Pantheon Report

Generated at 2018-08-22 14:34:21 (UTC).
Data path: Brazil Ethernet (remote) → AWS Brazil 1 Ethernet (local).
Repeated the test of 17 congestion control schemes 10 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1017-aws
net.core.default_qdisc = fq_codel
net.core.rmem_default = 16777216
net.core.rmem_max = 33554432
net.core.wmem_default = 212992
net.core.wmem_max = 212992
net.ipv4.tcp_rmem = 4096 87380 6291456
net.ipv4.tcp_wmem = 4096 16384 4194304

Git summary:
branch: master @ 7719b900495aa706f8452ab7d4a94dd562e9296e
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a2843ebdbb4b834
third_party/fillp-sheep @ deade0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4a9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e282f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038ed312594d366f9840f65b82ce8f464b1b39
third_party/pcc @ 1afcc95ffaf0d6618b623c091a55feced72b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac0d8f92c4eb24f974ab
third_party/PROTO-quic @ 7796f1a82733a86b42f1bc8143ebc978f3cf42
third_party/scream-reproduce @ f099118d1421aa3131b1f11ff1964974e1da3bdb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a6ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a26b1149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435a071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f00cc2a9061a41b6f9ddde4735770d143a1fa2851
test from Brazil to AWS Brazil 1, 10 runs of 30s each per scheme
(many 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>90.68</td>
<td>12.76</td>
<td>0.04</td>
</tr>
<tr>
<td>Copa</td>
<td>10</td>
<td>76.77</td>
<td>5.23</td>
<td>0.01</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>91.56</td>
<td>11.97</td>
<td>0.05</td>
</tr>
<tr>
<td>FillP</td>
<td>10</td>
<td>89.26</td>
<td>15.40</td>
<td>0.04</td>
</tr>
<tr>
<td>FillP-Sheep</td>
<td>10</td>
<td>89.48</td>
<td>14.92</td>
<td>0.04</td>
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<tr>
<td>Indigo</td>
<td>10</td>
<td>91.22</td>
<td>7.03</td>
<td>0.02</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>89.02</td>
<td>13.02</td>
<td>0.09</td>
</tr>
<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>80.27</td>
<td>11.64</td>
<td>0.64</td>
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<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>75.42</td>
<td>13.41</td>
<td>0.12</td>
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<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>84.84</td>
<td>13.13</td>
<td>0.05</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>2.58</td>
<td>0.03</td>
</tr>
<tr>
<td>Sprout</td>
<td>10</td>
<td>39.01</td>
<td>9.87</td>
<td>0.02</td>
</tr>
<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>75.40</td>
<td>5.35</td>
<td>0.01</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>90.42</td>
<td>4.85</td>
<td>0.01</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>55.64</td>
<td>12.86</td>
<td>0.02</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>57.20</td>
<td>10.96</td>
<td>0.18</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>2.36</td>
<td>3.28</td>
<td>0.02</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-08-22 11:17:47
End at: 2018-08-22 11:18:17
Local clock offset: -3.526 ms
Remote clock offset: -2.258 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 10.275 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 95.60 Mbit/s
95th percentile per-packet one-way delay: 10.275 ms
Loss rate: 0.05%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-08-22 11:36:47
End at: 2018-08-22 11:37:17
Local clock offset: -2.973 ms
Remote clock offset: -6.354 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.62 Mbit/s
95th percentile per-packet one-way delay: 8.645 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 95.62 Mbit/s
95th percentile per-packet one-way delay: 8.645 ms
Loss rate: 0.03%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-08-22 11:55:47
End at: 2018-08-22 11:56:17
Local clock offset: -6.292 ms
Remote clock offset: -6.125 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 10.669 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 10.669 ms
Loss rate: 0.05%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-08-22 12:14:45
End at: 2018-08-22 12:15:15
Local clock offset: -4.527 ms
Remote clock offset: -1.875 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 81.18 Mbit/s
  95th percentile per-packet one-way delay: 16.505 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 81.18 Mbit/s
  95th percentile per-packet one-way delay: 16.505 ms
  Loss rate: 0.03%
Run 4: Report of TCP BBR — Data Link

![Graph 1](image1.png)

- Flow 1 ingress (mean 81.20 Mbit/s)
- Flow 1 egress (mean 81.18 Mbit/s)

![Graph 2](image2.png)

- Flow 1 (95th percentile 16.50 ms)
Run 5: Statistics of TCP BBR

Start at: 2018-08-22 12:33:34
End at: 2018-08-22 12:34:04
Local clock offset: -4.234 ms
Remote clock offset: -2.208 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 15.247 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 15.247 ms
Loss rate: 0.08%
Run 5: Report of TCP BBR — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 88.91 Mbit/s)  Flow 1 egress (mean 88.85 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 15.25 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-08-22 12:52:29
End at: 2018-08-22 12:52:59
Local clock offset: -1.676 ms
Remote clock offset: -3.353 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 85.97 Mbit/s
  95th percentile per-packet one-way delay: 15.103 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 85.97 Mbit/s
  95th percentile per-packet one-way delay: 15.103 ms
  Loss rate: 0.04%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-08-22 13:11:23
End at: 2018-08-22 13:11:53
Local clock offset: -2.107 ms
Remote clock offset: -3.329 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.02 Mbit/s
95th percentile per-packet one-way delay: 15.288 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 90.02 Mbit/s
95th percentile per-packet one-way delay: 15.288 ms
Loss rate: 0.06%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-08-22 13:30:19
End at: 2018-08-22 13:30:49
Local clock offset: -3.01 ms
Remote clock offset: -3.318 ms

# Below is generated by plot.py at 2018-08-22 14:14:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.62 Mbit/s
95th percentile per-packet one-way delay: 11.981 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 90.62 Mbit/s
95th percentile per-packet one-way delay: 11.981 ms
Loss rate: 0.03%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

End at: 2018-08-22 13:49:43
Local clock offset: -2.646 ms
Remote clock offset: -2.671 ms

# Below is generated by plot.py at 2018-08-22 14:14:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 12.824 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 90.98 Mbit/s
95th percentile per-packet one-way delay: 12.824 ms
Loss rate: 0.03%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-08-22 14:08:09
End at: 2018-08-22 14:08:39
Local clock offset: -3.855 ms
Remote clock offset: -2.308 ms

# Below is generated by plot.py at 2018-08-22 14:14:53
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 92.34 Mbit/s
  95th percentile per-packet one-way delay: 11.111 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 92.34 Mbit/s
  95th percentile per-packet one-way delay: 11.111 ms
  Loss rate: 0.03%
Run 10: Report of TCP BBR — Data Link

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

Flow 1 ingress (mean 92.36 Mbit/s)  Flow 1 egress (mean 92.34 Mbit/s)

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

Flow 1 (95th percentile 11.11 ms)
Run 1: Statistics of Copa

Start at: 2018-08-22 11:01:04
End at: 2018-08-22 11:01:34
Local clock offset: -4.051 ms
Remote clock offset: -2.254 ms

# Below is generated by plot.py at 2018-08-22 14:15:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.80 Mbit/s
95th percentile per-packet one-way delay: 4.913 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 83.80 Mbit/s
95th percentile per-packet one-way delay: 4.913 ms
Loss rate: 0.02%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-08-22 11:20:00
End at: 2018-08-22 11:20:30
Local clock offset: -4.143 ms
Remote clock offset: -2.6 ms

# Below is generated by plot.py at 2018-08-22 14:15:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 7.869 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 86.12 Mbit/s
95th percentile per-packet one-way delay: 7.869 ms
Loss rate: 0.02%
Run 2: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 86.13 Mbit/s)**
- **Flow 1 egress (mean 86.12 Mbit/s)**

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

- **Flow 1 (95th percentile 7.87 ms)**
Run 3: Statistics of Copa

Start at: 2018-08-22 11:39:00  
End at: 2018-08-22 11:39:30  
Local clock offset: -3.711 ms  
Remote clock offset: -6.548 ms

# Below is generated by plot.py at 2018-08-22 14:15:46  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 83.32 Mbit/s  
95th percentile per-packet one-way delay: 4.156 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 83.32 Mbit/s  
95th percentile per-packet one-way delay: 4.156 ms  
Loss rate: 0.01%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-08-22 11:57:59
End at: 2018-08-22 11:58:29
Local clock offset: -7.232 ms
Remote clock offset: -5.107 ms

# Below is generated by plot.py at 2018-08-22 14:15:46
# Datalog statistics
-- Total of 1 flow:
  Average throughput: 81.58 Mbit/s
  95th percentile per-packet one-way delay: 3.620 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 81.58 Mbit/s
  95th percentile per-packet one-way delay: 3.620 ms
  Loss rate: 0.01%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-08-22 12:16:57
End at: 2018-08-22 12:17:27
Local clock offset: -5.779 ms
Remote clock offset: -1.681 ms

# Below is generated by plot.py at 2018-08-22 14:15:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 63.51 Mbit/s
  95th percentile per-packet one-way delay: 6.142 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 63.51 Mbit/s
  95th percentile per-packet one-way delay: 6.142 ms
  Loss rate: 0.01%
Run 5: Report of Copa — Data Link

![Graph of throughput and delay over time]

- Flow 1 ingress (mean 63.51 Mbit/s)
- Flow 1 egress (mean 63.51 Mbit/s)

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

- Flow 1 95th percentile 6.14 ms
Run 6: Statistics of Copa

Start at: 2018-08-22 12:35:47
End at: 2018-08-22 12:36:17
Local clock offset: -4.195 ms
Remote clock offset: -2.435 ms

# Below is generated by plot.py at 2018-08-22 14:15:46
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 74.27 Mbit/s
  95th percentile per-packet one-way delay: 5.280 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 74.27 Mbit/s
  95th percentile per-packet one-way delay: 5.280 ms
  Loss rate: 0.01%
Run 6: Report of Copa — Data Link

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**Graph 1:**
- Title: Throughput (Mbps)
- X-axis: Time (s)
- Y-axis: Throughput (Mbps)
- Legend:
  - Flow 1 ingress (mean 74.27 Mbps)
  - Flow 1 egress (mean 74.27 Mbps)

**Graph 2:**
- Title: Per-packet one-way delay (ms)
- X-axis: Time (s)
- Y-axis: Per-packet one-way delay (ms)
- Legend:
  - Flow 1 95th percentile 5.28 ms

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35
Run 7: Statistics of Copa

Start at: 2018-08-22 12:54:42
End at: 2018-08-22 12:55:12
Local clock offset: -2.333 ms
Remote clock offset: -3.373 ms

# Below is generated by plot.py at 2018-08-22 14:16:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.69 Mbit/s
95th percentile per-packet one-way delay: 4.914 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.69 Mbit/s
95th percentile per-packet one-way delay: 4.914 ms
Loss rate: 0.01%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

End at: 2018-08-22 13:14:06
Local clock offset: -2.932 ms
Remote clock offset: -3.4 ms

# Below is generated by plot.py at 2018-08-22 14:16:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 3.814 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 75.60 Mbit/s
95th percentile per-packet one-way delay: 3.814 ms
Loss rate: 0.02%
Run 8: Report of Copa — Data Link

![Graph of Throughput](image1)

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

Start at: 2018-08-22 13:32:32
End at: 2018-08-22 13:33:02
Local clock offset: -2.167 ms
Remote clock offset: -3.278 ms

# Below is generated by plot.py at 2018-08-22 14:16:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 5.920 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.67 Mbit/s
95th percentile per-packet one-way delay: 5.920 ms
Loss rate: 0.01%
Run 9: Report of Copa — Data Link

![Graph of Throughput and Packet Delay](image-url)

- **Flow 1 ingress (mean 71.67 Mbit/s)**
- **Flow 1 egress (mean 71.67 Mbit/s)**

![Graph of Packet Delay](image-url)

- **Flow 1 (99th percentile 5.92 ms)**
Run 10: Statistics of Copa

Start at: 2018-08-22 13:51:26
End at: 2018-08-22 13:51:56
Local clock offset: -2.749 ms
Remote clock offset: -2.622 ms

# Below is generated by plot.py at 2018-08-22 14:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 5.678 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 5.678 ms
Loss rate: 0.02%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-08-22 11:09:59
End at: 2018-08-22 11:10:29
Local clock offset: -4.474 ms
Remote clock offset: -2.291 ms

# Below is generated by plot.py at 2018-08-22 14:17:17
# Datalink statistics
--- Total of 1 flow:
Average throughput: 96.68 Mbit/s
95th percentile per-packet one-way delay: 9.406 ms
Loss rate: 0.05%
--- Flow 1:
Average throughput: 96.68 Mbit/s
95th percentile per-packet one-way delay: 9.406 ms
Loss rate: 0.05%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-08-22 11:28:58
End at: 2018-08-22 11:29:28
Local clock offset: -3.093 ms
Remote clock offset: -5.317 ms

# Below is generated by plot.py at 2018-08-22 14:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 9.421 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 96.30 Mbit/s
95th percentile per-packet one-way delay: 9.421 ms
Loss rate: 0.05%
Run 2: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps)**
  - Y-axis: 0 to 100
  - X-axis: 0 to 30 seconds

- **Per-packet end-to-end delay (ms)**
  - Y-axis: 0 to 15
  - X-axis: 0 to 30 seconds

Legend:
- **Flow 1 ingress (mean 96.34 Mbps)**
- **Flow 1 egress (mean 96.30 Mbps)**
- **Flow 1 (95th percentile 9.42 ms)**
Run 3: Statistics of TCP Cubic

Start at: 2018-08-22 11:47:58
End at: 2018-08-22 11:48:28
Local clock offset: -5.501 ms
Remote clock offset: -7.19 ms

# Below is generated by plot.py at 2018-08-22 14:17:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 9.705 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 96.55 Mbit/s
95th percentile per-packet one-way delay: 9.705 ms
Loss rate: 0.05%
Run 3: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 96.59 Mbit/s)
- Flow 1 egress (mean 96.55 Mbit/s)

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

- Flow 1 (95th percentile 9.71 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-08-22 12:06:58  
End at: 2018-08-22 12:07:28  
Local clock offset: -6.202 ms  
Remote clock offset: -2.77 ms

# Below is generated by plot.py at 2018-08-22 14:17:17  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 94.44 Mbit/s  
95th percentile per-packet one-way delay: 10.493 ms  
Loss rate: 0.05%  
-- Flow 1:  
Average throughput: 94.44 Mbit/s  
95th percentile per-packet one-way delay: 10.493 ms  
Loss rate: 0.05%
Run 4: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 94.48 Mbit/s)  Flow 1 egress (mean 94.44 Mbit/s)

Packet per second

Time (s)

Flow 1 (95th percentile 10.49 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-08-22 12:25:48
End at: 2018-08-22 12:26:18
Local clock offset: -4.463 ms
Remote clock offset: -1.077 ms

# Below is generated by plot.py at 2018-08-22 14:17:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.70 Mbit/s
95th percentile per-packet one-way delay: 15.340 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 82.70 Mbit/s
95th percentile per-packet one-way delay: 15.340 ms
Loss rate: 0.05%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-08-22 12:44:42
End at: 2018-08-22 12:45:12
Local clock offset: -3.799 ms
Remote clock offset: -3.121 ms

# Below is generated by plot.py at 2018-08-22 14:17:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 11.873 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 91.69 Mbit/s
95th percentile per-packet one-way delay: 11.873 ms
Loss rate: 0.05%
Run 6: Report of TCP Cubic — Data Link

![Graph of Throughput](image1)

- Flow 1 ingress (mean 91.72 Mbit/s)
- Flow 1 egress (mean 91.69 Mbit/s)

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

- Flow 1 (95th percentile 11.87 ms)
Run 7: Statistics of TCP Cubic

Start at: 2018-08-22 13:03:36
End at: 2018-08-22 13:04:06
Local clock offset: -1.987 ms
Remote clock offset: -3.323 ms

# Below is generated by plot.py at 2018-08-22 14:17:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 14.074 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: 14.074 ms
Loss rate: 0.06%
Run 7: Report of TCP Cubic — Data Link

![Graph](image-url)

- **Flow 1 ingress (mean 88.37 Mbit/s)**
- **Flow 1 egress (mean 88.33 Mbit/s)**

![Graph](image-url)

- **Flow 1 (95th percentile 14.07 ms)**

57
Run 8: Statistics of TCP Cubic

End at: 2018-08-22 13:23:02
Local clock offset: -1.465 ms
Remote clock offset: -3.32 ms

# Below is generated by plot.py at 2018-08-22 14:17:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 13.806 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 91.35 Mbit/s
95th percentile per-packet one-way delay: 13.806 ms
Loss rate: 0.05%
Run 8: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 91.39 Mbit/s)  Flow 1 egress (mean 91.35 Mbit/s)

Bit packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 13.81 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-08-22 13:41:26
End at: 2018-08-22 13:41:56
Local clock offset: -3.588 ms
Remote clock offset: -2.986 ms

# Below is generated by plot.py at 2018-08-22 14:17:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 14.049 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 85.72 Mbit/s
95th percentile per-packet one-way delay: 14.049 ms
Loss rate: 0.06%
Run 9: Report of TCP Cubic — Data Link

![Throughput and Delay Graphs]

- Flow 1 ingress (mean 85.76 Mbit/s)
- Flow 1 egress (mean 85.72 Mbit/s)

Flow 1 [95th percentile 14.05 ms]
Run 10: Statistics of TCP Cubic

Start at: 2018-08-22 14:00:21
End at: 2018-08-22 14:00:51
Local clock offset: -4.536 ms
Remote clock offset: -2.412 ms

# Below is generated by plot.py at 2018-08-22 14:17:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.80 Mbit/s
95th percentile per-packet one-way delay: 11.488 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 91.80 Mbit/s
95th percentile per-packet one-way delay: 11.488 ms
Loss rate: 0.05%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2018-08-22 11:12:14
End at: 2018-08-22 11:12:44
Local clock offset: -4.121 ms
Remote clock offset: -2.316 ms

# Below is generated by plot.py at 2018-08-22 14:18:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 12.601 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 95.21 Mbit/s
95th percentile per-packet one-way delay: 12.601 ms
Loss rate: 0.04%
Run 1: Report of FillP — Data Link

---

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Run 2: Statistics of FillP

Start at: 2018-08-22 11:31:14
End at: 2018-08-22 11:31:44
Local clock offset: -2.988 ms
Remote clock offset: -5.653 ms

# Below is generated by plot.py at 2018-08-22 14:18:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 12.646 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 95.03 Mbit/s
95th percentile per-packet one-way delay: 12.646 ms
Loss rate: 0.04%
Run 2: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

- Flow 1 ingress (mean 95.05 Mbit/s)
- Flow 1 egress (mean 95.03 Mbit/s)

Per-packet one way delay (ms)

Flow 1 (95th percentile 12.65 ms)
Run 3: Statistics of FillP

Start at: 2018-08-22 11:50:14
End at: 2018-08-22 11:50:44
Local clock offset: -5.01 ms
Remote clock offset: -7.403 ms

# Below is generated by plot.py at 2018-08-22 14:18:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 13.613 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 95.24 Mbit/s
95th percentile per-packet one-way delay: 13.613 ms
Loss rate: 0.04%
Run 3: Report of FillP — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 95.26 Mbit/s)  Flow 1 egress (mean 95.24 Mbit/s)

Pkt/pkt: one way delay (ms)

Flow 1 (95th percentile 13.61 ms)
Run 4: Statistics of FillP

Start at: 2018-08-22 12:09:13
End at: 2018-08-22 12:09:43
Local clock offset: -7.158 ms
Remote clock offset: -2.431 ms

# Below is generated by plot.py at 2018-08-22 14:18:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.25 Mbit/s
95th percentile per-packet one-way delay: 17.299 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 82.25 Mbit/s
95th percentile per-packet one-way delay: 17.299 ms
Loss rate: 0.05%
Run 4: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 82.27 Mbps/s)
- **Flow 1 egress** (mean 82.25 Mbps/s)

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

- **Flow 1 95th percentile 17.30 ms**
Run 5: Statistics of FillP

Start at: 2018-08-22 12:28:02
End at: 2018-08-22 12:28:32
Local clock offset: -4.325 ms
Remote clock offset: -1.144 ms

# Below is generated by plot.py at 2018-08-22 14:19:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.82 Mbit/s
95th percentile per-packet one-way delay: 17.192 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 84.82 Mbit/s
95th percentile per-packet one-way delay: 17.192 ms
Loss rate: 0.05%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-08-22 12:46:57
End at: 2018-08-22 12:47:27
Local clock offset: -3.65 ms
Remote clock offset: -3.236 ms

# Below is generated by plot.py at 2018-08-22 14:19:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.81 Mbit/s
95th percentile per-packet one-way delay: 16.499 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 85.81 Mbit/s
95th percentile per-packet one-way delay: 16.499 ms
Loss rate: 0.04%
Run 6: Report of FillP — Data Link

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

![Graph 2: Packet one-way delay (ms)](image2)
Run 7: Statistics of FillP

Start at: 2018-08-22 13:05:51
End at: 2018-08-22 13:06:21
Local clock offset: -2.692 ms
Remote clock offset: -3.344 ms

# Below is generated by plot.py at 2018-08-22 14:19:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 15.978 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 87.46 Mbit/s
95th percentile per-packet one-way delay: 15.978 ms
Loss rate: 0.04%
Run 7: Report of FillP — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with mean 87.48 Mbit/s and 87.46 Mbit/s respectively.](image)

![Graph showing packet delay distribution for Flow 1 with 95th percentile 15.98 ms.](image)
Run 8: Statistics of FillP

Start at: 2018-08-22 13:24:47
End at: 2018-08-22 13:25:17
Local clock offset: -2.275 ms
Remote clock offset: -3.299 ms

# Below is generated by plot.py at 2018-08-22 14:19:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.87 Mbit/s
95th percentile per-packet one-way delay: 16.286 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 88.87 Mbit/s
95th percentile per-packet one-way delay: 16.286 ms
Loss rate: 0.05%
Run 8: Report of FillP — Data Link

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

- Blue line: Flow 1 ingress (mean 88.89 Mbit/s)
- Blue line: Flow 1 egress (mean 88.87 Mbit/s)

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

- Blue line: Flow 1 (95th percentile 16.29 ms)
Run 9: Statistics of FillP

Start at: 2018-08-22 13:43:41
End at: 2018-08-22 13:44:11
Local clock offset: -3.029 ms
Remote clock offset: -2.883 ms

# Below is generated by plot.py at 2018-08-22 14:19:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 17.017 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 87.22 Mbit/s
95th percentile per-packet one-way delay: 17.017 ms
Loss rate: 0.03%
Run 9: Report of FillP — Data Link

![Graph of Throughput (Mbps) vs. Time (s) with line markers indicating Flow 1 ingress (mean 87.24 Mbps) and Flow 1 egress (mean 87.22 Mbps).]

![Graph of Average Packet Round-Trip Delay (ms) vs. Time (s) with a line indicating Flow 1 (95th percentile 17.02 ms).]
Run 10: Statistics of FillP

Start at: 2018-08-22 14:02:36
End at: 2018-08-22 14:03:06
Local clock offset: -3.848 ms
Remote clock offset: -2.389 ms

# Below is generated by plot.py at 2018-08-22 14:20:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.71 Mbit/s
95th percentile per-packet one-way delay: 14.918 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 90.71 Mbit/s
95th percentile per-packet one-way delay: 14.918 ms
Loss rate: 0.05%
Run 10: Report of FillP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2018-08-22 11:07:44
End at: 2018-08-22 11:08:14
Local clock offset: -4.917 ms
Remote clock offset: -2.333 ms

# Below is generated by plot.py at 2018-08-22 14:20:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.58 Mbit/s
95th percentile per-packet one-way delay: 12.529 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 94.58 Mbit/s
95th percentile per-packet one-way delay: 12.529 ms
Loss rate: 0.04%
Run 1: Report of FillP-Sheep — Data Link

Throughput (Mbit/s) vs. Time (s)

- Flow 1 ingress (mean 94.61 Mbit/s)
- Flow 1 egress (mean 94.58 Mbit/s)

Packet error rate (PER) vs. Time (s)

- Flow 1 (95th percentile 12.53 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2018-08-22 11:26:44
End at: 2018-08-22 11:27:14
Local clock offset: -2.331 ms
Remote clock offset: -4.808 ms

# Below is generated by plot.py at 2018-08-22 14:20:18
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 94.07 Mbit/s
  95th percentile per-packet one-way delay: 13.384 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 94.07 Mbit/s
  95th percentile per-packet one-way delay: 13.384 ms
  Loss rate: 0.04%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

Start at: 2018-08-22 11:45:43
End at: 2018-08-22 11:46:14
Local clock offset: -5.187 ms
Remote clock offset: -7.149 ms

# Below is generated by plot.py at 2018-08-22 14:20:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 12.847 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 94.52 Mbit/s
95th percentile per-packet one-way delay: 12.847 ms
Loss rate: 0.04%
Run 3: Report of FillP-Sheep — Data Link

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**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 94.54 Mbit/s)
- **Flow 1 egress** (mean 94.52 Mbit/s)

---

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

- **Flow 1** (95th percentile 12.85 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2018-08-22 12:04:43
End at: 2018-08-22 12:05:13
Local clock offset: -6.856 ms
Remote clock offset: -3.24 ms

# Below is generated by plot.py at 2018-08-22 14:20:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 12.948 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 94.06 Mbit/s
95th percentile per-packet one-way delay: 12.948 ms
Loss rate: 0.04%
Run 4: Report of FillP-Sheep — Data Link

![Graph of Throughput and Packet Delay](image)

*Flow 1 ingress (mean 94.08 Mbit/s) and Flow 1 egress (mean 94.06 Mbit/s)*

*Flow 1 (95th percentile 12.95 ms)*
Run 5: Statistics of FillP-Sheep

Start at: 2018-08-22 12:23:34
End at: 2018-08-22 12:24:04
Local clock offset: -4.588 ms
Remote clock offset: -1.265 ms

# Below is generated by plot.py at 2018-08-22 14:20:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.24 Mbit/s
95th percentile per-packet one-way delay: 18.722 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 79.24 Mbit/s
95th percentile per-packet one-way delay: 18.722 ms
Loss rate: 0.05%
Run 5: Report of FillP-Sheep — Data Link

[Graph showing throughput and packet delay over time]
Run 6: Statistics of FillP-Sheep

Start at: 2018-08-22 12:42:27
End at: 2018-08-22 12:42:57
Local clock offset: -3.277 ms
Remote clock offset: -3.056 ms

# Below is generated by plot.py at 2018-08-22 14:20:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.37 Mbit/s
95th percentile per-packet one-way delay: 15.173 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 89.37 Mbit/s
95th percentile per-packet one-way delay: 15.173 ms
Loss rate: 0.05%
Run 6: Report of FillP-Sheep — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 7: Statistics of FillP-Sheep

Start at: 2018-08-22 13:01:21
End at: 2018-08-22 13:01:51
Local clock offset: -2.119 ms
Remote clock offset: -3.32 ms

# Below is generated by plot.py at 2018-08-22 14:20:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 16.519 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 86.26 Mbit/s
95th percentile per-packet one-way delay: 16.519 ms
Loss rate: 0.03%
Run 7: Report of FillP-Sheep — Data Link

![Graph 1: Throughput](image1)

**Flow 1 ingress (mean 85.28 Mbit/s)**

![Graph 2: Delay](image2)

**Flow 1 egress (mean 86.26 Mbit/s)**

**Flow 1 (95th percentile 16.52 ms)**
Run 8: Statistics of FillP-Sheep

Start at: 2018-08-22 13:20:17
End at: 2018-08-22 13:20:47
Local clock offset: -2.295 ms
Remote clock offset: -3.323 ms

# Below is generated by plot.py at 2018-08-22 14:21:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.82 Mbit/s
95th percentile per-packet one-way delay: 15.463 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 88.82 Mbit/s
95th percentile per-packet one-way delay: 15.463 ms
Loss rate: 0.05%
Run 8: Report of FillP-Sheep — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 88.84 Mbit/s)
- Flow 1 egress (mean 88.82 Mbit/s)

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

- Flow 1 (95th percentile 15.46 ms)
Run 9: Statistics of FillP-Sheep

Start at: 2018-08-22 13:39:12
End at: 2018-08-22 13:39:42
Local clock offset: -1.744 ms
Remote clock offset: -3.12 ms

# Below is generated by plot.py at 2018-08-22 14:21:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.83 Mbit/s
95th percentile per-packet one-way delay: 18.101 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 83.83 Mbit/s
95th percentile per-packet one-way delay: 18.101 ms
Loss rate: 0.05%
Run 9: Report of FillP-Sheep — Data Link

![Graph of Throughput vs Time for Flow 1 ingress and egress]
Run 10: Statistics of FillP-Sheep

Start at: 2018-08-22 13:58:06
End at: 2018-08-22 13:58:36
Local clock offset: -4.561 ms
Remote clock offset: -2.466 ms

# Below is generated by plot.py at 2018-08-22 14:21:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 13.524 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 90.08 Mbit/s
95th percentile per-packet one-way delay: 13.524 ms
Loss rate: 0.04%
Run 10: Report of FillIP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2018-08-22 11:08:50
End at: 2018-08-22 11:09:20
Local clock offset: -5.447 ms
Remote clock offset: -2.321 ms

# Below is generated by plot.py at 2018-08-22 14:21:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.70 Mbit/s
95th percentile per-packet one-way delay: 4.886 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 96.70 Mbit/s
95th percentile per-packet one-way delay: 4.886 ms
Loss rate: 0.02%
Run 1: Report of Indigo — Data Link

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

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

Start at: 2018-08-22 11:27:50
End at: 2018-08-22 11:28:20
Local clock offset: -2.299 ms
Remote clock offset: -5.054 ms

# Below is generated by plot.py at 2018-08-22 14:21:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 6.505 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 96.12 Mbit/s
95th percentile per-packet one-way delay: 6.505 ms
Loss rate: 0.02%
Run 3: Statistics of Indigo

Start at: 2018-08-22 11:46:50
End at: 2018-08-22 11:47:20
Local clock offset: -5.34 ms
Remote clock offset: -7.145 ms

# Below is generated by plot.py at 2018-08-22 14:21:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 5.736 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 96.53 Mbit/s
95th percentile per-packet one-way delay: 5.736 ms
Loss rate: 0.02%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-08-22 12:05:49  
End at: 2018-08-22 12:06:19 
Local clock offset: -6.934 ms  
Remote clock offset: -2.969 ms

# Below is generated by plot.py at 2018-08-22 14:21:40 
# Datalink statistics
-- Total of 1 flow:  
Average throughput: 96.11 Mbit/s  
95th percentile per-packet one-way delay: 6.032 ms  
Loss rate: 0.02%  
-- Flow 1:  
Average throughput: 96.11 Mbit/s  
95th percentile per-packet one-way delay: 6.032 ms  
Loss rate: 0.02%
Run 4: Report of Indigo — Data Link

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

- **Flow 1 ingress** (mean 96.12 Mbps)
- **Flow 1 egress** (mean 96.11 Mbps)

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

- **Flow 1 (95th percentile 6.03 ms)**
Run 5: Statistics of Indigo

Start at: 2018-08-22 12:24:40
End at: 2018-08-22 12:25:10
Local clock offset: -4.517 ms
Remote clock offset: -1.173 ms

# Below is generated by plot.py at 2018-08-22 14:21:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 8.273 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 78.58 Mbit/s
95th percentile per-packet one-way delay: 8.273 ms
Loss rate: 0.01%
Run 5: Report of Indigo — Data Link

![Graph showing throughput over time](image1)

![Graph showing delay over time](image2)

End of page text.
Run 6: Statistics of Indigo

Start at: 2018-08-22 12:43:33
End at: 2018-08-22 12:44:03
Local clock offset: -3.153 ms
Remote clock offset: -3.039 ms

# Below is generated by plot.py at 2018-08-22 14:22:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 7.756 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 91.85 Mbit/s
95th percentile per-packet one-way delay: 7.756 ms
Loss rate: 0.05%
Run 6: Report of Indigo — Data Link

![Throughput Graph](image1)

- Flow 1 ingress (mean 91.88 Mbit/s)
- Flow 1 egress (mean 91.85 Mbit/s)

![Delay Graph](image2)

- Flow 1 (95th percentile 7.76 ms)
Run 7: Statistics of Indigo

Start at: 2018-08-22 13:02:27
End at: 2018-08-22 13:02:58
Local clock offset: -2.076 ms
Remote clock offset: -3.402 ms

# Below is generated by plot.py at 2018-08-22 14:22:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.84 Mbit/s
95th percentile per-packet one-way delay: 8.312 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 87.84 Mbit/s
95th percentile per-packet one-way delay: 8.312 ms
Loss rate: 0.01%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-08-22 13:21:24
End at: 2018-08-22 13:21:54
Local clock offset: -3.0 ms
Remote clock offset: -3.318 ms

# Below is generated by plot.py at 2018-08-22 14:22:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.00 Mbit/s
95th percentile per-packet one-way delay: 6.800 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 91.00 Mbit/s
95th percentile per-packet one-way delay: 6.800 ms
Loss rate: 0.02%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Start at: 2018-08-22 13:40:18
End at: 2018-08-22 13:40:48
Local clock offset: -1.897 ms
Remote clock offset: -3.024 ms

# Below is generated by plot.py at 2018-08-22 14:22:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 9.460 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 85.96 Mbit/s
95th percentile per-packet one-way delay: 9.460 ms
Loss rate: 0.02%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

End at: 2018-08-22 13:59:43
Local clock offset: -4.526 ms
Remote clock offset: -2.484 ms

# Below is generated by plot.py at 2018-08-22 14:22:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 6.550 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 91.49 Mbit/s
95th percentile per-packet one-way delay: 6.550 ms
Loss rate: 0.02%
Run 10: Report of Indigo — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 91.50 Mbit/s)  Flow 1 egress (mean 91.49 Mbit/s)

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 6.55 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-08-22 11:11:06
End at: 2018-08-22 11:11:36
Local clock offset: -4.264 ms
Remote clock offset: -2.337 ms

# Below is generated by plot.py at 2018-08-22 14:22:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 10.377 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 94.78 Mbit/s
95th percentile per-packet one-way delay: 10.377 ms
Loss rate: 0.08%
Run 1: Report of LEDBAT — Data Link

![Graph showing throughput over time with legend: Flow 1 ingress (mean 94.84 Mbit/s), Flow 1 egress (mean 94.78 Mbit/s)]

![Graph showing per-packet delay over time with legend: Flow 1 (95th percentile 10.38 ms)]
Run 2: Statistics of LEDBAT

Start at: 2018-08-22 11:30:06
End at: 2018-08-22 11:30:36
Local clock offset: -3.849 ms
Remote clock offset: -5.56 ms

# Below is generated by plot.py at 2018-08-22 14:22:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 9.683 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 94.50 Mbit/s
95th percentile per-packet one-way delay: 9.683 ms
Loss rate: 0.08%
Run 2: Report of LEDBAT — Data Link

![Graphs showing throughput and packet delay](image-url)
Run 3: Statistics of LEDBAT

Start at: 2018-08-22 11:49:06
End at: 2018-08-22 11:49:36
Local clock offset: -5.655 ms
Remote clock offset: -7.266 ms

# Below is generated by plot.py at 2018-08-22 14:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 10.795 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 95.06 Mbit/s
95th percentile per-packet one-way delay: 10.795 ms
Loss rate: 0.09%
Run 3: Report of LEDBAT — Data Link

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

![Graph of Packet Delay vs. Time](image2)
Run 4: Statistics of LEDBAT

Start at: 2018-08-22 12:08:05
End at: 2018-08-22 12:08:35
Local clock offset: -7.473 ms
Remote clock offset: -2.627 ms

# Below is generated by plot.py at 2018-08-22 14:23:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.85 Mbit/s
95th percentile per-packet one-way delay: 15.095 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 81.85 Mbit/s
95th percentile per-packet one-way delay: 15.095 ms
Loss rate: 0.07%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 81.91 Mbps)
- Flow 1 egress (mean 81.85 Mbps)

![Graph showing packet round-trip delay vs. time for Flow 1.]

- Flow 1 95th percentile 15.10 ms
Run 5: Statistics of LEDBAT

Start at: 2018-08-22 12:26:54
End at: 2018-08-22 12:27:24
Local clock offset: -5.117 ms
Remote clock offset: -1.077 ms

# Below is generated by plot.py at 2018-08-22 14:23:27
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 82.06 Mbit/s
  95th percentile per-packet one-way delay: 15.293 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 82.06 Mbit/s
  95th percentile per-packet one-way delay: 15.293 ms
  Loss rate: 0.10%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-08-22 12:45:49
End at: 2018-08-22 12:46:19
Local clock offset: -2.898 ms
Remote clock offset: -3.14 ms

# Below is generated by plot.py at 2018-08-22 14:23:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 14.614 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 87.31 Mbit/s
95th percentile per-packet one-way delay: 14.614 ms
Loss rate: 0.09%
Run 6: Report of LEDBAT — Data Link

![Graph](image1.png)

**Throughput (Mbps)**

- Flow 1 ingress (mean 87.38 Mbps)
- Flow 1 egress (mean 87.31 Mbps)

![Graph](image2.png)

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

- Flow 1 (95th percentile 14.61 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-08-22 13:04:42
End at: 2018-08-22 13:05:13
Local clock offset: -2.728 ms
Remote clock offset: -3.346 ms

# Below is generated by plot.py at 2018-08-22 14:23:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 14.128 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 87.28 Mbit/s
95th percentile per-packet one-way delay: 14.128 ms
Loss rate: 0.09%
Run 7: Report of LEDBAT — Data Link

Throughput (Mbps) vs. Time (s)

- Flow 1 ingress (mean 87.34 Mbps)
- Flow 1 egress (mean 87.28 Mbps)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 14.13 ms)
Run 8: Statistics of LEDBAT

End at: 2018-08-22 13:24:09
Local clock offset: -2.223 ms
Remote clock offset: -3.376 ms

# Below is generated by plot.py at 2018-08-22 14:23:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.00 Mbit/s
95th percentile per-packet one-way delay: 13.248 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 90.00 Mbit/s
95th percentile per-packet one-way delay: 13.248 ms
Loss rate: 0.08%
Run 8: Report of LEDBAT — Data Link

![Throughput Graph]

![Packet Delay Graph]
Run 9: Statistics of LEDBAT

Start at: 2018-08-22 13:42:33
End at: 2018-08-22 13:43:03
Local clock offset: -3.752 ms
Remote clock offset: -2.903 ms

# Below is generated by plot.py at 2018-08-22 14:23:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.86 Mbit/s
95th percentile per-packet one-way delay: 13.781 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 86.86 Mbit/s
95th percentile per-packet one-way delay: 13.781 ms
Loss rate: 0.08%
Run 9: Report of LEDBAT — Data Link

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

**Throughput (Mb/s)**

- Flow 1 ingress (mean 85.92 Mb/s)
- Flow 1 egress (mean 86.86 Mb/s)

**Packet Delay (ms)**

- Flow 1 (95th percentile 13.78 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-08-22 14:01:28
End at: 2018-08-22 14:01:58
Local clock offset: -3.853 ms
Remote clock offset: -2.389 ms

# Below is generated by plot.py at 2018-08-22 14:23:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.52 Mbit/s
95th percentile per-packet one-way delay: 13.225 ms
Loss rate: 0.10%

-- Flow 1:
Average throughput: 90.52 Mbit/s
95th percentile per-packet one-way delay: 13.225 ms
Loss rate: 0.10%
Run 10: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 90.59 Mbit/s)
- **Flow 1 egress** (mean 90.52 Mbit/s)

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

- **Flow 1** (95th percentile 13.22 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-08-22 11:05:33
End at: 2018-08-22 11:06:03
Local clock offset: -5.033 ms
Remote clock offset: -2.398 ms

# Below is generated by plot.py at 2018-08-22 14:24:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 5.001 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 90.89 Mbit/s
95th percentile per-packet one-way delay: 5.001 ms
Loss rate: 0.01%
Run 1: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet loss over time](image1)

- **Throughput (Mbps)**
  - Y-axis: Throughput in Mbps
  - X-axis: Time in seconds
  - Legend: Flow 1 ingress (mean 90.89 Mbit/s); Flow 1 egress (mean 90.89 Mbit/s)

- **Packet loss per packet per roundtrip delay (ms)**
  - Y-axis: Packet loss
  - X-axis: Time in seconds
  - Legend: Flow 1 (95th percentile 5.00 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-08-22 11:24:29
End at: 2018-08-22 11:24:59
Local clock offset: -3.941 ms
Remote clock offset: -4.234 ms

# Below is generated by plot.py at 2018-08-22 14:24:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 3.637 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 92.06 Mbit/s
95th percentile per-packet one-way delay: 3.637 ms
Loss rate: 0.01%
Run 2: Report of PCC-Allegro — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 92.06 Mbit/s)
- Blue solid line: Flow 1 egress (mean 92.06 Mbit/s)

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

- Black line: Flow 1 (95th percentile 3.64 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-08-22 11:43:29
End at: 2018-08-22 11:43:59
Local clock offset: -4.759 ms
Remote clock offset: -6.988 ms

# Below is generated by plot.py at 2018-08-22 14:24:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 4.521 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 92.08 Mbit/s
95th percentile per-packet one-way delay: 4.521 ms
Loss rate: 0.01%
Run 3: Report of PCC-Allegro — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 92.09 Mbit/s)**
- **Flow 1 egress (mean 92.08 Mbit/s)**

![Graph 2](image2)

- **Flow 1 (95th percentile 4.52 ms)**
Run 4: Statistics of PCC-Allegro

Start at: 2018-08-22 12:02:29
End at: 2018-08-22 12:02:59
Local clock offset: -6.754 ms
Remote clock offset: -3.661 ms

# Below is generated by plot.py at 2018-08-22 14:24:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.71 Mbit/s
95th percentile per-packet one-way delay: 5.695 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 87.71 Mbit/s
95th percentile per-packet one-way delay: 5.695 ms
Loss rate: 0.02%
Run 4: Report of PCC-Allegro — Data Link

![Graph of Throughput and Delay](image1.png)

Flow 1 ingress (mean 87.72 Mbit/s)  Flow 1 egress (mean 87.71 Mbit/s)

![Graph of Packet Delay](image2.png)

Flow 1 (95th percentile 5.70 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-08-22 12:21:24
End at: 2018-08-22 12:21:54
Local clock offset: -4.693 ms
Remote clock offset: -1.393 ms

# Below is generated by plot.py at 2018-08-22 14:24:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 16.305 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 40.30 Mbit/s
95th percentile per-packet one-way delay: 16.305 ms
Loss rate: 0.08%
Run 5: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 40.33 Mbit/s)**
- **Flow 1 egress (mean 40.30 Mbit/s)**

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

- **Flow 1 (95th percentile 16.30 ms)**
Run 6: Statistics of PCC-Allegro

Start at: 2018-08-22 12:40:15
End at: 2018-08-22 12:40:45
Local clock offset: -2.802 ms
Remote clock offset: -2.868 ms

# Below is generated by plot.py at 2018-08-22 14:24:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.84 Mbit/s
95th percentile per-packet one-way delay: 14.840 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 85.84 Mbit/s
95th percentile per-packet one-way delay: 14.840 ms
Loss rate: 0.15%
Run 6: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 85.96 Mbit/s)**
- **Flow 1 egress (mean 85.84 Mbit/s)**

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

- **Flow 1 (95th percentile 14.84 ms)**
Run 7: Statistics of PCC-Allegro

Start at: 2018-08-22 12:59:10
End at: 2018-08-22 12:59:40
Local clock offset: -2.898 ms
Remote clock offset: -3.352 ms

# Below is generated by plot.py at 2018-08-22 14:24:44
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 67.22 Mbit/s
  95th percentile per-packet one-way delay: 18.149 ms
  Loss rate: 1.43%
-- Flow 1:
  Average throughput: 67.22 Mbit/s
  95th percentile per-packet one-way delay: 18.149 ms
  Loss rate: 1.43%
Run 8: Statistics of PCC-Allegro

Start at: 2018-08-22 13:18:04
End at: 2018-08-22 13:18:34
Local clock offset: -2.26 ms
Remote clock offset: -3.296 ms

# Below is generated by plot.py at 2018-08-22 14:24:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 16.615 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 76.30 Mbit/s
95th percentile per-packet one-way delay: 16.615 ms
Loss rate: 0.52%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-08-22 13:37:00
End at: 2018-08-22 13:37:30
Local clock offset: -2.891 ms
Remote clock offset: -3.242 ms

# Below is generated by plot.py at 2018-08-22 14:25:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 18.329 ms
Loss rate: 4.09%
-- Flow 1:
Average throughput: 87.24 Mbit/s
95th percentile per-packet one-way delay: 18.329 ms
Loss rate: 4.09%
Run 9: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 90.95 Mbit/s)
- **Flow 1 egress** (mean 87.24 Mbit/s)

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

- **Flow 1 (95th percentile 18.33 ms)**

161
Run 10: Statistics of PCC-Allegro

Start at: 2018-08-22 13:55:54
End at: 2018-08-22 13:56:24
Local clock offset: -4.511 ms
Remote clock offset: -2.5 ms

# Below is generated by plot.py at 2018-08-22 14:25:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.06 Mbit/s
95th percentile per-packet one-way delay: 13.311 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 83.06 Mbit/s
95th percentile per-packet one-way delay: 13.311 ms
Loss rate: 0.11%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2018-08-22 11:03:17
End at: 2018-08-22 11:03:47
Local clock offset: -5.759 ms
Remote clock offset: -2.263 ms

# Below is generated by plot.py at 2018-08-22 14:26:14
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 79.42 Mbit/s
  95th percentile per-packet one-way delay: 5.015 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 79.42 Mbit/s
  95th percentile per-packet one-way delay: 5.015 ms
  Loss rate: 0.01%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

End at: 2018-08-22 11:22:43
Local clock offset: -4.023 ms
Remote clock offset: -3.586 ms

# Below is generated by plot.py at 2018-08-22 14:26:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.44 Mbit/s
95th percentile per-packet one-way delay: 11.259 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 83.44 Mbit/s
95th percentile per-packet one-way delay: 11.259 ms
Loss rate: 0.05%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-08-22 11:41:13
End at: 2018-08-22 11:41:43
Local clock offset: -4.23 ms
Remote clock offset: -6.752 ms

# Below is generated by plot.py at 2018-08-22 14:26:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 12.145 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 76.86 Mbit/s
95th percentile per-packet one-way delay: 12.145 ms
Loss rate: 0.03%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-08-22 12:00:12
End at: 2018-08-22 12:00:42
Local clock offset: -6.61 ms
Remote clock offset: -4.426 ms

# Below is generated by plot.py at 2018-08-22 14:26:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 11.061 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 82.98 Mbit/s
95th percentile per-packet one-way delay: 11.061 ms
Loss rate: 0.01%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-08-22 12:19:09
End at: 2018-08-22 12:19:39
Local clock offset: -4.033 ms
Remote clock offset: -1.455 ms

# Below is generated by plot.py at 2018-08-22 14:26:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 20.185 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 63.29 Mbit/s
95th percentile per-packet one-way delay: 20.185 ms
Loss rate: 0.45%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Start at: 2018-08-22 12:37:59
End at: 2018-08-22 12:38:29
Local clock offset: -4.774 ms
Remote clock offset: -2.736 ms

# Below is generated by plot.py at 2018-08-22 14:26:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 14.326 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 76.59 Mbit/s
95th percentile per-packet one-way delay: 14.326 ms
Loss rate: 0.09%
Run 6: Report of PCC-Expr — Data Link

![Graphs showing throughput and per-packet one-way delay](image-url)
Run 7: Statistics of PCC-Expr

Start at: 2018-08-22 12:56:54
End at: 2018-08-22 12:57:24
Local clock offset: -3.004 ms
Remote clock offset: -3.341 ms

# Below is generated by plot.py at 2018-08-22 14:26:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 16.313 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 16.313 ms
Loss rate: 0.17%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-08-22 13:15:48
End at: 2018-08-22 13:16:18
Local clock offset: -2.971 ms
Remote clock offset: -3.329 ms

# Below is generated by plot.py at 2018-08-22 14:26:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.28 Mbit/s
95th percentile per-packet one-way delay: 14.009 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 78.28 Mbit/s
95th percentile per-packet one-way delay: 14.009 ms
Loss rate: 0.09%
Run 8: Report of PCC-Expr — Data Link
Run 9: Statistics of PCC-Expr

Start at: 2018-08-22 13:34:44
End at: 2018-08-22 13:35:14
Local clock offset: -2.977 ms
Remote clock offset: -3.289 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 16.715 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 16.715 ms
Loss rate: 0.28%
Run 9: Report of PCC-Expr — Data Link
Run 10: Statistics of PCC-Expr

Start at: 2018-08-22 13:53:38
End at: 2018-08-22 13:54:08
Local clock offset: -3.605 ms
Remote clock offset: -2.617 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.56 Mbit/s
95th percentile per-packet one-way delay: 13.047 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 65.56 Mbit/s
95th percentile per-packet one-way delay: 13.047 ms
Loss rate: 0.05%
Run 10: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-08-22 11:16:40
End at: 2018-08-22 11:17:10
Local clock offset: -3.602 ms
Remote clock offset: -2.28 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 8.881 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 87.15 Mbit/s
95th percentile per-packet one-way delay: 8.881 ms
Loss rate: 0.04%
Run 1: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 87.18 Mbit/s)  Flow 1 egress (mean 87.15 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 8.88 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-08-22 11:35:40
End at: 2018-08-22 11:36:10
Local clock offset: -2.979 ms
Remote clock offset: -6.258 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 9.712 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: 9.712 ms
Loss rate: 0.02%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-08-22 11:54:39
End at: 2018-08-22 11:55:10
Local clock offset: -6.214 ms
Remote clock offset: -6.762 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.93 Mbit/s
95th percentile per-packet one-way delay: 7.000 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 87.93 Mbit/s
95th percentile per-packet one-way delay: 7.000 ms
Loss rate: 0.02%
Run 3: Report of QUIC Cubic — Data Link

[Graphs showing throughput and per-packet one-way delay over time for Flow 1 ingress and egress with mean values.]
Run 4: Statistics of QUIC Cubic

Start at: 2018-08-22 12:13:38
End at: 2018-08-22 12:14:08
Local clock offset: -5.425 ms
Remote clock offset: -1.985 ms

# Below is generated by plot.py at 2018-08-22 14:27:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.31 Mbit/s
95th percentile per-packet one-way delay: 17.595 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 78.31 Mbit/s
95th percentile per-packet one-way delay: 17.595 ms
Loss rate: 0.09%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-08-22 12:32:27
End at: 2018-08-22 12:32:57
Local clock offset: -4.962 ms
Remote clock offset: -2.022 ms

# Below is generated by plot.py at 2018-08-22 14:27:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.86 Mbit/s
95th percentile per-packet one-way delay: 15.181 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 83.86 Mbit/s
95th percentile per-packet one-way delay: 15.181 ms
Loss rate: 0.05%
Run 5: Report of QUIC Cubic — Data Link

![Graph of throughput vs. time for two flows, showing similar patterns with slight variations.]

![Graph of per-packet one-way delay vs. time for a single flow, showing a range of delays with a 95th percentile delay of 15.18 ms.]
Run 6: Statistics of QUIC Cubic

Start at: 2018-08-22 12:51:22
End at: 2018-08-22 12:51:53
Local clock offset: -2.505 ms
Remote clock offset: -3.317 ms

# Below is generated by plot.py at 2018-08-22 14:28:07
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 16.251 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 81.70 Mbit/s
95th percentile per-packet one-way delay: 16.251 ms
Loss rate: 0.08%
Run 6: Report of QUIC Cubic — Data Link

**Graph 1:**
- Title: Throughput vs Time
- X-axis: Time (s)
- Y-axis: Throughput (Mbit/s)
- Legend:
  - Flow 1 ingress (mean 81.76 Mbit/s)
  - Flow 1 egress (mean 81.70 Mbit/s)

**Graph 2:**
- Title: Packet-Way Delay vs Time
- X-axis: Time (s)
- Y-axis: Packet-Way Delay (ms)
- Legend:
  - Flow 1 (95th percentile 16.25 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-08-22 13:10:16
End at: 2018-08-22 13:10:46
Local clock offset: -2.826 ms
Remote clock offset: -3.358 ms

# Below is generated by plot.py at 2018-08-22 14:28:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.02 Mbit/s
95th percentile per-packet one-way delay: 13.974 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 86.02 Mbit/s
95th percentile per-packet one-way delay: 13.974 ms
Loss rate: 0.09%
Run 7: Report of QUIC Cubic — Data Link

Throughput (Mbps)

0 5 10 15 20 25 30

Time (s)

Flow 1 ingress (mean 86.07 Mbit/s)  Flow 1 egress (mean 86.02 Mbit/s)

Per packet one-way delay (ms)

0 5 10 15 20 25 30

Time (s)

Flow 1 (95th percentile 13.97 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-08-22 13:29:12
End at: 2018-08-22 13:29:42
Local clock offset: -2.21 ms
Remote clock offset: -3.291 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 13.964 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 85.78 Mbit/s
95th percentile per-packet one-way delay: 13.964 ms
Loss rate: 0.04%
Run 8: Report of QUIC Cubic — Data Link

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

![Graph showing Per-packet end-to-end delay (ms) vs Time (s)]
Run 9: Statistics of QUIC Cubic

Start at: 2018-08-22 13:48:06
End at: 2018-08-22 13:48:36
Local clock offset: -3.427 ms
Remote clock offset: -2.784 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 13.882 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 85.10 Mbit/s
95th percentile per-packet one-way delay: 13.882 ms
Loss rate: 0.04%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-08-22 14:07:02
End at: 2018-08-22 14:07:32
Local clock offset: -3.909 ms
Remote clock offset: -2.325 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 14.818 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 83.91 Mbit/s
95th percentile per-packet one-way delay: 14.818 ms
Loss rate: 0.05%
Run 10: Report of QUIC Cubic — Data Link

![Throughput Graph](image)

Flow 1 ingress (mean 83.94 Mbit/s)  
Flow 1 egress (mean 83.91 Mbit/s)

![Delay Graph](image)

Flow 1 (95th percentile 14.82 ms)
Run 1: Statistics of SCReAM

Start at: 2018-08-22 11:02:13
End at: 2018-08-22 11:02:43
Local clock offset: -4.869 ms
Remote clock offset: -2.211 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.369 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

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

Start at: 2018-08-22 11:21:09
End at: 2018-08-22 11:21:39
Local clock offset: -4.143 ms
Remote clock offset: -3.14 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.489 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.489 ms
  Loss rate: 0.13%
Run 2: Report of SCReAM — Data Link

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

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

![Graph 2: Round-trip Time vs Time](image2.png)

- Flow 1 (95th percentile 1.49 ms)
Run 3: Statistics of SCReAM

Start at: 2018-08-22 11:40:09
End at: 2018-08-22 11:40:39
Local clock offset: -3.995 ms
Remote clock offset: -6.684 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.510 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.510 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

Throughput (Mbit/s)

Time (s)

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

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 2.51 ms)
Run 4: Statistics of SCReAM

Start at: 2018-08-22 11:59:09
End at: 2018-08-22 11:59:39
Local clock offset: -6.562 ms
Remote clock offset: -4.692 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.612 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.612 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

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

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

![Graph of Packet One Way Delay (ms) vs Time (s)]

- **Flow 1 (95th percentile 2.61 ms)**

211
Run 5: Statistics of SCReAM

Start at: 2018-08-22 12:18:06
End at: 2018-08-22 12:18:36
Local clock offset: -4.895 ms
Remote clock offset: -1.531 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.515 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.515 ms
Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-08-22 12:36:55  
End at: 2018-08-22 12:37:25  
Local clock offset: -4.937 ms  
Remote clock offset: -2.682 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.491 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.491 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Graph showing throughput and delay over time]

- **Throughput (Mbps):** The graph illustrates the throughput over time, with two distinct lines representing Flow 1 ingress (mean 0.22 Mbps) and Flow 1 egress (mean 0.22 Mbps).

- **Delay (ms):** The scatter plot displays the one-way delay over time, indicating variability in delay with a 95th percentile of 2.49 ms.

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215
Run 7: Statistics of SCReAM

Start at: 2018-08-22 12:55:50
End at: 2018-08-22 12:56:21
Local clock offset: -3.042 ms
Remote clock offset: -3.315 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.736 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.736 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

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

Packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 2.74 ms)
Run 8: Statistics of SCReAM

Start at: 2018-08-22 13:14:45
End at: 2018-08-22 13:15:15
Local clock offset: -2.187 ms
Remote clock offset: -3.334 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics

-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.286 ms
Loss rate: 0.13%

-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 3.286 ms
Loss rate: 0.13%
Run 8: Report of SCReAM — Data Link

[Graphs showing throughput and per-packet one-way delay for Flow 1 ingress and egress.]
Run 9: Statistics of SCReAM

Start at: 2018-08-22 13:33:40
End at: 2018-08-22 13:34:10
Local clock offset: -2.991 ms
Remote clock offset: -3.277 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.674 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.674 ms
Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Graph of throughput over time with labels: Flow 1 ingress (mean 0.22 Mbit/s) and Flow 1 egress (mean 0.22 Mbit/s).]

![Graph of round-trip time over time with labels: Flow 1 95th percentile 2.67 ms.]
Run 10: Statistics of SCReAM

Start at: 2018-08-22 13:52:35
End at: 2018-08-22 13:53:05
Local clock offset: -4.392 ms
Remote clock offset: -2.582 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.131 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.131 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-08-22 11:18:54
End at: 2018-08-22 11:19:24
Local clock offset: -3.437 ms
Remote clock offset: -2.241 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 9.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.94 Mbit/s
95th percentile per-packet one-way delay: 9.467 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

![Graph of throughput](image1)

![Graph of per-packet one-way delay](image2)
Run 2: Statistics of Sprout

Start at: 2018-08-22 11:37:54
End at: 2018-08-22 11:38:24
Local clock offset: -3.267 ms
Remote clock offset: -6.472 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 9.725 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 9.725 ms
Loss rate: 0.04%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-08-22 11:56:54
End at: 2018-08-22 11:57:24
Local clock offset: -5.631 ms
Remote clock offset: -5.588 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 37.60 Mbit/s
  95th percentile per-packet one-way delay: 10.165 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 37.60 Mbit/s
  95th percentile per-packet one-way delay: 10.165 ms
  Loss rate: 0.05%
Run 3: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 37.62 Mbit/s)**
- **Flow 1 egress (mean 37.60 Mbit/s)**

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

- **Flow 1 (95th percentile 10.16 ms)**
Run 4: Statistics of Sprout

Start at: 2018-08-22 12:15:52
End at: 2018-08-22 12:16:22
Local clock offset: -5.122 ms
Remote clock offset: -1.732 ms

# Below is generated by plot.py at 2018-08-22 14:28:40
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.56 Mbit/s
95th percentile per-packet one-way delay: 11.259 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 36.56 Mbit/s
95th percentile per-packet one-way delay: 11.259 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-08-22 12:34:41
End at: 2018-08-22 12:35:11
Local clock offset: -4.145 ms
Remote clock offset: -2.404 ms

# Below is generated by plot.py at 2018-08-22 14:28:50
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 37.72 Mbit/s
  95th percentile per-packet one-way delay: 9.418 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 37.72 Mbit/s
  95th percentile per-packet one-way delay: 9.418 ms
  Loss rate: 0.07%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-08-22 12:53:36
End at: 2018-08-22 12:54:06
Local clock offset: -2.381 ms
Remote clock offset: -3.29 ms

# Below is generated by plot.py at 2018-08-22 14:28:52
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 40.60 Mbit/s
  95th percentile per-packet one-way delay: 10.856 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 40.60 Mbit/s
  95th percentile per-packet one-way delay: 10.856 ms
  Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-08-22 13:12:30
End at: 2018-08-22 13:13:00
Local clock offset: -2.894 ms
Remote clock offset: -3.328 ms

# Below is generated by plot.py at 2018-08-22 14:28:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 8.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 8.719 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

![Graph](image-url)
Run 8: Statistics of Sprout

Start at: 2018-08-22 13:31:26
End at: 2018-08-22 13:31:56
Local clock offset: -1.406 ms
Remote clock offset: -3.326 ms

# Below is generated by plot.py at 2018-08-22 14:29:04
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 36.91 Mbit/s
  95th percentile per-packet one-way delay: 10.331 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 36.91 Mbit/s
  95th percentile per-packet one-way delay: 10.331 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 35.92 Mbit/s)**
- **Flow 1 egress (mean 36.91 Mbit/s)**

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

- **Flow 1 (90th percentile 10.33 ms)**

239
Run 9: Statistics of Sprout

Start at: 2018-08-22 13:50:20
End at: 2018-08-22 13:50:50
Local clock offset: -3.538 ms
Remote clock offset: -2.633 ms

# Below is generated by plot.py at 2018-08-22 14:29:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 10.016 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.53 Mbit/s
95th percentile per-packet one-way delay: 10.016 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress** (mean 40.52 Mbps)
- **Flow 1 egress** (mean 40.53 Mbps)

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

- **Flow 1 95th percentile** 10.02 ms

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241
Run 10: Statistics of Sprout

Start at: 2018-08-22 14:09:16
End at: 2018-08-22 14:09:46
Local clock offset: -4.569 ms
Remote clock offset: -2.288 ms

# Below is generated by plot.py at 2018-08-22 14:29:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 8.777 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 8.777 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 40.47 Mbit/s)
- Flow 1 egress (mean 40.46 Mbit/s)

![Graph 2: Packet Delay vs Time]

- Flow 1 95th percentile 6.78 ms
Run 1: Statistics of TaoVA-100x

Start at: 2018-08-22 11:15:30
End at: 2018-08-22 11:16:00
Local clock offset: -2.948 ms
Remote clock offset: -2.299 ms

# Below is generated by plot.py at 2018-08-22 14:30:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 3.631 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 88.61 Mbit/s
95th percentile per-packet one-way delay: 3.631 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 88.61 Mbps/s)
- Flow 1 egress (mean 88.61 Mbps/s)

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

- Flow 1 95th percentile 3.63 ms
Run 2: Statistics of TaoVA-100x

Start at: 2018-08-22 11:34:30
End at: 2018-08-22 11:35:00
Local clock offset: -2.17 ms
Remote clock offset: -6.155 ms

# Below is generated by plot.py at 2018-08-22 14:30:37
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 89.50 Mbit/s
  95th percentile per-packet one-way delay: 3.492 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 89.50 Mbit/s
  95th percentile per-packet one-way delay: 3.492 ms
  Loss rate: 0.01%
Run 2: Report of TaoVA-100x — Data Link

![Graph 1](image1.png)

- **Flow 1 ingress (mean 89.50 Mbit/s)**
- **Flow 1 egress (mean 89.50 Mbit/s)**

![Graph 2](image2.png)

- **Flow 1 95th percentile 3.49 ms**
Run 3: Statistics of TaoVA-100x

Start at: 2018-08-22 11:53:30
End at: 2018-08-22 11:54:00
Local clock offset: -5.343 ms
Remote clock offset: -7.487 ms

# Below is generated by plot.py at 2018-08-22 14:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 3.976 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.87 Mbit/s
95th percentile per-packet one-way delay: 3.976 ms
Loss rate: 0.01%
Run 3: Report of TaoVA-100x — Data Link

![Graph of Throughput vs Time]

- **Flow 1 ingress (mean 85.87 Mb/s)**
- **Flow 1 egress (mean 86.87 Mb/s)**

![Graph of Per-packet round-trip delay vs Time]

- **Flow 1 (95th percentile 3.98 ms)**
Run 4: Statistics of TaoVA-100x

Start at: 2018-08-22 12:12:30
End at: 2018-08-22 12:13:00
Local clock offset: -5.638 ms
Remote clock offset: -2.03 ms

# Below is generated by plot.py at 2018-08-22 14:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.58 Mbit/s
95th percentile per-packet one-way delay: 7.918 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 63.58 Mbit/s
95th percentile per-packet one-way delay: 7.918 ms
Loss rate: 0.01%
Run 4: Report of TaoVA-100x — Data Link

![Graphs showing network performance metrics over time]

- **Throughput (Mbps)**
- **Time (s)**

Legend:
- Flow 1 ingress (mean 63.58 Mbit/s)
- Flow 1 egress (mean 63.58 Mbit/s)

- **Average packet round trip delay (ms)**
- **Time (s)**

Legend:
- Flow 1 (95th percentile 7.92 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-08-22 12:31:18
End at: 2018-08-22 12:31:48
Local clock offset: -4.272 ms
Remote clock offset: -1.849 ms

# Below is generated by plot.py at 2018-08-22 14:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.54 Mbit/s
95th percentile per-packet one-way delay: 5.640 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 69.54 Mbit/s
95th percentile per-packet one-way delay: 5.640 ms
Loss rate: 0.01%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-08-22 12:50:14
End at: 2018-08-22 12:50:44
Local clock offset: -1.811 ms
Remote clock offset: -3.244 ms

# Below is generated by plot.py at 2018-08-22 14:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 7.796 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 67.63 Mbit/s
95th percentile per-packet one-way delay: 7.796 ms
Loss rate: 0.01%
Run 6: Report of TaoVA-100x — Data Link

![Graph showing throughput and delay over time for flow 1 ingress and egress with mean 67.63 Mbps and 95th percentile 7.80 ms.](image)
Run 7: Statistics of TaoVA-100x

Start at: 2018-08-22 13:09:07
End at: 2018-08-22 13:09:37
Local clock offset: -2.015 ms
Remote clock offset: -3.341 ms

# Below is generated by plot.py at 2018-08-22 14:30:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.30 Mbit/s
95th percentile per-packet one-way delay: 5.384 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 70.30 Mbit/s
95th percentile per-packet one-way delay: 5.384 ms
Loss rate: 0.01%
Run 7: Report of TaoVA-100x — Data Link

![Graph of Throughput (Mbps)](image1)

- Flow 1 ingress (mean 70.31 Mbit/s)
- Flow 1 egress (mean 70.30 Mbit/s)

![Graph of Average Packet One-Way Delay (ms)](image2)

Flow 1 95th percentile 5.38 ms
Run 8: Statistics of TaoVA-100x

Start at: 2018-08-22 13:28:03
End at: 2018-08-22 13:28:34
Local clock offset: -2.272 ms
Remote clock offset: -3.275 ms

# Below is generated by plot.py at 2018-08-22 14:30:44
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.71 Mbit/s
95th percentile per-packet one-way delay: 5.173 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 72.71 Mbit/s
95th percentile per-packet one-way delay: 5.173 ms
Loss rate: 0.01%
Run 8: Report of TaoVA-100x — Data Link

![Throughput Graph](image1)

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

Flow 1 ingress (mean 72.71 Mbit/s)  
Flow 1 egress (mean 72.71 Mbit/s)

Flow 1 (95th percentile 5.17 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-08-22 13:46:58
End at: 2018-08-22 13:47:28
Local clock offset: -3.288 ms
Remote clock offset: -2.744 ms

# Below is generated by plot.py at 2018-08-22 14:31:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 5.510 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 73.72 Mbit/s
95th percentile per-packet one-way delay: 5.510 ms
Loss rate: 0.01%
Run 9: Report of TaoVA-100x — Data Link

![Graph of Throughput and Delay](image)

- **Flow 1 ingress (mean 73.72 Mbit/s)**
- **Flow 1 egress (mean 73.72 Mbit/s)**

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

- **Flow 1 (95th percentile 5.51 ms)**
Run 10: Statistics of TaoVA-100x

Start at: 2018-08-22 14:05:54
End at: 2018-08-22 14:06:24
Local clock offset: -4.722 ms
Remote clock offset: -2.349 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 71.55 Mbit/s
95th percentile per-packet one-way delay: 5.022 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.55 Mbit/s
95th percentile per-packet one-way delay: 5.022 ms
Loss rate: 0.01%
Run 10: Report of TaoVA-100x — Data Link

![Graph of Throughput vs. Time]

- **Flow 1 ingress (mean 71.55 Mbit/s)**
- **Flow 1 egress (mean 71.55 Mbit/s)**

![Graph of Packet Delay vs. Time]

- **Flow 1 95th percentile 5.02 ms**
Run 1: Statistics of TCP Vegas

Start at: 2018-08-22 11:04:26
End at: 2018-08-22 11:04:56
Local clock offset: -4.982 ms
Remote clock offset: -2.335 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 3.617 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 3.617 ms
Loss rate: 0.01%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-08-22 11:23:22
End at: 2018-08-22 11:23:52
Local clock offset: -3.964 ms
Remote clock offset: -3.885 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 2.640 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 95.19 Mbit/s
95th percentile per-packet one-way delay: 2.640 ms
Loss rate: 0.01%
Run 2: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**: The graph indicates stable throughput throughout the time interval, with a sharp decrease towards the end.
- **Packet delay (ms)**: Low packet delay is observed with occasional spikes towards the end of the interval.

The graphs illustrate the performance of Flow 1 ingress (mean 95.19 Mbit/s) and Flow 1 egress (mean 95.19 Mbit/s) over time.
Run 3: Statistics of TCP Vegas

Start at: 2018-08-22 11:42:22
End at: 2018-08-22 11:42:52
Local clock offset: -4.579 ms
Remote clock offset: -6.897 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 4.290 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 96.35 Mbit/s
95th percentile per-packet one-way delay: 4.290 ms
Loss rate: 0.01%
Run 3: Report of TCP Vegas — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 96.36 Mbit/s)  Flow 1 egress (mean 96.35 Mbit/s)

Per packet end-to-end delay (ms)

Flow 1 (95th percentile 4.29 ms)

269
Run 4: Statistics of TCP Vegas

Start at: 2018-08-22 12:01:22
End at: 2018-08-22 12:01:52
Local clock offset: -7.451 ms
Remote clock offset: -4.021 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 3.111 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 94.96 Mbit/s
95th percentile per-packet one-way delay: 3.111 ms
Loss rate: 0.01%
Run 4: Report of TCP Vegas — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 94.96 Mbit/s)  Flow 1 egress (mean 94.96 Mbit/s)

Per packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 3.11 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-08-22 12:20:17
End at: 2018-08-22 12:20:47
Local clock offset: -4.708 ms
Remote clock offset: -1.37 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 79.48 Mbit/s
95th percentile per-packet one-way delay: 7.208 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 79.48 Mbit/s
95th percentile per-packet one-way delay: 7.208 ms
Loss rate: 0.01%
Run 5: Report of TCP Vegas — Data Link

![Graph 1](image1)

Flow 1 ingress (mean 79.48 Mbit/s)  Flow 1 egress (mean 79.48 Mbit/s)

![Graph 2](image2)

Flow 1 (99th percentile 7.21 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-08-22 12:39:08
End at: 2018-08-22 12:39:38
Local clock offset: -4.562 ms
Remote clock offset: -2.793 ms

# Below is generated by plot.py at 2018-08-22 14:31:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 4.766 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 89.96 Mbit/s
95th percentile per-packet one-way delay: 4.766 ms
Loss rate: 0.01%
Run 6: Report of TCP Vegas — Data Link

![Graph 1: Throughput vs Time](image1)
- **Flow 1 ingress** (mean 89.96 Mbit/s)
- **Flow 1 egress** (mean 89.96 Mbit/s)

![Graph 2: Per-packet one-way delay vs Time](image2)
- **Flow 1** (95th percentile 4.77 ms)
Run 7: Statistics of TCP Vegas

Start at: 2018-08-22 12:58:03
End at: 2018-08-22 12:58:33
Local clock offset: -2.937 ms
Remote clock offset: -3.308 ms

# Below is generated by plot.py at 2018-08-22 14:32:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.58 Mbit/s
95th percentile per-packet one-way delay: 5.693 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 85.58 Mbit/s
95th percentile per-packet one-way delay: 5.693 ms
Loss rate: 0.02%
Run 7: Report of TCP Vegas — Data Link

![Graph showing throughput and latency over time]

- Flow 1 ingress (mean 85.58 Mbit/s)
- Flow 1 egress (mean 85.58 Mbit/s)

- Per-packet one-way delay (ms)

Flow 1 (95th percentile 5.69 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-08-22 13:16:57
End at: 2018-08-22 13:17:27
Local clock offset: -2.98 ms
Remote clock offset: -3.328 ms

# Below is generated by plot.py at 2018-08-22 14:32:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 88.89 Mbit/s
95th percentile per-packet one-way delay: 5.347 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 88.89 Mbit/s
95th percentile per-packet one-way delay: 5.347 ms
Loss rate: 0.01%
Run 8: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean 88.89 Mbit/s)**
- **Flow 1 egress (mean 88.89 Mbit/s)**

*Flow 1 (90th percentile 5.35 ms)*

279
Run 9: Statistics of TCP Vegas

Start at: 2018-08-22 13:35:53
End at: 2018-08-22 13:36:23
Local clock offset: -2.179 ms
Remote clock offset: -3.291 ms

# Below is generated by plot.py at 2018-08-22 14:32:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 87.09 Mbit/s
95th percentile per-packet one-way delay: 6.411 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 87.09 Mbit/s
95th percentile per-packet one-way delay: 6.411 ms
Loss rate: 0.01%
Run 9: Report of TCP Vegas — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 87.10 Mbit/s)
- Flow 1 egress (mean 87.09 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 6.41 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-08-22 13:54:47
End at: 2018-08-22 13:55:17
Local clock offset: -4.409 ms
Remote clock offset: -2.594 ms

# Below is generated by plot.py at 2018-08-22 14:32:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.48 Mbit/s
95th percentile per-packet one-way delay: 5.395 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 91.48 Mbit/s
95th percentile per-packet one-way delay: 5.395 ms
Loss rate: 0.02%
Run 10: Report of TCP Vegas — Data Link

![Graph showing throughput over time with two lines representing flow ingress and egress](image)

- Flow 1 ingress (mean 91.49 Mbit/s)
- Flow 1 egress (mean 91.48 Mbit/s)

![Graph showing packet delay over time with a single line representing the 95th percentile delay](image)

- Flow 1 (95th percentile 5.39 ms)
Run 1: Statistics of Verus

Start at: 2018-08-22 11:14:25
End at: 2018-08-22 11:14:55
Local clock offset: -4.603 ms
Remote clock offset: -2.287 ms

# Below is generated by plot.py at 2018-08-22 14:32:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.52 Mbit/s
95th percentile per-packet one-way delay: 9.161 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 33.52 Mbit/s
95th percentile per-packet one-way delay: 9.161 ms
Loss rate: 0.03%
Run 1: Report of Verus — Data Link

![Graph showing throughput over time with two lines: one for Flow 1 ingress and one for Flow 1 egress. The graphs show varying throughput levels over time.]
Run 2: Statistics of Verus

Start at: 2018-08-22 11:33:24
End at: 2018-08-22 11:33:54
Local clock offset: -2.944 ms
Remote clock offset: -6.061 ms

# Below is generated by plot.py at 2018-08-22 14:32:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 47.80 Mbit/s
95th percentile per-packet one-way delay: 11.647 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 47.80 Mbit/s
95th percentile per-packet one-way delay: 11.647 ms
Loss rate: 0.01%
Run 2: Report of Verus — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 47.81 Mbps)
- Flow 1 egress (mean 47.60 Mbps)

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

- Flow 1 (95th percentile 11.65 ms)
Run 3: Statistics of Verus

Start at: 2018-08-22 11:52:24
End at: 2018-08-22 11:52:54
Local clock offset: -6.006 ms
Remote clock offset: -7.426 ms

# Below is generated by plot.py at 2018-08-22 14:32:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.24 Mbit/s
95th percentile per-packet one-way delay: 12.232 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 41.24 Mbit/s
95th percentile per-packet one-way delay: 12.232 ms
Loss rate: 0.05%
Run 3: Report of Verus — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 41.25 Mbit/s)
- Flow 1 egress (mean 41.24 Mbit/s)

![Graph 2](image2)

- Flow 1 95th percentile 12.23 ms
Run 4: Statistics of Verus

Start at: 2018-08-22 12:11:23
End at: 2018-08-22 12:11:53
Local clock offset: -6.629 ms
Remote clock offset: -2.154 ms

# Below is generated by plot.py at 2018-08-22 14:32:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.84 Mbit/s
95th percentile per-packet one-way delay: 13.438 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 68.84 Mbit/s
95th percentile per-packet one-way delay: 13.438 ms
Loss rate: 0.02%
Run 4: Report of Verus — Data Link

![Graph of throughput over time with two lines, one for ingress and one for egress, labeled with their respective mean throughputs.]

![Graph of per-packet one-way delay with a line indicating the 95th percentile delay.]

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291
Run 5: Statistics of Verus

Start at: 2018-08-22 12:30:12
End at: 2018-08-22 12:30:42
Local clock offset: -5.07 ms
Remote clock offset: -1.652 ms

# Below is generated by plot.py at 2018-08-22 14:32:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.67 Mbit/s
95th percentile per-packet one-way delay: 13.385 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 52.67 Mbit/s
95th percentile per-packet one-way delay: 13.385 ms
Loss rate: 0.00%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 52.66 Mbit/s)
- Flow 1 egress (mean 52.67 Mbit/s)

![Graph 2: Per-packet round-trip delay vs Time](image2)

- Flow 1 95th percentile 13.38 ms
Run 6: Statistics of Verus

Start at: 2018-08-22 12:49:07
End at: 2018-08-22 12:49:37
Local clock offset: -2.645 ms
Remote clock offset: -3.224 ms

# Below is generated by plot.py at 2018-08-22 14:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 69.80 Mbit/s
95th percentile per-packet one-way delay: 14.126 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 69.80 Mbit/s
95th percentile per-packet one-way delay: 14.126 ms
Loss rate: 0.02%
Run 6: Report of Verus — Data Link

![Graph of Run 6](image1)

*Flow 1 ingress (mean 69.81 Mbit/s) — Flow 1 egress (mean 69.80 Mbit/s)*

![Graph of Run 6](image2)

*Flow 1 (95th percentile 14.13 ms)*
Run 7: Statistics of Verus

Start at: 2018-08-22 13:08:01
End at: 2018-08-22 13:08:31
Local clock offset: -2.723 ms
Remote clock offset: -3.352 ms

# Below is generated by plot.py at 2018-08-22 14:33:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 13.428 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 60.86 Mbit/s
95th percentile per-packet one-way delay: 13.428 ms
Loss rate: 0.01%
Run 7: Report of Verus — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 8: Statistics of Verus

Start at: 2018-08-22 13:26:57
End at: 2018-08-22 13:27:27
Local clock offset: -2.984 ms
Remote clock offset: -3.299 ms

# Below is generated by plot.py at 2018-08-22 14:33:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 13.281 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 51.68 Mbit/s
95th percentile per-packet one-way delay: 13.281 ms
Loss rate: 0.01%
Run 8: Report of Verus — Data Link

Graph 1: Throughput (Mbit/s) over Time (s)
- Flow 1 ingress (mean 51.69 Mbit/s)
- Flow 1 egress (mean 51.68 Mbit/s)

Graph 2: Per-packet one-way delay (ms) over Time (s)
- Flow 1 95th percentile 13.28 ms
Run 9: Statistics of Verus

Start at: 2018-08-22 13:45:51
End at: 2018-08-22 13:46:21
Local clock offset: -3.229 ms
Remote clock offset: -2.837 ms

# Below is generated by plot.py at 2018-08-22 14:33:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 14.174 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: 14.174 ms
Loss rate: 0.01%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 53.57 Mbps)
- Flow 1 egress (mean 53.57 Mbps)

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

- Flow 1 95th percentile 14.17 ms
Run 10: Statistics of Verus

Start at: 2018-08-22 14:04:46
End at: 2018-08-22 14:05:16
Local clock offset: -3.848 ms
Remote clock offset: -2.359 ms

# Below is generated by plot.py at 2018-08-22 14:33:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 13.770 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 13.770 ms
Loss rate: 0.04%
Run 10: Report of Verus — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Per-packet one-way delay (ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-08-22 11:06:39
End at: 2018-08-22 11:07:09
Local clock offset: -4.305 ms
Remote clock offset: -2.379 ms

# Below is generated by plot.py at 2018-08-22 14:33:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 3.144 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 21.66 Mbit/s
95th percentile per-packet one-way delay: 3.144 ms
Loss rate: 0.01%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing throughput over time for data link with two flows: ingress and egress.]

- **Flow 1 ingress** (mean 21.66 Mbit/s)
- **Flow 1 egress** (mean 21.66 Mbit/s)

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

- Flow 1 (95th percentile 3.14 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-08-22 11:25:36
End at: 2018-08-22 11:26:06
Local clock offset: -3.165 ms
Remote clock offset: -4.611 ms

# Below is generated by plot.py at 2018-08-22 14:34:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.18 Mbit/s
95th percentile per-packet one-way delay: 10.075 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 84.18 Mbit/s
95th percentile per-packet one-way delay: 10.075 ms
Loss rate: 0.02%
Run 2: Report of PCC-Vivace — Data Link

![Graph of Throughput (Mbps)](image)

- Flow 1 ingress (mean 84.19 Mbit/s)
- Flow 1 egress (mean 84.18 Mbit/s)

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

- Flow 1 (95th percentile 10.07 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2018-08-22 11:44:35
End at: 2018-08-22 11:45:05
Local clock offset: -4.972 ms
Remote clock offset: -7.046 ms

# Below is generated by plot.py at 2018-08-22 14:34:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 3.174 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 86.93 Mbit/s
95th percentile per-packet one-way delay: 3.174 ms
Loss rate: 0.01%
Run 3: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 85.93 Mbit/s)
- Flow 1 egress (mean 86.93 Mbit/s)

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

- Flow 1 95th percentile 3.17 ms
Run 4: Statistics of PCC-Vivace

Start at: 2018-08-22 12:03:35
End at: 2018-08-22 12:04:05
Local clock offset: -7.562 ms
Remote clock offset: -3.437 ms

# Below is generated by plot.py at 2018-08-22 14:34:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 2.751 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 84.86 Mbit/s
95th percentile per-packet one-way delay: 2.751 ms
Loss rate: 0.01%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-08-22 12:22:29
End at: 2018-08-22 12:22:59
Local clock offset: -4.617 ms
Remote clock offset: -1.184 ms

# Below is generated by plot.py at 2018-08-22 14:34:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 19.507 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 19.507 ms
Loss rate: 0.87%
Run 5: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress** (mean 31.42 Mbit/s)
- **Flow 1 egress** (mean 31.15 Mbit/s)

![Graph 2: Packet loss and delay (ms)](image2)

- **Flow 1 95th percentile 19.51 ms**
Run 6: Statistics of PCC-Vivace

Start at: 2018-08-22 12:41:21
End at: 2018-08-22 12:41:51
Local clock offset: -3.415 ms
Remote clock offset: -2.907 ms

# Below is generated by plot.py at 2018-08-22 14:34:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 13.529 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 49.34 Mbit/s
95th percentile per-packet one-way delay: 13.529 ms
Loss rate: 0.19%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-08-22 13:00:15
End at: 2018-08-22 13:00:45
Local clock offset: -2.088 ms
Remote clock offset: -3.331 ms

# Below is generated by plot.py at 2018-08-22 14:34:18
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 43.07 Mbit/s
  95th percentile per-packet one-way delay: 14.049 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 43.07 Mbit/s
  95th percentile per-packet one-way delay: 14.049 ms
  Loss rate: 0.15%
Run 7: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)

Graph 2: Packet Round Trip Delay (ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-08-22 13:19:10
End at: 2018-08-22 13:19:40
Local clock offset: -2.227 ms
Remote clock offset: -3.305 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 14.136 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 72.93 Mbit/s
95th percentile per-packet one-way delay: 14.136 ms
Loss rate: 0.20%
Run 8: Report of PCC-Vivace — Data Link

![Graph of Throughput (Mbps)]

![Graph of Per-packet one-way delay (ms)]
Run 9: Statistics of PCC-Vivace

Start at: 2018-08-22 13:38:06
End at: 2018-08-22 13:38:36
Local clock offset: -3.108 ms
Remote clock offset: -3.151 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.73 Mbit/s
95th percentile per-packet one-way delay: 15.507 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 44.73 Mbit/s
95th percentile per-packet one-way delay: 15.507 ms
Loss rate: 0.35%
Run 9: Report of PCC-Vivace — Data Link

1. Throughput (Mbps):
   - Flow 1 ingress (mean 44.88 Mbps)
   - Flow 1 egress (mean 44.73 Mbps)

2. Per-packet inter-packet delay (ms):
   - Flow 1 (95th percentile 15.51 ms)
Run 10: Statistics of PCC-Vivace

Start at: 2018-08-22 13:57:00
End at: 2018-08-22 13:57:30
Local clock offset: -3.691 ms
Remote clock offset: -2.528 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.11 Mbit/s
95th percentile per-packet one-way delay: 13.753 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.11 Mbit/s
95th percentile per-packet one-way delay: 13.753 ms
Loss rate: 0.02%
Run 10: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 53.11 Mbit/s)**
- **Flow 1 egress (mean 53.11 Mbit/s)**

![Graph 2: Per packet size vs delay (ms)](image2)

- **Flow 1 (95th percentile 13.75 ms)**

323
Run 1: Statistics of WebRTC media

Start at: 2018-08-22 11:13:21
End at: 2018-08-22 11:13:51
Local clock offset: -4.797 ms
Remote clock offset: -2.332 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.922 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 1.922 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time for WebRTC media.]
Run 2: Statistics of WebRTC media

Start at: 2018-08-22 11:32:21
End at: 2018-08-22 11:32:51
Local clock offset: -2.975 ms
Remote clock offset: -5.848 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 2.711 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 2.711 ms
Loss rate: 0.08%
Run 2: Report of WebRTC media — Data Link

![Graph showing network throughput and packet delay over time.](image-url)
Run 3: Statistics of WebRTC media

Start at: 2018-08-22 11:51:21
End at: 2018-08-22 11:51:51
Local clock offset: -5.912 ms
Remote clock offset: -7.381 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 2.880 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.37 Mbit/s
95th percentile per-packet one-way delay: 2.880 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 2.37 Mbps)**
- **Flow 1 egress (mean 2.37 Mbps)**

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

- **Flow 1 (95th percentile 2.88 ms)**
Run 4: Statistics of WebRTC media

Start at: 2018-08-22 12:10:19
End at: 2018-08-22 12:10:49
Local clock offset: -5.329 ms
Remote clock offset: -2.339 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 4.624 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 4.624 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Throughput Graph](image1)

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 2.35 Mbit/s)
- Flow 1 egress (mean 2.35 Mbit/s)

![Delay Graph](image2)

**Packet Delay (ms)**

- Flow 1 (95th percentile 4.62 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-08-22 12:29:08
End at: 2018-08-22 12:29:39
Local clock offset: -4.274 ms
Remote clock offset: -1.367 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 3.681 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 2.36 Mbit/s
95th percentile per-packet one-way delay: 3.681 ms
Loss rate: 0.08%
Run 5: Report of WebRTC media — Data Link

[Graph showing throughput and delay over time]
Run 6: Statistics of WebRTC media

Start at: 2018-08-22 12:48:03
End at: 2018-08-22 12:48:33
Local clock offset: -1.963 ms
Remote clock offset: -3.18 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
 Average throughput: 2.43 Mbit/s
 95th percentile per-packet one-way delay: 4.480 ms
 Loss rate: 0.00%
-- Flow 1:
 Average throughput: 2.43 Mbit/s
 95th percentile per-packet one-way delay: 4.480 ms
 Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

![Throughput Graph](image1)

![Round Trip Time Graph](image2)
Run 7: Statistics of WebRTC media

Start at: 2018-08-22 13:06:57
End at: 2018-08-22 13:07:27
Local clock offset: -1.904 ms
Remote clock offset: -3.355 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 3.740 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.33 Mbit/s
95th percentile per-packet one-way delay: 3.740 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

![Graph showing throughput over time and per-packet one-way delay for Flow 1 ingess and egress, with mean throughputs of 2.33 Mbit/s.](image)

- **Flow 1 ingess (mean 2.33 Mbit/s)**
- **Flow 1 egress (mean 2.33 Mbit/s)**

![Graph showing per-packet one-way delay for Flow 1 with 95th percentile of 3.74 ms.](image)
Run 8: Statistics of WebRTC media

Start at: 2018-08-22 13:25:54
End at: 2018-08-22 13:26:24
Local clock offset: -2.226 ms
Remote clock offset: -3.363 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 3.610 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.39 Mbit/s
95th percentile per-packet one-way delay: 3.610 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one-way delay (ms)]
Run 9: Statistics of WebRTC media

Start at: 2018-08-22 13:44:48
End at: 2018-08-22 13:45:18
Local clock offset: -3.96 ms
Remote clock offset: -2.898 ms

# Below is generated by plot.py at 2018-08-22 14:34:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 2.873 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 2.873 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

[Graph showing throughput over time]

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

Flow 1 ingress (mean 2.35 Mbit/s)  Flow 1 egress (mean 2.35 Mbit/s)
Flow 1 (95th percentile 2.87 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-08-22 14:03:43
End at: 2018-08-22 14:04:13
Local clock offset: -4.69 ms
Remote clock offset: -2.374 ms

# Below is generated by plot.py at 2018-08-22 14:34:19

# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 2.288 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.35 Mbit/s
95th percentile per-packet one-way delay: 2.288 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Packet Inter-arrival Delay (ms)]