss rate: 21.03%
-- Flow 3:
Average throughput: 19.24 Mbit/s
95th percentile per-packet one-way delay: 159.557 ms
Loss rate: 1.93%
Run 1: Report of PCC-Expr — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]

Legend:
- Flow 1 ingress (mean 77.05 Mbit/s)
- Flow 1 egress (mean 60.53 Mbit/s)
- Flow 2 ingress (mean 45.47 Mbit/s)
- Flow 2 egress (mean 36.05 Mbit/s)
- Flow 3 ingress (mean 19.46 Mbit/s)
- Flow 3 egress (mean 19.24 Mbit/s)

Legend:
- Flow 1 (95th percentile 1001.79 ms)
- Flow 2 (95th percentile 1436.11 ms)
- Flow 3 (95th percentile 159.56 ms)
Run 2: Statistics of PCC-Expr

End at: 2019-01-19 12:29:18
Local clock offset: 0.934 ms
Remote clock offset: -2.716 ms

# Below is generated by plot.py at 2019-01-19 14:14:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.23 Mbit/s
  95th percentile per-packet one-way delay: 1200.050 ms
  Loss rate: 13.28%
-- Flow 1:
  Average throughput: 63.48 Mbit/s
  95th percentile per-packet one-way delay: 1113.520 ms
  Loss rate: 14.89%
-- Flow 2:
  Average throughput: 33.95 Mbit/s
  95th percentile per-packet one-way delay: 1891.576 ms
  Loss rate: 11.37%
-- Flow 3:
  Average throughput: 18.84 Mbit/s
  95th percentile per-packet one-way delay: 111.776 ms
  Loss rate: 1.95%
Run 2: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mbps)]
- Flow 1 ingress (mean 74.39 Mbps)
- Flow 1 egress (mean 63.48 Mbps)
- Flow 2 ingress (mean 38.15 Mbps)
- Flow 2 egress (mean 33.95 Mbps)
- Flow 3 ingress (mean 19.67 Mbps)
- Flow 3 egress (mean 18.84 Mbps)

![Graph 2: Per packet one way delay (ms)]
- Flow 1 (95th percentile 1113.52 ms)
- Flow 2 (95th percentile 1891.58 ms)
- Flow 3 (95th percentile 111.78 ms)
Run 3: Statistics of PCC-Expr

End at: 2019-01-19 12:59:50
Local clock offset: -0.242 ms
Remote clock offset: -4.843 ms

# Below is generated by plot.py at 2019-01-19 14:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.77 Mbit/s
95th percentile per-packet one-way delay: 1501.163 ms
Loss rate: 18.74%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 1041.605 ms
Loss rate: 21.99%
-- Flow 2:
Average throughput: 35.34 Mbit/s
95th percentile per-packet one-way delay: 1882.723 ms
Loss rate: 12.95%
-- Flow 3:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 232.701 ms
Loss rate: 3.11%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

End at: 2019-01-19 13:28:08
Local clock offset: 0.909 ms
Remote clock offset: -3.017 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.46 Mbit/s
95th percentile per-packet one-way delay: 909.111 ms
Loss rate: 22.18%
-- Flow 1:
Average throughput: 55.61 Mbit/s
95th percentile per-packet one-way delay: 938.769 ms
Loss rate: 31.56%
-- Flow 2:
Average throughput: 43.39 Mbit/s
95th percentile per-packet one-way delay: 217.701 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 24.41 Mbit/s
95th percentile per-packet one-way delay: 505.613 ms
Loss rate: 6.31%
Run 4: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 81.06 Mbps)
  - Flow 1 egress (mean 55.61 Mbps)
  - Flow 2 ingress (mean 43.47 Mbps)
  - Flow 2 egress (mean 43.39 Mbps)
  - Flow 3 ingress (mean 25.85 Mbps)
  - Flow 3 egress (mean 24.41 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 938.77 ms)
  - Flow 2 (95th percentile 217.70 ms)
  - Flow 3 (95th percentile 505.61 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 13:56:10
End at: 2019-01-19 13:56:40
Local clock offset: -5.724 ms
Remote clock offset: -7.54 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.53 Mbit/s
95th percentile per-packet one-way delay: 939.715 ms
Loss rate: 21.94%
-- Flow 1:
Average throughput: 54.99 Mbit/s
95th percentile per-packet one-way delay: 976.763 ms
Loss rate: 31.03%
-- Flow 2:
Average throughput: 45.05 Mbit/s
95th percentile per-packet one-way delay: 526.851 ms
Loss rate: 3.80%
-- Flow 3:
Average throughput: 23.13 Mbit/s
95th percentile per-packet one-way delay: 196.232 ms
Loss rate: 1.05%
Run 5: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 79.52 Mbps)
  - Flow 1 egress (mean 54.99 Mbps)
  - Flow 2 ingress (mean 46.66 Mbps)
  - Flow 2 egress (mean 45.05 Mbps)
  - Flow 3 ingress (mean 23.19 Mbps)
  - Flow 3 egress (mean 23.13 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 976.76 ms)
  - Flow 2 (95th percentile 526.85 ms)
  - Flow 3 (95th percentile 196.23 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 11:59:36
End at: 2019-01-19 12:00:06
Local clock offset: 0.607 ms
Remote clock offset: -3.258 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.19 Mbit/s
95th percentile per-packet one-way delay: 124.416 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 40.93 Mbit/s
95th percentile per-packet one-way delay: 124.489 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 121.150 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: 129.948 ms
Loss rate: 0.92%
Run 1: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 40.93 Mbit/s)
- Flow 1 egress (mean 40.93 Mbit/s)
- Flow 2 ingress (mean 35.57 Mbit/s)
- Flow 2 egress (mean 35.52 Mbit/s)
- Flow 3 ingress (mean 29.87 Mbit/s)
- Flow 3 egress (mean 29.84 Mbit/s)

[Graph showing packet delay distribution for different flows]

- Flow 1 (95th percentile 124.49 ms)
- Flow 2 (95th percentile 121.15 ms)
- Flow 3 (95th percentile 129.95 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 12:30:21
End at: 2019-01-19 12:30:51
Local clock offset: -0.65 ms
Remote clock offset: -2.756 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.52 Mbit/s
  95th percentile per-packet one-way delay: 132.114 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 38.69 Mbit/s
  95th percentile per-packet one-way delay: 123.827 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 33.85 Mbit/s
  95th percentile per-packet one-way delay: 135.280 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 28.40 Mbit/s
  95th percentile per-packet one-way delay: 145.445 ms
  Loss rate: 0.90%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2019-01-19 13:01:04
End at: 2019-01-19 13:01:34
Local clock offset: -0.893 ms
Remote clock offset: -4.633 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.89 Mbit/s
95th percentile per-packet one-way delay: 132.938 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 126.983 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 35.26 Mbit/s
95th percentile per-packet one-way delay: 139.911 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 28.86 Mbit/s
95th percentile per-packet one-way delay: 146.793 ms
Loss rate: 0.98%
Run 3: Report of QUIC Cubic — Data Link

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

End at: 2019-01-19 13:29:49
Local clock offset: -1.63 ms
Remote clock offset: -2.176 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.77 Mbit/s
  95th percentile per-packet one-way delay: 130.438 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 37.65 Mbit/s
  95th percentile per-packet one-way delay: 128.656 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 41.73 Mbit/s
  95th percentile per-packet one-way delay: 120.489 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 22.97 Mbit/s
  95th percentile per-packet one-way delay: 155.429 ms
  Loss rate: 1.36%
Run 4: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 37.70 Mbit/s)
- Flow 1 egress (mean 37.65 Mbit/s)
- Flow 2 ingress (mean 41.79 Mbit/s)
- Flow 2 egress (mean 41.73 Mbit/s)
- Flow 3 ingress (mean 23.07 Mbit/s)
- Flow 3 egress (mean 22.97 Mbit/s)

![Graph 2: Percentile One-Way Delay vs. Time](image2)

- Flow 1 (95th percentile 128.66 ms)
- Flow 2 (95th percentile 120.49 ms)
- Flow 3 (95th percentile 155.43 ms)
Run 5: Statistics of QUIC Cubic

End at: 2019-01-19 13:58:08
Local clock offset: 0.181 ms
Remote clock offset: -2.383 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.11 Mbit/s
95th percentile per-packet one-way delay: 130.594 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 126.583 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 31.24 Mbit/s
95th percentile per-packet one-way delay: 138.522 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 23.05 Mbit/s
95th percentile per-packet one-way delay: 159.191 ms
Loss rate: 1.52%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2019-01-19 11:36:02
End at: 2019-01-19 11:36:32
Local clock offset: -0.332 ms
Remote clock offset: -3.113 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.40 Mbit/s
95th percentile per-packet one-way delay: 68.118 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.730 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 68.159 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 67.683 ms
Loss rate: 0.70%
Run 1: Report of SCReAM — Data Link

[Graph showing throughput and packet delay over time for different flows]
Run 2: Statistics of SCReAM

Start at: 2019-01-19 12:05:35
End at: 2019-01-19 12:06:05
Local clock offset: 0.774 ms
Remote clock offset: -2.926 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 69.304 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.302 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.307 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 69.289 ms
Loss rate: 0.70%
Run 2: Report of SCReAM — Data Link

![Graph showing throughput and packet loss over time]

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

- **Packet Loss Over Time:**
  - Flow 1 (95th percentile 69.30 ms)
  - Flow 2 (95th percentile 69.31 ms)
  - Flow 3 (95th percentile 69.29 ms)
Run 3: Statistics of SCReAM

Start at: 2019-01-19 12:35:57
End at: 2019-01-19 12:36:27
Local clock offset: 0.803 ms
Remote clock offset: -3.014 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 71.336 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 68.855 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 71.033 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 71.490 ms
  Loss rate: 0.70%
Run 4: Statistics of SCReAM

Start at: 2019-01-19 13:06:41
End at: 2019-01-19 13:07:11
Local clock offset: 0.595 ms
Remote clock offset: -4.926 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 69.494 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.060 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.057 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.554 ms
  Loss rate: 0.70%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

End at: 2019-01-19 13:35:25
Local clock offset: 0.238 ms
Remote clock offset: -2.368 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 69.144 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.144 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.135 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 69.161 ms
  Loss rate: 0.71%
Run 5: Report of SCReAM — Data Link

Throughput (Mbps)

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)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 69.14 ms)  Flow 2 (95th percentile 69.14 ms)  Flow 3 (95th percentile 69.16 ms)
Run 1: Statistics of Sprout

Start at: 2019-01-19 11:41:42
End at: 2019-01-19 11:42:12
Local clock offset: 1.761 ms
Remote clock offset: -3.879 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.17 Mbit/s
95th percentile per-packet one-way delay: 80.537 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 79.316 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 9.54 Mbit/s
95th percentile per-packet one-way delay: 82.113 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 9.58 Mbit/s
95th percentile per-packet one-way delay: 83.562 ms
Loss rate: 1.07%
Run 1: Report of Sprout — Data Link

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

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

Local clock offset: -0.417 ms
Remote clock offset: -2.977 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 76.347 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 9.44 Mbit/s
95th percentile per-packet one-way delay: 76.232 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 9.57 Mbit/s
95th percentile per-packet one-way delay: 76.572 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 9.25 Mbit/s
95th percentile per-packet one-way delay: 75.884 ms
Loss rate: 0.21%
Run 2: Report of Sprout — Data Link

[Graph showing network throughput over time for different flows with mean speeds indicated]

[Graph showing per-packet one-way delay over time for different flows with 95th percentile delays indicated]
Run 3: Statistics of Sprout

Start at: 2019-01-19 12:41:43
Local clock offset: -2.393 ms
Remote clock offset: -8.89 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 19.21 Mbit/s
  95th percentile per-packet one-way delay: 82.745 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 9.73 Mbit/s
  95th percentile per-packet one-way delay: 82.717 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 9.54 Mbit/s
  95th percentile per-packet one-way delay: 82.606 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 9.58 Mbit/s
  95th percentile per-packet one-way delay: 82.895 ms
  Loss rate: 1.03%
Run 3: Report of Sprout — Data Link

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

The graphs depict the throughput (in Mbps) and per-packet end-to-end delay (in ms) for three different flows labeled as Flow 1, Flow 2, and Flow 3. The throughput values are consistently high, with slight fluctuations. The packet processing delay shows variability, with Flow 1 having the lowest 95th percentile delay at 82.72 ms, followed by Flow 2 at 82.61 ms, and Flow 3 at 82.89 ms.
Run 4: Statistics of Sprout

End at: 2019-01-19 13:12:29
Local clock offset: -0.399 ms
Remote clock offset: -4.682 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 22.79 Mbit/s
  95th percentile per-packet one-way delay: 71.791 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 11.47 Mbit/s
  95th percentile per-packet one-way delay: 71.914 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 11.74 Mbit/s
  95th percentile per-packet one-way delay: 70.328 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 10.75 Mbit/s
  95th percentile per-packet one-way delay: 72.843 ms
  Loss rate: 0.66%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2019-01-19 13:40:16
End at: 2019-01-19 13:40:46
Local clock offset: -0.63 ms
Remote clock offset: -2.237 ms

# Below is generated by plot.py at 2019-01-19 14:15:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.75 Mbit/s
95th percentile per-packet one-way delay: 78.062 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 10.04 Mbit/s
95th percentile per-packet one-way delay: 77.489 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 9.86 Mbit/s
95th percentile per-packet one-way delay: 77.969 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 9.61 Mbit/s
95th percentile per-packet one-way delay: 79.645 ms
Loss rate: 0.64%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2019-01-19 11:40:05
End at: 2019-01-19 11:40:35
Local clock offset: 2.174 ms
Remote clock offset: -4.222 ms

# Below is generated by plot.py at 2019-01-19 14:16:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.15 Mbit/s
95th percentile per-packet one-way delay: 171.558 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 162.177 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 35.52 Mbit/s
95th percentile per-packet one-way delay: 181.130 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 45.42 Mbit/s
95th percentile per-packet one-way delay: 171.825 ms
Loss rate: 2.10%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2019-01-19 12:09:45
End at: 2019-01-19 12:10:15
Local clock offset: 0.274 ms
Remote clock offset: -3.108 ms

# Below is generated by plot.py at 2019-01-19 14:16:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.13 Mbit/s
  95th percentile per-packet one-way delay: 148.622 ms
  Loss rate: 1.44%
-- Flow 1:
  Average throughput: 56.81 Mbit/s
  95th percentile per-packet one-way delay: 146.887 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 39.17 Mbit/s
  95th percentile per-packet one-way delay: 157.359 ms
  Loss rate: 1.62%
-- Flow 3:
  Average throughput: 31.01 Mbit/s
  95th percentile per-packet one-way delay: 147.835 ms
  Loss rate: 4.28%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

End at: 2019-01-19 12:40:27
Local clock offset: -0.188 ms
Remote clock offset: -3.328 ms

# Below is generated by plot.py at 2019-01-19 14:16:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.83 Mbit/s
  95th percentile per-packet one-way delay: 151.393 ms
  Loss rate: 0.91%
-- Flow 1:
  Average throughput: 56.57 Mbit/s
  95th percentile per-packet one-way delay: 150.467 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 39.06 Mbit/s
  95th percentile per-packet one-way delay: 164.117 ms
  Loss rate: 1.05%
-- Flow 3:
  Average throughput: 31.01 Mbit/s
  95th percentile per-packet one-way delay: 150.738 ms
  Loss rate: 2.71%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 13:10:33
End at: 2019-01-19 13:11:03
Local clock offset: 0.924 ms
Remote clock offset: -4.645 ms

# Below is generated by plot.py at 2019-01-19 14:16:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.18 Mbit/s
95th percentile per-packet one-way delay: 154.346 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 56.82 Mbit/s
95th percentile per-packet one-way delay: 154.102 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 39.00 Mbit/s
95th percentile per-packet one-way delay: 156.404 ms
Loss rate: 1.99%
-- Flow 3:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 152.168 ms
Loss rate: 4.63%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs. Time (Mbps)]
- Flow 1 ingress (mean 57.12 Mbps)
- Flow 1 egress (mean 56.82 Mbps)
- Flow 2 ingress (mean 39.65 Mbps)
- Flow 2 egress (mean 39.00 Mbps)
- Flow 3 ingress (mean 32.71 Mbps)
- Flow 3 egress (mean 31.42 Mbps)

![Graph 2: Per-packet round-trip delay (ms)]
- Flow 1 (95th percentile 154.10 ms)
- Flow 2 (95th percentile 156.40 ms)
- Flow 3 (95th percentile 152.17 ms)
Run 5: Statistics of TaoVA-100x

Local clock offset: 1.084 ms
Remote clock offset: -2.334 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.18 Mbit/s
  95th percentile per-packet one-way delay: 152.112 ms
  Loss rate: 1.39%
-- Flow 1:
  Average throughput: 56.65 Mbit/s
  95th percentile per-packet one-way delay: 150.203 ms
  Loss rate: 1.06%
-- Flow 2:
  Average throughput: 39.27 Mbit/s
  95th percentile per-packet one-way delay: 162.569 ms
  Loss rate: 1.25%
-- Flow 3:
  Average throughput: 31.44 Mbit/s
  95th percentile per-packet one-way delay: 151.524 ms
  Loss rate: 3.49%
Run 5: Report of TaoVA-100x — Data Link

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

![Diagram 2: Packet delay vs Time](image)
Run 1: Statistics of TCP Vegas

Start at: 2019-01-19 12:03:51
End at: 2019-01-19 12:04:21
Local clock offset: 1.783 ms
Remote clock offset: -3.943 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.82 Mbit/s
  95th percentile per-packet one-way delay: 74.330 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 40.09 Mbit/s
  95th percentile per-packet one-way delay: 75.046 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 46.06 Mbit/s
  95th percentile per-packet one-way delay: 73.893 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 18.42 Mbit/s
  95th percentile per-packet one-way delay: 74.228 ms
  Loss rate: 1.00%
Run 1: Report of TCP Vegas — Data Link

[Graph showing throughput and packet error rate over time for different flows]

- Flow 1 ingress (mean 40.09 Mbit/s)
- Flow 1 egress (mean 40.09 Mbit/s)
- Flow 2 ingress (mean 46.03 Mbit/s)
- Flow 2 egress (mean 46.06 Mbit/s)
- Flow 3 ingress (mean 18.46 Mbit/s)
- Flow 3 egress (mean 18.42 Mbit/s)
Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 12:34:39
End at: 2019-01-19 12:35:09
Local clock offset: 0.043 ms
Remote clock offset: -3.475 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.43 Mbit/s
95th percentile per-packet one-way delay: 75.784 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 23.70 Mbit/s
95th percentile per-packet one-way delay: 74.781 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 39.01 Mbit/s
95th percentile per-packet one-way delay: 86.724 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 29.59 Mbit/s
95th percentile per-packet one-way delay: 76.086 ms
Loss rate: 0.91%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2019-01-19 13:05:24
End at: 2019-01-19 13:05:54
Local clock offset: 0.331 ms
Remote clock offset: -4.933 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.82 Mbit/s
95th percentile per-packet one-way delay: 71.700 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 44.16 Mbit/s
95th percentile per-packet one-way delay: 70.657 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 37.25 Mbit/s
95th percentile per-packet one-way delay: 70.662 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 26.86 Mbit/s
95th percentile per-packet one-way delay: 72.566 ms
Loss rate: 0.80%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

End at: 2019-01-19 13:34:11
Local clock offset: 0.647 ms
Remote clock offset: -2.489 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.96 Mbit/s
95th percentile per-packet one-way delay: 72.964 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 70.864 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 29.29 Mbit/s
95th percentile per-packet one-way delay: 81.263 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 30.69 Mbit/s
95th percentile per-packet one-way delay: 73.862 ms
Loss rate: 0.88%
Run 4: Report of TCP Vegas — Data Link

![Graph showing network performance metrics over time]

- Flow 1 ingress (mean 53.29 Mbit/s)
- Flow 1 egress (mean 53.33 Mbit/s)
- Flow 2 ingress (mean 29.30 Mbit/s)
- Flow 2 egress (mean 29.29 Mbit/s)
- Flow 3 ingress (mean 30.73 Mbit/s)
- Flow 3 egress (mean 30.69 Mbit/s)

- Flow 1 (95th percentile 70.86 ms)
- Flow 2 (95th percentile 81.26 ms)
- Flow 3 (95th percentile 73.86 ms)
Run 5: Statistics of TCP Vegas

Start at: 2019-01-19 14:01:48
End at: 2019-01-19 14:02:18
Local clock offset: 0.796 ms
Remote clock offset: -2.358 ms

# Below is generated by plot.py at 2019-01-19 14:17:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.09 Mbit/s
95th percentile per-packet one-way delay: 75.828 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 42.47 Mbit/s
95th percentile per-packet one-way delay: 78.890 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 38.56 Mbit/s
95th percentile per-packet one-way delay: 74.391 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 30.15 Mbit/s
95th percentile per-packet one-way delay: 77.724 ms
Loss rate: 0.87%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2019-01-19 11:52:37
End at: 2019-01-19 11:53:07
Local clock offset: 0.016 ms
Remote clock offset: -3.409 ms

# Below is generated by plot.py at 2019-01-19 14:17:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.25 Mbit/s
95th percentile per-packet one-way delay: 186.735 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 195.368 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 32.74 Mbit/s
95th percentile per-packet one-way delay: 138.459 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 36.41 Mbit/s
95th percentile per-packet one-way delay: 356.562 ms
Loss rate: 0.83%
Run 1: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - **Flow 1 ingress (mean 46.48 Mbps):**
  - **Flow 1 egress (mean 46.47 Mbps):**
  - **Flow 2 ingress (mean 32.83 Mbps):**
  - **Flow 2 egress (mean 32.74 Mbps):**
  - **Flow 3 ingress (mean 36.70 Mbps):**
  - **Flow 3 egress (mean 36.41 Mbps):**

- **Packet Delay (ms):**
  - **Flow 1 (95th percentile 195.37 ms):**
  - **Flow 2 (95th percentile 138.46 ms):**
  - **Flow 3 (95th percentile 356.56 ms):**
Run 2: Statistics of Verus

Local clock offset: 1.89 ms
Remote clock offset: -3.007 ms

# Below is generated by plot.py at 2019-01-19 14:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.63 Mbit/s
95th percentile per-packet one-way delay: 174.364 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 56.34 Mbit/s
95th percentile per-packet one-way delay: 154.989 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 34.35 Mbit/s
95th percentile per-packet one-way delay: 190.154 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 19.49 Mbit/s
95th percentile per-packet one-way delay: 325.466 ms
Loss rate: 0.90%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 56.40 Mbit/s)
- Flow 1 egress (mean 56.34 Mbit/s)
- Flow 2 ingress (mean 34.36 Mbit/s)
- Flow 2 egress (mean 34.35 Mbit/s)
- Flow 3 ingress (mean 19.71 Mbit/s)
- Flow 3 egress (mean 19.49 Mbit/s)
Run 3: Statistics of Verus

Start at: 2019-01-19 12:53:03
End at: 2019-01-19 12:53:33
Local clock offset: -0.164 ms
Remote clock offset: -3.85 ms

# Below is generated by plot.py at 2019-01-19 14:17:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.41 Mbit/s
  95th percentile per-packet one-way delay: 214.460 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 47.59 Mbit/s
  95th percentile per-packet one-way delay: 193.317 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 34.55 Mbit/s
  95th percentile per-packet one-way delay: 234.765 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 29.74 Mbit/s
  95th percentile per-packet one-way delay: 261.353 ms
  Loss rate: 1.15%
Run 3: Report of Verus — Data Link

![Graph showing network performance metrics]

- **Throughput**: Various flows showing ingress and egress data rates with mean values.
- **Packet Delay**: Graph indicating packet delay with 95th percentile values for each flow.

Flow 1 ingress (mean 47.82 Mbit/s), Flow 1 egress (mean 47.59 Mbit/s), Flow 2 ingress (mean 34.85 Mbit/s), Flow 2 egress (mean 34.35 Mbit/s), Flow 3 ingress (mean 29.88 Mbit/s), Flow 3 egress (mean 29.74 Mbit/s).

Flow 1 (95th percentile 193.32 ms), Flow 2 (95th percentile 234.76 ms), Flow 3 (95th percentile 261.35 ms).
Run 4: Statistics of Verus

Local clock offset: 0.702 ms
Remote clock offset: -3.309 ms

# Below is generated by plot.py at 2019-01-19 14:17:51
# Datalink statistics
--- Total of 3 flows:
Average throughput: 80.87 Mbit/s
95th percentile per-packet one-way delay: 213.783 ms
Loss rate: 0.49%
--- Flow 1:
Average throughput: 46.32 Mbit/s
95th percentile per-packet one-way delay: 174.444 ms
Loss rate: 0.30%
--- Flow 2:
Average throughput: 32.01 Mbit/s
95th percentile per-packet one-way delay: 263.745 ms
Loss rate: 0.51%
--- Flow 3:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 630.581 ms
Loss rate: 1.10%
Run 4: Report of Verus — Data Link

![Graph showing network throughput and packet loss over time for different flows. The graphs illustrate the variation in throughput and delay for three flow categories: Flow 1, Flow 2, and Flow 3. The throughput is measured in Mbps (Megabits per second), and the delay is measured in milliseconds (ms).]

- Flow 1 ingress (mean 46.44 Mbps)
- Flow 1 egress (mean 46.32 Mbps)
- Flow 2 ingress (mean 32.14 Mbps)
- Flow 2 egress (mean 32.01 Mbps)
- Flow 3 ingress (mean 40.31 Mbps)
- Flow 3 egress (mean 40.17 Mbps)
Run 5: Statistics of Verus

Start at: 2019-01-19 13:50:52
Local clock offset: 0.066 ms
Remote clock offset: -1.729 ms

# Below is generated by plot.py at 2019-01-19 14:17:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.73 Mbit/s
  95th percentile per-packet one-way delay: 230.474 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 58.77 Mbit/s
  95th percentile per-packet one-way delay: 174.064 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 29.43 Mbit/s
  95th percentile per-packet one-way delay: 296.562 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 22.31 Mbit/s
  95th percentile per-packet one-way delay: 356.291 ms
  Loss rate: 1.28%
Run 5: Report of Verus — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)
Run 1: Statistics of PCC-Vivace

End at: 2019-01-19 11:50:09
Local clock offset: 2.259 ms
Remote clock offset: -3.421 ms

# Below is generated by plot.py at 2019-01-19 14:18:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.43 Mbit/s
95th percentile per-packet one-way delay: 886.508 ms
Loss rate: 2.80%
-- Flow 1:
Average throughput: 54.67 Mbit/s
95th percentile per-packet one-way delay: 1034.976 ms
Loss rate: 3.97%
-- Flow 2:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: 77.024 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 19.45 Mbit/s
95th percentile per-packet one-way delay: 85.133 ms
Loss rate: 0.88%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

End at: 2019-01-19 12:20:29
Local clock offset: 1.098 ms
Remote clock offset: -2.989 ms

# Below is generated by plot.py at 2019-01-19 14:18:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 1026.834 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 64.75 Mbit/s
95th percentile per-packet one-way delay: 1021.729 ms
Loss rate: 2.10%
-- Flow 2:
Average throughput: 19.52 Mbit/s
95th percentile per-packet one-way delay: 1031.538 ms
Loss rate: 12.81%
-- Flow 3:
Average throughput: 16.00 Mbit/s
95th percentile per-packet one-way delay: 74.749 ms
Loss rate: 1.05%
Run 2: Report of PCC-Vivace — Data Link

![Graph of data link throughput and per-packet delay over time for three flows, with throughput measured in Mbps and delay in ms.]

Throughput (Mbps):

- Flow 1 ingress (mean 65.96 Mbps)
- Flow 1 egress (mean 64.75 Mbps)
- Flow 2 ingress (mean 22.29 Mbps)
- Flow 2 egress (mean 19.52 Mbps)
- Flow 3 ingress (mean 16.04 Mbps)
- Flow 3 egress (mean 16.00 Mbps)

Per-packet one-way delay (ms):

- Flow 1 (95th percentile 1021.73 ms)
- Flow 2 (95th percentile 1031.54 ms)
- Flow 3 (95th percentile 74.75 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 12:50:03
End at: 2019-01-19 12:50:33
Local clock offset: 0.968 ms
Remote clock offset: -3.668 ms

# Below is generated by plot.py at 2019-01-19 14:18:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.37 Mbit/s
95th percentile per-packet one-way delay: 315.182 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 28.88 Mbit/s
95th percentile per-packet one-way delay: 119.170 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 36.94 Mbit/s
95th percentile per-packet one-way delay: 369.903 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 15.04 Mbit/s
95th percentile per-packet one-way delay: 73.552 ms
Loss rate: 1.04%
Run 3: Report of PCC-Vivace — Data Link

![Throughput (Mbps/s) vs Time (s)](image1)

- Flow 1 ingress (mean 28.98 Mbps/s)
- Flow 1 egress (mean 28.88 Mbps/s)
- Flow 2 ingress (mean 37.22 Mbps/s)
- Flow 2 egress (mean 36.94 Mbps/s)
- Flow 3 ingress (mean 15.06 Mbps/s)
- Flow 3 egress (mean 15.04 Mbps/s)

![Packet drop rate vs Time (s)](image2)

- Flow 1 (95th percentile 119.17 ms)
- Flow 2 (95th percentile 369.90 ms)
- Flow 3 (95th percentile 73.55 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 13:19:45
End at: 2019-01-19 13:20:15
Local clock offset: 1.088 ms
Remote clock offset: -3.908 ms

# Below is generated by plot.py at 2019-01-19 14:18:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.94 Mbit/s
95th percentile per-packet one-way delay: 1628.479 ms
Loss rate: 5.03%
-- Flow 1:
Average throughput: 52.09 Mbit/s
95th percentile per-packet one-way delay: 2058.848 ms
Loss rate: 7.18%
-- Flow 2:
Average throughput: 31.06 Mbit/s
95th percentile per-packet one-way delay: 73.885 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 21.93 Mbit/s
95th percentile per-packet one-way delay: 219.552 ms
Loss rate: 1.26%
Run 4: Report of PCC-Vivace — Data Link

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

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 55.99 Mbps)
  - Flow 1 egress (mean 52.09 Mbps)
  - Flow 2 ingress (mean 31.10 Mbps)
  - Flow 2 egress (mean 31.06 Mbps)
  - Flow 3 ingress (mean 22.04 Mbps)
  - Flow 3 egress (mean 21.93 Mbps)

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

- **Delay** (ms):
  - Flow 1 (95th percentile 2058.85 ms)
  - Flow 2 (95th percentile 73.89 ms)
  - Flow 3 (95th percentile 219.55 ms)
Run 5: Statistics of PCC-Vivace

Local clock offset: 0.917 ms
Remote clock offset: -3.921 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.74 Mbit/s
95th percentile per-packet one-way delay: 254.614 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 53.59 Mbit/s
95th percentile per-packet one-way delay: 296.850 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 28.15 Mbit/s
95th percentile per-packet one-way delay: 130.601 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 16.62 Mbit/s
95th percentile per-packet one-way delay: 87.008 ms
Loss rate: 1.31%
Run 5: Report of PCC-Vivace — Data Link

[Graph of Throughput vs Time showing throughput in Mbit/s for different flows.

Graph showing per-packet one-way delay in ms for different flows.

Legend:
- Blue dashed line: Flow 1 ingress (mean 53.68 Mbit/s)
- Blue solid line: Flow 1 egress (mean 53.59 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 28.17 Mbit/s)
- Green solid line: Flow 2 egress (mean 28.15 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 16.69 Mbit/s)
- Red solid line: Flow 3 egress (mean 16.62 Mbit/s)

Legend for delay:
- Blue circle: Flow 1 (95th percentile 296.85 ms)
- Green circle: Flow 2 (95th percentile 130.69 ms)
- Red circle: Flow 3 (95th percentile 87.01 ms)
Run 1: Statistics of WebRTC media

End at: 2019-01-19 11:47:18
Local clock offset: -0.487 ms
Remote clock offset: -4.125 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.87 Mbit/s
95th percentile per-packet one-way delay: 69.289 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: 69.359 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: 67.279 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 0.41 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.88%
Run 1: Report of WebRTC media — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 1.57 Mbit/s)
- Flow 1 egress (mean 1.58 Mbit/s)
- Flow 2 ingress (mean 0.90 Mbit/s)
- Flow 2 egress (mean 0.90 Mbit/s)
- Flow 3 ingress (mean 0.41 Mbit/s)
- Flow 3 egress (mean 0.41 Mbit/s)

![Per-packet one-way delay Graph]

- Flow 1 (95th percentile 69.36 ms)
- Flow 2 (95th percentile 67.28 ms)
- Flow 3 (95th percentile 69.50 ms)
Run 2: Statistics of WebRTC media

Start at: 2019-01-19 12:17:15
End at: 2019-01-19 12:17:45
Local clock offset: 1.142 ms
Remote clock offset: -3.66 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: 71.165 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 69.116 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 71.269 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.28 Mbit/s
95th percentile per-packet one-way delay: 71.350 ms
Loss rate: 2.93%
Run 3: Statistics of WebRTC media

End at: 2019-01-19 12:47:29
Local clock offset: -0.347 ms
Remote clock offset: -3.445 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.94 Mbit/s
95th percentile per-packet one-way delay: 70.891 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 1.64 Mbit/s
95th percentile per-packet one-way delay: 70.939 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: 69.258 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 71.160 ms
Loss rate: 0.83%
Run 3: Report of WebRTC media — Data Link

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

Start at: 2019-01-19 13:17:04
End at: 2019-01-19 13:17:34
Local clock offset: -1.503 ms
Remote clock offset: -4.931 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.80 Mbit/s
  95th percentile per-packet one-way delay: 68.086 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 1.59 Mbit/s
  95th percentile per-packet one-way delay: 67.861 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 0.91 Mbit/s
  95th percentile per-packet one-way delay: 68.279 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 0.32 Mbit/s
  95th percentile per-packet one-way delay: 67.582 ms
  Loss rate: 0.39%
Run 4: Report of WebRTC media — Data Link

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

Legend:
- Flow 1 ingress (mean 1.58 Mbit/s)
- Flow 1 egress (mean 1.59 Mbit/s)
- Flow 2 ingress (mean 0.91 Mbit/s)
- Flow 2 egress (mean 0.91 Mbit/s)
- Flow 3 ingress (mean 0.32 Mbit/s)
- Flow 3 egress (mean 0.32 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 67.86 ms)
- Flow 2 (95th percentile 68.28 ms)
- Flow 3 (95th percentile 67.58 ms)
Run 5: Statistics of WebRTC media

Start at: 2019-01-19 13:45:10
End at: 2019-01-19 13:45:40
Local clock offset: 0.692 ms
Remote clock offset: -1.814 ms

# Below is generated by plot.py at 2019-01-19 14:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.90 Mbit/s
95th percentile per-packet one-way delay: 69.768 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 1.55 Mbit/s
95th percentile per-packet one-way delay: 67.675 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.94 Mbit/s
95th percentile per-packet one-way delay: 69.919 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 70.033 ms
Loss rate: 2.93%
Run 5: Report of WebRTC media — Data Link