Pantheon Report

Generated at 2018-07-27 07:37:45 (UTC).
Data path: GCE Iowa Ethernet (remote) → GCE London Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against time.google.com and have been applied
to correct the timestamps in logs.

Git summary:
branch: master @ 640164b5b17c7c6561fff57729b3b5935d8596ce
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf5e8562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edc8f90c077e64d
third_party/libutp @ b3456b942e2826f2b179eeab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f4f4d1b39
third_party/pcc @ 1a9c958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac08f8b92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1b8143ebc978f3e4f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bde2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a25
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a949
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9d8e4735770d413a1fa2851
test from GCE Iowa to GCE London, 10 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>10</td>
<td>221.25</td>
<td>62.27</td>
<td>0.35</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>105.17</td>
<td>54.65</td>
<td>0.31</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>209.10</td>
<td>61.47</td>
<td>0.28</td>
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<tr>
<td>FillP</td>
<td>10</td>
<td>627.07</td>
<td>237.97</td>
<td>0.87</td>
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<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>584.19</td>
<td>104.20</td>
<td>0.49</td>
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<tr>
<td>Indigo</td>
<td>10</td>
<td>182.10</td>
<td>51.02</td>
<td>0.38</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>34.08</td>
<td>52.14</td>
<td>0.65</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>309.07</td>
<td>89.88</td>
<td>0.47</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>250.36</td>
<td>107.43</td>
<td>2.11</td>
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<tr>
<td>QUIC Cubic</td>
<td>8</td>
<td>72.17</td>
<td>50.31</td>
<td>0.38</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>50.76</td>
<td>0.31</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>6.78</td>
<td>51.71</td>
<td>0.42</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>226.86</td>
<td>51.19</td>
<td>0.29</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>163.75</td>
<td>55.74</td>
<td>0.30</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>223.80</td>
<td>120.08</td>
<td>0.58</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>336.35</td>
<td>51.55</td>
<td>0.38</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.92</td>
<td>50.71</td>
<td>0.37</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-07-27 02:29:57
End at: 2018-07-27 02:30:27
Local clock offset: -0.078 ms
Remote clock offset: -0.18 ms

# Below is generated by plot.py at 2018-07-27 06:05:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.99 Mbit/s
95th percentile per-packet one-way delay: 53.721 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 221.99 Mbit/s
95th percentile per-packet one-way delay: 53.721 ms
Loss rate: 0.34%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 222.18 Mbit/s)
- Flow 1 egress (mean 221.99 Mbit/s)

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

- Flow 1 (99th percentile 53.72 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-07-27 02:51:23
End at: 2018-07-27 02:51:53
Local clock offset: -0.05 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-07-27 06:05:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.78 Mbit/s
95th percentile per-packet one-way delay: 52.933 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 222.78 Mbit/s
95th percentile per-packet one-way delay: 52.933 ms
Loss rate: 0.34%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 222.72 Mbps)
- Flow 1 egress (mean 222.78 Mbps)

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

- Flow 1 (95th percentile 52.93 ms)
Run 3: Statistics of TCP BBR

End at: 2018-07-27 03:13:55
Local clock offset: -0.029 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.20 Mbit/s
95th percentile per-packet one-way delay: 54.421 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 225.20 Mbit/s
95th percentile per-packet one-way delay: 54.421 ms
Loss rate: 0.36%
Run 3: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 225.39 Mbit/s)
- Flow 1 egress (mean 225.20 Mbit/s)

Graph 2: Packet delay (ms) vs Time (s)

- Flow 1 (95th percentile 54.42 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-07-27 03:35:05
End at: 2018-07-27 03:35:35
Local clock offset: -0.194 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.00 Mbit/s
95th percentile per-packet one-way delay: 59.717 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 222.00 Mbit/s
95th percentile per-packet one-way delay: 59.717 ms
Loss rate: 0.34%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-07-27 03:56:47
End at: 2018-07-27 03:57:17
Local clock offset: -0.415 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.58 Mbit/s
95th percentile per-packet one-way delay: 51.672 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 222.58 Mbit/s
95th percentile per-packet one-way delay: 51.672 ms
Loss rate: 0.34%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-07-27 04:18:31
End at: 2018-07-27 04:19:01
Local clock offset: -0.012 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.74 Mbit/s
95th percentile per-packet one-way delay: 61.807 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 224.74 Mbit/s
95th percentile per-packet one-way delay: 61.807 ms
Loss rate: 0.34%
Run 6: Report of TCP BBR — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 224.87 Mbit/s)
- Flow 1 egress (mean 224.74 Mbit/s)

![Packet Loss Graph](image2)

- Flow 1 (95th percentile 61.81 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-07-27 04:40:22
End at: 2018-07-27 04:40:52
Local clock offset: -0.373 ms
Remote clock offset: -0.144 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.39 Mbit/s
95th percentile per-packet one-way delay: 55.633 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 218.39 Mbit/s
95th percentile per-packet one-way delay: 55.633 ms
Loss rate: 0.36%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-07-27 05:02:11
End at: 2018-07-27 05:02:41
Local clock offset: -0.397 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-07-27 06:05:50
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.15 Mbit/s
95th percentile per-packet one-way delay: 59.433 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 221.15 Mbit/s
95th percentile per-packet one-way delay: 59.433 ms
Loss rate: 0.34%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 221.18 Mbit/s)
- Flow 1 egress (mean 221.15 Mbit/s)

![Graph 2: Packet delay vs. Time](Image)

- Flow 1 (95th percentile 59.43 ms)
Run 9: Statistics of TCP BBR

End at: 2018-07-27 05:24:23
Local clock offset: 0.285 ms
Remote clock offset: 0.122 ms

# Below is generated by plot.py at 2018-07-27 06:09:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 206.26 Mbit/s
95th percentile per-packet one-way delay: 116.368 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 206.26 Mbit/s
95th percentile per-packet one-way delay: 116.368 ms
Loss rate: 0.38%
Run 9: Report of TCP BBR — Data Link

![Throughput Graph](image1.png)

- **Flow 1 ingress (mean 206.35 Mbit/s)**
- **Flow 1 egress (mean 206.26 Mbit/s)**

![Latency Graph](image2.png)

- **Flow 1 (95th percentile 116.37 ms)**
Run 10: Statistics of TCP BBR

Start at: 2018-07-27 05:45:33
End at: 2018-07-27 05:46:03
Local clock offset: 0.346 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-07-27 06:09:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.45 Mbit/s
95th percentile per-packet one-way delay: 56.957 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 227.45 Mbit/s
95th percentile per-packet one-way delay: 56.957 ms
Loss rate: 0.34%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-07-27 02:28:43
End at: 2018-07-27 02:29:13
Local clock offset: -0.483 ms
Remote clock offset: -0.152 ms

# Below is generated by plot.py at 2018-07-27 06:09:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 110.16 Mbit/s
95th percentile per-packet one-way delay: 55.339 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 110.16 Mbit/s
95th percentile per-packet one-way delay: 55.339 ms
Loss rate: 0.50%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-07-27 02:50:09
End at: 2018-07-27 02:50:39
Local clock offset: 0.333 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-07-27 06:09:35
# Datalink statistics

-- Total of 1 flow:
Average throughput: 110.32 Mbit/s
95th percentile per-packet one-way delay: 52.459 ms
Loss rate: 0.40%

-- Flow 1:
Average throughput: 110.32 Mbit/s
95th percentile per-packet one-way delay: 52.459 ms
Loss rate: 0.40%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-07-27 03:12:09
End at: 2018-07-27 03:12:39
Local clock offset: 0.363 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-07-27 06:09:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 128.02 Mbit/s
  95th percentile per-packet one-way delay: 54.261 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 128.02 Mbit/s
  95th percentile per-packet one-way delay: 54.261 ms
  Loss rate: 0.37%
Run 3: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

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

- Flow 1 ingress (mean 127.95 Mbit/s)
- Flow 1 egress (mean 128.02 Mbit/s)

Flow 1 (95th percentile 54.26 ms)
Run 4: Statistics of Copa

Start at: 2018-07-27 03:33:49
End at: 2018-07-27 03:34:19
Local clock offset: 0.197 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-07-27 06:09:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 120.47 Mbit/s
  95th percentile per-packet one-way delay: 53.111 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 120.47 Mbit/s
  95th percentile per-packet one-way delay: 53.111 ms
  Loss rate: 0.09%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

End at: 2018-07-27 03:56:01
Local clock offset: -0.089 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-07-27 06:09:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 125.31 Mbit/s
95th percentile per-packet one-way delay: 52.818 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 125.31 Mbit/s
95th percentile per-packet one-way delay: 52.818 ms
Loss rate: 0.15%
Run 5: Report of Copa — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 125.08 Mbit/s)**
- **Flow 1 egress (mean 125.31 Mbit/s)**

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

- **Flow 1 (95th percentile 52.82 ms)**
Run 6: Statistics of Copa

Start at: 2018-07-27 04:17:16
End at: 2018-07-27 04:17:46
Local clock offset: -0.039 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-07-27 06:09:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 116.83 Mbit/s
95th percentile per-packet one-way delay: 55.065 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 116.83 Mbit/s
95th percentile per-packet one-way delay: 55.065 ms
Loss rate: 0.35%
Run 6: Report of Copa — Data Link

[Graph showing network throughput and packet delay over time]

- **Flow 1 ingress (mean 116.84 Mbit/s)**
- **Flow 1 egress (mean 116.83 Mbit/s)**

[Graph showing packet delay over time for Flow 1]

- **Flow 1 (95th percentile 55.06 ms)**
Run 7: Statistics of Copa

Start at: 2018-07-27 04:39:12
End at: 2018-07-27 04:39:42
Local clock offset: -0.021 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2018-07-27 06:10:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 57.203 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 59.00 Mbit/s
95th percentile per-packet one-way delay: 57.203 ms
Loss rate: 0.58%
Run 7: Report of Copa — Data Link

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

- Flow 1 ingress (mean 59.14 Mbit/s)
- Flow 1 egress (mean 59.00 Mbit/s)

![Graph of packet delay over time for Flow 1 showing 95th percentile delay.](image-url)
Run 8: Statistics of Copa

Start at: 2018-07-27 05:00:57
End at: 2018-07-27 05:01:27
Local clock offset: -0.383 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-07-27 06:12:31
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 104.63 Mbit/s
  95th percentile per-packet one-way delay: 56.219 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 104.63 Mbit/s
  95th percentile per-packet one-way delay: 56.219 ms
  Loss rate: 0.38%
Run 8: Report of Copa — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 104.67 Mbit/s)
- Flow 1 egress (mean 104.63 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 56.22 ms)
Run 9: Statistics of Copa

End at: 2018-07-27 05:23:12
Local clock offset: -0.419 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2018-07-27 06:12:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.48 Mbit/s
95th percentile per-packet one-way delay: 52.788 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 71.48 Mbit/s
95th percentile per-packet one-way delay: 52.788 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 10: Statistics of Copa

Start at: 2018-07-27 05:44:19  
End at: 2018-07-27 05:44:49  
Local clock offset: -0.032 ms  
Remote clock offset: 0.06 ms  

# Below is generated by plot.py at 2018-07-27 06:12:50  
# Datalink statistics

-- Total of 1 flow:  
Average throughput: 105.48 Mbit/s  
95th percentile per-packet one-way delay: 57.254 ms  
Loss rate: 0.24%  

-- Flow 1:  
Average throughput: 105.48 Mbit/s  
95th percentile per-packet one-way delay: 57.254 ms  
Loss rate: 0.24%
Run 10: Report of Copa — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress.]
Run 1: Statistics of TCP Cubic

Start at: 2018-07-27 02:15:20
End at: 2018-07-27 02:15:50
Local clock offset: 0.276 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-07-27 06:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.84 Mbit/s
95th percentile per-packet one-way delay: 61.861 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 223.84 Mbit/s
95th percentile per-packet one-way delay: 61.861 ms
Loss rate: 0.28%
Run 1: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 223.71 Mbit/s)  Flow 1 egress (mean 223.84 Mbit/s)

Flow 1 (95th percentile 61.86 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-07-27 02:36:56
End at: 2018-07-27 02:37:26
Local clock offset: -0.103 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2018-07-27 06:13:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 200.46 Mbit/s
95th percentile per-packet one-way delay: 62.113 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 200.46 Mbit/s
95th percentile per-packet one-way delay: 62.113 ms
Loss rate: 0.17%
Run 2: Report of TCP Cubic — Data Link

![Graph of Throughput](image1)

- **Flow 1 ingress (mean 200.11 Mbit/s)**
- **Flow 1 egress (mean 200.46 Mbit/s)**

![Graph of Per-packet end-to-end delay](image2)

- **Flow 1 (95th percentile 62.11 ms)**
Run 3: Statistics of TCP Cubic

Start at: 2018-07-27 02:58:40
End at: 2018-07-27 02:59:10
Local clock offset: -0.367 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-27 06:13:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.80 Mbit/s
95th percentile per-packet one-way delay: 61.012 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 228.80 Mbit/s
95th percentile per-packet one-way delay: 61.012 ms
Loss rate: 0.35%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-07-27 03:20:28
End at: 2018-07-27 03:20:58
Local clock offset: -0.049 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-27 06:13:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 232.79 Mbit/s
  95th percentile per-packet one-way delay: 60.080 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 232.79 Mbit/s
  95th percentile per-packet one-way delay: 60.080 ms
  Loss rate: 0.33%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-07-27 03:42:09
End at: 2018-07-27 03:42:39
Local clock offset: -0.515 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-07-27 06:13:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.81 Mbit/s
95th percentile per-packet one-way delay: 58.403 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 148.81 Mbit/s
95th percentile per-packet one-way delay: 58.403 ms
Loss rate: 0.35%
Run 5: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 148.83 Mbit/s)
- **Flow 1 egress** (mean 148.81 Mbit/s)

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

- **Flow 1** (95th percentile 58.40 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-07-27 04:03:51
End at: 2018-07-27 04:04:21
Local clock offset: -0.086 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-07-27 06:14:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.52 Mbit/s
95th percentile per-packet one-way delay: 61.560 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 166.52 Mbit/s
95th percentile per-packet one-way delay: 61.560 ms
Loss rate: 0.48%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

End at: 2018-07-27 04:26:05
Local clock offset: -0.37 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2018-07-27 06:16:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.39 Mbit/s
95th percentile per-packet one-way delay: 62.454 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 224.39 Mbit/s
95th percentile per-packet one-way delay: 62.454 ms
Loss rate: 0.14%
Run 7: Report of TCP Cubic — Data Link

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

**Flow 1**:
- Ingress (mean 223.94 Mbit/s)
- Egress (mean 224.39 Mbit/s)

**Flow 2**:
- (95th percentile 62.45 ms)
Run 8: Statistics of TCP Cubic

End at: 2018-07-27 04:47:55
Local clock offset: -0.038 ms
Remote clock offset: -0.186 ms

# Below is generated by plot.py at 2018-07-27 06:16:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.88 Mbit/s
95th percentile per-packet one-way delay: 62.513 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 218.88 Mbit/s
95th percentile per-packet one-way delay: 62.513 ms
Loss rate: 0.19%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-07-27 05:09:16
End at: 2018-07-27 05:09:46
Local clock offset: 0.038 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-07-27 06:16:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.84 Mbit/s
95th percentile per-packet one-way delay: 62.126 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 219.84 Mbit/s
95th percentile per-packet one-way delay: 62.126 ms
Loss rate: 0.13%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-07-27 05:30:54
End at: 2018-07-27 05:31:24
Local clock offset: 0.298 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-07-27 06:16:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.67 Mbit/s
95th percentile per-packet one-way delay: 62.548 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 226.67 Mbit/s
95th percentile per-packet one-way delay: 62.548 ms
Loss rate: 0.36%
Run 10: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 226.72 Mbit/s)
- Flow 1 egress (mean 226.67 Mbit/s)

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

- Flow 1 (95th percentile 62.55 ms)
Run 1: Statistics of FillP

Start at: 2018-07-27 02:20:26
End at: 2018-07-27 02:20:56
Local clock offset: -0.073 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-07-27 06:24:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 583.30 Mbit/s
95th percentile per-packet one-way delay: 236.757 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 583.30 Mbit/s
95th percentile per-packet one-way delay: 236.757 ms
Loss rate: 0.65%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-07-27 02:42:11
End at: 2018-07-27 02:42:41
Local clock offset: 0.291 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-07-27 06:27:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 650.70 Mbit/s
95th percentile per-packet one-way delay: 251.194 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 650.70 Mbit/s
95th percentile per-packet one-way delay: 251.194 ms
Loss rate: 0.42%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 651.25 Mbit/s)
- Flow 1 egress (mean 650.70 Mbit/s)

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

- Flow 1 (95th percentile 251.19 ms)
Run 3: Statistics of FillP

Start at: 2018-07-27 03:04:00
End at: 2018-07-27 03:04:30
Local clock offset: 0.364 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2018-07-27 06:27:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 651.00 Mbit/s
95th percentile per-packet one-way delay: 265.962 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 651.00 Mbit/s
95th percentile per-packet one-way delay: 265.962 ms
Loss rate: 0.95%
Run 3: Report of FillP — Data Link

Throughput (Mbps)

0 5 10 15 20 25 30

0 200 400 600

Flow 1 ingress (mean 655.05 Mbit/s)  Flow 1 egress (mean 651.00 Mbit/s)

Packet one way delay (ms)

0 5 10 15 20 25 30

50 100 150 200 250 300

Flow 1 (95th percentile 265.96 ms)
Run 4: Statistics of FillP

Start at: 2018-07-27 03:25:48
End at: 2018-07-27 03:26:18
Local clock offset: -0.165 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-27 06:27:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 600.43 Mbit/s
95th percentile per-packet one-way delay: 230.547 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 600.43 Mbit/s
95th percentile per-packet one-way delay: 230.547 ms
Loss rate: 1.05%
Run 4: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 604.80 Mbps)
- **Flow 1 egress** (mean 600.43 Mbps)

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

- **Flow 1 (95th percentile 230.55 ms)**
Run 5: Statistics of FillP

Start at: 2018-07-27 03:47:26
End at: 2018-07-27 03:47:56
Local clock offset: -0.203 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-07-27 06:29:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 637.93 Mbit/s
95th percentile per-packet one-way delay: 226.557 ms
Loss rate: 1.19%
-- Flow 1:
Average throughput: 637.93 Mbit/s
95th percentile per-packet one-way delay: 226.557 ms
Loss rate: 1.19%
Run 5: Report of FillP — Data Link

Graph showing throughput over time for Flow 1 ingress (mean 643.41 Mbit/s) and Flow 1 egress (mean 637.93 Mbit/s).

Graph showing per-packet one-way delay over time for Flow 1 (95th percentile 226.56 ms).
Run 6: Statistics of FillP

Start at: 2018-07-27 04:09:06
End at: 2018-07-27 04:09:36
Local clock offset: -0.043 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-07-27 06:29:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 675.02 Mbit/s
95th percentile per-packet one-way delay: 219.469 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 675.02 Mbit/s
95th percentile per-packet one-way delay: 219.469 ms
Loss rate: 0.81%
Run 6: Report of FillP — Data Link

[Graphs showing throughput and packet delay over time]
Run 7: Statistics of FillP

Start at: 2018-07-27 04:30:54
End at: 2018-07-27 04:31:24
Local clock offset: -0.031 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-07-27 06:30:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 677.94 Mbit/s
95th percentile per-packet one-way delay: 230.183 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 677.94 Mbit/s
95th percentile per-packet one-way delay: 230.183 ms
Loss rate: 0.40%
Run 7: Report of FillP — Data Link
Run 8: Statistics of FillP

Start at: 2018-07-27 04:52:45
End at: 2018-07-27 04:53:15
Local clock offset: -0.048 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2018-07-27 06:30:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 581.82 Mbit/s
95th percentile per-packet one-way delay: 238.033 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 581.82 Mbit/s
95th percentile per-packet one-way delay: 238.033 ms
Loss rate: 1.00%
Run 8: Report of FillP — Data Link

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

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

Flow 1 ingress (mean 585.68 Mbit/s) vs Flow 1 egress (mean 581.82 Mbit/s)

Flow 1 (95th percentile 238.03 ms)
Run 9: Statistics of FillP

Start at: 2018-07-27 05:14:35
End at: 2018-07-27 05:15:05
Local clock offset: -0.023 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-07-27 06:37:43
# Datalink statistics
   -- Total of 1 flow:
   Average throughput: 603.04 Mbit/s
   95th percentile per-packet one-way delay: 229.304 ms
   Loss rate: 1.01%
   -- Flow 1:
   Average throughput: 603.04 Mbit/s
   95th percentile per-packet one-way delay: 229.304 ms
   Loss rate: 1.01%
Run 9: Report of FillP — Data Link
Run 10: Statistics of FillP

Start at: 2018-07-27 05:36:14  
End at: 2018-07-27 05:36:44  
Local clock offset: 0.354 ms  
Remote clock offset: 0.106 ms

# Below is generated by plot.py at 2018-07-27 06:39:29  
# Datalink statistics
-- Total of 1 flow:  
Average throughput: 609.54 Mbit/s  
95th percentile per-packet one-way delay: 251.695 ms  
Loss rate: 1.25%  
-- Flow 1:  
Average throughput: 609.54 Mbit/s  
95th percentile per-packet one-way delay: 251.695 ms  
Loss rate: 1.25%
Run 10: Report of FillP — Data Link

![Graph showing network throughput and delay over time]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 615.16 Mbit/s)
Flow 1 egress (mean 609.54 Mbit/s)

Packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 251.69 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-27 02:18:58
End at: 2018-07-27 02:19:28
Local clock offset: 0.283 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-07-27 06:39:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 558.00 Mbit/s
95th percentile per-packet one-way delay: 105.830 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 558.00 Mbit/s
95th percentile per-packet one-way delay: 105.830 ms
Loss rate: 0.49%
Run 1: Report of FillP-Sheep — Data Link
Run 2: Statistics of FillP-Sheep

Start at: 2018-07-27 02:40:41
End at: 2018-07-27 02:41:11
Local clock offset: -0.057 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-07-27 06:40:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 623.13 Mbit/s
95th percentile per-packet one-way delay: 114.931 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 623.13 Mbit/s
95th percentile per-packet one-way delay: 114.931 ms
Loss rate: 0.47%
Run 2: Report of FillP-Sheep — Data Link

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

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

- Flow 1 ingress (mean 623.97 Mbit/s)
- Flow 1 egress (mean 623.33 Mbit/s)

- Flow 1 (95th percentile 114.93 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2018-07-27 03:02:32
End at: 2018-07-27 03:03:02
Local clock offset: -0.031 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-27 06:41:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.61 Mbit/s
95th percentile per-packet one-way delay: 99.893 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 562.61 Mbit/s
95th percentile per-packet one-way delay: 99.893 ms
Loss rate: 0.45%
Run 3: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 563.30 Mbit/s)**
- **Flow 1 egress (mean 562.61 Mbit/s)**

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

- **Flow 1 (95th percentile 99.89 ms)**
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-27 03:24:19
End at: 2018-07-27 03:24:49
Local clock offset: 0.235 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-07-27 06:41:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 596.38 Mbit/s
95th percentile per-packet one-way delay: 96.805 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 596.38 Mbit/s
95th percentile per-packet one-way delay: 96.805 ms
Loss rate: 0.52%
Run 4: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress** (mean 597.60 Mbit/s)
- **Flow 1 egress** (mean 596.38 Mbit/s)

![Graph 2: Packet delay vs Time](image2.png)

- **Flow 1 (95th percentile 96.81 ms)**
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-27 03:45:56
End at: 2018-07-27 03:46:26
Local clock offset: -0.171 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-07-27 06:42:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 609.37 Mbit/s
95th percentile per-packet one-way delay: 90.683 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 609.37 Mbit/s
95th percentile per-packet one-way delay: 90.683 ms
Loss rate: 0.56%
Run 5: Report of FillP-Sheep — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 611.71 Mbps)
- Flow 1 egress (mean 609.37 Mbps)

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

- Flow 1 (95th percentile 90.68 ms)
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-27 04:07:39
End at: 2018-07-27 04:08:09
Local clock offset: -0.435 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-07-27 06:42:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 556.36 Mbit/s
95th percentile per-packet one-way delay: 110.136 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 556.36 Mbit/s
95th percentile per-packet one-way delay: 110.136 ms
Loss rate: 0.49%
Run 6: Report of FillP-Sheep — Data Link

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

Flow 1 ingress (mean 557.22 Mbps)  Flow 1 egress (mean 556.36 Mbps)

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

Flow 1 (95th percentile 110.14 ms)
Run 7: Statistics of FillP-Sheep

End at: 2018-07-27 04:29:55
Local clock offset: -0.038 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2018-07-27 06:50:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 565.75 Mbit/s
95th percentile per-packet one-way delay: 108.693 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 565.75 Mbit/s
95th percentile per-packet one-way delay: 108.693 ms
Loss rate: 0.48%
Run 7: Report of FillP-Sheep — Data Link

![Graph showing throughput over time]

- Flow 1 ingress (mean 566.58 Mbit/s)
- Flow 1 egress (mean 565.75 Mbit/s)

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

- Flow 1 (95th percentile 108.69 ms)
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-27 04:51:15
End at: 2018-07-27 04:51:45
Local clock offset: 0.305 ms
Remote clock offset: -0.193 ms

# Below is generated by plot.py at 2018-07-27 06:51:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 607.72 Mbit/s
95th percentile per-packet one-way delay: 101.077 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 607.72 Mbit/s
95th percentile per-packet one-way delay: 101.077 ms
Loss rate: 0.49%
Run 8: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 608.62 Mbps)**
- **Flow 1 egress (mean 607.72 Mbps)**

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

- **Flow 1 (95th percentile 101.08 ms)**
Run 9: Statistics of FillP-Sheep

Start at: 2018-07-27 05:13:06
End at: 2018-07-27 05:13:36
Local clock offset: 0.324 ms
Remote clock offset: 0.035 ms

# Below is generated by plot.py at 2018-07-27 06:52:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 596.06 Mbit/s
95th percentile per-packet one-way delay: 109.204 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 596.06 Mbit/s
95th percentile per-packet one-way delay: 109.204 ms
Loss rate: 0.46%
Run 9: Report of FillP-Sheep — Data Link

![Graph of data link throughput over time]

- **Flow 1 ingress (mean 596.83 Mbit/s)**
- **Flow 1 egress (mean 596.06 Mbit/s)**

![Graph of packet delay over time]

- **Flow 1 (95th percentile 109.20 ms)**
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-27 05:34:46
End at: 2018-07-27 05:35:16
Local clock offset: 0.406 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 566.49 Mbit/s
95th percentile per-packet one-way delay: 104.767 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 566.49 Mbit/s
95th percentile per-packet one-way delay: 104.767 ms
Loss rate: 0.47%
Run 10: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2018-07-27 02:16:36
End at: 2018-07-27 02:17:06
Local clock offset: -0.111 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 5.41 Mbit/s
  95th percentile per-packet one-way delay: 50.334 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 5.41 Mbit/s
  95th percentile per-packet one-way delay: 50.334 ms
  Loss rate: 0.69%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-07-27 02:38:11
End at: 2018-07-27 02:38:41
Local clock offset: 0.272 ms
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 180.19 Mbit/s
  95th percentile per-packet one-way delay: 51.800 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 180.19 Mbit/s
  95th percentile per-packet one-way delay: 51.800 ms
  Loss rate: 0.34%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-07-27 02:59:57
End at: 2018-07-27 03:00:27
Local clock offset: 0.37 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.50 Mbit/s
95th percentile per-packet one-way delay: 50.399 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 202.50 Mbit/s
95th percentile per-packet one-way delay: 50.399 ms
Loss rate: 0.38%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-07-27 03:21:44
End at: 2018-07-27 03:22:14
Local clock offset: -0.116 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.69 Mbit/s
95th percentile per-packet one-way delay: 50.980 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 213.69 Mbit/s
95th percentile per-packet one-way delay: 50.980 ms
Loss rate: 0.36%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2018-07-27 03:43:21
End at: 2018-07-27 03:43:51
Local clock offset: -0.182 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.31 Mbit/s
95th percentile per-packet one-way delay: 51.385 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 205.31 Mbit/s
95th percentile per-packet one-way delay: 51.385 ms
Loss rate: 0.33%
Run 5: Report of Indigo — Data Link

![Throughput Graph]

- **Flow 1 ingress (mean 205.30 Mbit/s)**
- **Flow 1 egress (mean 205.31 Mbit/s)**

![Delay Graph]

- **Flow 1 (95th percentile 51.38 ms)**
Run 6: Statistics of Indigo

Start at: 2018-07-27 04:05:04
End at: 2018-07-27 04:05:34
Local clock offset: -0.066 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.29 Mbit/s
95th percentile per-packet one-way delay: 51.501 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 215.29 Mbit/s
95th percentile per-packet one-way delay: 51.501 ms
Loss rate: 0.35%
Run 6: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 215.33 Mbps)  Flow 1 egress (mean 215.29 Mbps)

Packet Error Rate (%)

Time (s)

Flow 1 (95th percentile 5.15 ms)
Run 7: Statistics of Indigo

Start at: 2018-07-27 04:26:51
End at: 2018-07-27 04:27:21
Local clock offset: -0.035 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.70 Mbit/s
95th percentile per-packet one-way delay: 51.202 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 193.70 Mbit/s
95th percentile per-packet one-way delay: 51.202 ms
Loss rate: 0.36%
Run 7: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 193.65 Mbit/s)**
- **Flow 1 egress (mean 193.70 Mbit/s)**

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

- **Flow 1 (95th percentile 51.20 ms)**

117
Run 8: Statistics of Indigo

End at: 2018-07-27 04:49:11
Local clock offset: -0.04 ms
Remote clock offset: -0.154 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.68 Mbit/s
95th percentile per-packet one-way delay: 51.081 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 203.68 Mbit/s
95th percentile per-packet one-way delay: 51.081 ms
Loss rate: 0.35%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Start at: 2018-07-27 05:10:32
End at: 2018-07-27 05:11:02
Local clock offset: -0.018 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.51 Mbit/s
95th percentile per-packet one-way delay: 51.020 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 186.51 Mbit/s
95th percentile per-packet one-way delay: 51.020 ms
Loss rate: 0.38%
Run 9: Report of Indigo — Data Link

[Graphs showing throughput and per-packet one way delay over time]
Run 10: Statistics of Indigo

Start at: 2018-07-27 05:32:11
End at: 2018-07-27 05:32:41
Local clock offset: 0.356 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.74 Mbit/s
95th percentile per-packet one-way delay: 50.461 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 214.74 Mbit/s
95th percentile per-packet one-way delay: 50.461 ms
Loss rate: 0.30%
Run 10: Report of Indigo — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 214.65 Mbit/s)  
Flow 1 egress (mean 214.74 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 50.46 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-07-27 02:33:38
End at: 2018-07-27 02:34:08
Local clock offset: 0.301 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.95 Mbit/s
95th percentile per-packet one-way delay: 53.035 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 34.95 Mbit/s
95th percentile per-packet one-way delay: 53.035 ms
Loss rate: 0.67%
Run 1: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 35.07 Mb/s)**
- **Flow 1 egress (mean 34.65 Mb/s)**

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

- **Flow 1 (95th percentile 53.03 ms)**
Run 2: Statistics of LEDBAT

Start at: 2018-07-27 02:55:02
End at: 2018-07-27 02:55:32
Local clock offset: -0.055 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.44 Mbit/s
95th percentile per-packet one-way delay: 52.250 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 35.44 Mbit/s
95th percentile per-packet one-way delay: 52.250 ms
Loss rate: 0.66%
Run 2: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 35.56 Mbit/s)
- **Flow 1 egress** (mean 35.44 Mbit/s)

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

- **Flow 1 95th percentile** 52.25 ms
Run 3: Statistics of LEDBAT

Start at: 2018-07-27 03:17:05
End at: 2018-07-27 03:17:35
Local clock offset: -0.045 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 51.310 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 35.83 Mbit/s
95th percentile per-packet one-way delay: 51.310 ms
Loss rate: 0.66%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 35.95 Mbit/s)
- Flow 1 egress (mean 35.83 Mbit/s)

![Graph 2: Packet Loss vs Time](image2.png)

- Flow 1 (95th percentile 51.31 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-07-27 03:38:46
End at: 2018-07-27 03:39:16
Local clock offset: 0.198 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 51.687 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 35.08 Mbit/s
95th percentile per-packet one-way delay: 51.687 ms
Loss rate: 0.67%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 35.20 Mbit/s)
- Flow 1 egress (mean 35.08 Mbit/s)

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

- Flow 1 (95th percentile 51.69 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-07-27 04:00:28
End at: 2018-07-27 04:00:58
Local clock offset: -0.014 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: 51.743 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: 51.743 ms
Loss rate: 0.67%
Run 5: Report of LEDBAT — Data Link

[Graphs showing throughput and packet loss over time.]
Run 6: Statistics of LEDBAT

Local clock offset: -0.05 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.94 Mbit/s
95th percentile per-packet one-way delay: 52.523 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 34.94 Mbit/s
95th percentile per-packet one-way delay: 52.523 ms
Loss rate: 0.67%
Run 6: Report of LEDBAT — Data Link

![Graph showing throughput and delay over time. The graphs display two lines: one for flow ingress and another for egress. The throughput is shown on the y-axis, and time on the x-axis. The graph indicates stable flow ingress with a mean of 35.06 Mbps and egress with a mean of 34.94 Mbps. The delay graph shows a 95th percentile delay of 52.52 ms.](image-url)
Run 7: Statistics of LEDBAT

Start at: 2018-07-27 04:44:03
End at: 2018-07-27 04:44:33
Local clock offset: -0.03 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 51.964 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 36.17 Mbit/s
95th percentile per-packet one-way delay: 51.964 ms
Loss rate: 0.66%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-07-27 05:05:54
End at: 2018-07-27 05:06:24
Local clock offset: 0.021 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 51.945 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 31.44 Mbit/s
95th percentile per-packet one-way delay: 51.945 ms
Loss rate: 0.43%
Run 8: Report of LEDBAT — Data Link

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

**Throughput:**
- Flow 1 ingress (mean 31.47 Mbit/s)
- Flow 1 egress (mean 31.44 Mbit/s)

**Packet Delay:**
- Flow 1 (95th percentile 51.95 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-07-27 05:27:32
End at: 2018-07-27 05:28:02
Local clock offset: -0.046 ms
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 52.741 ms
Loss rate: 0.69%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-07-27 05:49:14
End at: 2018-07-27 05:49:44
Local clock offset: -0.026 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-07-27 06:52:14
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 52.242 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 28.46 Mbit/s
95th percentile per-packet one-way delay: 52.242 ms
Loss rate: 0.74%
Run 10: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 28.58 Mbps)**
- **Flow 1 egress (mean 28.46 Mbps)**

![Graph 2: Average round-trip delay (ms) vs. Time (s)]

- **Flow 1 (95th percentile 52.24 ms)**

143
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-27 02:17:42
End at: 2018-07-27 02:18:12
Local clock offset: 0.264 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-07-27 06:57:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 308.94 Mbit/s
95th percentile per-packet one-way delay: 81.358 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 308.94 Mbit/s
95th percentile per-packet one-way delay: 81.358 ms
Loss rate: 0.43%
Run 1: Report of PCC-Allegro — Data Link

![Graph 1](image1)

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 309.23 Mbit/s)  
Flow 1 egress (mean 308.94 Mbit/s)

![Graph 2](image2)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 81.36 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-07-27 02:39:28
End at: 2018-07-27 02:39:58
Local clock offset: -0.046 ms
Remote clock offset: -0.171 ms

# Below is generated by plot.py at 2018-07-27 06:57:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 234.58 Mbit/s
95th percentile per-packet one-way delay: 63.579 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 234.58 Mbit/s
95th percentile per-packet one-way delay: 63.579 ms
Loss rate: 0.46%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 234.85 Mbit/s)**
- **Flow 1 egress (mean 234.58 Mbit/s)**
Run 3: Statistics of PCC-Allegro

Start at: 2018-07-27 03:01:15
End at: 2018-07-27 03:01:45
Local clock offset: 0.007 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-07-27 06:57:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 329.51 Mbit/s
95th percentile per-packet one-way delay: 79.478 ms
Loss rate: 0.48%

-- Flow 1:
Average throughput: 329.51 Mbit/s
95th percentile per-packet one-way delay: 79.478 ms
Loss rate: 0.48%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 330.00 Mbit/s)
- Flow 1 egress (mean 329.51 Mbit/s)

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

- Flow 1 (95th percentile 79.48 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-27 03:23:03
End at: 2018-07-27 03:23:33
Local clock offset: -0.13 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-07-27 06:57:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 312.76 Mbit/s
95th percentile per-packet one-way delay: 143.476 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 312.76 Mbit/s
95th percentile per-packet one-way delay: 143.476 ms
Loss rate: 0.88%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-27 03:44:39
End at: 2018-07-27 03:45:09
Local clock offset: -0.542 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-07-27 06:57:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.76 Mbit/s
95th percentile per-packet one-way delay: 94.585 ms
Loss rate: 0.36%

-- Flow 1:
Average throughput: 341.76 Mbit/s
95th percentile per-packet one-way delay: 94.585 ms
Loss rate: 0.36%
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-27 04:06:23
End at: 2018-07-27 04:06:53
Local clock offset: -0.027 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-27 06:57:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 316.88 Mbit/s
95th percentile per-packet one-way delay: 61.748 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 316.88 Mbit/s
95th percentile per-packet one-way delay: 61.748 ms
Loss rate: 0.42%
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-27 04:28:08
End at: 2018-07-27 04:28:38
Local clock offset: 0.343 ms
Remote clock offset: -0.088 ms

# Below is generated by plot.py at 2018-07-27 06:58:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 333.75 Mbit/s
  95th percentile per-packet one-way delay: 67.425 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 333.75 Mbit/s
  95th percentile per-packet one-way delay: 67.425 ms
  Loss rate: 0.43%
Run 7: Report of PCC-Allegro — Data Link
Run 8: Statistics of PCC-Allegro

End at: 2018-07-27 04:50:29
Local clock offset: 0.025 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-07-27 06:58:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 280.01 Mbit/s
  95th percentile per-packet one-way delay: 102.191 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 280.01 Mbit/s
  95th percentile per-packet one-way delay: 102.191 ms
  Loss rate: 0.48%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-07-27 05:11:49
End at: 2018-07-27 05:12:19
Local clock offset: 0.031 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-07-27 07:01:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 315.52 Mbit/s
95th percentile per-packet one-way delay: 74.182 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 315.52 Mbit/s
95th percentile per-packet one-way delay: 74.182 ms
Loss rate: 0.39%
Run 9: Report of PCC-Allegro — Data Link

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

Flow 1 ingress (mean 315.69 Mbit/s)  
Flow 1 egress (mean 315.52 Mbit/s)

![Graph of Per packet nose delay vs Time](image2.png)

Flow 1 (95th percentile 74.18 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-07-27 05:33:30
End at: 2018-07-27 05:34:00
Local clock offset: -0.416 ms
Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-07-27 07:02:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 317.01 Mbit/s
95th percentile per-packet one-way delay: 130.758 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 317.01 Mbit/s
95th percentile per-packet one-way delay: 130.758 ms
Loss rate: 0.40%
Run 10: Report of PCC-Allegro — Data Link

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

Flow 1 ingress (mean 317.23 Mbps)  Flow 1 egress (mean 317.01 Mbps)

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

Flow 1 (95th percentile 130.76 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-07-27 02:25:57
End at: 2018-07-27 02:26:27
Local clock offset: -0.089 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-07-27 07:07:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 308.50 Mbit/s
95th percentile per-packet one-way delay: 66.892 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 308.50 Mbit/s
95th percentile per-packet one-way delay: 66.892 ms
Loss rate: 0.30%
Run 1: Report of PCC-Expr — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 308.40 Mbit/s)**
- **Flow 1 egress (mean 308.50 Mbit/s)**

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

- **Flow 1 (95th percentile 66.89 ms)**
Run 2: Statistics of PCC-Expr

Start at: 2018-07-27 02:47:39
End at: 2018-07-27 02:48:09
Local clock offset: -0.39 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-07-27 07:07:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.24 Mbit/s
95th percentile per-packet one-way delay: 50.554 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 160.24 Mbit/s
95th percentile per-packet one-way delay: 50.554 ms
Loss rate: 0.48%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-07-27 03:09:26
End at: 2018-07-27 03:09:56
Local clock offset: 0.029 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-07-27 07:09:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 320.61 Mbit/s
95th percentile per-packet one-way delay: 312.953 ms
Loss rate: 6.83%
-- Flow 1:
Average throughput: 320.61 Mbit/s
95th percentile per-packet one-way delay: 312.953 ms
Loss rate: 6.83%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-07-27 03:31:08
End at: 2018-07-27 03:31:38
Local clock offset: -0.142 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-07-27 07:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 381.22 Mbit/s
95th percentile per-packet one-way delay: 309.432 ms
Loss rate: 10.61%
-- Flow 1:
Average throughput: 381.22 Mbit/s
95th percentile per-packet one-way delay: 309.432 ms
Loss rate: 10.61%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-07-27 03:52:57
End at: 2018-07-27 03:53:27
Local clock offset: -0.137 ms
Remote clock offset: -0.064 ms

# Below is generated by plot.py at 2018-07-27 07:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 175.01 Mbit/s
95th percentile per-packet one-way delay: 50.991 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 175.01 Mbit/s
95th percentile per-packet one-way delay: 50.991 ms
Loss rate: 0.44%
Run 5: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 175.19 Mbit/s)**
- **Flow 1 egress (mean 175.01 Mbit/s)**

![Graph showing packet delay](image)

- Flow 1 (95th percentile 50.99 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-07-27 04:14:40
End at: 2018-07-27 04:15:10
Local clock offset: -0.397 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-07-27 07:11:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 170.10 Mbit/s
95th percentile per-packet one-way delay: 52.219 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 170.10 Mbit/s
95th percentile per-packet one-way delay: 52.219 ms
Loss rate: 0.57%
Run 6: Report of PCC-Expr — Data Link

![Graph of Throughput vs Time]

- Flow 1 ingress (mean 170.50 Mbit/s)
- Flow 1 egress (mean 170.10 Mbit/s)

![Graph of Packet Delay vs Time]

- Flow 1 (95th percentile 52.22 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-07-27 04:36:29
End at: 2018-07-27 04:36:59
Local clock offset: -0.4 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-07-27 07:11:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 290.06 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 290.06 Mbit/s
95th percentile per-packet one-way delay: 65.925 ms
Loss rate: 0.30%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-07-27 04:58:15
End at: 2018-07-27 04:58:46
Local clock offset: 0.364 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-07-27 07:11:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 221.05 Mbit/s
95th percentile per-packet one-way delay: 51.682 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 221.05 Mbit/s
95th percentile per-packet one-way delay: 51.682 ms
Loss rate: 0.45%
Run 8: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 221.29 Mbps)
  - Flow 1 egress (mean 221.05 Mbps)

- **Packet round-trip delay (ms)**
  - Flow 1 (99th percentile 51.68 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-07-27 05:20:02
End at: 2018-07-27 05:20:32
Local clock offset: -0.366 ms
Remote clock offset: 0.145 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 259.62 Mbit/s
95th percentile per-packet one-way delay: 59.904 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 259.62 Mbit/s
95th percentile per-packet one-way delay: 59.904 ms
Loss rate: 0.63%
Run 9: Report of PCC-Expr — Data Link

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

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

*Flow 1 ingress (mean 260.38 Mbit/s)*
*Flow 1 egress (mean 259.62 Mbit/s)*

Flow 1 (95th percentile 59.90 ms)
Run 10: Statistics of PCC-Expr

Start at: 2018-07-27 05:41:45
End at: 2018-07-27 05:42:15
Local clock offset: 0.358 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.16 Mbit/s
95th percentile per-packet one-way delay: 53.758 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 217.16 Mbit/s
95th percentile per-packet one-way delay: 53.758 ms
Loss rate: 0.45%
Run 10: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 217.41 Mbit/s)**
- **Flow 1 egress (mean 217.16 Mbit/s)**

![Graph 2: Per Packet End-to-End Delay (ms) Over Time (s)]

- **Flow 1 (95th percentile 53.76 ms)**
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-27 02:34:45
End at: 2018-07-27 02:35:15
Local clock offset: -0.104 ms
Remote clock offset: -0.164 ms
Run 1: Report of QUIC Cubic — Data Link

![Graph showing throughput and latency over time for QUIC Cubic flow 1, with mean ingress and egress throughput, and 95th percentile latency.]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.06 Mbps)

Flow 1 egress (mean 0.06 Mbps)

Packet-cumulated one-way delay (ms)

Time (s)

Flow 1 (95th percentile 50.75 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-07-27 02:56:09
End at: 2018-07-27 02:56:39
Local clock offset: 0.344 ms
Remote clock offset: -0.017 ms
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-27 03:18:13
End at: 2018-07-27 03:18:43
Local clock offset: 0.286 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.47 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 71.47 Mbit/s
95th percentile per-packet one-way delay: 51.018 ms
Loss rate: 0.39%
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-27 03:39:54
End at: 2018-07-27 03:40:24
Local clock offset: -0.164 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.12 Mbit/s
95th percentile per-packet one-way delay: 49.777 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 73.12 Mbit/s
95th percentile per-packet one-way delay: 49.777 ms
Loss rate: 0.36%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-27 04:01:36
End at: 2018-07-27 04:02:06
Local clock offset: -0.086 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.48 Mbit/s
95th percentile per-packet one-way delay: 50.208 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 70.48 Mbit/s
95th percentile per-packet one-way delay: 50.208 ms
Loss rate: 0.39%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

End at: 2018-07-27 04:23:50
Local clock offset: -0.398 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 50.359 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 50.359 ms
Loss rate: 0.37%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-27 04:45:11
End at: 2018-07-27 04:45:41
Local clock offset: -0.035 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 50.645 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 69.89 Mbit/s
95th percentile per-packet one-way delay: 50.645 ms
Loss rate: 0.39%
Run 7: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 69.93 Mbit/s)**
- **Flow 1 egress (mean 69.89 Mbit/s)**

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

- **Flow 1 (95th percentile 50.65 ms)**
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-27 05:07:01
End at: 2018-07-27 05:07:32
Local clock offset: -0.362 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.59 Mbit/s
95th percentile per-packet one-way delay: 50.494 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 73.59 Mbit/s
95th percentile per-packet one-way delay: 50.494 ms
Loss rate: 0.38%
Run 8: Report of QUIC Cubic — Data Link

![Graph showing network throughput and round-trip times over time.]

- Flow 1 ingress (mean 73.62 Mbit/s)
- Flow 1 egress (mean 73.59 Mbit/s)
Run 9: Statistics of QUIC Cubic

Start at: 2018-07-27 05:28:40
End at: 2018-07-27 05:29:10
Local clock offset: -0.011 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.55 Mbit/s
95th percentile per-packet one-way delay: 48.856 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 74.55 Mbit/s
95th percentile per-packet one-way delay: 48.856 ms
Loss rate: 0.38%
Run 9: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 74.58 Mbit/s)
- Flow 1 egress (mean 74.55 Mbit/s)

![Graph showing per-packet round-trip delay](image-url)

- Flow 1 (95th percentile 48.86 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-27 05:50:21
End at: 2018-07-27 05:50:51
Local clock offset: 0.34 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 72.55 Mbit/s
  95th percentile per-packet one-way delay: 51.091 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 72.55 Mbit/s
  95th percentile per-packet one-way delay: 51.091 ms
  Loss rate: 0.38%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-07-27 02:32:33
End at: 2018-07-27 02:33:03
Local clock offset: -0.082 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
--- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.066 ms
Loss rate: 0.25%
--- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.066 ms
Loss rate: 0.25%
Run 1: Report of SCReAM — Data Link

![Graph showing network data over time]

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

![Graph showing packet delay over time]

- Flow 1 (95th percentile 50.07 ms)
Run 2: Statistics of SCReAM

Start at: 2018-07-27 02:53:56
End at: 2018-07-27 02:54:26
Local clock offset: 0.338 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.320 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.320 ms
Loss rate: 0.39%
Run 2: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for two flows.](image-url)
Run 3: Statistics of SCReAM

Start at: 2018-07-27 03:16:00
End at: 2018-07-27 03:16:30
Local clock offset: -0.118 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.903 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.903 ms
Loss rate: 0.26%
Run 3: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 49.90 ms)
Run 4: Statistics of SCReAM

Start at: 2018-07-27 03:37:41
End at: 2018-07-27 03:38:11
Local clock offset: -0.179 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.925 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.925 ms
Loss rate: 0.26%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-07-27 03:59:23
End at: 2018-07-27 03:59:53
Local clock offset: -0.45 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.486 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.486 ms
  Loss rate: 0.26%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

End at: 2018-07-27 04:21:37  
Local clock offset: -0.408 ms  
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-07-27 07:12:03  
# Datalink statistics

-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.119 ms
Loss rate: 0.26%

-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.119 ms
Loss rate: 0.26%
Run 6: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress.

Throughput in Mbps and packet delay in milliseconds are plotted against time in seconds.]
Run 7: Statistics of SCReAM

Local clock offset: 0.309 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.343 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.343 ms
  Loss rate: 0.26%
Run 7: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 51.34 ms)
Run 8: Statistics of SCReAM

Start at: 2018-07-27 05:04:49
End at: 2018-07-27 05:05:19
Local clock offset: 0.007 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.003 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.003 ms
Loss rate: 0.38%
Run 8: Report of SCReAM — Data Link

![Graph showing data link performance](image)

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

![Graph showing packet delay](image)

- Flow 1 (95th percentile 51.00 ms)
Run 9: Statistics of SCReAM

Start at: 2018-07-27 05:26:27
End at: 2018-07-27 05:26:57
Local clock offset: 0.36 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.389 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.389 ms
Loss rate: 0.39%
Run 9: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 51.39 ms)
Run 10: Statistics of SCReAM

Start at: 2018-07-27 05:48:09
End at: 2018-07-27 05:48:39
Local clock offset: -0.005 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.007 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.007 ms
Loss rate: 0.39%
Run 10: Report of SCReAM — Data Link

[Graphs showing network performance metrics such as throughput and one-way packet delay over time.]
Run 1: Statistics of Sprout

Start at: 2018-07-27 02:23:21
End at: 2018-07-27 02:23:51
Local clock offset: -0.097 ms
Remote clock offset: -0.156 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.39%
Run 1: Report of Sprout — Data Link

![Graph of throughput and packet delay](image1.png)

- **Throughput (Mbps)**
- **Time (s)**
- **Flow 1 ingress (mean 7.21 Mbit/s)**
- **Flow 1 egress (mean 7.21 Mbit/s)**

![Graph of packet delay](image2.png)

- **Per packet delay (ms)**
- **Flow 1 95th percentile 51.47 ms**
Run 2: Statistics of Sprout

Start at: 2018-07-27 02:45:06
End at: 2018-07-27 02:45:36
Local clock offset: 0.31 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-07-27 07:12:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 52.030 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 6.68 Mbit/s
95th percentile per-packet one-way delay: 52.030 ms
Loss rate: 0.75%
Run 2: Report of Sprout — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 6.71 Mbit/s)
- Flow 1 egress (mean 6.64 Mbit/s)
Run 3: Statistics of Sprout

Start at: 2018-07-27 03:06:53
End at: 2018-07-27 03:07:23
Local clock offset: 0.324 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 51.590 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 7.29 Mbit/s
95th percentile per-packet one-way delay: 51.590 ms
Loss rate: 0.09%
Run 3: Report of Sprout — Data Link

Diagram 1: Throughput vs. Time (s)
- Flow 1 ingress (mean 7.27 Mbit/s)
- Flow 1 egress (mean 7.26 Mbit/s)

Diagram 2: Packet Delay vs. Time (s)
- Flow 1 (95th percentile 51.59 ms)
Run 4: Statistics of Sprout

Start at: 2018-07-27 03:28:37
End at: 2018-07-27 03:29:07
Local clock offset: -0.117 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 7.28 Mbit/s
  95th percentile per-packet one-way delay: 51.620 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 7.28 Mbit/s
  95th percentile per-packet one-way delay: 51.620 ms
  Loss rate: 0.28%
Run 4: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 7.28 Mbit/s)**
- **Flow 1 egress (mean 7.28 Mbit/s)**

![Graph 2: Avg. packet inter-arrival delay (ms)]

- **Flow 1 (95th percentile 51.62 ms)**

231
Run 5: Statistics of Sprout

Start at: 2018-07-27 03:50:25
End at: 2018-07-27 03:50:55
Local clock offset: -0.492 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 51.381 ms
Loss rate: 0.50%
-- Flow 1:
  Average throughput: 7.17 Mbit/s
  95th percentile per-packet one-way delay: 51.381 ms
  Loss rate: 0.50%
Run 5: Report of Sprout — Data Link

![Graph of Throughput vs Time](image1)

- **Flow 1 ingress (mean 7.18 Mbit/s)**
- **Flow 1 egress (mean 7.17 Mbit/s)**

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

- **Flow 1 (95th percentile 51.38 ms)**
Run 6: Statistics of Sprout

Start at: 2018-07-27 04:12:05
End at: 2018-07-27 04:12:35
Local clock offset: -0.096 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 51.463 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 51.463 ms
Loss rate: 0.35%
Run 6: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 7.17 Mbps)
  - Flow 1 egress (mean 7.17 Mbps)

- **Packet Delay (ms):**
  - Flow 1 95th percentile 51.46 ms
Run 7: Statistics of Sprout

End at: 2018-07-27 04:34:25
Local clock offset: -0.044 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 51.766 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 5.92 Mbit/s
95th percentile per-packet one-way delay: 51.766 ms
Loss rate: 0.35%
Run 7: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 5.92 Mbps)**
- **Flow 1 egress (mean 5.92 Mbps)**

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

- **Flow 1 95th percentile 51.77 ms**
Run 8: Statistics of Sprout

End at: 2018-07-27 04:56:08
Local clock offset: 0.338 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 52.033 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 52.033 ms
Loss rate: 0.77%
Run 8: Report of Sprout — Data Link

![Graph depicting throughput and packet round-trip delay](image)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 5.88 Mbps)
  - Flow 1 egress (mean 5.86 Mbps)

- **Packet round-trip delay (ms)**
  - Flow 1 (95th percentile 52.03 ms)
Run 9: Statistics of Sprout

Start at: 2018-07-27 05:17:30
End at: 2018-07-27 05:18:00
Local clock offset: 0.313 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 51.763 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 51.763 ms
Loss rate: 0.54%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Start at: 2018-07-27 05:39:10
End at: 2018-07-27 05:39:40
Local clock offset: -0.052 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-07-27 07:12:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 51.938 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 6.06 Mbit/s
95th percentile per-packet one-way delay: 51.938 ms
Loss rate: 0.22%
Run 10: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-27 02:21:54
End at: 2018-07-27 02:22:24
Local clock offset: -0.048 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2018-07-27 07:19:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.87 Mbit/s
95th percentile per-packet one-way delay: 51.044 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 249.87 Mbit/s
95th percentile per-packet one-way delay: 51.044 ms
Loss rate: 0.33%
Run 1: Report of TaoVA-100x — Data Link

![Graph of Throughput](image1)

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 249.85 Mbit/s)
- Flow 1 egress (mean 249.87 Mbit/s)

![Graph of Per-packet Round-trip delay](image2)

Per-packet round-trip delay (ms)

Time (s)

- Flow 1 (95th percentile 51.04 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-07-27 02:43:43
End at: 2018-07-27 02:44:13
Local clock offset: -0.383 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-07-27 07:19:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.08 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 217.08 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.16%
Run 2: Report of TaoVA-100x — Data Link

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

Flow 1 ingress (mean 216.69 Mbit/s)  Flow 1 egress (mean 217.08 Mbit/s)

Flow 1 (95th percentile 50.34 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-07-27 03:05:31
End at: 2018-07-27 03:06:01
Local clock offset: 0.351 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-07-27 07:19:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 193.44 Mbit/s
95th percentile per-packet one-way delay: 51.506 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 193.44 Mbit/s
95th percentile per-packet one-way delay: 51.506 ms
Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 193.54 Mbit/s)
- Flow 1 egress (mean 193.44 Mbit/s)

![Graph of per-packet one-way delay for Flow 1.]

Legend:
- Flow 1 (95th percentile 51.51 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-07-27 03:27:17
End at: 2018-07-27 03:27:47
Local clock offset: -0.139 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-07-27 07:19:26
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 181.41 Mbit/s
  95th percentile per-packet one-way delay: 51.456 ms
  Loss rate: 0.27%
-- Flow 1:
  Average throughput: 181.41 Mbit/s
  95th percentile per-packet one-way delay: 51.456 ms
  Loss rate: 0.27%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

End at: 2018-07-27 03:49:27
Local clock offset: -0.14 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-07-27 07:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.49 Mbit/s
95th percentile per-packet one-way delay: 51.223 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 261.49 Mbit/s
95th percentile per-packet one-way delay: 51.223 ms
Loss rate: 0.36%
Run 5: Report of TaoVA-100x — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 261.53 Mbps)
- Flow 1 egress (mean 261.49 Mbps)

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

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

Start at: 2018-07-27 04:10:39
End at: 2018-07-27 04:11:09
Local clock offset: 0.339 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-07-27 07:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.28 Mbit/s
95th percentile per-packet one-way delay: 51.654 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 241.28 Mbit/s
95th percentile per-packet one-way delay: 51.654 ms
Loss rate: 0.36%
Run 6: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 241.33 Mbit/s)
- Flow 1 egress (mean 241.28 Mbit/s)

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

- Flow 1 (95th percentile 51.65 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-07-27 04:32:27
End at: 2018-07-27 04:32:57
Local clock offset: -0.406 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-07-27 07:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 249.89 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 249.89 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.30%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-07-27 04:54:15
End at: 2018-07-27 04:54:45
Local clock offset: -0.069 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2018-07-27 07:20:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.66 Mbit/s
95th percentile per-packet one-way delay: 51.435 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 213.66 Mbit/s
95th percentile per-packet one-way delay: 51.435 ms
Loss rate: 0.43%
Run 8: Report of TaoVA-100x — Data Link

![Graph showing throughput changes over time for Flow 1 ingress and egress, with mean throughput figures indicated.]

![Graph showing packet delay changes over time for Flow 1, with a 95th percentile delay marked.]

259
Run 9: Statistics of TaoVA-100x

Start at: 2018-07-27 05:16:05
End at: 2018-07-27 05:16:35
Local clock offset: 0.381 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-07-27 07:25:04
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 224.35 Mbit/s
  95th percentile per-packet one-way delay: 51.510 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 224.35 Mbit/s
  95th percentile per-packet one-way delay: 51.510 ms
  Loss rate: 0.40%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-27 05:37:44
End at: 2018-07-27 05:38:14
Local clock offset: -0.009 ms
Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 236.17 Mbit/s
95th percentile per-packet one-way delay: 51.087 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 236.17 Mbit/s
95th percentile per-packet one-way delay: 51.087 ms
Loss rate: 0.27%
Run 10: Report of TaoVA-100x — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 236.00 Mbps)
- Flow 1 egress (mean 236.17 Mbps)

**Packet Delay (ms):**
- Flow 1 (95th percentile 51.09 ms)
Run 1: Statistics of TCP Vegas

End at: 2018-07-27 02:27:58
Local clock offset: 0.294 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.98 Mbit/s
95th percentile per-packet one-way delay: 60.730 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 190.98 Mbit/s
95th percentile per-packet one-way delay: 60.730 ms
Loss rate: 0.24%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-07-27 02:48:58
End at: 2018-07-27 02:49:28
Local clock offset: -0.059 ms
Remote clock offset: -0.042 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.77 Mbit/s
95th percentile per-packet one-way delay: 52.344 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 120.77 Mbit/s
95th percentile per-packet one-way delay: 52.344 ms
Loss rate: 0.30%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-07-27 03:10:55
End at: 2018-07-27 03:11:25
Local clock offset: 0.348 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 171.98 Mbit/s
95th percentile per-packet one-way delay: 61.431 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 171.98 Mbit/s
95th percentile per-packet one-way delay: 61.431 ms
Loss rate: 0.18%
Run 3: Report of TCP Vegas — Data Link

![Graphs showing TCP Vegas performance metrics over time.](image-url)
Run 4: Statistics of TCP Vegas

Start at: 2018-07-27 03:32:39
End at: 2018-07-27 03:33:09
Local clock offset: -0.146 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 100.82 Mbit/s
95th percentile per-packet one-way delay: 51.815 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 100.82 Mbit/s
95th percentile per-packet one-way delay: 51.815 ms
Loss rate: 0.33%
Run 4: Report of TCP Vegas — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 100.82 Mbit/s)
- Flow 1 egress (mean 100.82 Mbit/s)

Graph 2: Per packet one-way delay (ms)
- Flow 1 (95th percentile 51.81 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-07-27 03:54:18
End at: 2018-07-27 03:54:48
Local clock offset: -0.054 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 162.97 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 162.97 Mbit/s
95th percentile per-packet one-way delay: 51.472 ms
Loss rate: 0.32%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-07-27 04:16:00
End at: 2018-07-27 04:16:30
Local clock offset: -0.018 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 223.47 Mbit/s
95th percentile per-packet one-way delay: 61.549 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 223.47 Mbit/s
95th percentile per-packet one-way delay: 61.549 ms
Loss rate: 0.13%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-07-27 04:37:58
End at: 2018-07-27 04:38:28
Local clock offset: -0.409 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2018-07-27 07:25:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.09 Mbit/s
95th percentile per-packet one-way delay: 51.443 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 179.09 Mbit/s
95th percentile per-packet one-way delay: 51.443 ms
Loss rate: 0.32%
Run 7: Report of TCP Vegas — Data Link

![Graph showing data link throughput over time for two flows.]

- Flow 1 ingress (mean 179.07 Mbit/s)
- Flow 1 egress (mean 179.09 Mbit/s)

![Graph showing packet loss over time for Flow 1.]

- Flow 1 (95th percentile 51.44 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-07-27 04:59:40
End at: 2018-07-27 05:00:10
Local clock offset: 0.326 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-07-27 07:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.09 Mbit/s
95th percentile per-packet one-way delay: 62.095 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 229.09 Mbit/s
95th percentile per-packet one-way delay: 62.095 ms
Loss rate: 0.39%
Run 8: Report of TCP Vegas — Data Link

![Graph of throughput vs. time for two flows with different mean speeds.]

- Flow 1 ingress (mean 229.21 Mbit/s)
- Flow 1 egress (mean 229.09 Mbit/s)

![Graph of packet delay vs. time for Flow 1 with 95th percentile delay of 62.09 ms.]

279
Run 9: Statistics of TCP Vegas

Start at: 2018-07-27 05:21:29
End at: 2018-07-27 05:21:59
Local clock offset: 0.326 ms
Remote clock offset: 0.088 ms

# Below is generated by plot.py at 2018-07-27 07:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.56 Mbit/s
95th percentile per-packet one-way delay: 52.291 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 156.56 Mbit/s
95th percentile per-packet one-way delay: 52.291 ms
Loss rate: 0.37%
Run 9: Report of TCP Vegas — Data Link

Graph 1: Time vs. Throughput (Mbps)

Flow 1 ingress (mean 156.62 Mbit/s) vs. Flow 1 egress (mean 156.56 Mbit/s)

Graph 2: Time vs. Packet Delay (ms)

Flow 1 99th percentile 52.29 ms
Run 10: Statistics of TCP Vegas

Start at: 2018-07-27 05:43:09
End at: 2018-07-27 05:43:39
Local clock offset: -0.016 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-07-27 07:25:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.77 Mbit/s
95th percentile per-packet one-way delay: 52.220 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 101.77 Mbit/s
95th percentile per-packet one-way delay: 52.220 ms
Loss rate: 0.38%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

End at: 2018-07-27 02:31:43
Local clock offset: -0.088 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-07-27 07:27:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 220.36 Mbit/s
  95th percentile per-packet one-way delay: 194.522 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 220.36 Mbit/s
  95th percentile per-packet one-way delay: 194.522 ms
  Loss rate: 0.60%
Run 1: Report of Verus — Data Link

![Graph of Throughput and Delay over Time]

- **Flow 1 ingress** (mean 222.22 Mbit/s)
- **Flow 1 egress** (mean 220.36 Mbit/s)

![Graph of Packet One Way Delay over Time]

- **Flow 1** (95th percentile 194.52 ms)
Run 2: Statistics of Verus

Start at: 2018-07-27 02:52:39
End at: 2018-07-27 02:53:09
Local clock offset: -0.052 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-07-27 07:27:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 186.11 Mbit/s
95th percentile per-packet one-way delay: 89.768 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 186.11 Mbit/s
95th percentile per-packet one-way delay: 89.768 ms
Loss rate: 0.20%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-07-27 03:14:41
End at: 2018-07-27 03:15:11
Local clock offset: 0.323 ms
Remote clock offset: -0.056 ms

# Below is generated by plot.py at 2018-07-27 07:28:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.11 Mbit/s
95th percentile per-packet one-way delay: 102.299 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 213.11 Mbit/s
95th percentile per-packet one-way delay: 102.299 ms
Loss rate: 0.23%
Run 3: Report of Verus — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 212.51 Mbit/s)
- **Flow 1 egress** (mean 213.11 Mbit/s)

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

- **Flow 1 (95th percentile 102.30 ms)**
Run 4: Statistics of Verus

Start at: 2018-07-27 03:36:20
End at: 2018-07-27 03:36:50
Local clock offset: -0.169 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-07-27 07:29:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 237.24 Mbit/s
95th percentile per-packet one-way delay: 98.220 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 237.24 Mbit/s
95th percentile per-packet one-way delay: 98.220 ms
Loss rate: 0.36%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 237.73 Mbit/s)
- Flow 1 egress (mean 237.24 Mbit/s)

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

- Flow 1 (95th percentile 98.22 ms)
Run 5: Statistics of Verus

Start at: 2018-07-27 03:58:02
End at: 2018-07-27 03:58:32
Local clock offset: -0.081 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-07-27 07:29:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 243.06 Mbit/s
95th percentile per-packet one-way delay: 99.760 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 243.06 Mbit/s
95th percentile per-packet one-way delay: 99.760 ms
Loss rate: 0.68%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 243.90 Mbit/s)
- Flow 1 egress (mean 243.06 Mbit/s)

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

- Flow 1 (95th percentile 99.76 ms)
Run 6: Statistics of Verus

Start at: 2018-07-27 04:19:47
End at: 2018-07-27 04:20:17
Local clock offset: -0.047 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-07-27 07:29:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.32 Mbit/s
95th percentile per-packet one-way delay: 189.831 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 229.32 Mbit/s
95th percentile per-packet one-way delay: 189.831 ms
Loss rate: 0.78%
Run 6: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet Delay (ms)]

Flow 1 ingress (mean 230.59 Mbps)  Flow 1 egress (mean 229.32 Mbps)

Flow 1 (95th percentile 189.83 ms)
Run 7: Statistics of Verus

Start at: 2018-07-27 04:41:38
End at: 2018-07-27 04:42:08
Local clock offset: -0.045 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-07-27 07:29:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.57 Mbit/s
95th percentile per-packet one-way delay: 121.977 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 222.57 Mbit/s
95th percentile per-packet one-way delay: 121.977 ms
Loss rate: 0.37%
Run 7: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 222.63 Mbps) vs. Flow 1 egress (mean 222.57 Mbps)

- **Per packet one way delay (ms):**
  - Flow 1 (95th percentile 121.98 ms)
Run 8: Statistics of Verus

Start at: 2018-07-27 05:03:27
End at: 2018-07-27 05:03:57
Local clock offset: -0.027 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-07-27 07:30:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 241.66 Mbit/s
95th percentile per-packet one-way delay: 93.859 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 241.66 Mbit/s
95th percentile per-packet one-way delay: 93.859 ms
Loss rate: 0.48%
Run 8: Report of Verus — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 9: Statistics of Verus

Start at: 2018-07-27 05:25:08
End at: 2018-07-27 05:25:38
Local clock offset: -0.019 ms
Remote clock offset: 0.115 ms

# Below is generated by plot.py at 2018-07-27 07:31:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.87 Mbit/s
95th percentile per-packet one-way delay: 121.834 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 218.87 Mbit/s
95th percentile per-packet one-way delay: 121.834 ms
Loss rate: 1.43%
Run 9: Report of Verus — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 221.27 Mbit/s)  Flow 1 egress (mean 218.87 Mbit/s)

Round trip one way delay (ms)

Flow 1 (95th percentile 121.83 ms)
Run 10: Statistics of Verus

Start at: 2018-07-27 05:46:49
End at: 2018-07-27 05:47:19
Local clock offset: -0.015 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2018-07-27 07:31:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 88.759 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 225.74 Mbit/s
95th percentile per-packet one-way delay: 88.759 ms
Loss rate: 0.64%
Run 10: Report of Verus — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-27 02:24:27
End at: 2018-07-27 02:24:57
Local clock offset: -0.404 ms
Remote clock offset: -0.2 ms

# Below is generated by plot.py at 2018-07-27 07:35:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 380.87 Mbit/s
95th percentile per-packet one-way delay: 51.564 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 380.87 Mbit/s
95th percentile per-packet one-way delay: 51.564 ms
Loss rate: 0.37%
Run 1: Report of PCC-Vivace — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 381.00 Mbit/s)
- Flow 1 egress (mean 380.87 Mbit/s)

![Graph 2](image2.png)

- Flow 1 (95th percentile 51.36 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-27 02:46:12
End at: 2018-07-27 02:46:42
Local clock offset: -0.369 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2018-07-27 07:35:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 323.57 Mbit/s
95th percentile per-packet one-way delay: 50.882 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 323.57 Mbit/s
95th percentile per-packet one-way delay: 50.882 ms
Loss rate: 0.33%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-27 03:07:59
End at: 2018-07-27 03:08:29
Local clock offset: 0.355 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-07-27 07:35:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 333.48 Mbit/s
95th percentile per-packet one-way delay: 51.283 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 333.48 Mbit/s
95th percentile per-packet one-way delay: 51.283 ms
Loss rate: 0.40%
Run 3: Report of PCC-Vivace — Data Link

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

**Flow 1:**
- **Ingress:** Mean 333.67 Mbit/s
- **Egress:** Mean 333.48 Mbit/s

**Flow 1 (95th percentile):** 51.28 ms
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-27 03:29:43
End at: 2018-07-27 03:30:13
Local clock offset: -0.172 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-07-27 07:35:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 278.21 Mbit/s
95th percentile per-packet one-way delay: 51.627 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 278.21 Mbit/s
95th percentile per-packet one-way delay: 51.627 ms
Loss rate: 0.41%
Run 4: Report of PCC-Vivace — Data Link

![Graph of throughput over time for Flow 1 ingress and egress with a mean of 278.40 Mbit/s and 278.21 Mbit/s respectively.]

![Graph of packet loss and delay over time for Flow 1 with a 95th percentile delay of 51.63 ms.]

311
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-27 03:51:31
End at: 2018-07-27 03:52:01
Local clock offset: -0.093 ms
Remote clock offset: -0.094 ms

# Below is generated by plot.py at 2018-07-27 07:35:42
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 308.24 Mbit/s
  95th percentile per-packet one-way delay: 51.019 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 308.24 Mbit/s
  95th percentile per-packet one-way delay: 51.019 ms
  Loss rate: 0.40%
Run 6: Statistics of PCC-Vivace

Local clock offset: 0.309 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-07-27 07:36:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 347.96 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 347.96 Mbit/s
95th percentile per-packet one-way delay: 51.413 ms
Loss rate: 0.35%
Run 6: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 347.98 Mbps)
- Flow 1 egress (mean 347.96 Mbps)

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

- Flow 1 (95th percentile 51.41 ms)
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-27 04:35:01
End at: 2018-07-27 04:35:31
Local clock offset: 0.331 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2018-07-27 07:37:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 349.24 Mbit/s
95th percentile per-packet one-way delay: 52.101 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 349.24 Mbit/s
95th percentile per-packet one-way delay: 52.101 ms
Loss rate: 0.34%
Run 7: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 349.27 Mbit/s)
- Flow 1 egress (mean 349.24 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 52.10 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-07-27 04:56:44
End at: 2018-07-27 04:57:14
Local clock offset: -0.045 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-07-27 07:37:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 383.66 Mbit/s
95th percentile per-packet one-way delay: 52.438 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 383.66 Mbit/s
95th percentile per-packet one-way delay: 52.438 ms
Loss rate: 0.34%
Run 8: Report of PCC-Vivace — Data Link
Run 9: Statistics of PCC-Vivace

Start at: 2018-07-27 05:18:36
End at: 2018-07-27 05:19:06
Local clock offset: -0.427 ms
Remote clock offset: 0.076 ms

# Below is generated by plot.py at 2018-07-27 07:37:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.50 Mbit/s
95th percentile per-packet one-way delay: 52.152 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 300.50 Mbit/s
95th percentile per-packet one-way delay: 52.152 ms
Loss rate: 0.48%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-27 05:40:16
End at: 2018-07-27 05:40:46
Local clock offset: 0.297 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.73 Mbit/s
95th percentile per-packet one-way delay: 50.995 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 357.73 Mbit/s
95th percentile per-packet one-way delay: 50.995 ms
Loss rate: 0.35%
Run 10: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time.](image-url)
Run 1: Statistics of WebRTC media

Start at: 2018-07-27 02:14:15
End at: 2018-07-27 02:14:45
Local clock offset: -0.454 ms
Remote clock offset: -0.135 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 50.418 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 1.67 Mbit/s
95th percentile per-packet one-way delay: 50.418 ms
Loss rate: 0.43%
Run 1: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.67 Mbit/s)
- Flow 1 egress (mean 1.67 Mbit/s)

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

- Flow 1 95th percentile 50.42 ms
Run 2: Statistics of WebRTC media

Start at: 2018-07-27 02:35:51
End at: 2018-07-27 02:36:21
Local clock offset: 0.275 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 51.400 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 1.98 Mbit/s
95th percentile per-packet one-way delay: 51.400 ms
Loss rate: 0.35%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput and delay over time]

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 1.98 Mbit/s)
- Flow 1 egress (mean 1.98 Mbit/s)

Delay vs Time (s)

- Flow 1 (95th percentile 51.40 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-07-27 02:57:14
End at: 2018-07-27 02:57:44
Local clock offset: -0.002 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 49.745 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 49.745 ms
Loss rate: 0.37%
Run 3: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.93 Mbit/s)
- Flow 1 egress (mean 1.93 Mbit/s)

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

- Flow 1 (95th percentile 49.74 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-07-27 03:19:22
End at: 2018-07-27 03:19:52
Local clock offset: -0.412 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.96 Mbit/s
  95th percentile per-packet one-way delay: 49.637 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 1.96 Mbit/s
  95th percentile per-packet one-way delay: 49.637 ms
  Loss rate: 0.37%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-07-27 03:41:03
End at: 2018-07-27 03:41:33
Local clock offset: -0.168 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 51.095 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 51.095 ms
Loss rate: 0.37%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-07-27 04:02:45
End at: 2018-07-27 04:03:15
Local clock offset: 0.307 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 50.966 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.93 Mbit/s
95th percentile per-packet one-way delay: 50.966 ms
Loss rate: 0.37%
Run 6: Report of WebRTC media — Data Link

![Graph of throughput for WebRTC media](image1)

- **Flow 1 ingress (mean 1.94 Mbit/s)**
- **Flow 1 egress (mean 1.93 Mbit/s)**

![Graph of per-packet end-to-end delay for WebRTC media](image2)

- **Flow 1 (95th percentile 50.97 ms)**
Run 7: Statistics of WebRTC media

Start at: 2018-07-27 04:24:29
End at: 2018-07-27 04:24:59
Local clock offset: -0.412 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.94 Mbit/s
  95th percentile per-packet one-way delay: 50.657 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 1.94 Mbit/s
  95th percentile per-packet one-way delay: 50.657 ms
  Loss rate: 0.37%
Run 7: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 1.94 Mbit/s)
- **Flow 1 egress** (mean 1.94 Mbit/s)

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

- **Flow 1** (95th percentile 50.66 ms)
Run 8: Statistics of WebRTC media

End at: 2018-07-27 04:46:50
Local clock offset: -0.065 ms
Remote clock offset: -0.177 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.973 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 50.973 ms
Loss rate: 0.37%
Run 8: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 1.94 Mbit/s)**
- **Flow 1 egress (mean 1.94 Mbit/s)**

![Graph 2: Per-packet end-to-end delay (ms)](image2)

- **Flow 1 (95th percentile 50.97 ms)**
Run 9: Statistics of WebRTC media

Start at: 2018-07-27 05:08:11
End at: 2018-07-27 05:08:41
Local clock offset: -0.025 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 51.148 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 51.148 ms
Loss rate: 0.36%
Run 9: Report of WebRTC media — Data Link

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

Throughput (Mbps) vs Time (s):
- Flow 1 ingress (mean 1.92 Mbps)
- Flow 1 egress (mean 1.92 Mbps)

Per-packet one-way delay (ms) vs Time (s):
- Flow 1 (95th percentile 51.15 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-07-27 05:29:49
End at: 2018-07-27 05:30:19
Local clock offset: -0.022 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2018-07-27 07:37:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 51.062 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 51.062 ms
Loss rate: 0.37%
Run 10: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.97 Mbit/s)
- Flow 1 egress (mean 1.97 Mbit/s)

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

- Flow 1 (95th percentile 51.06 ms)