Pantheon Report

Generated at 2019-07-18 20:41:02 (UTC).
Data path: GCE Iowa on ens4 (remote) → GCE London on ens4 (local).
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 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfafdf722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babcd2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdfe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc44e0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtrees @ 387225f7b5f61ddbe924708a8869fffbb84eb3200
third_party/pantheon-tunnel @ f686d3f58d27af942717625ee3a354cc2e802bd
third_party/pcc @ 1af9c958fa0d66d18b623c091a55f8c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac0d08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cffe2
third_party/scream-reproduce @ f099118d421aa3131bf11ff19649794e1da3dbdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Iowa 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>527.74</td>
<td>148.82</td>
<td>0.74</td>
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<tr>
<td>Copa</td>
<td>5</td>
<td>296.13</td>
<td>57.14</td>
<td>0.32</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>516.86</td>
<td>92.20</td>
<td>0.36</td>
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<tr>
<td>FillP</td>
<td>5</td>
<td>854.41</td>
<td>92.77</td>
<td>0.50</td>
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<tr>
<td>FillP-Sheep</td>
<td>5</td>
<td>848.71</td>
<td>84.54</td>
<td>0.51</td>
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<tr>
<td>Indigo</td>
<td>4</td>
<td>229.88</td>
<td>48.46</td>
<td>0.34</td>
</tr>
<tr>
<td>Indigo-MusesC3</td>
<td>5</td>
<td>578.91</td>
<td>66.54</td>
<td>0.38</td>
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<td>597.00</td>
<td>72.37</td>
<td>0.41</td>
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<td>Indigo-MusesD</td>
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<td>0.43</td>
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<td>615.60</td>
<td>105.82</td>
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<td>LEDBAT</td>
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<td>40.63</td>
<td>48.73</td>
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<td>Muses_DecisionTree</td>
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<td>0.34</td>
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<tr>
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<td>118.18</td>
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<td>60.85</td>
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<td>PCC-Allegro</td>
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<td>PCC-Expr</td>
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<td>291.05</td>
<td>113.32</td>
<td>1.03</td>
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<td>64.34</td>
<td>46.81</td>
<td>0.52</td>
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<td>SCReAM</td>
<td>5</td>
<td>0.22</td>
<td>47.86</td>
<td>0.31</td>
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<tr>
<td>Sprout</td>
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<td>9.61</td>
<td>47.67</td>
<td>0.35</td>
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<td>TaoVA-100x</td>
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<td>247.97</td>
<td>48.18</td>
<td>0.32</td>
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<tr>
<td>TCP Vegas</td>
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<td>57.30</td>
<td>0.24</td>
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<td>Verus</td>
<td>5</td>
<td>166.03</td>
<td>151.09</td>
<td>2.41</td>
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<tr>
<td>PCC-Vivace</td>
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<td>50.17</td>
<td>0.55</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>4</td>
<td>0.05</td>
<td>47.31</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Local clock offset: -0.077 ms
Remote clock offset: -0.204 ms

# Below is generated by plot.py at 2019-07-18 18:56:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 504.02 Mbit/s
95th percentile per-packet one-way delay: 149.710 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 504.02 Mbit/s
95th percentile per-packet one-way delay: 149.710 ms
Loss rate: 0.85%
Run 1: Report of TCP BBR — Data Link

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**Graph 1:**
Throughput in Mbps over time.

- **Flow 1 ingress** (mean 506.74 Mbps): Dashed line.
- **Flow 1 egress** (mean 504.02 Mbps): Solid line.

**Graph 2:**
Packet round trip delay in ms over time.

- **Flow 1** (95th percentile 149.71 ms): Blue line.

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6
Run 2: Statistics of TCP BBR

End at: 2019-07-18 16:22:49
Local clock offset: -0.043 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-07-18 18:56:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 525.96 Mbit/s
95th percentile per-packet one-way delay: 150.608 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 525.96 Mbit/s
95th percentile per-packet one-way delay: 150.608 ms
Loss rate: 0.88%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 528.94 Mbit/s)
- Flow 1 egress (mean 525.96 Mbit/s)

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

- Flow 1 (95th percentile 150.61 ms)
Run 3: Statistics of TCP BBR

Start at: 2019-07-18 16:57:00
End at: 2019-07-18 16:57:30
Local clock offset: -0.206 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2019-07-18 18:56:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 540.61 Mbit/s
95th percentile per-packet one-way delay: 150.505 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 540.61 Mbit/s
95th percentile per-packet one-way delay: 150.505 ms
Loss rate: 0.38%
Run 3: Report of TCP BBR — Data Link

![Graph of throughput and delay over time for Run 3 with TCP BBR.](image-url)
Run 4: Statistics of TCP BBR

Start at: 2019-07-18 17:31:31
End at: 2019-07-18 17:32:01
Local clock offset: -0.13 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-07-18 18:56:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 546.14 Mbit/s
95th percentile per-packet one-way delay: 144.714 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 546.14 Mbit/s
95th percentile per-packet one-way delay: 144.714 ms
Loss rate: 0.54%
Run 5: Statistics of TCP BBR

Start at: 2019-07-18 18:06:19
End at: 2019-07-18 18:06:49
Local clock offset: -0.153 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2019-07-18 18:56:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 521.95 Mbit/s
95th percentile per-packet one-way delay: 148.579 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 521.95 Mbit/s
95th percentile per-packet one-way delay: 148.579 ms
Loss rate: 1.05%
Run 5: Report of TCP BBR — Data Link

![Graph of Throughput](image1)

- Flow 1 ingress (mean 525.79 Mbit/s)
- Flow 1 egress (mean 521.95 Mbit/s)

![Graph of Per Packet One Way Delay](image2)

- Flow 1 (95th percentile 148.58 ms)
Run 1: Statistics of Copa

End at: 2019-07-18 15:42:52
Local clock offset: -0.096 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2019-07-18 18:56:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 299.33 Mbit/s
95th percentile per-packet one-way delay: 59.875 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 299.33 Mbit/s
95th percentile per-packet one-way delay: 59.875 ms
Loss rate: 0.34%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2019-07-18 16:16:34
End at: 2019-07-18 16:17:04
Local clock offset: -0.047 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2019-07-18 18:57:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.36 Mbit/s
95th percentile per-packet one-way delay: 59.324 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 319.36 Mbit/s
95th percentile per-packet one-way delay: 59.324 ms
Loss rate: 0.30%
Run 2: Report of Copa — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 319.32 Mbit/s)
- Flow 1 egress (mean 319.36 Mbit/s)

![Graph 2: Packet Drop Rate vs Time]

- Flow 1 (95th percentile 59.32 ms)
Run 3: Statistics of Copa

Start at: 2019-07-18 16:51:22
End at: 2019-07-18 16:51:52
Local clock offset: -0.201 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2019-07-18 18:57:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 299.04 Mbit/s
95th percentile per-packet one-way delay: 53.855 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 299.04 Mbit/s
95th percentile per-packet one-way delay: 53.855 ms
Loss rate: 0.33%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2019-07-18 17:25:50
End at: 2019-07-18 17:26:20
Local clock offset: -0.133 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-07-18 19:04:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.16 Mbit/s
95th percentile per-packet one-way delay: 55.684 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 290.16 Mbit/s
95th percentile per-packet one-way delay: 55.684 ms
Loss rate: 0.26%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 290.00 Mbit/s)
- Flow 1 egress (mean 290.16 Mbit/s)

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

- Flow 1 (95th percentile 55.68 ms)
Run 5: Statistics of Copa

Start at: 2019-07-18 18:00:38
End at: 2019-07-18 18:01:09
Local clock offset: -0.175 ms
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2019-07-18 19:04:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 272.78 Mbit/s
95th percentile per-packet one-way delay: 56.942 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 272.78 Mbit/s
95th percentile per-packet one-way delay: 56.942 ms
Loss rate: 0.36%
Run 5: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

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

Flow 1 ingress (mean 272.91 Mbps)
Flow 1 egress (mean 272.78 Mbps)

Flow 1 (95th percentile 56.94 ms)
Run 1: Statistics of TCP Cubic

End at: 2019-07-18 15:58:17
Local clock offset: -0.043 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-07-18 19:04:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 427.62 Mbit/s
95th percentile per-packet one-way delay: 106.965 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 427.62 Mbit/s
95th percentile per-packet one-way delay: 106.965 ms
Loss rate: 0.37%
Run 1: Report of TCP Cubic — Data Link

![Graph showing network throughput and packet delay over time.](attachment:image.png)
Run 2: Statistics of TCP Cubic

Start at: 2019-07-18 16:32:03
End at: 2019-07-18 16:32:33
Local clock offset: -0.094 ms
Remote clock offset: 0.058 ms

# Below is generated by plot.py at 2019-07-18 19:04:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 503.12 Mbit/s
95th percentile per-packet one-way delay: 68.647 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 503.12 Mbit/s
95th percentile per-packet one-way delay: 68.647 ms
Loss rate: 0.43%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2019-07-18 17:06:47
End at: 2019-07-18 17:07:17
Local clock offset: -0.162 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-07-18 19:05:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 561.27 Mbit/s
95th percentile per-packet one-way delay: 121.993 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 561.27 Mbit/s
95th percentile per-packet one-way delay: 121.993 ms
Loss rate: 0.36%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2019-07-18 17:41:21
End at: 2019-07-18 17:41:51
Local clock offset: -0.113 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2019-07-18 19:05:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 554.31 Mbit/s
95th percentile per-packet one-way delay: 67.632 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 554.31 Mbit/s
95th percentile per-packet one-way delay: 67.632 ms
Loss rate: 0.30%
Run 4: Report of TCP Cubic — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 554.21 Mbit/s)**
- **Flow 1 egress (mean 554.31 Mbit/s)**

![Graph of Packet Delay vs Time](image2)

- **Flow 1 (95th percentile 67.83 ms)**
Run 5: Statistics of TCP Cubic

Start at: 2019-07-18 18:16:20
End at: 2019-07-18 18:16:50
Local clock offset: -0.468 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2019-07-18 19:05:43
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 537.98 Mbit/s
  95th percentile per-packet one-way delay: 95.759 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 537.98 Mbit/s
  95th percentile per-packet one-way delay: 95.759 ms
  Loss rate: 0.35%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 538.19 Mbit/s)
- Flow 1 egress (mean 537.98 Mbit/s)

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

- Flow 1 (95th percentile 95.76 ms)
Run 1: Statistics of FillP

Start at: 2019-07-18 16:09:25
End at: 2019-07-18 16:09:55
Local clock offset: -0.042 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2019-07-18 19:12:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 863.40 Mbit/s
95th percentile per-packet one-way delay: 87.017 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 863.40 Mbit/s
95th percentile per-packet one-way delay: 87.017 ms
Loss rate: 0.26%
Run 1: Report of FillP — Data Link

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

- Flow 1 ingress (mean 862.89 Mbit/s)
- Flow 1 egress (mean 863.40 Mbit/s)

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

- Flow 1 (95th percentile 87.02 ms)
Run 2: Statistics of FillP

Start at: 2019-07-18 16:44:16
End at: 2019-07-18 16:44:46
Local clock offset: -0.162 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2019-07-18 19:21:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 872.30 Mbit/s
95th percentile per-packet one-way delay: 106.396 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 872.30 Mbit/s
95th percentile per-packet one-way delay: 106.396 ms
Loss rate: 0.74%
Run 2: Report of FillP — Data Link

![Throughput Graph](image1)

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

- Flow 1 ingress (mean 876.04 Mbit/s)
- Flow 1 egress (mean 872.30 Mbit/s)

Flow 1 (95th percentile 106.40 ms)
Run 3: Statistics of FillP

Start at: 2019-07-18 17:18:42
End at: 2019-07-18 17:19:12
Local clock offset: -0.086 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-07-18 19:22:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 861.82 Mbit/s
95th percentile per-packet one-way delay: 78.472 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 861.82 Mbit/s
95th percentile per-packet one-way delay: 78.472 ms
Loss rate: 0.43%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2019-07-18 17:53:32  
End at: 2019-07-18 17:54:02  
Local clock offset: 0.241 ms  
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-07-18 19:22:07  
# Datalink statistics  
-- Total of 1 flow:
Average throughput: 803.65 Mbit/s  
95th percentile per-packet one-way delay: 87.104 ms  
Loss rate: 0.56%

-- Flow 1:
Average throughput: 803.65 Mbit/s  
95th percentile per-packet one-way delay: 87.104 ms  
Loss rate: 0.56%
Run 4: Report of FillP — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 Ingress** (mean 805.60 Mb/s)
- **Flow 1 Egress** (mean 803.65 Mb/s)

![Graph 2: Per-Socket One-Way Delay vs Time]

- **Flow 1** (95th percentile 87.10 ms)
Run 5: Statistics of FillP

End at: 2019-07-18 18:28:59
Local clock offset: ~0.036 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2019-07-18 19:22:33
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 870.89 Mbit/s
  95th percentile per-packet one-way delay: 104.883 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 870.89 Mbit/s
  95th percentile per-packet one-way delay: 104.883 ms
  Loss rate: 0.53%
Run 5: Report of FillP — Data Link

Run 5: Report of FillP — Data Link

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**Throughput (Mbps)**

```
<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Throughput</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
<td>5</td>
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</tr>
<tr>
<td>10</td>
<td>700</td>
</tr>
<tr>
<td>15</td>
<td>600</td>
</tr>
<tr>
<td>20</td>
<td>500</td>
</tr>
<tr>
<td>25</td>
<td>400</td>
</tr>
<tr>
<td>30</td>
<td>300</td>
</tr>
</tbody>
</table>
```

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

```
<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Per-packet delay</th>
</tr>
</thead>
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<td>100</td>
</tr>
<tr>
<td>25</td>
<td>110</td>
</tr>
<tr>
<td>30</td>
<td>120</td>
</tr>
</tbody>
</table>
```

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Legend:
- Flow 1 ingress (mean 872.70 Mbps)
- Flow 1 egress (mean 870.89 Mbps)

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**Flow 1 (95th percentile 104.88 ms)**
Run 1: Statistics of FillP-Sheep

Start at: 2019-07-18 16:00:22
End at: 2019-07-18 16:00:52
Local clock offset: -0.029 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2019-07-18 19:22:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 836.57 Mbit/s
95th percentile per-packet one-way delay: 72.089 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 836.57 Mbit/s
95th percentile per-packet one-way delay: 72.089 ms
Loss rate: 0.39%
Run 1: Report of FillP-Sheep — Data Link

![Graph of network throughput and packet delay over time for Flow 1.](image-url)

- **Throughput (Mb/s)**
  - Y-axis: Throughput in Mb/s, ranging from 0 to 1000.
  - X-axis: Time in seconds, ranging from 0 to 30.

- **Packet Delay (ms)**
  - Y-axis: Packet delay in millisecond, ranging from 0 to 110.
  - X-axis: Time in seconds, ranging from 0 to 30.

Legend:
- **Flow 1 ingress (mean 837.11 Mb/s)**
- **Flow 1 egress (mean 836.57 Mb/s)**
- **Flow 1 (95th percentile 72.09 ms)**
Run 2: Statistics of FillP-Sheep

Start at: 2019-07-18 16:35:03
End at: 2019-07-18 16:35:33
Local clock offset: 0.283 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-07-18 19:23:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 872.72 Mbit/s
95th percentile per-packet one-way delay: 77.644 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 872.72 Mbit/s
95th percentile per-packet one-way delay: 77.644 ms
Loss rate: 0.46%
Run 2: Report of FillP-Sheep — Data Link

![Graph showing throughput over time with labels for Flow 1 ingress and Flow 1 egress.]

![Graph showing per-packet one-way delay over time with label for Flow 1 95th percentile.]
Run 3: Statistics of FillP-Sheep

Start at: 2019-07-18 17:09:49
End at: 2019-07-18 17:10:19
Local clock offset: -0.113 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2019-07-18 19:23:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 850.72 Mbit/s
95th percentile per-packet one-way delay: 84.679 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 850.72 Mbit/s
95th percentile per-packet one-way delay: 84.679 ms
Loss rate: 0.39%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2019-07-18 17:44:23
End at: 2019-07-18 17:44:53
Local clock offset: -0.099 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-07-18 19:32:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 814.37 Mbit/s
95th percentile per-packet one-way delay: 112.455 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 814.37 Mbit/s
95th percentile per-packet one-way delay: 112.455 ms
Loss rate: 0.91%
Run 4: Report of FillP-Sheep — Data Link

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

- **Flow 1 Ingress (mean 819.19 Mbit/s)**
- **Flow 1 Egress (mean 814.37 Mbit/s)**

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

- **Flow 1 (95th percentile 112.45 ms)**
Run 5: Statistics of FillP-Sheep

End at: 2019-07-18 18:19:50
Local clock offset: -0.131 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2019-07-18 19:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 869.15 Mbit/s
95th percentile per-packet one-way delay: 75.826 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 869.15 Mbit/s
95th percentile per-packet one-way delay: 75.826 ms
Loss rate: 0.39%
Run 5: Report of FillP-Sheep — Data Link

[Graph showing network throughput and per-packet round-trip time over time.]
Run 1: Statistics of Indigo

End at: 2019-07-18 15:59:44
Local clock offset: -0.445 ms
Remote clock offset: -0.043 ms
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2019-07-18 16:33:35
End at: 2019-07-18 16:34:05
Local clock offset: -0.107 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-07-18 19:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.27 Mbit/s
95th percentile per-packet one-way delay: 48.362 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 234.27 Mbit/s
95th percentile per-packet one-way delay: 48.362 ms
Loss rate: 0.32%
Run 2: Report of Indigo — Data Link

![Throughput Graph](image1)

- **Flow 1 ingress (mean 2.34.71 Mbit/s)**
- **Flow 1 egress (mean 2.34.27 Mbit/s)**

![Packet Delay Graph](image2)

- **Flow 1 (95th percentile 48.36 ms)**
Run 3: Statistics of Indigo

Start at: 2019-07-18 17:08:21
End at: 2019-07-18 17:08:51
Local clock offset: -0.148 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2019-07-18 19:38:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 234.82 Mbit/s
  95th percentile per-packet one-way delay: 48.578 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 234.82 Mbit/s
  95th percentile per-packet one-way delay: 48.578 ms
  Loss rate: 0.33%
Run 3: Report of Indigo — Data Link

![Graph showing throughput and delay over time]

- **Throughput Graph:**
  - Flow 1 ingress (mean 234.85 Mbit/s)
  - Flow 1 egress (mean 234.82 Mbit/s)

- **Delay Graph:**
  - Flow 1 (95th percentile 48.58 ms)
Run 4: Statistics of Indigo

End at: 2019-07-18 17:43:25
Local clock offset: -0.114 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2019-07-18 19:38:57
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 228.95 Mbit/s
  95th percentile per-packet one-way delay: 48.401 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 228.95 Mbit/s
  95th percentile per-packet one-way delay: 48.401 ms
  Loss rate: 0.36%
Run 4: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 229.03 Mbit/s)
- Flow 1 egress (mean 228.95 Mbit/s)

- Flow 1 (95th percentile 48.40 ms)
Run 5: Statistics of Indigo

Start at: 2019-07-18 18:17:53
End at: 2019-07-18 18:18:23
Local clock offset: -0.078 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-07-18 19:38:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.47 Mbit/s
95th percentile per-packet one-way delay: 48.495 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 221.47 Mbit/s
95th percentile per-packet one-way delay: 48.495 ms
Loss rate: 0.37%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-07-18 16:12:13
End at: 2019-07-18 16:12:43
Local clock offset: -0.434 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2019-07-18 19:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 602.23 Mbit/s
95th percentile per-packet one-way delay: 68.528 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 602.23 Mbit/s
95th percentile per-packet one-way delay: 68.528 ms
Loss rate: 0.40%
Run 1: Report of Indigo-MusesC3 — Data Link

**Throughput (Mbps)**

Time (s)

- Flow 1 ingress (mean 602.59 Mbit/s)
- Flow 1 egress (mean 602.23 Mbit/s)

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

Time (s)

Flow 1 (95th percentile 68.53 ms)
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-07-18 16:47:04
End at: 2019-07-18 16:47:34
Local clock offset: -0.165 ms
Remote clock offset: 0.022 ms

# Below is generated by plot.py at 2019-07-18 19:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 569.95 Mbit/s
95th percentile per-packet one-way delay: 57.055 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 569.95 Mbit/s
95th percentile per-packet one-way delay: 57.055 ms
Loss rate: 0.36%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-07-18 17:21:31
End at: 2019-07-18 17:22:01
Local clock offset: 0.256 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-07-18 19:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.13 Mbit/s
95th percentile per-packet one-way delay: 64.698 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 571.13 Mbit/s
95th percentile per-packet one-way delay: 64.698 ms
Loss rate: 0.39%
Run 3: Report of Indigo-MusesC3 — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 571.41 Mb/s)
- Flow 1 egress (mean 571.13 Mb/s)

---

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

- Flow 1 (95th percentile 64.70 ms)
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-07-18 17:56:18
End at: 2019-07-18 17:56:49
Local clock offset: -0.149 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-07-18 19:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.77 Mbit/s
95th percentile per-packet one-way delay: 62.013 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 571.77 Mbit/s
95th percentile per-packet one-way delay: 62.013 ms
Loss rate: 0.38%
Run 4: Report of Indigo-MusesC3 — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 571.99 Mbit/s)  Flow 1 egress (mean 571.77 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 62.01 ms)
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-07-18 18:31:19
End at: 2019-07-18 18:31:49
Local clock offset: -0.08 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-07-18 19:38:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 579.45 Mbit/s
95th percentile per-packet one-way delay: 80.426 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 579.45 Mbit/s
95th percentile per-packet one-way delay: 80.426 ms
Loss rate: 0.39%
Run 5: Report of Indigo-MusesC3 — Data Link

![Throughput Graph]

![Packet Delay Graph]

Flow 1 ingress (mean 579.73 Mbit/s) — Flow 1 egress (mean 579.45 Mbit/s)

Flow 1 (95th percentile 80.43 ms)
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-07-18 16:04:58
End at: 2019-07-18 16:05:28
Local clock offset: -0.023 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2019-07-18 19:39:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 618.01 Mbit/s
95th percentile per-packet one-way delay: 66.793 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 618.01 Mbit/s
95th percentile per-packet one-way delay: 66.793 ms
Loss rate: 0.40%
Run 1: Report of Indigo-MusesC5 — Data Link

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

Flow 1 ingress (mean 618.35 Mbit/s)  Flow 1 egress (mean 618.01 Mbit/s)

Flow 1 (95th percentile 66.79 ms)
Run 2: Statistics of Indigo-MusesC5

End at: 2019-07-18 16:40:17
Local clock offset: -0.134 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-07-18 19:42:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 584.96 Mbit/s
95th percentile per-packet one-way delay: 71.898 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 584.96 Mbit/s
95th percentile per-packet one-way delay: 71.898 ms
Loss rate: 0.42%
Run 2: Report of Indigo-MusesC5 — Data Link

The first graph shows the throughput (in Mb/s) over time (in s) for two flows: Flow 1 ingress (mean 585.43 Mb/s) and Flow 1 egress (mean 584.96 Mb/s).

The second graph displays the per-packet one-way delay (in ms) over time (in s) for Flow 1, with a 95th percentile of 71.90 ms.
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-07-18 17:14:14
End at: 2019-07-18 17:14:44
Local clock offset: -0.177 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2019-07-18 19:42:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 592.68 Mbit/s
95th percentile per-packet one-way delay: 68.834 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 592.68 Mbit/s
95th percentile per-packet one-way delay: 68.834 ms
Loss rate: 0.40%
Run 3: Report of Indigo-MusesC5 — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 593.10 Mbit/s)
- Flow 1 egress (mean 592.68 Mbit/s)

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

- Flow 1 (95th percentile 68.83 ms)
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-07-18 17:49:09
End at: 2019-07-18 17:49:39
Local clock offset: -0.154 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2019-07-18 19:42:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.06 Mbit/s
95th percentile per-packet one-way delay: 72.304 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 607.06 Mbit/s
95th percentile per-packet one-way delay: 72.304 ms
Loss rate: 0.38%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-07-18 18:24:05
End at: 2019-07-18 18:24:35
Local clock offset: -0.001 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2019-07-18 19:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.27 Mbit/s
95th percentile per-packet one-way delay: 82.011 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 582.27 Mbit/s
95th percentile per-packet one-way delay: 82.011 ms
Loss rate: 0.45%
Run 5: Report of Indigo-MusesC5 — Data Link

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

![Graph 2: Per-packet end-to-end delay vs Time](image2)
Run 1: Statistics of Indigo-MusesD

Start at: 2019-07-18 16:02:02
End at: 2019-07-18 16:02:32
Local clock offset: -0.054 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2019-07-18 19:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 404.90 Mbit/s
95th percentile per-packet one-way delay: 63.270 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 404.90 Mbit/s
95th percentile per-packet one-way delay: 63.270 ms
Loss rate: 0.58%
Run 1: Report of Indigo-MusesD — Data Link

![Graph of throughput over time showing flow ingress and egress rates.]

![Graph of per-packet one-way delay over time showing 95th percentile delay.]

Flow 1 ingress (mean 405.87 Mbit/s)  Flow 1 egress (mean 404.90 Mbit/s)

Flow 1 (95th percentile 63.27 ms)
Run 2: Statistics of Indigo-MusesD

Start at: 2019-07-18 16:36:45
End at: 2019-07-18 16:37:15
Local clock offset: ~0.106 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-07-18 19:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 505.52 Mbit/s
95th percentile per-packet one-way delay: 80.632 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 505.52 Mbit/s
95th percentile per-packet one-way delay: 80.632 ms
Loss rate: 0.41%
Run 2: Report of Indigo-MusesD — Data Link

[Graph 1: Throughput vs. Time]

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

Legend:
- Flow 1 ingress (mean 505.84 Mbit/s)
- Flow 1 egress (mean 505.52 Mbit/s)

Flow 1 (95th percentile 80.63 ms)
Run 3: Statistics of Indigo-MusesD

Start at: 2019-07-18 17:11:28
End at: 2019-07-18 17:11:58
Local clock offset: -0.134 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-07-18 19:47:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.25 Mbit/s
95th percentile per-packet one-way delay: 47.574 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 133.25 Mbit/s
95th percentile per-packet one-way delay: 47.574 ms
Loss rate: 0.36%
Run 3: Report of Indigo-MusesD — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 133.28 Mbps)
- Flow 1 egress (mean 133.25 Mbps)

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

- Flow 1 (95th percentile 47.57 ms)
Run 4: Statistics of Indigo-MusesD

Start at: 2019-07-18 17:46:01
End at: 2019-07-18 17:46:31
Local clock offset: -0.116 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2019-07-18 19:48:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 511.81 Mbit/s
95th percentile per-packet one-way delay: 77.881 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 511.81 Mbit/s
95th percentile per-packet one-way delay: 77.881 ms
Loss rate: 0.39%
Run 4: Report of Indigo-MusesD — Data Link

![Graph of throughput vs time with two lines indicating flow ingress and egress rates.]

![Graph of per-packet one-way delay vs time with a marker indicating the 95th percentile delay.]
Run 5: Statistics of Indigo-MusesD

Start at: 2019-07-18 18:21:01
End at: 2019-07-18 18:21:31
Local clock offset: -0.09 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2019-07-18 19:50:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 518.51 Mbit/s
95th percentile per-packet one-way delay: 76.399 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 518.51 Mbit/s
95th percentile per-packet one-way delay: 76.399 ms
Loss rate: 0.40%
Run 5: Report of Indigo-MusesD — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress.]
Run 1: Statistics of Indigo-MusesT

End at: 2019-07-18 16:14:17
Local clock offset: -0.035 ms
Remote clock offset: 0.032 ms

# Below is generated by plot.py at 2019-07-18 19:52:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 624.57 Mbit/s
95th percentile per-packet one-way delay: 110.899 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 624.57 Mbit/s
95th percentile per-packet one-way delay: 110.899 ms
Loss rate: 0.49%
Run 1: Report of Indigo-MusesT — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 625.50 Mbps)
- Flow 1 egress (mean 624.57 Mbps)

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

- Flow 1 (95th percentile 110.90 ms)
Run 2: Statistics of Indigo-MusesT

End at: 2019-07-18 16:49:07
Local clock offset: -0.192 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2019-07-18 19:52:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 602.33 Mbit/s
95th percentile per-packet one-way delay: 98.365 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 602.33 Mbit/s
95th percentile per-packet one-way delay: 98.365 ms
Loss rate: 0.51%
Run 2: Report of Indigo-MusesT — Data Link
Run 3: Statistics of Indigo-MusesT

Start at: 2019-07-18 17:23:04
End at: 2019-07-18 17:23:34
Local clock offset: -0.489 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-07-18 19:53:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 605.70 Mbit/s
95th percentile per-packet one-way delay: 115.630 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 605.70 Mbit/s
95th percentile per-packet one-way delay: 115.630 ms
Loss rate: 0.48%
Run 3: Report of Indigo-MusesT — Data Link

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

- Flow 1 ingress (mean 606.53 Mbit/s)
- Flow 1 egress (mean 605.70 Mbit/s)

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

- Flow 1 (95th percentile 115.63 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-07-18 17:57:52
End at: 2019-07-18 17:58:22
Local clock offset: 0.227 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-07-18 19:55:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 617.27 Mbit/s
95th percentile per-packet one-way delay: 101.689 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 617.27 Mbit/s
95th percentile per-packet one-way delay: 101.689 ms
Loss rate: 0.51%
Run 4: Report of Indigo-MusesT — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 618.39 Mbit/s) — Flow 1 egress (mean 617.72 Mbit/s)

Packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 101.69 ms)
Run 5: Statistics of Indigo-MusesT

Start at: 2019-07-18 18:32:52
End at: 2019-07-18 18:33:22
Local clock offset: 0.357 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 628.11 Mbit/s
95th percentile per-packet one-way delay: 102.502 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 628.11 Mbit/s
95th percentile per-packet one-way delay: 102.502 ms
Loss rate: 0.38%
Run 5: Report of Indigo-MuseT — Data Link

![Graph showing data link throughput over time.](image)

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Flow 1 ingress (mean 628.33 Mbit/s)
Flow 1 egress (mean 628.11 Mbit/s)

---

Flow 1 (95th percentile 102.50 ms)
Run 1: Statistics of LEDBAT

Start at: 2019-07-18 15:41:10
End at: 2019-07-18 15:41:40
Local clock offset: -0.079 ms
Remote clock offset: -0.198 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 48.658 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 40.81 Mbit/s
95th percentile per-packet one-way delay: 48.658 ms
Loss rate: 0.63%
Run 1: Report of LEDBAT — Data Link

![Graph showing data link throughput over time]

- Flow 1 ingress (mean 40.94 Mbit/s)
- Flow 1 egress (mean 40.81 Mbit/s)

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

- Flow 1 (95th percentile 48.66 ms)
Run 2: Statistics of LEDBAT

Start at: 2019-07-18 16:15:23
End at: 2019-07-18 16:15:53
Local clock offset: 0.024 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.78 Mbit/s
95th percentile per-packet one-way delay: 49.083 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 40.78 Mbit/s
95th percentile per-packet one-way delay: 49.083 ms
Loss rate: 0.63%
Run 2: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 40.90 Mb/s)
- **Flow 1 egress** (mean 40.78 Mb/s)

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

- **Flow 1** (95th percentile 49.08 ms)
Run 3: Statistics of LEDBAT

Start at: 2019-07-18 16:50:11
End at: 2019-07-18 16:50:41
Local clock offset: -0.191 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 48.874 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: 48.874 ms
Loss rate: 0.37%
Run 3: Report of LEDBAT — Data Link

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

Legend:
- Flow 1 ingress (mean 38.15 Mbit/s)
- Flow 1 egress (mean 38.13 Mbit/s)

Packet delay is shown with blue markers, with a 95th percentile of 48.87 ms.
Run 4: Statistics of LEDBAT

Start at: 2019-07-18 17:24:39
End at: 2019-07-18 17:25:09
Local clock offset: 0.252 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 42.45 Mbit/s
95th percentile per-packet one-way delay: 48.277 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 42.45 Mbit/s
95th percentile per-packet one-way delay: 48.277 ms
Loss rate: 0.62%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2019-07-18 17:59:27
End at: 2019-07-18 17:59:57
Local clock offset: -0.207 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2019-07-18 19:57:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 41.00 Mbit/s
  95th percentile per-packet one-way delay: 48.760 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 41.00 Mbit/s
  95th percentile per-packet one-way delay: 48.760 ms
  Loss rate: 0.63%
Run 5: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 41.13 Mbps/s)
- Flow 1 egress (mean 41.00 Mbps/s)

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

- Flow 1 95th percentile 48.76 ms
Run 1: Statistics of Muses\_DecisionTree

End at: 2019-07-18 15:56:43
Local clock offset: -0.071 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2019-07-18 20:01:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 571.71 Mbit/s
95th percentile per-packet one-way delay: 61.771 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 571.71 Mbit/s
95th percentile per-packet one-way delay: 61.771 ms
Loss rate: 0.33%
Run 1: Report of Muses. DecisionTree — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean rates of 571.74 Mbps and 571.71 Mbps respectively.]

![Graph showing per packet delay for Flow 1 with a 95th percentile delay of 61.77 ms.]

116
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 16:30:28
End at: 2019-07-18 16:30:58
Local clock offset: ~0.046 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-07-18 20:01:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 570.18 Mbit/s
95th percentile per-packet one-way delay: 64.325 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 570.18 Mbit/s
95th percentile per-packet one-way delay: 64.325 ms
Loss rate: 0.27%
Run 2: Report of Muses_DecisionTree — Data Link
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 17:05:13
End at: 2019-07-18 17:05:43
Local clock offset: -0.171 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2019-07-18 20:01:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 556.48 Mbit/s
95th percentile per-packet one-way delay: 61.439 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 556.48 Mbit/s
95th percentile per-packet one-way delay: 61.439 ms
Loss rate: 0.37%
Run 3: Report of Muses_DecisionTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 17:39:46  
End at: 2019-07-18 17:40:17  
Local clock offset: -0.115 ms  
Remote clock offset: -0.024 ms  

# Below is generated by plot.py at 2019-07-18 20:02:55  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 569.26 Mbit/s  
95th percentile per-packet one-way delay: 60.004 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 569.26 Mbit/s  
95th percentile per-packet one-way delay: 60.004 ms  
Loss rate: 0.37%
Run 4: Report of Muses_DecisionTree — Data Link
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-07-18 18:14:44
End at: 2019-07-18 18:15:14
Local clock offset: -0.067 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2019-07-18 20:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 605.52 Mbit/s
95th percentile per-packet one-way delay: 59.662 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 605.52 Mbit/s
95th percentile per-packet one-way delay: 59.662 ms
Loss rate: 0.36%
Run 5: Report of Muses_DecisionTree — Data Link

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

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

Legend:
- Flow 1 ingress (mean 605.76 Mbit/s)
- Flow 1 egress (mean 605.52 Mbit/s)

Flow 1 (95th percentile 59.66 ms)
Run 1: Statistics of Muses\_DecisionTreeHO

Start at: 2019-07-18 15:45:04
End at: 2019-07-18 15:45:34
Local clock offset: -0.09 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2019-07-18 20:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 293.63 Mbit/s
95th percentile per-packet one-way delay: 117.975 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 293.63 Mbit/s
95th percentile per-packet one-way delay: 117.975 ms
Loss rate: 0.13%
Run 1: Report of Muses_DecisionTreeH0 — Data Link

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

- Flow 1 ingress (mean 292.79 Mbit/s)
- Flow 1 egress (mean 293.63 Mbit/s)

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

Flow 1 (95th percentile 117.97 ms)
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 16:19:21
End at: 2019-07-18 16:19:51
Local clock offset: -0.039 ms
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-07-18 20:03:32
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 348.25 Mbit/s
  95th percentile per-packet one-way delay: 107.800 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 348.25 Mbit/s
  95th percentile per-packet one-way delay: 107.800 ms
  Loss rate: 0.47%
Run 2: Report of Muses_DecisionTreeH0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 16:54:05
End at: 2019-07-18 16:54:35
Local clock offset: -0.197 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2019-07-18 20:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.68 Mbit/s
95th percentile per-packet one-way delay: 129.800 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 290.68 Mbit/s
95th percentile per-packet one-way delay: 129.800 ms
Loss rate: 0.03%
Run 3: Report of Muses DecisionTreeH0 — Data Link

![Graph of network data analysis showing throughput and packet delay over time.]

- Flow 1 ingress (mean 289.77 Mbps)
- Flow 1 egress (mean 290.68 Mbps)
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 17:28:34  
End at: 2019-07-18 17:29:04  
Local clock offset: -0.121 ms  
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-07-18 20:03:34  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.75 Mbit/s
95th percentile per-packet one-way delay: 121.281 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 300.75 Mbit/s
95th percentile per-packet one-way delay: 121.281 ms
Loss rate: 0.07%
Run 4: Report of Muses_DecisionTreeH0 — Data Link
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-07-18 18:03:21
End at: 2019-07-18 18:03:51
Local clock offset: -0.118 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2019-07-18 20:05:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 329.82 Mbit/s
  95th percentile per-packet one-way delay: 114.064 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 329.82 Mbit/s
  95th percentile per-packet one-way delay: 114.064 ms
  Loss rate: 0.90%
Run 5: Report of Muses_DecisionTreeH0 — Data Link

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

- **Flow 1 ingress (mean 331.75 Mbps)**
- **Flow 1 egress (mean 329.62 Mbps)**

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

- **Flow 1 (95th percentile 114.06 ms)**
Run 1: Statistics of Muses\_DecisionTreeRO

Local clock offset: -0.073 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2019-07-18 20:10:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 570.28 Mbit/s
95th percentile per-packet one-way delay: 61.182 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 570.28 Mbit/s
95th percentile per-packet one-way delay: 61.182 ms
Loss rate: 0.37%
Run 1: Report of Muses_DecisionTreeR0 — Data Link
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 16:20:44
End at: 2019-07-18 16:21:14
Local clock offset: -0.047 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-07-18 20:11:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 581.22 Mbit/s
95th percentile per-packet one-way delay: 62.301 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 581.22 Mbit/s
95th percentile per-packet one-way delay: 62.301 ms
Loss rate: 0.45%
Run 2: Report of Muses_DecisionTreeR0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeRO

Local clock offset: -0.171 ms
Remote clock offset: 0.068 ms

# Below is generated by plot.py at 2019-07-18 20:11:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 557.69 Mbit/s
95th percentile per-packet one-way delay: 61.684 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 557.69 Mbit/s
95th percentile per-packet one-way delay: 61.684 ms
Loss rate: 0.35%
Run 3: Report of Muses _DecisionTreeR0_ — Data Link

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

![Graph 2: Packet Delay vs. Time](image2)
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 17:29:56
End at: 2019-07-18 17:30:26
Local clock offset: -0.122 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-07-18 20:13:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 585.75 Mbit/s
95th percentile per-packet one-way delay: 60.362 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 585.75 Mbit/s
95th percentile per-packet one-way delay: 60.362 ms
Loss rate: 0.42%
Run 4: Report of Muses_DecisionTreeR0 — Data Link

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

- **Flow 1 ingress (mean 586.38 Mbit/s)**
- **Flow 1 egress (mean 585.75 Mbit/s)**

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

- **Flow 1 (95th percentile 60.36 ms)**
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-07-18 18:04:44
End at: 2019-07-18 18:05:14
Local clock offset: -0.151 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-07-18 20:13:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 577.44 Mbit/s
95th percentile per-packet one-way delay: 58.715 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 577.44 Mbit/s
95th percentile per-packet one-way delay: 58.715 ms
Loss rate: 0.36%
Run 5: Report of Muses.DecisionTreeR0 — Data Link

![Graph of data link throughput and delay]

- **Flow 1 ingress (mean 577.69 Mbit/s)**
- **Flow 1 egress (mean 577.44 Mbit/s)**

<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Throughput (Mbit/s)</th>
</tr>
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<tbody>
<tr>
<td>0</td>
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<td>600</td>
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<td>30</td>
<td>600</td>
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<table>
<thead>
<tr>
<th>Time (s)</th>
<th>Delay (ms)</th>
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</thead>
<tbody>
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<td>25</td>
<td>50</td>
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<tr>
<td>30</td>
<td>50</td>
</tr>
</tbody>
</table>

- **Flow 1 (95th percentile 58.72 ms)**
Run 1: Statistics of PCC-Allegro

Start at: 2019-07-18 16:03:27
End at: 2019-07-18 16:03:57
Local clock offset: -0.008 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-07-18 20:15:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 378.28 Mbit/s
95th percentile per-packet one-way delay: 67.774 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 378.28 Mbit/s
95th percentile per-packet one-way delay: 67.774 ms
Loss rate: 0.79%
Run 1: Report of PCC-Allegro — Data Link

Throughput (Mbps) vs. Time (s)

Flow 1 ingress (mean 379.83 Mbps) vs. Flow 1 egress (mean 378.28 Mbps)

Packet delay (ms) vs. Time (s)

Flow 1 (95th percentile 67.77 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2019-07-18 16:38:15
End at: 2019-07-18 16:38:45
Local clock offset: -0.122 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-07-18 20:16:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 383.88 Mbit/s
95th percentile per-packet one-way delay: 70.646 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 383.88 Mbit/s
95th percentile per-packet one-way delay: 70.646 ms
Loss rate: 0.44%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2019-07-18 17:12:42
End at: 2019-07-18 17:13:12
Local clock offset: 0.202 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2019-07-18 20:19:47
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 400.07 Mbit/s
  95th percentile per-packet one-way delay: 163.409 ms
  Loss rate: 2.55%
-- Flow 1:
  Average throughput: 400.07 Mbit/s
  95th percentile per-packet one-way delay: 163.409 ms
  Loss rate: 2.55%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 499.25 Mbit/s)
- Flow 1 egress (mean 490.07 Mbit/s)

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

- Flow 1 (95th percentile 163.41 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2019-07-18 17:47:32
End at: 2019-07-18 17:48:02
Local clock offset: -0.11 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2019-07-18 20:27:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 480.40 Mbit/s
95th percentile per-packet one-way delay: 163.336 ms
Loss rate: 3.08%
-- Flow 1:
Average throughput: 480.40 Mbit/s
95th percentile per-packet one-way delay: 163.336 ms
Loss rate: 3.08%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

End at: 2019-07-18 18:23:02
Local clock offset: -0.065 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-07-18 20:27:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 412.22 Mbit/s
95th percentile per-packet one-way delay: 163.927 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 412.22 Mbit/s
95th percentile per-packet one-way delay: 163.927 ms
Loss rate: 2.31%
Run 1: Statistics of PCC-Expr

Start at: 2019-07-18 15:52:08
End at: 2019-07-18 15:52:38
Local clock offset: -0.039 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2019-07-18 20:27:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.32 Mbit/s
95th percentile per-packet one-way delay: 74.097 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 276.32 Mbit/s
95th percentile per-packet one-way delay: 74.097 ms
Loss rate: 0.45%
Run 1: Report of PCC-Expr — Data Link

[Graph: Throughput over time for Flow 1 ingress and egress with mean values]

[Graph: Packet delay over time for Flow 1 with 95th percentile delay]

156
Run 2: Statistics of PCC-Expr

Start at: 2019-07-18 16:26:32
End at: 2019-07-18 16:27:02
Local clock offset: -0.03 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2019-07-18 20:27:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.72 Mbit/s
95th percentile per-packet one-way delay: 77.161 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 287.72 Mbit/s
95th percentile per-packet one-way delay: 77.161 ms
Loss rate: 0.61%
Run 2: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 288.56 Mbit/s)**
- **Flow 1 egress (mean 287.72 Mbit/s)**

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

  - Flow 1 (95th percentile 77.16 ms)
Run 3: Statistics of PCC-Expr

Start at: 2019-07-18 17:01:10  
End at: 2019-07-18 17:01:40  
Local clock offset: -0.183 ms  
Remote clock offset: 0.056 ms

# Below is generated by plot.py at 2019-07-18 20:27:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 284.08 Mbit/s
95th percentile per-packet one-way delay: 147.280 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 284.08 Mbit/s
95th percentile per-packet one-way delay: 147.280 ms
Loss rate: 1.69%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2019-07-18 17:35:43
End at: 2019-07-18 17:36:13
Local clock offset: -0.5 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 291.79 Mbit/s
95th percentile per-packet one-way delay: 148.421 ms
Loss rate: 1.84%

-- Flow 1:
Average throughput: 291.79 Mbit/s
95th percentile per-packet one-way delay: 148.421 ms
Loss rate: 1.84%
Run 4: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 296.31 Mbps)
- Flow 1 egress (mean 291.79 Mbps)

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

- Flow 1 (95th percentile 148.42 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-07-18 18:10:30
End at: 2019-07-18 18:11:00
Local clock offset: -0.169 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.35 Mbit/s
95th percentile per-packet one-way delay: 119.653 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 315.35 Mbit/s
95th percentile per-packet one-way delay: 119.653 ms
Loss rate: 0.55%
Run 5: Report of PCC-Expr — Data Link

---

Graph 1: Throughput (Mbps) vs. Time (s)
- **Flow 1 ingress (mean 316.07 Mbit/s)**
- **Flow 1 egress (mean 315.35 Mbit/s)**

Graph 2: Per packet one way delay (ms) vs. Time (s)
- **Flow 1 (95th percentile 119.65 ms)**

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164
Run 1: Statistics of QUIC Cubic

Start at: 2019-07-18 15:43:56
End at: 2019-07-18 15:44:26
Local clock offset: -0.072 ms
Remote clock offset: -0.187 ms
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-07-18 16:18:10
End at: 2019-07-18 16:18:40
Local clock offset: -0.029 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 47.270 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 69.51 Mbit/s
95th percentile per-packet one-way delay: 47.270 ms
Loss rate: 0.50%
Run 2: Report of QUIC Cubic — Data Link

[Graphs showing throughput and packet delay over time with labels and annotations]

168
Run 3: Statistics of QUIC Cubic

End at: 2019-07-18 16:53:25
Local clock offset: -0.195 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 46.02 Mbit/s
95th percentile per-packet one-way delay: 46.393 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 46.02 Mbit/s
95th percentile per-packet one-way delay: 46.393 ms
Loss rate: 0.62%
Run 3: Report of QUIC Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 46.16 Mbit/s)**
- **Flow 1 egress (mean 46.02 Mbit/s)**

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

- **Flow 1 (95th percentile 46.39 ms)**

170
Run 4: Statistics of QUIC Cubic

End at: 2019-07-18 17:27:53
Local clock offset: -0.128 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.84 Mbit/s
95th percentile per-packet one-way delay: 46.472 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 74.84 Mbit/s
95th percentile per-packet one-way delay: 46.472 ms
Loss rate: 0.45%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet round trip time over time.

**Throughput (Mbps):**
- Flow 1 ingress (mean 74.93 Mbps)
- Flow 1 egress (mean 74.84 Mbps)

**Packet round trip time (ms):**
- Flow 1 (95th percentile 46.47 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2019-07-18 18:02:10
End at: 2019-07-18 18:02:40
Local clock offset: -0.119 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.97 Mbit/s
95th percentile per-packet one-way delay: 47.110 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 66.97 Mbit/s
95th percentile per-packet one-way delay: 47.110 ms
Loss rate: 0.50%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2019-07-18 15:51:00
End at: 2019-07-18 15:51:30
Local clock offset: -0.069 ms
Remote clock offset: -0.223 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.622 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.622 ms
Loss rate: 0.25%
Run 2: Statistics of SCReAM

End at: 2019-07-18 16:25:54
Local clock offset: -0.021 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.494 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.494 ms
Loss rate: 0.38%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2019-07-18 17:00:03
End at: 2019-07-18 17:00:33
Local clock offset: -0.214 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.458 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.458 ms
Loss rate: 0.26%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2019-07-18 17:34:36
End at: 2019-07-18 17:35:06
Local clock offset: -0.124 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.484 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 47.484 ms
Loss rate: 0.39%
Run 4: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 47.48 ms)
Run 5: Statistics of SCReAM

Start at: 2019-07-18 18:09:22
End at: 2019-07-18 18:09:52
Local clock offset: -0.163 ms
Remote clock offset: -0.063 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 47.259 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 47.259 ms
  Loss rate: 0.26%
Run 5: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time]

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

- **Packet Delay (ms)**

  *Flow 1 (95th percentile 47.26 ms)*
Run 1: Statistics of Sprout

Local clock offset: -0.475 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 47.463 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.69 Mbit/s
95th percentile per-packet one-way delay: 47.463 ms
Loss rate: 0.35%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

End at: 2019-07-18 16:29:50
Local clock offset: -0.045 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 9.51 Mbit/s
  95th percentile per-packet one-way delay: 47.114 ms
  Loss rate: 0.36%
-- Flow 1:
  Average throughput: 9.51 Mbit/s
  95th percentile per-packet one-way delay: 47.114 ms
  Loss rate: 0.36%
Run 2: Report of Sprout — Data Link

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

![Graph 2: Per-packet Round Trip Delay vs Time](image)
Run 3: Statistics of Sprout

Start at: 2019-07-18 17:04:05
End at: 2019-07-18 17:04:35
Local clock offset: -0.195 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 47.978 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.66 Mbit/s
95th percentile per-packet one-way delay: 47.978 ms
Loss rate: 0.35%
Run 3: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 9.67 Mbps)
- Flow 1 egress (mean 9.66 Mbps)

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

- Flow 1 (95th percentile 47.98 ms)
Run 4: Statistics of Sprout

Start at: 2019-07-18 17:38:38
End at: 2019-07-18 17:39:08
Local clock offset: -0.124 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 47.670 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 9.59 Mbit/s
95th percentile per-packet one-way delay: 47.670 ms
Loss rate: 0.35%
Run 4: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 9.59 Mbit/s)**
- **Flow 1 egress (mean 9.59 Mbit/s)**

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

- **Flow 1 95th percentile 47.67 ms**
Run 5: Statistics of Sprout

End at: 2019-07-18 18:14:05
Local clock offset: 0.24 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-07-18 20:27:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 48.136 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 9.60 Mbit/s
95th percentile per-packet one-way delay: 48.136 ms
Loss rate: 0.33%
Run 5: Report of Sprout — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress](image1)

![Graph showing packet delay over time for Flow 1](image2)
Run 1: Statistics of TaoVA-100x

End at: 2019-07-18 15:50:01
Local clock offset: -0.079 ms
Remote clock offset: -0.209 ms

# Below is generated by plot.py at 2019-07-18 20:31:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 245.85 Mbit/s
95th percentile per-packet one-way delay: 50.320 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 245.85 Mbit/s
95th percentile per-packet one-way delay: 50.320 ms
Loss rate: 0.28%
Run 1: Report of TaoVA-100x — Data Link

![Graph of throughput vs. time for Flow 1, with incoming and outgoing data rates labeled.]

![Graph of packet loss vs. time for Flow 1, with 95th percentile delay marked.]
Run 2: Statistics of TaoVA-100x

Start at: 2019-07-18 16:23:54
End at: 2019-07-18 16:24:24
Local clock offset: -0.017 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2019-07-18 20:31:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 254.13 Mbit/s
95th percentile per-packet one-way delay: 48.057 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 254.13 Mbit/s
95th percentile per-packet one-way delay: 48.057 ms
Loss rate: 0.31%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2019-07-18 16:58:34
End at: 2019-07-18 16:59:04
Local clock offset: -0.181 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2019-07-18 20:31:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.28 Mbit/s
95th percentile per-packet one-way delay: 48.212 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 249.28 Mbit/s
95th percentile per-packet one-way delay: 48.212 ms
Loss rate: 0.35%
Run 3: Report of TaoVA-100x — Data Link

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

Flow 1 ingress (mean 249.36 Mbit/s)  |  Flow 1 egress (mean 249.28 Mbit/s)

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

Flow 1 (95th percentile 48.21 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2019-07-18 17:33:06
End at: 2019-07-18 17:33:36
Local clock offset: -0.138 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-07-18 20:31:49
# Datalink statistics

-- Total of 1 flow:
Average throughput: 247.70 Mbit/s
95th percentile per-packet one-way delay: 46.703 ms
Loss rate: 0.32%

-- Flow 1:
Average throughput: 247.70 Mbit/s
95th percentile per-packet one-way delay: 46.703 ms
Loss rate: 0.32%
Run 4: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 247.70 Mbit/s)
- Flow 1 egress (mean 247.70 Mbit/s)

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

- Flow 1 (95th percentile 46.70 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-07-18 18:07:53
End at: 2019-07-18 18:08:23
Local clock offset: -0.122 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-07-18 20:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 242.91 Mbit/s
95th percentile per-packet one-way delay: 47.603 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 242.91 Mbit/s
95th percentile per-packet one-way delay: 47.603 ms
Loss rate: 0.34%
Run 5: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 242.97 Mbps)
- Flow 1 egress (mean 242.91 Mbps)

One-way packet delay (ms)

Time (s)

- Flow 1 (95th percentile 47.60 ms)
Run 1: Statistics of TCP Vegas

End at: 2019-07-18 15:54:09
Local clock offset: -0.072 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2019-07-18 20:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 373.17 Mbit/s
95th percentile per-packet one-way delay: 59.114 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 373.17 Mbit/s
95th percentile per-packet one-way delay: 59.114 ms
Loss rate: 0.27%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

End at: 2019-07-18 16:28:34
Local clock offset: -0.049 ms
Remote clock offset: 0.046 ms

# Below is generated by plot.py at 2019-07-18 20:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 155.95 Mbit/s
95th percentile per-packet one-way delay: 47.547 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 155.95 Mbit/s
95th percentile per-packet one-way delay: 47.547 ms
Loss rate: 0.27%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2019-07-18 17:02:42
End at: 2019-07-18 17:03:12
Local clock offset: -0.183 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-07-18 20:33:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 319.68 Mbit/s
95th percentile per-packet one-way delay: 54.123 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 319.68 Mbit/s
95th percentile per-packet one-way delay: 54.123 ms
Loss rate: 0.27%
Run 3: Report of TCP Vegas — Data Link

![Graph showing throughput over time for TCP Vegas. The graph includes two lines representing flow ingress and egress with a mean throughput of 319.53 Mbit/s and 319.68 Mbit/s respectively.]

![Graph showing per-packet one-way delay over time for TCP Vegas. The graph includes a line representing flow 1 with a 95th percentile delay of 54.12 ms.]
Run 4: Statistics of TCP Vegas

Start at: 2019-07-18 17:37:16
End at: 2019-07-18 17:37:46
Local clock offset: -0.126 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-07-18 20:34:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 306.00 Mbit/s
95th percentile per-packet one-way delay: 58.292 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 306.00 Mbit/s
95th percentile per-packet one-way delay: 58.292 ms
Loss rate: 0.18%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2019-07-18 18:12:04
End at: 2019-07-18 18:12:34
Local clock offset: -0.184 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.74 Mbit/s
95th percentile per-packet one-way delay: 67.418 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 493.74 Mbit/s
95th percentile per-packet one-way delay: 67.418 ms
Loss rate: 0.19%
Run 5: Report of TCP Vegas — Data Link

 através de uma linha.

 Flow 1 ingress (mean 493.10 Mbit/s)  Flow 1 egress (mean 493.34 Mbit/s)

 Flow 1 (95th percentile 67.42 ms)
Run 1: Statistics of Verus

Start at: 2019-07-18 16:06:33
End at: 2019-07-18 16:07:03
Local clock offset: -0.014 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.27 Mbit/s
95th percentile per-packet one-way delay: 105.306 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 149.27 Mbit/s
95th percentile per-packet one-way delay: 105.306 ms
Loss rate: 0.44%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

Start at: 2019-07-18 16:41:21
End at: 2019-07-18 16:41:51
Local clock offset: -0.152 ms
Remote clock offset: 0.04 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.02 Mbit/s
95th percentile per-packet one-way delay: 176.889 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 184.02 Mbit/s
95th percentile per-packet one-way delay: 176.889 ms
Loss rate: 0.36%
Run 2: Report of Verus — Data Link

![Graph 1: Throughput vs. Time]

![Graph 2: Packet Delay vs. Time]

- Flow 1 ingress (mean 183.51 Mbit/s)
- Flow 1 egress (mean 184.02 Mbit/s)

Flow 1 (95th percentile 176.89 ms)
Run 3: Statistics of Verus

Start at: 2019-07-18 17:15:48
End at: 2019-07-18 17:16:18
Local clock offset: -0.158 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.76 Mbit/s
95th percentile per-packet one-way delay: 232.337 ms
Loss rate: 10.80%
-- Flow 1:
Average throughput: 149.76 Mbit/s
95th percentile per-packet one-way delay: 232.337 ms
Loss rate: 10.80%
Run 3: Report of Verus — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 167.37 Mbit/s)
- Flow 1 egress (mean 149.76 Mbit/s)

- Flow 1 (95th percentile 232.34 ms)
Run 4: Statistics of Verus

Start at: 2019-07-18 17:50:43
End at: 2019-07-18 17:51:13
Local clock offset: -0.147 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.07 Mbit/s
95th percentile per-packet one-way delay: 118.930 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 177.07 Mbit/s
95th percentile per-packet one-way delay: 118.930 ms
Loss rate: 0.17%
Run 4: Report of Verus — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 177.47 Mbit/s)**
- **Flow 1 egress (mean 177.07 Mbit/s)**

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

- **Flow 1 (95th percentile 118.93 ms)**
Run 5: Statistics of Verus

End at: 2019-07-18 18:26:09
Local clock offset: -0.072 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2019-07-18 20:39:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.04 Mbit/s
95th percentile per-packet one-way delay: 122.005 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 170.04 Mbit/s
95th percentile per-packet one-way delay: 122.005 ms
Loss rate: 0.27%
Run 5: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 170.04 Mbit/s)  Flow 1 egress (mean 170.04 Mbit/s)

Flow 1 (95th percentile 122.60 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2019-07-18 16:07:54
End at: 2019-07-18 16:08:24
Local clock offset: 0.297 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2019-07-18 20:39:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 355.64 Mbit/s
95th percentile per-packet one-way delay: 54.023 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 355.64 Mbit/s
95th percentile per-packet one-way delay: 54.023 ms
Loss rate: 0.34%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2019-07-18 16:42:45
End at: 2019-07-18 16:43:15
Local clock offset: -0.143 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2019-07-18 20:40:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 358.10 Mbit/s
95th percentile per-packet one-way delay: 54.401 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 358.10 Mbit/s
95th percentile per-packet one-way delay: 54.401 ms
Loss rate: 0.33%
Run 2: Report of PCC-Vivace — Data Link

![Graphs showing throughput and packet delay over time for Flow 1 ingress and egress.]
Run 3: Statistics of PCC-Vivace

Start at: 2019-07-18 17:17:10
End at: 2019-07-18 17:17:40
Local clock offset: -0.137 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 368.94 Mbit/s
95th percentile per-packet one-way delay: 187.506 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 368.94 Mbit/s
95th percentile per-packet one-way delay: 187.506 ms
Loss rate: 1.15%
Run 3: Report of PCC-Vivace — Data Link

- Flow 1 ingress (mean 372.05 Mbit/s)
- Flow 1 egress (mean 368.94 Mbit/s)

Flow 1 (95th percentile 187.53 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2019-07-18 17:52:07
End at: 2019-07-18 17:52:37
Local clock offset: 0.242 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 266.13 Mbit/s
95th percentile per-packet one-way delay: 54.939 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 266.13 Mbit/s
95th percentile per-packet one-way delay: 54.939 ms
Loss rate: 0.54%
Run 4: Report of PCC-Vivace — Data Link

![Graph of throughput vs. time]

- Flow 1 ingress (mean 266.71 Mbit/s)
- Flow 1 egress (mean 266.13 Mbit/s)

![Graph of packet delay vs. time]

- Flow 1 (95th percentile 54.94 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2019-07-18 18:27:02
End at: 2019-07-18 18:27:32
Local clock offset: 0.315 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 303.43 Mbit/s
95th percentile per-packet one-way delay: 49.990 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 303.43 Mbit/s
95th percentile per-packet one-way delay: 49.990 ms
Loss rate: 0.40%
Run 5: Report of PCC-Vivace — Data Link

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

![Graph 2: Per-packet end-to-end delay vs Time](image2)
Run 1: Statistics of WebRTC media

Start at: 2019-07-18 16:11:06
End at: 2019-07-18 16:11:36
Local clock offset: -0.021 ms
Remote clock offset: 0.039 ms
Run 1: Report of WebRTC media — Data Link

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

- **Throughput:**
  - Flow 1 ingress (mean 0.00 Mbit/s)
  - Flow 1 egress (mean 0.00 Mbit/s)

- **Packet Delay:**
  - Flow 1 (95th percentile 48.11 ms)
Run 2: Statistics of WebRTC media

Start at: 2019-07-18 16:45:57
End at: 2019-07-18 16:46:27
Local clock offset: -0.189 ms
Remote clock offset: 0.062 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.474 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.474 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

- Throughput (Mbps)
- Time (s)

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

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

Flow 1 95th percentile 47.47 ms
Run 3: Statistics of WebRTC media

Start at: 2019-07-18 17:20:24
End at: 2019-07-18 17:20:54
Local clock offset: -0.104 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.490 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.490 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

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

![Graph showing packet delay distribution](image)

- Flow 1 (95th percentile 47.49 ms)
Run 4: Statistics of WebRTC media

Local clock offset: -0.102 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.301 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 47.301 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2019-07-18 18:30:12
End at: 2019-07-18 18:30:42
Local clock offset: -0.392 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-07-18 20:40:58
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 46.972 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 46.972 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link