Pantheon Report

Data path: Stanford Ethernet (remote) → AWS California 1 Ethernet (local).
Repeated the test of 15 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).
NTP offsets were measured against time.stanford.edu and have been applied to correct the timestamps in logs.

Git summary:

branch: master @ f23294ec38436c9f802847d477a41b7343ec76e6
third_party/calibrated_koho @ 3cb73c0d1c03222cdfae446ea37a522e53227db50
M datagrump/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80bf16c448f795fd6e9675f7177b69622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7c0d0a9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db748450f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa958d38dc4df0e0ecdbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f7541135ed5b540c0fd3505939528e2af5
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad58360c55d89
third_party/koho_cc @ f0f2e693303ae82ea808e6928eac4f1083a6681
M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b17eab4a4906ce6bb7cfc3cf
third_party/pantheon-tunnel @ fb1053193c2861da659b9a9013db26744ccfc993
third_party/pcc @ 1afc958fa0d66d18b623c091a55f3c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c942
third_party/scream @ c3370fd7bd17265a79ae34e4016de23f5965885
third_party/sourdough @ f1a14bffe749737437f61b1eaeeb30b267cde681
third_party/sprout @ 6f2efe6e088d91066a9f023df375eee2665089ce
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c0a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 423cbeca3e8a1d599e7b5cf725835e8a2b6bfac6
third_party/webrtc @ a488197dd041ace68a42849b2540ad83482542
test from Stanford Ethernet to AWS California 1 Ethernet, 10 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>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>542.58</td>
<td>388.67</td>
<td>319.54</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>449.42</td>
<td>358.94</td>
<td>285.15</td>
</tr>
<tr>
<td>LEDBAT</td>
<td>10</td>
<td>309.08</td>
<td>245.88</td>
<td>184.32</td>
</tr>
<tr>
<td>PCC</td>
<td>10</td>
<td>606.13</td>
<td>191.88</td>
<td>172.90</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>SCRReAM</td>
<td>10</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>0.05</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>24.80</td>
<td>24.69</td>
<td>24.54</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>204.70</td>
<td>182.03</td>
<td>122.01</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>247.16</td>
<td>193.30</td>
<td>236.13</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>207.73</td>
<td>170.85</td>
<td>130.91</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>72.49</td>
<td>67.08</td>
<td>60.64</td>
</tr>
<tr>
<td>Indigo-2-256</td>
<td>10</td>
<td>167.56</td>
<td>160.29</td>
<td>95.91</td>
</tr>
<tr>
<td>Indigo-1-32</td>
<td>10</td>
<td>176.50</td>
<td>162.76</td>
<td>146.84</td>
</tr>
<tr>
<td>Indigo-1-128</td>
<td>10</td>
<td>184.98</td>
<td>166.14</td>
<td>120.78</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-01-27 00:27:23
End at: 2018-01-27 00:27:53
Local clock offset: -2.345 ms

# Below is generated by plot.py at 2018-01-27 17:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 842.41 Mbit/s
  95th percentile per-packet one-way delay: 23.631 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 474.38 Mbit/s
  95th percentile per-packet one-way delay: 24.584 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 392.49 Mbit/s
  95th percentile per-packet one-way delay: 20.314 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 321.90 Mbit/s
  95th percentile per-packet one-way delay: 7.855 ms
  Loss rate: 0.27%
Run 2: Statistics of TCP BBR

Start at: 2018-01-27 01:18:09
End at: 2018-01-27 01:18:39
Local clock offset: -3.986 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 929.68 Mbit/s
95th percentile per-packet one-way delay: 10.359 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 563.67 Mbit/s
95th percentile per-packet one-way delay: 10.605 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 389.92 Mbit/s
95th percentile per-packet one-way delay: 9.842 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 322.87 Mbit/s
95th percentile per-packet one-way delay: 9.462 ms
Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 3: Statistics of TCP BBR

Start at: 2018-01-27 02:08:58
End at: 2018-01-27 02:09:28
Local clock offset: -3.07 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 910.11 Mbit/s
  95th percentile per-packet one-way delay: 11.742 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 545.17 Mbit/s
  95th percentile per-packet one-way delay: 13.794 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 389.27 Mbit/s
  95th percentile per-packet one-way delay: 10.164 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 319.55 Mbit/s
  95th percentile per-packet one-way delay: 9.554 ms
  Loss rate: 0.23%
Run 3: Report of TCP BBR — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 545.06 Mbps)  Flow 1 egress (mean 545.17 Mbps)
Flow 2 ingress (mean 389.21 Mbps)  Flow 2 egress (mean 389.27 Mbps)
Flow 3 ingress (mean 319.62 Mbps)  Flow 3 egress (mean 319.55 Mbps)

Per-packet one way delay (ms)

Flow 1 (95th percentile 13.79 ms)  Flow 2 (95th percentile 10.16 ms)  Flow 3 (95th percentile 9.55 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-01-27 02:59:57  
End at: 2018-01-27 03:00:27  
Local clock offset: -2.873 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 901.55 Mbit/s  
95th percentile per-packet one-way delay: 11.109 ms  
Loss rate: 0.08%
-- Flow 1:
Average throughput: 537.48 Mbit/s  
95th percentile per-packet one-way delay: 12.454 ms  
Loss rate: 0.04%
-- Flow 2:
Average throughput: 387.83 Mbit/s  
95th percentile per-packet one-way delay: 9.547 ms  
Loss rate: 0.09%
-- Flow 3:
Average throughput: 320.00 Mbit/s  
95th percentile per-packet one-way delay: 9.332 ms  
Loss rate: 0.22%
Run 4: Report of TCP BBR — Data Link

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

![Graph of per-packet one-way delay for different flows.](image2)
Run 5: Statistics of TCP BBR

Start at: 2018-01-27 03:50:21
End at: 2018-01-27 03:50:51
Local clock offset: -3.257 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 930.66 Mbit/s
  95th percentile per-packet one-way delay: 12.702 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 565.79 Mbit/s
  95th percentile per-packet one-way delay: 10.978 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 390.78 Mbit/s
  95th percentile per-packet one-way delay: 22.204 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 317.24 Mbit/s
  95th percentile per-packet one-way delay: 9.846 ms
  Loss rate: 0.24%
Run 5: Report of TCP BBR — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 565.67 Mbps)
- Flow 1 egress (mean 565.79 Mbps)
- Flow 2 ingress (mean 390.77 Mbps)
- Flow 2 egress (mean 390.78 Mbps)
- Flow 3 ingress (mean 317.31 Mbps)
- Flow 3 egress (mean 317.24 Mbps)

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

- Flow 1 (95th percentile 10.98 ms)
- Flow 2 (95th percentile 22.20 ms)
- Flow 3 (95th percentile 9.05 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-01-27 04:41:09
End at: 2018-01-27 04:41:39
Local clock offset: -3.386 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 908.17 Mbit/s
95th percentile per-packet one-way delay: 10.545 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 543.36 Mbit/s
95th percentile per-packet one-way delay: 10.883 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 389.64 Mbit/s
95th percentile per-packet one-way delay: 10.115 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 318.68 Mbit/s
95th percentile per-packet one-way delay: 9.601 ms
Loss rate: 0.27%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-01-27 05:31:54
End at: 2018-01-27 05:32:24
Local clock offset: -2.071 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 896.66 Mbit/s
95th percentile per-packet one-way delay: 11.311 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 532.63 Mbit/s
95th percentile per-packet one-way delay: 15.641 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 386.79 Mbit/s
95th percentile per-packet one-way delay: 8.329 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 322.03 Mbit/s
95th percentile per-packet one-way delay: 8.316 ms
Loss rate: 0.25%
Run 7: Report of TCP BBR — Data Link

![Graph showing network performance metrics over time](Image)

- **Throughput (Mbps)**:
  - Flow 1 Ingress (mean 532.49 Mbps)
  - Flow 1 Egress (mean 532.63 Mbps)
  - Flow 2 Ingress (mean 386.78 Mbps)
  - Flow 2 Egress (mean 386.79 Mbps)
  - Flow 3 Ingress (mean 322.07 Mbps)
  - Flow 3 Egress (mean 322.03 Mbps)

- **Per-packet one way delay (ms)**:
  - Flow 1 (95th percentile 15.64 ms)
  - Flow 2 (95th percentile 8.33 ms)
  - Flow 3 (95th percentile 8.32 ms)
Run 8: Statistics of TCP BBR

End at: 2018-01-27 06:23:12
Local clock offset: -3.851 ms

# Below is generated by plot.py at 2018-01-27 17:25:21
# Datalink statistics
# Total of 3 flows:
Average throughput: 897.49 Mbit/s
95th percentile per-packet one-way delay: 13.417 ms
Loss rate: 0.08%

-- Flow 1:
Average throughput: 535.93 Mbit/s
95th percentile per-packet one-way delay: 24.214 ms
Loss rate: 0.05%

-- Flow 2:
Average throughput: 385.45 Mbit/s
95th percentile per-packet one-way delay: 10.199 ms
Loss rate: 0.09%

-- Flow 3:
Average throughput: 317.69 Mbit/s
95th percentile per-packet one-way delay: 10.219 ms
Loss rate: 0.21%
Run 8: Report of TCP BBR — Data Link

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

![Graph 2: Packet one way delay (ms)](image2)
Run 9: Statistics of TCP BBR

Start at: 2018-01-27 07:13:40
End at: 2018-01-27 07:14:10
Local clock offset: 1.658 ms

# Below is generated by plot.py at 2018-01-27 17:36:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 924.40 Mbit/s
95th percentile per-packet one-way delay: 5.700 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 561.83 Mbit/s
95th percentile per-packet one-way delay: 5.763 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 388.33 Mbit/s
95th percentile per-packet one-way delay: 11.723 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 314.65 Mbit/s
95th percentile per-packet one-way delay: 3.856 ms
Loss rate: 0.19%
Run 9: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 561.73 Mbps)  Flow 1 egress (mean 561.83 Mbps)
Flow 2 ingress (mean 388.33 Mbps)  Flow 2 egress (mean 388.33 Mbps)
Flow 3 ingress (mean 314.59 Mbps)  Flow 3 egress (mean 314.65 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 5.76 ms)  Flow 2 (95th percentile 11.72 ms)  Flow 3 (95th percentile 3.86 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-01-27 08:04:34
End at: 2018-01-27 08:05:04
Local clock offset: -3.43 ms

# Below is generated by plot.py at 2018-01-27 17:37:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 928.60 Mbit/s
  95th percentile per-packet one-way delay: 10.395 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 565.60 Mbit/s
  95th percentile per-packet one-way delay: 10.678 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 386.16 Mbit/s
  95th percentile per-packet one-way delay: 8.561 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 320.81 Mbit/s
  95th percentile per-packet one-way delay: 7.982 ms
  Loss rate: 0.25%
Run 10: Report of TCP BBR — Data Link

![Throughput Graph]

![Delay Graph]
Run 1: Statistics of TCP Cubic

Start at: 2018-01-27 00:43:03
End at: 2018-01-27 00:43:33
Local clock offset: -2.869 ms

# Below is generated by plot.py at 2018-01-27 17:37:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 32.17 Mbit/s
  95th percentile per-packet one-way delay: 6.119 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 14.83 Mbit/s
  95th percentile per-packet one-way delay: 6.117 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 18.71 Mbit/s
  95th percentile per-packet one-way delay: 6.119 ms
  Loss rate: 0.44%
-- Flow 3:
  Average throughput: 14.80 Mbit/s
  95th percentile per-packet one-way delay: 6.123 ms
  Loss rate: 0.51%
Run 1: Report of TCP Cubic — Data Link

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

Flow 1 ingress (mean 14.91 Mbps)
Flow 1 egress (mean 14.83 Mbps)
Flow 2 ingress (mean 18.77 Mbps)
Flow 2 egress (mean 18.71 Mbps)
Flow 3 ingress (mean 14.85 Mbps)
Flow 3 egress (mean 14.80 Mbps)

![Graph 2: Packet round-trip delay (ms)](image2)

Flow 1 (95th percentile 6.12 ms)
Flow 2 (95th percentile 6.12 ms)
Flow 3 (95th percentile 6.12 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-01-27 01:33:48
End at: 2018-01-27 01:34:18
Local clock offset: -2.892 ms

# Below is generated by plot.py at 2018-01-27 17:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 836.29 Mbit/s
95th percentile per-packet one-way delay: 8.738 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 477.47 Mbit/s
95th percentile per-packet one-way delay: 8.698 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 381.94 Mbit/s
95th percentile per-packet one-way delay: 8.757 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 317.01 Mbit/s
95th percentile per-packet one-way delay: 8.793 ms
Loss rate: 0.24%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-01-27 02:24:41
End at: 2018-01-27 02:25:11
Local clock offset: -3.178 ms

# Below is generated by plot.py at 2018-01-27 17:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 893.26 Mbit/s
95th percentile per-packet one-way delay: 12.071 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 517.55 Mbit/s
95th percentile per-packet one-way delay: 12.261 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 411.87 Mbit/s
95th percentile per-packet one-way delay: 9.610 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 306.83 Mbit/s
95th percentile per-packet one-way delay: 9.721 ms
Loss rate: 0.24%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-01-27 03:15:14
End at: 2018-01-27 03:15:44
Local clock offset: -2.01 ms

# Below is generated by plot.py at 2018-01-27 17:37:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 829.57 Mbit/s
95th percentile per-packet one-way delay: 8.575 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 468.83 Mbit/s
95th percentile per-packet one-way delay: 8.977 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 384.97 Mbit/s
95th percentile per-packet one-way delay: 8.439 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 315.91 Mbit/s
95th percentile per-packet one-way delay: 8.447 ms
Loss rate: 0.23%
Run 4: Report of TCP Cubic — Data Link

![Graph showing Throughput and Per-packet one-way delay](imageURL)

- Flow 1 (ingress mean 468.72 Mbps, egress mean 468.83 Mbps)
- Flow 2 (ingress mean 384.93 Mbps, egress mean 384.97 Mbps)
- Flow 3 (ingress mean 315.94 Mbps, egress mean 315.91 Mbps)
Run 5: Statistics of TCP Cubic

Start at: 2018-01-27 04:06:00
End at: 2018-01-27 04:06:30
Local clock offset: -3.697 ms

# Below is generated by plot.py at 2018-01-27 17:37:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 912.65 Mbit/s
95th percentile per-packet one-way delay: 11.753 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 541.35 Mbit/s
95th percentile per-packet one-way delay: 11.862 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 399.95 Mbit/s
95th percentile per-packet one-way delay: 9.790 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 316.86 Mbit/s
95th percentile per-packet one-way delay: 9.785 ms
Loss rate: 0.23%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 541.25 Mbps)
- Flow 1 egress (mean 541.35 Mbps)
- Flow 2 ingress (mean 399.93 Mbps)
- Flow 2 egress (mean 399.95 Mbps)
- Flow 3 ingress (mean 316.89 Mbps)
- Flow 3 egress (mean 316.96 Mbps)
Run 6: Statistics of TCP Cubic

Start at: 2018-01-27 04:56:47
End at: 2018-01-27 04:57:17
Local clock offset: -3.138 ms

# Below is generated by plot.py at 2018-01-27 17:37:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 919.54 Mbit/s
95th percentile per-packet one-way delay: 17.850 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 554.96 Mbit/s
95th percentile per-packet one-way delay: 18.394 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 389.97 Mbit/s
95th percentile per-packet one-way delay: 9.445 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 317.35 Mbit/s
95th percentile per-packet one-way delay: 9.496 ms
Loss rate: 0.22%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-01-27 05:47:27
End at: 2018-01-27 05:47:57
Local clock offset: -1.764 ms

# Below is generated by plot.py at 2018-01-27 17:37:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 860.52 Mbit/s
95th percentile per-packet one-way delay: 8.174 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 490.22 Mbit/s
95th percentile per-packet one-way delay: 8.121 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 400.47 Mbit/s
95th percentile per-packet one-way delay: 8.202 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 314.88 Mbit/s
95th percentile per-packet one-way delay: 8.248 ms
Loss rate: 0.23%
Run 7: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 490.00 Mbps)
- Flow 1 egress (mean 490.22 Mbps)
- Flow 2 ingress (mean 400.33 Mbps)
- Flow 2 egress (mean 400.47 Mbps)
- Flow 3 ingress (mean 314.60 Mbps)
- Flow 3 egress (mean 314.88 Mbps)

![Graph of Per-packet end-to-end delay (ms)](image)

- Flow 1 (95th percentile 8.12 ms)
- Flow 2 (95th percentile 8.20 ms)
- Flow 3 (95th percentile 8.25 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-01-27 06:38:25
End at: 2018-01-27 06:38:55
Local clock offset: -4.291 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 882.73 Mbit/s
  95th percentile per-packet one-way delay: 12.556 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 511.36 Mbit/s
  95th percentile per-packet one-way delay: 12.788 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 400.87 Mbit/s
  95th percentile per-packet one-way delay: 10.318 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 316.25 Mbit/s
  95th percentile per-packet one-way delay: 10.291 ms
  Loss rate: 0.35%
Run 8: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for three different flows.](image-url)
Run 9: Statistics of TCP Cubic

Start at: 2018-01-27 07:29:21
End at: 2018-01-27 07:29:51
Local clock offset: 3.674 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 806.58 Mbit/s
95th percentile per-packet one-way delay: 3.262 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 437.39 Mbit/s
95th percentile per-packet one-way delay: 3.247 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 399.73 Mbit/s
95th percentile per-packet one-way delay: 3.282 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 311.63 Mbit/s
95th percentile per-packet one-way delay: 3.265 ms
Loss rate: 0.23%
Run 9: Report of TCP Cubic — Data Link

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

![Graph 2: Percentiles vs Time](image2)
Run 10: Statistics of TCP Cubic

Start at: 2018-01-27 08:20:13
End at: 2018-01-27 08:20:43
Local clock offset: 1.291 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 853.26 Mbit/s
95th percentile per-packet one-way delay: 4.420 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 480.23 Mbit/s
95th percentile per-packet one-way delay: 7.234 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 400.93 Mbit/s
95th percentile per-packet one-way delay: 4.244 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 319.94 Mbit/s
95th percentile per-packet one-way delay: 4.291 ms
Loss rate: 0.24%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-01-27 00:17:46
End at: 2018-01-27 00:18:16
Local clock offset: -2.58 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 525.82 Mbit/s
95th percentile per-packet one-way delay: 6.579 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 309.26 Mbit/s
95th percentile per-packet one-way delay: 6.161 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 242.73 Mbit/s
95th percentile per-packet one-way delay: 7.231 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 166.61 Mbit/s
95th percentile per-packet one-way delay: 5.541 ms
Loss rate: 0.44%
Run 1: Report of LEDBAT — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 309.15 Mbps)  
Flow 1 egress (mean 309.26 Mbps)  
Flow 2 ingress (mean 242.69 Mbps)  
Flow 2 egress (mean 242.73 Mbps)  
Flow 3 ingress (mean 167.03 Mbps)  
Flow 3 egress (mean 166.61 Mbps)

Packet inter-packet delay (ms)

Time (s)

- Flow 1 (95th percentile 6.16 ms)
- Flow 2 (95th percentile 7.23 ms)
- Flow 3 (95th percentile 5.54 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-01-27 01:08:30
End at: 2018-01-27 01:09:00
Local clock offset: -4.214 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 531.58 Mbit/s
95th percentile per-packet one-way delay: 8.008 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 317.29 Mbit/s
95th percentile per-packet one-way delay: 8.044 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 234.19 Mbit/s
95th percentile per-packet one-way delay: 7.753 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 177.05 Mbit/s
95th percentile per-packet one-way delay: 8.331 ms
Loss rate: 0.23%
Run 2: Report of LEDBAT — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Time (s) on the x-axis, ranging from 0 to 30.
  - Throughput in Mbps on the y-axis, ranging from 0 to 400.

**Graph 2:**
- **Round-trip Time (ms):**
  - Time (s) on the x-axis, ranging from 0 to 30.
  - Round-trip time in ms on the y-axis, ranging from 0 to 25.

Legend for Graph 1:
- **Flow 1 ingress (mean 317.38 Mbps):** Blue dashed line.
- **Flow 1 egress (mean 317.29 Mbps):** Blue solid line.
- **Flow 2 ingress (mean 234.10 Mbps):** Green dashed line.
- **Flow 2 egress (mean 234.19 Mbps):** Green solid line.
- **Flow 3 ingress (mean 177.02 Mbps):** Red dashed line.
- **Flow 3 egress (mean 177.05 Mbps):** Red solid line.

Legend for Graph 2:
- **Flow 1 (95th percentile 8.04 ms):** Blue circle.
- **Flow 2 (95th percentile 7.75 ms):** Green circle.
- **Flow 3 (95th percentile 8.33 ms):** Red circle.
Run 3: Statistics of LEDBAT

Start at: 2018-01-27 01:59:21
End at: 2018-01-27 01:59:51
Local clock offset: -2.951 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.33 Mbit/s
95th percentile per-packet one-way delay: 9.117 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 306.70 Mbit/s
95th percentile per-packet one-way delay: 9.000 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 254.56 Mbit/s
95th percentile per-packet one-way delay: 10.184 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 181.94 Mbit/s
95th percentile per-packet one-way delay: 7.141 ms
Loss rate: 0.46%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-01-27 02:50:21
End at: 2018-01-27 02:50:51
Local clock offset: -3.238 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 521.19 Mbit/s
  95th percentile per-packet one-way delay: 8.482 ms
  Loss rate: 0.11%
-- Flow 1:
  Average throughput: 274.52 Mbit/s
  95th percentile per-packet one-way delay: 8.333 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 275.65 Mbit/s
  95th percentile per-packet one-way delay: 8.989 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 192.17 Mbit/s
  95th percentile per-packet one-way delay: 7.789 ms
  Loss rate: 0.47%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-01-27 03:40:47
End at: 2018-01-27 03:41:17
Local clock offset: -2.739 ms

# Below is generated by plot.py at 2018-01-27 17:48:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 535.63 Mbit/s
95th percentile per-packet one-way delay: 8.368 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 299.94 Mbit/s
95th percentile per-packet one-way delay: 7.309 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 254.10 Mbit/s
95th percentile per-packet one-way delay: 9.680 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 201.94 Mbit/s
95th percentile per-packet one-way delay: 7.182 ms
Loss rate: 0.40%
Run 5: Report of LEDBAT — Data Link

\begin{figure}
\centering
\includegraphics[width=\textwidth]{throughput.png}
\caption{Throughput (Mbps) over time for different flows.}
\end{figure}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{delay.png}
\caption{Packet delay (ms) over time for different flows.}
\end{figure}
Run 6: Statistics of LEDBAT

Start at: 2018-01-27 04:31:33
End at: 2018-01-27 04:32:03
Local clock offset: -3.37 ms

# Below is generated by plot.py at 2018-01-27 17:51:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 538.35 Mbit/s
95th percentile per-packet one-way delay: 10.291 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 317.46 Mbit/s
95th percentile per-packet one-way delay: 10.764 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 238.28 Mbit/s
95th percentile per-packet one-way delay: 7.722 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 188.89 Mbit/s
95th percentile per-packet one-way delay: 7.881 ms
Loss rate: 0.40%
Run 6: Report of LEDBAT — Data Link

![Graph 1: Throughput over time for different flows](image1)

![Graph 2: Per-packet round-trip delay over time for different flows](image2)
Run 7: Statistics of LEDBAT

End at: 2018-01-27 05:22:49
Local clock offset: -2.456 ms

# Below is generated by plot.py at 2018-01-27 17:52:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 526.73 Mbit/s
95th percentile per-packet one-way delay: 6.843 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 311.38 Mbit/s
95th percentile per-packet one-way delay: 7.155 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 230.39 Mbit/s
95th percentile per-packet one-way delay: 6.663 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 188.07 Mbit/s
95th percentile per-packet one-way delay: 6.421 ms
Loss rate: 0.25%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-01-27 06:13:05
End at: 2018-01-27 06:13:35
Local clock offset: -3.716 ms

# Below is generated by plot.py at 2018-01-27 17:52:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 545.55 Mbit/s
  95th percentile per-packet one-way delay: 8.092 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 323.67 Mbit/s
  95th percentile per-packet one-way delay: 8.376 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 247.33 Mbit/s
  95th percentile per-packet one-way delay: 7.877 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 173.06 Mbit/s
  95th percentile per-packet one-way delay: 7.737 ms
  Loss rate: 0.27%
Run 8: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per-packet one-way delay vs Time](image2)
Run 9: Statistics of LEDBAT

Start at: 2018-01-27 07:04:03
End at: 2018-01-27 07:04:33
Local clock offset: -0.648 ms

# Below is generated by plot.py at 2018-01-27 17:52:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 543.15 Mbit/s
95th percentile per-packet one-way delay: 5.212 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 325.85 Mbit/s
95th percentile per-packet one-way delay: 4.450 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 232.17 Mbit/s
95th percentile per-packet one-way delay: 6.665 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 190.47 Mbit/s
95th percentile per-packet one-way delay: 3.777 ms
Loss rate: 0.41%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-01-27 07:54:58
Local clock offset: -3.002 ms

# Below is generated by plot.py at 2018-01-27 17:52:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 531.07 Mbit/s
  95th percentile per-packet one-way delay: 8.683 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 304.74 Mbit/s
  95th percentile per-packet one-way delay: 9.700 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 249.36 Mbit/s
  95th percentile per-packet one-way delay: 7.111 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 183.01 Mbit/s
  95th percentile per-packet one-way delay: 6.802 ms
  Loss rate: 0.30%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Start at: 2018-01-27 00:46:00
End at: 2018-01-27 00:46:30
Local clock offset: -3.159 ms

# Below is generated by plot.py at 2018-01-27 17:54:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 555.49 Mbit/s
95th percentile per-packet one-way delay: 6.721 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 481.15 Mbit/s
95th percentile per-packet one-way delay: 6.746 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 72.51 Mbit/s
95th percentile per-packet one-way delay: 6.673 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 79.45 Mbit/s
95th percentile per-packet one-way delay: 6.495 ms
Loss rate: 1.31%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-01-27 01:37:13
End at: 2018-01-27 01:37:43
Local clock offset: -2.687 ms

# Below is generated by plot.py at 2018-01-27 17:57:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 680.89 Mbit/s
95th percentile per-packet one-way delay: 8.449 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 485.69 Mbit/s
95th percentile per-packet one-way delay: 19.487 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 236.91 Mbit/s
95th percentile per-packet one-way delay: 7.050 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 114.68 Mbit/s
95th percentile per-packet one-way delay: 7.034 ms
Loss rate: 0.19%
Run 2: Report of PCC — Data Link

![Graphs showing network performance metrics for flows 1, 2, and 3.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 485.72 Mbps)
  - Flow 1 egress (mean 485.69 Mbps)
  - Flow 2 ingress (mean 236.78 Mbps)
  - Flow 2 egress (mean 236.91 Mbps)
  - Flow 3 ingress (mean 114.66 Mbps)
  - Flow 3 egress (mean 114.68 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 19.49 ms)
  - Flow 2 (95th percentile 7.05 ms)
  - Flow 3 (95th percentile 7.03 ms)
Run 3: Statistics of PCC

Start at: 2018-01-27 02:28:09
End at: 2018-01-27 02:28:39
Local clock offset: -3.158 ms

# Below is generated by plot.py at 2018-01-27 17:58:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 810.13 Mbit/s
95th percentile per-packet one-way delay: 8.570 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 563.84 Mbit/s
95th percentile per-packet one-way delay: 10.131 ms
Loss rate: 1.35%
-- Flow 2:
Average throughput: 366.04 Mbit/s
95th percentile per-packet one-way delay: 8.380 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 10.05 Mbit/s
95th percentile per-packet one-way delay: 7.556 ms
Loss rate: 0.24%
Run 3: Report of PCC — Data Link

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

- Flow 1 Ingress (mean 571.09 Mbps/s)
- Flow 1 Egress (mean 563.84 Mbps/s)
- Flow 2 Ingress (mean 365.91 Mbps/s)
- Flow 2 Egress (mean 366.04 Mbps/s)
- Flow 3 Ingress (mean 10.05 Mbps/s)
- Flow 3 Egress (mean 10.05 Mbps/s)

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

- Flow 1 (95th percentile 10.13 ms)
- Flow 2 (95th percentile 8.38 ms)
- Flow 3 (95th percentile 7.56 ms)
Run 4: Statistics of PCC

Start at: 2018-01-27 03:18:40
End at: 2018-01-27 03:19:10
Local clock offset: -1.897 ms

# Below is generated by plot.py at 2018-01-27 18:05:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 904.75 Mbit/s
95th percentile per-packet one-way delay: 7.303 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 564.75 Mbit/s
95th percentile per-packet one-way delay: 6.981 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 386.61 Mbit/s
95th percentile per-packet one-way delay: 7.372 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 253.34 Mbit/s
95th percentile per-packet one-way delay: 7.700 ms
Loss rate: 0.15%
Run 4: Report of PCC — Data Link

Throughput (Mb/s) vs Time (s)

Flow 1 Ingress (mean 564.52 Mb/s) vs Flow 1 Egress (mean 564.75 Mb/s)
Flow 2 Ingress (mean 386.56 Mb/s) vs Flow 2 Egress (mean 386.63 Mb/s)
Flow 3 Ingress (mean 253.23 Mb/s) vs Flow 3 Egress (mean 253.34 Mb/s)

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

Flow 1 (99th percentile 6.98 ms) vs Flow 2 (99th percentile 7.37 ms) vs Flow 3 (99th percentile 7.70 ms)

71
Run 5: Statistics of PCC

Start at: 2018-01-27 04:09:29
End at: 2018-01-27 04:09:59
Local clock offset: -3.439 ms

# Below is generated by plot.py at 2018-01-27 18:05:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 812.90 Mbit/s
95th percentile per-packet one-way delay: 7.682 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 588.26 Mbit/s
95th percentile per-packet one-way delay: 7.588 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 220.44 Mbit/s
95th percentile per-packet one-way delay: 7.904 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 238.05 Mbit/s
95th percentile per-packet one-way delay: 7.919 ms
Loss rate: 0.20%
Run 5: Report of PCC — Data Link

![Graph of throughput and packet one-way delay over time]

- Flow 1 ingress (mean 588.06 Mbit/s) — Flow 1 egress (mean 588.26 Mbit/s)
- Flow 2 ingress (mean 220.45 Mbit/s) — Flow 2 egress (mean 220.44 Mbit/s)
- Flow 3 ingress (mean 238.08 Mbit/s) — Flow 3 egress (mean 238.05 Mbit/s)
Run 6: Statistics of PCC

Start at: 2018-01-27 05:00:16
End at: 2018-01-27 05:00:46
Local clock offset: -3.222 ms

# Below is generated by plot.py at 2018-01-27 18:05:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 753.22 Mbit/s
95th percentile per-packet one-way delay: 7.265 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 660.02 Mbit/s
95th percentile per-packet one-way delay: 7.303 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 97.03 Mbit/s
95th percentile per-packet one-way delay: 7.025 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 6.975 ms
Loss rate: 0.33%
Run 6: Report of PCC — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 Ingress (mean 659.76 Mbps)
- Flow 1 Egress (mean 660.02 Mbps)
- Flow 2 Ingress (mean 97.10 Mbps)
- Flow 2 Egress (mean 97.03 Mbps)
- Flow 3 Ingress (mean 87.27 Mbps)
- Flow 3 Egress (mean 87.15 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (99th percentile 7.30 ms)
- Flow 2 (99th percentile 7.03 ms)
- Flow 3 (99th percentile 6.97 ms)
Run 7: Statistics of PCC

Start at: 2018-01-27 05:50:54
End at: 2018-01-27 05:51:24
Local clock offset: -2.215 ms

# Below is generated by plot.py at 2018-01-27 18:05:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 823.74 Mbit/s
95th percentile per-packet one-way delay: 6.709 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 677.25 Mbit/s
95th percentile per-packet one-way delay: 6.656 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 101.80 Mbit/s
95th percentile per-packet one-way delay: 6.543 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 239.68 Mbit/s
95th percentile per-packet one-way delay: 6.853 ms
Loss rate: 0.17%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-01-27 06:41:53
End at: 2018-01-27 06:42:23
Local clock offset: -4.277 ms

# Below is generated by plot.py at 2018-01-27 18:05:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 835.26 Mbit/s
95th percentile per-packet one-way delay: 9.118 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 612.45 Mbit/s
95th percentile per-packet one-way delay: 12.795 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 264.27 Mbit/s
95th percentile per-packet one-way delay: 8.734 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 144.10 Mbit/s
95th percentile per-packet one-way delay: 8.926 ms
Loss rate: 0.25%
Run 8: Report of PCC — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 621.96 Mbps)
- Flow 2 ingress (mean 264.22 Mbps)
- Flow 3 ingress (mean 144.18 Mbps)
- Flow 1 egress (mean 612.45 Mbps)
- Flow 2 egress (mean 264.27 Mbps)
- Flow 3 egress (mean 144.10 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 12.79 ms)
- Flow 2 (95th percentile 8.73 ms)
- Flow 3 (95th percentile 8.93 ms)
Run 9: Statistics of PCC

Start at: 2018-01-27 07:32:47
End at: 2018-01-27 07:33:17
Local clock offset: 2.172 ms

# Below is generated by plot.py at 2018-01-27 18:07:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 832.27 Mbit/s
95th percentile per-packet one-way delay: 3.975 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 693.09 Mbit/s
95th percentile per-packet one-way delay: 3.968 ms
Loss rate: 0.74%
-- Flow 2:
Average throughput: 42.44 Mbit/s
95th percentile per-packet one-way delay: 3.835 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 338.65 Mbit/s
95th percentile per-packet one-way delay: 4.004 ms
Loss rate: 0.12%
Run 9: Report of PCC — Data Link

![Graph showing network performance metrics with time (s) on the x-axis and throughput (Mbps) on the y-axis, and packet processing time (ms) and 95th percentile values for different network flows.]
Run 10: Statistics of PCC

Start at: 2018-01-27 08:23:40
End at: 2018-01-27 08:24:10
Local clock offset: 1.827 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 895.19 Mbit/s
95th percentile per-packet one-way delay: 2.097 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 734.78 Mbit/s
95th percentile per-packet one-way delay: 2.043 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 130.73 Mbit/s
95th percentile per-packet one-way delay: 2.126 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 223.83 Mbit/s
95th percentile per-packet one-way delay: 2.256 ms
Loss rate: 0.18%
Run 10: Report of PCC — Data Link

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

- **Throughput (Mbps)**
  - Blue line: Flow 1 ingress (mean 734.24 Mbps)
  - Dashed blue line: Flow 1 egress (mean 734.78 Mbps)
  - Green line: Flow 2 ingress (mean 130.79 Mbps)
  - Red line: Flow 2 egress (mean 130.73 Mbps)
  - Red dashed line: Flow 3 ingress (mean 223.80 Mbps)
  - Red dotted line: Flow 3 egress (mean 223.83 Mbps)

- **Per-packet one way delay (ms)**
  - Black line: Flow 1 (95th percentile 2.04 ms)
  - Green line: Flow 2 (95th percentile 2.13 ms)
  - Red line: Flow 3 (95th percentile 2.26 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-27 00:14:51
End at: 2018-01-27 00:15:21
Local clock offset: -2.643 ms
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-27 01:05:35
End at: 2018-01-27 01:06:05
Local clock offset: -4.132 ms
Run 2: Report of QUIC Cubic — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 0.81 Mbps)**
- **Flow 1 egress (mean 0.81 Mbps)**
- **Flow 2 ingress (mean 0.79 Mbps)**
- **Flow 2 egress (mean 0.79 Mbps)**
- **Flow 3 ingress (mean 0.85 Mbps)**
- **Flow 3 egress (mean 0.85 Mbps)**

**Packet delay (ms)**

- **Flow 1 (95th percentile 6.55 ms)**
- **Flow 2 (95th percentile 6.50 ms)**
- **Flow 3 (95th percentile 6.55 ms)**
Run 3: Statistics of QUIC Cubic

Start at: 2018-01-27 01:56:26
End at: 2018-01-27 01:56:56
Local clock offset: -2.935 ms
Run 3: Report of QUIC Cubic — Data Link

---

**Graph 1:**
- **X-axis:** Time (s)
- **Y-axis:** Throughput (Mbps)
- Lines represent different flows:
  - Flow 1 Ingress (mean 0.81 Mbps)
  - Flow 1 Egress (mean 0.82 Mbps)
  - Flow 2 Ingress (mean 0.79 Mbps)
  - Flow 2 Egress (mean 0.80 Mbps)
  - Flow 3 Ingress (mean 0.80 Mbps)
  - Flow 3 Egress (mean 0.80 Mbps)

**Graph 2:**
- **X-axis:** Time (s)
- **Y-axis:** Per-packet one way delay (ms)
- Symbols represent different flows:
  - Flow 1 (95th percentile 5.77 ms)
  - Flow 2 (95th percentile 5.87 ms)
  - Flow 3 (95th percentile 5.89 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-01-27 02:47:26
End at: 2018-01-27 02:47:56
Local clock offset: -3.22 ms
Run 4: Report of QUIC Cubic — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 0.86 Mbit/s)
- Flow 1 egress (mean 0.87 Mbit/s)
- Flow 2 ingress (mean 0.85 Mbit/s)
- Flow 2 egress (mean 0.85 Mbit/s)
- Flow 3 ingress (mean 0.79 Mbit/s)
- Flow 3 egress (mean 0.80 Mbit/s)

---

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

- Flow 1 (95th percentile 6.48 ms)
- Flow 2 (95th percentile 6.44 ms)
- Flow 3 (95th percentile 6.51 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-01-27 03:37:52
End at: 2018-01-27 03:38:22
Local clock offset: -2.54 ms
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

End at: 2018-01-27 04:29:09
Local clock offset: -3.261 ms
Run 6: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 Ingress (mean 0.87 Mbps)
  - Flow 1 Egress (mean 0.86 Mbps)
  - Flow 2 Ingress (mean 0.79 Mbps)
  - Flow 2 Egress (mean 0.80 Mbps)
  - Flow 3 Ingress (mean 0.79 Mbps)
  - Flow 3 Egress (mean 0.80 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 6.21 ms)
  - Flow 2 (95th percentile 6.33 ms)
  - Flow 3 (95th percentile 6.24 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-01-27 05:19:23
End at: 2018-01-27 05:19:53
Local clock offset: -2.647 ms
Run 7: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one way delay over time for flows with different ingress and egress speeds.](image-url)
Run 8: Statistics of QUIC Cubic

Start at: 2018-01-27 06:10:10
End at: 2018-01-27 06:10:40
Local clock offset: -3.592 ms
Run 8: Report of QUIC Cubic — Data Link

![Graph 1: Throughout (Mbps)]

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

Start at: 2018-01-27 07:01:07
End at: 2018-01-27 07:01:37
Local clock offset: -1.946 ms
Run 9: Report of QUIC Cubic — Data Link

The diagram shows the throughput and per-packet one-way delay for three flows over time. The throughput is measured in Mbps, and the per-packet one-way delay is measured in ms.

- Flow 1: Ingress (mean 0.82 Mbps) and Egress (mean 0.82 Mbps)
- Flow 2: Ingress (mean 0.80 Mbps) and Egress (mean 0.76 Mbps)
- Flow 3: Ingress (mean 0.81 Mbps) and Egress (mean 0.81 Mbps)

The throughput graph shows a stable performance with slight variations over time, while the per-packet one-way delay graph indicates a consistent delay across all flows.
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-27 07:52:03  
End at: 2018-01-27 07:52:33  
Local clock offset: -2.783 ms
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-01-27 00:40:07
End at: 2018-01-27 00:40:37
Local clock offset: -2.614 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.25 Mbit/s
  95th percentile per-packet one-way delay: 5.908 ms
  Loss rate: 1.09%
-- Flow 1:
  Average throughput: 0.10 Mbit/s
  95th percentile per-packet one-way delay: 5.897 ms
  Loss rate: 1.18%
-- Flow 2:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 5.909 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 5.926 ms
  Loss rate: 0.86%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-01-27 01:30:52
End at: 2018-01-27 01:31:22
Local clock offset: -2.866 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 5.609 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 5.621 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 5.612 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 5.594 ms
  Loss rate: 0.35%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-01-27 02:21:46
End at: 2018-01-27 02:22:16
Local clock offset: -3.169 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 6.546 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.546 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.556 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.521 ms
  Loss rate: 0.35%
Run 3: Report of SCReAM — Data Link

[Graph showing throughput (Mbps) over time with different flows indicated]

[Graph showing per-packet one-way delay (ms) over time with different flows indicated]
Run 4: Statistics of SCReAM

Start at: 2018-01-27 03:12:19
End at: 2018-01-27 03:12:49
Local clock offset: -2.025 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 5.413 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 5.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 5.378 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 5.399 ms
Loss rate: 0.35%
Run 5: Statistics of SCReAM

Start at: 2018-01-27 04:03:05
End at: 2018-01-27 04:03:35
Local clock offset: -3.61 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 6.790 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.818 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 6.778 ms
Loss rate: 0.35%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-01-27 04:53:52
End at: 2018-01-27 04:54:22
Local clock offset: -3.154 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 6.333 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.323 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.342 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 6.334 ms
  Loss rate: 0.35%
Run 7: Statistics of SCReAM

Start at: 2018-01-27 05:44:31
End at: 2018-01-27 05:45:01
Local clock offset: -1.736 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 4.685 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.691 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.685 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 4.649 ms
Loss rate: 0.35%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-01-27 06:35:30
End at: 2018-01-27 06:36:00
Local clock offset: -4.148 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 7.082 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.081 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.070 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 7.104 ms
Loss rate: 0.35%
Run 8: Report of SCReAM — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 0.22 Mb/s)  Flow 1 egress (mean 0.22 Mb/s)
Flow 2 ingress (mean 0.22 Mb/s)  Flow 2 egress (mean 0.22 Mb/s)
Flow 3 ingress (mean 0.22 Mb/s)  Flow 3 egress (mean 0.22 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 7.08 ms)  Flow 2 (95th percentile 7.07 ms)  Flow 3 (95th percentile 7.10 ms)
Run 9: Statistics of SCReAM

Start at: 2018-01-27 07:26:25
End at: 2018-01-27 07:26:55
Local clock offset: 3.398 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: -0.820 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -0.815 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -0.820 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -0.832 ms
  Loss rate: 0.35%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-01-27 08:17:18
End at: 2018-01-27 08:17:48
Local clock offset: 0.807 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 1.377 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.387 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.359 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.350 ms
  Loss rate: 0.35%
Run 10: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per packet one-way delay (ms)

Flow 1 (95th percentile 1.39 ms)
Flow 2 (95th percentile 1.36 ms)
Flow 3 (95th percentile 1.35 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-01-27 00:37:12
End at: 2018-01-27 00:37:42
Local clock offset: -2.555 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 5.577 ms
  Loss rate: 3.27%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 5.560 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 5.591 ms
  Loss rate: 8.37%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 5.551 ms
  Loss rate: 0.05%
Run 1: Report of WebRTC media — Data Link

![Graph of throughput over time for different flows]

![Graph of per-packet one-way delay over time for different flows]
Run 2: Statistics of WebRTC media

Start at: 2018-01-27 01:27:57
End at: 2018-01-27 01:28:27
Local clock offset: -3.031 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 5.629 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.666 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.630 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 5.578 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

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

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 5.67 ms)
  - Flow 2 (95th percentile 5.63 ms)
  - Flow 3 (95th percentile 5.58 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-01-27 02:18:51
End at: 2018-01-27 02:19:21
Local clock offset: -3.215 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 6.583 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.516 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.430 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

![Graph of throughput and packet round-trip time](image)

Throughput (Mbit/s) vs Time (s)

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

Packet round-trip time (ms) vs Time (s)

* Flow 1 (95th percentile 6.64 ms)  Flow 2 (95th percentile 6.52 ms)  Flow 3 (95th percentile 6.43 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-01-27 03:09:23
End at: 2018-01-27 03:09:53
Local clock offset: -2.122 ms
Remote clock offset: 2.172 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 1.185 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.198 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.204 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.148 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-01-27 04:00:09
End at: 2018-01-27 04:00:39
Local clock offset: -3.627 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 6.694 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.658 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.699 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.703 ms
Loss rate: 0.05%
Run 5: Report of WebRTC media — Data Link

![Throughput Graph]

![Delay Graph]
Run 6: Statistics of WebRTC media

Start at: 2018-01-27 04:50:57
End at: 2018-01-27 04:51:27
Local clock offset: -3.15 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 6.263 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 6.245 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 6.286 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 6.256 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

![Graph showing throughput and packet round-trip time](image)

**Throughput** (Mbps):
- Blue line: Flow 1 ingress (mean 0.05 Mbps)
- Light blue line: Flow 1 egress (mean 0.05 Mbps)
- Green line: Flow 2 ingress (mean 0.05 Mbps)
- Dark green line: Flow 2 egress (mean 0.05 Mbps)
- Pink line: Flow 3 ingress (mean 0.05 Mbps)
- Red line: Flow 3 egress (mean 0.05 Mbps)

**Packet round-trip time delay (ms):**
- Flow 1 (95th percentile 6.25 ms)
- Flow 2 (95th percentile 6.29 ms)
- Flow 3 (95th percentile 6.26 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-01-27 05:41:36
End at: 2018-01-27 05:42:06
Local clock offset: -1.79 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 4.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 4.648 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

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

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

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

- Flow 1 (95th percentile 4.66 ms)
- Flow 2 (95th percentile 4.72 ms)
- Flow 3 (95th percentile 4.65 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-01-27 06:32:35
End at: 2018-01-27 06:33:05
Local clock offset: -4.093 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 6.971 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.945 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.962 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 6.999 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

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

- Throughput (Mbps): Trends indicating data flow efficiency with peaks at specific times.
- Per-packet one-way delay (ms): Distribution of delay times with markers at intervals.

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

Start at: 2018-01-27 07:23:30
End at: 2018-01-27 07:24:00
Local clock offset: 3.109 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: -0.493 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -0.112 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -0.531 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: -0.551 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

Throughput (Mbit/s) vs Time (s)

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

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

- Flow 1 (95th percentile - 0.11 ms)
- Flow 2 (95th percentile - 0.53 ms)
- Flow 3 (95th percentile - 0.55 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-01-27 08:14:23
End at: 2018-01-27 08:14:53
Local clock offset: 0.191 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 1.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.850 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.978 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 1.850 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

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

Start at: 2018-01-27 00:52:35
End at: 2018-01-27 00:53:05
Local clock offset: -3.533 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.40 Mbit/s
95th percentile per-packet one-way delay: 6.925 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 24.13 Mbit/s
95th percentile per-packet one-way delay: 6.928 ms
Loss rate: 1.56%
-- Flow 2:
Average throughput: 24.45 Mbit/s
95th percentile per-packet one-way delay: 6.931 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 24.48 Mbit/s
95th percentile per-packet one-way delay: 6.897 ms
Loss rate: 1.04%
Run 1: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 24.48 Mb/s)
- Flow 1 egress (mean 24.13 Mb/s)
- Flow 2 ingress (mean 24.84 Mb/s)
- Flow 2 egress (mean 24.45 Mb/s)
- Flow 3 ingress (mean 24.03 Mb/s)
- Flow 3 egress (mean 24.48 Mb/s)
Run 2: Statistics of Sprout

Start at: 2018-01-27 01:43:43
End at: 2018-01-27 01:44:13
Local clock offset: -2.699 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 48.94 Mbit/s
  95th percentile per-packet one-way delay: 5.472 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 24.82 Mbit/s
  95th percentile per-packet one-way delay: 5.465 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 24.15 Mbit/s
  95th percentile per-packet one-way delay: 5.471 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 24.59 Mbit/s
  95th percentile per-packet one-way delay: 5.491 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 24.82 Mbps)
- Flow 1 egress (mean 24.82 Mbps)
- Flow 2 ingress (mean 24.15 Mbps)
- Flow 2 egress (mean 24.15 Mbps)
- Flow 3 ingress (mean 24.59 Mbps)
- Flow 3 egress (mean 24.59 Mbps)

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

- Flow 1 (95th percentile 5.46 ms)
- Flow 2 (95th percentile 5.47 ms)
- Flow 3 (95th percentile 5.49 ms)
Run 3: Statistics of Sprout

Start at: 2018-01-27 02:34:41
End at: 2018-01-27 02:35:11
Local clock offset: -3.184 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.39 Mbit/s
95th percentile per-packet one-way delay: 6.535 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 24.92 Mbit/s
95th percentile per-packet one-way delay: 6.547 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 24.81 Mbit/s
95th percentile per-packet one-way delay: 6.520 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 24.38 Mbit/s
95th percentile per-packet one-way delay: 6.514 ms
Loss rate: 0.42%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-01-27 03:25:10
End at: 2018-01-27 03:25:40
Local clock offset: -1.665 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.43 Mbit/s
95th percentile per-packet one-way delay: 4.959 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 24.93 Mbit/s
95th percentile per-packet one-way delay: 4.978 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.88 Mbit/s
95th percentile per-packet one-way delay: 4.949 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 24.34 Mbit/s
95th percentile per-packet one-way delay: 4.921 ms
Loss rate: 0.26%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 24.93 Mbit/s)
- Flow 1 egress (mean 24.93 Mbit/s)
- Flow 2 ingress (mean 24.88 Mbit/s)
- Flow 2 egress (mean 24.88 Mbit/s)
- Flow 3 ingress (mean 24.35 Mbit/s)
- Flow 3 egress (mean 24.34 Mbit/s)
Run 5: Statistics of Sprout

Start at: 2018-01-27 04:16:01
End at: 2018-01-27 04:16:31
Local clock offset: -3.283 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.50 Mbit/s
  95th percentile per-packet one-way delay: 6.285 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 24.85 Mbit/s
  95th percentile per-packet one-way delay: 6.284 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.92 Mbit/s
  95th percentile per-packet one-way delay: 6.294 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 24.71 Mbit/s
  95th percentile per-packet one-way delay: 6.274 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-01-27 05:06:43
End at: 2018-01-27 05:07:13
Local clock offset: -3.205 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.37 Mbit/s
  95th percentile per-packet one-way delay: 6.246 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 24.86 Mbit/s
  95th percentile per-packet one-way delay: 6.248 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.83 Mbit/s
  95th percentile per-packet one-way delay: 6.235 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 24.44 Mbit/s
  95th percentile per-packet one-way delay: 6.257 ms
  Loss rate: 0.42%
Run 6: Report of Sprout — Data Link

### Throughput (Mbps)

- **Flow 1 Ingress** (mean 24.86 Mbps/s)
- **Flow 1 Egress** (mean 24.86 Mbps/s)
- **Flow 2 Ingress** (mean 24.83 Mbps/s)
- **Flow 2 Egress** (mean 24.83 Mbps/s)
- **Flow 3 Ingress** (mean 24.45 Mbps/s)
- **Flow 3 Egress** (mean 24.44 Mbps/s)

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

- **Flow 1 (95th percentile 6.25 ms)**
- **Flow 2 (95th percentile 6.24 ms)**
- **Flow 3 (95th percentile 6.26 ms)**
Run 7: Statistics of Sprout

Start at: 2018-01-27 05:57:28
End at: 2018-01-27 05:57:58
Local clock offset: -2.95 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.00 Mbit/s
95th percentile per-packet one-way delay: 5.952 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 5.962 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 24.18 Mbit/s
95th percentile per-packet one-way delay: 5.930 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 24.52 Mbit/s
95th percentile per-packet one-way delay: 5.946 ms
Loss rate: 0.03%
Run 7: Report of Sprout — Data Link

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

- **Flow 1 ingress** (mean 24.89 Mbit/s)
- **Flow 1 egress** (mean 24.89 Mbit/s)
- **Flow 2 ingress** (mean 24.20 Mbit/s)
- **Flow 2 egress** (mean 24.18 Mbit/s)
- **Flow 3 ingress** (mean 24.53 Mbit/s)
- **Flow 3 egress** (mean 24.52 Mbit/s)

![Graph 2: Packet-arrival time vs Time (s)]

- **Flow 1** (95th percentile 5.96 ms)
- **Flow 2** (95th percentile 5.93 ms)
- **Flow 3** (95th percentile 5.95 ms)
Run 8: Statistics of Sprout

Start at: 2018-01-27 06:48:21
End at: 2018-01-27 06:48:51
Local clock offset: -4.449 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 49.57 Mbit/s
  95th percentile per-packet one-way delay: 7.246 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 24.96 Mbit/s
  95th percentile per-packet one-way delay: 7.243 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.87 Mbit/s
  95th percentile per-packet one-way delay: 7.252 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 24.68 Mbit/s
  95th percentile per-packet one-way delay: 7.241 ms
  Loss rate: 0.42%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

End at: 2018-01-27 07:39:52
Local clock offset: -0.735 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.46 Mbit/s
95th percentile per-packet one-way delay: 4.116 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 24.85 Mbit/s
95th percentile per-packet one-way delay: 4.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: 4.114 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 24.58 Mbit/s
95th percentile per-packet one-way delay: 4.154 ms
Loss rate: 0.42%
Run 9: Report of Sprout — Data Link

![Graph](image-url)

- **Throughput (Mbit/s)**
- **Time (s)**

**Legend:**
- Flow 1 ingress (mean 24.85 Mbit/s)
- Flow 1 egress (mean 24.85 Mbit/s)
- Flow 2 ingress (mean 24.90 Mbit/s)
- Flow 2 egress (mean 24.89 Mbit/s)
- Flow 3 ingress (mean 24.58 Mbit/s)
- Flow 3 egress (mean 24.58 Mbit/s)

![Graph](image-url)

**Legend:**
- Flow 1 (95th percentile 4.10 ms)
- Flow 2 (95th percentile 4.11 ms)
- Flow 3 (95th percentile 4.15 ms)
Run 10: Statistics of Sprout

Start at: 2018-01-27 08:30:14
End at: 2018-01-27 08:30:44
Local clock offset: 2.59 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.43 Mbit/s
95th percentile per-packet one-way delay: -0.233 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: -0.218 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 24.89 Mbit/s
95th percentile per-packet one-way delay: -0.262 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: -0.247 ms
Loss rate: 0.01%
Run 10: Report of Sprout — Data Link

![Graph of throughput and latency for different flows]

- Flow 1 ingress (mean 24.76 Mbit/s)
- Flow 1 egress (mean 24.79 Mbit/s)
- Flow 2 ingress (mean 24.89 Mbit/s)
- Flow 2 egress (mean 24.89 Mbit/s)
- Flow 3 ingress (mean 24.63 Mbit/s)
- Flow 3 egress (mean 24.67 Mbit/s)

![Graph of packet delay for different flows]

- Flow 1 (95th percentile - 0.22 ms)
- Flow 2 (95th percentile - 0.26 ms)
- Flow 3 (95th percentile - 0.25 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-27 00:55:34
End at: 2018-01-27 00:56:04
Local clock offset: -3.669 ms

# Below is generated by plot.py at 2018-01-27 18:10:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 227.22 Mbit/s
95th percentile per-packet one-way delay: 6.979 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 114.11 Mbit/s
95th percentile per-packet one-way delay: 6.972 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 124.95 Mbit/s
95th percentile per-packet one-way delay: 6.989 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 90.85 Mbit/s
95th percentile per-packet one-way delay: 6.976 ms
Loss rate: 0.63%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-27 01:46:40
End at: 2018-01-27 01:47:10
Local clock offset: -2.576 ms

# Below is generated by plot.py at 2018-01-27 18:14:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 389.25 Mbit/s
  95th percentile per-packet one-way delay: 5.703 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 222.57 Mbit/s
  95th percentile per-packet one-way delay: 5.561 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 185.55 Mbit/s
  95th percentile per-packet one-way delay: 5.912 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 130.98 Mbit/s
  95th percentile per-packet one-way delay: 6.025 ms
  Loss rate: 0.20%
Run 2: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 222.53 Mbit/s)
- Flow 1 egress (mean 222.57 Mbit/s)
- Flow 2 ingress (mean 185.51 Mbit/s)
- Flow 2 egress (mean 185.55 Mbit/s)
- Flow 3 ingress (mean 131.09 Mbit/s)
- Flow 3 egress (mean 130.99 Mbit/s)
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-27 02:37:37
End at: 2018-01-27 02:38:07
Local clock offset: -3.187 ms

# Below is generated by plot.py at 2018-01-27 18:15:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 388.03 Mbit/s
  95th percentile per-packet one-way delay: 6.698 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 220.12 Mbit/s
  95th percentile per-packet one-way delay: 6.570 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 189.56 Mbit/s
  95th percentile per-packet one-way delay: 7.060 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 126.79 Mbit/s
  95th percentile per-packet one-way delay: 6.753 ms
  Loss rate: 0.10%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-27 03:28:07
End at: 2018-01-27 03:28:37
Local clock offset: -1.619 ms

# Below is generated by plot.py at 2018-01-27 18:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.75 Mbit/s
95th percentile per-packet one-way delay: 5.026 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 201.15 Mbit/s
95th percentile per-packet one-way delay: 5.026 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 180.94 Mbit/s
95th percentile per-packet one-way delay: 4.932 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 124.85 Mbit/s
95th percentile per-packet one-way delay: 5.289 ms
Loss rate: 0.24%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 201.01 Mbit/s)
- Flow 1 egress (mean 201.15 Mbit/s)
- Flow 2 ingress (mean 180.87 Mbit/s)
- Flow 2 egress (mean 180.94 Mbit/s)
- Flow 3 ingress (mean 124.83 Mbit/s)
- Flow 3 egress (mean 124.85 Mbit/s)

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

- Flow 1 (95th percentile 5.03 ms)
- Flow 2 (95th percentile 4.93 ms)
- Flow 3 (95th percentile 5.29 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-27 04:18:57
End at: 2018-01-27 04:19:27
Local clock offset: -3.349 ms

# Below is generated by plot.py at 2018-01-27 18:15:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.71 Mbit/s
95th percentile per-packet one-way delay: 6.372 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 207.41 Mbit/s
95th percentile per-packet one-way delay: 6.268 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 179.66 Mbit/s
95th percentile per-packet one-way delay: 6.761 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 117.50 Mbit/s
95th percentile per-packet one-way delay: 6.509 ms
Loss rate: 0.16%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-27 05:09:39
End at: 2018-01-27 05:10:09
Local clock offset: -3.126 ms

# Below is generated by plot.py at 2018-01-27 18:15:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.79 Mbit/s
95th percentile per-packet one-way delay: 6.499 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 217.19 Mbit/s
95th percentile per-packet one-way delay: 6.381 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 195.40 Mbit/s
95th percentile per-packet one-way delay: 6.612 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 132.37 Mbit/s
95th percentile per-packet one-way delay: 6.665 ms
Loss rate: 0.15%
Run 7: Statistics of TaoVA-100x

Start at: 2018-01-27 06:00:25
End at: 2018-01-27 06:00:55
Local clock offset: -3.143 ms

# Below is generated by plot.py at 2018-01-27 18:16:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.65 Mbit/s
95th percentile per-packet one-way delay: 6.283 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 209.18 Mbit/s
95th percentile per-packet one-way delay: 6.199 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 184.83 Mbit/s
95th percentile per-packet one-way delay: 6.311 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 119.67 Mbit/s
95th percentile per-packet one-way delay: 6.546 ms
Loss rate: 0.22%
Run 7: Report of TaoVA-100x — Data Link

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

Flow 1 (95th percentile 6.20 ms)  •  Flow 2 (95th percentile 6.31 ms)  •  Flow 3 (95th percentile 6.55 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-01-27 06:51:17
End at: 2018-01-27 06:51:47
Local clock offset: -4.602 ms

# Below is generated by plot.py at 2018-01-27 18:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.32 Mbit/s
95th percentile per-packet one-way delay: 7.340 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 222.74 Mbit/s
95th percentile per-packet one-way delay: 7.301 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 201.83 Mbit/s
95th percentile per-packet one-way delay: 7.299 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 125.15 Mbit/s
95th percentile per-packet one-way delay: 7.820 ms
Loss rate: 0.22%
Run 8: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 222.66 Mbit/s) — Flow 1 egress (mean 222.74 Mbit/s)
Flow 2 ingress (mean 201.79 Mbit/s) — Flow 2 egress (mean 201.83 Mbit/s)
Flow 3 ingress (mean 125.15 Mbit/s) — Flow 3 egress (mean 125.15 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 7.30 ms) — Flow 2 (95th percentile 7.30 ms) — Flow 3 (95th percentile 7.82 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-27 07:42:19
End at: 2018-01-27 07:42:49
Local clock offset: -1.477 ms

# Below is generated by plot.py at 2018-01-27 18:20:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 381.07 Mbit/s
  95th percentile per-packet one-way delay: 4.803 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 217.18 Mbit/s
  95th percentile per-packet one-way delay: 4.609 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 185.15 Mbit/s
  95th percentile per-packet one-way delay: 5.018 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 123.46 Mbit/s
  95th percentile per-packet one-way delay: 5.697 ms
  Loss rate: 0.26%
Run 9: Report of TaoVA-100x — Data Link

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

**Throughput Graph:**
- Flow 1 ingress (mean 217.11 Mbit/s)
- Flow 1 egress (mean 217.18 Mbit/s)
- Flow 2 ingress (mean 185.05 Mbit/s)
- Flow 2 egress (mean 185.15 Mbit/s)
- Flow 3 ingress (mean 123.59 Mbit/s)
- Flow 3 egress (mean 123.46 Mbit/s)

**Latency Graph:**
- Flow 1 (95th percentile 4.61 ms)
- Flow 2 (95th percentile 5.02 ms)
- Flow 3 (95th percentile 5.70 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-27 08:33:10
End at: 2018-01-27 08:33:40
Local clock offset: 2.87 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.89 Mbit/s
95th percentile per-packet one-way delay: -0.262 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 215.32 Mbit/s
95th percentile per-packet one-way delay: -0.380 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 192.38 Mbit/s
95th percentile per-packet one-way delay: -0.135 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 128.51 Mbit/s
95th percentile per-packet one-way delay: -0.099 ms
Loss rate: 0.13%
Run 10: Report of TaoVA-100x — Data Link

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

![Graph 2: Per-packet one-way delay over Time](image2)
Run 1: Statistics of TCP Vegas

Start at: 2018-01-27 00:49:36
End at: 2018-01-27 00:50:06
Local clock offset: -3.308 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 28.63 Mbit/s
95th percentile per-packet one-way delay: 6.712 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 12.17 Mbit/s
95th percentile per-packet one-way delay: 6.725 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 16.27 Mbit/s
95th percentile per-packet one-way delay: 6.698 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 17.04 Mbit/s
95th percentile per-packet one-way delay: 6.704 ms
Loss rate: 0.69%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-01-27 01:40:27
End at: 2018-01-27 01:40:57
Local clock offset: -2.736 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 563.73 Mbit/s
95th percentile per-packet one-way delay: 6.101 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 291.20 Mbit/s
95th percentile per-packet one-way delay: 6.007 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 250.85 Mbit/s
95th percentile per-packet one-way delay: 6.146 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 319.73 Mbit/s
95th percentile per-packet one-way delay: 6.188 ms
Loss rate: 0.19%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-01-27 02:31:27
End at: 2018-01-27 02:31:57
Local clock offset: -3.159 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 515.22 Mbit/s
  95th percentile per-packet one-way delay: 6.974 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 302.05 Mbit/s
  95th percentile per-packet one-way delay: 6.930 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 143.13 Mbit/s
  95th percentile per-packet one-way delay: 6.935 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 356.19 Mbit/s
  95th percentile per-packet one-way delay: 7.067 ms
  Loss rate: 0.22%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-01-27 03:21:59
End at: 2018-01-27 03:22:29
Local clock offset: -1.736 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 414.25 Mbit/s
    95th percentile per-packet one-way delay: 5.200 ms
    Loss rate: 0.07%
-- Flow 1:
    Average throughput: 265.46 Mbit/s
    95th percentile per-packet one-way delay: 5.182 ms
    Loss rate: 0.08%
-- Flow 2:
    Average throughput: 133.29 Mbit/s
    95th percentile per-packet one-way delay: 5.201 ms
    Loss rate: 0.04%
-- Flow 3:
    Average throughput: 181.45 Mbit/s
    95th percentile per-packet one-way delay: 5.334 ms
    Loss rate: 0.07%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 265.50 Mbit/s)
- Flow 1 egress (mean 265.46 Mbit/s)
- Flow 2 ingress (mean 133.25 Mbit/s)
- Flow 2 egress (mean 133.29 Mbit/s)
- Flow 3 ingress (mean 181.35 Mbit/s)
- Flow 3 egress (mean 181.45 Mbit/s)

![Graph showing latency of different flows over time.](image)

- Flow 1 (95th percentile 5.18 ms)
- Flow 2 (95th percentile 5.20 ms)
- Flow 3 (95th percentile 5.33 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-01-27 04:12:46
End at: 2018-01-27 04:13:16
Local clock offset: -3.354 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 521.71 Mbit/s
95th percentile per-packet one-way delay: 6.752 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 245.62 Mbit/s
95th percentile per-packet one-way delay: 6.678 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 310.37 Mbit/s
95th percentile per-packet one-way delay: 6.817 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 210.16 Mbit/s
95th percentile per-packet one-way delay: 6.774 ms
Loss rate: 0.23%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-01-27 05:03:32
End at: 2018-01-27 05:04:02
Local clock offset: -3.118 ms

# Below is generated by plot.py at 2018-01-27 18:24:15
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 431.36 Mbit/s
   95th percentile per-packet one-way delay: 6.505 ms
   Loss rate: 0.08%
-- Flow 1:
   Average throughput: 268.72 Mbit/s
   95th percentile per-packet one-way delay: 6.487 ms
   Loss rate: 0.08%
-- Flow 2:
   Average throughput: 136.75 Mbit/s
   95th percentile per-packet one-way delay: 6.480 ms
   Loss rate: 0.04%
-- Flow 3:
   Average throughput: 216.31 Mbit/s
   95th percentile per-packet one-way delay: 6.620 ms
   Loss rate: 0.15%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 268.76 Mbit/s)
- Flow 1 egress (mean 268.72 Mbit/s)
- Flow 2 ingress (mean 136.68 Mbit/s)
- Flow 2 egress (mean 136.75 Mbit/s)
- Flow 3 ingress (mean 216.23 Mbit/s)
- Flow 3 egress (mean 216.31 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-01-27 05:54:11
End at: 2018-01-27 05:54:41
Local clock offset: -2.543 ms

# Below is generated by plot.py at 2018-01-27 18:28:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 570.67 Mbit/s
  95th percentile per-packet one-way delay: 6.318 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 279.76 Mbit/s
  95th percentile per-packet one-way delay: 6.275 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 340.05 Mbit/s
  95th percentile per-packet one-way delay: 6.345 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 195.42 Mbit/s
  95th percentile per-packet one-way delay: 6.374 ms
  Loss rate: 0.24%
Run 7: Report of TCP Vegas — Data Link

![Graph of throughput and packet delay over time for different flows.](image)
Run 8: Statistics of TCP Vegas

Start at: 2018-01-27 06:45:11
End at: 2018-01-27 06:45:41
Local clock offset: -4.453 ms

# Below is generated by plot.py at 2018-01-27 18:28:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.74 Mbit/s
95th percentile per-packet one-way delay: 7.413 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 240.37 Mbit/s
95th percentile per-packet one-way delay: 7.353 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 140.34 Mbit/s
95th percentile per-packet one-way delay: 7.538 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 200.27 Mbit/s
95th percentile per-packet one-way delay: 7.419 ms
Loss rate: 0.07%
Run 8: Report of TCP Vegas — Data Link

![Graph of TCP Vegas data](image)

199
Run 9: Statistics of TCP Vegas

Start at: 2018-01-27 07:36:05
End at: 2018-01-27 07:36:35
Local clock offset: 0.469 ms

# Below is generated by plot.py at 2018-01-27 18:29:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 589.32 Mbit/s
95th percentile per-packet one-way delay: 3.795 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 282.37 Mbit/s
95th percentile per-packet one-way delay: 3.733 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 324.59 Mbit/s
95th percentile per-packet one-way delay: 3.842 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 274.79 Mbit/s
95th percentile per-packet one-way delay: 3.854 ms
Loss rate: 0.18%
Run 9: Report of TCP Vegas — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 282.36 Mb/s)  Flow 1 egress (mean 282.37 Mb/s)
Flow 2 ingress (mean 324.46 Mb/s)  Flow 2 egress (mean 324.59 Mb/s)
Flow 3 ingress (mean 274.86 Mb/s)  Flow 3 egress (mean 274.79 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 3.73 ms)  Flow 2 (95th percentile 3.84 ms)  Flow 3 (95th percentile 3.85 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-01-27 08:26:59
End at: 2018-01-27 08:27:29
Local clock offset: 2.115 ms

# Below is generated by plot.py at 2018-01-27 18:29:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 504.59 Mbit/s
  95th percentile per-packet one-way delay: 0.651 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 283.88 Mbit/s
  95th percentile per-packet one-way delay: 0.614 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 137.40 Mbit/s
  95th percentile per-packet one-way delay: 0.587 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 389.97 Mbit/s
  95th percentile per-packet one-way delay: 0.738 ms
  Loss rate: 0.19%
Run 1: Statistics of Verus

Start at: 2018-01-27 00:08:23
End at: 2018-01-27 00:08:53
Local clock offset: -3.39 ms

# Below is generated by plot.py at 2018-01-27 18:29:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 441.23 Mbit/s
95th percentile per-packet one-way delay: 38.136 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 264.29 Mbit/s
95th percentile per-packet one-way delay: 60.945 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 209.11 Mbit/s
95th percentile per-packet one-way delay: 7.055 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 121.37 Mbit/s
95th percentile per-packet one-way delay: 6.851 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-01-27 00:59:08
End at: 2018-01-27 00:59:38
Local clock offset: -3.866 ms

# Below is generated by plot.py at 2018-01-27 18:29:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 296.12 Mbit/s
  95th percentile per-packet one-way delay: 15.801 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 192.89 Mbit/s
  95th percentile per-packet one-way delay: 16.802 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 93.20 Mbit/s
  95th percentile per-packet one-way delay: 15.254 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 125.12 Mbit/s
  95th percentile per-packet one-way delay: 7.997 ms
  Loss rate: 0.03%
Run 2: Report of Verus — Data Link

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

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 192.85 Mbps)
  - Flow 1 egress (mean 192.89 Mbps)
  - Flow 2 ingress (mean 93.20 Mbps)
  - Flow 2 egress (mean 93.20 Mbps)
  - Flow 3 ingress (mean 124.42 Mbps)
  - Flow 3 egress (mean 125.32 Mbps)

- **Packet Delay** (ms):
  - Flow 1 (95th percentile 16.80 ms)
  - Flow 2 (95th percentile 15.25 ms)
  - Flow 3 (95th percentile 8.00 ms)
Run 3: Statistics of Verus

Start at: 2018-01-27 01:50:03
End at: 2018-01-27 01:50:33
Local clock offset: -2.616 ms

# Below is generated by plot.py at 2018-01-27 18:29:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.13 Mbit/s
95th percentile per-packet one-way delay: 9.962 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 204.97 Mbit/s
95th percentile per-packet one-way delay: 10.633 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 168.66 Mbit/s
95th percentile per-packet one-way delay: 8.034 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 132.39 Mbit/s
95th percentile per-packet one-way delay: 8.640 ms
Loss rate: 0.01%
Run 3: Report of Verus — Data Link

![Graph showing throughput and latency of data link flows over time. The graph displays multiple lines representing different flow ingress and egress rates. The x-axis represents time in seconds, and the y-axes represent throughput in Mbps and packet one-way delay in milliseconds.]

Flow 1 ingress (mean 204.86 Mbps)  Flow 1 egress (mean 204.97 Mbps)
Flow 2 ingress (mean 168.77 Mbps)  Flow 2 egress (mean 168.66 Mbps)
Flow 3 ingress (mean 132.08 Mbps)  Flow 3 egress (mean 132.39 Mbps)
Run 4: Statistics of Verus

Start at: 2018-01-27 02:41:00
End at: 2018-01-27 02:41:30
Local clock offset: -3.317 ms

# Below is generated by plot.py at 2018-01-27 18:30:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 398.73 Mbit/s
  95th percentile per-packet one-way delay: 11.460 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 240.82 Mbit/s
  95th percentile per-packet one-way delay: 15.327 ms
  Loss rate: 1.72%
-- Flow 2:
  Average throughput: 168.72 Mbit/s
  95th percentile per-packet one-way delay: 8.399 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 138.01 Mbit/s
  95th percentile per-packet one-way delay: 8.134 ms
  Loss rate: 0.04%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 244.91 Mbit/s)
- Flow 1 egress (mean 240.82 Mbit/s)
- Flow 2 ingress (mean 168.69 Mbit/s)
- Flow 2 egress (mean 168.72 Mbit/s)
- Flow 3 ingress (mean 137.77 Mbit/s)
- Flow 3 egress (mean 138.01 Mbit/s)
Run 5: Statistics of Verus

Start at: 2018-01-27 03:31:27
End at: 2018-01-27 03:31:57
Local clock offset: -1.559 ms

# Below is generated by plot.py at 2018-01-27 18:31:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 366.28 Mbit/s
  95th percentile per-packet one-way delay: 11.266 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 201.55 Mbit/s
  95th percentile per-packet one-way delay: 13.981 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 184.80 Mbit/s
  95th percentile per-packet one-way delay: 7.024 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 137.02 Mbit/s
  95th percentile per-packet one-way delay: 7.084 ms
  Loss rate: 0.16%
Run 5: Report of Verus — Data Link

[Graphs showing data link performance metrics]
Run 6: Statistics of Verus

Local clock offset: -3.336 ms

# Below is generated by plot.py at 2018-01-27 18:31:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.33 Mbit/s
95th percentile per-packet one-way delay: 12.520 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 172.58 Mbit/s
95th percentile per-packet one-way delay: 13.546 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 174.89 Mbit/s
95th percentile per-packet one-way delay: 8.940 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 134.74 Mbit/s
95th percentile per-packet one-way delay: 8.755 ms
Loss rate: 0.21%
Run 6: Report of Verus — Data Link

[Graph showing throughput and delay over time for different flows with annotations indicating mean throughput and latency.]
Run 7: Statistics of Verus

Start at: 2018-01-27 05:13:02
End at: 2018-01-27 05:13:32
Local clock offset: -3.246 ms

# Below is generated by plot.py at 2018-01-27 18:32:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.97 Mbit/s
95th percentile per-packet one-way delay: 45.844 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.62 Mbit/s
95th percentile per-packet one-way delay: 64.348 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 180.00 Mbit/s
95th percentile per-packet one-way delay: 11.637 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 100.06 Mbit/s
95th percentile per-packet one-way delay: 8.422 ms
Loss rate: 0.00%
Run 7: Report of Verus — Data Link

Graph 1: Throughput vs Time

Graph 2: Per packet one way delay vs Time

Legend:
- Flow 1 ingress (mean 162.61 Mbit/s)
- Flow 1 egress (mean 162.62 Mbit/s)
- Flow 2 ingress (mean 180.02 Mbit/s)
- Flow 2 egress (mean 180.00 Mbit/s)
- Flow 3 ingress (mean 100.06 Mbit/s)
- Flow 3 egress (mean 100.06 Mbit/s)
Run 8: Statistics of Verus

Start at: 2018-01-27 06:03:46
End at: 2018-01-27 06:04:16
Local clock offset: -3.346 ms

# Below is generated by plot.py at 2018-01-27 18:34:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 369.32 Mbit/s
  95th percentile per-packet one-way delay: 9.822 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 226.83 Mbit/s
  95th percentile per-packet one-way delay: 9.473 ms
  Loss rate: 0.81%
-- Flow 2:
  Average throughput: 152.22 Mbit/s
  95th percentile per-packet one-way delay: 10.970 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 127.07 Mbit/s
  95th percentile per-packet one-way delay: 8.535 ms
  Loss rate: 0.51%
Run 8: Report of Verus — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 226.53 Mbps)
- Flow 1 egress (mean 226.83 Mbps)
- Flow 2 ingress (mean 152.22 Mbps)
- Flow 2 egress (mean 152.22 Mbps)
- Flow 3 ingress (mean 127.47 Mbps)
- Flow 3 egress (mean 127.07 Mbps)

**Packet Delay (ms):**
- Flow 1 (95th percentile 9.47 ms)
- Flow 2 (95th percentile 10.97 ms)
- Flow 3 (95th percentile 8.54 ms)
Run 9: Statistics of Verus

Start at: 2018-01-27 06:54:40
End at: 2018-01-27 06:55:10
Local clock offset: -4.683 ms

# Below is generated by plot.py at 2018-01-27 18:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.90 Mbit/s
95th percentile per-packet one-way delay: 11.794 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 232.80 Mbit/s
95th percentile per-packet one-way delay: 12.700 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 198.11 Mbit/s
95th percentile per-packet one-way delay: 10.572 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 175.61 Mbit/s
95th percentile per-packet one-way delay: 10.559 ms
Loss rate: 0.16%
Run 9: Report of Verus — Data Link

[Graph showing throughput and per-packet one-way delay]

- Flow 1 ingress (mean 232.90 Mbps) vs. Flow 1 egress (mean 232.80 Mbps)
- Flow 2 ingress (mean 198.06 Mbps) vs. Flow 2 egress (mean 198.11 Mbps)
- Flow 3 ingress (mean 175.53 Mbps) vs. Flow 3 egress (mean 175.61 Mbps)

[Graph showing time (s) vs. throughput (Mbps)]

[Graph showing time (s) vs. per-packet one way delay (ms)]
Run 10: Statistics of Verus

Start at: 2018-01-27 07:45:40
End at: 2018-01-27 07:46:10
Local clock offset: -2.187 ms

# Below is generated by plot.py at 2018-01-27 18:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.16 Mbit/s
95th percentile per-packet one-way delay: 8.646 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 177.96 Mbit/s
95th percentile per-packet one-way delay: 8.993 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.82 Mbit/s
95th percentile per-packet one-way delay: 8.531 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 117.71 Mbit/s
95th percentile per-packet one-way delay: 7.344 ms
Loss rate: 0.13%
Run 10: Report of Verus — Data Link

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

- Flow 1 ingress (mean 175.08 Mbit/s)
- Flow 1 egress (mean 177.96 Mbit/s)
- Flow 2 ingress (mean 178.77 Mbit/s)
- Flow 2 egress (mean 178.82 Mbit/s)
- Flow 3 ingress (mean 117.61 Mbit/s)
- Flow 3 egress (mean 117.71 Mbit/s)
Run 1: Statistics of Copa

Start at: 2018-01-27 00:21:06
End at: 2018-01-27 00:21:36
Local clock offset: -2.495 ms

# Below is generated by plot.py at 2018-01-27 18:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.76 Mbit/s
95th percentile per-packet one-way delay: 3.992 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 75.89 Mbit/s
95th percentile per-packet one-way delay: 3.995 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 69.90 Mbit/s
95th percentile per-packet one-way delay: 3.989 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 67.68 Mbit/s
95th percentile per-packet one-way delay: 3.986 ms
Loss rate: 0.20%
Run 1: Report of Copa — Data Link

[Graph showing network traffic over time for different flows, with labels indicating mean throughput and delay metrics.]
Run 2: Statistics of Copa

Start at: 2018-01-27 01:11:51
End at: 2018-01-27 01:12:21
Local clock offset: -4.351 ms

# Below is generated by plot.py at 2018-01-27 18:35:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.06 Mbit/s
95th percentile per-packet one-way delay: 6.912 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 74.10 Mbit/s
95th percentile per-packet one-way delay: 6.911 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 68.61 Mbit/s
95th percentile per-packet one-way delay: 6.896 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 64.40 Mbit/s
95th percentile per-packet one-way delay: 6.931 ms
Loss rate: 0.20%
Run 2: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 74.09 Mbit/s)**
- **Flow 1 egress (mean 74.10 Mbit/s)**
- **Flow 2 ingress (mean 68.60 Mbit/s)**
- **Flow 2 egress (mean 68.61 Mbit/s)**
- **Flow 3 ingress (mean 64.30 Mbit/s)**
- **Flow 3 egress (mean 64.40 Mbit/s)**
Run 3: Statistics of Copa

Start at: 2018-01-27 02:02:40
End at: 2018-01-27 02:03:10
Local clock offset: -2.969 ms

# Below is generated by plot.py at 2018-01-27 18:35:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 146.39 Mbit/s
  95th percentile per-packet one-way delay: 6.093 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 77.39 Mbit/s
  95th percentile per-packet one-way delay: 6.083 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 67.54 Mbit/s
  95th percentile per-packet one-way delay: 6.118 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 72.73 Mbit/s
  95th percentile per-packet one-way delay: 6.075 ms
  Loss rate: 0.03%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 77.38 Mbit/s)
- Flow 1 egress (mean 77.39 Mbit/s)
- Flow 2 ingress (mean 67.53 Mbit/s)
- Flow 2 egress (mean 67.54 Mbit/s)
- Flow 3 ingress (mean 72.62 Mbit/s)
- Flow 3 egress (mean 72.73 Mbit/s)
Run 4: Statistics of Copa

Start at: 2018-01-27 02:53:40
End at: 2018-01-27 02:54:10
Local clock offset: -3.311 ms

# Below is generated by plot.py at 2018-01-27 18:35:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.13 Mbit/s
95th percentile per-packet one-way delay: 6.556 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 71.82 Mbit/s
95th percentile per-packet one-way delay: 6.567 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 66.31 Mbit/s
95th percentile per-packet one-way delay: 6.533 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 51.90 Mbit/s
95th percentile per-packet one-way delay: 6.559 ms
Loss rate: 0.24%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-01-27 03:44:05
End at: 2018-01-27 03:44:35
Local clock offset: -2.95 ms

# Below is generated by plot.py at 2018-01-27 18:36:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 130.51 Mbit/s
95th percentile per-packet one-way delay: 6.349 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 70.54 Mbit/s
95th percentile per-packet one-way delay: 6.346 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 59.29 Mbit/s
95th percentile per-packet one-way delay: 6.361 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 61.96 Mbit/s
95th percentile per-packet one-way delay: 6.337 ms
Loss rate: 0.20%
Run 5: Report of Copa — Data Link

---

1. Throughput (Mbps)
   - Flow 1 Ingress: mean 70.53 Mbps
   - Flow 1 Egress: mean 70.54 Mbps
   - Flow 2 Ingress: mean 59.28 Mbps
   - Flow 2 Egress: mean 59.29 Mbps
   - Flow 3 Ingress: mean 61.94 Mbps
   - Flow 3 Egress: mean 61.96 Mbps

2. Per-packet one-way delay (ms)
   - Flow 1: 95th percentile 6.35 ms
   - Flow 2: 95th percentile 6.36 ms
   - Flow 3: 95th percentile 6.34 ms

---

233
Run 6: Statistics of Copa

Start at: 2018-01-27 04:34:53
End at: 2018-01-27 04:35:23
Local clock offset: -3.308 ms

# Below is generated by plot.py at 2018-01-27 18:36:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.07 Mbit/s
95th percentile per-packet one-way delay: 6.355 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 66.03 Mbit/s
95th percentile per-packet one-way delay: 6.352 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 65.99 Mbit/s
95th percentile per-packet one-way delay: 6.355 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 57.81 Mbit/s
95th percentile per-packet one-way delay: 6.364 ms
Loss rate: 0.21%
Run 6: Report of Copa — Data Link

---

![Graph of Throughput and Delay](image_url)

- **Throughput Graph**: The graph shows the throughput (Mbit/s) over time (s) for different flows.
  - **Flow 1 Ingress** (mean 65.02 Mbit/s)
  - **Flow 1 Egress** (mean 66.03 Mbit/s)
  - **Flow 2 Ingress** (mean 65.99 Mbit/s)
  - **Flow 2 Egress** (mean 65.99 Mbit/s)
  - **Flow 3 Ingress** (mean 57.83 Mbit/s)
  - **Flow 3 Egress** (mean 57.81 Mbit/s)

- **Delay Graph**: The graph shows the per-packet one-way delay (ms) over time (s) for different flows.
  - **Flow 1** (95th percentile 6.35 ms)
  - **Flow 2** (95th percentile 6.36 ms)
  - **Flow 3** (95th percentile 6.36 ms)

---

235
Run 7: Statistics of Copa

Start at: 2018-01-27 05:25:38
End at: 2018-01-27 05:26:08
Local clock offset: -2.288 ms

# Below is generated by plot.py at 2018-01-27 18:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.84 Mbit/s
95th percentile per-packet one-way delay: 5.086 ms
Loss rate: 0.06%

-- Flow 1:
Average throughput: 68.38 Mbit/s
95th percentile per-packet one-way delay: 5.062 ms
Loss rate: 0.06%

-- Flow 2:
Average throughput: 64.59 Mbit/s
95th percentile per-packet one-way delay: 5.090 ms
Loss rate: 0.09%

-- Flow 3:
Average throughput: 49.82 Mbit/s
95th percentile per-packet one-way delay: 5.168 ms
Loss rate: 0.03%
Run 8: Statistics of Copa

Start at: 2018-01-27 06:16:25
End at: 2018-01-27 06:16:55
Local clock offset: -3.813 ms

# Below is generated by plot.py at 2018-01-27 18:37:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.66 Mbit/s
95th percentile per-packet one-way delay: 6.600 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 74.81 Mbit/s
95th percentile per-packet one-way delay: 6.585 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 74.63 Mbit/s
95th percentile per-packet one-way delay: 6.607 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 61.08 Mbit/s
95th percentile per-packet one-way delay: 6.621 ms
Loss rate: 0.19%
Run 8: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 74.80 Mbps/s)
Flow 1 egress (mean 74.81 Mbps/s)
Flow 2 ingress (mean 74.62 Mbps/s)
Flow 2 egress (mean 74.63 Mbps/s)
Flow 3 ingress (mean 61.09 Mbps/s)
Flow 3 egress (mean 61.08 Mbps/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 6.58 ms)
Flow 2 (95th percentile 6.61 ms)
Flow 3 (95th percentile 6.62 ms)
Run 9: Statistics of Copa

Start at: 2018-01-27 07:07:23
End at: 2018-01-27 07:07:53
Local clock offset: 0.324 ms

# Below is generated by plot.py at 2018-01-27 18:37:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 142.79 Mbit/s
  95th percentile per-packet one-way delay: 1.688 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 74.40 Mbit/s
  95th percentile per-packet one-way delay: 1.693 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 70.33 Mbit/s
  95th percentile per-packet one-way delay: 1.686 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 65.33 Mbit/s
  95th percentile per-packet one-way delay: 1.673 ms
  Loss rate: 0.21%
Run 9: Report of Copa — Data Link

![Graph showing throughput over time for different flows]

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

Flow 1 ing (mean 74.39 Mbit/s)  
Flow 1 egress (mean 74.40 Mbit/s)  
Flow 2 ing (mean 70.32 Mbit/s)  
Flow 2 egress (mean 70.33 Mbit/s)  
Flow 3 ing (mean 65.32 Mbit/s)  
Flow 3 egress (mean 65.33 Mbit/s)
Run 10: Statistics of Copa

Start at: 2018-01-27 07:58:18
End at: 2018-01-27 07:58:48
Local clock offset: -3.193 ms

# Below is generated by plot.py at 2018-01-27 18:38:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.59 Mbit/s
  95th percentile per-packet one-way delay: 5.788 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 71.53 Mbit/s
  95th percentile per-packet one-way delay: 5.771 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 63.60 Mbit/s
  95th percentile per-packet one-way delay: 5.788 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 53.69 Mbit/s
  95th percentile per-packet one-way delay: 5.873 ms
  Loss rate: 0.24%
Run 10: Report of Copa — Data Link
Run 1: Statistics of Indigo-2-256

Start at: 2018-01-27 00:11:41
End at: 2018-01-27 00:12:11
Local clock offset: -2.933 ms

# Below is generated by plot.py at 2018-01-27 18:39:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 309.08 Mbit/s
  95th percentile per-packet one-way delay: 4.349 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 172.78 Mbit/s
  95th percentile per-packet one-way delay: 4.302 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 160.32 Mbit/s
  95th percentile per-packet one-way delay: 4.369 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 90.56 Mbit/s
  95th percentile per-packet one-way delay: 4.483 ms
  Loss rate: 0.22\%
Run 1: Report of Indigo-2-256 — Data Link

![Graph 1: Throughput Breakdown]

- Flow 1 ingress (mean 172.78 Mbit/s)
- Flow 1 egress (mean 172.78 Mbit/s)
- Flow 2 ingress (mean 160.26 Mbit/s)
- Flow 2 egress (mean 160.32 Mbit/s)
- Flow 3 ingress (mean 90.66 Mbit/s)
- Flow 3 egress (mean 90.56 Mbit/s)

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

- Flow 1 (95th percentile 4.30 ms)
- Flow 2 (95th percentile 4.37 ms)
- Flow 3 (95th percentile 4.48 ms)
Run 2: Statistics of Indigo-2-256

Start at: 2018-01-27 01:02:23
End at: 2018-01-27 01:02:53
Local clock offset: -3.971 ms

# Below is generated by plot.py at 2018-01-27 18:39:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 307.59 Mbit/s
  95th percentile per-packet one-way delay: 6.471 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 171.91 Mbit/s
  95th percentile per-packet one-way delay: 6.434 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 158.26 Mbit/s
  95th percentile per-packet one-way delay: 6.534 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 94.47 Mbit/s
  95th percentile per-packet one-way delay: 6.511 ms
  Loss rate: 0.16%
Run 2: Report of Indigo-2-256 — Data Link
Run 3: Statistics of Indigo-2-256

Start at: 2018-01-27 01:53:16
End at: 2018-01-27 01:53:46
Local clock offset: -2.845 ms

# Below is generated by plot.py at 2018-01-27 18:40:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.70 Mbit/s
95th percentile per-packet one-way delay: 5.942 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 173.75 Mbit/s
95th percentile per-packet one-way delay: 5.885 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 159.46 Mbit/s
95th percentile per-packet one-way delay: 6.005 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 6.061 ms
Loss rate: 0.13%
Run 3: Report of Indigo-2-256 — Data Link

![Graph showing network performance metrics](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 173.74 Mbit/s)
  - Flow 1 egress (mean 173.75 Mbit/s)
  - Flow 2 ingress (mean 159.44 Mbit/s)
  - Flow 2 egress (mean 159.46 Mbit/s)
  - Flow 3 ingress (mean 85.87 Mbit/s)
  - Flow 3 egress (mean 85.96 Mbit/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 5.88 ms)
  - Flow 2 (95th percentile 6.00 ms)
  - Flow 3 (95th percentile 6.06 ms)
Run 4: Statistics of Indigo-2-256

Start at: 2018-01-27 02:44:15
End at: 2018-01-27 02:44:45
Local clock offset: -3.235 ms

# Below is generated by plot.py at 2018-01-27 18:40:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.28 Mbit/s
95th percentile per-packet one-way delay: 6.664 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 171.65 Mbit/s
95th percentile per-packet one-way delay: 6.607 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 155.31 Mbit/s
95th percentile per-packet one-way delay: 6.741 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 114.55 Mbit/s
95th percentile per-packet one-way delay: 6.769 ms
Loss rate: 0.17%
Run 4: Report of Indigo-2-256 — Data Link
Run 5: Statistics of Indigo-2-256

Start at: 2018-01-27 03:34:41
End at: 2018-01-27 03:35:11
Local clock offset: -2.152 ms

# Below is generated by plot.py at 2018-01-27 18:41:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 310.81 Mbit/s
  95th percentile per-packet one-way delay: 5.728 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 176.52 Mbit/s
  95th percentile per-packet one-way delay: 5.689 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 159.71 Mbit/s
  95th percentile per-packet one-way delay: 5.767 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 86.76 Mbit/s
  95th percentile per-packet one-way delay: 5.804 ms
  Loss rate: 0.27%
Run 5: Report of Indigo-2-256 — Data Link

---

**Throughput (Mbps):**

- Flow 1 ingress (mean 176.51 Mbps)
- Flow 1 egress (mean 176.52 Mbps)
- Flow 2 ingress (mean 159.72 Mbps)
- Flow 2 egress (mean 159.71 Mbps)
- Flow 3 ingress (mean 86.88 Mbps)
- Flow 3 egress (mean 86.76 Mbps)

---

**Packet Loss per 1000 bytes:**

- Flow 1 (95th percentile 5.69 ms)
- Flow 2 (95th percentile 5.77 ms)
- Flow 3 (95th percentile 5.80 ms)
Run 6: Statistics of Indigo-2-256

Start at: 2018-01-27 04:25:30
End at: 2018-01-27 04:26:00
Local clock offset: -3.239 ms

# Below is generated by plot.py at 2018-01-27 18:41:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 266.37 Mbit/s
95th percentile per-packet one-way delay: 6.374 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 117.09 Mbit/s
95th percentile per-packet one-way delay: 6.318 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 171.00 Mbit/s
95th percentile per-packet one-way delay: 6.407 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 109.37 Mbit/s
95th percentile per-packet one-way delay: 6.498 ms
Loss rate: 0.13%
Run 6: Report of Indigo-2-256 — Data Link
Run 7: Statistics of Indigo-2-256

Start at: 2018-01-27 05:16:13
End at: 2018-01-27 05:16:43
Local clock offset: -2.888 ms

# Below is generated by plot.py at 2018-01-27 18:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.73 Mbit/s
95th percentile per-packet one-way delay: 5.780 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 176.88 Mbit/s
95th percentile per-packet one-way delay: 5.750 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 159.51 Mbit/s
95th percentile per-packet one-way delay: 5.856 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 82.48 Mbit/s
95th percentile per-packet one-way delay: 5.784 ms
Loss rate: 0.26%
Run 7: Report of Indigo-2-256 — Data Link

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

1. **Throughput (Mbps)**
   - Flow 1 ingress (mean 176.81 Mbps)
   - Flow 1 egress (mean 176.88 Mbps)
   - Flow 2 ingress (mean 159.52 Mbps)
   - Flow 2 egress (mean 159.51 Mbps)
   - Flow 3 ingress (mean 82.58 Mbps)
   - Flow 3 egress (mean 82.48 Mbps)

2. **Packet delay (ms)**
   - Flow 1 (95th percentile 5.75 ms)
   - Flow 2 (95th percentile 5.86 ms)
   - Flow 3 (95th percentile 5.78 ms)
Run 8: Statistics of Indigo-2-256

Start at: 2018-01-27 06:07:00
End at: 2018-01-27 06:07:30
Local clock offset: -3.377 ms

# Below is generated by plot.py at 2018-01-27 18:42:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 310.21 Mbit/s
  95th percentile per-packet one-way delay: 6.538 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 169.45 Mbit/s
  95th percentile per-packet one-way delay: 6.496 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 161.69 Mbit/s
  95th percentile per-packet one-way delay: 6.569 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 102.04 Mbit/s
  95th percentile per-packet one-way delay: 6.596 ms
  Loss rate: 0.13%
Run 8: Report of Indigo-2-256 — Data Link

---

**Throughput (Mbit/s):**

- Flow 1 ingress (mean 169.46 Mbit/s)
- Flow 1 egress (mean 169.45 Mbit/s)
- Flow 2 ingress (mean 161.71 Mbit/s)
- Flow 2 egress (mean 161.69 Mbit/s)
- Flow 3 ingress (mean 101.83 Mbit/s)
- Flow 3 egress (mean 102.04 Mbit/s)

---

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

- Flow 1 (95th percentile 6.50 ms)
- Flow 2 (95th percentile 6.57 ms)
- Flow 3 (95th percentile 6.60 ms)

---
Run 9: Statistics of Indigo-2-256

Start at: 2018-01-27 06:57:57
End at: 2018-01-27 06:58:27
Local clock offset: -3.574 ms

# Below is generated by plot.py at 2018-01-27 18:43:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 311.06 Mbit/s
  95th percentile per-packet one-way delay: 4.947 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 173.74 Mbit/s
  95th percentile per-packet one-way delay: 4.958 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 158.94 Mbit/s
  95th percentile per-packet one-way delay: 4.905 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 97.18 Mbit/s
  95th percentile per-packet one-way delay: 4.947 ms
  Loss rate: 0.19%
Run 9: Report of Indigo-2-256 — Data Link

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

- Flow 1 ingress (mean 173.69 Mbit/s)
- Flow 1 egress (mean 173.74 Mbit/s)
- Flow 2 ingress (mean 158.95 Mbit/s)
- Flow 2 egress (mean 158.94 Mbit/s)
- Flow 3 ingress (mean 97.16 Mbit/s)
- Flow 3 egress (mean 97.18 Mbit/s)
Run 10: Statistics of Indigo-2-256

Local clock offset: -2.594 ms

# Below is generated by plot.py at 2018-01-27 18:44:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.28 Mbit/s
95th percentile per-packet one-way delay: 5.415 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 171.86 Mbit/s
95th percentile per-packet one-way delay: 5.365 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 158.72 Mbit/s
95th percentile per-packet one-way delay: 5.467 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 95.73 Mbit/s
95th percentile per-packet one-way delay: 5.539 ms
Loss rate: 0.27%
Run 10: Report of Indigo-2-256 — Data Link

[Graph showing throughput and delay over time for different flows]
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-27 00:34:01
End at: 2018-01-27 00:34:31
Local clock offset: -2.497 ms

# Below is generated by plot.py at 2018-01-27 18:44:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.03 Mbit/s
95th percentile per-packet one-way delay: 4.365 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 176.72 Mbit/s
95th percentile per-packet one-way delay: 4.351 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 164.10 Mbit/s
95th percentile per-packet one-way delay: 4.366 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 142.60 Mbit/s
95th percentile per-packet one-way delay: 4.404 ms
Loss rate: 0.26%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

Start at: 2018-01-27 01:24:45
End at: 2018-01-27 01:25:16
Local clock offset: -3.188 ms

# Below is generated by plot.py at 2018-01-27 18:45:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.09 Mbit/s
95th percentile per-packet one-way delay: 5.800 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 177.42 Mbit/s
95th percentile per-packet one-way delay: 5.757 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 162.73 Mbit/s
95th percentile per-packet one-way delay: 5.861 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 148.22 Mbit/s
95th percentile per-packet one-way delay: 5.830 ms
Loss rate: 0.20%
Run 2: Report of Indigo-1-32 — Data Link
Run 3: Statistics of Indigo-1-32

Start at: 2018-01-27 02:15:39  
End at: 2018-01-27 02:16:09  
Local clock offset: -3.108 ms

# Below is generated by plot.py at 2018-01-27 18:46:08  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 332.16 Mbit/s  
  95th percentile per-packet one-way delay: 6.476 ms  
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 175.94 Mbit/s  
  95th percentile per-packet one-way delay: 6.450 ms  
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 163.58 Mbit/s  
  95th percentile per-packet one-way delay: 6.493 ms  
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 145.04 Mbit/s  
  95th percentile per-packet one-way delay: 6.534 ms  
  Loss rate: 0.23%
Run 3: Report of Indigo-1-32 — Data Link

[Graph showing throughput and delay over time for different flows.]
Run 4: Statistics of Indigo-1-32

Start at: 2018-01-27 03:06:31
End at: 2018-01-27 03:07:01
Local clock offset: -2.284 ms

# Below is generated by plot.py at 2018-01-27 18:46:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 331.97 Mbit/s
  95th percentile per-packet one-way delay: 5.659 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 175.26 Mbit/s
  95th percentile per-packet one-way delay: 5.621 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 163.27 Mbit/s
  95th percentile per-packet one-way delay: 5.693 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 148.65 Mbit/s
  95th percentile per-packet one-way delay: 5.707 ms
  Loss rate: 0.15%
Run 4: Report of Indigo-1-32 — Data Link
Run 5: Statistics of Indigo-1-32

Start at: 2018-01-27 03:56:57
End at: 2018-01-27 03:57:27
Local clock offset: -3.455 ms

# Below is generated by plot.py at 2018-01-27 18:46:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 332.41 Mbit/s
95th percentile per-packet one-way delay: 6.721 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 174.95 Mbit/s
95th percentile per-packet one-way delay: 6.657 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 162.25 Mbit/s
95th percentile per-packet one-way delay: 6.890 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 152.68 Mbit/s
95th percentile per-packet one-way delay: 6.765 ms
Loss rate: 0.22%
Run 5: Report of Indigo-1-32 — Data Link

Graph 1: Throughput Over Time (Mbps)
- Flow 1 (mean 174.91 Mbps)
- Flow 2 (mean 162.16 Mbps)
- Flow 3 (mean 152.70 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 6.66 ms)
- Flow 2 (95th percentile 6.89 ms)
- Flow 3 (95th percentile 6.76 ms)
Run 6: Statistics of Indigo-1-32

Start at: 2018-01-27 04:47:45
End at: 2018-01-27 04:48:15
Local clock offset: -3.193 ms

# Below is generated by plot.py at 2018-01-27 18:47:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 329.01 Mbit/s
  95th percentile per-packet one-way delay: 6.282 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 174.06 Mbit/s
  95th percentile per-packet one-way delay: 6.260 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 162.78 Mbit/s
  95th percentile per-packet one-way delay: 6.270 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 143.85 Mbit/s
  95th percentile per-packet one-way delay: 6.405 ms
  Loss rate: 0.23%
Run 6: Report of Indigo-1-32 — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 173.96 Mbps)
- Flow 1 egress (mean 174.06 Mbps)
- Flow 2 ingress (mean 162.68 Mbps)
- Flow 2 egress (mean 162.78 Mbps)
- Flow 3 ingress (mean 143.75 Mbps)
- Flow 3 egress (mean 143.85 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 6.26 ms)
- Flow 2 (95th percentile 6.27 ms)
- Flow 3 (95th percentile 6.41 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-01-27 05:38:24
End at: 2018-01-27 05:38:54
Local clock offset: -1.821 ms

# Below is generated by plot.py at 2018-01-27 18:48:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.47 Mbit/s
95th percentile per-packet one-way delay: 4.818 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 171.34 Mbit/s
95th percentile per-packet one-way delay: 4.771 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 161.36 Mbit/s
95th percentile per-packet one-way delay: 4.847 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 153.89 Mbit/s
95th percentile per-packet one-way delay: 4.911 ms
Loss rate: 0.23%
Run 7: Report of Indigo-1-32 — Data Link

![Graph 1] (Throughput vs Time)

![Graph 2] (Packet Delay vs Time)
Run 8: Statistics of Indigo-1-32

Start at: 2018-01-27 06:29:23
End at: 2018-01-27 06:29:53
Local clock offset: ~4.1 ms

# Below is generated by plot.py at 2018-01-27 18:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.10 Mbit/s
95th percentile per-packet one-way delay: 6.970 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 177.82 Mbit/s
95th percentile per-packet one-way delay: 6.923 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 164.15 Mbit/s
95th percentile per-packet one-way delay: 7.000 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 142.33 Mbit/s
95th percentile per-packet one-way delay: 7.056 ms
Loss rate: 0.22%
Run 8: Report of Indigo-1-32 — Data Link
Run 9: Statistics of Indigo-1-32

Start at: 2018-01-27 07:20:19
End at: 2018-01-27 07:20:49
Local clock offset: 2.632 ms

# Below is generated by plot.py at 2018-01-27 18:49:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 332.79 Mbit/s
  95th percentile per-packet one-way delay: -0.145 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 180.03 Mbit/s
  95th percentile per-packet one-way delay: -0.200 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 161.25 Mbit/s
  95th percentile per-packet one-way delay: -0.064 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 140.47 Mbit/s
  95th percentile per-packet one-way delay: -0.097 ms
  Loss rate: 0.12%
Run 9: Report of Indigo-1-32 — Data Link

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

**Throughput (Mbps)**

- Flow 1 ingress (mean 180.03 Mbit/s)
- Flow 1 egress (mean 180.03 Mbit/s)
- Flow 2 ingress (mean 161.21 Mbit/s)
- Flow 2 egress (mean 161.25 Mbit/s)
- Flow 3 ingress (mean 140.35 Mbit/s)
- Flow 3 egress (mean 140.47 Mbit/s)

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

- Flow 1 (95th percentile -0.20 ms)
- Flow 2 (95th percentile -0.06 ms)
- Flow 3 (95th percentile -0.10 ms)
Run 10: Statistics of Indigo-1-32

Start at: 2018-01-27 08:11:11
End at: 2018-01-27 08:11:41
Local clock offset: -0.76 ms

# Below is generated by plot.py at 2018-01-27 18:50:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.33 Mbit/s
95th percentile per-packet one-way delay: 2.606 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 181.43 Mbit/s
95th percentile per-packet one-way delay: 2.619 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 162.09 Mbit/s
95th percentile per-packet one-way delay: 2.565 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 150.65 Mbit/s
95th percentile per-packet one-way delay: 2.667 ms
Loss rate: 0.18%
Run 10: Report of Indigo-1-32 — Data Link

![Graph of throughput over time for different flows]

- Flow 1 ingress (mean 181.37 Mbit/s)
- Flow 1 egress (mean 181.43 Mbit/s)
- Flow 2 ingress (mean 162.63 Mbit/s)
- Flow 2 egress (mean 162.09 Mbit/s)
- Flow 3 ingress (mean 150.66 Mbit/s)
- Flow 3 egress (mean 150.65 Mbit/s)

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

- Flow 1 (95th percentile 2.62 ms)
- Flow 2 (95th percentile 2.56 ms)
- Flow 3 (95th percentile 2.67 ms)
Run 1: Statistics of Indigo-1-128

Start at: 2018-01-27 00:24:11
End at: 2018-01-27 00:24:41
Local clock offset: -2.378 ms

# Below is generated by plot.py at 2018-01-27 18:50:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 338.38 Mbit/s
95th percentile per-packet one-way delay: 4.175 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 186.35 Mbit/s
95th percentile per-packet one-way delay: 4.105 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 165.91 Mbit/s
95th percentile per-packet one-way delay: 4.345 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 128.13 Mbit/s
95th percentile per-packet one-way delay: 4.179 ms
Loss rate: 0.22%
Run 1: Report of Indigo-1-128 — Data Link

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

- Flow 1 ingress (mean 186.28 Mbit/s)
- Flow 1 egress (mean 186.35 Mbit/s)
- Flow 2 ingress (mean 165.91 Mbit/s)
- Flow 2 egress (mean 165.91 Mbit/s)
- Flow 3 ingress (mean 126.08 Mbit/s)
- Flow 3 egress (mean 126.13 Mbit/s)

- Flow 1 (95th percentile 4.11 ms)
- Flow 2 (95th percentile 4.34 ms)
- Flow 3 (95th percentile 4.18 ms)
Run 2: Statistics of Indigo-1-128

Start at: 2018-01-27 01:14:57
End at: 2018-01-27 01:15:27
Local clock offset: -4.472 ms

# Below is generated by plot.py at 2018-01-27 18:50:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 335.98 Mbit/s
  95th percentile per-packet one-way delay: 6.696 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 183.62 Mbit/s
  95th percentile per-packet one-way delay: 6.660 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 164.87 Mbit/s
  95th percentile per-packet one-way delay: 6.743 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 131.50 Mbit/s
  95th percentile per-packet one-way delay: 6.757 ms
  Loss rate: 0.24%
Run 2: Report of Indigo-1-128 — Data Link

![Graph of throughput over time](image1)

![Graph of packet latency over time](image2)
Run 3: Statistics of Indigo-1-128

Start at: 2018-01-27 02:05:46
End at: 2018-01-27 02:06:16
Local clock offset: -3.122 ms

# Below is generated by plot.py at 2018-01-27 18:51:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.53 Mbit/s
95th percentile per-packet one-way delay: 6.364 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 187.44 Mbit/s
95th percentile per-packet one-way delay: 6.294 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 167.72 Mbit/s
95th percentile per-packet one-way delay: 6.420 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 112.49 Mbit/s
95th percentile per-packet one-way delay: 6.469 ms
Loss rate: 0.14%
Run 3: Report of Indigo-1-128 — Data Link

---

---

289
Run 4: Statistics of Indigo-1-128

Start at: 2018-01-27 02:56:45
End at: 2018-01-27 02:57:15
Local clock offset: -3.237 ms

# Below is generated by plot.py at 2018-01-27 18:51:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.26 Mbit/s
95th percentile per-packet one-way delay: 6.375 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 186.05 Mbit/s
95th percentile per-packet one-way delay: 6.358 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 169.73 Mbit/s
95th percentile per-packet one-way delay: 6.391 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 6.448 ms
Loss rate: 0.24%
Run 4: Report of Indigo-1-128 — Data Link

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

- Flow 1 ingress (mean 186.05 Mbit/s)
- Flow 1 egress (mean 186.05 Mbit/s)
- Flow 2 ingress (mean 169.60 Mbit/s)
- Flow 2 egress (mean 169.73 Mbit/s)
- Flow 3 ingress (mean 96.92 Mbit/s)
- Flow 3 egress (mean 96.88 Mbit/s)

![Graph showing end-to-end delay over time for different flows.]

- Flow 1 (95th percentile 6.36 ms)
- Flow 2 (95th percentile 6.39 ms)
- Flow 3 (95th percentile 6.45 ms)
Run 5: Statistics of Indigo-1-128

Start at: 2018-01-27 03:47:09
End at: 2018-01-27 03:47:39
Local clock offset: -3.096 ms

# Below is generated by plot.py at 2018-01-27 18:52:56
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 336.44 Mbit/s
   95th percentile per-packet one-way delay: 6.542 ms
   Loss rate: 0.10%
-- Flow 1:
   Average throughput: 182.10 Mbit/s
   95th percentile per-packet one-way delay: 6.529 ms
   Loss rate: 0.07%
-- Flow 2:
   Average throughput: 164.52 Mbit/s
   95th percentile per-packet one-way delay: 6.554 ms
   Loss rate: 0.13%
-- Flow 3:
   Average throughput: 138.90 Mbit/s
   95th percentile per-packet one-way delay: 6.554 ms
   Loss rate: 0.16%
Run 6: Statistics of Indigo-1-128

Start at: 2018-01-27 04:37:57
End at: 2018-01-27 04:38:27
Local clock offset: -3.316 ms

# Below is generated by plot.py at 2018-01-27 18:53:04
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 340.41 Mbit/s
   95th percentile per-packet one-way delay: 6.470 ms
   Loss rate: 0.09%
-- Flow 1:
   Average throughput: 183.74 Mbit/s
   95th percentile per-packet one-way delay: 6.446 ms
   Loss rate: 0.05%
-- Flow 2:
   Average throughput: 168.53 Mbit/s
   95th percentile per-packet one-way delay: 6.497 ms
   Loss rate: 0.11%
-- Flow 3:
   Average throughput: 137.94 Mbit/s
   95th percentile per-packet one-way delay: 6.483 ms
   Loss rate: 0.21%
Run 7: Statistics of Indigo-1-128

Start at: 2018-01-27 05:28:42
End at: 2018-01-27 05:29:12
Local clock offset: -2.07 ms

# Below is generated by plot.py at 2018-01-27 18:53:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 337.85 Mbit/s
95th percentile per-packet one-way delay: 5.061 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 183.31 Mbit/s
95th percentile per-packet one-way delay: 5.029 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 162.99 Mbit/s
95th percentile per-packet one-way delay: 5.093 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 141.21 Mbit/s
95th percentile per-packet one-way delay: 5.123 ms
Loss rate: 0.16%
Run 7: Report of Indigo-1-128 — Data Link
Run 8: Statistics of Indigo-1-128

Start at: 2018-01-27 06:19:30
End at: 2018-01-27 06:20:00
Local clock offset: -3.89 ms

# Below is generated by plot.py at 2018-01-27 18:53:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 331.54 Mbit/s
95th percentile per-packet one-way delay: 6.811 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 185.56 Mbit/s
95th percentile per-packet one-way delay: 6.775 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 164.06 Mbit/s
95th percentile per-packet one-way delay: 6.871 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 114.12 Mbit/s
95th percentile per-packet one-way delay: 6.811 ms
Loss rate: 0.22%
Run 8: Report of Indigo-1-128 — Data Link
Run 9: Statistics of Indigo-1-128

Start at: 2018-01-27 07:10:28
End at: 2018-01-27 07:10:58
Local clock offset: 1.07 ms

# Below is generated by plot.py at 2018-01-27 18:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.51 Mbit/s
95th percentile per-packet one-way delay: 1.152 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 184.87 Mbit/s
95th percentile per-packet one-way delay: 1.123 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 165.71 Mbit/s
95th percentile per-packet one-way delay: 1.157 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 121.17 Mbit/s
95th percentile per-packet one-way delay: 1.308 ms
Loss rate: 0.18%
Run 10: Statistics of Indigo-1-128

Start at: 2018-01-27 08:01:22
End at: 2018-01-27 08:01:52
Local clock offset: -3.323 ms

# Below is generated by plot.py at 2018-01-27 18:53:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.49 Mbit/s
95th percentile per-packet one-way delay: 6.018 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 186.77 Mbit/s
95th percentile per-packet one-way delay: 5.987 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 167.33 Mbit/s
95th percentile per-packet one-way delay: 6.066 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 85.42 Mbit/s
95th percentile per-packet one-way delay: 6.013 ms
Loss rate: 0.24%
Run 10: Report of Indigo-1-128 — Data Link