Pantheon Report

Data path: GCE London Ethernet (remote) → GCE Iowa 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).

Git summary:
branch: master @ f23294ec38436c9f802847d477a41b7343ec76e6
third_party/calibrated_koho @ 3cb73c0d1c03222cdfae446ea37a522e53227db50
  M datagroupm/sender.cc
third_party/fillp @ ec9585325218d5048c4d4152fa42240af54c6e67
third_party/genericCC @ 80b516c448f795fd6e9675f7177b69c622f07da8
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7cd0ab9
third_party/indigo-1-layer-128-unit @ 3ae9e4ef4230db7484501f82ce8b377695f2f66d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0edcbf90c077e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f7541135ed7b4c0d3505939528e2a5f
third_party/indigo-no-calib @ 7224f22b2e8a044d8306fa0b9548360c53d89
third_party/koho_cc @ f0f2e693303ae82ea808e6928eac4f1083a6681
  M datagroupm/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cc3f3f
third_party/pantheon-tunnel1 @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afc958fa0d66d18b623c091a55f4c872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/proto-quic @ 77961f10a82733a86b42f1bc8143ebc97f8f3f42
third_party/scream @ c3370fd7bd17265a79eb3a4e016ad23f5956885
third_party/sourdough @ f1a16bfe749737437f61b1aeab3b627cde681
third_party/sprout @ 6f2e2e6e088d91066a9f023df375e6e2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutb2.cc
  M src/network/sproutcomm.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 423cbbca3e8ea1d599e7b5cfe725835e8a2b6bf6a6
third_party/webrtc @ a488197dd041ace68a42849b2540ad834825f42
test from GCE London Ethernet to GCE Iowa 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) flow 1</th>
<th>mean avg tput (Mbit/s) flow 2</th>
<th>mean avg tput (Mbit/s) flow 3</th>
<th>mean 95th-%ile delay (ms) flow 1</th>
<th>mean 95th-%ile delay (ms) flow 2</th>
<th>mean 95th-%ile delay (ms) flow 3</th>
<th>mean loss rate (%) flow 1</th>
<th>mean loss rate (%) flow 2</th>
<th>mean loss rate (%) flow 3</th>
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</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>215.91</td>
<td>212.37</td>
<td>197.95</td>
<td>60.11</td>
<td>61.48</td>
<td>63.31</td>
<td>0.38</td>
<td>0.58</td>
<td>1.22</td>
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<td>TCP Cubic</td>
<td>10</td>
<td>130.23</td>
<td>121.94</td>
<td>88.84</td>
<td>54.42</td>
<td>54.84</td>
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<td>LEDBAT</td>
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<td>12.19</td>
<td>8.39</td>
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<td>51.31</td>
<td>51.37</td>
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<td>0.92</td>
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<td>PCC</td>
<td>10</td>
<td>530.85</td>
<td>70.18</td>
<td>44.77</td>
<td>172.28</td>
<td>163.03</td>
<td>158.43</td>
<td>2.28</td>
<td>2.32</td>
<td>3.92</td>
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<td>N/A</td>
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<td>50.64</td>
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<td>1.40</td>
<td>0.56</td>
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<td>0.47</td>
<td>0.58</td>
<td>1.54</td>
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<td>51.45</td>
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<td>219.92</td>
<td>216.72</td>
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<td>52.65</td>
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<td>59.73</td>
<td>86.56</td>
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<td>51.32</td>
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<td>Indigo-1-128</td>
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<td>51.23</td>
<td>51.67</td>
<td>0.32</td>
<td>0.46</td>
<td>1.04</td>
</tr>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-01-26 16:16:37
End at: 2018-01-26 16:17:07

# Below is generated by plot.py at 2018-01-26 21:10:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 421.12 Mbit/s
  95th percentile per-packet one-way delay: 65.367 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 215.53 Mbit/s
  95th percentile per-packet one-way delay: 63.809 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 210.03 Mbit/s
  95th percentile per-packet one-way delay: 65.622 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 201.52 Mbit/s
  95th percentile per-packet one-way delay: 67.522 ms
  Loss rate: 1.19%
Run 1: Report of TCP BBR — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 215.65 Mbps)
- **Flow 1 egress** (mean 215.53 Mbps)
- **Flow 2 ingress** (mean 210.25 Mbps)
- **Flow 2 egress** (mean 210.03 Mbps)
- **Flow 3 ingress** (mean 201.84 Mbps)
- **Flow 3 egress** (mean 201.52 Mbps)

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

- **Flow 1** (95th percentile 63.81 ms)
- **Flow 2** (95th percentile 65.62 ms)
- **Flow 3** (95th percentile 67.52 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-01-26 16:31:02
End at: 2018-01-26 16:31:32

# Below is generated by plot.py at 2018-01-26 21:10:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 422.21 Mbit/s
  95th percentile per-packet one-way delay: 59.254 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 214.83 Mbit/s
  95th percentile per-packet one-way delay: 58.506 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 214.70 Mbit/s
  95th percentile per-packet one-way delay: 58.854 ms
  Loss rate: 0.68%
-- Flow 3:
  Average throughput: 196.41 Mbit/s
  95th percentile per-packet one-way delay: 60.996 ms
  Loss rate: 1.23%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-01-26 16:45:26
End at: 2018-01-26 16:45:56

# Below is generated by plot.py at 2018-01-26 21:10:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 420.41 Mbit/s
  95th percentile per-packet one-way delay: 64.150 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 215.45 Mbit/s
  95th percentile per-packet one-way delay: 62.237 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 212.99 Mbit/s
  95th percentile per-packet one-way delay: 64.561 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 192.52 Mbit/s
  95th percentile per-packet one-way delay: 66.706 ms
  Loss rate: 1.28%
Run 3: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 215.57 Mbit/s)
- Flow 1 egress (mean 215.45 Mbit/s)
- Flow 2 ingress (mean 213.14 Mbit/s)
- Flow 2 egress (mean 212.99 Mbit/s)
- Flow 3 ingress (mean 193.02 Mbit/s)
- Flow 3 egress (mean 192.52 Mbit/s)
Run 4: Statistics of TCP BBR

Start at: 2018-01-26 16:59:59
End at: 2018-01-26 17:00:30

# Below is generated by plot.py at 2018-01-26 21:10:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 417.01 Mbit/s
  95th percentile per-packet one-way delay: 64.128 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 213.14 Mbit/s
  95th percentile per-packet one-way delay: 62.055 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 211.33 Mbit/s
  95th percentile per-packet one-way delay: 63.829 ms
  Loss rate: 0.60%
-- Flow 3:
  Average throughput: 192.70 Mbit/s
  95th percentile per-packet one-way delay: 67.525 ms
  Loss rate: 1.29%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput and round-trip time for flows 1, 2, and 3 over time.]

Legend:
- Flow 1 ingress (mean 213.29 Mbit/s)
- Flow 1 egress (mean 213.14 Mbit/s)
- Flow 2 ingress (mean 211.52 Mbit/s)
- Flow 2 egress (mean 211.33 Mbit/s)
- Flow 3 ingress (mean 191.21 Mbit/s)
- Flow 3 egress (mean 192.79 Mbit/s)
Run 5: Statistics of TCP BBR

Start at: 2018-01-26 17:14:31
End at: 2018-01-26 17:15:01

# Below is generated by plot.py at 2018-01-26 21:10:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 423.82 Mbit/s
  95th percentile per-packet one-way delay: 58.612 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 216.84 Mbit/s
  95th percentile per-packet one-way delay: 57.473 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 210.66 Mbit/s
  95th percentile per-packet one-way delay: 59.136 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 203.11 Mbit/s
  95th percentile per-packet one-way delay: 59.528 ms
  Loss rate: 1.10%
Run 5: Report of TCP BBR — Data Link

![Throughput Graph]

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

Start at: 2018-01-26 17:29:02
End at: 2018-01-26 17:29:32

# Below is generated by plot.py at 2018-01-26 21:11:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 428.05 Mbit/s
  95th percentile per-packet one-way delay: 58.856 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 217.08 Mbit/s
  95th percentile per-packet one-way delay: 58.148 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 214.81 Mbit/s
  95th percentile per-packet one-way delay: 58.894 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 207.10 Mbit/s
  95th percentile per-packet one-way delay: 59.836 ms
  Loss rate: 1.19%
Run 7: Statistics of TCP BBR

Start at: 2018-01-26 17:43:15
End at: 2018-01-26 17:43:45

# Below is generated by plot.py at 2018-01-26 21:11:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 425.19 Mbit/s
  95th percentile per-packet one-way delay: 59.960 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 217.33 Mbit/s
  95th percentile per-packet one-way delay: 58.285 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 211.10 Mbit/s
  95th percentile per-packet one-way delay: 60.296 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 205.66 Mbit/s
  95th percentile per-packet one-way delay: 62.269 ms
  Loss rate: 1.12%
Run 7: Report of TCP BBR — Data Link

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

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Flow 1:
- Ingress: mean 217.55 Mbps
- Egress: mean 217.33 Mbps

Flow 2:
- Ingress: mean 211.42 Mbps
- Egress: mean 211.10 Mbps

Flow 3:
- Ingress: mean 205.84 Mbps
- Egress: mean 205.66 Mbps

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Flow 1 (95th percentile 58.28 ms)
Flow 2 (95th percentile 60.30 ms)
Flow 3 (95th percentile 62.27 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-01-26 17:57:36
End at: 2018-01-26 17:58:06

# Below is generated by plot.py at 2018-01-26 21:11:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 413.37 Mbit/s
  95th percentile per-packet one-way delay: 69.802 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 211.00 Mbit/s
  95th percentile per-packet one-way delay: 68.402 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 211.53 Mbit/s
  95th percentile per-packet one-way delay: 69.725 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 187.61 Mbit/s
  95th percentile per-packet one-way delay: 71.624 ms
  Loss rate: 1.22%
Run 8: Report of TCP BBR — Data Link

![Graph showing network throughput and per-packet one-way delay for flows 1, 2, and 3.](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 211.02 Mbps)
  - Flow 1 egress (mean 211.00 Mbps)
  - Flow 2 ingress (mean 211.71 Mbps)
  - Flow 2 egress (mean 211.53 Mbps)
  - Flow 3 ingress (mean 188.00 Mbps)
  - Flow 3 egress (mean 187.61 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 68.40 ms)
  - Flow 2 (95th percentile 69.72 ms)
  - Flow 3 (95th percentile 71.62 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-01-26 18:12:04
End at: 2018-01-26 18:12:34

# Below is generated by plot.py at 2018-01-26 21:18:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 427.64 Mbit/s
  95th percentile per-packet one-way delay: 55.387 ms
  Loss rate: 0.55%
  -- Flow 1:
  Average throughput: 218.93 Mbit/s
  95th percentile per-packet one-way delay: 54.648 ms
  Loss rate: 0.36%
  -- Flow 2:
  Average throughput: 217.05 Mbit/s
  95th percentile per-packet one-way delay: 55.365 ms
  Loss rate: 0.55%
  -- Flow 3:
  Average throughput: 195.68 Mbit/s
  95th percentile per-packet one-way delay: 56.595 ms
  Loss rate: 1.21%
Run 9: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 218.98 Mbit/s)
- Flow 1 egress (mean 218.93 Mbit/s)
- Flow 2 ingress (mean 217.13 Mbit/s)
- Flow 2 egress (mean 217.05 Mbit/s)
- Flow 3 ingress (mean 196.29 Mbit/s)
- Flow 3 egress (mean 195.68 Mbit/s)
Run 10: Statistics of TCP BBR

Start at: 2018-01-26 18:26:30
End at: 2018-01-26 18:27:00

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 422.86 Mbit/s
  95th percentile per-packet one-way delay: 58.618 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 218.93 Mbit/s
  95th percentile per-packet one-way delay: 57.525 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 209.52 Mbit/s
  95th percentile per-packet one-way delay: 58.501 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 197.22 Mbit/s
  95th percentile per-packet one-way delay: 60.519 ms
  Loss rate: 1.33%
Run 10: Report of TCP BBR — Data Link

![Graph showing network data](image1)

![Graph showing network delay](image2)
Run 1: Statistics of TCP Cubic

Start at: 2018-01-26 16:19:33
End at: 2018-01-26 16:20:03

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 263.17 Mbit/s
 95th percentile per-packet one-way delay: 57.554 ms
 Loss rate: 0.34%
-- Flow 1:
 Average throughput: 128.16 Mbit/s
 95th percentile per-packet one-way delay: 56.910 ms
 Loss rate: 0.17%
-- Flow 2:
 Average throughput: 148.41 Mbit/s
 95th percentile per-packet one-way delay: 57.676 ms
 Loss rate: 0.30%
-- Flow 3:
 Average throughput: 110.46 Mbit/s
 95th percentile per-packet one-way delay: 58.311 ms
 Loss rate: 1.02%

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Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-01-26 16:33:56
End at: 2018-01-26 16:34:26

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.77 Mbit/s
95th percentile per-packet one-way delay: 54.797 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 137.27 Mbit/s
95th percentile per-packet one-way delay: 53.814 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 148.49 Mbit/s
95th percentile per-packet one-way delay: 56.551 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 142.16 Mbit/s
95th percentile per-packet one-way delay: 52.658 ms
Loss rate: 1.02%
Run 2: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 137.24 Mbps)**
- **Flow 1 egress (mean 137.27 Mbps)**
- **Flow 2 ingress (mean 148.20 Mbps)**
- **Flow 2 egress (mean 148.49 Mbps)**
- **Flow 3 ingress (mean 142.22 Mbps)**
- **Flow 3 egress (mean 142.16 Mbps)**

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

- **Flow 1 (95th percentile 53.81 ms)**
- **Flow 2 (95th percentile 56.55 ms)**
- **Flow 3 (95th percentile 52.66 ms)**
Run 3: Statistics of TCP Cubic

Start at: 2018-01-26 16:48:25
End at: 2018-01-26 16:48:55

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 269.57 Mbit/s
  95th percentile per-packet one-way delay: 56.290 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 135.75 Mbit/s
  95th percentile per-packet one-way delay: 55.050 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 123.43 Mbit/s
  95th percentile per-packet one-way delay: 55.276 ms
  Loss rate: 0.75%
-- Flow 3:
  Average throughput: 157.68 Mbit/s
  95th percentile per-packet one-way delay: 57.149 ms
  Loss rate: 0.71%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-01-26 17:02:58
End at: 2018-01-26 17:03:28

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.94 Mbit/s
95th percentile per-packet one-way delay: 55.123 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 171.11 Mbit/s
95th percentile per-packet one-way delay: 55.890 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 144.83 Mbit/s
95th percentile per-packet one-way delay: 52.883 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 5.25 Mbit/s
95th percentile per-packet one-way delay: 54.186 ms
Loss rate: 3.96%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-01-26 17:17:30
End at: 2018-01-26 17:18:00

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 172.74 Mbit/s
95th percentile per-packet one-way delay: 55.525 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 123.12 Mbit/s
95th percentile per-packet one-way delay: 54.188 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 18.34 Mbit/s
95th percentile per-packet one-way delay: 52.013 ms
Loss rate: 1.88%
-- Flow 3:
Average throughput: 113.59 Mbit/s
95th percentile per-packet one-way delay: 56.679 ms
Loss rate: 0.99%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 123.10 Mbit/s)
- Flow 1 egress (mean 123.12 Mbit/s)
- Flow 2 ingress (mean 18.60 Mbit/s)
- Flow 2 egress (mean 18.34 Mbit/s)
- Flow 3 ingress (mean 111.55 Mbit/s)
- Flow 3 egress (mean 111.59 Mbit/s)

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

- Flow 1 (95th percentile 54.19 ms)
- Flow 2 (95th percentile 52.01 ms)
- Flow 3 (95th percentile 56.68 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-01-26 17:31:59
End at: 2018-01-26 17:32:29

# Below is generated by plot.py at 2018-01-26 21:18:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 225.64 Mbit/s
  95th percentile per-packet one-way delay: 56.950 ms
  Loss rate: 0.65%
-- Flow 1:
  Average throughput: 109.56 Mbit/s
  95th percentile per-packet one-way delay: 56.626 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 105.44 Mbit/s
  95th percentile per-packet one-way delay: 58.508 ms
  Loss rate: 0.74%
-- Flow 3:
  Average throughput: 140.17 Mbit/s
  95th percentile per-packet one-way delay: 55.439 ms
  Loss rate: 1.12%
Run 6: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 7: Statistics of TCP Cubic

Start at: 2018-01-26 17:46:10
End at: 2018-01-26 17:46:40

# Below is generated by plot.py at 2018-01-26 21:19:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 265.38 Mbit/s
  95th percentile per-packet one-way delay: 54.311 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 138.77 Mbit/s
  95th percentile per-packet one-way delay: 54.170 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 141.04 Mbit/s
  95th percentile per-packet one-way delay: 54.224 ms
  Loss rate: 0.67%
-- Flow 3:
  Average throughput: 100.19 Mbit/s
  95th percentile per-packet one-way delay: 55.028 ms
  Loss rate: 1.13%
Run 7: Report of TCP Cubic — Data Link

![Graph 1: Throughput vs. Time]

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 138.83 Mbit/s)
Flow 1 egress (mean 138.77 Mbit/s)
Flow 2 ingress (mean 141.26 Mbit/s)
Flow 2 egress (mean 141.04 Mbit/s)
Flow 3 ingress (mean 130.29 Mbit/s)
Flow 3 egress (mean 100.39 Mbit/s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 54.17 ms)
Flow 2 (95th percentile 54.22 ms)
Flow 3 (95th percentile 55.03 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-01-26 18:00:36
End at: 2018-01-26 18:01:06

# Below is generated by plot.py at 2018-01-26 21:19:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 196.87 Mbit/s
95th percentile per-packet one-way delay: 51.492 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 117.84 Mbit/s
95th percentile per-packet one-way delay: 51.614 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 116.72 Mbit/s
95th percentile per-packet one-way delay: 51.319 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 50.157 ms
Loss rate: 3.63%
Run 9: Statistics of TCP Cubic

Start at: 2018-01-26 18:15:00
End at: 2018-01-26 18:15:30

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.16 Mbit/s
95th percentile per-packet one-way delay: 54.750 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 136.02 Mbit/s
95th percentile per-packet one-way delay: 53.466 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 128.33 Mbit/s
95th percentile per-packet one-way delay: 54.119 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 108.84 Mbit/s
95th percentile per-packet one-way delay: 57.089 ms
Loss rate: 1.00%
Run 9: Report of TCP Cubic — Data Link

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

- **Flow 1 ing(bis)** (mean 136.01 Mbit/s)
- **Flow 1 egress (mean 136.02 Mbit/s)**
- **Flow 2 ing(bis)** (mean 128.51 Mbit/s)
- **Flow 2 egress (mean 128.33 Mbit/s)**
- **Flow 3 ing(bis)** (mean 108.81 Mbit/s)
- **Flow 3 egress (mean 108.54 Mbit/s)**

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

- **Flow 1 (95th percentile 53.47 ms)**
- **Flow 2 (95th percentile 54.12 ms)**
- **Flow 3 (95th percentile 57.09 ms)**

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Run 10: Statistics of TCP Cubic

Start at: 2018-01-26 18:29:25
End at: 2018-01-26 18:29:55

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 202.32 Mbit/s
  95th percentile per-packet one-way delay: 54.441 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 104.67 Mbit/s
  95th percentile per-packet one-way delay: 52.439 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 144.39 Mbit/s
  95th percentile per-packet one-way delay: 55.874 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 5.31 Mbit/s
  95th percentile per-packet one-way delay: 51.273 ms
  Loss rate: 3.52%
Run 10: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 104.61 Mbit/s)
- Flow 1 egress (mean 104.67 Mbit/s)
- Flow 2 ingress (mean 144.33 Mbit/s)
- Flow 2 egress (mean 144.39 Mbit/s)
- Flow 3 ingress (mean 5.44 Mbit/s)
- Flow 3 egress (mean 5.31 Mbit/s)
Run 1: Statistics of LEDBAT

Start at: 2018-01-26 16:11:41
End at: 2018-01-26 16:12:11

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.17 Mbit/s
  95th percentile per-packet one-way delay: 50.946 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 11.47 Mbit/s
  95th percentile per-packet one-way delay: 51.007 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 12.02 Mbit/s
  95th percentile per-packet one-way delay: 50.749 ms
  Loss rate: 0.81%
-- Flow 3:
  Average throughput: 11.39 Mbit/s
  95th percentile per-packet one-way delay: 50.921 ms
  Loss rate: 2.06%
Run 1: Report of LEDBAT — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 11.49 Mbit/s)
- Flow 1 egress (mean 11.47 Mbit/s)
- Flow 2 ingress (mean 12.05 Mbit/s)
- Flow 2 egress (mean 12.02 Mbit/s)
- Flow 3 ingress (mean 11.51 Mbit/s)
- Flow 3 egress (mean 11.39 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 51.01 ms)
- Flow 2 (95th percentile 50.75 ms)
- Flow 3 (95th percentile 50.92 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-01-26 16:26:10
End at: 2018-01-26 16:26:40

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 27.50 Mbit/s
95th percentile per-packet one-way delay: 51.630 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 15.30 Mbit/s
95th percentile per-packet one-way delay: 51.725 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 14.98 Mbit/s
95th percentile per-packet one-way delay: 51.399 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 6.90 Mbit/s
95th percentile per-packet one-way delay: 51.811 ms
Loss rate: 1.35%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-01-26 16:40:34
End at: 2018-01-26 16:41:04

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 24.15 Mbit/s
  95th percentile per-packet one-way delay: 51.218 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 11.44 Mbit/s
  95th percentile per-packet one-way delay: 51.222 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 14.65 Mbit/s
  95th percentile per-packet one-way delay: 51.251 ms
  Loss rate: 0.78%
-- Flow 3:
  Average throughput: 9.17 Mbit/s
  95th percentile per-packet one-way delay: 51.103 ms
  Loss rate: 2.27%
Run 3: Report of LEDBAT — Data Link

[Graph showing throughput and packet error rates over time for different flows.]
Run 4: Statistics of LEDBAT

Start at: 2018-01-26 16:55:06
End at: 2018-01-26 16:55:36

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 25.55 Mbit/s
95th percentile per-packet one-way delay: 51.320 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 15.37 Mbit/s
95th percentile per-packet one-way delay: 51.288 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 10.48 Mbit/s
95th percentile per-packet one-way delay: 51.340 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 9.87 Mbit/s
95th percentile per-packet one-way delay: 51.353 ms
Loss rate: 2.17%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 15.45 Mbit/s)**
- **Flow 1 egress (mean 15.37 Mbit/s)**
- **Flow 2 ingress (mean 10.51 Mbit/s)**
- **Flow 2 egress (mean 10.48 Mbit/s)**
- **Flow 3 ingress (mean 9.98 Mbit/s)**
- **Flow 3 egress (mean 9.87 Mbit/s)**

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

- **Flow 1 (95th percentile 51.29 ms)**
- **Flow 2 (95th percentile 51.34 ms)**
- **Flow 3 (95th percentile 51.35 ms)**
Run 5: Statistics of LEDBAT

Start at: 2018-01-26 17:09:44
End at: 2018-01-26 17:10:14

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 18.82 Mbit/s
  95th percentile per-packet one-way delay: 51.358 ms
  Loss rate: 1.24%
-- Flow 1:
  Average throughput: 10.82 Mbit/s
  95th percentile per-packet one-way delay: 51.505 ms
  Loss rate: 1.31%
-- Flow 2:
  Average throughput: 9.80 Mbit/s
  95th percentile per-packet one-way delay: 51.229 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 4.61 Mbit/s
  95th percentile per-packet one-way delay: 51.146 ms
  Loss rate: 4.45%
Run 5: Report of LEDBAT — Data Link

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

- **Flow 1 ingress**: mean 10.92 Mbps
- **Flow 1 egress**: mean 10.82 Mbps
- **Flow 2 ingress**: mean 9.78 Mbps
- **Flow 2 egress**: mean 9.80 Mbps
- **Flow 3 ingress**: mean 4.77 Mbps
- **Flow 3 egress**: mean 4.61 Mbps

![Graph 2: Per-packet round-trip time (ms)]

- **Flow 1 (95th percentile)**: 51.51 ms
- **Flow 2 (95th percentile)**: 51.23 ms
- **Flow 3 (95th percentile)**: 51.15 ms
Run 6: Statistics of LEDBAT

Start at: 2018-01-26 17:24:10
End at: 2018-01-26 17:24:40

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 22.29 Mbit/s
  95th percentile per-packet one-way delay: 51.468 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 10.45 Mbit/s
  95th percentile per-packet one-way delay: 51.363 ms
  Loss rate: 0.86%
-- Flow 2:
  Average throughput: 12.09 Mbit/s
  95th percentile per-packet one-way delay: 51.575 ms
  Loss rate: 1.06%
-- Flow 3:
  Average throughput: 11.66 Mbit/s
  95th percentile per-packet one-way delay: 51.424 ms
  Loss rate: 2.04%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-01-26 17:38:37
End at: 2018-01-26 17:39:07

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 27.91 Mbit/s
  95th percentile per-packet one-way delay: 51.347 ms
  Loss rate: 0.88%
-- Flow 1:
  Average throughput: 15.35 Mbit/s
  95th percentile per-packet one-way delay: 51.299 ms
  Loss rate: 0.87%
-- Flow 2:
  Average throughput: 14.72 Mbit/s
  95th percentile per-packet one-way delay: 51.378 ms
  Loss rate: 0.83%
-- Flow 3:
  Average throughput: 8.50 Mbit/s
  95th percentile per-packet one-way delay: 51.390 ms
  Loss rate: 1.12%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-01-26 17:52:46
End at: 2018-01-26 17:53:16

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.74 Mbit/s
  95th percentile per-packet one-way delay: 51.119 ms
  Loss rate: 1.62%
-- Flow 1:
  Average throughput: 8.27 Mbit/s
  95th percentile per-packet one-way delay: 51.076 ms
  Loss rate: 1.39%
-- Flow 2:
  Average throughput: 9.06 Mbit/s
  95th percentile per-packet one-way delay: 51.264 ms
  Loss rate: 1.76%
-- Flow 3:
  Average throughput: 4.49 Mbit/s
  95th percentile per-packet one-way delay: 51.119 ms
  Loss rate: 2.35%
Run 8: Report of LEDBAT — Data Link

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

![Graph 2: Per-Packet Round-Trip Time vs Time](image2)
Run 9: Statistics of LEDBAT

Start at: 2018-01-26 18:07:16
End at: 2018-01-26 18:07:46

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.72 Mbit/s
95th percentile per-packet one-way delay: 51.479 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 26.46 Mbit/s
95th percentile per-packet one-way delay: 51.496 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 51.364 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 51.538 ms
Loss rate: 1.82%
Run 9: Report of LEDBAT — Data Link

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

Throughput (Mbit/s)

<table>
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<tr>
<th>Time (s)</th>
<th>Flow 1 ingress (mean 26.57 Mbit/s)</th>
<th>Flow 1 egress (mean 26.46 Mbit/s)</th>
<th>Flow 2 ingress (mean 8.88 Mbit/s)</th>
<th>Flow 2 egress (mean 8.84 Mbit/s)</th>
<th>Flow 3 ingress (mean 7.38 Mbit/s)</th>
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</table>

Per-packet one-way delay (ms)

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<th>Time (s)</th>
<th>Flow 1 (95th percentile 51.50 ms)</th>
<th>Flow 2 (95th percentile 51.36 ms)</th>
<th>Flow 3 (95th percentile 51.54 ms)</th>
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</tbody>
</table>
Run 10: Statistics of LEDBAT

Start at: 2018-01-26 18:21:38
End at: 2018-01-26 18:22:08

# Below is generated by plot.py at 2018-01-26 21:20:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 23.66 Mbit/s
  95th percentile per-packet one-way delay: 51.588 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 10.27 Mbit/s
  95th percentile per-packet one-way delay: 51.564 ms
  Loss rate: 0.83%
-- Flow 2:
  Average throughput: 15.25 Mbit/s
  95th percentile per-packet one-way delay: 51.522 ms
  Loss rate: 0.80%
-- Flow 3:
  Average throughput: 9.99 Mbit/s
  95th percentile per-packet one-way delay: 51.889 ms
  Loss rate: 2.18%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC

Start at: 2018-01-26 16:24:27
End at: 2018-01-26 16:24:57

# Below is generated by plot.py at 2018-01-26 21:28:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 591.86 Mbit/s
  95th percentile per-packet one-way delay: 166.427 ms
  Loss rate: 2.19%
-- Flow 1:
  Average throughput: 509.83 Mbit/s
  95th percentile per-packet one-way delay: 166.386 ms
  Loss rate: 2.17%
-- Flow 2:
  Average throughput: 122.41 Mbit/s
  95th percentile per-packet one-way delay: 166.564 ms
  Loss rate: 2.37%
-- Flow 3:
  Average throughput: 2.43 Mbit/s
  95th percentile per-packet one-way delay: 158.929 ms
  Loss rate: 1.10%
Run 1: Report of PCC — Data Link
Run 2: Statistics of PCC

Start at: 2018-01-26 16:38:51
End at: 2018-01-26 16:39:21

# Below is generated by plot.py at 2018-01-26 21:29:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 633.02 Mbit/s
95th percentile per-packet one-way delay: 179.044 ms
Loss rate: 1.57%
-- Flow 1:
Average throughput: 574.39 Mbit/s
95th percentile per-packet one-way delay: 181.440 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 28.64 Mbit/s
95th percentile per-packet one-way delay: 155.620 ms
Loss rate: 1.32%
-- Flow 3:
Average throughput: 121.19 Mbit/s
95th percentile per-packet one-way delay: 152.682 ms
Loss rate: 1.39%
Run 2: Report of PCC — Data Link
Run 3: Statistics of PCC

Start at: 2018-01-26 16:53:25
End at: 2018-01-26 16:53:55

# Below is generated by plot.py at 2018-01-26 21:29:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 570.39 Mbit/s
  95th percentile per-packet one-way delay: 177.031 ms
  Loss rate: 1.47%
-- Flow 1:
  Average throughput: 556.38 Mbit/s
  95th percentile per-packet one-way delay: 177.235 ms
  Loss rate: 1.48%
-- Flow 2:
  Average throughput: 6.38 Mbit/s
  95th percentile per-packet one-way delay: 174.031 ms
  Loss rate: 1.28%
-- Flow 3:
  Average throughput: 30.02 Mbit/s
  95th percentile per-packet one-way delay: 127.534 ms
  Loss rate: 0.99%
Run 3: Report of PCC — Data Link

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

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

Start at: 2018-01-26 17:08:01
End at: 2018-01-26 17:08:31

# Below is generated by plot.py at 2018-01-26 21:29:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 587.17 Mbit/s
  95th percentile per-packet one-way delay: 189.803 ms
  Loss rate: 2.73%
-- Flow 1:
  Average throughput: 528.69 Mbit/s
  95th percentile per-packet one-way delay: 202.717 ms
  Loss rate: 2.76%
-- Flow 2:
  Average throughput: 80.65 Mbit/s
  95th percentile per-packet one-way delay: 162.584 ms
  Loss rate: 2.28%
-- Flow 3:
  Average throughput: 15.52 Mbit/s
  95th percentile per-packet one-way delay: 163.045 ms
  Loss rate: 4.33%
Run 4: Report of PCC — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 541.83 Mbps)
Flow 1 egress (mean 528.69 Mbps)
Flow 2 ingress (mean 82.11 Mbps)
Flow 2 egress (mean 80.65 Mbps)
Flow 3 ingress (mean 16.05 Mbps)
Flow 3 egress (mean 15.52 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 202.72 ms)
Flow 2 (95th percentile 162.58 ms)
Flow 3 (95th percentile 163.04 ms)
Run 5: Statistics of PCC

Start at: 2018-01-26 17:22:27
End at: 2018-01-26 17:22:57

# Below is generated by plot.py at 2018-01-26 21:29:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 597.37 Mbit/s
95th percentile per-packet one-way delay: 164.238 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 584.19 Mbit/s
95th percentile per-packet one-way delay: 164.212 ms
Loss rate: 2.02%
-- Flow 2:
Average throughput: 4.51 Mbit/s
95th percentile per-packet one-way delay: 163.400 ms
Loss rate: 2.27%
-- Flow 3:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: 164.966 ms
Loss rate: 3.76%
Run 5: Report of PCC — Data Link

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

- **Flow 1 ingress (mean 593.99 Mbit/s)**
- **Flow 1 egress (mean 584.19 Mbit/s)**
- **Flow 2 ingress (mean 4.59 Mbit/s)**
- **Flow 2 egress (mean 4.51 Mbit/s)**
- **Flow 3 ingress (mean 32.03 Mbit/s)**
- **Flow 3 egress (mean 31.19 Mbit/s)**

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

- **Flow 1 (95th percentile 164.21 ms)**
- **Flow 2 (95th percentile 163.40 ms)**
- **Flow 3 (95th percentile 164.97 ms)**
Run 6: Statistics of PCC

Start at: 2018-01-26 17:36:55
End at: 2018-01-26 17:37:25

# Below is generated by plot.py at 2018-01-26 21:30:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 595.95 Mbit/s
  95th percentile per-packet one-way delay: 162.626 ms
  Loss rate: 1.53%
-- Flow 1:
  Average throughput: 545.06 Mbit/s
  95th percentile per-packet one-way delay: 162.946 ms
  Loss rate: 1.51%
-- Flow 2:
  Average throughput: 62.00 Mbit/s
  95th percentile per-packet one-way delay: 160.606 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 29.83 Mbit/s
  95th percentile per-packet one-way delay: 162.352 ms
  Loss rate: 2.87%
Run 6: Report of PCC — Data Link

[Graph showing throughput and packet delay for different flows]
Run 7: Statistics of PCC

Start at: 2018-01-26 17:51:03
End at: 2018-01-26 17:51:33

# Below is generated by plot.py at 2018-01-26 21:30:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 590.60 Mbit/s
  95th percentile per-packet one-way delay: 164.547 ms
  Loss rate: 2.64%
-- Flow 1:
  Average throughput: 492.47 Mbit/s
  95th percentile per-packet one-way delay: 164.783 ms
  Loss rate: 2.60%
-- Flow 2:
  Average throughput: 139.79 Mbit/s
  95th percentile per-packet one-way delay: 163.579 ms
  Loss rate: 2.69%
-- Flow 3:
  Average throughput: 16.44 Mbit/s
  95th percentile per-packet one-way delay: 164.419 ms
  Loss rate: 4.70%
Run 7: Report of PCC — Data Link
Run 8: Statistics of PCC

Start at: 2018-01-26 18:05:33
End at: 2018-01-26 18:06:03

# Below is generated by plot.py at 2018-01-26 21:31:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 599.55 Mbit/s
  95th percentile per-packet one-way delay: 146.292 ms
  Loss rate: 0.71%
-- Flow 1:
  Average throughput: 577.58 Mbit/s
  95th percentile per-packet one-way delay: 149.350 ms
  Loss rate: 0.71%
-- Flow 2:
  Average throughput: 16.47 Mbit/s
  95th percentile per-packet one-way delay: 133.687 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 33.90 Mbit/s
  95th percentile per-packet one-way delay: 136.056 ms
  Loss rate: 1.13%
Run 8: Report of PCC — Data Link
Run 9: Statistics of PCC

Start at: 2018-01-26 18:19:55
End at: 2018-01-26 18:20:25

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 595.53 Mbit/s
 95th percentile per-packet one-way delay: 169.297 ms
 Loss rate: 4.83%
-- Flow 1:
 Average throughput: 479.39 Mbit/s
 95th percentile per-packet one-way delay: 170.487 ms
 Loss rate: 4.33%
-- Flow 2:
 Average throughput: 121.66 Mbit/s
 95th percentile per-packet one-way delay: 166.355 ms
 Loss rate: 4.82%
-- Flow 3:
 Average throughput: 108.38 Mbit/s
 95th percentile per-packet one-way delay: 168.849 ms
 Loss rate: 11.14%
Run 9: Report of PCC — Data Link
Run 10: Statistics of PCC

Start at: 2018-01-26 18:34:18
End at: 2018-01-26 18:34:48

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 558.84 Mbit/s
  95th percentile per-packet one-way delay: 183.642 ms
  Loss rate: 3.85%
-- Flow 1:
  Average throughput: 460.53 Mbit/s
  95th percentile per-packet one-way delay: 183.263 ms
  Loss rate: 3.62%
-- Flow 2:
  Average throughput: 119.31 Mbit/s
  95th percentile per-packet one-way delay: 183.830 ms
  Loss rate: 4.21%
-- Flow 3:
  Average throughput: 58.77 Mbit/s
  95th percentile per-packet one-way delay: 185.474 ms
  Loss rate: 7.74%
Run 10: Report of PCC — Data Link

Throughput (Mb/s) vs Time (s)

- Flow 1 ingress (mean 476.20 Mb/s)
- Flow 1 egress (mean 460.53 Mb/s)
- Flow 2 ingress (mean 123.92 Mb/s)
- Flow 2 egress (mean 119.31 Mb/s)
- Flow 3 ingress (mean 63.04 Mb/s)
- Flow 3 egress (mean 58.77 Mb/s)

Packet delay (ms) vs Time (s)

- Flow 1 (95th percentile 183.26 ms)
- Flow 2 (95th percentile 183.83 ms)
- Flow 3 (95th percentile 185.47 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-01-26 16:18:54
End at: 2018-01-26 16:19:24
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-01-26 16:33:17
End at: 2018-01-26 16:33:47
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 0.22 Mbit/s)**
- **Flow 1 egress (mean 0.22 Mbit/s)**
- **Flow 2 ingress (mean 0.23 Mbit/s)**
- **Flow 2 egress (mean 0.23 Mbit/s)**
- **Flow 3 ingress (mean 0.22 Mbit/s)**
- **Flow 3 egress (mean 0.23 Mbit/s)**

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

- **Flow 1 95th percentile 50.57 ms**
- **Flow 2 95th percentile 49.96 ms**
- **Flow 3 95th percentile 50.29 ms**

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Run 3: Statistics of QUIC Cubic

Start at: 2018-01-26 16:47:46
End at: 2018-01-26 16:48:16
Run 3: Report of QUIC Cubic — Data Link

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**Throughput (kb/s)**

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.22 Mbit/s)
- Flow 2 egress (mean 0.23 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

---

**Packet Delivery Ratio (PDV)**

- Flow 1 (95th percentile 51.80 ms)
- Flow 2 (95th percentile 50.71 ms)
- Flow 3 (95th percentile 50.69 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2018-01-26 17:02:19
End at: 2018-01-26 17:02:49
Run 4: Report of QUIC Cubic — Data Link

### Throughput (Mbps)

- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.23 Mbps)
- Flow 3 ingress (mean 0.23 Mbps)
- Flow 3 egress (mean 0.23 Mbps)

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

- Flow 1 (95th percentile 50.34 ms)
- Flow 2 (95th percentile 50.99 ms)
- Flow 3 (95th percentile 51.05 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-01-26 17:16:51
End at: 2018-01-26 17:17:21
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet loss over time for different flows with 95th percentile delay values.]
Run 6: Statistics of QUIC Cubic

Start at: 2018-01-26 17:31:20
End at: 2018-01-26 17:31:50
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-01-26 17:45:31
End at: 2018-01-26 17:46:01
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-01-26 17:59:57
End at: 2018-01-26 18:00:27
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-01-26 18:14:21
End at: 2018-01-26 18:14:51
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-01-26 18:28:45
End at: 2018-01-26 18:29:15
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-01-26 16:11:02
End at: 2018-01-26 16:11:32

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.424 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.448 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.703 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.321 ms
  Loss rate: 1.11%
Run 1: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 50.45 ms)  
Flow 2 (95th percentile 49.70 ms)  
Flow 3 (95th percentile 50.32 ms)
Run 2: Statistics of SCReAM

Start at: 2018-01-26 16:25:30
End at: 2018-01-26 16:26:01

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.601 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.621 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.575 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.382 ms
  Loss rate: 1.11%
Run 3: Statistics of SCReAM

End at: 2018-01-26 16:40:25

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.555 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.570 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.505 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.353 ms
  Loss rate: 1.10%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-01-26 16:54:27
End at: 2018-01-26 16:54:57

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.736 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.753 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.596 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.494 ms
  Loss rate: 1.11%
Run 4: Report of SCReAM — Data Link

![Graph 1: Throughput vs Time for Flow 1 ingress (mean 0.22 Mbit/s) and Flow 1 egress (mean 0.22 Mbit/s), Flow 2 ingress (mean 0.22 Mbit/s) and Flow 2 egress (mean 0.22 Mbit/s), Flow 3 ingress (mean 0.22 Mbit/s) and Flow 3 egress (mean 0.22 Mbit/s).]

![Graph 2: Per-packet one-way delay vs Time for Flow 1 (95th percentile 50.75 ms), Flow 2 (95th percentile 50.60 ms), and Flow 3 (95th percentile 50.49 ms).]
Run 5: Statistics of SCReAM

Start at: 2018-01-26 17:09:05
End at: 2018-01-26 17:09:35

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.915 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.692 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.954 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.658 ms
  Loss rate: 1.10%
Run 5: Report of SCReAM — Data Link

Throughput (Mbps)

0.16 0.18 0.2 0.22 0.24 0.26 0.28

Time (s)

0 5 10 15 20 25 30

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

Per-packet one-way delay (ms)

40 49 58 59 54

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 50.69 ms)
Flow 2 (95th percentile 50.95 ms)
Flow 3 (95th percentile 50.66 ms)
Run 6: Statistics of SCReAM

Start at: 2018-01-26 17:23:31
End at: 2018-01-26 17:24:01

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.664 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.527 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.514 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.712 ms
Loss rate: 1.11%
Run 6: Report of SCReAM — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 7: Statistics of SCReAM

Start at: 2018-01-26 17:37:58
End at: 2018-01-26 17:38:28

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.782 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.550 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.820 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.638 ms
  Loss rate: 1.11%
Run 7: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 50.55 ms) — Flow 2 (95th percentile 50.82 ms) — Flow 3 (95th percentile 50.64 ms)
Run 8: Statistics of SCReAM

Start at: 2018-01-26 17:52:06
End at: 2018-01-26 17:52:36

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.860 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.896 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.537 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.614 ms
  Loss rate: 1.11%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-01-26 18:06:37
End at: 2018-01-26 18:07:07

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.761 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.440 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.775 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.785 ms
  Loss rate: 1.10%
Run 10: Statistics of SCReAM

Start at: 2018-01-26 18:20:59
End at: 2018-01-26 18:21:29

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.890 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.923 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.853 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.853 ms
Loss rate: 1.11%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-01-26 16:20:28
End at: 2018-01-26 16:20:58

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.21 Mbit/s
  95th percentile per-packet one-way delay: 50.420 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 2.23 Mbit/s
  95th percentile per-packet one-way delay: 50.405 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 1.42 Mbit/s
  95th percentile per-packet one-way delay: 50.501 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 50.307 ms
  Loss rate: 1.58%
Run 1: Report of WebRTC media — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 2.23 Mbps)
  - Flow 1 egress (mean 2.23 Mbps)
  - Flow 2 ingress (mean 1.42 Mbps)
  - Flow 2 egress (mean 1.42 Mbps)
  - Flow 3 ingress (mean 0.58 Mbps)
  - Flow 3 egress (mean 0.57 Mbps)

- **Per-packet round-trip delay (ms)**
  - Flow 1 (95th percentile 50.41 ms)
  - Flow 2 (95th percentile 50.50 ms)
  - Flow 3 (95th percentile 50.31 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-01-26 16:34:52
End at: 2018-01-26 16:35:22

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.19 Mbit/s
95th percentile per-packet one-way delay: 50.554 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 50.582 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 1.41 Mbit/s
95th percentile per-packet one-way delay: 50.392 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 0.58 Mbit/s
95th percentile per-packet one-way delay: 50.393 ms
Loss rate: 1.66%
Run 2: Report of WebRTC media — Data Link

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

Legend:
- Flow 1 ingress (mean 2.22 Mbit/s)
- Flow 1 egress (mean 2.22 Mbit/s)
- Flow 2 ingress (mean 1.42 Mbit/s)
- Flow 2 egress (mean 1.41 Mbit/s)
- Flow 3 ingress (mean 0.58 Mbit/s)
- Flow 3 egress (mean 0.58 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 50.58 ms)
- Flow 2 (95th percentile 50.39 ms)
- Flow 3 (95th percentile 50.39 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-01-26 16:49:20
End at: 2018-01-26 16:49:50

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.21 Mbit/s
  95th percentile per-packet one-way delay: 50.949 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 2.24 Mbit/s
  95th percentile per-packet one-way delay: 50.373 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 1.42 Mbit/s
  95th percentile per-packet one-way delay: 51.002 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 0.58 Mbit/s
  95th percentile per-packet one-way delay: 50.645 ms
  Loss rate: 1.32%
Run 3: Report of WebRTC media — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 2.24 Mbps)
- Flow 1 egress (mean 2.24 Mbps)
- Flow 2 ingress (mean 1.42 Mbps)
- Flow 2 egress (mean 1.42 Mbps)
- Flow 3 ingress (mean 0.59 Mbps)
- Flow 3 egress (mean 0.58 Mbps)
Run 4: Statistics of WebRTC media

Start at: 2018-01-26 17:03:52
End at: 2018-01-26 17:04:22

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.19 Mbit/s
  95th percentile per-packet one-way delay: 50.314 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 2.24 Mbit/s
  95th percentile per-packet one-way delay: 50.324 ms
  Loss rate: 0.43%
-- Flow 2:
  Average throughput: 1.40 Mbit/s
  95th percentile per-packet one-way delay: 50.301 ms
  Loss rate: 0.60%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 50.178 ms
  Loss rate: 1.26%
Run 4: Report of WebRTC media — Data Link

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

- **Throughput**
  - Flow 1 ingress (mean 2.24 Mbit/s)
  - Flow 1 egress (mean 2.24 Mbit/s)
  - Flow 2 ingress (mean 1.40 Mbit/s)
  - Flow 2 egress (mean 1.40 Mbit/s)
  - Flow 3 ingress (mean 0.58 Mbit/s)
  - Flow 3 egress (mean 0.57 Mbit/s)

- **Packet Delay**
  - Flow 1 (95th percentile 50.32 ms)
  - Flow 2 (95th percentile 50.30 ms)
  - Flow 3 (95th percentile 50.18 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-01-26 17:18:19
End at: 2018-01-26 17:18:49

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 4.20 Mbit/s
  95th percentile per-packet one-way delay: 50.750 ms
  Loss rate: 0.65%
-- Flow 1:
 Average throughput: 2.24 Mbit/s
  95th percentile per-packet one-way delay: 50.776 ms
  Loss rate: 0.42%
-- Flow 2:
 Average throughput: 1.41 Mbit/s
  95th percentile per-packet one-way delay: 50.381 ms
  Loss rate: 0.72%
-- Flow 3:
 Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 50.402 ms
  Loss rate: 1.35%
Run 5: Report of WebRTC media — Data Link

[Graph showing throughput over time for different flows, with legends indicating mean bit rates for ingress and egress.]
Run 6: Statistics of WebRTC media

Start at: 2018-01-26 17:32:52
End at: 2018-01-26 17:33:22

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.18 Mbit/s
  95th percentile per-packet one-way delay: 50.737 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 2.23 Mbit/s
  95th percentile per-packet one-way delay: 50.767 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 1.41 Mbit/s
  95th percentile per-packet one-way delay: 49.003 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 0.57 Mbit/s
  95th percentile per-packet one-way delay: 50.606 ms
  Loss rate: 1.27%
Run 6: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay]
Run 7: Statistics of WebRTC media

Start at: 2018-01-26 17:47:05
End at: 2018-01-26 17:47:35

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 51.030 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 2.22 Mbit/s
95th percentile per-packet one-way delay: 51.066 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 50.639 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 50.791 ms
Loss rate: 2.25%
Run 7: Report of WebRTC media — Data Link

---

**Throughput (Mbps) vs. Time (s)**

- **Flow 1 ingress** (mean 2.22 Mbps)
- **Flow 1 egress** (mean 2.22 Mbps)
- **Flow 2 ingress** (mean 1.40 Mbps)
- **Flow 2 egress** (mean 1.39 Mbps)
- **Flow 3 ingress** (mean 0.55 Mbps)
- **Flow 3 egress** (mean 0.54 Mbps)

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

- **Flow 1** (95th percentile 51.07 ms)
- **Flow 2** (95th percentile 50.64 ms)
- **Flow 3** (95th percentile 50.79 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-01-26 18:01:27
End at: 2018-01-26 18:01:57

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 50.770 ms
Loss rate: 0.66%
-- Flow 2:
Average throughput: 1.38 Mbit/s
95th percentile per-packet one-way delay: 50.432 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 50.402 ms
Loss rate: 0.78%
Run 8: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 2.22 Mbit/s)  Flow 1 egress (mean 2.21 Mbit/s)
Flow 2 ingress (mean 1.39 Mbit/s)  Flow 2 egress (mean 1.38 Mbit/s)
Flow 3 ingress (mean 0.57 Mbit/s)  Flow 3 egress (mean 0.57 Mbit/s)

Per packet one way delay [ms]

Time (s)

Flow 1 (95th percentile 50.77 ms)  Flow 2 (95th percentile 50.43 ms)  Flow 3 (95th percentile 50.40 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-01-26 18:15:55
End at: 2018-01-26 18:16:25

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 4.16 Mbit/s
  95th percentile per-packet one-way delay: 50.827 ms
  Loss rate: 0.58%
  -- Flow 1:
    Average throughput: 2.24 Mbit/s
    95th percentile per-packet one-way delay: 50.850 ms
    Loss rate: 0.48%
  -- Flow 2:
    Average throughput: 1.39 Mbit/s
    95th percentile per-packet one-way delay: 49.758 ms
    Loss rate: 0.31%
  -- Flow 3:
    Average throughput: 0.56 Mbit/s
    95th percentile per-packet one-way delay: 50.899 ms
    Loss rate: 1.66%
Run 9: Report of WebRTC media — Data Link

---

**Throughput (Mbps)**

**Time (s)**

- Flow 1 ingress (mean 2.24 Mbps)
- Flow 1 egress (mean 2.24 Mbps)
- Flow 2 ingress (mean 1.39 Mbps)
- Flow 2 egress (mean 1.39 Mbps)
- Flow 3 ingress (mean 0.57 Mbps)
- Flow 3 egress (mean 0.56 Mbps)

---

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

**Time (s)**

- Flow 1 (95th percentile 50.85 ms)
- Flow 2 (95th percentile 49.76 ms)
- Flow 3 (95th percentile 50.90 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-01-26 18:30:16
End at: 2018-01-26 18:30:46

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 50.820 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 49.873 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.39 Mbit/s
95th percentile per-packet one-way delay: 50.902 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 50.332 ms
Loss rate: 2.25%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-01-26 16:23:02
End at: 2018-01-26 16:23:32

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.62 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 7.93 Mbit/s
95th percentile per-packet one-way delay: 51.349 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 7.85 Mbit/s
95th percentile per-packet one-way delay: 51.458 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 7.56 Mbit/s
95th percentile per-packet one-way delay: 51.501 ms
Loss rate: 0.22%
Run 1: Report of Sprout — Data Link

![Graph showing throughput and delay over time for different flows. The graphs illustrate the performance of data link under varying conditions, with markers indicating specific values such as mean throughput and 95th percentile delay.](image-url)
Run 2: Statistics of Sprout

Start at: 2018-01-26 16:37:28
End at: 2018-01-26 16:37:58

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.58 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 7.95 Mbit/s
95th percentile per-packet one-way delay: 51.171 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 50.824 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 50.774 ms
Loss rate: 1.31%
Run 2: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 7.97 Mbps)
- Flow 1 egress (mean 7.95 Mbps)
- Flow 2 ingress (mean 7.71 Mbps)
- Flow 2 egress (mean 7.71 Mbps)
- Flow 3 ingress (mean 7.73 Mbps)
- Flow 3 egress (mean 7.72 Mbps)

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

- Flow 1 (95th percentile 51.17 ms)
- Flow 2 (95th percentile 50.82 ms)
- Flow 3 (95th percentile 50.77 ms)
Run 3: Statistics of Sprout

Start at: 2018-01-26 16:51:58
End at: 2018-01-26 16:52:28

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.72 Mbit/s
95th percentile per-packet one-way delay: 51.279 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 8.01 Mbit/s
95th percentile per-packet one-way delay: 51.370 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 51.265 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.40 Mbit/s
95th percentile per-packet one-way delay: 50.738 ms
Loss rate: 0.99%
Run 3: Report of Sprout — Data Link

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

Start at: 2018-01-26 17:06:34
End at: 2018-01-26 17:07:04

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.72 Mbit/s
  95th percentile per-packet one-way delay: 51.592 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 7.97 Mbit/s
  95th percentile per-packet one-way delay: 51.593 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 7.94 Mbit/s
  95th percentile per-packet one-way delay: 51.497 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.60 Mbit/s
  95th percentile per-packet one-way delay: 51.943 ms
  Loss rate: 1.30%
Run 4: Report of Sprout — Data Link

Throughput (Mbit/s)

- Flow 1 ingress (mean 7.98 Mbit/s)
- Flow 1 egress (mean 7.97 Mbit/s)
- Flow 2 ingress (mean 7.90 Mbit/s)
- Flow 2 egress (mean 7.94 Mbit/s)
- Flow 3 ingress (mean 7.60 Mbit/s)
- Flow 3 egress (mean 7.60 Mbit/s)

Per-packet one way delay [ms]

- Flow 1 (95th percentile 51.59 ms)
- Flow 2 (95th percentile 51.50 ms)
- Flow 3 (95th percentile 51.94 ms)
Run 5: Statistics of Sprout

Start at: 2018-01-26 17:20:56
End at: 2018-01-26 17:21:26

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.53 Mbit/s
95th percentile per-packet one-way delay: 51.661 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 51.706 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 51.596 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 7.50 Mbit/s
95th percentile per-packet one-way delay: 51.625 ms
Loss rate: 1.18%
Run 5: Report of Sprout — Data Link

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

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

Legend:
- Flow 1 ingress (mean 7.88 Mbps/s)
- Flow 1 egress (mean 7.88 Mbps/s)
- Flow 2 ingress (mean 7.82 Mbps/s)
- Flow 2 egress (mean 7.84 Mbps/s)
- Flow 3 ingress (mean 7.53 Mbps/s)
- Flow 3 egress (mean 7.50 Mbps/s)

Legend (Per-packet one-way delay):
- Flow 1 (95th percentile 51.71 ms)
- Flow 2 (95th percentile 51.60 ms)
- Flow 3 (95th percentile 51.62 ms)
Run 6: Statistics of Sprout

Start at: 2018-01-26 17:35:29
End at: 2018-01-26 17:35:59

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.63 Mbit/s
  95th percentile per-packet one-way delay: 51.604 ms
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 7.95 Mbit/s
  95th percentile per-packet one-way delay: 51.579 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 7.88 Mbit/s
  95th percentile per-packet one-way delay: 51.661 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 7.51 Mbit/s
  95th percentile per-packet one-way delay: 51.576 ms
  Loss rate: 1.31%
Run 6: Report of Sprout — Data Link

![Graph of Throughput vs Time](image1)

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

Legend:
- Flow 1 ingress (mean 7.95 Mbit/s)
- Flow 1 egress (mean 7.95 Mbit/s)
- Flow 2 ingress (mean 7.86 Mbit/s)
- Flow 2 egress (mean 7.86 Mbit/s)
- Flow 3 ingress (mean 7.55 Mbit/s)
- Flow 3 egress (mean 7.31 Mbit/s)
- Flow 1 (95th percentile 51.58 ms)
- Flow 2 (95th percentile 51.66 ms)
- Flow 3 (95th percentile 51.58 ms)
Run 7: Statistics of Sprout

Start at: 2018-01-26 17:49:38
End at: 2018-01-26 17:50:08

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.60 Mbit/s
  95th percentile per-packet one-way delay: 51.478 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 7.96 Mbit/s
  95th percentile per-packet one-way delay: 51.399 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 7.92 Mbit/s
  95th percentile per-packet one-way delay: 51.555 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 7.31 Mbit/s
  95th percentile per-packet one-way delay: 51.519 ms
  Loss rate: 1.37%
Run 7: Report of Sprout — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 7.96 Mbps)
  - Flow 1 egress (mean 7.96 Mbps)
  - Flow 2 ingress (mean 7.92 Mbps)
  - Flow 2 egress (mean 7.92 Mbps)
  - Flow 3 ingress (mean 7.32 Mbps)
  - Flow 3 egress (mean 7.31 Mbps)

- **Per packet one-way delay (ms)**
  - Flow 1 (95th percentile 51.40 ms)
  - Flow 2 (95th percentile 51.55 ms)
  - Flow 3 (95th percentile 51.52 ms)
Run 8: Statistics of Sprout

Start at: 2018-01-26 18:04:05
End at: 2018-01-26 18:04:35

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.66 Mbit/s
  95th percentile per-packet one-way delay: 51.179 ms
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 7.98 Mbit/s
  95th percentile per-packet one-way delay: 51.041 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 7.84 Mbit/s
  95th percentile per-packet one-way delay: 51.223 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 7.61 Mbit/s
  95th percentile per-packet one-way delay: 51.342 ms
  Loss rate: 1.33%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-01-26 18:18:30
End at: 2018-01-26 18:19:00

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 51.942 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 7.96 Mbit/s
95th percentile per-packet one-way delay: 51.956 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 52.026 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 51.789 ms
Loss rate: 2.25%
Run 10: Statistics of Sprout

Start at: 2018-01-26 18:32:52
End at: 2018-01-26 18:33:22

# Below is generated by plot.py at 2018-01-26 21:39:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.59 Mbit/s
95th percentile per-packet one-way delay: 51.724 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 7.97 Mbit/s
95th percentile per-packet one-way delay: 51.843 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 51.369 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 7.66 Mbit/s
95th percentile per-packet one-way delay: 51.583 ms
Loss rate: 1.32%
Run 10: Report of Sprout — Data Link

![Graphs showing throughput and per-packet one-way delay for different flows.](image-url)
Run 1: Statistics of TaoVA-100x

Start at: 2018-01-26 16:17:40
End at: 2018-01-26 16:18:10

# Below is generated by plot.py at 2018-01-26 21:42:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 388.25 Mbit/s
  95th percentile per-packet one-way delay: 53.488 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 216.45 Mbit/s
  95th percentile per-packet one-way delay: 51.268 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 225.99 Mbit/s
  95th percentile per-packet one-way delay: 55.712 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 96.73 Mbit/s
  95th percentile per-packet one-way delay: 54.025 ms
  Loss rate: 2.41%
Run 1: Report of TaoVA-100x — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 216.07 Mbit/s)
Flow 1 egress (mean 216.45 Mbit/s)
Flow 2 ingress (mean 225.96 Mbit/s)
Flow 2 egress (mean 225.99 Mbit/s)
Flow 3 ingress (mean 97.82 Mbit/s)
Flow 3 egress (mean 96.73 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 51.27 ms)
Flow 2 (95th percentile 55.71 ms)
Flow 3 (95th percentile 54.02 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-01-26 16:32:04
End at: 2018-01-26 16:32:34

# Below is generated by plot.py at 2018-01-26 21:42:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.41 Mbit/s
95th percentile per-packet one-way delay: 53.292 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 247.50 Mbit/s
95th percentile per-packet one-way delay: 53.484 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 166.71 Mbit/s
95th percentile per-packet one-way delay: 52.201 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 56.850 ms
Loss rate: 0.47%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-01-26 16:46:29
End at: 2018-01-26 16:46:59

# Below is generated by plot.py at 2018-01-26 21:43:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 419.44 Mbit/s
95th percentile per-packet one-way delay: 54.009 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 225.76 Mbit/s
95th percentile per-packet one-way delay: 51.023 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 214.19 Mbit/s
95th percentile per-packet one-way delay: 59.772 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 201.16 Mbit/s
95th percentile per-packet one-way delay: 51.846 ms
Loss rate: 1.64%
Run 3: Report of TaoVA-100x — Data Link

Throughput (Mbps):

- Flow 1 ingress (mean 225.41 Mbps)
- Flow 1 egress (mean 225.76 Mbps)
- Flow 2 ingress (mean 213.03 Mbps)
- Flow 2 egress (mean 214.19 Mbps)
- Flow 3 ingress (mean 201.89 Mbps)
- Flow 3 egress (mean 201.16 Mbps)

Per-packet one way delay (ms):

- Flow 1 (95th percentile 51.02 ms)
- Flow 2 (95th percentile 59.77 ms)
- Flow 3 (95th percentile 51.85 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-01-26 17:01:01
End at: 2018-01-26 17:01:31

# Below is generated by plot.py at 2018-01-26 21:43:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 421.03 Mbit/s
  95th percentile per-packet one-way delay: 51.982 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 242.95 Mbit/s
  95th percentile per-packet one-way delay: 52.800 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 231.92 Mbit/s
  95th percentile per-packet one-way delay: 51.212 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 104.93 Mbit/s
  95th percentile per-packet one-way delay: 51.768 ms
  Loss rate: 0.16%
Run 4: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 242.96 Mbps)
  - Flow 1 egress (mean 242.95 Mbps)
  - Flow 2 ingress (mean 232.11 Mbps)
  - Flow 2 egress (mean 231.92 Mbps)
  - Flow 3 ingress (mean 103.79 Mbps)
  - Flow 3 egress (mean 104.93 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 52.80 ms)
  - Flow 2 (95th percentile 51.21 ms)
  - Flow 3 (95th percentile 51.77 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-01-26 17:15:34
End at: 2018-01-26 17:16:04

# Below is generated by plot.py at 2018-01-26 21:43:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 406.06 Mbit/s
  95th percentile per-packet one-way delay: 51.239 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 192.97 Mbit/s
  95th percentile per-packet one-way delay: 50.873 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 231.12 Mbit/s
  95th percentile per-packet one-way delay: 51.890 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 232.33 Mbit/s
  95th percentile per-packet one-way delay: 51.222 ms
  Loss rate: 1.50%
Run 5: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 192.70 Mbps)
- Flow 1 egress (mean 192.97 Mbps)
- Flow 2 ingress (mean 231.28 Mbps)
- Flow 2 egress (mean 231.12 Mbps)
- Flow 3 ingress (mean 232.82 Mbps)
- Flow 3 egress (mean 232.33 Mbps)

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

- Flow 1 (95th percentile 50.87 ms)
- Flow 2 (95th percentile 51.89 ms)
- Flow 3 (95th percentile 51.22 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-01-26 17:30:04
End at: 2018-01-26 17:30:34

# Below is generated by plot.py at 2018-01-26 21:44:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 400.36 Mbit/s
  95th percentile per-packet one-way delay: 50.813 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 192.08 Mbit/s
  95th percentile per-packet one-way delay: 50.809 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 245.27 Mbit/s
  95th percentile per-packet one-way delay: 50.841 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 182.29 Mbit/s
  95th percentile per-packet one-way delay: 50.728 ms
  Loss rate: 1.79%
Run 6: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 191.71 Mbit/s)
- Flow 1 egress (mean 192.08 Mbit/s)
- Flow 2 ingress (mean 245.17 Mbit/s)
- Flow 2 egress (mean 245.27 Mbit/s)
- Flow 3 ingress (mean 181.28 Mbit/s)
- Flow 3 egress (mean 182.29 Mbit/s)
Run 7: Statistics of TaoVA-100x
Start at: 2018-01-26 17:44:18
End at: 2018-01-26 17:44:48

# Below is generated by plot.py at 2018-01-26 21:50:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 365.52 Mbit/s
  95th percentile per-packet one-way delay: 58.157 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 190.64 Mbit/s
  95th percentile per-packet one-way delay: 53.216 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 203.27 Mbit/s
  95th percentile per-packet one-way delay: 62.551 ms
  Loss rate: 0.73%
-- Flow 3:
  Average throughput: 159.29 Mbit/s
  95th percentile per-packet one-way delay: 63.523 ms
  Loss rate: 0.12%
Run 7: Report of TaoVA-100x — Data Link

**Throughput (Mbps)**

- **Flow 1 ingress (mean 190.27 Mbps)**
- **Flow 1 egress (mean 190.64 Mbps)**
- **Flow 2 ingress (mean 203.60 Mbps)**
- **Flow 2 egress (mean 203.27 Mbps)**
- **Flow 3 ingress (mean 157.42 Mbps)**
- **Flow 3 egress (mean 159.29 Mbps)**

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

- **Flow 1 (95th percentile 53.22 ms)**
- **Flow 2 (95th percentile 62.55 ms)**
- **Flow 3 (95th percentile 63.52 ms)**
Run 8: Statistics of TaoVA-100x

Start at: 2018-01-26 17:58:38
End at: 2018-01-26 17:59:08

# Below is generated by plot.py at 2018-01-26 21:53:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 440.68 Mbit/s
  95th percentile per-packet one-way delay: 52.541 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 239.82 Mbit/s
  95th percentile per-packet one-way delay: 52.908 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 218.59 Mbit/s
  95th percentile per-packet one-way delay: 52.526 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 217.41 Mbit/s
  95th percentile per-packet one-way delay: 51.570 ms
  Loss rate: 1.27%
Run 8: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 239.68 Mbps)
- Flow 1 egress (mean 239.82 Mbps)
- Flow 2 ingress (mean 218.19 Mbps)
- Flow 2 egress (mean 218.59 Mbps)
- Flow 3 ingress (mean 217.34 Mbps)
- Flow 3 egress (mean 217.41 Mbps)

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

- Flow 1 (95th percentile 52.91 ms)
- Flow 2 (95th percentile 52.53 ms)
- Flow 3 (95th percentile 51.57 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-01-26 18:13:07
End at: 2018-01-26 18:13:37

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 386.95 Mbit/s
  95th percentile per-packet one-way delay: 51.157 ms
  Loss rate: 0.43%
  -- Flow 1:
  Average throughput: 225.85 Mbit/s
  95th percentile per-packet one-way delay: 50.679 ms
  Loss rate: 0.40%
  -- Flow 2:
  Average throughput: 235.92 Mbit/s
  95th percentile per-packet one-way delay: 52.809 ms
  Loss rate: 0.48%
  -- Flow 3:
  Average throughput: 35.81 Mbit/s
  95th percentile per-packet one-way delay: 53.434 ms
  Loss rate: 0.42%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-01-26 18:27:33
End at: 2018-01-26 18:28:03

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 366.19 Mbit/s
  95th percentile per-packet one-way delay: 60.408 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 225.19 Mbit/s
  95th percentile per-packet one-way delay: 59.391 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 194.18 Mbit/s
  95th percentile per-packet one-way delay: 62.631 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 59.56 Mbit/s
  95th percentile per-packet one-way delay: 59.464 ms
  Loss rate: 2.23%
Run 10: Report of TaoVA-100x — Data Link

[Graphs showing throughput and packet loss]
Run 1: Statistics of TCP Vegas

Start at: 2018-01-26 16:23:42
End at: 2018-01-26 16:24:12

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 105.05 Mbit/s
  95th percentile per-packet one-way delay: 50.935 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 70.34 Mbit/s
  95th percentile per-packet one-way delay: 51.031 ms
  Loss rate: 0.22%
-- Flow 2:
  Average throughput: 49.17 Mbit/s
  95th percentile per-packet one-way delay: 50.848 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 6.22 Mbit/s
  95th percentile per-packet one-way delay: 50.665 ms
  Loss rate: 2.05%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-01-26 16:38:08
End at: 2018-01-26 16:38:38
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-01-26 16:52:39
End at: 2018-01-26 16:53:09

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 125.29 Mbit/s
95th percentile per-packet one-way delay: 51.930 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 67.11 Mbit/s
95th percentile per-packet one-way delay: 51.604 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: 51.493 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 106.87 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 1.12%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-01-26 17:07:14
End at: 2018-01-26 17:07:44

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 134.62 Mbit/s
  95th percentile per-packet one-way delay: 57.425 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 27.89 Mbit/s
  95th percentile per-packet one-way delay: 53.819 ms
  Loss rate: 0.54%
-- Flow 2:
  Average throughput: 85.83 Mbit/s
  95th percentile per-packet one-way delay: 58.046 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 150.88 Mbit/s
  95th percentile per-packet one-way delay: 56.959 ms
  Loss rate: 0.92%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-01-26 17:21:37
End at: 2018-01-26 17:22:07

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 190.31 Mbit/s
  95th percentile per-packet one-way delay: 51.472 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 69.29 Mbit/s
  95th percentile per-packet one-way delay: 51.539 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 139.90 Mbit/s
  95th percentile per-packet one-way delay: 51.399 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 85.73 Mbit/s
  95th percentile per-packet one-way delay: 51.560 ms
  Loss rate: 1.11%
Run 5: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**: The graphs display the throughput of data packets over time, with distinct lines for different flows. The throughput values are given as mean rates for each flow.
- **Packet Delay (ms)**: Another graph shows the packet delay over time, indicating the latency issues across different flows.

Flow 1 (Ingress 69.27 Mbps, Egress 69.29 Mbps), Flow 2 (Ingress 139.48 Mbps, Egress 139.90 Mbps), Flow 3 (Ingress 85.79 Mbps, Egress 85.73 Mbps)
Run 6: Statistics of TCP Vegas

Start at: 2018-01-26 17:36:09
End at: 2018-01-26 17:36:39
Run 6: Report of TCP Vegas — Data Link

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

Flow 1 ingress (mean 149.00 Mbit/s)  Flow 1 egress (mean 149.00 Mbit/s)
Flow 2 ingress (mean 43.11 Mbit/s)  Flow 2 egress (mean 43.04 Mbit/s)
Flow 3 ingress (mean 18.67 Mbit/s)  Flow 3 egress (mean 18.66 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-01-26 17:50:18
End at: 2018-01-26 17:50:48

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.17 Mbit/s
  95th percentile per-packet one-way delay: 51.223 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 44.02 Mbit/s
  95th percentile per-packet one-way delay: 51.281 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 35.73 Mbit/s
  95th percentile per-packet one-way delay: 51.213 ms
  Loss rate: 0.35%
-- Flow 3:
  Average throughput: 62.13 Mbit/s
  95th percentile per-packet one-way delay: 51.131 ms
  Loss rate: 1.13%
Run 7: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 (ingress: mean 44.03 Mbps)
  - Flow 1 (egress: mean 44.02 Mbps)
  - Flow 2 (ingress: mean 35.67 Mbps)
  - Flow 2 (egress: mean 35.73 Mbps)
  - Flow 3 (ingress: mean 62.21 Mbps)
  - Flow 3 (egress: mean 62.13 Mbps)

- **Per packet one way delay (ms):**
  - Flow 1 (95th percentile: 51.28 ms)
  - Flow 2 (95th percentile: 51.21 ms)
  - Flow 3 (95th percentile: 51.13 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-01-26 18:04:45
End at: 2018-01-26 18:05:15

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.93 Mbit/s
95th percentile per-packet one-way delay: 51.817 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 85.99 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 58.34 Mbit/s
95th percentile per-packet one-way delay: 53.004 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 79.69 Mbit/s
95th percentile per-packet one-way delay: 55.473 ms
Loss rate: 1.08%
Run 8: Report of TCP Vegas — Data Link

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[Graph showing network performance metrics over time, with labels for each flow and their respective throughput and packet delay statistics.

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Run 9: Statistics of TCP Vegas

Start at: 2018-01-26 18:19:10
End at: 2018-01-26 18:19:40

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.35 Mbit/s
  95th percentile per-packet one-way delay: 56.086 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 31.36 Mbit/s
  95th percentile per-packet one-way delay: 52.182 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 39.80 Mbit/s
  95th percentile per-packet one-way delay: 52.852 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 125.63 Mbit/s
  95th percentile per-packet one-way delay: 57.696 ms
  Loss rate: 0.83%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-01-26 18:33:32
End at: 2018-01-26 18:34:02

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 104.60 Mbit/s
  95th percentile per-packet one-way delay: 51.511 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 56.98 Mbit/s
  95th percentile per-packet one-way delay: 51.383 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 34.40 Mbit/s
  95th percentile per-packet one-way delay: 51.745 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 75.37 Mbit/s
  95th percentile per-packet one-way delay: 51.427 ms
  Loss rate: 1.16%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-01-26 16:21:08
End at: 2018-01-26 16:21:38

# Below is generated by plot.py at 2018-01-26 21:53:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 297.08 Mbit/s
  95th percentile per-packet one-way delay: 111.303 ms
  Loss rate: 1.65%
-- Flow 1:
  Average throughput: 168.34 Mbit/s
  95th percentile per-packet one-way delay: 116.509 ms
  Loss rate: 2.04%
-- Flow 2:
  Average throughput: 139.05 Mbit/s
  95th percentile per-packet one-way delay: 103.818 ms
  Loss rate: 0.75%
-- Flow 3:
  Average throughput: 110.54 Mbit/s
  95th percentile per-packet one-way delay: 102.229 ms
  Loss rate: 2.13%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-01-26 16:35:31
End at: 2018-01-26 16:36:01

# Below is generated by plot.py at 2018-01-26 21:54:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 333.24 Mbit/s
  95th percentile per-packet one-way delay: 102.862 ms
  Loss rate: 1.56%
-- Flow 1:
  Average throughput: 205.53 Mbit/s
  95th percentile per-packet one-way delay: 117.587 ms
  Loss rate: 2.06%
-- Flow 2:
  Average throughput: 140.03 Mbit/s
  95th percentile per-packet one-way delay: 100.307 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 105.92 Mbit/s
  95th percentile per-packet one-way delay: 86.704 ms
  Loss rate: 2.00%
Run 2: Report of Verus — Data Link

![Graph showing data link performance metrics for multiple flows over time.](image-url)

- Flow 1 ingress (mean 209.10 Mbit/s)
- Flow 1 egress (mean 205.53 Mbit/s)
- Flow 2 ingress (mean 139.68 Mbit/s)
- Flow 2 egress (mean 140.03 Mbit/s)
- Flow 3 ingress (mean 196.74 Mbit/s)
- Flow 3 egress (mean 105.92 Mbit/s)

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

- Flow 1 (95th percentile 117.59 ms)
- Flow 2 (95th percentile 100.31 ms)
- Flow 3 (95th percentile 86.70 ms)
Run 3: Statistics of Verus

Start at: 2018-01-26 16:49:59
End at: 2018-01-26 16:50:29

# Below is generated by plot.py at 2018-01-26 21:55:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.70 Mbit/s
95th percentile per-packet one-way delay: 123.784 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 233.75 Mbit/s
95th percentile per-packet one-way delay: 116.659 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 147.58 Mbit/s
95th percentile per-packet one-way delay: 136.648 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 91.82 Mbit/s
95th percentile per-packet one-way delay: 136.699 ms
Loss rate: 0.27%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-01-26 17:04:32
End at: 2018-01-26 17:05:02

# Below is generated by plot.py at 2018-01-26 21:56:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.29 Mbit/s
95th percentile per-packet one-way delay: 130.773 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 238.12 Mbit/s
95th percentile per-packet one-way delay: 139.139 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 178.24 Mbit/s
95th percentile per-packet one-way delay: 109.076 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 128.27 Mbit/s
95th percentile per-packet one-way delay: 129.966 ms
Loss rate: 0.21%
Run 4: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 238.27 Mbps)
  - Flow 1 egress (mean 238.32 Mbps)
  - Flow 2 ingress (mean 177.12 Mbps)
  - Flow 2 egress (mean 178.24 Mbps)
  - Flow 3 ingress (mean 127.21 Mbps)
  - Flow 3 egress (mean 128.27 Mbps)

- **Per-packet error rate (ms):**
  - Flow 1 (95th percentile 139.14 ms)
  - Flow 2 (95th percentile 109.08 ms)
  - Flow 3 (95th percentile 129.97 ms)
Run 5: Statistics of Verus

Start at: 2018-01-26 17:18:58
End at: 2018-01-26 17:19:28

# Below is generated by plot.py at 2018-01-26 21:57:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 348.16 Mbit/s
  95th percentile per-packet one-way delay: 149.123 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 206.72 Mbit/s
  95th percentile per-packet one-way delay: 108.691 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 137.89 Mbit/s
  95th percentile per-packet one-way delay: 192.357 ms
  Loss rate: 1.63%
-- Flow 3:
  Average throughput: 165.84 Mbit/s
  95th percentile per-packet one-way delay: 191.510 ms
  Loss rate: 1.77%
Run 5: Report of Verus — Data Link

The graphs depict the throughput and per-packet one-way delay over time for different flows. The throughput graph shows the fluctuations in the data transfer rate for each flow, with the y-axis representing throughput in Mbit/s and the x-axis showing time in seconds. The per-packet one-way delay graph illustrates the delay experienced by packets for each flow, with the y-axis showing delay in milliseconds and the x-axis showing time in seconds.

Legend:
- Flow 1 ingress (mean 206.85 Mbit/s)
- Flow 1 egress (mean 206.72 Mbit/s)
- Flow 2 ingress (mean 139.72 Mbit/s)
- Flow 2 egress (mean 137.89 Mbit/s)
- Flow 3 ingress (mean 172.54 Mbit/s)
- Flow 3 egress (mean 165.54 Mbit/s)
Run 6: Statistics of Verus

Start at: 2018-01-26 17:33:32
End at: 2018-01-26 17:34:02

# Below is generated by plot.py at 2018-01-26 21:59:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 316.84 Mbit/s
95th percentile per-packet one-way delay: 154.829 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 191.19 Mbit/s
95th percentile per-packet one-way delay: 173.257 ms
Loss rate: 1.75%
-- Flow 2:
Average throughput: 150.52 Mbit/s
95th percentile per-packet one-way delay: 154.307 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 79.62 Mbit/s
95th percentile per-packet one-way delay: 98.813 ms
Loss rate: 7.09%
Run 7: Statistics of Verus

Start at: 2018-01-26 17:47:44
End at: 2018-01-26 17:48:14

# Below is generated by plot.py at 2018-01-26 21:59:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.77 Mbit/s
95th percentile per-packet one-way delay: 115.595 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 207.44 Mbit/s
95th percentile per-packet one-way delay: 106.654 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 128.62 Mbit/s
95th percentile per-packet one-way delay: 135.909 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 131.58 Mbit/s
95th percentile per-packet one-way delay: 110.769 ms
Loss rate: 1.30%
Run 7: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 207.41 Mbps)**
- **Flow 1 egress (mean 207.44 Mbps)**
- **Flow 2 ingress (mean 130.25 Mbps)**
- **Flow 2 egress (mean 128.62 Mbps)**
- **Flow 3 ingress (mean 131.97 Mbps)**
- **Flow 3 egress (mean 131.58 Mbps)**

![Graph 2: Packet delay (ms) vs Time (s)]

- **Flow 1 (95th percentile 106.65 ms)**
- **Flow 2 (95th percentile 135.91 ms)**
- **Flow 3 (95th percentile 110.77 ms)**
Run 8: Statistics of Verus

Start at: 2018-01-26 18:02:07
End at: 2018-01-26 18:02:37

# Below is generated by plot.py at 2018-01-26 21:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.74 Mbit/s
95th percentile per-packet one-way delay: 80.318 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 205.79 Mbit/s
95th percentile per-packet one-way delay: 80.788 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 165.24 Mbit/s
95th percentile per-packet one-way delay: 79.408 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 116.30 Mbit/s
95th percentile per-packet one-way delay: 81.798 ms
Loss rate: 1.89%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-01-26 18:16:34
End at: 2018-01-26 18:17:04

# Below is generated by plot.py at 2018-01-26 21:59:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.02 Mbit/s
95th percentile per-packet one-way delay: 125.120 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 207.58 Mbit/s
95th percentile per-packet one-way delay: 152.203 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 131.95 Mbit/s
95th percentile per-packet one-way delay: 87.736 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 134.93 Mbit/s
95th percentile per-packet one-way delay: 77.152 ms
Loss rate: 1.90%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-01-26 18:30:55
End at: 2018-01-26 18:31:25

# Below is generated by plot.py at 2018-01-26 22:00:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 326.02 Mbit/s
  95th percentile per-packet one-way delay: 90.732 ms
  Loss rate: 1.48%
-- Flow 1:
  Average throughput: 185.90 Mbit/s
  95th percentile per-packet one-way delay: 101.325 ms
  Loss rate: 0.91%
-- Flow 2:
  Average throughput: 154.19 Mbit/s
  95th percentile per-packet one-way delay: 80.812 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 118.96 Mbit/s
  95th percentile per-packet one-way delay: 80.071 ms
  Loss rate: 6.30%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 185.84 Mbit/s)**
- **Flow 1 egress (mean 185.90 Mbit/s)**
- **Flow 2 ingress (mean 154.26 Mbit/s)**
- **Flow 2 egress (mean 154.19 Mbit/s)**
- **Flow 3 ingress (mean 125.64 Mbit/s)**
- **Flow 3 egress (mean 118.96 Mbit/s)**

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

- **Flow 1 (95th percentile 101.33 ms)**
- **Flow 2 (95th percentile 80.81 ms)**
- **Flow 3 (95th percentile 80.07 ms)**
Run 1: Statistics of Copa

Start at: 2018-01-26 16:22:09
End at: 2018-01-26 16:22:39

# Below is generated by plot.py at 2018-01-26 22:00:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 139.09 Mbit/s
95th percentile per-packet one-way delay: 50.328 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 73.16 Mbit/s
95th percentile per-packet one-way delay: 49.685 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 68.84 Mbit/s
95th percentile per-packet one-way delay: 50.428 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 77.64 Mbit/s
95th percentile per-packet one-way delay: 50.352 ms
Loss rate: 1.44%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-01-26 16:36:35
End at: 2018-01-26 16:37:05

# Below is generated by plot.py at 2018-01-26 22:01:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.43 Mbit/s
95th percentile per-packet one-way delay: 50.631 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 66.08 Mbit/s
95th percentile per-packet one-way delay: 50.676 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 81.57 Mbit/s
95th percentile per-packet one-way delay: 50.591 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 82.37 Mbit/s
95th percentile per-packet one-way delay: 50.565 ms
Loss rate: 1.16%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-01-26 16:51:04
End at: 2018-01-26 16:51:34

# Below is generated by plot.py at 2018-01-26 22:02:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.90 Mbit/s
95th percentile per-packet one-way delay: 50.601 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 84.30 Mbit/s
95th percentile per-packet one-way delay: 50.517 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 83.07 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 36.87 Mbit/s
95th percentile per-packet one-way delay: 51.185 ms
Loss rate: 1.60%
Run 3: Report of Copa — Data Link

![Graph showing data link performance metrics](Image)

Legend:
- Flow 1 ingress (mean 84.24 Mbit/s)
- Flow 1 egress (mean 84.30 Mbit/s)
- Flow 2 ingress (mean 82.88 Mbit/s)
- Flow 2 egress (mean 83.07 Mbit/s)
- Flow 3 ingress (mean 36.97 Mbit/s)
- Flow 3 egress (mean 36.87 Mbit/s)

![Graph showing packet delay](Image)

Legend:
- Flow 1 (95th percentile 50.52 ms)
- Flow 2 (95th percentile 50.57 ms)
- Flow 3 (95th percentile 51.19 ms)
Run 4: Statistics of Copa

Start at: 2018-01-26 17:05:40
End at: 2018-01-26 17:06:10

# Below is generated by plot.py at 2018-01-26 22:03:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 146.60 Mbit/s
  95th percentile per-packet one-way delay: 50.850 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 73.75 Mbit/s
  95th percentile per-packet one-way delay: 50.853 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 78.39 Mbit/s
  95th percentile per-packet one-way delay: 50.869 ms
  Loss rate: 0.55%
-- Flow 3:
  Average throughput: 80.79 Mbit/s
  95th percentile per-packet one-way delay: 50.228 ms
  Loss rate: 1.14%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 73.61 Mbit/s)
- Flow 1 egress (mean 73.75 Mbit/s)
- Flow 2 ingress (mean 78.38 Mbit/s)
- Flow 2 egress (mean 78.39 Mbit/s)
- Flow 3 ingress (mean 80.65 Mbit/s)
- Flow 3 egress (mean 80.79 Mbit/s)
Run 5: Statistics of Copa

Start at: 2018-01-26 17:20:03
End at: 2018-01-26 17:20:33

# Below is generated by plot.py at 2018-01-26 22:04:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.76 Mbit/s
95th percentile per-packet one-way delay: 50.802 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 79.79 Mbit/s
95th percentile per-packet one-way delay: 50.839 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 70.74 Mbit/s
95th percentile per-packet one-way delay: 50.726 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 81.01 Mbit/s
95th percentile per-packet one-way delay: 50.578 ms
Loss rate: 1.52%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-01-26 17:34:35
End at: 2018-01-26 17:35:05

# Below is generated by plot.py at 2018-01-26 22:04:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 147.34 Mbit/s
  95th percentile per-packet one-way delay: 50.594 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 79.45 Mbit/s
  95th percentile per-packet one-way delay: 50.602 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 71.99 Mbit/s
  95th percentile per-packet one-way delay: 50.624 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 77.73 Mbit/s
  95th percentile per-packet one-way delay: 50.355 ms
  Loss rate: 1.34%
Run 6: Report of Copa — Data Link

![Graph of throughput and per-packet one-way delay](image-url)
Run 7: Statistics of Copa

Start at: 2018-01-26 17:48:48
End at: 2018-01-26 17:49:18

# Below is generated by plot.py at 2018-01-26 22:04:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 110.73 Mbit/s
  95th percentile per-packet one-way delay: 50.737 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 48.81 Mbit/s
  95th percentile per-packet one-way delay: 50.726 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 67.15 Mbit/s
  95th percentile per-packet one-way delay: 50.553 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 67.77 Mbit/s
  95th percentile per-packet one-way delay: 50.816 ms
  Loss rate: 2.39%
Run 7: Report of Copa — Data Link

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

- Flow 1 ingress (mean 48.72 Mbit/s)
- Flow 1 egress (mean 48.81 Mbit/s)
- Flow 2 ingress (mean 67.15 Mbit/s)
- Flow 2 egress (mean 67.15 Mbit/s)
- Flow 3 ingress (mean 68.53 Mbit/s)
- Flow 3 egress (mean 67.77 Mbit/s)

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

- Flow 1 (95th percentile 50.73 ms)
- Flow 2 (95th percentile 50.55 ms)
- Flow 3 (95th percentile 50.82 ms)
Run 8: Statistics of Copa

Start at: 2018-01-26 18:03:12
End at: 2018-01-26 18:03:42

# Below is generated by plot.py at 2018-01-26 22:04:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 137.13 Mbit/s
  95th percentile per-packet one-way delay: 50.651 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 72.09 Mbit/s
  95th percentile per-packet one-way delay: 50.432 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 66.43 Mbit/s
  95th percentile per-packet one-way delay: 50.769 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 79.97 Mbit/s
  95th percentile per-packet one-way delay: 50.355 ms
  Loss rate: 0.83%
Run 8: Report of Copa — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows.]
Run 9: Statistics of Copa

Start at: 2018-01-26 18:17:38
End at: 2018-01-26 18:18:08

# Below is generated by plot.py at 2018-01-26 22:05:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 134.80 Mbit/s
  95th percentile per-packet one-way delay: 50.829 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 70.69 Mbit/s
  95th percentile per-packet one-way delay: 50.797 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 66.53 Mbit/s
  95th percentile per-packet one-way delay: 50.860 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 76.52 Mbit/s
  95th percentile per-packet one-way delay: 50.824 ms
  Loss rate: 1.44%
Run 9: Report of Copa — Data Link

![Graph of Throughput](image1)

![Graph of Per-packet one-way delay](image2)
Run 10: Statistics of Copa

Start at: 2018-01-26 18:31:59
End at: 2018-01-26 18:32:29

# Below is generated by plot.py at 2018-01-26 22:05:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 133.33 Mbit/s
95th percentile per-packet one-way delay: 50.800 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 72.25 Mbit/s
95th percentile per-packet one-way delay: 50.541 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 60.72 Mbit/s
95th percentile per-packet one-way delay: 50.950 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 79.29 Mbit/s
95th percentile per-packet one-way delay: 50.513 ms
Loss rate: 1.28%
Run 10: Report of Copa — Data Link
Run 1: Statistics of Indigo-2-256

Start at: 2018-01-26 16:15:33
End at: 2018-01-26 16:16:03

# Below is generated by plot.py at 2018-01-26 22:08:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 325.39 Mbit/s
  95th percentile per-packet one-way delay: 51.100 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 173.49 Mbit/s
  95th percentile per-packet one-way delay: 50.905 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 161.20 Mbit/s
  95th percentile per-packet one-way delay: 51.258 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 138.65 Mbit/s
  95th percentile per-packet one-way delay: 51.410 ms
  Loss rate: 0.93%
Run 1: Report of Indigo-2-256 — Data Link
Run 2: Statistics of Indigo-2-256

Start at: 2018-01-26 16:29:59
End at: 2018-01-26 16:30:29

# Below is generated by plot.py at 2018-01-26 22:09:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.97 Mbit/s
95th percentile per-packet one-way delay: 50.936 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 173.51 Mbit/s
95th percentile per-packet one-way delay: 50.657 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 162.42 Mbit/s
95th percentile per-packet one-way delay: 51.081 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 143.59 Mbit/s
95th percentile per-packet one-way delay: 51.356 ms
Loss rate: 0.83%
Run 2: Report of Indigo-2-256 — Data Link
Run 3: Statistics of Indigo-2-256

Start at: 2018-01-26 16:44:23
End at: 2018-01-26 16:44:53

# Below is generated by plot.py at 2018-01-26 22:09:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.39 Mbit/s
95th percentile per-packet one-way delay: 50.530 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 173.77 Mbit/s
95th percentile per-packet one-way delay: 50.543 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 160.82 Mbit/s
95th percentile per-packet one-way delay: 50.400 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 135.60 Mbit/s
95th percentile per-packet one-way delay: 50.459 ms
Loss rate: 1.04%
Run 3: Report of Indigo-2-256 — Data Link

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

- Flow 1 ingress (mean 173.67 Mbps)
- Flow 1 egress (mean 173.77 Mbps)
- Flow 2 ingress (mean 160.55 Mbps)
- Flow 2 egress (mean 160.82 Mbps)
- Flow 3 ingress (mean 135.60 Mbps)
- Flow 3 egress (mean 135.60 Mbps)

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

- Flow 1 (95th percentile 50.54 ms)
- Flow 2 (95th percentile 50.40 ms)
- Flow 3 (95th percentile 50.46 ms)
Run 4: Statistics of Indigo-2-256

Start at: 2018-01-26 16:58:58  
End at: 2018-01-26 16:59:28  

# Below is generated by plot.py at 2018-01-26 22:09:37  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 312.50 Mbit/s  
95th percentile per-packet one-way delay: 50.593 ms  
Loss rate: 0.46%  
-- Flow 1:  
Average throughput: 169.55 Mbit/s  
95th percentile per-packet one-way delay: 50.586 ms  
Loss rate: 0.27%  
-- Flow 2:  
Average throughput: 152.54 Mbit/s  
95th percentile per-packet one-way delay: 50.579 ms  
Loss rate: 0.53%  
-- Flow 3:  
Average throughput: 130.51 Mbit/s  
95th percentile per-packet one-way delay: 50.691 ms  
Loss rate: 1.04%
Run 4: Report of Indigo-2-256 — Data Link

![Graph showing throughput and per-packet one-way delay over time for Flow 1, Flow 2, and Flow 3.]

- Flow 1 ingress (mean 169.44 Mbit/s)
- Flow 1 egress (mean 169.55 Mbit/s)
- Flow 2 ingress (mean 152.74 Mbit/s)
- Flow 2 egress (mean 152.54 Mbit/s)
- Flow 3 ingress (mean 130.42 Mbit/s)
- Flow 3 egress (mean 130.51 Mbit/s)

![Graph showing per-packet one-way delay for Flow 1, Flow 2, and Flow 3.]

- Flow 1 (95th percentile 50.59 ms)
- Flow 2 (95th percentile 50.58 ms)
- Flow 3 (95th percentile 50.69 ms)
Run 5: Statistics of Indigo-2-256

Start at: 2018-01-26 17:13:28
End at: 2018-01-26 17:13:58

# Below is generated by plot.py at 2018-01-26 22:10:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 339.85 Mbit/s
95th percentile per-packet one-way delay: 50.791 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 180.26 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 176.89 Mbit/s
95th percentile per-packet one-way delay: 50.885 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 130.53 Mbit/s
95th percentile per-packet one-way delay: 51.125 ms
Loss rate: 0.72%
Run 5: Report of Indigo-2-256 — Data Link

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

- Flow 1 ingress (mean 180.37 Mbit/s)
- Flow 1 egress (mean 180.26 Mbit/s)
- Flow 2 ingress (mean 176.91 Mbit/s)
- Flow 2 egress (mean 176.89 Mbit/s)
- Flow 3 ingress (mean 130.64 Mbit/s)
- Flow 3 egress (mean 130.53 Mbit/s)

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

- Flow 1 (95th percentile 50.69 ms)
- Flow 2 (95th percentile 50.88 ms)
- Flow 3 (95th percentile 51.12 ms)
Run 6: Statistics of Indigo-2-256

Start at: 2018-01-26 17:28:00
End at: 2018-01-26 17:28:30

# Below is generated by plot.py at 2018-01-26 22:10:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.91 Mbit/s
95th percentile per-packet one-way delay: 51.073 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 170.08 Mbit/s
95th percentile per-packet one-way delay: 51.006 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 146.85 Mbit/s
95th percentile per-packet one-way delay: 51.126 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 141.13 Mbit/s
95th percentile per-packet one-way delay: 51.169 ms
Loss rate: 0.75%
Run 6: Report of Indigo-2-256 — Data Link

Throughput plot showing:
- Flow 1 ingress (mean 170.11 Mbit/s)
- Flow 1 egress (mean 170.08 Mbit/s)
- Flow 2 ingress (mean 146.31 Mbit/s)
- Flow 2 egress (mean 146.65 Mbit/s)
- Flow 3 ingress (mean 140.69 Mbit/s)
- Flow 3 egress (mean 141.13 Mbit/s)

Packet loss plot showing:
- Flow 1 (95th percentile 51.01 ms)
- Flow 2 (95th percentile 51.13 ms)
- Flow 3 (95th percentile 51.17 ms)
Run 7: Statistics of Indigo-2-256

Start at: 2018-01-26 17:42:14
End at: 2018-01-26 17:42:44

# Below is generated by plot.py at 2018-01-26 22:10:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 297.73 Mbit/s
95th percentile per-packet one-way delay: 51.051 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 156.60 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 158.08 Mbit/s
95th percentile per-packet one-way delay: 51.319 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 112.38 Mbit/s
95th percentile per-packet one-way delay: 50.973 ms
Loss rate: 1.08%
Run 7: Report of Indigo-2-256 — Data Link
Run 8: Statistics of Indigo-2-256

Start at: 2018-01-26 17:56:34
End at: 2018-01-26 17:57:04

# Below is generated by plot.py at 2018-01-26 22:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 309.68 Mbit/s
  95th percentile per-packet one-way delay: 50.753 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 167.15 Mbit/s
  95th percentile per-packet one-way delay: 50.765 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 155.43 Mbit/s
  95th percentile per-packet one-way delay: 50.618 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 121.69 Mbit/s
  95th percentile per-packet one-way delay: 50.826 ms
  Loss rate: 1.12%
Run 8: Report of Indigo-2-256 — Data Link

![Data Link Graphs]

*Top Graph: Throughput (Mbps)*
- Flow 1 ingress (mean 167.01 Mbps)
- Flow 1 egress (mean 167.15 Mbps)
- Flow 2 ingress (mean 135.45 Mbps)
- Flow 2 egress (mean 135.43 Mbps)
- Flow 3 ingress (mean 121.82 Mbps)
- Flow 3 egress (mean 121.69 Mbps)

*Bottom Graph: Per-packet one-way delay (ms)*
- Flow 1 (95th percentile 50.77 ms)
- Flow 2 (95th percentile 50.62 ms)
- Flow 3 (95th percentile 50.83 ms)
Run 9: Statistics of Indigo-2-256

Start at: 2018-01-26 18:11:02
End at: 2018-01-26 18:11:32

# Below is generated by plot.py at 2018-01-26 22:13:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 313.94 Mbit/s
  95th percentile per-packet one-way delay: 50.793 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 165.99 Mbit/s
  95th percentile per-packet one-way delay: 50.758 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 155.37 Mbit/s
  95th percentile per-packet one-way delay: 50.845 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 139.21 Mbit/s
  95th percentile per-packet one-way delay: 50.790 ms
  Loss rate: 1.31%
Run 10: Statistics of Indigo-2-256

Start at: 2018-01-26 18:25:30
End at: 2018-01-26 18:26:00

# Below is generated by plot.py at 2018-01-26 22:13:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 284.12 Mbit/s
  95th percentile per-packet one-way delay: 50.656 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 152.48 Mbit/s
  95th percentile per-packet one-way delay: 50.661 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 144.83 Mbit/s
  95th percentile per-packet one-way delay: 50.617 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 109.61 Mbit/s
  95th percentile per-packet one-way delay: 50.663 ms
  Loss rate: 1.14%
Run 10: Report of Indigo-2-256 — Data Link
Run 1: Statistics of Indigo-1-32

Start at: 2018-01-26 16:13:25
End at: 2018-01-26 16:13:55

# Below is generated by plot.py at 2018-01-26 22:15:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 336.63 Mbit/s
  95th percentile per-packet one-way delay: 50.920 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 175.67 Mbit/s
  95th percentile per-packet one-way delay: 50.774 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 162.76 Mbit/s
  95th percentile per-packet one-way delay: 51.106 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 164.76 Mbit/s
  95th percentile per-packet one-way delay: 50.999 ms
  Loss rate: 0.94%
Run 1: Report of Indigo-1-32 — Data Link

![Graph showing data link performance](image)

![Graph showing per-packet one-way delay](image)
Run 2: Statistics of Indigo-1-32

Start at: 2018-01-26 16:27:53
End at: 2018-01-26 16:28:23

# Below is generated by plot.py at 2018-01-26 22:15:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 323.53 Mbit/s
  95th percentile per-packet one-way delay: 56.583 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 170.58 Mbit/s
  95th percentile per-packet one-way delay: 55.139 ms
  Loss rate: 0.21%
-- Flow 2:
  Average throughput: 156.39 Mbit/s
  95th percentile per-packet one-way delay: 57.242 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 152.02 Mbit/s
  95th percentile per-packet one-way delay: 58.883 ms
  Loss rate: 0.90%
Run 2: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 170.30 Mbps)
  - Flow 1 egress (mean 170.58 Mbps)
  - Flow 2 ingress (mean 156.40 Mbps)
  - Flow 2 egress (mean 156.39 Mbps)
  - Flow 3 ingress (mean 151.82 Mbps)
  - Flow 3 egress (mean 152.02 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 55.14 ms)
  - Flow 2 (95th percentile 57.24 ms)
  - Flow 3 (95th percentile 58.88 ms)
Run 3: Statistics of Indigo-1-32

Start at: 2018-01-26 16:42:17
End at: 2018-01-26 16:42:47

# Below is generated by plot.py at 2018-01-26 22:15:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 331.79 Mbit/s
  95th percentile per-packet one-way delay: 51.093 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 173.21 Mbit/s
  95th percentile per-packet one-way delay: 50.924 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 164.27 Mbit/s
  95th percentile per-packet one-way delay: 51.126 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 153.31 Mbit/s
  95th percentile per-packet one-way delay: 51.449 ms
  Loss rate: 1.08%
Run 3: Report of Indigo-1-32 — Data Link

Graph 1: Throughput vs Time

Graph 2: Per-packet round-trip time vs Time

Legend:
- Flow 1 ingress (mean 173.10 Mbit/s)
- Flow 1 egress (mean 173.21 Mbit/s)
- Flow 2 ingress (mean 164.21 Mbit/s)
- Flow 2 egress (mean 164.27 Mbit/s)
- Flow 3 ingress (mean 153.35 Mbit/s)
- Flow 3 egress (mean 153.31 Mbit/s)

Legend for RTT:
- Flow 1 (95th percentile 50.92 ms)
- Flow 2 (95th percentile 51.13 ms)
- Flow 3 (95th percentile 51.45 ms)
Run 4: Statistics of Indigo-1-32

Start at: 2018-01-26 16:56:50
End at: 2018-01-26 16:57:20

# Below is generated by plot.py at 2018-01-26 22:16:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 337.69 Mbit/s
  95th percentile per-packet one-way delay: 50.808 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 180.11 Mbit/s
  95th percentile per-packet one-way delay: 50.603 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 164.97 Mbit/s
  95th percentile per-packet one-way delay: 50.961 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 148.46 Mbit/s
  95th percentile per-packet one-way delay: 51.071 ms
  Loss rate: 1.19%
Run 4: Report of Indigo-1-32 — Data Link

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

- *Flow 1 ingress (mean 179.94 Mbps)*
- *Flow 1 egress (mean 180.11 Mbps)*
- *Flow 2 ingress (mean 164.97 Mbps)*
- *Flow 2 egress (mean 164.97 Mbps)*
- *Flow 3 ingress (mean 148.77 Mbps)*
- *Flow 3 egress (mean 148.46 Mbps)*

![Graph 2: Per-packet end-to-end delay (ms) vs. Time (s)]

- *Flow 1 (95th percentile 50.60 ms)*
- *Flow 2 (95th percentile 50.96 ms)*
- *Flow 3 (95th percentile 51.07 ms)*

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Run 5: Statistics of Indigo-1-32

Start at: 2018-01-26 17:11:19
End at: 2018-01-26 17:11:49

# Below is generated by plot.py at 2018-01-26 22:16:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 340.58 Mbit/s
  95th percentile per-packet one-way delay: 51.173 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 184.09 Mbit/s
  95th percentile per-packet one-way delay: 51.000 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 161.57 Mbit/s
  95th percentile per-packet one-way delay: 51.287 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 152.75 Mbit/s
  95th percentile per-packet one-way delay: 51.414 ms
  Loss rate: 1.17%
Run 5: Report of Indigo-1-32 — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 6: Statistics of Indigo-1-32

Start at: 2018-01-26 17:25:55
End at: 2018-01-26 17:26:25

# Below is generated by plot.py at 2018-01-26 22:17:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 330.42 Mbit/s
  95th percentile per-packet one-way delay: 50.867 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 182.98 Mbit/s
  95th percentile per-packet one-way delay: 50.818 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 155.39 Mbit/s
  95th percentile per-packet one-way delay: 50.960 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 138.63 Mbit/s
  95th percentile per-packet one-way delay: 50.902 ms
  Loss rate: 1.13%
Run 6: Report of Indigo-1-32 — Data Link
Run 7: Statistics of Indigo-1-32

Start at: 2018-01-26 17:40:09
End at: 2018-01-26 17:40:39

# Below is generated by plot.py at 2018-01-26 22:19:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 311.23 Mbit/s
  95th percentile per-packet one-way delay: 51.048 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 160.41 Mbit/s
  95th percentile per-packet one-way delay: 51.063 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 160.13 Mbit/s
  95th percentile per-packet one-way delay: 51.112 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 137.41 Mbit/s
  95th percentile per-packet one-way delay: 50.900 ms
  Loss rate: 1.26%
Run 7: Report of Indigo-1-32 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 160.41 Mbps)
  - Flow 1 egress (mean 160.41 Mbps)
  - Flow 2 ingress (mean 159.99 Mbps)
  - Flow 2 egress (mean 160.13 Mbps)
  - Flow 3 ingress (mean 137.80 Mbps)
  - Flow 3 egress (mean 137.41 Mbps)

- **Packet delay (ms):**
  - Flow 1 95th percentile 51.06 ms
  - Flow 2 95th percentile 51.11 ms
  - Flow 3 95th percentile 50.90 ms
Run 8: Statistics of Indigo-1-32

Start at: 2018-01-26 17:54:29
End at: 2018-01-26 17:54:59

# Below is generated by plot.py at 2018-01-26 22:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.29 Mbit/s
95th percentile per-packet one-way delay: 50.810 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 165.38 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 151.81 Mbit/s
95th percentile per-packet one-way delay: 50.831 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 145.36 Mbit/s
95th percentile per-packet one-way delay: 51.034 ms
Loss rate: 1.01%
Run 8: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 165.31 Mbps)
- Flow 1 egress (mean 165.38 Mbps)
- Flow 2 ingress (mean 151.79 Mbps)
- Flow 2 egress (mean 151.81 Mbps)
- Flow 3 ingress (mean 145.34 Mbps)
- Flow 3 egress (mean 145.36 Mbps)

![Graph of Per-packet end-to-end delay (ms) vs. Time (s)]

- Flow 1 (95th percentile 50.71 ms)
- Flow 2 (95th percentile 50.83 ms)
- Flow 3 (95th percentile 51.03 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-01-26 18:09:00
End at: 2018-01-26 18:09:30

# Below is generated by plot.py at 2018-01-26 22:21:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 327.17 Mbit/s
  95th percentile per-packet one-way delay: 51.025 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 172.89 Mbit/s
  95th percentile per-packet one-way delay: 50.739 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 157.45 Mbit/s
  95th percentile per-packet one-way delay: 51.281 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 154.14 Mbit/s
  95th percentile per-packet one-way delay: 51.199 ms
  Loss rate: 1.17%
Run 9: Report of Indigo-1-32 — Data Link

![Graphs showing data link performance metrics for different flows.](image)
Run 10: Statistics of Indigo-1-32

End at: 2018-01-26 18:23:53

# Below is generated by plot.py at 2018-01-26 22:21:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 326.10 Mbit/s
95th percentile per-packet one-way delay: 51.728 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 171.80 Mbit/s
95th percentile per-packet one-way delay: 51.402 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 162.48 Mbit/s
95th percentile per-packet one-way delay: 52.202 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 143.83 Mbit/s
95th percentile per-packet one-way delay: 51.916 ms
Loss rate: 0.97%
Run 10: Report of Indigo-1-32 — Data Link

![Graph showing data link performance metrics](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 171.73 Mbps)
  - Flow 1 egress (mean 171.80 Mbps)
  - Flow 2 ingress (mean 162.35 Mbps)
  - Flow 2 egress (mean 162.48 Mbps)
  - Flow 3 ingress (mean 143.70 Mbps)
  - Flow 3 egress (mean 143.83 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 51.40 ms)
  - Flow 2 (95th percentile 52.20 ms)
  - Flow 3 (95th percentile 51.92 ms)
Run 1: Statistics of Indigo-1-128

Start at: 2018-01-26 16:14:29
End at: 2018-01-26 16:14:59

# Below is generated by plot.py at 2018-01-26 22:21:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 340.32 Mbit/s
  95th percentile per-packet one-way delay: 50.874 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 181.41 Mbit/s
  95th percentile per-packet one-way delay: 50.753 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 170.66 Mbit/s
  95th percentile per-packet one-way delay: 51.140 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 143.12 Mbit/s
  95th percentile per-packet one-way delay: 50.897 ms
  Loss rate: 1.08%
Run 1: Report of Indigo-1-128 — Data Link

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

- Flow 1 ingress (mean 181.45 Mbit/s)
- Flow 1 egress (mean 181.41 Mbit/s)
- Flow 2 ingress (mean 170.77 Mbit/s)
- Flow 2 egress (mean 170.66 Mbit/s)
- Flow 3 ingress (mean 143.35 Mbit/s)
- Flow 3 egress (mean 143.32 Mbit/s)
Run 2: Statistics of Indigo-1-128

Start at: 2018-01-26 16:28:56
End at: 2018-01-26 16:29:26

# Below is generated by plot.py at 2018-01-26 22:22:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.96 Mbit/s
95th percentile per-packet one-way delay: 51.494 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 179.57 Mbit/s
95th percentile per-packet one-way delay: 51.088 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 164.56 Mbit/s
95th percentile per-packet one-way delay: 51.737 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 124.34 Mbit/s
95th percentile per-packet one-way delay: 56.521 ms
Loss rate: 1.10%
Run 2: Report of Indigo-1-128 — Data Link
Run 3: Statistics of Indigo-1-128

Start at: 2018-01-26 16:43:20
End at: 2018-01-26 16:43:50

# Below is generated by plot.py at 2018-01-26 22:22:40
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 338.85 Mbit/s
 95th percentile per-packet one-way delay: 51.253 ms
 Loss rate: 0.48%
 -- Flow 1:
 Average throughput: 185.51 Mbit/s
 95th percentile per-packet one-way delay: 51.069 ms
 Loss rate: 0.30%
 -- Flow 2:
 Average throughput: 176.29 Mbit/s
 95th percentile per-packet one-way delay: 51.458 ms
 Loss rate: 0.58%
 -- Flow 3:
 Average throughput: 113.54 Mbit/s
 95th percentile per-packet one-way delay: 51.357 ms
 Loss rate: 1.09%
Run 3: Report of Indigo-1-128 — Data Link
Run 4: Statistics of Indigo-1-128

Start at: 2018-01-26 16:57:54
End at: 2018-01-26 16:58:24

# Below is generated by plot.py at 2018-01-26 22:23:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.10 Mbit/s
95th percentile per-packet one-way delay: 50.878 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 187.18 Mbit/s
95th percentile per-packet one-way delay: 50.806 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 171.35 Mbit/s
95th percentile per-packet one-way delay: 50.918 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 137.32 Mbit/s
95th percentile per-packet one-way delay: 50.998 ms
Loss rate: 1.14%
Run 4: Report of Indigo-1-128 — Data Link
Run 5: Statistics of Indigo-1-128

Start at: 2018-01-26 17:12:23
End at: 2018-01-26 17:12:53

# Below is generated by plot.py at 2018-01-26 22:25:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 349.72 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 187.54 Mbit/s
95th percentile per-packet one-way delay: 50.419 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 170.90 Mbit/s
95th percentile per-packet one-way delay: 50.603 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 151.11 Mbit/s
95th percentile per-packet one-way delay: 50.520 ms
Loss rate: 0.97%
Run 5: Report of Indigo-1-128 — Data Link

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

Throughput (Mbps) vs Time (s)
- Flow 1 ingress (mean 187.55 Mbps)
- Flow 1 egress (mean 187.54 Mbps)
- Flow 2 ingress (mean 170.82 Mbps)
- Flow 2 egress (mean 170.90 Mbps)
- Flow 3 ingress (mean 151.08 Mbps)
- Flow 3 egress (mean 151.11 Mbps)

Packet delay (ms) vs Time (s)
- Flow 1 (95th percentile 50.42 ms)
- Flow 2 (95th percentile 50.60 ms)
- Flow 3 (95th percentile 50.52 ms)
Run 6: Statistics of Indigo-1-128

Start at: 2018-01-26 17:26:58
End at: 2018-01-26 17:27:28

# Below is generated by plot.py at 2018-01-26 22:25:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 371.59 Mbit/s
  95th percentile per-packet one-way delay: 51.666 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 176.43 Mbit/s
  95th percentile per-packet one-way delay: 51.154 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 177.10 Mbit/s
  95th percentile per-packet one-way delay: 52.071 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 155.13 Mbit/s
  95th percentile per-packet one-way delay: 51.972 ms
  Loss rate: 0.95%
Run 7: Statistics of Indigo-1-128

Start at: 2018-01-26 17:41:11
End at: 2018-01-26 17:41:41

# Below is generated by plot.py at 2018-01-26 22:25:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 329.46 Mbit/s
  95th percentile per-packet one-way delay: 50.921 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 172.85 Mbit/s
  95th percentile per-packet one-way delay: 50.805 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 165.82 Mbit/s
  95th percentile per-packet one-way delay: 51.060 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 143.53 Mbit/s
  95th percentile per-packet one-way delay: 50.987 ms
  Loss rate: 1.03%
Run 7: Report of Indigo-1-128 — Data Link

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

- **Flow 1** (mean 172.83 Mbps) and (95th percentile 50.80 ms)
- **Flow 2** (mean 165.66 Mbps) and (95th percentile 51.06 ms)
- **Flow 3** (mean 143.52 Mbps) and (95th percentile 50.99 ms)
Run 8: Statistics of Indigo-1-128

Start at: 2018-01-26 17:55:31
End at: 2018-01-26 17:56:01

# Below is generated by plot.py at 2018-01-26 22:25:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.99 Mbit/s
95th percentile per-packet one-way delay: 50.237 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 173.12 Mbit/s
95th percentile per-packet one-way delay: 50.068 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 168.20 Mbit/s
95th percentile per-packet one-way delay: 50.480 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 142.38 Mbit/s
95th percentile per-packet one-way delay: 50.192 ms
Loss rate: 0.91%
Run 8: Report of Indigo-1-128 — Data Link

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 173.04 Mbps)
- Flow 1 egress (mean 173.12 Mbps)
- Flow 2 ingress (mean 168.03 Mbps)
- Flow 2 egress (mean 168.20 Mbps)
- Flow 3 ingress (mean 142.22 Mbps)
- Flow 3 egress (mean 142.38 Mbps)

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

- Flow 1 (95th percentile 50.07 ms)
- Flow 2 (95th percentile 50.48 ms)
- Flow 3 (95th percentile 50.19 ms)
Run 9: Statistics of Indigo-1-128

Start at: 2018-01-26 18:10:03
End at: 2018-01-26 18:10:33
Run 9: Report of Indigo-1-128 — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress (mean 167.56 Mbps)**
- **Flow 1 egress (mean 167.54 Mbps)**
- **Flow 2 ingress (mean 153.96 Mbps)**
- **Flow 2 egress (mean 153.85 Mbps)**
- **Flow 3 ingress (mean 126.97 Mbps)**
- **Flow 3 egress (mean 126.81 Mbps)**

**Per-packet one way delay (ms):**
- **Flow 1 (95th percentile 51.00 ms)**
- **Flow 2 (95th percentile 50.99 ms)**
- **Flow 3 (95th percentile 50.81 ms)**
Run 10: Statistics of Indigo-1-128

Start at: 2018-01-26 18:24:27
End at: 2018-01-26 18:24:57

# Below is generated by plot.py at 2018-01-26 22:25:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 322.23 Mbit/s
95th percentile per-packet one-way delay: 51.345 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 170.89 Mbit/s
95th percentile per-packet one-way delay: 51.077 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 156.66 Mbit/s
95th percentile per-packet one-way delay: 51.608 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 146.26 Mbit/s
95th percentile per-packet one-way delay: 51.546 ms
Loss rate: 1.05%
Run 10: Report of Indigo-1-128 — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 170.78 Mbps)
- Flow 1 egress (mean 170.89 Mbps)
- Flow 2 ingress (mean 156.60 Mbps)
- Flow 2 egress (mean 156.66 Mbps)
- Flow 3 ingress (mean 146.28 Mbps)
- Flow 3 egress (mean 146.26 Mbps)

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

- Flow 1 (95th percentile 51.08 ms)
- Flow 2 (95th percentile 51.61 ms)
- Flow 3 (95th percentile 51.55 ms)