Pantheon Report

Generated at 2018-06-20 16:38:06 (UTC).
Data path: GCE London Ethernet (local) → GCE Iowa Ethernet (remote).
Repeated the test of 16 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).
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ e7966e494a929986eaa5a9c169a7f381f1b2be5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eabab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1af9c958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8a3d08f2b924eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bca81343ec978f3c2f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c6a261149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d1431afa2851
Test from GCE London to GCE Iowa, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<tr>
<td>TCP BBR</td>
<td>10</td>
<td>217.26</td>
<td>212.52</td>
<td>199.65</td>
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<td>Copa</td>
<td>10</td>
<td>158.94</td>
<td>133.83</td>
<td>107.10</td>
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<td>179.07</td>
<td>134.48</td>
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<td>189.53</td>
<td>183.17</td>
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<td>23.03</td>
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<td>112.24</td>
<td>15.92</td>
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<td>PCC-Expr</td>
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<td>220.36</td>
<td>198.08</td>
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<td>QUIC Cubic</td>
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<td>32.12</td>
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<td>Sprout</td>
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<td>TaoVA-100x</td>
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<td>196.22</td>
<td>174.05</td>
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<td>TCP Vegas</td>
<td>10</td>
<td>105.44</td>
<td>110.98</td>
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<td>Verus</td>
<td>10</td>
<td>205.81</td>
<td>173.57</td>
<td>134.35</td>
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<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>266.31</td>
<td>217.34</td>
<td>132.35</td>
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<tr>
<td>WebRTC media</td>
<td>10</td>
<td>2.07</td>
<td>1.32</td>
<td>0.54</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-20 10:25:37
End at: 2018-06-20 10:26:07
Local clock offset: -0.054 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-20 14:26:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.57 Mbit/s
95th percentile per-packet one-way delay: 66.996 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 219.01 Mbit/s
95th percentile per-packet one-way delay: 64.935 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 209.16 Mbit/s
95th percentile per-packet one-way delay: 67.193 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 199.70 Mbit/s
95th percentile per-packet one-way delay: 69.159 ms
Loss rate: 0.15%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-06-20 10:48:40
End at: 2018-06-20 10:49:10
Local clock offset: -0.003 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-06-20 14:26:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.06 Mbit/s
95th percentile per-packet one-way delay: 63.693 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 214.87 Mbit/s
95th percentile per-packet one-way delay: 62.423 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 214.77 Mbit/s
95th percentile per-packet one-way delay: 64.326 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 193.35 Mbit/s
95th percentile per-packet one-way delay: 64.737 ms
Loss rate: 0.27%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-06-20 11:12:06
End at: 2018-06-20 11:12:36
Local clock offset: -0.389 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-20 14:26:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.95 Mbit/s
95th percentile per-packet one-way delay: 69.488 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 215.21 Mbit/s
95th percentile per-packet one-way delay: 68.080 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 209.33 Mbit/s
95th percentile per-packet one-way delay: 69.976 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 202.52 Mbit/s
95th percentile per-packet one-way delay: 70.630 ms
Loss rate: 0.09%
Run 3: Report of TCP BBR — Data Link

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

- **Flow 1** (ingress: mean 215.31 Mb/s, egress: mean 215.21 Mb/s)
- **Flow 2** (ingress: mean 209.49 Mb/s, egress: mean 209.33 Mb/s)
- **Flow 3** (ingress: mean 202.60 Mb/s, egress: mean 202.52 Mb/s)

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

- **Flow 1** (95th percentile 68.08 ms)
- **Flow 2** (95th percentile 69.98 ms)
- **Flow 3** (95th percentile 70.63 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-06-20 11:35:22
End at: 2018-06-20 11:35:52
Local clock offset: -0.001 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-06-20 14:26:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.15 Mbit/s
95th percentile per-packet one-way delay: 63.628 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 220.25 Mbit/s
95th percentile per-packet one-way delay: 61.519 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 214.37 Mbit/s
95th percentile per-packet one-way delay: 64.027 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 204.69 Mbit/s
95th percentile per-packet one-way delay: 66.229 ms
Loss rate: 0.00%
Run 5: Statistics of TCP BBR

Start at: 2018-06-20 11:58:21
End at: 2018-06-20 11:58:51
Local clock offset: -0.019 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 14:26:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.56 Mbit/s
95th percentile per-packet one-way delay: 67.933 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 217.32 Mbit/s
95th percentile per-packet one-way delay: 66.968 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 211.67 Mbit/s
95th percentile per-packet one-way delay: 68.124 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 202.23 Mbit/s
95th percentile per-packet one-way delay: 69.296 ms
Loss rate: 0.15%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

End at: 2018-06-20 12:21:52
Local clock offset: 0.054 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-06-20 14:26:35
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 433.19 Mbit/s
   95th percentile per-packet one-way delay: 65.636 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 221.07 Mbit/s
   95th percentile per-packet one-way delay: 64.229 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 215.33 Mbit/s
   95th percentile per-packet one-way delay: 66.073 ms
   Loss rate: 0.01%
-- Flow 3:
   Average throughput: 206.75 Mbit/s
   95th percentile per-packet one-way delay: 66.946 ms
   Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link

The charts show the throughput and per-packet one-way delay over time for three different flows. The throughput chart indicates the mean throughput in Mbps for each flow, while the per-packet delay chart shows the 95th percentile delay in ms for each flow.

- **Flow 1**: Mean throughput 221.08 Mbps, 95th percentile delay 64.23 ms
- **Flow 2**: Mean throughput 215.35 Mbps, 95th percentile delay 66.07 ms
- **Flow 3**: Mean throughput 206.92 Mbps, 95th percentile delay 66.95 ms
Run 7: Statistics of TCP BBR

Start at: 2018-06-20 12:44:30
End at: 2018-06-20 12:45:00
Local clock offset: 0.125 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-06-20 14:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.28 Mbit/s
95th percentile per-packet one-way delay: 64.772 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 215.35 Mbit/s
95th percentile per-packet one-way delay: 63.392 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 212.11 Mbit/s
95th percentile per-packet one-way delay: 64.759 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 204.02 Mbit/s
95th percentile per-packet one-way delay: 66.210 ms
Loss rate: 0.15%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-06-20 13:07:22
End at: 2018-06-20 13:07:52
Local clock offset: 0.121 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-20 14:26:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.31 Mbit/s
95th percentile per-packet one-way delay: 64.002 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 211.49 Mbit/s
95th percentile per-packet one-way delay: 62.241 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 207.99 Mbit/s
95th percentile per-packet one-way delay: 63.913 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 196.63 Mbit/s
95th percentile per-packet one-way delay: 66.046 ms
Loss rate: 0.21%
Run 8: Report of TCP BBR — Data Link

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

- **Throughput** metrics for different flows:
  - Flow 1 (ingress mean 211.65 Mbit/s, egress mean 211.49 Mbit/s)
  - Flow 2 (ingress mean 208.29 Mbit/s, egress mean 207.99 Mbit/s)
  - Flow 3 (ingress mean 196.80 Mbit/s, egress mean 196.63 Mbit/s)

- **Per-packet one-way delay** metrics for different flows:
  - Flow 1 (95th percentile 62.24 ms)
  - Flow 2 (95th percentile 63.91 ms)
  - Flow 3 (95th percentile 66.05 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-06-20 13:30:18
End at: 2018-06-20 13:30:48
Local clock offset: -0.321 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-06-20 14:33:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 430.88 Mbit/s
95th percentile per-packet one-way delay: 62.704 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 217.72 Mbit/s
95th percentile per-packet one-way delay: 61.786 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 217.61 Mbit/s
95th percentile per-packet one-way delay: 62.833 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 205.37 Mbit/s
95th percentile per-packet one-way delay: 64.241 ms
Loss rate: 0.08%
Run 9: Report of TCP BBR — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.](image)
Run 10: Statistics of TCP BBR

Start at: 2018-06-20 13:53:26
End at: 2018-06-20 13:53:56
Local clock offset: 0.053 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-06-20 14:33:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 422.28 Mbit/s
  95th percentile per-packet one-way delay: 64.187 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 220.30 Mbit/s
  95th percentile per-packet one-way delay: 62.355 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 212.85 Mbit/s
  95th percentile per-packet one-way delay: 64.691 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 181.25 Mbit/s
  95th percentile per-packet one-way delay: 66.530 ms
  Loss rate: 0.14%
Run 10: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 220.31 Mbps)
- Flow 1 egress (mean 220.30 Mbps)
- Flow 2 ingress (mean 212.88 Mbps)
- Flow 2 egress (mean 212.85 Mbps)
- Flow 3 ingress (mean 181.29 Mbps)
- Flow 3 egress (mean 181.25 Mbps)

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

- Flow 1 (95th percentile 62.35 ms)
- Flow 2 (95th percentile 64.69 ms)
- Flow 3 (95th percentile 66.53 ms)
Run 1: Statistics of Copa

Start at: 2018-06-20 10:24:00
End at: 2018-06-20 10:24:30
Local clock offset: -0.041 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-06-20 14:36:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 314.73 Mbit/s
  95th percentile per-packet one-way delay: 56.448 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 166.65 Mbit/s
  95th percentile per-packet one-way delay: 56.768 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 151.26 Mbit/s
  95th percentile per-packet one-way delay: 55.667 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 142.38 Mbit/s
  95th percentile per-packet one-way delay: 55.144 ms
  Loss rate: 0.00%
Run 1: Report of Copa — Data Link

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

Start at: 2018-06-20 10:47:06
End at: 2018-06-20 10:47:36
Local clock offset: -0.01 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2018-06-20 14:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 283.94 Mbit/s
95th percentile per-packet one-way delay: 59.280 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.39 Mbit/s
95th percentile per-packet one-way delay: 59.224 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 109.17 Mbit/s
95th percentile per-packet one-way delay: 56.536 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 122.31 Mbit/s
95th percentile per-packet one-way delay: 63.504 ms
Loss rate: 0.02%
Run 2: Report of Copa — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 181.39 Mbps)
- Flow 1 egress (mean 181.39 Mbps)
- Flow 2 ingress (mean 109.33 Mbps)
- Flow 2 egress (mean 109.17 Mbps)
- Flow 3 ingress (mean 122.32 Mbps)
- Flow 3 egress (mean 122.31 Mbps)

**Per-packet end-to-end delay (ms):**
- Flow 1 (95th percentile 59.22 ms)
- Flow 2 (95th percentile 56.54 ms)
- Flow 3 (95th percentile 63.50 ms)
Run 3: Statistics of Copa

Start at: 2018-06-20 11:10:32
End at: 2018-06-20 11:11:02
Local clock offset: -0.033 ms
Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2018-06-20 14:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.11 Mbit/s
95th percentile per-packet one-way delay: 60.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 172.43 Mbit/s
95th percentile per-packet one-way delay: 61.118 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 135.74 Mbit/s
95th percentile per-packet one-way delay: 59.426 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.13 Mbit/s
95th percentile per-packet one-way delay: 58.349 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-06-20 11:33:48
End at: 2018-06-20 11:34:18
Local clock offset: 0.023 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-06-20 14:36:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.28 Mbit/s
95th percentile per-packet one-way delay: 52.292 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.79 Mbit/s
95th percentile per-packet one-way delay: 51.659 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.45 Mbit/s
95th percentile per-packet one-way delay: 53.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 52.338 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-06-20 11:56:44
End at: 2018-06-20 11:57:14
Local clock offset: -0.059 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-20 14:36:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.16 Mbit/s
95th percentile per-packet one-way delay: 55.338 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.66 Mbit/s
95th percentile per-packet one-way delay: 53.762 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 131.51 Mbit/s
95th percentile per-packet one-way delay: 56.139 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 135.40 Mbit/s
95th percentile per-packet one-way delay: 60.267 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link

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

- Flow 1 ingress (mean 184.66 Mbit/s)
- Flow 1 egress (mean 184.66 Mbit/s)
- Flow 2 ingress (mean 131.51 Mbit/s)
- Flow 2 egress (mean 131.51 Mbit/s)
- Flow 3 ingress (mean 135.40 Mbit/s)
- Flow 3 egress (mean 135.40 Mbit/s)
Run 6: Statistics of Copa

Start at: 2018-06-20 12:19:50
End at: 2018-06-20 12:20:20
Local clock offset: -0.032 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-20 14:36:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.03 Mbit/s
95th percentile per-packet one-way delay: 55.430 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 137.69 Mbit/s
95th percentile per-packet one-way delay: 58.332 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.73 Mbit/s
95th percentile per-packet one-way delay: 53.050 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 125.23 Mbit/s
95th percentile per-packet one-way delay: 52.684 ms
Loss rate: 0.02%
Run 6: Report of Copa — Data Link

![Graph showing data link performance metrics over time. The graphs depict throughput and per-packet one-way delay for different flows with their respective mean values (mean 137.69 Mbit/s for Flow 1 ingress, mean 140.73 Mbit/s for Flow 2 ingress, mean 125.23 Mbit/s for Flow 3 ingress).]
Run 7: Statistics of Copa

Start at: 2018-06-20 12:43:01
End at: 2018-06-20 12:43:31
Local clock offset: -0.275 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-06-20 14:40:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 229.59 Mbit/s
95th percentile per-packet one-way delay: 53.920 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 119.67 Mbit/s
95th percentile per-packet one-way delay: 53.247 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 130.92 Mbit/s
95th percentile per-packet one-way delay: 55.186 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 68.41 Mbit/s
95th percentile per-packet one-way delay: 52.154 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-06-20 13:05:50
End at: 2018-06-20 13:06:20
Local clock offset: 0.154 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-06-20 14:42:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 268.84 Mbit/s
95th percentile per-packet one-way delay: 55.269 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 161.61 Mbit/s
95th percentile per-packet one-way delay: 55.102 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 117.51 Mbit/s
95th percentile per-packet one-way delay: 53.769 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 87.20 Mbit/s
95th percentile per-packet one-way delay: 64.892 ms
Loss rate: 1.05%
Run 8: Report of Copa — Data Link

![Graph of throughput and packet delay over time with annotations for each flow's ingress and egress mean values.]

<table>
<thead>
<tr>
<th>Flow 1 ingress (mean 161.86 Mbit/s)</th>
<th>Flow 1 egress (mean 161.61 Mbit/s)</th>
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<tbody>
<tr>
<td>Flow 2 ingress (mean 117.70 Mbit/s)</td>
<td>Flow 2 egress (mean 117.51 Mbit/s)</td>
</tr>
<tr>
<td>Flow 3 ingress (mean 88.11 Mbit/s)</td>
<td>Flow 3 egress (mean 87.20 Mbit/s)</td>
</tr>
</tbody>
</table>

![Graph of packet delay over time with annotations for each flow's 95th percentile delay.]

| Flow 1 (95th percentile 55.10 ms) | Flow 2 (95th percentile 53.77 ms) | Flow 3 (95th percentile 64.89 ms) |
Run 9: Statistics of Copa

End at: 2018-06-20 13:29:16
Local clock offset: 0.047 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-06-20 14:43:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 279.05 Mbit/s
  95th percentile per-packet one-way delay: 55.048 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 169.52 Mbit/s
  95th percentile per-packet one-way delay: 55.831 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 116.48 Mbit/s
  95th percentile per-packet one-way delay: 52.111 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 96.06 Mbit/s
  95th percentile per-packet one-way delay: 61.471 ms
  Loss rate: 0.03%
Run 9: Report of Copa — Data Link
Run 10: Statistics of Copa

End at: 2018-06-20 13:52:23
Local clock offset: 0.007 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-20 14:44:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.01 Mbit/s
95th percentile per-packet one-way delay: 52.634 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 150.98 Mbit/s
95th percentile per-packet one-way delay: 52.830 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 134.55 Mbit/s
95th percentile per-packet one-way delay: 52.497 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 124.67 Mbit/s
95th percentile per-packet one-way delay: 52.510 ms
Loss rate: 0.03%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-06-20 10:19:46
End at: 2018-06-20 10:20:16
Local clock offset: -0.001 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2018-06-20 14:44:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.86 Mbit/s
95th percentile per-packet one-way delay: 61.066 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 198.84 Mbit/s
95th percentile per-packet one-way delay: 60.588 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 225.38 Mbit/s
95th percentile per-packet one-way delay: 61.812 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 5.31 Mbit/s
95th percentile per-packet one-way delay: 55.607 ms
Loss rate: 0.11%
Run 1: Report of TCP Cubic — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 198.85 Mbit/s)
- Flow 1 egress (mean 198.84 Mbit/s)
- Flow 2 ingress (mean 225.52 Mbit/s)
- Flow 2 egress (mean 225.38 Mbit/s)
- Flow 3 ingress (mean 5.32 Mbit/s)
- Flow 3 egress (mean 5.31 Mbit/s)

![Round-Trip Time Graph](image)

- Flow 1 (95th percentile 60.59 ms)
- Flow 2 (95th percentile 61.81 ms)
- Flow 3 (95th percentile 55.61 ms)
Run 2: Statistics of TCP Cubic

End at: 2018-06-20 10:43:29
Local clock offset: -0.005 ms
Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-06-20 14:44:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 261.58 Mbit/s
95th percentile per-packet one-way delay: 58.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 176.63 Mbit/s
95th percentile per-packet one-way delay: 59.011 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 125.08 Mbit/s
95th percentile per-packet one-way delay: 54.417 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.40 Mbit/s
95th percentile per-packet one-way delay: 54.641 ms
Loss rate: 0.16%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-06-20 11:06:12
End at: 2018-06-20 11:06:42
Local clock offset: -0.013 ms
Remote clock offset: 0.147 ms

# Below is generated by plot.py at 2018-06-20 14:44:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 392.25 Mbit/s
95th percentile per-packet one-way delay: 64.649 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 171.81 Mbit/s
95th percentile per-packet one-way delay: 61.880 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 224.79 Mbit/s
95th percentile per-packet one-way delay: 66.140 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 212.92 Mbit/s
95th percentile per-packet one-way delay: 65.727 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 172.04 Mbit/s)
- Flow 1 egress (mean 171.81 Mbit/s)
- Flow 2 ingress (mean 225.03 Mbit/s)
- Flow 2 egress (mean 224.79 Mbit/s)
- Flow 3 ingress (mean 213.24 Mbit/s)
- Flow 3 egress (mean 212.92 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 61.88 ms)
- Flow 2 (95th percentile 66.14 ms)
- Flow 3 (95th percentile 65.73 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-06-20 11:29:34
End at: 2018-06-20 11:30:04
Local clock offset: -0.05 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-20 14:44:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.38 Mbit/s
95th percentile per-packet one-way delay: 59.744 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 198.10 Mbit/s
95th percentile per-packet one-way delay: 60.193 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 112.15 Mbit/s
95th percentile per-packet one-way delay: 54.723 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.83 Mbit/s
95th percentile per-packet one-way delay: 51.360 ms
Loss rate: 0.25%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-06-20 11:52:34
End at: 2018-06-20 11:53:04
Local clock offset: -0.028 ms
Remote clock offset: 0.084 ms

# Below is generated by plot.py at 2018-06-20 14:44:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.45 Mbit/s
95th percentile per-packet one-way delay: 56.654 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 162.83 Mbit/s
95th percentile per-packet one-way delay: 57.140 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.85 Mbit/s
95th percentile per-packet one-way delay: 55.883 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 178.24 Mbit/s
95th percentile per-packet one-way delay: 56.355 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 162.83 Mbit/s)  
Flow 1 egress (mean 162.83 Mbit/s)
Flow 2 ingress (mean 51.85 Mbit/s)  
Flow 2 egress (mean 51.85 Mbit/s)
Flow 3 ingress (mean 178.27 Mbit/s)  
Flow 3 egress (mean 178.24 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 57.14 ms)  
Flow 2 (95th percentile 55.88 ms)  
Flow 3 (95th percentile 56.35 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-06-20 12:15:43
End at: 2018-06-20 12:16:13
Local clock offset: -0.024 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-06-20 14:47:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.94 Mbit/s
95th percentile per-packet one-way delay: 61.947 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 228.71 Mbit/s
95th percentile per-packet one-way delay: 60.974 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 223.52 Mbit/s
95th percentile per-packet one-way delay: 63.170 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 4.60 Mbit/s
95th percentile per-packet one-way delay: 57.324 ms
Loss rate: 0.26%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-06-20 12:38:52
End at: 2018-06-20 12:39:22
Local clock offset: -0.274 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2018-06-20 14:47:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 236.68 Mbit/s
95th percentile per-packet one-way delay: 59.446 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 146.81 Mbit/s
95th percentile per-packet one-way delay: 60.224 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 53.02 Mbit/s
95th percentile per-packet one-way delay: 58.099 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 164.22 Mbit/s
95th percentile per-packet one-way delay: 57.964 ms
Loss rate: 0.04%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-06-20 13:01:44
End at: 2018-06-20 13:02:14
Local clock offset: 0.107 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-20 14:47:18

# Datalink statistics
-- Total of 3 flows:
Average throughput: 230.21 Mbit/s
95th percentile per-packet one-way delay: 55.872 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 157.96 Mbit/s
95th percentile per-packet one-way delay: 55.858 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 56.052 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 110.56 Mbit/s
95th percentile per-packet one-way delay: 55.587 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 157.97 Mbit/s)
Flow 1 egress (mean 157.96 Mbit/s)
Flow 2 ingress (mean 53.32 Mbit/s)
Flow 2 egress (mean 53.31 Mbit/s)
Flow 3 ingress (mean 110.57 Mbit/s)
Flow 3 egress (mean 110.56 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 55.86 ms)
Flow 2 (95th percentile 56.05 ms)
Flow 3 (95th percentile 55.59 ms)
Run 9: Statistics of TCP Cubic

End at: 2018-06-20 13:25:08
Local clock offset: 0.103 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-20 14:47:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.32 Mbit/s
95th percentile per-packet one-way delay: 60.677 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 174.78 Mbit/s
95th percentile per-packet one-way delay: 59.924 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 53.01 Mbit/s
95th percentile per-packet one-way delay: 59.211 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 214.69 Mbit/s
95th percentile per-packet one-way delay: 63.119 ms
Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 175.01 Mbit/s)
- Flow 1 egress (mean 174.78 Mbit/s)
- Flow 2 ingress (mean 53.03 Mbit/s)
- Flow 2 egress (mean 53.01 Mbit/s)
- Flow 3 ingress (mean 214.87 Mbit/s)
- Flow 3 egress (mean 214.69 Mbit/s)
- Flow 1 (95th percentile 59.92 ms)
- Flow 2 (95th percentile 59.21 ms)
- Flow 3 (95th percentile 63.12 ms)
Run 10: Statistics of TCP Cubic

Local clock offset: -0.331 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 14:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 393.96 Mbit/s
95th percentile per-packet one-way delay: 62.971 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 174.21 Mbit/s
95th percentile per-packet one-way delay: 61.835 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 222.74 Mbit/s
95th percentile per-packet one-way delay: 63.811 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 215.33 Mbit/s
95th percentile per-packet one-way delay: 64.097 ms
Loss rate: 0.00%
Run 10: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 174.26 Mbit/s)
- Flow 1 egress (mean 174.21 Mbit/s)
- Flow 2 ingress (mean 222.76 Mbit/s)
- Flow 2 egress (mean 222.74 Mbit/s)
- Flow 3 ingress (mean 215.43 Mbit/s)
- Flow 3 egress (mean 215.33 Mbit/s)

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

- Flow 1 (95th percentile 61.84 ms)
- Flow 2 (95th percentile 63.81 ms)
- Flow 3 (95th percentile 64.10 ms)
Run 1: Statistics of FillP

Start at: 2018-06-20 10:31:22
End at: 2018-06-20 10:31:52
Local clock offset: -0.045 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-06-20 15:09:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1242.20 Mbit/s
95th percentile per-packet one-way delay: 170.777 ms
Loss rate: 3.44%
-- Flow 1:
Average throughput: 678.56 Mbit/s
95th percentile per-packet one-way delay: 145.660 ms
Loss rate: 3.76%
-- Flow 2:
Average throughput: 591.91 Mbit/s
95th percentile per-packet one-way delay: 191.800 ms
Loss rate: 3.76%
-- Flow 3:
Average throughput: 511.09 Mbit/s
95th percentile per-packet one-way delay: 181.825 ms
Loss rate: 1.37%
Run 1: Report of FillP — Data Link

![Throughput Graph]

![End-to-End Delay Graph]
Run 2: Statistics of FillP

Start at: 2018-06-20 10:54:33
End at: 2018-06-20 10:55:03
Local clock offset: -0.019 ms
Remote clock offset: 0.144 ms

# Below is generated by plot.py at 2018-06-20 15:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1244.69 Mbit/s
95th percentile per-packet one-way delay: 142.456 ms
Loss rate: 2.54%
-- Flow 1:
Average throughput: 653.78 Mbit/s
95th percentile per-packet one-way delay: 129.140 ms
Loss rate: 3.52%
-- Flow 2:
Average throughput: 617.12 Mbit/s
95th percentile per-packet one-way delay: 174.717 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 544.26 Mbit/s
95th percentile per-packet one-way delay: 113.846 ms
Loss rate: 2.70%
Run 2: Report of FillP — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 3: Statistics of FillP

Start at: 2018-06-20 11:17:54
End at: 2018-06-20 11:18:24
Local clock offset: -0.048 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-06-20 15:11:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1299.76 Mbit/s
95th percentile per-packet one-way delay: 124.373 ms
Loss rate: 2.41%
-- Flow 1:
Average throughput: 714.19 Mbit/s
95th percentile per-packet one-way delay: 118.711 ms
Loss rate: 1.94%
-- Flow 2:
Average throughput: 640.41 Mbit/s
95th percentile per-packet one-way delay: 135.691 ms
Loss rate: 3.77%
-- Flow 3:
Average throughput: 481.51 Mbit/s
95th percentile per-packet one-way delay: 107.932 ms
Loss rate: 0.83%
Run 3: Report of FillP — Data Link

![Throughput Graph]

- **Flow 1 ingress (mean 728.34 Mbit/s)**
- **Flow 1 egress (mean 714.19 Mbit/s)**
- **Flow 2 ingress (mean 665.48 Mbit/s)**
- **Flow 2 egress (mean 640.41 Mbit/s)**
- **Flow 3 ingress (mean 485.58 Mbit/s)**
- **Flow 3 egress (mean 481.51 Mbit/s)**

![Delay Graph]

- **Flow 1 (95th percentile 118.71 ms)**
- **Flow 2 (95th percentile 135.69 ms)**
- **Flow 3 (95th percentile 107.93 ms)**

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Run 4: Statistics of FILLP

Start at: 2018-06-20 11:41:16
End at: 2018-06-20 11:41:46
Local clock offset: -0.064 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2018-06-20 15:11:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1006.24 Mbit/s
95th percentile per-packet one-way delay: 214.263 ms
Loss rate: 1.68%
-- Flow 1:
Average throughput: 609.70 Mbit/s
95th percentile per-packet one-way delay: 221.706 ms
Loss rate: 2.24%
-- Flow 2:
Average throughput: 437.74 Mbit/s
95th percentile per-packet one-way delay: 211.938 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 319.97 Mbit/s
95th percentile per-packet one-way delay: 207.313 ms
Loss rate: 1.46%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-06-20 12:04:09
End at: 2018-06-20 12:04:39
Local clock offset: -0.054 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-06-20 15:11:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1257.48 Mbit/s
  95th percentile per-packet one-way delay: 172.591 ms
  Loss rate: 2.91%
-- Flow 1:
  Average throughput: 701.00 Mbit/s
  95th percentile per-packet one-way delay: 191.105 ms
  Loss rate: 1.73%
-- Flow 2:
  Average throughput: 589.53 Mbit/s
  95th percentile per-packet one-way delay: 162.113 ms
  Loss rate: 4.12%
-- Flow 3:
  Average throughput: 495.11 Mbit/s
  95th percentile per-packet one-way delay: 121.039 ms
  Loss rate: 4.90%
Run 5: Report of FillP — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 713.36 Mbps/s)
- Green dashed line: Flow 1 egress (mean 711.00 Mbps/s)
- Blue solid line: Flow 2 ingress (mean 614.86 Mbps/s)
- Blue dashed-dotted line: Flow 2 egress (mean 589.53 Mbps/s)
- Red solid line: Flow 3 ingress (mean 520.68 Mbps/s)
- Red dashed line: Flow 3 egress (mean 495.11 Mbps/s)

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

- Blue dashed line: Flow 1 (95th percentile 191.10 ms)
- Green dashed line: Flow 2 (95th percentile 162.11 ms)
- Red solid line: Flow 3 (95th percentile 121.04 ms)
Run 6: Statistics of FillP

Start at: 2018-06-20 12:27:11
End at: 2018-06-20 12:27:41
Local clock offset: 0.061 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-20 15:12:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1265.01 Mbit/s
  95th percentile per-packet one-way delay: 147.106 ms
  Loss rate: 3.25%
-- Flow 1:
  Average throughput: 664.32 Mbit/s
  95th percentile per-packet one-way delay: 148.133 ms
  Loss rate: 3.41%
-- Flow 2:
  Average throughput: 628.44 Mbit/s
  95th percentile per-packet one-way delay: 131.207 ms
  Loss rate: 3.14%
-- Flow 3:
  Average throughput: 550.97 Mbit/s
  95th percentile per-packet one-way delay: 148.298 ms
  Loss rate: 2.96%
Run 6: Report of FillP — Data Link
Run 7: Statistics of FillP

Start at: 2018-06-20 12:50:16
End at: 2018-06-20 12:50:46
Local clock offset: 0.087 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-06-20 15:12:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1226.60 Mbit/s
95th percentile per-packet one-way delay: 196.809 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 688.10 Mbit/s
95th percentile per-packet one-way delay: 152.303 ms
Loss rate: 4.48%
-- Flow 2:
Average throughput: 547.44 Mbit/s
95th percentile per-packet one-way delay: 187.127 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 526.20 Mbit/s
95th percentile per-packet one-way delay: 250.364 ms
Loss rate: 2.12%
Run 7: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 720.37 Mbit/s)**
- **Flow 1 Egress (mean 688.10 Mbit/s)**
- **Flow 2 Ingress (mean 554.32 Mbit/s)**
- **Flow 2 Egress (mean 547.44 Mbit/s)**
- **Flow 3 Ingress (mean 537.50 Mbit/s)**
- **Flow 3 Egress (mean 526.20 Mbit/s)**

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

- **Flow 1 (95th percentile 152.30 ms)**
- **Flow 2 (95th percentile 187.13 ms)**
- **Flow 3 (95th percentile 250.36 ms)**
Run 8: Statistics of FillP

Start at: 2018-06-20 13:13:05
Local clock offset: -0.273 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-20 15:16:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1259.54 Mbit/s
95th percentile per-packet one-way delay: 146.043 ms
Loss rate: 3.57%
-- Flow 1:
Average throughput: 693.82 Mbit/s
95th percentile per-packet one-way delay: 141.489 ms
Loss rate: 3.46%
-- Flow 2:
Average throughput: 610.54 Mbit/s
95th percentile per-packet one-way delay: 145.678 ms
Loss rate: 3.66%
-- Flow 3:
Average throughput: 481.71 Mbit/s
95th percentile per-packet one-way delay: 154.274 ms
Loss rate: 3.87%
Run 8: Report of FillP — Data Link

![Throughput vs Time Graph]

![Per-Packet Delay vs Time Graph]

Legend:
- Flow 1 Ingress (mean 718.67 Mbit/s)
- Flow 1 Egress (mean 693.82 Mbit/s)
- Flow 2 Ingress (mean 633.72 Mbit/s)
- Flow 2 Egress (mean 610.54 Mbit/s)
- Flow 3 Ingress (mean 501.04 Mbit/s)
- Flow 3 Egress (mean 481.73 Mbit/s)

Legend:
- Flow 1 (95th percentile 141.49 ms)
- Flow 2 (95th percentile 145.68 ms)
- Flow 3 (95th percentile 154.27 ms)
Run 9: Statistics of FillP

Start at: 2018-06-20 13:36:10
End at: 2018-06-20 13:36:40
Local clock offset: 0.046 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-20 15:33:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1160.38 Mbit/s
95th percentile per-packet one-way delay: 160.270 ms
Loss rate: 5.96%
-- Flow 1:
Average throughput: 585.67 Mbit/s
95th percentile per-packet one-way delay: 168.536 ms
Loss rate: 7.75%
-- Flow 2:
Average throughput: 642.84 Mbit/s
95th percentile per-packet one-way delay: 133.541 ms
Loss rate: 3.20%
-- Flow 3:
Average throughput: 442.98 Mbit/s
95th percentile per-packet one-way delay: 159.718 ms
Loss rate: 6.52%
Run 9: Report of FillP — Data Link
Run 10: Statistics of FillP

Start at: 2018-06-20 13:59:08
End at: 2018-06-20 13:59:38
Local clock offset: 0.033 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-06-20 15:36:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1201.74 Mbit/s
  95th percentile per-packet one-way delay: 205.553 ms
  Loss rate: 6.17%
-- Flow 1:
  Average throughput: 675.72 Mbit/s
  95th percentile per-packet one-way delay: 151.081 ms
  Loss rate: 5.63%
-- Flow 2:
  Average throughput: 592.82 Mbit/s
  95th percentile per-packet one-way delay: 237.827 ms
  Loss rate: 7.22%
-- Flow 3:
  Average throughput: 396.79 Mbit/s
  95th percentile per-packet one-way delay: 274.905 ms
  Loss rate: 5.73%
Run 10: Report of FillIP — Data Link

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

- Flow 1 ingress (mean 716.07 Mbps/s)
- Flow 1 egress (mean 675.72 Mbps/s)
- Flow 2 ingress (mean 638.94 Mbps/s)
- Flow 2 egress (mean 592.82 Mbps/s)
- Flow 3 ingress (mean 420.95 Mbps/s)
- Flow 3 egress (mean 396.79 Mbps/s)

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

- Flow 1 (95th percentile 151.08 ms)
- Flow 2 (95th percentile 237.83 ms)
- Flow 3 (95th percentile 274.90 ms)
Run 1: Statistics of Indigo

End at: 2018-06-20 10:28:54  
Local clock offset: -0.056 ms  
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-06-20 15:36:11  
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.09 Mbit/s
95th percentile per-packet one-way delay: 53.478 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 145.24 Mbit/s
95th percentile per-packet one-way delay: 53.499 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 180.40 Mbit/s
95th percentile per-packet one-way delay: 53.400 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 170.13 Mbit/s
95th percentile per-packet one-way delay: 53.610 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 145.29 Mbit/s)**
- **Flow 1 egress (mean 145.24 Mbit/s)**
- **Flow 2 ingress (mean 180.41 Mbit/s)**
- **Flow 2 egress (mean 180.40 Mbit/s)**
- **Flow 3 ingress (mean 170.14 Mbit/s)**
- **Flow 3 egress (mean 170.13 Mbit/s)**

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

- **Flow 1 (95th percentile 53.50 ms)**
- **Flow 2 (95th percentile 53.40 ms)**
- **Flow 3 (95th percentile 53.61 ms)**
Run 2: Statistics of Indigo

Start at: 2018-06-20 10:51:32
End at: 2018-06-20 10:52:02
Local clock offset: 0.02 ms
Remote clock offset: 0.143 ms

# Below is generated by plot.py at 2018-06-20 15:36:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 370.92 Mbit/s
  95th percentile per-packet one-way delay: 52.802 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 190.37 Mbit/s
  95th percentile per-packet one-way delay: 52.611 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 190.69 Mbit/s
  95th percentile per-packet one-way delay: 52.833 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 165.99 Mbit/s
  95th percentile per-packet one-way delay: 53.147 ms
  Loss rate: 0.00%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-06-20 11:14:54
End at: 2018-06-20 11:15:24
Local clock offset: -0.031 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 353.04 Mbit/s
  95th percentile per-packet one-way delay: 53.524 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 183.44 Mbit/s
  95th percentile per-packet one-way delay: 53.375 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 177.90 Mbit/s
  95th percentile per-packet one-way delay: 53.567 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 159.12 Mbit/s
  95th percentile per-packet one-way delay: 53.707 ms
  Loss rate: 0.00%
Run 3: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)](image1)
- Flow 1 ingress (mean 183.40 Mbps)
- Flow 1 egress (mean 183.44 Mbps)
- Flow 2 ingress (mean 177.90 Mbps)
- Flow 2 egress (mean 177.90 Mbps)
- Flow 3 ingress (mean 159.11 Mbps)
- Flow 3 egress (mean 159.12 Mbps)

![Graph 2: Per-packet end-to-end delay (ms)](image2)
- Flow 1 (95th percentile 53.38 ms)
- Flow 2 (95th percentile 53.57 ms)
- Flow 3 (95th percentile 53.71 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-20 11:38:14
End at: 2018-06-20 11:38:44
Local clock offset: 0.332 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 402.56 Mbit/s
  95th percentile per-packet one-way delay: 55.689 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 216.35 Mbit/s
  95th percentile per-packet one-way delay: 54.917 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 194.37 Mbit/s
  95th percentile per-packet one-way delay: 56.502 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 177.09 Mbit/s
  95th percentile per-packet one-way delay: 57.020 ms
  Loss rate: 0.00%
Run 4: Report of Indigo — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 216.36 Mb/s)  Flow 1 egress (mean 216.35 Mb/s)
Flow 2 ingress (mean 194.36 Mb/s)  Flow 2 egress (mean 194.37 Mb/s)
Flow 3 ingress (mean 177.11 Mb/s)  Flow 3 egress (mean 177.09 Mb/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 54.92 ms)  Flow 2 (95th percentile 56.50 ms)  Flow 3 (95th percentile 57.02 ms)
Run 5: Statistics of Indigo

Start at: 2018-06-20 12:01:10
End at: 2018-06-20 12:01:40
Local clock offset: -0.018 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.09 Mbit/s
95th percentile per-packet one-way delay: 52.728 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 187.64 Mbit/s
95th percentile per-packet one-way delay: 52.594 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 181.50 Mbit/s
95th percentile per-packet one-way delay: 52.872 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.21 Mbit/s
95th percentile per-packet one-way delay: 52.829 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

![Graph showing network performance metrics over time]

**Throughput (Mbps)**
- **Flow 1 ingress**: mean 187.64 Mbps
- **Flow 1 egress**: mean 187.64 Mbps
- **Flow 2 ingress**: mean 181.49 Mbps
- **Flow 2 egress**: mean 181.50 Mbps
- **Flow 3 ingress**: mean 159.18 Mbps
- **Flow 3 egress**: mean 159.21 Mbps

**Per-packet one way delay (ms)**
- **Flow 1 (95th percentile)**: 52.59 ms
- **Flow 2 (95th percentile)**: 52.87 ms
- **Flow 3 (95th percentile)**: 52.83 ms
Run 6: Statistics of Indigo

Start at: 2018-06-20 12:24:10
End at: 2018-06-20 12:24:40
Local clock offset: 0.065 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 378.11 Mbit/s
  95th percentile per-packet one-way delay: 52.988 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 202.36 Mbit/s
  95th percentile per-packet one-way delay: 52.578 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 186.11 Mbit/s
  95th percentile per-packet one-way delay: 53.538 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 161.81 Mbit/s
  95th percentile per-packet one-way delay: 53.125 ms
  Loss rate: 0.00%
Run 6: Report of Indigo — Data Link

![Graph of Throughput vs Time]

- **Flow 1 Ingress (mean 202.36 Mbit/s)**
- **Flow 1 Egress (mean 202.36 Mbit/s)**
- **Flow 2 Ingress (mean 186.10 Mbit/s)**
- **Flow 2 Egress (mean 186.11 Mbit/s)**
- **Flow 3 Ingress (mean 161.35 Mbit/s)**
- **Flow 3 Egress (mean 161.81 Mbit/s)**

![Graph of Per-packet One-way Delay vs Time]

- **Flow 1 (95th percentile 52.58 ms)**
- **Flow 2 (95th percentile 53.54 ms)**
- **Flow 3 (95th percentile 53.12 ms)**
Run 7: Statistics of Indigo

Start at: 2018-06-20 12:47:16
End at: 2018-06-20 12:47:46
Local clock offset: -0.269 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 371.87 Mbit/s
95th percentile per-packet one-way delay: 53.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.93 Mbit/s
95th percentile per-packet one-way delay: 53.794 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 189.26 Mbit/s
95th percentile per-packet one-way delay: 53.705 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.44 Mbit/s
95th percentile per-packet one-way delay: 54.043 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-06-20 13:10:06
End at: 2018-06-20 13:10:36
Local clock offset: 0.092 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.01 Mbit/s
95th percentile per-packet one-way delay: 53.068 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.22 Mbit/s
95th percentile per-packet one-way delay: 52.594 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 178.33 Mbit/s
95th percentile per-packet one-way delay: 53.231 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.43 Mbit/s
95th percentile per-packet one-way delay: 53.808 ms
Loss rate: 0.00%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Start at: 2018-06-20 13:33:10
End at: 2018-06-20 13:33:40
Local clock offset: 0.024 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 375.41 Mbit/s
  95th percentile per-packet one-way delay: 57.869 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 204.07 Mbit/s
  95th percentile per-packet one-way delay: 56.263 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 183.05 Mbit/s
  95th percentile per-packet one-way delay: 58.333 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 154.10 Mbit/s
  95th percentile per-packet one-way delay: 59.488 ms
  Loss rate: 0.00%
Run 10: Statistics of Indigo

Start at: 2018-06-20 13:56:10
End at: 2018-06-20 13:56:40
Local clock offset: -0.316 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.60 Mbit/s
95th percentile per-packet one-way delay: 52.985 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 184.66 Mbit/s
95th percentile per-packet one-way delay: 52.704 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.12 Mbit/s
95th percentile per-packet one-way delay: 53.021 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 164.03 Mbit/s
95th percentile per-packet one-way delay: 53.572 ms
Loss rate: 0.00%
Run 10: Report of Indigo — Data Link

![Graph of Throughput and Delay](image)

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 184.68 Mbps)
- **Flow 1 egress** (mean 184.66 Mbps)
- **Flow 2 ingress** (mean 170.18 Mbps)
- **Flow 2 egress** (mean 170.12 Mbps)
- **Flow 3 ingress** (mean 164.66 Mbps)
- **Flow 3 egress** (mean 164.03 Mbps)

**Delay (ms)**

- **Flow 1 (95th percentile 52.70 ms)**
- **Flow 2 (95th percentile 53.02 ms)**
- **Flow 3 (95th percentile 53.57 ms)**
Run 1: Statistics of LEDBAT

Start at: 2018-06-20 10:15:54
End at: 2018-06-20 10:16:24
Local clock offset: -0.015 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.71 Mbit/s
95th percentile per-packet one-way delay: 51.948 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 33.48 Mbit/s
95th percentile per-packet one-way delay: 52.369 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.17 Mbit/s
95th percentile per-packet one-way delay: 51.730 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 51.367 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link

![Graph showing network performance metrics over time]

Legend:
- Blue dashed line: Flow 1 ingress (mean 33.48 Mbit/s)
- Blue solid line: Flow 1 egress (mean 33.48 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 23.19 Mbit/s)
- Green solid line: Flow 2 egress (mean 23.17 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 11.62 Mbit/s)
- Red solid line: Flow 3 egress (mean 11.62 Mbit/s)

![Graph showing packet loss over time]

Legend:
- Blue line: Flow 1 (95th percentile 52.37 ms)
- Green line: Flow 2 (95th percentile 51.73 ms)
- Red line: Flow 3 (95th percentile 51.37 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-06-20 10:39:07
End at: 2018-06-20 10:39:37
Local clock offset: -0.014 ms
Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.06 Mbit/s
95th percentile per-packet one-way delay: 51.650 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.09 Mbit/s
95th percentile per-packet one-way delay: 51.671 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.54 Mbit/s
95th percentile per-packet one-way delay: 51.617 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.98 Mbit/s
95th percentile per-packet one-way delay: 51.581 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

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

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

- Flow 1 ingress (mean 31.09 Mbit/s)
- Flow 1 egress (mean 31.09 Mbit/s)
- Flow 2 ingress (mean 23.54 Mbit/s)
- Flow 2 egress (mean 23.54 Mbit/s)
- Flow 3 ingress (mean 9.98 Mbit/s)
- Flow 3 egress (mean 9.98 Mbit/s)
Run 3: Statistics of LEDBAT

Start at: 2018-06-20 11:02:18
End at: 2018-06-20 11:02:48
Local clock offset: -0.396 ms
Remote clock offset: 0.149 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.68 Mbit/s
  95th percentile per-packet one-way delay: 52.483 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.77 Mbit/s
  95th percentile per-packet one-way delay: 52.570 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 24.03 Mbit/s
  95th percentile per-packet one-way delay: 52.304 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.92 Mbit/s
  95th percentile per-packet one-way delay: 52.287 ms
  Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

The graphs illustrate the throughput and per-packet end-to-end delay for three different flows during the duration of 30 seconds. The graphs show:

- **Throughput (Mbps)** vs. **Time (s)**
  - Blue line: Flow 1 ingoing (mean 34.77 Mbps)
  - Blue dashed line: Flow 1 egressing (mean 34.77 Mbps)
  - Green line: Flow 2 ingoing (mean 24.03 Mbps)
  - Green dashed line: Flow 2 egressing (mean 24.03 Mbps)
  - Red line: Flow 3 ingoing (mean 11.92 Mbps)
  - Red dashed line: Flow 3 egressing (mean 11.92 Mbps)

- **Per-packet end-to-end delay (ms)** vs. **Time (s)**
  - Purple dots: Flow 1 (95th percentile 52.57 ms)
  - Green dots: Flow 2 (95th percentile 52.30 ms)
  - Red dots: Flow 3 (95th percentile 52.29 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-06-20 11:25:43
End at: 2018-06-20 11:26:13
Local clock offset: -0.026 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.25 Mbit/s
95th percentile per-packet one-way delay: 51.495 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.19 Mbit/s
95th percentile per-packet one-way delay: 51.568 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.04 Mbit/s
95th percentile per-packet one-way delay: 51.454 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.42 Mbit/s
95th percentile per-packet one-way delay: 51.122 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

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

- **Flow 1 Ingress** (mean 35.19 Mbit/s)
- **Flow 1 Egress** (mean 35.19 Mbit/s)
- **Flow 2 Ingress** (mean 23.04 Mbit/s)
- **Flow 2 Egress** (mean 23.04 Mbit/s)
- **Flow 3 Ingress** (mean 11.42 Mbit/s)
- **Flow 3 Egress** (mean 11.42 Mbit/s)

![Graph 2: Per-Packet Round-Trip Delay vs Time](image2)

- **Flow 1 (95th percentile 51.57 ms)**
- **Flow 2 (95th percentile 51.45 ms)**
- **Flow 3 (95th percentile 51.12 ms)**
Run 5: Statistics of LEDBAT

Start at: 2018-06-20 11:48:42
End at: 2018-06-20 11:49:12
Local clock offset: -0.017 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 52.25 Mbit/s
  95th percentile per-packet one-way delay: 51.479 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 35.06 Mbit/s
  95th percentile per-packet one-way delay: 51.592 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 20.55 Mbit/s
  95th percentile per-packet one-way delay: 51.393 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.69 Mbit/s
  95th percentile per-packet one-way delay: 51.237 ms
  Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

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

- Blue solid line: Flow 1 ingress (mean 35.06 Mbit/s)
- Blue dotted line: Flow 1 egress (mean 35.06 Mbit/s)
- Green solid line: Flow 2 ingress (mean 20.55 Mbit/s)
- Green dotted line: Flow 2 egress (mean 20.55 Mbit/s)
- Red solid line: Flow 3 ingress (mean 10.69 Mbit/s)
- Red dotted line: Flow 3 egress (mean 10.69 Mbit/s)

![Graph 2: Per Packet One Way Delay vs Time](image2.png)

- Blue circles: Flow 1 (95th percentile 51.59 ms)
- Green circles: Flow 2 (95th percentile 51.39 ms)
- Red circles: Flow 3 (95th percentile 51.24 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-06-20 12:11:49
End at: 2018-06-20 12:12:19
Local clock offset: -0.064 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.24 Mbit/s
95th percentile per-packet one-way delay: 51.998 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 34.84 Mbit/s
95th percentile per-packet one-way delay: 52.061 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: 51.978 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 11.52 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

[Graph of throughput over time for different flows]

[Graph of packet end-to-end delay over time for different flows]
Run 7: Statistics of LEDBAT

Start at: 2018-06-20 12:35:01
End at: 2018-06-20 12:35:31
Local clock offset: -0.266 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.93 Mbit/s
  95th percentile per-packet one-way delay: 51.818 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.74 Mbit/s
  95th percentile per-packet one-way delay: 51.902 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.22 Mbit/s
  95th percentile per-packet one-way delay: 51.587 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.35 Mbit/s
  95th percentile per-packet one-way delay: 51.643 ms
  Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-06-20 12:57:53
End at: 2018-06-20 12:58:23
Local clock offset: 0.093 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.84 Mbit/s
95th percentile per-packet one-way delay: 51.659 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 27.76 Mbit/s
95th percentile per-packet one-way delay: 51.678 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.84 Mbit/s
95th percentile per-packet one-way delay: 51.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 51.009 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

End at: 2018-06-20 13:21:17
Local clock offset: 0.113 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 50.90 Mbit/s
  95th percentile per-packet one-way delay: 51.491 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 31.82 Mbit/s
  95th percentile per-packet one-way delay: 51.464 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.11 Mbit/s
  95th percentile per-packet one-way delay: 51.597 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.25 Mbit/s
  95th percentile per-packet one-way delay: 51.066 ms
  Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-06-20 13:43:52
End at: 2018-06-20 13:44:22
Local clock offset: -0.314 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics

-- Total of 3 flows:
Average throughput: 53.13 Mbit/s
95th percentile per-packet one-way delay: 52.122 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 33.72 Mbit/s
95th percentile per-packet one-way delay: 52.187 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 23.42 Mbit/s
95th percentile per-packet one-way delay: 52.044 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 11.54 Mbit/s
95th percentile per-packet one-way delay: 51.658 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-20 10:29:53
End at: 2018-06-20 10:30:23
Local clock offset: -0.046 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 569.55 Mbit/s
95th percentile per-packet one-way delay: 229.541 ms
Loss rate: 3.58%
-- Flow 1:
Average throughput: 520.22 Mbit/s
95th percentile per-packet one-way delay: 229.960 ms
Loss rate: 3.73%
-- Flow 2:
Average throughput: 60.30 Mbit/s
95th percentile per-packet one-way delay: 162.447 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 27.96 Mbit/s
95th percentile per-packet one-way delay: 162.994 ms
Loss rate: 3.14%
Run 1: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 540.37 Mbps)
- **Flow 1 egress** (mean 520.22 Mbps)
- **Flow 2 ingress** (mean 61.35 Mbps)
- **Flow 2 egress** (mean 60.30 Mbps)
- **Flow 3 ingress** (mean 28.98 Mbps)
- **Flow 3 egress** (mean 27.96 Mbps)

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

- **Flow 1 (95th percentile 229.96 ms)**
- **Flow 2 (95th percentile 162.45 ms)**
- **Flow 3 (95th percentile 162.99 ms)**

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Run 2: Statistics of PCC-Allegro

Start at: 2018-06-20 10:53:04
End at: 2018-06-20 10:53:34
Local clock offset: 0.369 ms
Remote clock offset: 0.129 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 572.59 Mbit/s
  95th percentile per-packet one-way delay: 189.470 ms
  Loss rate: 5.29%
-- Flow 1:
  Average throughput: 497.79 Mbit/s
  95th percentile per-packet one-way delay: 192.080 ms
  Loss rate: 5.35%
-- Flow 2:
  Average throughput: 111.64 Mbit/s
  95th percentile per-packet one-way delay: 170.334 ms
  Loss rate: 4.90%
-- Flow 3:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: 169.296 ms
  Loss rate: 4.04%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-20 11:16:25
End at: 2018-06-20 11:16:55
Local clock offset: -0.036 ms
Remote clock offset: 0.11 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 590.52 Mbit/s
95th percentile per-packet one-way delay: 192.415 ms
Loss rate: 5.62%
-- Flow 1:
Average throughput: 509.57 Mbit/s
95th percentile per-packet one-way delay: 195.097 ms
Loss rate: 5.75%
-- Flow 2:
Average throughput: 120.75 Mbit/s
95th percentile per-packet one-way delay: 162.402 ms
Loss rate: 4.81%
-- Flow 3:
Average throughput: 2.11 Mbit/s
95th percentile per-packet one-way delay: 161.397 ms
Loss rate: 4.85%
Run 3: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet loss over time for different flows in Run 3.]

- Flow 1 ingress (mean 540.62 Mbit/s)
- Flow 1 egress (mean 509.57 Mbit/s)
- Flow 2 ingress (mean 126.84 Mbit/s)
- Flow 2 egress (mean 120.75 Mbit/s)
- Flow 3 ingress (mean 2.22 Mbit/s)
- Flow 3 egress (mean 2.11 Mbit/s)
Run 4: Statistics of PCC-Allegro

End at: 2018-06-20 11:40:18
Local clock offset: -0.404 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 553.75 Mbit/s
95th percentile per-packet one-way delay: 184.154 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 512.38 Mbit/s
95th percentile per-packet one-way delay: 184.608 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 58.50 Mbit/s
95th percentile per-packet one-way delay: 168.624 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 168.720 ms
Loss rate: 0.23%
Run 4: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 515.27 Mbit/s)**
- **Flow 1 egress (mean 512.38 Mbit/s)**
- **Flow 2 ingress (mean 58.01 Mbit/s)**
- **Flow 2 egress (mean 58.50 Mbit/s)**
- **Flow 3 ingress (mean 7.53 Mbit/s)**
- **Flow 3 egress (mean 7.51 Mbit/s)**

![Graph 2: Per-packet delay over time](image2)

- **Flow 1 (95th percentile 184.61 ms)**
- **Flow 2 (95th percentile 168.62 ms)**
- **Flow 3 (95th percentile 168.72 ms)**
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-20 12:02:41
End at: 2018-06-20 12:03:11
Local clock offset: -0.065 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-06-20 15:36:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 551.84 Mbit/s
95th percentile per-packet one-way delay: 157.787 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 456.36 Mbit/s
95th percentile per-packet one-way delay: 159.099 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 126.30 Mbit/s
95th percentile per-packet one-way delay: 155.665 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 114.835 ms
Loss rate: 0.11%
Run 5: Report of PCC-Allegro — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 459.95 Mbit/s)
- Blue solid line: Flow 1 egress (mean 456.36 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 126.43 Mbit/s)
- Green solid line: Flow 2 egress (mean 126.30 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 35.64 Mbit/s)
- Red solid line: Flow 3 egress (mean 35.40 Mbit/s)

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

- Blue circle: Flow 1 (95th percentile 159.10 ms)
- Green circle: Flow 2 (95th percentile 155.66 ms)
- Red circle: Flow 3 (95th percentile 114.83 ms)
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-20 12:25:43
End at: 2018-06-20 12:26:13
Local clock offset: 0.063 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-06-20 15:36:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 557.83 Mbit/s
  95th percentile per-packet one-way delay: 171.814 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 466.68 Mbit/s
  95th percentile per-packet one-way delay: 171.749 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 132.94 Mbit/s
  95th percentile per-packet one-way delay: 171.986 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 8.54 Mbit/s
  95th percentile per-packet one-way delay: 172.629 ms
  Loss rate: 0.85%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-20 12:48:49
End at: 2018-06-20 12:49:19
Local clock offset: 0.096 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-06-20 15:42:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 563.36 Mbit/s
  95th percentile per-packet one-way delay: 171.926 ms
  Loss rate: 1.45%
-- Flow 1:
  Average throughput: 483.54 Mbit/s
  95th percentile per-packet one-way delay: 172.100 ms
  Loss rate: 1.50%
-- Flow 2:
  Average throughput: 118.99 Mbit/s
  95th percentile per-packet one-way delay: 171.240 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 2.21 Mbit/s
  95th percentile per-packet one-way delay: 171.752 ms
  Loss rate: 1.58%
Run 7: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 490.89 Mbps)
- Flow 1 egress (mean 483.54 Mbps)
- Flow 2 ingress (mean 120.36 Mbps)
- Flow 2 egress (mean 118.99 Mbps)
- Flow 3 ingress (mean 2.24 Mbps)
- Flow 3 egress (mean 2.21 Mbps)

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

- Flow 1 (95th percentile 172.10 ms)
- Flow 2 (95th percentile 171.24 ms)
- Flow 3 (95th percentile 171.75 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-20 13:11:37
End at: 2018-06-20 13:12:07
Local clock offset: 0.426 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-20 15:44:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 561.17 Mbit/s
95th percentile per-packet one-way delay: 132.249 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 466.51 Mbit/s
95th percentile per-packet one-way delay: 140.362 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 138.04 Mbit/s
95th percentile per-packet one-way delay: 113.795 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 8.84 Mbit/s
95th percentile per-packet one-way delay: 71.616 ms
Loss rate: 0.00%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-20 13:34:42
End at: 2018-06-20 13:35:12
Local clock offset: 0.064 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-06-20 15:44:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 577.33 Mbit/s
95th percentile per-packet one-way delay: 174.719 ms
Loss rate: 1.54%
-- Flow 1:
Average throughput: 490.77 Mbit/s
95th percentile per-packet one-way delay: 180.906 ms
Loss rate: 1.54%
-- Flow 2:
Average throughput: 128.78 Mbit/s
95th percentile per-packet one-way delay: 168.326 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 3.74 Mbit/s
95th percentile per-packet one-way delay: 168.784 ms
Loss rate: 2.64%
Run 9: Report of PCC-Allegro — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 498.45 Mbps)
- Flow 1 egress (mean 490.77 Mbps)
- Flow 2 ingress (mean 130.35 Mbps)
- Flow 2 egress (mean 128.78 Mbps)
- Flow 3 ingress (mean 3.84 Mbps)
- Flow 3 egress (mean 3.74 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 180.91 ms)
- Flow 2 (95th percentile 168.33 ms)
- Flow 3 (95th percentile 168.78 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-20 13:57:40
End at: 2018-06-20 13:58:10
Local clock offset: 0.008 ms
Remote clock offset: 0.091 ms

# Below is generated by plot.py at 2018-06-20 15:44:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 573.76 Mbit/s
95th percentile per-packet one-way delay: 153.697 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 469.87 Mbit/s
95th percentile per-packet one-way delay: 154.263 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 126.19 Mbit/s
95th percentile per-packet one-way delay: 152.044 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 60.74 Mbit/s
95th percentile per-packet one-way delay: 120.628 ms
Loss rate: 0.50%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2018-06-20 10:12:31
End at: 2018-06-20 10:13:01
Local clock offset: -0.03 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-20 15:47:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 382.63 Mbit/s
  95th percentile per-packet one-way delay: 203.636 ms
  Loss rate: 1.91%
-- Flow 1:
  Average throughput: 193.43 Mbit/s
  95th percentile per-packet one-way delay: 95.203 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 229.50 Mbit/s
  95th percentile per-packet one-way delay: 226.326 ms
  Loss rate: 4.65%
-- Flow 3:
  Average throughput: 108.84 Mbit/s
  95th percentile per-packet one-way delay: 60.950 ms
  Loss rate: 0.00%
Run 1: Report of PCC-Expr — Data Link

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

Legend:
- Flow 1 ingress (mean 193.44 Mbit/s)
- Flow 1 egress (mean 193.43 Mbit/s)
- Flow 2 ingress (mean 240.66 Mbit/s)
- Flow 2 egress (mean 229.50 Mbit/s)
- Flow 3 ingress (mean 108.84 Mbit/s)
- Flow 3 egress (mean 108.84 Mbit/s)
Run 2: Statistics of PCC-Expr

Start at: 2018-06-20 10:35:43
End at: 2018-06-20 10:36:13
Local clock offset: -0.022 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-06-20 15:48:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.14 Mbit/s
95th percentile per-packet one-way delay: 185.960 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 234.74 Mbit/s
95th percentile per-packet one-way delay: 193.819 ms
Loss rate: 1.45%
-- Flow 2:
Average throughput: 192.93 Mbit/s
95th percentile per-packet one-way delay: 116.398 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 82.19 Mbit/s
95th percentile per-packet one-way delay: 115.769 ms
Loss rate: 0.04%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-06-20 10:58:54
End at: 2018-06-20 10:59:24
Local clock offset: 0.377 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2018-06-20 15:49:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 419.25 Mbit/s
  95th percentile per-packet one-way delay: 185.310 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 206.31 Mbit/s
  95th percentile per-packet one-way delay: 98.138 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 265.21 Mbit/s
  95th percentile per-packet one-way delay: 211.303 ms
  Loss rate: 1.47%
-- Flow 3:
  Average throughput: 110.91 Mbit/s
  95th percentile per-packet one-way delay: 52.585 ms
  Loss rate: 0.00%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

End at: 2018-06-20 11:22:46
Local clock offset: 0.366 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-06-20 15:49:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 408.09 Mbit/s
95th percentile per-packet one-way delay: 205.484 ms
Loss rate: 1.93%
-- Flow 1:
Average throughput: 283.93 Mbit/s
95th percentile per-packet one-way delay: 218.538 ms
Loss rate: 2.66%
-- Flow 2:
Average throughput: 173.52 Mbit/s
95th percentile per-packet one-way delay: 166.877 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 26.55 Mbit/s
95th percentile per-packet one-way delay: 51.294 ms
Loss rate: 0.00%
Run 4: Report of PCC-Expr — Data Link

![Graph of Throughput (Mbps) vs Time (s)](image1)

- **Flow 1 Ingress (mean 291.71 Mbps)**
- **Flow 1 Egress (mean 283.93 Mbps)**
- **Flow 2 Ingress (mean 173.92 Mbps)**
- **Flow 2 Egress (mean 173.52 Mbps)**
- **Flow 3 Ingress (mean 26.55 Mbps)**
- **Flow 3 Egress (mean 26.55 Mbps)**

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

- **Flow 1 (95th percentile 218.54 ms)**
- **Flow 2 (95th percentile 166.88 ms)**
- **Flow 3 (95th percentile 51.29 ms)**
Run 5: Statistics of PCC-Expr

Start at: 2018-06-20 11:45:26
End at: 2018-06-20 11:45:56
Local clock offset: -0.41 ms
Remote clock offset: 0.141 ms

# Below is generated by plot.py at 2018-06-20 15:56:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 370.25 Mbit/s
95th percentile per-packet one-way delay: 61.042 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 175.57 Mbit/s
95th percentile per-packet one-way delay: 58.796 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 199.98 Mbit/s
95th percentile per-packet one-way delay: 62.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 186.51 Mbit/s
95th percentile per-packet one-way delay: 70.708 ms
Loss rate: 0.00%
Run 5: Report of PCC-Expr — Data Link

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 175.56 Mbps)
- Blue solid line: Flow 1 egress (mean 175.57 Mbps)
- Green dashed line: Flow 2 ingress (mean 199.99 Mbps)
- Green solid line: Flow 2 egress (mean 199.98 Mbps)
- Red dashed line: Flow 3 ingress (mean 186.52 Mbps)
- Red solid line: Flow 3 egress (mean 186.51 Mbps)

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

Legend:
- Blue line: Flow 1 (95th percentile 58.80 ms)
- Green line: Flow 2 (95th percentile 62.39 ms)
- Red line: Flow 3 (95th percentile 70.71 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-06-20 12:08:30
End at: 2018-06-20 12:09:00
Local clock offset: -0.006 ms
Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-06-20 15:56:01

# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.29 Mbit/s
95th percentile per-packet one-way delay: 68.390 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 225.30 Mbit/s
95th percentile per-packet one-way delay: 76.640 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 96.81 Mbit/s
95th percentile per-packet one-way delay: 51.581 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 117.04 Mbit/s
95th percentile per-packet one-way delay: 53.079 ms
Loss rate: 0.01%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 225.30 Mbit/s)
- Flow 1 egress (mean 225.30 Mbit/s)
- Flow 2 ingress (mean 96.62 Mbit/s)
- Flow 2 egress (mean 96.81 Mbit/s)
- Flow 3 ingress (mean 117.05 Mbit/s)
- Flow 3 egress (mean 117.04 Mbit/s)

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

- Flow 1 (95th percentile 76.64 ms)
- Flow 2 (95th percentile 51.58 ms)
- Flow 3 (95th percentile 53.08 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-20 12:31:31
End at: 2018-06-20 12:32:01
Local clock offset: 0.059 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-06-20 15:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 422.28 Mbit/s
95th percentile per-packet one-way delay: 200.108 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 247.39 Mbit/s
95th percentile per-packet one-way delay: 161.850 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 234.67 Mbit/s
95th percentile per-packet one-way delay: 207.728 ms
Loss rate: 4.58%
-- Flow 3:
Average throughput: 57.60 Mbit/s
95th percentile per-packet one-way delay: 52.769 ms
Loss rate: 0.11%
Run 7: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 247.84 Mbit/s)
- Flow 1 egress (mean 247.39 Mbit/s)
- Flow 2 ingress (mean 246.29 Mbit/s)
- Flow 2 egress (mean 234.67 Mbit/s)
- Flow 3 ingress (mean 57.66 Mbit/s)
- Flow 3 egress (mean 57.60 Mbit/s)
Run 8: Statistics of PCC-Expr

Start at: 2018-06-20 12:54:37
End at: 2018-06-20 12:55:07
Local clock offset: 0.118 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-20 15:59:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.40 Mbit/s
95th percentile per-packet one-way delay: 122.400 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 170.43 Mbit/s
95th percentile per-packet one-way delay: 109.256 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 226.07 Mbit/s
95th percentile per-packet one-way delay: 136.432 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 105.00 Mbit/s
95th percentile per-packet one-way delay: 77.884 ms
Loss rate: 0.02%
Run 9: Statistics of PCC-Expr

Start at: 2018-06-20 13:17:25
End at: 2018-06-20 13:17:55
Local clock offset: -0.263 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-06-20 16:00:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.74 Mbit/s
95th percentile per-packet one-way delay: 266.655 ms
Loss rate: 3.66%
-- Flow 1:
Average throughput: 229.76 Mbit/s
95th percentile per-packet one-way delay: 275.240 ms
Loss rate: 5.54%
-- Flow 2:
Average throughput: 157.91 Mbit/s
95th percentile per-packet one-way delay: 210.327 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 106.01 Mbit/s
95th percentile per-packet one-way delay: 58.305 ms
Loss rate: 0.00%
Run 9: Report of PCC-Expr — Data Link

[Graphs showing network throughput and per-packet one-way delay over time for different flows, with annotations for mean throughput and 95th percentile delay for each flow.]
Run 10: Statistics of PCC-Expr

Start at: 2018-06-20 13:40:25
End at: 2018-06-20 13:40:55
Local clock offset: -0.38 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 404.10 Mbit/s
  95th percentile per-packet one-way delay: 114.776 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 236.78 Mbit/s
  95th percentile per-packet one-way delay: 141.042 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 204.23 Mbit/s
  95th percentile per-packet one-way delay: 59.086 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 95.49 Mbit/s
  95th percentile per-packet one-way delay: 53.517 ms
  Loss rate: 0.00%
Run 10: Report of PCC-Expr — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 237.61 Mbps)
- Flow 1 egress (mean 236.78 Mbps)
- Flow 2 ingress (mean 204.23 Mbps)
- Flow 2 egress (mean 204.23 Mbps)
- Flow 3 ingress (mean 95.49 Mbps)
- Flow 3 egress (mean 95.49 Mbps)

---

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

- Flow 1 (95th percentile 141.04 ms)
- Flow 2 (95th percentile 59.09 ms)
- Flow 3 (95th percentile 53.52 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-20 10:11:21
End at: 2018-06-20 10:11:51
Local clock offset: 0.004 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 21.81 Mbit/s
  95th percentile per-packet one-way delay: 50.712 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.929 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.65 Mbit/s
  95th percentile per-packet one-way delay: 50.421 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 18.61 Mbit/s
  95th percentile per-packet one-way delay: 50.814 ms
  Loss rate: 0.01%
Run 1: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 0.06 Mbps)
- Flow 1 egress (mean 0.06 Mbps)
- Flow 2 ingress (mean 23.64 Mbps)
- Flow 2 egress (mean 23.65 Mbps)
- Flow 3 ingress (mean 18.61 Mbps)
- Flow 3 egress (mean 18.61 Mbps)

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

- Flow 1 (95th percentile 50.93 ms)
- Flow 2 (95th percentile 50.42 ms)
- Flow 3 (95th percentile 50.81 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-20 10:34:30
End at: 2018-06-20 10:35:00
Local clock offset: 0.37 ms
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.17 Mbit/s
95th percentile per-packet one-way delay: 50.669 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 42.70 Mbit/s
95th percentile per-packet one-way delay: 50.592 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 50.828 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: 50.386 ms
Loss rate: 0.00%
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-20 10:57:42
End at: 2018-06-20 10:58:12
Local clock offset: -0.026 ms
Remote clock offset: 0.169 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 65.81 Mbit/s
  95th percentile per-packet one-way delay: 50.885 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 46.94 Mbit/s
  95th percentile per-packet one-way delay: 50.910 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 21.46 Mbit/s
  95th percentile per-packet one-way delay: 50.176 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 14.07 Mbit/s
  95th percentile per-packet one-way delay: 50.191 ms
  Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 46.94 Mbit/s)
- Flow 1 egress (mean 46.94 Mbit/s)
- Flow 2 ingress (mean 21.46 Mbit/s)
- Flow 2 egress (mean 21.46 Mbit/s)
- Flow 3 ingress (mean 14.07 Mbit/s)
- Flow 3 egress (mean 14.07 Mbit/s)
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-20 11:21:04
End at: 2018-06-20 11:21:34
Local clock offset: -0.009 ms
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.56 Mbit/s
95th percentile per-packet one-way delay: 50.598 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 46.40 Mbit/s
95th percentile per-packet one-way delay: 50.615 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.59 Mbit/s
95th percentile per-packet one-way delay: 50.530 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 17.69 Mbit/s
95th percentile per-packet one-way delay: 50.477 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-20 11:44:17
End at: 2018-06-20 11:44:47
Local clock offset: -0.015 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.71 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.302 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 50.337 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 17.13 Mbit/s
95th percentile per-packet one-way delay: 50.834 ms
Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-20 12:07:18
End at: 2018-06-20 12:07:48
Local clock offset: -0.444 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.32 Mbit/s
  95th percentile per-packet one-way delay: 51.172 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 44.53 Mbit/s
  95th percentile per-packet one-way delay: 50.753 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 19.23 Mbit/s
  95th percentile per-packet one-way delay: 51.311 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.27 Mbit/s
  95th percentile per-packet one-way delay: 51.198 ms
  Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 44.53 Mbit/s)**
- **Flow 1 egress (mean 44.53 Mbit/s)**
- **Flow 2 ingress (mean 19.23 Mbit/s)**
- **Flow 2 egress (mean 19.23 Mbit/s)**
- **Flow 3 ingress (mean 15.27 Mbit/s)**
- **Flow 3 egress (mean 15.27 Mbit/s)**

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

- **Flow 1 (95th percentile 50.75 ms)**
- **Flow 2 (95th percentile 51.31 ms)**
- **Flow 3 (95th percentile 51.20 ms)**
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-20 12:30:19
End at: 2018-06-20 12:30:49
Local clock offset: 0.065 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.15 Mbit/s
95th percentile per-packet one-way delay: 51.176 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: 51.247 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 51.178 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 41.61 Mbit/s
95th percentile per-packet one-way delay: 50.791 ms
Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link

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

Start at: 2018-06-20 12:53:24
End at: 2018-06-20 12:53:54
Local clock offset: 0.456 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.11 Mbit/s
95th percentile per-packet one-way delay: 50.558 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 38.14 Mbit/s
95th percentile per-packet one-way delay: 50.403 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.10 Mbit/s
95th percentile per-packet one-way delay: 50.674 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.45 Mbit/s
95th percentile per-packet one-way delay: 50.443 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 38.14 Mbit/s)
- Flow 1 egress (mean 38.14 Mbit/s)
- Flow 2 ingress (mean 55.10 Mbit/s)
- Flow 2 egress (mean 55.10 Mbit/s)
- Flow 3 ingress (mean 16.44 Mbit/s)
- Flow 3 egress (mean 16.45 Mbit/s)
Run 9: Statistics of QUIC Cubic

End at: 2018-06-20 13:16:43
Local clock offset: 0.104 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.70 Mbit/s
95th percentile per-packet one-way delay: 51.092 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.04 Mbit/s
95th percentile per-packet one-way delay: 51.167 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 62.15 Mbit/s
95th percentile per-packet one-way delay: 50.902 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 16.54 Mbit/s
95th percentile per-packet one-way delay: 51.007 ms
Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

End at: 2018-06-20 13:39:44
Local clock offset: 0.05 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.49 Mbit/s
95th percentile per-packet one-way delay: 50.638 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.94 Mbit/s
95th percentile per-packet one-way delay: 50.259 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 25.58 Mbit/s
95th percentile per-packet one-way delay: 50.753 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 20.03 Mbit/s
95th percentile per-packet one-way delay: 50.065 ms
Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-06-20 10:21:12
End at: 2018-06-20 10:21:42
Local clock offset: 0.315 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.553 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.454 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.605 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.126 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

- **Throughput (Mbps)**: Blue line for Flow 1 ingress (mean 0.22 Mbps), Blue line for Flow 1 egress (mean 0.22 Mbps), Dark blue line for Flow 2 ingress (mean 0.22 Mbps), Dark blue line for Flow 2 egress (mean 0.22 Mbps), Green line for Flow 3 ingress (mean 0.22 Mbps), Green line for Flow 3 egress (mean 0.22 Mbps).

- **Packet Delay (ms)**: Green markers for Flow 1 (95th percentile 49.45 ms), Pink markers for Flow 2 (95th percentile 50.60 ms), Red markers for Flow 3 (95th percentile 50.13 ms).
Run 2: Statistics of SCReAM

Start at: 2018-06-20 10:44:20
End at: 2018-06-20 10:44:50
Local clock offset: -0.017 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.816 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.737 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.816 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.880 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-06-20 11:07:40
End at: 2018-06-20 11:08:10
Local clock offset: -0.022 ms
Remote clock offset: 0.103 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.750 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.460 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.785 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.495 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

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

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

![Graph 2: Packet Loss vs. Time (ms)]

- **Flow 1 (95th percentile 50.46 ms)**
- **Flow 2 (95th percentile 50.78 ms)**
- **Flow 3 (95th percentile 50.49 ms)**

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Run 4: Statistics of SCReAM

Start at: 2018-06-20 11:30:56
End at: 2018-06-20 11:31:26
Local clock offset: -0.031 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.756 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.429 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.784 ms
Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

End at: 2018-06-20 11:54:25
Local clock offset: -0.056 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.851 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.588 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.366 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 50.85 ms)
- Flow 2 (95th percentile 50.59 ms)
- Flow 3 (95th percentile 50.37 ms)
Run 6: Statistics of SCReAM

Start at: 2018-06-20 12:17:09
End at: 2018-06-20 12:17:39
Local clock offset: 0.038 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.818 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.708 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.889 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.775 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

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

![Graph 2: One-packet-conveyed delay (ms)]

- **Flow 1 (95th percentile 50.71 ms)**
- **Flow 2 (95th percentile 50.89 ms)**
- **Flow 3 (95th percentile 50.77 ms)**
Run 7: Statistics of SCReAM

Start at: 2018-06-20 12:40:12
End at: 2018-06-20 12:40:42
Local clock offset: 0.088 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.989 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.012 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.897 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link
Run 8: Statistics of SCReAM

Start at: 2018-06-20 13:03:04
End at: 2018-06-20 13:03:34
Local clock offset: -0.288 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 51.289 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.317 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.104 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.158 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 51.12 ms)
- Flow 2 (95th percentile 51.10 ms)
- Flow 3 (95th percentile 51.16 ms)
Run 9: Statistics of SCReAM

Start at: 2018-06-20 13:26:00
End at: 2018-06-20 13:26:30
Local clock offset: 0.098 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.801 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.820 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.781 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.486 ms
Loss rate: 0.00%
Run 9: 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)

Packet per second vs. delay (ms)

Time (s)

Flow 1 (95th percentile 50.82 ms)
Flow 2 (95th percentile 50.78 ms)
Flow 3 (95th percentile 50.49 ms)
Run 10: Statistics of SCReAM

Start at: 2018-06-20 13:49:10
End at: 2018-06-20 13:49:40
Local clock offset: 0.025 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.801 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.837 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.538 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.572 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-06-20 10:33:21
End at: 2018-06-20 10:33:51
Local clock offset: -0.052 ms
Remote clock offset: 0.081 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 51.111 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.42 Mbit/s
95th percentile per-packet one-way delay: 51.092 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 4.81 Mbit/s
95th percentile per-packet one-way delay: 51.118 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 51.210 ms
Loss rate: 0.00%
Run 2: Statistics of Sprout

Start at: 2018-06-20 10:56:33
End at: 2018-06-20 10:57:03
Local clock offset: -0.004 ms
Remote clock offset: 0.176 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.06 Mbit/s
95th percentile per-packet one-way delay: 51.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.18 Mbit/s
95th percentile per-packet one-way delay: 51.226 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.37 Mbit/s
95th percentile per-packet one-way delay: 51.257 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 51.225 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-06-20 11:19:55
End at: 2018-06-20 11:20:25
Local clock offset: -0.04 ms
Remote clock offset: 0.124 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.61 Mbit/s
95th percentile per-packet one-way delay: 51.178 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 51.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 51.210 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 2.41 Mbit/s
95th percentile per-packet one-way delay: 51.056 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2018-06-20 11:43:08
End at: 2018-06-20 11:43:38
Local clock offset: 0.017 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2018-06-20 16:02:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.90 Mbit/s
95th percentile per-packet one-way delay: 50.677 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 50.654 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.12 Mbit/s
95th percentile per-packet one-way delay: 50.403 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

![Graph of throughput and packet delay over time for different flows.](image)
Run 5: Statistics of Sprout

Start at: 2018-06-20 12:06:09
End at: 2018-06-20 12:06:39
Local clock offset: -0.039 ms
Remote clock offset: 0.082 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 10.99 Mbit/s
95th percentile per-packet one-way delay: 51.237 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 51.224 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 2.57 Mbit/s
95th percentile per-packet one-way delay: 51.193 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 51.297 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-06-20 12:29:10
End at: 2018-06-20 12:29:40
Local clock offset: 0.074 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.63 Mbit/s
95th percentile per-packet one-way delay: 50.837 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.97 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 50.949 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.55 Mbit/s
95th percentile per-packet one-way delay: 50.878 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 6.97 Mbit/s)
- Flow 1 egress (mean 6.97 Mbit/s)
- Flow 2 ingress (mean 7.76 Mbit/s)
- Flow 2 egress (mean 7.76 Mbit/s)
- Flow 3 ingress (mean 4.55 Mbit/s)
- Flow 3 egress (mean 4.55 Mbit/s)

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

- Flow 1 (95th percentile 50.73 ms)
- Flow 2 (95th percentile 50.95 ms)
- Flow 3 (95th percentile 50.88 ms)
Run 7: Statistics of Sprout

Start at: 2018-06-20 12:52:15
End at: 2018-06-20 12:52:45
Local clock offset: 0.105 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.89 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.41 Mbit/s
95th percentile per-packet one-way delay: 51.350 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 51.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.00 Mbit/s
95th percentile per-packet one-way delay: 51.410 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-06-20 13:15:04
End at: 2018-06-20 13:15:34
Local clock offset: 0.091 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.86 Mbit/s
95th percentile per-packet one-way delay: 50.894 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 50.830 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.61 Mbit/s
95th percentile per-packet one-way delay: 50.865 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.36 Mbit/s
95th percentile per-packet one-way delay: 51.025 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-06-20 13:38:05
End at: 2018-06-20 13:38:35
Local clock offset: 0.057 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.56 Mbit/s
95th percentile per-packet one-way delay: 50.642 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.61 Mbit/s
95th percentile per-packet one-way delay: 50.634 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 50.697 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 50.480 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-06-20 14:01:06
End at: 2018-06-20 14:01:36
Local clock offset: 0.027 ms
Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2018-06-20 16:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.90 Mbit/s
95th percentile per-packet one-way delay: 51.168 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.33 Mbit/s
95th percentile per-packet one-way delay: 51.168 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 5.81 Mbit/s
95th percentile per-packet one-way delay: 51.245 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 51.011 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

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

**Throughput (Mbps):**

- Flow 1 ingress (mean 7.33 Mbps)
- Flow 1 egress (mean 7.33 Mbps)
- Flow 2 ingress (mean 5.81 Mbps)
- Flow 2 egress (mean 5.81 Mbps)
- Flow 3 ingress (mean 5.16 Mbps)
- Flow 3 egress (mean 5.16 Mbps)

**Latency (ms):**

- Flow 1 (95th percentile 51.17 ms)
- Flow 2 (95th percentile 51.24 ms)
- Flow 3 (95th percentile 51.01 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-20 10:14:12
End at: 2018-06-20 10:14:42
Local clock offset: -0.032 ms
Remote clock offset: 0.02 ms

# Below is generated by plot.py at 2018-06-20 16:08:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 381.99 Mbit/s
95th percentile per-packet one-way delay: 60.130 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 219.30 Mbit/s
95th percentile per-packet one-way delay: 56.308 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 142.67 Mbit/s
95th percentile per-packet one-way delay: 58.860 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 201.67 Mbit/s
95th percentile per-packet one-way delay: 64.642 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-20 10:37:25
End at: 2018-06-20 10:37:55
Local clock offset: -0.026 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-06-20 16:09:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 386.41 Mbit/s
95th percentile per-packet one-way delay: 54.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.94 Mbit/s
95th percentile per-packet one-way delay: 55.576 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 183.75 Mbit/s
95th percentile per-packet one-way delay: 53.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 144.77 Mbit/s
95th percentile per-packet one-way delay: 53.705 ms
Loss rate: 0.00%
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-20 11:00:37
End at: 2018-06-20 11:01:07
Local clock offset: -0.036 ms
Remote clock offset: 0.178 ms

# Below is generated by plot.py at 2018-06-20 16:09:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 369.30 Mbit/s
95th percentile per-packet one-way delay: 58.405 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.34 Mbit/s
95th percentile per-packet one-way delay: 52.831 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 173.22 Mbit/s
95th percentile per-packet one-way delay: 59.768 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 200.30 Mbit/s
95th percentile per-packet one-way delay: 59.874 ms
Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 191.39 Mbps)
  - Flow 1 egress (mean 191.34 Mbps)
  - Flow 2 ingress (mean 173.19 Mbps)
  - Flow 2 egress (mean 173.22 Mbps)
  - Flow 3 ingress (mean 200.28 Mbps)
  - Flow 3 egress (mean 200.30 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 52.83 ms)
  - Flow 2 (95th percentile 59.77 ms)
  - Flow 3 (95th percentile 59.87 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-20 11:24:00
End at: 2018-06-20 11:24:30
Local clock offset: 0.363 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-20 16:09:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 375.28 Mbit/s
95th percentile per-packet one-way delay: 63.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.34 Mbit/s
95th percentile per-packet one-way delay: 55.612 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 175.58 Mbit/s
95th percentile per-packet one-way delay: 68.502 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 150.46 Mbit/s
95th percentile per-packet one-way delay: 72.213 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

![Throughput Graph]

Flow 1 ingress (mean 208.34 Mbit/s) — Flow 1 egress (mean 208.34 Mbit/s)
Flow 2 ingress (mean 175.59 Mbit/s) — Flow 2 egress (mean 175.59 Mbit/s)
Flow 3 ingress (mean 150.47 Mbit/s) — Flow 3 egress (mean 150.46 Mbit/s)

![Per-packet one-way delay Graph]

Flow 1 (95th percentile 55.61 ms) — Flow 2 (95th percentile 68.50 ms) — Flow 3 (95th percentile 72.21 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-20 11:47:07
End at: 2018-06-20 11:47:37
Local clock offset: -0.034 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-06-20 16:09:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.83 Mbit/s
95th percentile per-packet one-way delay: 51.995 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 167.34 Mbit/s
95th percentile per-packet one-way delay: 51.776 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 136.36 Mbit/s
95th percentile per-packet one-way delay: 52.169 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 149.53 Mbit/s
95th percentile per-packet one-way delay: 52.231 ms
Loss rate: 0.13%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-20 12:10:07
End at: 2018-06-20 12:10:37
Local clock offset: -0.043 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-20 16:11:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 366.48 Mbit/s
  95th percentile per-packet one-way delay: 52.398 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 181.60 Mbit/s
  95th percentile per-packet one-way delay: 51.570 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 206.39 Mbit/s
  95th percentile per-packet one-way delay: 53.646 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 142.67 Mbit/s
  95th percentile per-packet one-way delay: 51.449 ms
  Loss rate: 0.03%
Run 6: Report of TaoVA-100x — Data Link

[Graph of throughput vs. time showing different flows with mean throughput values.

Graph of per-packet round-trip delay vs. time showing different flows with 95th percentile delay values.

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Run 7: Statistics of TaoVA-100x

Start at: 2018-06-20 12:33:17
End at: 2018-06-20 12:33:47
Local clock offset: -0.354 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-06-20 16:14:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.49 Mbit/s
95th percentile per-packet one-way delay: 55.566 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 205.41 Mbit/s
95th percentile per-packet one-way delay: 52.846 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 206.72 Mbit/s
95th percentile per-packet one-way delay: 58.342 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 172.07 Mbit/s
95th percentile per-packet one-way delay: 60.822 ms
Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 205.44 Mbps)
  - Flow 1 egress (mean 205.41 Mbps)
  - Flow 2 ingress (mean 206.73 Mbps)
  - Flow 2 egress (mean 206.72 Mbps)
  - Flow 3 ingress (mean 172.68 Mbps)
  - Flow 3 egress (mean 172.07 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 52.85 ms)
  - Flow 2 (95th percentile 58.34 ms)
  - Flow 3 (95th percentile 60.82 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-20 12:56:15
End at: 2018-06-20 12:56:45
Local clock offset: 0.114 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-20 16:14:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.57 Mbit/s
95th percentile per-packet one-way delay: 57.793 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.88 Mbit/s
95th percentile per-packet one-way delay: 52.288 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 164.62 Mbit/s
95th percentile per-packet one-way delay: 59.328 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.65 Mbit/s
95th percentile per-packet one-way delay: 66.630 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

![Graph showing network performance metrics](image-url)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 173.88 Mbps)
  - Flow 1 egress (mean 173.88 Mbps)
  - Flow 2 ingress (mean 164.62 Mbps)
  - Flow 2 egress (mean 164.62 Mbps)
  - Flow 3 ingress (mean 159.64 Mbps)
  - Flow 3 egress (mean 159.65 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 52.29 ms)
  - Flow 2 (95th percentile 59.33 ms)
  - Flow 3 (95th percentile 66.63 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-20 13:19:07
End at: 2018-06-20 13:19:37
Local clock offset: 0.134 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-06-20 16:19:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 363.91 Mbit/s
  95th percentile per-packet one-way delay: 52.317 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 190.76 Mbit/s
  95th percentile per-packet one-way delay: 51.900 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 154.41 Mbit/s
  95th percentile per-packet one-way delay: 52.108 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 211.58 Mbit/s
  95th percentile per-packet one-way delay: 53.142 ms
  Loss rate: 0.02%
Run 9: Report of TaoVA-100x — Data Link

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

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 190.78 Mbps)
Flow 1 egress (mean 190.76 Mbps)
Flow 2 ingress (mean 154.44 Mbps)
Flow 2 egress (mean 154.41 Mbps)
Flow 3 ingress (mean 211.60 Mbps)
Flow 3 egress (mean 211.58 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 51.90 ms)
Flow 2 (95th percentile 52.31 ms)
Flow 3 (95th percentile 53.14 ms)
Run 10: Statistics of TaoVA-100x

Local clock offset: -0.375 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 403.23 Mbit/s
  95th percentile per-packet one-way delay: 54.756 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 208.33 Mbit/s
  95th percentile per-packet one-way delay: 53.220 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 196.77 Mbit/s
  95th percentile per-packet one-way delay: 53.984 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 192.42 Mbit/s
  95th percentile per-packet one-way delay: 59.861 ms
  Loss rate: 0.02%
Run 10: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 208.25 Mbps)
Flow 1 egress (mean 208.33 Mbps)
Flow 2 ingress (mean 196.66 Mbps)
Flow 2 egress (mean 196.77 Mbps)
Flow 3 ingress (mean 192.25 Mbps)
Flow 3 egress (mean 192.42 Mbps)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 53.22 ms)
Flow 2 (95th percentile 53.98 ms)
Flow 3 (95th percentile 59.86 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-06-20 10:27:06
End at: 2018-06-20 10:27:36
Local clock offset: -0.002 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 196.39 Mbit/s
95th percentile per-packet one-way delay: 51.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.02 Mbit/s
95th percentile per-packet one-way delay: 51.674 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 12.35 Mbit/s
95th percentile per-packet one-way delay: 51.207 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 75.87 Mbit/s
95th percentile per-packet one-way delay: 51.386 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link

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

<table>
<thead>
<tr>
<th>Flow 1 ingress (mean 163.03 Mbit/s)</th>
<th>Flow 1 egress (mean 163.02 Mbit/s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow 2 ingress (mean 12.36 Mbit/s)</td>
<td>Flow 2 egress (mean 12.35 Mbit/s)</td>
</tr>
<tr>
<td>Flow 3 ingress (mean 75.87 Mbit/s)</td>
<td>Flow 3 egress (mean 75.87 Mbit/s)</td>
</tr>
</tbody>
</table>

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

| Flow 1 (95th percentile 51.67 ms) | Flow 2 (95th percentile 51.21 ms) | Flow 3 (95th percentile 51.39 ms) |

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Run 2: Statistics of TCP Vegas

Start at: 2018-06-20 10:50:09
End at: 2018-06-20 10:50:39
Local clock offset: 0.026 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.79 Mbit/s
95th percentile per-packet one-way delay: 60.453 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 102.94 Mbit/s
95th percentile per-packet one-way delay: 55.984 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 224.71 Mbit/s
95th percentile per-packet one-way delay: 61.642 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 63.90 Mbit/s
95th percentile per-packet one-way delay: 58.929 ms
Loss rate: 0.02%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

End at: 2018-06-20 11:14:05
Local clock offset: -0.005 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 187.28 Mbit/s
  95th percentile per-packet one-way delay: 51.789 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 99.57 Mbit/s
  95th percentile per-packet one-way delay: 51.945 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 99.88 Mbit/s
  95th percentile per-packet one-way delay: 51.738 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 64.10 Mbit/s
  95th percentile per-packet one-way delay: 51.270 ms
  Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-06-20 11:36:52
End at: 2018-06-20 11:37:22
Local clock offset: -0.025 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 263.58 Mbit/s
95th percentile per-packet one-way delay: 51.636 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.96 Mbit/s
95th percentile per-packet one-way delay: 51.380 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 106.67 Mbit/s
95th percentile per-packet one-way delay: 51.596 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 128.04 Mbit/s
95th percentile per-packet one-way delay: 51.979 ms
Loss rate: 0.00%
Run 5: Statistics of TCP Vegas

Start at: 2018-06-20 11:59:51
End at: 2018-06-20 12:00:21
Local clock offset: -0.389 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 202.90 Mbit/s
95th percentile per-packet one-way delay: 51.206 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 125.28 Mbit/s
95th percentile per-packet one-way delay: 51.106 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.30 Mbit/s
95th percentile per-packet one-way delay: 51.384 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 6.49 Mbit/s
95th percentile per-packet one-way delay: 51.243 ms
Loss rate: 0.02%
Run 5: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time for TCP Vegas with three flows, Flow 1, Flow 2, and Flow 3.](image-url)

- Flow 1 ingress (mean 125.28 Mbit/s)
- Flow 1 egress (mean 125.28 Mbit/s)
- Flow 2 ingress (mean 115.30 Mbit/s)
- Flow 2 egress (mean 115.30 Mbit/s)
- Flow 3 ingress (mean 6.49 Mbit/s)
- Flow 3 egress (mean 6.49 Mbit/s)

- Flow 1 (95th percentile 51.11 ms)
- Flow 2 (95th percentile 51.38 ms)
- Flow 3 (95th percentile 51.24 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-06-20 12:22:54
End at: 2018-06-20 12:23:24
Local clock offset: 0.065 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 151.85 Mbit/s
95th percentile per-packet one-way delay: 51.541 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.08 Mbit/s
95th percentile per-packet one-way delay: 51.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 88.06 Mbit/s
95th percentile per-packet one-way delay: 51.954 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 123.82 Mbit/s
95th percentile per-packet one-way delay: 51.202 ms
Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 52.07 Mbit/s)
- Flow 1 egress (mean 52.08 Mbit/s)
- Flow 2 ingress (mean 88.07 Mbit/s)
- Flow 2 egress (mean 88.06 Mbit/s)
- Flow 3 ingress (mean 123.82 Mbit/s)
- Flow 3 egress (mean 123.82 Mbit/s)
Run 7: Statistics of TCP Vegas

Start at: 2018-06-20 12:45:59
End at: 2018-06-20 12:46:29
Local clock offset: 0.142 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics

-- Total of 3 flows:
Average throughput: 178.78 Mbit/s
95th percentile per-packet one-way delay: 51.337 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 84.46 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 138.79 Mbit/s
95th percentile per-packet one-way delay: 51.330 ms
Loss rate: 0.00%

-- Flow 3:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 51.020 ms
Loss rate: 0.19%
Run 8: Statistics of TCP Vegas

Start at: 2018-06-20 13:08:51
End at: 2018-06-20 13:09:21
Local clock offset: 0.109 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.75 Mbit/s
95th percentile per-packet one-way delay: 51.209 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.85 Mbit/s
95th percentile per-packet one-way delay: 51.303 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 91.32 Mbit/s
95th percentile per-packet one-way delay: 51.148 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 75.54 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 61.85 Mbps)
  - Flow 1 egress (mean 61.85 Mbps)
  - Flow 2 ingress (mean 91.32 Mbps)
  - Flow 2 egress (mean 91.32 Mbps)
  - Flow 3 ingress (mean 75.53 Mbps)
  - Flow 3 egress (mean 75.54 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 51.30 ms)
  - Flow 2 (95th percentile 51.15 ms)
  - Flow 3 (95th percentile 50.90 ms)
Run 9: Statistics of TCP Vegas

End at: 2018-06-20 13:32:17
Local clock offset: 0.064 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 296.52 Mbit/s
95th percentile per-packet one-way delay: 58.276 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 147.53 Mbit/s
95th percentile per-packet one-way delay: 55.608 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 166.46 Mbit/s
95th percentile per-packet one-way delay: 56.080 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.02 Mbit/s
95th percentile per-packet one-way delay: 65.628 ms
Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows with mean throughput and 95th percentile delays](image_url)
Run 10: Statistics of TCP Vegas

Start at: 2018-06-20 13:54:54
Local clock offset: 0.012 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2018-06-20 16:22:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 141.41 Mbit/s
95th percentile per-packet one-way delay: 52.139 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 67.75 Mbit/s
95th percentile per-packet one-way delay: 51.477 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.26 Mbit/s
95th percentile per-packet one-way delay: 53.459 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 84.95 Mbit/s
95th percentile per-packet one-way delay: 53.863 ms
Loss rate: 0.07%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-06-20 10:17:06
End at: 2018-06-20 10:17:36
Local clock offset: -0.006 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-20 16:23:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 363.39 Mbit/s
  95th percentile per-packet one-way delay: 173.754 ms
  Loss rate: 1.48%
-- Flow 1:
  Average throughput: 210.62 Mbit/s
  95th percentile per-packet one-way delay: 126.110 ms
  Loss rate: 1.08%
-- Flow 2:
  Average throughput: 172.63 Mbit/s
  95th percentile per-packet one-way delay: 177.158 ms
  Loss rate: 0.39%
-- Flow 3:
  Average throughput: 129.36 Mbit/s
  95th percentile per-packet one-way delay: 291.280 ms
  Loss rate: 6.66%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2018-06-20 10:40:19
End at: 2018-06-20 10:40:49
Local clock offset: ~0.031 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-20 16:23:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.46 Mbit/s
95th percentile per-packet one-way delay: 127.344 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 196.22 Mbit/s
95th percentile per-packet one-way delay: 127.898 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 171.73 Mbit/s
95th percentile per-packet one-way delay: 185.680 ms
Loss rate: 1.69%
-- Flow 3:
Average throughput: 122.56 Mbit/s
95th percentile per-packet one-way delay: 88.153 ms
Loss rate: 0.00%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-06-20 11:03:30
End at: 2018-06-20 11:04:00
Local clock offset: 0.006 ms
Remote clock offset: 0.163 ms

# Below is generated by plot.py at 2018-06-20 16:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 379.44 Mbit/s
  95th percentile per-packet one-way delay: 115.510 ms
  Loss rate: 0.96%
-- Flow 1:
  Average throughput: 224.55 Mbit/s
  95th percentile per-packet one-way delay: 128.332 ms
  Loss rate: 1.44%
-- Flow 2:
  Average throughput: 178.06 Mbit/s
  95th percentile per-packet one-way delay: 101.994 ms
  Loss rate: 0.32%
-- Flow 3:
  Average throughput: 111.05 Mbit/s
  95th percentile per-packet one-way delay: 93.589 ms
  Loss rate: 0.06%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 227.84 Mbit/s)
- Flow 1 egress (mean 224.55 Mbit/s)
- Flow 2 ingress (mean 178.62 Mbit/s)
- Flow 2 egress (mean 178.06 Mbit/s)
- Flow 3 ingress (mean 111.10 Mbit/s)
- Flow 3 egress (mean 111.09 Mbit/s)

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

- Flow 1 (95th percentile 128.33 ms)
- Flow 2 (95th percentile 101.99 ms)
- Flow 3 (95th percentile 93.59 ms)

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Run 4: Statistics of Verus

Start at: 2018-06-20 11:26:54
End at: 2018-06-20 11:27:24
Local clock offset: -0.363 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-06-20 16:23:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 354.90 Mbit/s
  95th percentile per-packet one-way delay: 158.645 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 185.20 Mbit/s
  95th percentile per-packet one-way delay: 119.163 ms
  Loss rate: 0.80%
-- Flow 2:
  Average throughput: 185.48 Mbit/s
  95th percentile per-packet one-way delay: 129.523 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 141.88 Mbit/s
  95th percentile per-packet one-way delay: 270.914 ms
  Loss rate: 1.85%
Run 4: Report of Verus — Data Link

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

- **Throughput (Mbps)**
  - Y-axis: Throughput (Mbps)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 ingress (mean 186.70 Mbps)
    - Flow 1 egress (mean 185.29 Mbps)
    - Flow 2 ingress (mean 186.41 Mbps)
    - Flow 2 egress (mean 185.48 Mbps)
    - Flow 3 ingress (mean 144.56 Mbps)
    - Flow 3 egress (mean 141.98 Mbps)

- **Per-packet one-way delay (ms)**
  - Y-axis: Per-packet one-way delay (ms)
  - X-axis: Time (s)
  - Legend:
    - Flow 1 (95th percentile 119.16 ms)
    - Flow 2 (95th percentile 129.52 ms)
    - Flow 3 (95th percentile 270.91 ms)
Run 5: Statistics of Verus

Start at: 2018-06-20 11:49:54
End at: 2018-06-20 11:50:24
Local clock offset: -0.443 ms
Remote clock offset: 0.089 ms

# Below is generated by plot.py at 2018-06-20 16:25:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.45 Mbit/s
95th percentile per-packet one-way delay: 112.737 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 215.02 Mbit/s
95th percentile per-packet one-way delay: 110.581 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 146.38 Mbit/s
95th percentile per-packet one-way delay: 111.331 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 164.94 Mbit/s
95th percentile per-packet one-way delay: 119.883 ms
Loss rate: 0.14%
Run 5: Report of Verus — Data Link

[Graph showing throughput and per-packet one-way delay over time for flows 1, 2, and 3, with specified mean and 95th percentile delay values.]
Run 6: Statistics of Verus

Start at: 2018-06-20 12:13:00
End at: 2018-06-20 12:13:30
Local clock offset: -0.027 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2018-06-20 16:26:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 399.54 Mbit/s
95th percentile per-packet one-way delay: 112.686 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 227.02 Mbit/s
95th percentile per-packet one-way delay: 113.137 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 176.17 Mbit/s
95th percentile per-packet one-way delay: 117.182 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 168.85 Mbit/s
95th percentile per-packet one-way delay: 100.412 ms
Loss rate: 0.14%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-06-20 12:36:12
End at: 2018-06-20 12:36:42
Local clock offset: -0.295 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-06-20 16:26:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.53 Mbit/s
95th percentile per-packet one-way delay: 167.461 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 213.87 Mbit/s
95th percentile per-packet one-way delay: 151.589 ms
Loss rate: 1.77%
-- Flow 2:
Average throughput: 152.91 Mbit/s
95th percentile per-packet one-way delay: 198.528 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 118.69 Mbit/s
95th percentile per-packet one-way delay: 179.832 ms
Loss rate: 0.06%
Run 7: Report of Verus — Data Link
Run 8: Statistics of Verus

Start at: 2018-06-20 12:59:04
End at: 2018-06-20 12:59:34
Local clock offset: 0.082 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-20 16:28:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 361.56 Mbit/s
  95th percentile per-packet one-way delay: 154.889 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 208.31 Mbit/s
  95th percentile per-packet one-way delay: 118.826 ms
  Loss rate: 0.46%
-- Flow 2:
  Average throughput: 173.33 Mbit/s
  95th percentile per-packet one-way delay: 200.565 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 115.57 Mbit/s
  95th percentile per-packet one-way delay: 82.451 ms
  Loss rate: 0.30%
Run 8: Report of Verus — Data Link

![Graphs showing throughput and one-way delay](image_url)
Run 9: Statistics of Verus

Local clock offset: 0.109 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-20 16:29:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 362.04 Mbit/s
95th percentile per-packet one-way delay: 136.764 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 202.64 Mbit/s
95th percentile per-packet one-way delay: 123.697 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 177.37 Mbit/s
95th percentile per-packet one-way delay: 163.329 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 140.39 Mbit/s
95th percentile per-packet one-way delay: 126.429 ms
Loss rate: 6.44%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 204.57 Mbit/s)
- Flow 1 egress (mean 202.64 Mbit/s)
- Flow 2 ingress (mean 180.15 Mbit/s)
- Flow 2 egress (mean 177.37 Mbit/s)
- Flow 3 ingress (mean 134.82 Mbit/s)
- Flow 3 egress (mean 140.39 Mbit/s)
Run 10: Statistics of Verus

Start at: 2018-06-20 13:45:03
End at: 2018-06-20 13:45:33
Local clock offset: -0.381 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-20 16:29:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 351.15 Mbit/s
  95th percentile per-packet one-way delay: 118.405 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 174.70 Mbit/s
  95th percentile per-packet one-way delay: 125.870 ms
  Loss rate: 1.25%
-- Flow 2:
  Average throughput: 201.67 Mbit/s
  95th percentile per-packet one-way delay: 108.482 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 130.26 Mbit/s
  95th percentile per-packet one-way delay: 111.457 ms
  Loss rate: 0.25%
Run 10: Report of Verus — Data Link

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

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Run 1: Statistics of PCC-Vivace

End at: 2018-06-20 10:22:50
Local clock offset: -0.393 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2018-06-20 16:32:10
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 466.65 Mbit/s
 95th percentile per-packet one-way delay: 153.609 ms
 Loss rate: 0.19%
-- Flow 1:
 Average throughput: 282.91 Mbit/s
 95th percentile per-packet one-way delay: 210.535 ms
 Loss rate: 0.31%
-- Flow 2:
 Average throughput: 220.84 Mbit/s
 95th percentile per-packet one-way delay: 60.182 ms
 Loss rate: 0.00%
-- Flow 3:
 Average throughput: 111.17 Mbit/s
 95th percentile per-packet one-way delay: 51.985 ms
 Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time for different flows with specific mean values mentioned in the legend.]

- **Throughput (Mb/s):**
  - Flow 1 ingress: 283.80 Mb/s
  - Flow 1 egress: 282.91 Mb/s
  - Flow 2 ingress: 220.84 Mb/s
  - Flow 2 egress: 220.84 Mb/s
  - Flow 3 ingress: 111.18 Mb/s
  - Flow 3 egress: 111.17 Mb/s

- **Delay (ms):**
  - Flow 1 95th percentile: 210.53 ms
  - Flow 2 95th percentile: 60.18 ms
  - Flow 3 95th percentile: 51.98 ms
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-20 10:45:28
End at: 2018-06-20 10:45:58
Local clock offset: -0.015 ms
Remote clock offset: 0.171 ms

# Below is generated by plot.py at 2018-06-20 16:32:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 426.80 Mbit/s
  95th percentile per-packet one-way delay: 57.954 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 280.09 Mbit/s
  95th percentile per-packet one-way delay: 63.548 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 164.97 Mbit/s
  95th percentile per-packet one-way delay: 53.590 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 112.14 Mbit/s
  95th percentile per-packet one-way delay: 51.109 ms
  Loss rate: 0.00%
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-20 11:08:48
End at: 2018-06-20 11:09:18
Local clock offset: -0.38 ms
Remote clock offset: 0.161 ms

# Below is generated by plot.py at 2018-06-20 16:35:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.08 Mbit/s
95th percentile per-packet one-way delay: 181.538 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 294.32 Mbit/s
95th percentile per-packet one-way delay: 154.467 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 253.26 Mbit/s
95th percentile per-packet one-way delay: 207.490 ms
Loss rate: 1.79%
-- Flow 3:
Average throughput: 197.88 Mbit/s
95th percentile per-packet one-way delay: 68.021 ms
Loss rate: 0.06%
Run 3: Report of PCC-Vivace — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 294.32 Mbit/s)  Flow 1 egress (mean 294.32 Mbit/s)
Flow 2 ingress (mean 257.88 Mbit/s)  Flow 2 egress (mean 253.26 Mbit/s)
Flow 3 ingress (mean 196.02 Mbit/s)  Flow 3 egress (mean 197.89 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 154.47 ms)  Flow 2 (95th percentile 207.49 ms)  Flow 3 (95th percentile 68.02 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-20 11:32:04
End at: 2018-06-20 11:32:34
Local clock offset: -0.427 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-20 16:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 517.33 Mbit/s
95th percentile per-packet one-way delay: 122.557 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 299.26 Mbit/s
95th percentile per-packet one-way delay: 176.828 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 288.61 Mbit/s
95th percentile per-packet one-way delay: 94.515 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.29 Mbit/s
95th percentile per-packet one-way delay: 52.097 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link

![Graph 1: Throughput vs Time]

*Flow 1 ingress (mean 299.66 Mbit/s)*  
*Flow 1 egress (mean 299.26 Mbit/s)*  
*Flow 2 ingress (mean 288.61 Mbit/s)*  
*Flow 2 egress (mean 288.61 Mbit/s)*  
*Flow 3 ingress (mean 72.28 Mbit/s)*  
*Flow 3 egress (mean 72.29 Mbit/s)*

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

*Flow 1 (95th percentile 176.83 ms)*  
*Flow 2 (95th percentile 94.52 ms)*  
*Flow 3 (95th percentile 52.10 ms)*

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Run 5: Statistics of PCC-Vivace

Start at: 2018-06-20 11:55:03
End at: 2018-06-20 11:55:33
Local clock offset: -0.049 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-20 16:36:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 473.36 Mbit/s
  95th percentile per-packet one-way delay: 141.046 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 264.62 Mbit/s
  95th percentile per-packet one-way delay: 207.054 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 236.00 Mbit/s
  95th percentile per-packet one-way delay: 61.865 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 157.15 Mbit/s
  95th percentile per-packet one-way delay: 70.656 ms
  Loss rate: 0.01%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time]

Legend:
- Flow 1 ingress (mean 265.40 Mbit/s)
- Flow 1 egress (mean 264.62 Mbit/s)
- Flow 2 ingress (mean 236.00 Mbit/s)
- Flow 2 egress (mean 236.00 Mbit/s)
- Flow 3 ingress (mean 157.15 Mbit/s)
- Flow 3 egress (mean 157.15 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 207.05 ms)
- Flow 2 (95th percentile 61.87 ms)
- Flow 3 (95th percentile 70.66 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-20 12:18:17
End at: 2018-06-20 12:18:47
Local clock offset: -0.371 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-06-20 16:36:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.89 Mbit/s
95th percentile per-packet one-way delay: 55.319 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 186.02 Mbit/s
95th percentile per-packet one-way delay: 70.627 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.17 Mbit/s
95th percentile per-packet one-way delay: 54.646 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 109.58 Mbit/s
95th percentile per-packet one-way delay: 52.447 ms
Loss rate: 0.02%
Run 6: Report of PCC-Vivace — Data Link

![Graphs showing throughput and per-packet one-way delay for different flows.](image-url)
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-20 12:41:20
End at: 2018-06-20 12:41:50
Local clock offset: 0.446 ms
Remote clock offset: -0.136 ms

# Below is generated by plot.py at 2018-06-20 16:37:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 483.69 Mbit/s
95th percentile per-packet one-way delay: 195.508 ms
Loss rate: 1.29%
-- Flow 1:
Average throughput: 303.31 Mbit/s
95th percentile per-packet one-way delay: 211.547 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 217.93 Mbit/s
95th percentile per-packet one-way delay: 56.247 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 107.65 Mbit/s
95th percentile per-packet one-way delay: 51.869 ms
Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

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

![Graph showing per-packet one way delay over time for different flows](image2)
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-20 13:04:11
End at: 2018-06-20 13:04:41
Local clock offset: 0.111 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2018-06-20 16:37:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.93 Mbit/s
95th percentile per-packet one-way delay: 144.886 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 247.74 Mbit/s
95th percentile per-packet one-way delay: 69.942 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 257.41 Mbit/s
95th percentile per-packet one-way delay: 256.458 ms
Loss rate: 1.28%
-- Flow 3:
Average throughput: 87.90 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 0.00%
Run 8: Report of PCC-Vivace — Data Link

![Graph showing data link performance](image)

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 247.76 Mbps)
  - Flow 1 egress (mean 247.74 Mbps)
  - Flow 2 ingress (mean 266.70 Mbps)
  - Flow 2 egress (mean 257.41 Mbps)
  - Flow 3 ingress (mean 87.88 Mbps)
  - Flow 3 egress (mean 87.90 Mbps)

- **Packet Error Rate (ms):**
  - Flow 1 (95th percentile 69.94 ms)
  - Flow 2 (95th percentile 256.46 ms)
  - Flow 3 (95th percentile 51.37 ms)
Run 9: Statistics of PCC-Vivace

End at: 2018-06-20 13:27:37
Local clock offset: -0.331 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 450.46 Mbit/s
95th percentile per-packet one-way delay: 113.956 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 307.13 Mbit/s
95th percentile per-packet one-way delay: 97.481 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.07 Mbit/s
95th percentile per-packet one-way delay: 54.966 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 252.96 Mbit/s
95th percentile per-packet one-way delay: 125.692 ms
Loss rate: 0.05%
Run 9: Report of PCC-Vivace — Data Link

![Data Link Throughput Graph](image1)

![Data Link Delay Graph](image2)

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Run 10: Statistics of PCC-Vivace

Start at: 2018-06-20 13:50:18
End at: 2018-06-20 13:50:48
Local clock offset: 0.03 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 383.02 Mbit/s
  95th percentile per-packet one-way delay: 198.812 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 197.72 Mbit/s
  95th percentile per-packet one-way delay: 279.480 ms
  Loss rate: 0.88%
-- Flow 2:
  Average throughput: 225.18 Mbit/s
  95th percentile per-packet one-way delay: 54.545 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 107.80 Mbit/s
  95th percentile per-packet one-way delay: 51.616 ms
  Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

[Graph showing throughput and packet delay over time for different flows with detailed statistics provided for each flow.]
Run 1: Statistics of WebRTC media

Start at: 2018-06-20 10:18:38
End at: 2018-06-20 10:19:08
Local clock offset: -0.43 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 51.232 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.21 Mbit/s
95th percentile per-packet one-way delay: 50.658 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.49 Mbit/s
95th percentile per-packet one-way delay: 51.301 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 51.256 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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**Graph 1:**
- **Y-axis:** Throughput (Mbps)
- **X-axis:** Time (s)
- **Legend:**
  - Flow 1 ingress (mean 2.21 Mbps)
  - Flow 1 egress (mean 2.21 Mbps)
  - Flow 2 ingress (mean 1.49 Mbps)
  - Flow 2 egress (mean 1.49 Mbps)
  - Flow 3 ingress (mean 0.62 Mbps)
  - Flow 3 egress (mean 0.62 Mbps)

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**Graph 2:**
- **Y-axis:** Per packet one way delay [ms]
- **X-axis:** Time (s)
- **Legend:**
  - Flow 1 (95th percentile 50.66 ms)
  - Flow 2 (95th percentile 51.30 ms)
  - Flow 3 (95th percentile 51.26 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-06-20 10:41:50
End at: 2018-06-20 10:42:20
Local clock offset: -0.008 ms
Remote clock offset: 0.119 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.95 Mbit/s
  95th percentile per-packet one-way delay: 50.949 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.12 Mbit/s
  95th percentile per-packet one-way delay: 50.997 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 50.799 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 50.741 ms
  Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-06-20 11:05:03
End at: 2018-06-20 11:05:33
Local clock offset: 0.008 ms
Remote clock offset: 0.153 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.85 Mbit/s
95th percentile per-packet one-way delay: 50.642 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 50.611 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.31 Mbit/s
95th percentile per-packet one-way delay: 50.656 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 50.832 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-06-20 11:28:26
End at: 2018-06-20 11:28:56
Local clock offset: -0.036 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.79 Mbit/s
95th percentile per-packet one-way delay: 50.937 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.00 Mbit/s
95th percentile per-packet one-way delay: 50.931 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 50.823 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 51.047 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graph showing throughput and latency for different flows over time.](image-url)
Run 5: Statistics of WebRTC media

Start at: 2018-06-20 11:51:26
End at: 2018-06-20 11:51:56
Local clock offset: -0.044 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.95 Mbit/s
  95th percentile per-packet one-way delay: 50.792 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 50.716 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 50.857 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 50.699 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-06-20 12:14:34
End at: 2018-06-20 12:15:04
Local clock offset: -0.024 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.82 Mbit/s
95th percentile per-packet one-way delay: 50.760 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 49.948 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 50.296 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-06-20 12:37:44
End at: 2018-06-20 12:38:14
Local clock offset: 0.09 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.93 Mbit/s
  95th percentile per-packet one-way delay: 50.976 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 2.10 Mbit/s
  95th percentile per-packet one-way delay: 50.898 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 51.061 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.53 Mbit/s
  95th percentile per-packet one-way delay: 50.766 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-06-20 13:00:36
End at: 2018-06-20 13:01:06
Local clock offset: 0.118 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 51.188 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 51.291 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 50.850 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 50.984 ms
Loss rate: 0.05%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-06-20 13:23:30
End at: 2018-06-20 13:24:00
Local clock offset: -0.311 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 51.375 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.09 Mbit/s
95th percentile per-packet one-way delay: 51.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 1.29 Mbit/s
95th percentile per-packet one-way delay: 51.209 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 51.446 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 10: Statistics of WebRTC media

End at: 2018-06-20 13:47:05
Local clock offset: 0.013 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-20 16:38:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.84 Mbit/s
95th percentile per-packet one-way delay: 51.211 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 2.03 Mbit/s
95th percentile per-packet one-way delay: 51.245 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 1.32 Mbit/s
95th percentile per-packet one-way delay: 51.169 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.51 Mbit/s
95th percentile per-packet one-way delay: 50.817 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss over time]