Pantheon Report

Data path: GCE Sydney on ens4 (local) → GCE London on ens4 (remote).
Repeated the test of 24 congestion control schemes 5 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against time.google.com and have been applied
to correct the timestamps in logs.

System info:
Linux 5.0.0-1031-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b377a59a3294dfafdf722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7e6a17e6a324d519
third_party/fillp-sheep @ 0e5bb722943babcd2eb0902c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa93b032143cedbfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da2095537730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8869ffbb84eb3200
third_party/pantheon-tunnel @ f866df58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1afecf958e0d66d18b623c091a55f8ec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961fa1e8273a86b42f2bc8143ebc978f3cfcf42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a6ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562539f9a949
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9d9d70d4735770d143a1fa2851
test from GCE Sydney to GCE London, 5 runs of 30s each per scheme
(mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>5</td>
<td>651.29</td>
<td>215.84</td>
<td>3.18</td>
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<tr>
<td>Copa</td>
<td>5</td>
<td>294.93</td>
<td>173.32</td>
<td>0.00</td>
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<td>TCP Cubic</td>
<td>5</td>
<td>288.24</td>
<td>201.73</td>
<td>0.40</td>
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<tr>
<td>FillP</td>
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<td>608.86</td>
<td>188.12</td>
<td>2.05</td>
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<td>FillP-Sheep</td>
<td>5</td>
<td>509.69</td>
<td>157.46</td>
<td>0.30</td>
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<tr>
<td>Indigo</td>
<td>5</td>
<td>173.73</td>
<td>131.90</td>
<td>0.00</td>
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<td>Indigo-MusesC3</td>
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<td>615.64</td>
<td>172.73</td>
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<td>184.92</td>
<td>0.12</td>
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<td>189.06</td>
<td>0.15</td>
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<tr>
<td>Indigo-MusesT</td>
<td>4</td>
<td>688.57</td>
<td>190.29</td>
<td>0.36</td>
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<td>LEDBAT</td>
<td>5</td>
<td>5.36</td>
<td>133.29</td>
<td>0.00</td>
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<td>Muses_DecisionTree</td>
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<td>135.52</td>
<td>0.02</td>
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<td>136.98</td>
<td>0.05</td>
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<td>5</td>
<td>389.32</td>
<td>250.61</td>
<td>3.67</td>
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<td>PCC-Expr</td>
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<td>314.25</td>
<td>216.55</td>
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<tr>
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<td>132.88</td>
<td>0.00</td>
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<td>SCReAM</td>
<td>5</td>
<td>0.17</td>
<td>133.15</td>
<td>0.00</td>
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<td>Sprout</td>
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<td>0.63</td>
<td>132.79</td>
<td>0.00</td>
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<td>190.15</td>
<td>133.20</td>
<td>0.00</td>
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<td>TCP Vegas</td>
<td>5</td>
<td>415.15</td>
<td>157.45</td>
<td>0.29</td>
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<td>Verus</td>
<td>5</td>
<td>109.55</td>
<td>204.16</td>
<td>3.11</td>
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<tr>
<td>PCC-Vivace</td>
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<td>171.88</td>
<td>0.44</td>
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<td>N/A</td>
<td>N/A</td>
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Run 1: Statistics of TCP BBR

Start at: 2020-04-16 16:42:35
End at: 2020-04-16 16:43:05
Local clock offset: 0.279 ms
Remote clock offset: -0.472 ms

# Below is generated by plot.py at 2020-04-16 19:51:32
# Datalink statistics
-- Total of 1 flow:
 Average throughput: 613.61 Mbit/s
  95th percentile per-packet one-way delay: 185.732 ms
 Loss rate: 0.94%
-- Flow 1:
 Average throughput: 613.61 Mbit/s
  95th percentile per-packet one-way delay: 185.732 ms
 Loss rate: 0.94%
Run 1: Report of TCP BBR — Data Link

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

**Throughput (Mbps)**

- Flow 1 ingress (mean 619.41 Mbps)
- Flow 1 egress (mean 613.61 Mbps)

**Per packet end to end delay (ms)**

- Flow 1 (95th percentile 185.73 ms)
Run 2: Statistics of TCP BBR

Start at: 2020-04-16 17:19:59
End at: 2020-04-16 17:20:29
Local clock offset: -0.483 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2020-04-16 19:52:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 657.71 Mbit/s
95th percentile per-packet one-way delay: 215.587 ms
Loss rate: 1.56%
-- Flow 1:
Average throughput: 657.71 Mbit/s
95th percentile per-packet one-way delay: 215.587 ms
Loss rate: 1.56%
Run 2: Report of TCP BBR — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 668.11 Mbps)
- Flow 1 egress (mean 657.71 Mbps)

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

- Flow 1 (95th percentile 215.59 ms)
Run 3: Statistics of TCP BBR

Start at: 2020-04-16 17:56:17
End at: 2020-04-16 17:56:47
Local clock offset: -0.118 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-04-16 19:52:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 657.77 Mbit/s
95th percentile per-packet one-way delay: 204.004 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 657.77 Mbit/s
95th percentile per-packet one-way delay: 204.004 ms
Loss rate: 1.71%
Run 3: Report of TCP BBR — Data Link

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

*Flow 1 ingress (mean 669.45 Mb/s) — Flow 1 egress (mean 657.77 Mb/s)*

![Graph 2: One-way delay vs Time](image2)

*Flow 1 (95th percentile 204.00 ms)*

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Run 4: Statistics of TCP BBR

Start at: 2020-04-16 18:32:04
End at: 2020-04-16 18:32:34
Local clock offset: ~0.115 ms
Remote clock offset: ~0.393 ms

# Below is generated by plot.py at 2020-04-16 19:52:49
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 672.69 Mbit/s
  95th percentile per-packet one-way delay: 247.410 ms
  Loss rate: 10.08%
-- Flow 1:
  Average throughput: 672.69 Mbit/s
  95th percentile per-packet one-way delay: 247.410 ms
  Loss rate: 10.08%
Run 4: Report of TCP BBR — Data Link

![Graph of throughput and delay](image)

- **Throughput (Mbps)**
  - **Flow 1 ingress (mean 748.10 Mbps)**
  - **Flow 1 egress (mean 672.69 Mbps)**

- **Delay (ms)**
  - **Flow 1 (95th percentile 247.41 ms)**
Run 5: Statistics of TCP BBR

Start at: 2020-04-16 19:08:17
End at: 2020-04-16 19:08:47
Local clock offset: -0.041 ms
Remote clock offset: -0.506 ms

# Below is generated by plot.py at 2020-04-16 19:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 654.68 Mbit/s
95th percentile per-packet one-way delay: 226.477 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 654.68 Mbit/s
95th percentile per-packet one-way delay: 226.477 ms
Loss rate: 1.62%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2020-04-16 16:49:15
End at: 2020-04-16 16:49:46
Local clock offset: -0.119 ms
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2020-04-16 19:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.77 Mbit/s
95th percentile per-packet one-way delay: 213.799 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 290.77 Mbit/s
95th percentile per-packet one-way delay: 213.799 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2020-04-16 17:26:48
End at: 2020-04-16 17:27:19
Local clock offset: -0.121 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2020-04-16 19:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 298.52 Mbit/s
95th percentile per-packet one-way delay: 172.120 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 298.52 Mbit/s
95th percentile per-packet one-way delay: 172.120 ms
Loss rate: 0.01%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2020-04-16 18:03:01
End at: 2020-04-16 18:03:31
Local clock offset: -0.057 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2020-04-16 19:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.44 Mbit/s
95th percentile per-packet one-way delay: 140.380 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 281.44 Mbit/s
95th percentile per-packet one-way delay: 140.380 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

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**Graph 1:**

- **X-axis:** Time (s)
- **Y-axis:** Throughput (Mbps)
- **Legend:**
  - Flow 1 ingress (mean 281.43 Mbps)
  - Flow 1 egress (mean 281.44 Mbps)

**Graph 2:**

- **X-axis:** Time (s)
- **Y-axis:** Per packet one way delay (ms)
- **Legend:**
  - Flow 1 (95th percentile 140.38 ms)
Run 4: Statistics of Copa

Start at: 2020-04-16 18:38:48
End at: 2020-04-16 18:39:18
Local clock offset: 0.247 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2020-04-16 20:00:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 304.68 Mbit/s
95th percentile per-packet one-way delay: 180.463 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 304.68 Mbit/s
95th percentile per-packet one-way delay: 180.463 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

![Graph 2: Per packet one-way delay (ms)](image2)
Run 5: Statistics of Copa

Start at: 2020-04-16 19:14:56
End at: 2020-04-16 19:15:26
Local clock offset: 0.33 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 299.26 Mbit/s
95th percentile per-packet one-way delay: 159.843 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 299.26 Mbit/s
95th percentile per-packet one-way delay: 159.843 ms
Loss rate: 0.01%
Run 5: Report of Copa — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 299.26 Mbps)
- Flow 1 egress (mean 299.26 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 159.84 ms)
Run 1: Statistics of TCP Cubic

Start at: 2020-04-16 16:33:31
End at: 2020-04-16 16:34:01
Local clock offset: -0.09 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.00 Mbit/s
95th percentile per-packet one-way delay: 210.166 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 339.00 Mbit/s
95th percentile per-packet one-way delay: 210.166 ms
Loss rate: 0.42%
Run 1: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 340.44 Mbit/s)**
- **Flow 1 egress (mean 339.00 Mbit/s)**

![Graph 2: Packet One-Way Delay Over Time](image2)

- **Flow 1 (95th percentile 210.17 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2020-04-16 17:10:59
End at: 2020-04-16 17:11:29
Local clock offset: -0.127 ms
Remote clock offset: -0.567 ms

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 302.76 Mbit/s
95th percentile per-packet one-way delay: 231.029 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 302.76 Mbit/s
95th percentile per-packet one-way delay: 231.029 ms
Loss rate: 0.71%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2020-04-16 17:46:57  
End at: 2020-04-16 17:47:27  
Local clock offset: -0.108 ms  
Remote clock offset: -0.114 ms  

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 345.25 Mbit/s  
95th percentile per-packet one-way delay: 221.808 ms  
Loss rate: 0.42%  
-- Flow 1:  
Average throughput: 345.25 Mbit/s  
95th percentile per-packet one-way delay: 221.808 ms  
Loss rate: 0.42%
Run 3: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for TCP Cubic in Run 3. The graph indicates fluctuations in throughput and delay, with specific values and statistics provided for each flow.](image-url)
Run 4: Statistics of TCP Cubic

Start at: 2020-04-16 18:23:04
End at: 2020-04-16 18:23:34
Local clock offset: -0.116 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 342.30 Mbit/s
  95th percentile per-packet one-way delay: 214.514 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 342.30 Mbit/s
  95th percentile per-packet one-way delay: 214.514 ms
  Loss rate: 0.43%
Run 4: Report of TCP Cubic — Data Link

[Graph showing throughput over time for TCP Cubic with flow 1 ingress and egress with mean values provided.]

[Graph showing per packet one-way delay for TCP Cubic with flow 1 95th percentile delay value.]
Run 5: Statistics of TCP Cubic

Start at: 2020-04-16 18:59:22
End at: 2020-04-16 18:59:52
Local clock offset: 0.286 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2020-04-16 20:00:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 111.89 Mbit/s
95th percentile per-packet one-way delay: 131.150 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 111.89 Mbit/s
95th percentile per-packet one-way delay: 131.150 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 111.89 Mbit/s)
- Flow 1 egress (mean 111.89 Mbit/s)

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

- Flow 1 (95th percentile 131.15 ms)
Run 1: Statistics of FillP

Start at: 2020-04-16 16:54:12
End at: 2020-04-16 16:54:42
Local clock offset: -0.106 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2020-04-16 20:12:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 846.61 Mbit/s
95th percentile per-packet one-way delay: 189.106 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 846.61 Mbit/s
95th percentile per-packet one-way delay: 189.106 ms
Loss rate: 1.03%
Run 1: Report of FillP — Data Link

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

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Flow 1 ingress (mean 855.29 Mbit/s)  Flow 1 egress (mean 846.61 Mbit/s)

Flow 1 (95th percentile 189.11 ms)
Run 2: Statistics of FillP

Start at: 2020-04-16 17:31:48
End at: 2020-04-16 17:32:18
Local clock offset: -0.121 ms
Remote clock offset: -0.475 ms

# Below is generated by plot.py at 2020-04-16 20:14:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 831.21 Mbit/s
95th percentile per-packet one-way delay: 163.731 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 831.21 Mbit/s
95th percentile per-packet one-way delay: 163.731 ms
Loss rate: 0.80%
Run 2: Report of FillP — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Round trip delay (ms)

Legend:
- Flow 1 ingress (mean 837.91 Mbps)
- Flow 1 egress (mean 831.21 Mbps)
- Flow 1 (95th percentile 163.73 ms)
Run 3: Statistics of FillP

Start at: 2020-04-16 18:07:59  
End at: 2020-04-16 18:08:29  
Local clock offset: 0.243 ms  
Remote clock offset: -0.085 ms

# Below is generated by plot.py at 2020-04-16 20:14:36  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 292.07 Mbit/s  
95th percentile per-packet one-way delay: 198.683 ms  
Loss rate: 3.79%  
-- Flow 1:  
Average throughput: 292.07 Mbit/s  
95th percentile per-packet one-way delay: 198.683 ms  
Loss rate: 3.79%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2020-04-16 18:43:35
End at: 2020-04-16 18:44:05
Local clock offset: -0.113 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2020-04-16 20:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 856.72 Mbit/s
95th percentile per-packet one-way delay: 190.085 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 856.72 Mbit/s
95th percentile per-packet one-way delay: 190.085 ms
Loss rate: 1.85%
Run 4: Report of FillP — Data Link

![Graph showing throughput and delay](image)

**Throughput (Mbps):**
- Flow 1 ingress (mean 872.62 Mbps)
- Flow 1 egress (mean 856.72 Mbps)

**Per packet one way delay (ms):**
- Flow 1 (95th percentile 190.09 ms)
Run 5: Statistics of FillP

Start at: 2020-04-16 19:19:54
End at: 2020-04-16 19:20:24
Local clock offset: -0.017 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2020-04-16 20:18:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 198.990 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 198.990 ms
Loss rate: 2.76%
Run 5: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 223.89 Mbps)
- Flow 1 Egress (mean 217.71 Mbps)

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

- Flow 1 (95th percentile 198.99 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2020-04-16 16:56:02
End at: 2020-04-16 16:56:32
Local clock offset: -0.099 ms
Remote clock offset: -0.583 ms

# Below is generated by plot.py at 2020-04-16 20:19:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 843.26 Mbit/s
95th percentile per-packet one-way delay: 138.050 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 843.26 Mbit/s
95th percentile per-packet one-way delay: 138.050 ms
Loss rate: 0.15%
Run 1: Report of FillP-Sheep — Data Link
Run 2: Statistics of FillP-Sheep

Start at: 2020-04-16 17:33:37
End at: 2020-04-16 17:34:07
Local clock offset: -0.48 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2020-04-16 20:19:28
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 41.13 Mbit/s
  95th percentile per-packet one-way delay: 136.905 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 41.13 Mbit/s
  95th percentile per-packet one-way delay: 136.905 ms
  Loss rate: 0.00%
Run 2: Report of FillP-Sheep — Data Link

![Graph showing network traffic](image1)

- Flow 1 ingress (mean 41.13 Mbit/s)
- Flow 1 egress (mean 41.13 Mbit/s)

![Graph showing packet delay](image2)

- Flow 1 (95th percentile 136.91 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2020-04-16 18:09:24
End at: 2020-04-16 18:09:54
Local clock offset: 0.335 ms
Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2020-04-16 20:19:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 775.56 Mbit/s
95th percentile per-packet one-way delay: 191.676 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 775.56 Mbit/s
95th percentile per-packet one-way delay: 191.676 ms
Loss rate: 0.58%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2020-04-16 18:45:27
End at: 2020-04-16 18:45:57
Local clock offset: ~0.12 ms
Remote clock offset: 0.392 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 845.44 Mbit/s
  95th percentile per-packet one-way delay: 178.372 ms
  Loss rate: 0.79%
-- Flow 1:
  Average throughput: 845.44 Mbit/s
  95th percentile per-packet one-way delay: 178.372 ms
  Loss rate: 0.79%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2020-04-16 19:21:16
End at: 2020-04-16 19:21:46
Local clock offset: 0.013 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 43.05 Mbit/s
  95th percentile per-packet one-way delay: 142.288 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 43.05 Mbit/s
  95th percentile per-packet one-way delay: 142.288 ms
  Loss rate: 0.00%
Run 5: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 43.05 Mbit/s)**
- **Flow 1 egress (mean 43.05 Mbit/s)**

![Graph 2: Flow 1 round trip delay](image2)

- **Flow 1 (95th percentile 142.29 ms)**
Run 1: Statistics of Indigo

Start at: 2020-04-16 16:35:02
End at: 2020-04-16 16:35:32
Local clock offset: -0.097 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.71 Mbit/s
95th percentile per-packet one-way delay: 131.508 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 166.71 Mbit/s
95th percentile per-packet one-way delay: 131.508 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link

![Graph of Throughput vs Time]

![Graph of Packet Delay vs Time]

Flow 1 ingress (mean 166.70 Mbit/s)  Flow 1 egress (mean 166.71 Mbit/s)
Run 2: Statistics of Indigo

Start at: 2020-04-16 17:12:28
End at: 2020-04-16 17:12:58
Local clock offset: -0.122 ms
Remote clock offset: -0.205 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 185.93 Mbit/s
95th percentile per-packet one-way delay: 131.953 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.93 Mbit/s
95th percentile per-packet one-way delay: 131.953 ms
Loss rate: 0.00%
Run 2: Report of Indigo — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 185.92 Mbit/s)
- Flow 1 egress (mean 185.93 Mbit/s)

![Packet Delay Graph]

- Flow 1 (95th percentile 131.95 ms)
Run 3: Statistics of Indigo

Start at: 2020-04-16 17:48:28
End at: 2020-04-16 17:48:58
Local clock offset: -0.094 ms
Remote clock offset: 0.282 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.46 Mbit/s
95th percentile per-packet one-way delay: 132.313 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 184.46 Mbit/s
95th percentile per-packet one-way delay: 132.313 ms
Loss rate: 0.00%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2020-04-16 18:24:34
End at: 2020-04-16 18:25:04
Local clock offset: 0.268 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 183.00 Mbit/s
  95th percentile per-packet one-way delay: 131.854 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 183.00 Mbit/s
  95th percentile per-packet one-way delay: 131.854 ms
  Loss rate: 0.00%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2020-04-16 19:00:40
End at: 2020-04-16 19:01:10
Local clock offset: -0.06 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2020-04-16 20:21:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.56 Mbit/s
95th percentile per-packet one-way delay: 131.892 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 148.56 Mbit/s
95th percentile per-packet one-way delay: 131.892 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 148.56 Mbit/s)
- Flow 1 egress (mean 148.56 Mbit/s)

![Graph showing packet delay distribution over time.]

- Flow 1 (95th percentile 131.89 ms)
Run 1: Statistics of Indigo-MusesC3

Start at: 2020-04-16 16:59:33
End at: 2020-04-16 17:00:03
Local clock offset: -0.061 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2020-04-16 20:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 601.31 Mbit/s
95th percentile per-packet one-way delay: 176.697 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 601.31 Mbit/s
95th percentile per-packet one-way delay: 176.697 ms
Loss rate: 0.02%
Run 1: Report of Indigo-MusesC3 — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 601.37 Mbit/s)
- Flow 1 egress (mean 601.31 Mbit/s)

Per packet one way delay (ms)

Time (s)

- Flow 1 (95th percentile 176.70 ms)
Run 2: Statistics of Indigo-MusesC3

Start at: 2020-04-16 17:36:21
End at: 2020-04-16 17:36:51
Local clock offset: -0.087 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2020-04-16 20:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 618.39 Mbit/s
95th percentile per-packet one-way delay: 177.635 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 618.39 Mbit/s
95th percentile per-packet one-way delay: 177.635 ms
Loss rate: 0.27%
Run 2: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 620.05 Mbit/s)
- Flow 1 egress (mean 618.39 Mbit/s)

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

- Flow 1 (95th percentile 177.63 ms)
Run 3: Statistics of Indigo-MusesC3

Start at: 2020-04-16 18:12:48
End at: 2020-04-16 18:13:18
Local clock offset: -0.056 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2020-04-16 20:29:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 618.37 Mbit/s
95th percentile per-packet one-way delay: 163.117 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 618.37 Mbit/s
95th percentile per-packet one-way delay: 163.117 ms
Loss rate: 0.00%
Run 3: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 618.42 Mbit/s)
- Flow 1 egress (mean 618.37 Mbit/s)

![Graph 2: Packet Delivery Ratio vs Time (ms)]

- Flow 1 (95th percentile 163.12 ms)
Run 4: Statistics of Indigo-MusesC3

Start at: 2020-04-16 18:48:42
End at: 2020-04-16 18:49:13
Local clock offset: -0.131 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2020-04-16 20:30:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 669.13 Mbit/s
95th percentile per-packet one-way delay: 171.673 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 669.13 Mbit/s
95th percentile per-packet one-way delay: 171.673 ms
Loss rate: 0.00%
Run 4: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 669.15 Mbit/s)
- Flow 1 egress (mean 669.13 Mbit/s)

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

- Flow 1 (95th percentile 171.67 ms)
Run 5: Statistics of Indigo-MusesC3

Start at: 2020-04-16 19:24:06
End at: 2020-04-16 19:24:36
Local clock offset: -0.012 ms
Remote clock offset: -0.328 ms

# Below is generated by plot.py at 2020-04-16 20:30:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.01 Mbit/s
95th percentile per-packet one-way delay: 174.504 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 571.01 Mbit/s
95th percentile per-packet one-way delay: 174.504 ms
Loss rate: 0.10%
Run 5: Report of Indigo-MusesC3 — Data Link

![Graph showing throughput and delay over time for data link.]
Run 1: Statistics of Indigo-MusesC5

Start at: 2020-04-16 16:47:32
End at: 2020-04-16 16:48:02
Local clock offset: -0.1 ms
Remote clock offset: -0.147 ms

# Below is generated by plot.py at 2020-04-16 20:31:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 613.73 Mbit/s
95th percentile per-packet one-way delay: 186.704 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 613.73 Mbit/s
95th percentile per-packet one-way delay: 186.704 ms
Loss rate: 0.16%
Run 1: Report of Indigo-MusesC5 — Data Link

![Throughput vs Time Graph](image1)

**Throughput (Mbps)**

<table>
<thead>
<tr>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>25</td>
</tr>
</tbody>
</table>

*Flow 1 ingress (mean 614.76 Mbit/s) | Flow 1 egress (mean 613.73 Mbit/s)*

![Delay vs Time Graph](image2)

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

<table>
<thead>
<tr>
<th>Time (s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>25</td>
</tr>
</tbody>
</table>

*Flow 1 (95th percentile 186.70 ms)*
Run 2: Statistics of Indigo-MusesC5

Start at: 2020-04-16 17:25:05
End at: 2020-04-16 17:25:35
Local clock offset: -0.083 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2020-04-16 20:31:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 610.11 Mbit/s
  95th percentile per-packet one-way delay: 195.146 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 610.11 Mbit/s
  95th percentile per-packet one-way delay: 195.146 ms
  Loss rate: 0.01%
Run 2: Report of Indigo-MusesC5 — Data Link

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

- **Flow 1 ingress (mean 610.20 Mbit/s)**
- **Flow 1 egress (mean 610.11 Mbit/s)**

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

- **Flow 1 (95th percentile 185.15 ms)**
Run 3: Statistics of Indigo-MusesC5

Start at: 2020-04-16 18:01:18
End at: 2020-04-16 18:01:48
Local clock offset: -0.04 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2020-04-16 20:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 646.25 Mbit/s
95th percentile per-packet one-way delay: 170.537 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 646.25 Mbit/s
95th percentile per-packet one-way delay: 170.537 ms
Loss rate: 0.11%
Run 3: Report of Indigo-MusesC5 — Data Link

![Graph 1](image1.png)  
- Flow 1 ingress (mean 646.94 Mbit/s)  
- Flow 1 egress (mean 646.25 Mbit/s)

![Graph 2](image2.png)  
- Flow 1 (95th percentile 170.54 ms)
Run 4: Statistics of Indigo-MusesC5

Start at: 2020-04-16 18:37:05
End at: 2020-04-16 18:37:35
Local clock offset: -0.117 ms
Remote clock offset: -0.395 ms

# Below is generated by plot.py at 2020-04-16 20:36:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 609.20 Mbit/s
95th percentile per-packet one-way delay: 165.051 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 609.20 Mbit/s
95th percentile per-packet one-way delay: 165.051 ms
Loss rate: 0.20%
Run 4: Report of Indigo-MusesC5 — Data Link

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

- **Flow 1 ingress** (mean 610.39 Mbit/s)
- **Flow 1 egress** (mean 609.20 Mbit/s)

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

- **Flow 1** (95th percentile 165.05 ms)
Run 5: Statistics of Indigo-MusesC5

Start at: 2020-04-16 19:13:14
End at: 2020-04-16 19:13:44
Local clock offset: -0.017 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2020-04-16 20:40:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 594.02 Mbit/s
95th percentile per-packet one-way delay: 207.165 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 594.02 Mbit/s
95th percentile per-packet one-way delay: 207.165 ms
Loss rate: 0.11%
Run 5: Report of Indigo-MusesC5 — Data Link

![Graph showing Throughput and Packet Loss](image)

- Flow 1 ingress (mean 594.69 Mbit/s)
- Flow 1 egress (mean 594.02 Mbit/s)
Run 1: Statistics of Indigo-MusesD

Start at: 2020-04-16 16:44:16
End at: 2020-04-16 16:44:46
Local clock offset: ~0.074 ms
Remote clock offset: 0.221 ms

# Below is generated by plot.py at 2020-04-16 20:40:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 532.28 Mbit/s
95th percentile per-packet one-way delay: 218.483 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 532.28 Mbit/s
95th percentile per-packet one-way delay: 218.483 ms
Loss rate: 0.06%
Run 2: Statistics of Indigo-MusesD

Start at: 2020-04-16 17:21:42
End at: 2020-04-16 17:22:12
Local clock offset: -0.095 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2020-04-16 20:41:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 603.74 Mbit/s
95th percentile per-packet one-way delay: 158.911 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 603.74 Mbit/s
95th percentile per-packet one-way delay: 158.911 ms
Loss rate: 0.01%
Run 2: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 603.82 Mbit/s)
- Flow 1 egress (mean 603.74 Mbit/s)

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

- Flow 1 (95th percentile 158.91 ms)
Run 3: Statistics of Indigo-MusesD

Start at: 2020-04-16 17:57:59
End at: 2020-04-16 17:58:29
Local clock offset: -0.08 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2020-04-16 20:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.12 Mbit/s
95th percentile per-packet one-way delay: 209.870 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 562.12 Mbit/s
95th percentile per-packet one-way delay: 209.870 ms
Loss rate: 0.48%
Run 3: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 564.85 Mbit/s)
- Flow 1 egress (mean 562.12 Mbit/s)

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

- Flow 1 (95th percentile 209.87 ms)
Run 4: Statistics of Indigo-MusesD

Start at: 2020-04-16 18:33:47
End at: 2020-04-16 18:34:17
Local clock offset: -0.088 ms
Remote clock offset: 0.356 ms

# Below is generated by plot.py at 2020-04-16 20:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 523.67 Mbit/s
95th percentile per-packet one-way delay: 156.437 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 523.67 Mbit/s
95th percentile per-packet one-way delay: 156.437 ms
Loss rate: 0.19%
Run 4: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 524.65 Mbps)
- Flow 1 egress (mean 523.67 Mbps)

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

- Flow 1 (95th percentile 156.44 ms)
Run 5: Statistics of Indigo-MusesD

Start at: 2020-04-16 19:10:01
End at: 2020-04-16 19:10:31
Local clock offset: -0.051 ms
Remote clock offset: -0.139 ms

# Below is generated by plot.py at 2020-04-16 20:41:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 500.04 Mbit/s
95th percentile per-packet one-way delay: 201.589 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 500.04 Mbit/s
95th percentile per-packet one-way delay: 201.589 ms
Loss rate: 0.01%
Run 5: Report of Indigo-MusesD — Data Link
Run 1: Statistics of Indigo-MusesT

Start at: 2020-04-16 16:26:50
End at: 2020-04-16 16:27:20
Local clock offset: -0.096 ms
Remote clock offset: -0.029 ms
Run 1: Report of Indigo-MusesT — Data Link

![Data Link Graph]

- **Throughput (Mbps)**
  - **Flow 1 ingress**: mean 641.50 Mbps
  - **Flow 1 egress**: mean 641.11 Mbps

![Packet Delay Graph]

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 166.43 ms)
Run 2: Statistics of Indigo-MusesT

Start at: 2020-04-16 17:04:11
End at: 2020-04-16 17:04:41
Local clock offset: -0.102 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2020-04-16 20:51:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 699.09 Mbit/s
95th percentile per-packet one-way delay: 169.466 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 699.09 Mbit/s
95th percentile per-packet one-way delay: 169.466 ms
Loss rate: 0.16%
Run 2: Report of Indigo-MusesT — Data Link

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

- **Flow 1 ingress (mean 700.23 Mbit/s)**
- **Flow 1 egress (mean 699.09 Mbit/s)**

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

- **Flow 1 (95th percentile 169.47 ms)**
Run 3: Statistics of Indigo-MusesT

Start at: 2020-04-16 17:40:30
End at: 2020-04-16 17:41:00
Local clock offset: -0.096 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2020-04-16 20:52:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 697.25 Mbit/s
95th percentile per-packet one-way delay: 183.233 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 697.25 Mbit/s
95th percentile per-packet one-way delay: 183.233 ms
Loss rate: 0.07%
Run 3: Report of Indigo-MusesT — Data Link

![Graph showing throughput and delay over time for a network flow.](Image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 697.74 Mbps)
  - Flow 1 egress (mean 697.25 Mbps)

- **Delay (ms):**
  - Flow 1 (95th percentile 183.23 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2020-04-16 18:16:57
End at: 2020-04-16 18:17:27
Local clock offset: -0.054 ms
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2020-04-16 20:52:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 643.44 Mbit/s
95th percentile per-packet one-way delay: 223.537 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 643.44 Mbit/s
95th percentile per-packet one-way delay: 223.537 ms
Loss rate: 1.10%
Run 5: Statistics of Indigo-MusesT

Start at: 2020-04-16 18:53:30
End at: 2020-04-16 18:54:00
Local clock offset: -0.105 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 714.48 Mbit/s
95th percentile per-packet one-way delay: 184.937 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 714.48 Mbit/s
95th percentile per-packet one-way delay: 184.937 ms
Loss rate: 0.09%
Run 5: Report of Indigo-MusesT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 715.17 Mbit/s)  Flow 1 egress (mean 714.48 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 184.94 ms)
Run 1: Statistics of LEDBAT

Start at: 2020-04-16 16:41:23
End at: 2020-04-16 16:41:53
Local clock offset: -0.427 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 132.208 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.39 Mbit/s
95th percentile per-packet one-way delay: 132.208 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2020-04-16 17:18:47
End at: 2020-04-16 17:19:17
Local clock offset: -0.072 ms
Remote clock offset: 0.251 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 134.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 134.457 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2020-04-16 17:55:05
End at: 2020-04-16 17:55:35
Local clock offset: -0.088 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 135.301 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 135.301 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2020-04-16 18:30:52
End at: 2020-04-16 18:31:22
Local clock offset: -0.451 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 132.013 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 132.013 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2020-04-16 19:07:05
End at: 2020-04-16 19:07:35
Local clock offset: 0.298 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 132.468 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.47 Mbit/s
95th percentile per-packet one-way delay: 132.468 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 17:02:26
End at: 2020-04-16 17:02:56
Local clock offset: -0.435 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 612.93 Mbit/s
95th percentile per-packet one-way delay: 141.946 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 612.93 Mbit/s
95th percentile per-packet one-way delay: 141.946 ms
Loss rate: 0.09%
Run 1: Report of Muses DecisionTree — Data Link
Run 2: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 17:39:19
End at: 2020-04-16 17:39:49
Local clock offset: -0.101 ms
Remote clock offset: -0.496 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 133.980 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 133.980 ms
Loss rate: 0.00%
Run 2: Report of Muses_DecisionTree — Data Link
Run 3: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 18:15:47
End at: 2020-04-16 18:16:17
Local clock offset: -0.039 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 132.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 132.159 ms
Loss rate: 0.00%
Run 3: Report of Muses Decision Tree — Data Link

[Graph showing throughput over time for two flows, with labels for Flow 1 ingress and egress, indicating mean 0.43 Mbit/s for each.]
Run 4: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 18:51:43
End at: 2020-04-16 18:52:13
Local clock offset: -0.087 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 634.08 Mbit/s
95th percentile per-packet one-way delay: 138.610 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 634.08 Mbit/s
95th percentile per-packet one-way delay: 138.610 ms
Loss rate: 0.00%
Run 4: Report of Muses_DecisionTree — Data Link

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

- Flow 1 ingress (mean 634.14 Mbit/s)
- Flow 1 egress (mean 634.08 Mbit/s)

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

- Flow 1 (95th percentile 138.61 ms)
Run 5: Statistics of Muses\_DecisionTree

Start at: 2020-04-16 19:27:03
End at: 2020-04-16 19:27:33
Local clock offset: 0.339 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.10 Mbit/s
  95th percentile per-packet one-way delay: 130.881 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.10 Mbit/s
  95th percentile per-packet one-way delay: 130.881 ms
  Loss rate: 0.00%
Run 5: Report of Muses_DecisionTree — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.10 Mbit/s)  Flow 1 egress (mean 0.10 Mbit/s)

End-to-end one-way delay (ms)

Flow 1 (95th percentile 130.88 ms)
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 16:31:50
End at: 2020-04-16 16:32:20
Local clock offset: 0.247 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 539.42 Mbit/s
95th percentile per-packet one-way delay: 203.483 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 539.42 Mbit/s
95th percentile per-packet one-way delay: 203.483 ms
Loss rate: 0.88%
Run 1: Report of Muses_DocumentTreeH0 — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress (mean 544.20 Mbit/s)**
- **Flow 1 egress (mean 539.42 Mbit/s)**

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

- **Flow 1 (95th percentile 203.48 ms)**
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 17:09:25
End at: 2020-04-16 17:09:55
Local clock offset: -0.066 ms
Remote clock offset: -0.22 ms

# Below is generated by plot.py at 2020-04-16 20:54:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 415.38 Mbit/s
95th percentile per-packet one-way delay: 235.373 ms
Loss rate: 5.94%
-- Flow 1:
Average throughput: 415.38 Mbit/s
95th percentile per-packet one-way delay: 235.373 ms
Loss rate: 5.94%
Run 2: Report of Muses_DecisionTreeH0 — Data Link

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

*Flow 1 ingress (mean 441.66 Mbit/s) - Flow 1 egress (mean 415.38 Mbit/s)*

![Graph 2: Packet Delay](image2.png)

*Flow 1 (95th percentile 235.37 ms)*
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 17:45:10
End at: 2020-04-16 17:45:40
Local clock offset: -0.105 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2020-04-16 21:02:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 647.49 Mbit/s
95th percentile per-packet one-way delay: 178.306 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 647.49 Mbit/s
95th percentile per-packet one-way delay: 178.306 ms
Loss rate: 0.16%
Run 3: Report of Muses_DecimalTreeH0 — Data Link
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 18:21:22
End at: 2020-04-16 18:21:52
Local clock offset: ~0.088 ms
Remote clock offset: 0.337 ms

# Below is generated by plot.py at 2020-04-16 21:02:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 542.13 Mbit/s
95th percentile per-packet one-way delay: 173.227 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 542.13 Mbit/s
95th percentile per-packet one-way delay: 173.227 ms
Loss rate: 0.78%
Run 4: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with ingress and egress rates.]
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2020-04-16 18:58:12
End at: 2020-04-16 18:58:42
Local clock offset: -0.051 ms
Remote clock offset: -0.487 ms

# Below is generated by plot.py at 2020-04-16 21:02:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 131.986 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.12 Mbit/s
95th percentile per-packet one-way delay: 131.986 ms
Loss rate: 0.00%
Run 5: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing network performance metrics for Flow 1 ingress and egress over time. The graphs display throughput and one-way delay for a specific flow, with metrics including mean and 95th percentile values.]
Run 1: Statistics of Muses\_DecisionTreeRO

Start at: 2020-04-16 16:28:21
End at: 2020-04-16 16:28:51
Local clock offset: -0.1 ms
Remote clock offset: 0.379 ms

# Below is generated by plot.py at 2020-04-16 21:05:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 643.04 Mbit/s
95th percentile per-packet one-way delay: 152.214 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 643.04 Mbit/s
95th percentile per-packet one-way delay: 152.214 ms
Loss rate: 0.06%
Run 1: Report of Muses.DecisionTreeR0 — Data Link

[Graphs showing throughput and packet delay over time]
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2020-04-16 17:05:58
End at: 2020-04-16 17:06:28
Local clock offset: -0.104 ms
Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2020-04-16 21:05:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 599.73 Mbit/s
95th percentile per-packet one-way delay: 137.143 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 599.73 Mbit/s
95th percentile per-packet one-way delay: 137.143 ms
Loss rate: 0.17%
Run 2: Report of Muses_DecisionTreeR0 — Data Link

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

- Flow 1 ingress (mean 600.74 Mbps)
- Flow 1 egress (mean 599.73 Mbps)

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

- Flow 1 (95th percentile 137.14 ms)
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2020-04-16 17:42:17
End at: 2020-04-16 17:42:47
Local clock offset: -0.107 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2020-04-16 21:05:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 131.058 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 131.058 ms
Loss rate: 0.00%
Run 4: Statistics of Muses\_DecisionTreeRO

Start at: 2020-04-16 18:18:42
End at: 2020-04-16 18:19:12
Local clock offset: -0.081 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2020-04-16 21:05:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 132.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 132.559 ms
Loss rate: 0.00%
Run 4: Report of Muses

DecisionTreeR0 — Data Link

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

- Flow 1 ingress (mean 0.42 Mbit/s)
- Flow 1 egress (mean 0.42 Mbit/s)

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

- Flow 1 (95th percentile 132.5 ms)
Run 5: Statistics of Muses\_DecisionTreeRO

Start at: 2020-04-16 18:55:18  
End at: 2020-04-16 18:55:48  
Local clock offset: 0.261 ms  
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2020-04-16 21:05:12  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 131.903 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.10 Mbit/s
95th percentile per-packet one-way delay: 131.903 ms
Loss rate: 0.00%
Run 5: Report of Muses_DocumentTreeR0 — Data Link

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

- **Flow 1 ingress (mean 0.10 Mbit/s)**
- **Flow 1 egress (mean 0.10 Mbit/s)**

![Graph 2: Percentile over Time (ms)](image)

- **Flow 1 (95th percentile 131.90 ms)**
Run 1: Statistics of PCC-Allegro

Start at: 2020-04-16 16:30:07
End at: 2020-04-16 16:30:37
Local clock offset: -0.074 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2020-04-16 21:09:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 436.10 Mbit/s
95th percentile per-packet one-way delay: 250.723 ms
Loss rate: 2.97%
-- Flow 1:
Average throughput: 436.10 Mbit/s
95th percentile per-packet one-way delay: 250.723 ms
Loss rate: 2.97%
Run 1: Report of PCC-Allegro — Data Link

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

*Legend: Flow 1 ingress (mean 449.46 Mbit/s) — Flow 1 egress (mean 436.10 Mbit/s)*

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

*Legend: Flow 1 (95th percentile 250.72 ms)*
Run 2: Statistics of PCC-Allegro

Start at: 2020-04-16 17:07:42
End at: 2020-04-16 17:08:12
Local clock offset: -0.107 ms
Remote clock offset: -0.207 ms

# Below is generated by plot.py at 2020-04-16 21:09:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 412.97 Mbit/s
95th percentile per-packet one-way delay: 257.564 ms
Loss rate: 4.92%
-- Flow 1:
Average throughput: 412.97 Mbit/s
95th percentile per-packet one-way delay: 257.564 ms
Loss rate: 4.92%
Run 2: Report of PCC-Allegro — Data Link

![Graph 1](image1.jpg)

**Legend:**
- Flow 1 ingress (mean 434.30 Mbit/s)
- Flow 1 egress (mean 412.97 Mbit/s)

![Graph 2](image2.jpg)

**Legend:**
- Flow 1 (95th percentile 257.56 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2020-04-16 17:43:28
End at: 2020-04-16 17:43:58
Local clock offset: -0.133 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2020-04-16 21:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 424.22 Mbit/s
95th percentile per-packet one-way delay: 254.461 ms
Loss rate: 3.07%
-- Flow 1:
Average throughput: 424.22 Mbit/s
95th percentile per-packet one-way delay: 254.461 ms
Loss rate: 3.07%
Run 3: Report of PCC-Allegro — Data Link

![Graph of data link throughput and delay over time]

- Flow 1 ingress (mean 437.64 Mbit/s)
- Flow 1 egress (mean 424.22 Mbit/s)

*Flow 1 (95th percentile 254.46 ms)*
Run 4: Statistics of PCC-Allegro

Start at: 2020-04-16 18:19:52
End at: 2020-04-16 18:20:23
Local clock offset: 0.267 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2020-04-16 21:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 235.59 Mbit/s
95th percentile per-packet one-way delay: 256.126 ms
Loss rate: 6.24%
-- Flow 1:
Average throughput: 235.59 Mbit/s
95th percentile per-packet one-way delay: 256.126 ms
Loss rate: 6.24%
Run 4: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 251.25 Mbit/s)**
- **Flow 1 egress (mean 235.59 Mbit/s)**

![Graph of packet delay over time.]

- **Flow 1 (95th percentile 256.13 ms)**
Run 5: Statistics of PCC-Allegro

Start at: 2020-04-16 18:56:28
End at: 2020-04-16 18:56:58
Local clock offset: ~0.03 ms
Remote clock offset: ~0.09 ms

# Below is generated by plot.py at 2020-04-16 21:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 437.70 Mbit/s
95th percentile per-packet one-way delay: 234.193 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 437.70 Mbit/s
95th percentile per-packet one-way delay: 234.193 ms
Loss rate: 1.17%
Run 5: Report of PCC-Allegro — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 442.90 Mbps)
- Flow 1 egress (mean 437.70 Mbps)

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

- Flow 1 (95th percentile 234.19 ms)
Run 1: Statistics of PCC-Expr

Start at: 2020-04-16 16:50:56
End at: 2020-04-16 16:51:26
Local clock offset: -0.128 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2020-04-16 21:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 329.02 Mbit/s
95th percentile per-packet one-way delay: 208.524 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 329.02 Mbit/s
95th percentile per-packet one-way delay: 208.524 ms
Loss rate: 1.06%
Run 1: Report of PCC-Expr — Data Link

---

Graph 1: Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 331.96 Mbps)
- Flow 1 egress (mean 329.02 Mbps)

Graph 2: Per-packet one-way delay (ms) vs. Time (s)

- Flow 1 (95th percentile 208.52 ms)
Run 2: Statistics of PCC-Expr

Start at: 2020-04-16 17:28:31
End at: 2020-04-16 17:29:01
Local clock offset: -0.084 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2020-04-16 21:18:36
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 345.41 Mbit/s
  95th percentile per-packet one-way delay: 199.021 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 345.41 Mbit/s
  95th percentile per-packet one-way delay: 199.021 ms
  Loss rate: 0.13%
Run 2: Report of PCC-Expr — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 345.85 Mbps)  Flow 1 egress (mean 345.41 Mbps)

Per packet one way delay (ms)

Flow 1 (95th percentile 199.02 ms)
Run 3: Statistics of PCC-Expr

Start at: 2020-04-16 18:04:42
End at: 2020-04-16 18:05:12
Local clock offset: -0.103 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2020-04-16 21:18:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 345.29 Mbit/s
95th percentile per-packet one-way delay: 217.170 ms
Loss rate: 1.75%
-- Flow 1:
Average throughput: 345.29 Mbit/s
95th percentile per-packet one-way delay: 217.170 ms
Loss rate: 1.75%
Run 3: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 351.42 Mbps)**
- **Flow 1 egress (mean 345.29 Mbps)**

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

- **Flow 1 (95th percentile 217.17 ms)**
Run 4: Statistics of PCC-Expr

Start at: 2020-04-16 18:40:30
End at: 2020-04-16 18:41:00
Local clock offset: -0.097 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2020-04-16 21:18:36
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 221.20 Mbit/s
  95th percentile per-packet one-way delay: 210.319 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 221.20 Mbit/s
  95th percentile per-packet one-way delay: 210.319 ms
  Loss rate: 0.37%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2020-04-16 19:16:38
End at: 2020-04-16 19:17:08
Local clock offset: 0.012 ms
Remote clock offset: 0.229 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 330.35 Mbit/s
95th percentile per-packet one-way delay: 247.737 ms
Loss rate: 3.79%
-- Flow 1:
Average throughput: 330.35 Mbit/s
95th percentile per-packet one-way delay: 247.737 ms
Loss rate: 3.79%
Run 5: Report of PCC-Expr — Data Link

![Graph showing network performance metrics](image1)

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![Graph showing packet delay metrics](image2)

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Run 1: Statistics of QUIC Cubic

Start at: 2020-04-16 17:01:16
End at: 2020-04-16 17:01:46
Local clock offset: -0.161 ms
Remote clock offset: -0.171 ms
Run 1: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 0.01 Mbps)
- Flow 1 egress (mean 0.01 Mbps)

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

- Flow 1 (95th percentile 132.45 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2020-04-16 17:38:05
End at: 2020-04-16 17:38:35
Local clock offset: -0.123 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.67 Mbit/s
95th percentile per-packet one-way delay: 134.139 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.67 Mbit/s
95th percentile per-packet one-way delay: 134.139 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2020-04-16 18:14:32
End at: 2020-04-16 18:15:02
Local clock offset: -0.072 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 130.975 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 50.13 Mbit/s
95th percentile per-packet one-way delay: 130.975 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 50.13 Mbit/s)
- Flow 1 egress (mean 50.13 Mbit/s)

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

- Flow 1 (95th percentile: 130.97 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2020-04-16 18:50:28
End at: 2020-04-16 18:50:58
Local clock offset: -0.102 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 131.051 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 56.67 Mbit/s
95th percentile per-packet one-way delay: 131.051 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2020-04-16 19:25:48
End at: 2020-04-16 19:26:18
Local clock offset: 0.006 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.21 Mbit/s
95th percentile per-packet one-way delay: 135.358 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 62.21 Mbit/s
95th percentile per-packet one-way delay: 135.358 ms
Loss rate: 0.01%
Run 5: Report of QUIC Cubic — Data Link

![Graph 1](Image)

![Graph 2](Image)

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Run 1: Statistics of SCReAM

Start at: 2020-04-16 16:40:12
End at: 2020-04-16 16:40:42
Local clock offset: -0.415 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.855 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 131.855 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Data Link Chart]

![Per-packet one-way delay Chart]

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Run 2: Statistics of SCReAM

Start at: 2020-04-16 17:17:36
End at: 2020-04-16 17:18:06
Local clock offset: -0.101 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 135.320 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 135.320 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

![Graphs showing throughput and packet delivery time](image-url)
Run 3: Statistics of SCReAM

Start at: 2020-04-16 17:53:55  
End at: 2020-04-16 17:54:25  
Local clock offset: -0.116 ms  
Remote clock offset: 0.289 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 134.596 ms  
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.15 Mbit/s  
95th percentile per-packet one-way delay: 134.596 ms  
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2020-04-16 18:29:42
End at: 2020-04-16 18:30:12
Local clock offset: -0.119 ms
Remote clock offset: 0.338 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 131.560 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 131.560 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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**Throughput (Mbps)**

![Throughput Graph](image1)

**Flow 1 ingress (mean 0.14 Mbit/s)**

**Flow 1 egress (mean 0.14 Mbit/s)**

---

**Packet one way delay (ms)**

![Delay Graph](image2)

**Flow 1 (95th percentile 131.56 ms)**

---

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Run 5: Statistics of SCReAM

Start at: 2020-04-16 19:05:54
End at: 2020-04-16 19:06:24
Local clock offset: -0.047 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 132.408 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 132.408 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 1: Statistics of Sprout

Start at: 2020-04-16 16:39:02
End at: 2020-04-16 16:39:32
Local clock offset: 0.226 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 130.776 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 130.776 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 0.64 Mbps)**
- **Flow 1 egress (mean 0.64 Mbps)**

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

- **Flow 1 (95th percentile 130.78 ms)**

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Run 2: Statistics of Sprout

Start at: 2020-04-16 17:16:26
End at: 2020-04-16 17:16:56
Local clock offset: -0.147 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
    Average throughput: 0.59 Mbit/s
    95th percentile per-packet one-way delay: 134.542 ms
    Loss rate: 0.00%
-- Flow 1:
    Average throughput: 0.59 Mbit/s
    95th percentile per-packet one-way delay: 134.542 ms
    Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.59 Mbit/s)
- Flow 1 egress (mean 0.59 Mbit/s)

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

- Flow 1 (90th percentile 134.54 ms)
Run 3: Statistics of Sprout

Start at: 2020-04-16 17:52:44
End at: 2020-04-16 17:53:14
Local clock offset: -0.141 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 135.662 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 135.662 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 0.64 Mbit/s)  Flow 1 egress (mean 0.64 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (90th percentile 135.66 ms)
Run 4: Statistics of Sprout

Start at: 2020-04-16 18:28:31
End at: 2020-04-16 18:29:01
Local clock offset: -0.079 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 130.404 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.61 Mbit/s
95th percentile per-packet one-way delay: 130.404 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 0.61 Mbit/s)
- Flow 1 egress (mean 0.61 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 130.40 ms)
Run 5: Statistics of Sprout

Start at: 2020-04-16 19:04:43
End at: 2020-04-16 19:05:13
Local clock offset: -0.073 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.68 Mbit/s
  95th percentile per-packet one-way delay: 132.543 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.68 Mbit/s
  95th percentile per-packet one-way delay: 132.543 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

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

Throughput (Mbps)

Flow 1 ingress (mean 0.68 Mbit/s) — Flow 1 egress (mean 0.68 Mbit/s)

Packet delay (ms)

Flow 1 (90th percentile 132.34 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2020-04-16 16:52:41
End at: 2020-04-16 16:53:11
Local clock offset: -0.127 ms
Remote clock offset: -0.165 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 189.69 Mbit/s
95th percentile per-packet one-way delay: 135.480 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.69 Mbit/s
95th percentile per-packet one-way delay: 135.480 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2020-04-16 17:30:17
End at: 2020-04-16 17:30:47
Local clock offset: -0.146 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2020-04-16 21:22:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.58 Mbit/s
95th percentile per-packet one-way delay: 135.854 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 190.58 Mbit/s
95th percentile per-packet one-way delay: 135.854 ms
Loss rate: 0.01%
Run 2: Report of TaoVA-100x — Data Link

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

**Flow 1 ingress** (mean 190.58 Mbit/s)  **Flow 1 egress** (mean 190.58 Mbit/s)

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

**Flow 1** (95th percentile 135.85 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2020-04-16 18:06:28  
End at: 2020-04-16 18:06:58  
Local clock offset: -0.073 ms  
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2020-04-16 21:22:19  
# Datalink statistics
  -- Total of 1 flow:
    Average throughput: 185.23 Mbit/s
    95th percentile per-packet one-way delay: 131.695 ms
    Loss rate: 0.00%
  -- Flow 1:
    Average throughput: 185.23 Mbit/s
    95th percentile per-packet one-way delay: 131.695 ms
    Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 185.22 Mbit/s)**
- **Flow 1 egress (mean 185.23 Mbit/s)**

![Graph 2: Per Packet One Way Delay (ms)](image2)

- **Flow 1 (95th percentile 131.69 ms)**

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Run 4: Statistics of TaoVA-100x

Start at: 2020-04-16 18:42:04
End at: 2020-04-16 18:42:34
Local clock offset: -0.086 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2020-04-16 21:22:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.36 Mbit/s
95th percentile per-packet one-way delay: 130.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.36 Mbit/s
95th percentile per-packet one-way delay: 130.609 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 193.35 Mbit/s)
- Flow 1 egress (mean 193.36 Mbit/s)

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

- Flow 1 (95th percentile 130.61 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2020-04-16 19:18:23
End at: 2020-04-16 19:18:53
Local clock offset: 0.352 ms
Remote clock offset: -0.127 ms

# Below is generated by plot.py at 2020-04-16 21:23:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.88 Mbit/s
95th percentile per-packet one-way delay: 132.343 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 191.88 Mbit/s
95th percentile per-packet one-way delay: 132.343 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 191.87 Mbit/s)
- Flow 1 egress (mean 191.88 Mbit/s)

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

- Flow 1 (95th percentile 132.34 ms)
Run 1: Statistics of TCP Vegas

Start at: 2020-04-16 16:57:51
End at: 2020-04-16 16:58:21
Local clock offset: -0.088 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2020-04-16 21:28:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 550.85 Mbit/s
95th percentile per-packet one-way delay: 167.638 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 550.85 Mbit/s
95th percentile per-packet one-way delay: 167.638 ms
Loss rate: 0.06%
Run 1: Report of TCP Vegas — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 551.17 Mbit/s)
- Flow 1 egress (mean 550.85 Mbit/s)

![Delay Graph](image)

- Flow 1 (95th percentile 167.64 ms)
Run 2: Statistics of TCP Vegas

Start at: 2020-04-16 17:34:51
End at: 2020-04-16 17:35:21
Local clock offset: -0.146 ms
Remote clock offset: -0.465 ms

# Below is generated by plot.py at 2020-04-16 21:28:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.66 Mbit/s
95th percentile per-packet one-way delay: 173.653 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 332.66 Mbit/s
95th percentile per-packet one-way delay: 173.653 ms
Loss rate: 1.38%
Run 2: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 337.29 Mbit/s)**
- **Flow 1 egress (mean 332.66 Mbit/s)**

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

- **Flow 1 (95th percentile 173.65 ms)**
Run 3: Statistics of TCP Vegas

Start at: 2020-04-16 18:11:10
End at: 2020-04-16 18:11:40
Local clock offset: -0.032 ms
Remote clock offset: -0.135 ms

# Below is generated by plot.py at 2020-04-16 21:29:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 479.46 Mbit/s
95th percentile per-packet one-way delay: 156.125 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 479.46 Mbit/s
95th percentile per-packet one-way delay: 156.125 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2020-04-16 18:47:16
End at: 2020-04-16 18:47:46
Local clock offset: -0.117 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2020-04-16 21:29:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 269.65 Mbit/s
95th percentile per-packet one-way delay: 134.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 269.65 Mbit/s
95th percentile per-packet one-way delay: 134.873 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 269.65 Mbit/s)**
- **Flow 1 egress (mean 269.65 Mbit/s)**

![Graph 2: Packet Delay vs Time]

- **Flow 1 (95th percentile 134.87 ms)**
Run 5: Statistics of TCP Vegas

Start at: 2020-04-16 19:22:30
End at: 2020-04-16 19:23:00
Local clock offset: 0.345 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2020-04-16 21:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 443.15 Mbit/s
95th percentile per-packet one-way delay: 154.969 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 443.15 Mbit/s
95th percentile per-packet one-way delay: 154.969 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link

![Throughput Graph](image)

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

- Flow 1 ingress (mean 443.14 Mbit/s)
- Flow 1 egress (mean 443.15 Mbit/s)

- Flow 1 (95th percentile 154.97 ms)
Run 1: Statistics of Verus

Start at: 2020-04-16 16:36:31
End at: 2020-04-16 16:37:01
Local clock offset: -0.1 ms
Remote clock offset: -0.43 ms

# Below is generated by plot.py at 2020-04-16 21:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.11 Mbit/s
95th percentile per-packet one-way delay: 153.525 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.11 Mbit/s
95th percentile per-packet one-way delay: 153.525 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

[Graphs showing data link performance metrics, including throughput and packet delay over time.]

Flow 1 ingress (mean 85.11 Mbit/s) and Flow 1 egress (mean 85.11 Mbit/s) for throughput. Flow 1 (95th percentile 153.53 ms) for packet delay.
Run 2: Statistics of Verus

Start at: 2020-04-16 17:13:58
End at: 2020-04-16 17:14:28
Local clock offset: -0.093 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2020-04-16 21:29:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 191.668 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.17 Mbit/s
95th percentile per-packet one-way delay: 191.668 ms
Loss rate: 0.00%
Run 2: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 53.23 Mbps)  Flow 1 egress (mean 53.17 Mbps)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 191.67 ms)
Run 3: Statistics of Verus

Start at: 2020-04-16 17:49:58
End at: 2020-04-16 17:50:28
Local clock offset: -0.059 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2020-04-16 21:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.59 Mbit/s
95th percentile per-packet one-way delay: 256.598 ms
Loss rate: 2.60%
-- Flow 1:
Average throughput: 224.59 Mbit/s
95th percentile per-packet one-way delay: 256.598 ms
Loss rate: 2.60%
Run 3: Report of Verus — Data Link

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Flow 1 ingress (mean 230.87 Mbit/s)  
Flow 1 egress (mean 224.59 Mbit/s)
Run 4: Statistics of Verus

Start at: 2020-04-16 18:26:04
End at: 2020-04-16 18:26:34
Local clock offset: 0.26 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2020-04-16 21:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.75 Mbit/s
95th percentile per-packet one-way delay: 136.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 44.75 Mbit/s
95th percentile per-packet one-way delay: 136.679 ms
Loss rate: 0.00%
Run 4: Report of Verus — Data Link

![Throughput and Delay Graphs]

- Flow 1 ingress (mean 44.77 Mbit/s)
- Flow 1 egress (mean 44.75 Mbit/s)

Flow 1 (95th percentile 136.68 ms)
Run 5: Statistics of Verus

Start at: 2020-04-16 19:02:07
End at: 2020-04-16 19:02:37
Local clock offset: 0.297 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2020-04-16 21:31:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 140.15 Mbit/s
95th percentile per-packet one-way delay: 282.313 ms
Loss rate: 12.93%
-- Flow 1:
Average throughput: 140.15 Mbit/s
95th percentile per-packet one-way delay: 282.313 ms
Loss rate: 12.93%
Run 5: Report of Verus — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 161.63 Mbps)
- Flow 1 egress (mean 140.15 Mbps)

Graph 2: Per packet one-way delay (ms)
- Flow 1 (95th percentile 282.31 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2020-04-16 16:45:55
End at: 2020-04-16 16:46:25
Local clock offset: -0.148 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2020-04-16 21:32:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 344.83 Mbit/s
95th percentile per-packet one-way delay: 133.715 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 344.83 Mbit/s
95th percentile per-packet one-way delay: 133.715 ms
Loss rate: 0.18%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing network performance metrics over time.]

- Flow 1 ingress (mean 345.44 Mbit/s)
- Flow 1 egress (mean 344.83 Mbit/s)

![Graph showing packet delay over time.]

- Flow 1 (95th percentile 133.72 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2020-04-16 17:23:25
End at: 2020-04-16 17:23:55
Local clock offset: -0.121 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2020-04-16 21:32:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 386.89 Mbit/s
95th percentile per-packet one-way delay: 153.738 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 386.89 Mbit/s
95th percentile per-packet one-way delay: 153.738 ms
Loss rate: 0.22%
Run 2: Report of PCC-Vivace — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 387.73 Mbit/s)
- Flow 1 egress (mean 386.89 Mbit/s)

![Graph 2](image2.png)

- Flow 1 (95th percentile 153.74 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2020-04-16 17:59:40
End at: 2020-04-16 18:00:10
Local clock offset: -0.056 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2020-04-16 21:32:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 343.46 Mbit/s
95th percentile per-packet one-way delay: 288.394 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 343.46 Mbit/s
95th percentile per-packet one-way delay: 288.394 ms
Loss rate: 1.61%
Run 3: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress](image)

- Flow 1 ingress (mean 349.08 Mbit/s)
- Flow 1 egress (mean 343.46 Mbit/s)

![Graph showing packet delay over time for Flow 1](image)

- Flow 1 (95th percentile 288.39 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2020-04-16 18:35:26
End at: 2020-04-16 18:35:56
Local clock offset: -0.118 ms
Remote clock offset: 0.371 ms

# Below is generated by plot.py at 2020-04-16 21:32:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 364.15 Mbit/s
95th percentile per-packet one-way delay: 144.561 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 364.15 Mbit/s
95th percentile per-packet one-way delay: 144.561 ms
Loss rate: 0.09%
Run 4: Report of PCC-Vivace — Data Link

![Graph of Network Performance](image)

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 364.48 Mbit/s)
- **Flow 1 egress** (mean 364.13 Mbit/s)

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

- **Flow 1** (95th percentile 144.56 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2020-04-16 19:11:38
End at: 2020-04-16 19:12:08
Local clock offset: -0.036 ms
Remote clock offset: -0.521 ms

# Below is generated by plot.py at 2020-04-16 21:32:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 317.52 Mbit/s
95th percentile per-packet one-way delay: 139.004 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 317.52 Mbit/s
95th percentile per-packet one-way delay: 139.004 ms
Loss rate: 0.11%
Run 5: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 317.85 Mbit/s)**
- **Flow 1 egress (mean 317.52 Mbit/s)**

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

- **Flow 1 (95th percentile 139.00 ms)**

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Run 1: Statistics of WebRTC media

Start at: 2020-04-16 16:37:51
End at: 2020-04-16 16:38:21
Local clock offset: -0.129 ms
Remote clock offset: -0.045 ms
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2020-04-16 17:15:15
End at: 2020-04-16 17:15:45
Local clock offset: 0.246 ms
Remote clock offset: -0.165 ms
Run 2: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.74 Mbit/s)
- Flow 1 egress (mean 0.74 Mbit/s)

![Graph showing one-way delay over time](image)

- Flow 1 (95th percentile 135.02 ms)
Run 3: Statistics of WebRTC media

Start at: 2020-04-16 17:51:34
End at: 2020-04-16 17:52:04
Local clock offset: -0.098 ms
Remote clock offset: -0.077 ms
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2020-04-16 18:27:21
End at: 2020-04-16 18:27:51
Local clock offset: -0.06 ms
Remote clock offset: -0.02 ms
Run 4: Report of WebRTC media — Data Link

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

Flow 1 ingress (mean 0.34 Mbit/s) vs Flow 1 egress (mean 0.34 Mbit/s)

[Second graph showing packet delay with a 95th percentile of 132.16 ms]
Run 5: Statistics of WebRTC media

Start at: 2020-04-16 19:03:33
End at: 2020-04-16 19:04:03
Local clock offset: -0.081 ms
Remote clock offset: -0.515 ms