Pantheon Report

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

Git summary:
branch: master @ 9250dbec7f9b57193cdefb1ba8c440b4e16ab30f0
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 37162fe9af8f529aeeccac061c93e75640e5710b5
third_party/genericCC @ 0153f8e594a89e93b0321435edfdfe58e562f4
third_party/indigo @ 2601c92e49d58d38cd4de0e4dbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7c3cf
third_party/pantheon-tunnel @ 6f038ed312b9d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afcc955fa0d6d10b623c091a55fec872b4981e1
   M receiver/src/buffer.h
   M receiver/src/core.cpp
   M sender/src/buffer.h
   M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac08faba24df974ab
third_party/proto-quic @ 77961f1a82733a56b42f1bc8143ebc978f3e3f
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3b9b2
   M src/ScreamClient
   M src/ScreamServer
third_party/sprout @ 366e35c617301e31d4a4ed18c74f9415f19a26
third_party/verus @ d4b447ea74c6ca6a261149af2629562939f9a494
   M src/verus.hpp
   M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c054587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9d6e4735770d143a1fa2851
test from GCE Sydney to GCE Tokyo, 10 runs of 30s each per scheme (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>218.07</td>
<td>52.53</td>
<td>0.00</td>
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<tr>
<td>Copa</td>
<td>10</td>
<td>133.00</td>
<td>56.91</td>
<td>0.00</td>
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<td>TCP Cubic</td>
<td>10</td>
<td>153.05</td>
<td>53.17</td>
<td>0.00</td>
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<td>FillP</td>
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<td>848.42</td>
<td>156.75</td>
<td>1.48</td>
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<td>FillP-Sheep</td>
<td>10</td>
<td>675.97</td>
<td>237.56</td>
<td>4.09</td>
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<td>Indigo</td>
<td>10</td>
<td>202.30</td>
<td>50.57</td>
<td>0.00</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>30.66</td>
<td>51.61</td>
<td>0.00</td>
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<td>PCC-Allegro</td>
<td>10</td>
<td>563.13</td>
<td>168.23</td>
<td>1.24</td>
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<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>227.80</td>
<td>86.05</td>
<td>0.26</td>
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<tr>
<td>QUIC Cubic</td>
<td>7</td>
<td>67.50</td>
<td>53.21</td>
<td>0.00</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>52.54</td>
<td>0.01</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>6.85</td>
<td>52.14</td>
<td>0.00</td>
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<tr>
<td>TaoVA-100x</td>
<td>7</td>
<td>28.16</td>
<td>53.39</td>
<td>0.00</td>
</tr>
<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>100.61</td>
<td>51.79</td>
<td>0.00</td>
</tr>
<tr>
<td>Verus</td>
<td>10</td>
<td>241.71</td>
<td>105.89</td>
<td>0.07</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>302.94</td>
<td>53.08</td>
<td>0.00</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.99</td>
<td>53.99</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-07-05 12:57:38
End at: 2018-07-05 12:58:08
Local clock offset: 0.012 ms
Remote clock offset: -0.093 ms

# Below is generated by plot.py at 2018-07-05 16:41:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.05 Mbit/s
95th percentile per-packet one-way delay: 50.562 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 218.05 Mbit/s
95th percentile per-packet one-way delay: 50.562 ms
Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 218.03 Mbit/s)
- Flow 1 egress (mean 218.05 Mbit/s)

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

- Flow 1 (95th percentile 50.56 ms)
Run 2: Statistics of TCP BBR

Local clock offset: 0.132 ms
Remote clock offset: -0.26 ms

# Below is generated by plot.py at 2018-07-05 16:41:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.06 Mbit/s
95th percentile per-packet one-way delay: 52.573 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.06 Mbit/s
95th percentile per-packet one-way delay: 52.573 ms
Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 213.06 Mbit/s)**
- **Flow 1 egress (mean 213.06 Mbit/s)**

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

- **Flow 1 (95th percentile 52.57 ms)**
Run 3: Statistics of TCP BBR

Start at: 2018-07-05 13:40:26
End at: 2018-07-05 13:40:56
Local clock offset: -0.048 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.37 Mbit/s
95th percentile per-packet one-way delay: 54.417 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.37 Mbit/s
95th percentile per-packet one-way delay: 54.417 ms
Loss rate: 0.00%
Run 3: Report of TCP BBR — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 222.37 Mbps)
- Blue solid line: Flow 1 egress (mean 222.37 Mbps)

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

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

Start at: 2018-07-05 14:02:15
End at: 2018-07-05 14:02:45
Local clock offset: 0.135 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 220.49 Mbit/s
  95th percentile per-packet one-way delay: 52.763 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 220.49 Mbit/s
  95th percentile per-packet one-way delay: 52.763 ms
  Loss rate: 0.00%
Run 4: Report of TCP BBR — Data Link

![Throughput Graph](image1)

![Per-packet one-way delay Graph](image2)
Run 5: Statistics of TCP BBR

Start at: 2018-07-05 14:24:15
End at: 2018-07-05 14:24:45
Local clock offset: 0.019 ms
Remote clock offset: 1.433 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.69 Mbit/s
95th percentile per-packet one-way delay: 52.677 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 216.69 Mbit/s
95th percentile per-packet one-way delay: 52.677 ms
Loss rate: 0.00%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-07-05 14:46:00
End at: 2018-07-05 14:46:30
Local clock offset: -0.034 ms
Remote clock offset: 1.363 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.44 Mbit/s
95th percentile per-packet one-way delay: 52.832 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.44 Mbit/s
95th percentile per-packet one-way delay: 52.832 ms
Loss rate: 0.00%
Run 6: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 217.41 Mbps)**
- **Flow 1 egress (mean 217.44 Mbps)**

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

- **Flow 1 (95th percentile 52.83 ms)**
Run 7: Statistics of TCP BBR

Start at: 2018-07-05 15:07:43
End at: 2018-07-05 15:08:13
Local clock offset: -0.078 ms
Remote clock offset: 1.389 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.98 Mbit/s
95th percentile per-packet one-way delay: 52.264 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 219.98 Mbit/s
95th percentile per-packet one-way delay: 52.264 ms
Loss rate: 0.00%
Run 7: Report of TCP BBR — Data Link

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

Throughput (Mbps)

Flow 1 ingress (mean 219.96 Mbit/s)
Flow 1 egress (mean 219.98 Mbit/s)

Packet delay (ms)

Flow 1 (95th percentile 52.26 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-07-05 15:29:50
End at: 2018-07-05 15:30:20
Local clock offset: ~0.15 ms
Remote clock offset: 1.43 ms

# Below is generated by plot.py at 2018-07-05 16:41:52
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 214.68 Mbit/s
  95th percentile per-packet one-way delay: 52.300 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 214.68 Mbit/s
  95th percentile per-packet one-way delay: 52.300 ms
  Loss rate: 0.00%
Run 8: Report of TCP BBR — Data Link

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

*Legend:* Flow 1 ingress (mean 214.65 Mbit/s) — Flow 1 egress (mean 214.68 Mbit/s)

![Graph 2: End-to-End RTT](image2)

*Legend:* Flow 1 (95th percentile 52.30 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-07-05 15:51:52
End at: 2018-07-05 15:52:22
Local clock offset: ~0.27 ms
Remote clock offset: 1.266 ms

# Below is generated by plot.py at 2018-07-05 16:45:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.23 Mbit/s
95th percentile per-packet one-way delay: 52.033 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 222.23 Mbit/s
95th percentile per-packet one-way delay: 52.033 ms
Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-07-05 16:13:56
End at: 2018-07-05 16:14:26
Local clock offset: -0.045 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2018-07-05 16:45:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.76 Mbit/s
95th percentile per-packet one-way delay: 52.902 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 215.76 Mbit/s
95th percentile per-packet one-way delay: 52.902 ms
Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2018-07-05 12:52:15
End at: 2018-07-05 12:52:45
Local clock offset: -0.034 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-07-05 16:47:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.36 Mbit/s
95th percentile per-packet one-way delay: 55.144 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.36 Mbit/s
95th percentile per-packet one-way delay: 55.144 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

Throughput (Mbps) vs Time (s)

- Flow 1 ingress (mean 188.36 Mbit/s)
- Flow 1 egress (mean 188.36 Mbit/s)

Packet error rate vs Time (s)

- Flow 1 (95th percentile 55.14 ms)
Run 2: Statistics of Copa

End at: 2018-07-05 13:14:16
Local clock offset: 0.264 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-07-05 16:47:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.23 Mbit/s
95th percentile per-packet one-way delay: 53.521 ms
Loss rate: 0.00%
Run 2: Report of Copa — Data Link

/chart1/

/chart2/
Run 3: Statistics of Copa

Start at: 2018-07-05 13:35:18
End at: 2018-07-05 13:35:48
Local clock offset: 0.139 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-07-05 16:47:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.56 Mbit/s
95th percentile per-packet one-way delay: 53.892 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 99.56 Mbit/s
95th percentile per-packet one-way delay: 53.892 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link

![Graph of throughput (Mbps) over time (s)]

- Flow 1 ingress (mean 99.56 Mbit/s)
- Flow 1 egress (mean 99.56 Mbit/s)

![Graph of one-way delay (ms) over time (s)]

- Flow 1 (95th percentile 53.89 ms)
Run 4: Statistics of Copa

Local clock offset: 0.248 ms
Remote clock offset: -1.274 ms

# Below is generated by plot.py at 2018-07-05 16:47:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 133.10 Mbit/s
95th percentile per-packet one-way delay: 62.043 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 133.10 Mbit/s
95th percentile per-packet one-way delay: 62.043 ms
Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

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

Flow 1 ingress (mean 133.09 Mbit/s)  Flow 1 egress (mean 133.10 Mbit/s)

Flow 1 (95th percentile 62.04 ms)
Run 5: Statistics of Copa

Start at: 2018-07-05 14:18:55
End at: 2018-07-05 14:19:26
Local clock offset: -0.053 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-07-05 16:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.92 Mbit/s
95th percentile per-packet one-way delay: 52.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 192.92 Mbit/s
95th percentile per-packet one-way delay: 52.961 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-07-05 14:40:53
End at: 2018-07-05 14:41:23
Local clock offset: ~0.077 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2018-07-05 16:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.33 Mbit/s
95th percentile per-packet one-way delay: 53.751 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 57.33 Mbit/s
95th percentile per-packet one-way delay: 53.751 ms
Loss rate: 0.00%
Run 6: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 57.32 Mbps/s)
- Flow 1 egress (mean 57.33 Mbps/s)

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

- Flow 1 (95th percentile 53.75 ms)
Run 7: Statistics of Copa

Start at: 2018-07-05 15:02:38
End at: 2018-07-05 15:03:08
Local clock offset: -0.275 ms
Remote clock offset: 0.988 ms

# Below is generated by plot.py at 2018-07-05 16:47:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 54.810 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 54.810 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress: mean 53.91 Mbps
  - Flow 1 egress: mean 53.91 Mbps

- **Packet delay (ms):**
  - Flow 1 (95th percentile 54.81 ms)
Run 8: Statistics of Copa

Start at: 2018-07-05 15:24:37
End at: 2018-07-05 15:25:07
Local clock offset: 0.014 ms
Remote clock offset: 1.146 ms

# Below is generated by plot.py at 2018-07-05 16:47:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.85 Mbit/s
95th percentile per-packet one-way delay: 70.471 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 134.85 Mbit/s
95th percentile per-packet one-way delay: 70.471 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with ingestion and egress rates and a 95th percentile delay of 70.47 ms.](image-url)
Run 9: Statistics of Copa

Start at: 2018-07-05 15:46:31
End at: 2018-07-05 15:47:01
Local clock offset: -0.138 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-07-05 16:50:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.67 Mbit/s
95th percentile per-packet one-way delay: 56.866 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 180.67 Mbit/s
95th percentile per-packet one-way delay: 56.866 ms
Loss rate: 0.00%
Run 9: Report of Copa — Data Link

Graph 1: Throughput over time (Mbps)
- Flow 1 ingress (mean 180.66 Mbps)
- Flow 1 egress (mean 180.67 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 56.87 ms)
Run 10: Statistics of Copa

Start at: 2018-07-05 16:08:26
End at: 2018-07-05 16:08:56
Local clock offset: -0.003 ms
Remote clock offset: -1.417 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 55.641 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 55.641 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with ingress and egress data rates of 228.06 Mbps.](image)

![Graph showing packet delay over time for Flow 1 with a 95th percentile of 55.64 ms.](image)
Run 1: Statistics of TCP Cubic

Start at: 2018-07-05 13:07:12
End at: 2018-07-05 13:07:42
Local clock offset: -0.022 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 144.79 Mbit/s
95th percentile per-packet one-way delay: 51.887 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 144.79 Mbit/s
95th percentile per-packet one-way delay: 51.887 ms
Loss rate: 0.00%
Run 1: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 144.77 Mbit/s)  Flow 1 egress (mean 144.79 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 51.89 ms)
Run 2: Statistics of TCP Cubic

End at: 2018-07-05 13:29:03
Local clock offset: 0.247 ms
Remote clock offset: 0.118 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 139.78 Mbit/s
95th percentile per-packet one-way delay: 52.209 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 139.78 Mbit/s
95th percentile per-packet one-way delay: 52.209 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

End at: 2018-07-05 13:51:06
Local clock offset: -0.191 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 165.06 Mbit/s
95th percentile per-packet one-way delay: 54.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 165.06 Mbit/s
95th percentile per-packet one-way delay: 54.796 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

[Graphs showing throughput and packet delay for Flow 1]
Run 4: Statistics of TCP Cubic

Start at: 2018-07-05 14:12:28
End at: 2018-07-05 14:12:58
Local clock offset: 0.154 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.39 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 156.39 Mbit/s
95th percentile per-packet one-way delay: 51.457 ms
Loss rate: 0.00%
Run 4: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 156.38 Mbps)  Flow 1 egress (mean 156.39 Mbps)

Packet per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 51.46 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-07-05 14:34:29
End at: 2018-07-05 14:34:59
Local clock offset: 0.108 ms
Remote clock offset: 1.247 ms

# Below is generated by plot.py at 2018-07-05 16:52:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 129.35 Mbit/s
  95th percentile per-packet one-way delay: 53.594 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 129.35 Mbit/s
  95th percentile per-packet one-way delay: 53.594 ms
  Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

Start at: 2018-07-05 14:56:13
End at: 2018-07-05 14:56:43
Local clock offset: -0.067 ms
Remote clock offset: 1.436 ms

# Below is generated by plot.py at 2018-07-05 16:52:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 135.85 Mbit/s
95th percentile per-packet one-way delay: 52.822 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 135.85 Mbit/s
95th percentile per-packet one-way delay: 52.822 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-07-05 15:17:58
End at: 2018-07-05 15:18:28
Local clock offset: -0.018 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-07-05 16:52:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 156.22 Mbit/s
95th percentile per-packet one-way delay: 53.089 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 156.22 Mbit/s
95th percentile per-packet one-way delay: 53.089 ms
Loss rate: 0.00%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-07-05 15:39:47
End at: 2018-07-05 15:40:17
Local clock offset: -0.08 ms
Remote clock offset: 1.339 ms

# Below is generated by plot.py at 2018-07-05 16:52:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 160.68 Mbit/s
95th percentile per-packet one-way delay: 52.846 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.68 Mbit/s
95th percentile per-packet one-way delay: 52.846 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

Start at: 2018-07-05 16:02:01
End at: 2018-07-05 16:02:31
Local clock offset: 0.02 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-07-05 16:52:38
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 218.87 Mbit/s
  95th percentile per-packet one-way delay: 54.155 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 218.87 Mbit/s
  95th percentile per-packet one-way delay: 54.155 ms
  Loss rate: 0.00%
Run 9: Report of TCP Cubic — Data Link

![Throughput Graph]

![Delay Graph]
Run 10: Statistics of TCP Cubic

Start at: 2018-07-05 16:24:07
End at: 2018-07-05 16:24:37
Local clock offset: 0.02 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-07-05 16:52:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 123.54 Mbit/s
95th percentile per-packet one-way delay: 54.805 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 123.54 Mbit/s
95th percentile per-packet one-way delay: 54.805 ms
Loss rate: 0.00%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2018-07-05 13:08:25
End at: 2018-07-05 13:08:55
Local clock offset: 0.107 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-07-05 17:08:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 821.39 Mbit/s
95th percentile per-packet one-way delay: 116.387 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 821.39 Mbit/s
95th percentile per-packet one-way delay: 116.387 ms
Loss rate: 0.95%
Run 1: Report of FillP — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 829.27 Mbps)
  - Flow 1 egress (mean 821.39 Mbps)

- **Packet one-way delay (ms):**
  - Flow 1 (95th percentile 116.39 ms)
Run 2: Statistics of FillIP

Start at: 2018-07-05 13:29:46
End at: 2018-07-05 13:30:16
Local clock offset: -0.173 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-07-05 17:08:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 867.37 Mbit/s
95th percentile per-packet one-way delay: 169.810 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 867.37 Mbit/s
95th percentile per-packet one-way delay: 169.810 ms
Loss rate: 0.61%
Run 2: Report of FillP — Data Link

---

**Throughput (Mbps)**

![Graph showing throughput over time with two curves labeled as Flow 1 ingress (mean 872.76 Mbps) and Flow 1 egress (mean 867.37 Mbps).]

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

![Graph showing per packet one way delay over time with a curve labeled as Flow 1 (95th percentile 169.81 ms).]
Run 3: Statistics of FillP

Start at: 2018-07-05 13:51:50
End at: 2018-07-05 13:52:20
Local clock offset: -0.103 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-07-05 17:08:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 810.97 Mbit/s
95th percentile per-packet one-way delay: 144.986 ms
Loss rate: 3.27%
-- Flow 1:
Average throughput: 810.97 Mbit/s
95th percentile per-packet one-way delay: 144.986 ms
Loss rate: 3.27%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 838.90 Mbps)
- Flow 1 egress (mean 810.97 Mbps)

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

- Flow 1 (95th percentile 144.99 ms)
Run 4: Statistics of FillP

Start at: 2018-07-05 14:13:41
End at: 2018-07-05 14:14:11
Local clock offset: -0.147 ms
Remote clock offset: -1.2 ms

# Below is generated by plot.py at 2018-07-05 17:09:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 874.86 Mbit/s
95th percentile per-packet one-way delay: 121.381 ms
Loss rate: 1.48%
-- Flow 1:
Average throughput: 874.86 Mbit/s
95th percentile per-packet one-way delay: 121.381 ms
Loss rate: 1.48%
Run 4: Report of FillP — Data Link

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

- Flow 1 ingress (mean 888.03 Mbit/s)
- Flow 1 egress (mean 874.86 Mbit/s)

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

- Flow 1 (95th percentile 121.38 ms)
Run 5: Statistics of FillP

Start at: 2018-07-05 14:35:41
End at: 2018-07-05 14:36:11
Local clock offset: -0.185 ms
Remote clock offset: -0.434 ms

# Below is generated by plot.py at 2018-07-05 17:09:05
# Datalink statistics
-- Total of 1 flow:
Average throughput: 840.28 Mbit/s
95th percentile per-packet one-way delay: 126.309 ms
Loss rate: 2.25%
-- Flow 1:
Average throughput: 840.28 Mbit/s
95th percentile per-packet one-way delay: 126.309 ms
Loss rate: 2.25%
Run 5: Report of FillP — Data Link

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

**Throughput (Mbps)**

- Flow 1 ingress (mean 899.75 Mbps)
- Flow 1 egress (mean 840.28 Mbps)

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

- Flow 1 (95th percentile 126.31 ms)
Run 6: Statistics of FillP

Start at: 2018-07-05 14:57:25
End at: 2018-07-05 14:57:56
Local clock offset: 0.154 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-07-05 17:09:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 821.68 Mbit/s
95th percentile per-packet one-way delay: 221.049 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 821.68 Mbit/s
95th percentile per-packet one-way delay: 221.049 ms
Loss rate: 1.09%
Run 6: Report of FillP — Data Link

![Graph showing data link performance]

- Flow 1 ingress (mean 830.77 Mbps)
- Flow 1 egress (mean 821.68 Mbps)

![Graph showing packet delay]

- Flow 1 (95th percentile 221.05 ms)
Run 7: Statistics of FillP

Start at: 2018-07-05 15:19:11
End at: 2018-07-05 15:19:41
Local clock offset: -0.058 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-07-05 17:11:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 879.58 Mbit/s
95th percentile per-packet one-way delay: 145.210 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 879.58 Mbit/s
95th percentile per-packet one-way delay: 145.210 ms
Loss rate: 0.79%
Run 7: Report of FillP — Data Link

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

- Flow 1 ingress (mean 886.65 Mbit/s)
- Flow 1 egress (mean 879.58 Mbit/s)

- Flow 1 (95th percentile 145.21 ms)
Run 8: Statistics of FillP

Start at: 2018-07-05 15:41:00
End at: 2018-07-05 15:41:30
Local clock offset: 0.002 ms
Remote clock offset: 0.125 ms

# Below is generated by plot.py at 2018-07-05 17:11:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 853.50 Mbit/s
95th percentile per-packet one-way delay: 182.410 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 853.50 Mbit/s
95th percentile per-packet one-way delay: 182.410 ms
Loss rate: 0.51%
Run 8: Report of FillP — Data Link

![Graph](image1)

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

Start at: 2018-07-05 16:03:17
End at: 2018-07-05 16:03:47
Local clock offset: 0.009 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-07-05 17:26:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 878.31 Mbit/s
95th percentile per-packet one-way delay: 154.504 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 878.31 Mbit/s
95th percentile per-packet one-way delay: 154.504 ms
Loss rate: 1.25%
Run 9: Report of FillP — Data Link

![Throughput Graph]

- **Flow 1 Ingress (mean 899.40 Mbits)**
- **Flow 1 Egress (mean 878.31 Mbits)**

![Ping Graph]

- **Flow 1 (95th percentile 154.50 ms)**
Run 10: Statistics of FillP

Start at: 2018-07-05 16:25:19
End at: 2018-07-05 16:25:49
Local clock offset: 0.029 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-07-05 17:26:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 836.26 Mbit/s
95th percentile per-packet one-way delay: 185.486 ms
Loss rate: 2.64%
-- Flow 1:
Average throughput: 836.26 Mbit/s
95th percentile per-packet one-way delay: 185.486 ms
Loss rate: 2.64%
Run 10: Report of FillIP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2018-07-05 13:05:58
End at: 2018-07-05 13:06:28
Local clock offset: 0.162 ms
Remote clock offset: 0.096 ms

# Below is generated by plot.py at 2018-07-05 17:26:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 192.21 Mbit/s
95th percentile per-packet one-way delay: 263.765 ms
Loss rate: 6.07%
-- Flow 1:
Average throughput: 192.21 Mbit/s
95th percentile per-packet one-way delay: 263.765 ms
Loss rate: 6.07%
Run 1: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 204.64 Mbps)
- Flow 1 egress (mean 192.21 Mbps)

Flow 1 (95th percentile 263.76 ms)
Run 2: Statistics of FillP-Sheep

End at: 2018-07-05 13:27:50
Local clock offset: -0.038 ms
Remote clock offset: -1.324 ms

# Below is generated by plot.py at 2018-07-05 17:26:26
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.01 Mbit/s
95th percentile per-packet one-way delay: 286.326 ms
Loss rate: 4.07%
-- Flow 1:
Average throughput: 164.01 Mbit/s
95th percentile per-packet one-way delay: 286.326 ms
Loss rate: 4.07%
Run 2: Report of FillP-Sheep — Data Link

![Graph 1](Graph 1)

![Graph 2](Graph 2)
Run 3: Statistics of FillP-Sheep

End at: 2018-07-05 13:49:26
Local clock offset: -0.021 ms
Remote clock offset: 0.177 ms

# Below is generated by plot.py at 2018-07-05 17:26:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 821.97 Mbit/s
95th percentile per-packet one-way delay: 256.118 ms
Loss rate: 6.37%
-- Flow 1:
Average throughput: 821.97 Mbit/s
95th percentile per-packet one-way delay: 256.118 ms
Loss rate: 6.37%
Run 3: Report of FillP-Sheep — Data Link

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

- **Flow 1 Ingress (mean 877.89 Mbit/s)**
- **Flow 1 Egress (mean 821.97 Mbit/s)**

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

- **Flow 1 (95th percentile 256.12 ms)**
Run 4: Statistics of FillP-Sheep

Start at: 2018-07-05 14:10:46
End at: 2018-07-05 14:11:16
Local clock offset: -0.048 ms
Remote clock offset: 1.264 ms

# Below is generated by plot.py at 2018-07-05 17:26:51
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 799.25 Mbit/s
  95th percentile per-packet one-way delay: 131.522 ms
  Loss rate: 7.15%
-- Flow 1:
  Average throughput: 799.25 Mbit/s
  95th percentile per-packet one-way delay: 131.522 ms
  Loss rate: 7.15%
Run 4: Report of FillP-Sheep — Data Link

![Graph showing throughput and delay over time for Flow 1 with mean ingress and egress rates.]
Run 5: Statistics of FillP-Sheep

Start at: 2018-07-05 14:32:47
End at: 2018-07-05 14:33:17
Local clock offset: -0.115 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-07-05 17:29:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 861.70 Mbit/s
95th percentile per-packet one-way delay: 246.030 ms
Loss rate: 4.03%
-- Flow 1:
Average throughput: 861.70 Mbit/s
95th percentile per-packet one-way delay: 246.030 ms
Loss rate: 4.03%
Run 5: Report of FillP-Sheep — Data Link

![Graph showing network performance metrics over time.](image-url)
Run 6: Statistics of FillP-Sheep

Start at: 2018-07-05 14:54:33
End at: 2018-07-05 14:55:03
Local clock offset: -0.204 ms
Remote clock offset: 1.382 ms

# Below is generated by plot.py at 2018-07-05 17:29:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 831.50 Mbit/s
95th percentile per-packet one-way delay: 241.957 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 831.50 Mbit/s
95th percentile per-packet one-way delay: 241.957 ms
Loss rate: 3.61%
Run 6: Report of FillP-Sheep — Data Link
Run 7: Statistics of FillP-Sheep

Start at: 2018-07-05 15:16:17
End at: 2018-07-05 15:16:47
Local clock offset: 0.169 ms
Remote clock offset: 0.028 ms

# Below is generated by plot.py at 2018-07-05 17:29:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 832.89 Mbit/s
95th percentile per-packet one-way delay: 226.231 ms
Loss rate: 3.33%
-- Flow 1:
Average throughput: 832.89 Mbit/s
95th percentile per-packet one-way delay: 226.231 ms
Loss rate: 3.33%
Run 7: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 861.64 Mbit/s)**
- **Flow 1 egress (mean 832.89 Mbit/s)**

![Graph showing delay over time](image)

- **Flow 1 (95th percentile 226.23 ms)**
Run 8: Statistics of FillP-Sheep

Start at: 2018-07-05 15:38:16
End at: 2018-07-05 15:38:46
Local clock offset: -0.128 ms
Remote clock offset: 1.45 ms

# Below is generated by plot.py at 2018-07-05 17:29:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 598.33 Mbit/s
95th percentile per-packet one-way delay: 241.757 ms
Loss rate: 1.50%
-- Flow 1:
Average throughput: 598.33 Mbit/s
95th percentile per-packet one-way delay: 241.757 ms
Loss rate: 1.50%
Run 8: Report of FillP-Sheep — Data Link

![Graph of Throughput over Time](image1)

![Graph of Per-Socket One-Way Delay over Time](image2)
Run 9: Statistics of FillP-Sheep

Start at: 2018-07-05 16:00:21
End at: 2018-07-05 16:00:51
Local clock offset: 0.169 ms
Remote clock offset: 0.039 ms

# Below is generated by plot.py at 2018-07-05 17:43:07
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 830.24 Mbit/s
  95th percentile per-packet one-way delay: 233.982 ms
  Loss rate: 0.95%
-- Flow 1:
  Average throughput: 830.24 Mbit/s
  95th percentile per-packet one-way delay: 233.982 ms
  Loss rate: 0.95%
Run 9: Report of FillP-Sheep — Data Link
Run 10: Statistics of FillP-Sheep

Start at: 2018-07-05 16:22:26
End at: 2018-07-05 16:22:56
Local clock offset: 0.048 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 827.64 Mbit/s
95th percentile per-packet one-way delay: 247.947 ms
Loss rate: 3.84%
-- Flow 1:
Average throughput: 827.64 Mbit/s
95th percentile per-packet one-way delay: 247.947 ms
Loss rate: 3.84%
Run 10: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2018-07-05 13:00:00
End at: 2018-07-05 13:00:30
Local clock offset: -0.001 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.19 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 166.19 Mbit/s
95th percentile per-packet one-way delay: 50.572 ms
Loss rate: 0.00%
Run 1: Report of Indigo — Data Link

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

![Graph of packet delay over time with a line indicating 95th percentile delay.]

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Run 2: Statistics of Indigo

End at: 2018-07-05 13:21:45
Local clock offset: -0.169 ms
Remote clock offset: -0.173 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.13 Mbit/s
95th percentile per-packet one-way delay: 50.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.13 Mbit/s
95th percentile per-packet one-way delay: 50.600 ms
Loss rate: 0.00%
Run 2: Report of Indigo — Data Link

![Graph showing throughput over time]

- Flow 1 ingress (mean 212.13 Mbit/s)
- Flow 1 egress (mean 212.13 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 50.60 ms)
Run 3: Statistics of Indigo

End at: 2018-07-05 13:43:19
Local clock offset: 0.006 ms
Remote clock offset: 1.125 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.86 Mbit/s
95th percentile per-packet one-way delay: 51.824 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.86 Mbit/s
95th percentile per-packet one-way delay: 51.824 ms
Loss rate: 0.00%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2018-07-05 14:04:38
End at: 2018-07-05 14:05:08
Local clock offset: -0.001 ms
Remote clock offset: 0.18 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.21 Mbit/s
95th percentile per-packet one-way delay: 50.879 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.21 Mbit/s
95th percentile per-packet one-way delay: 50.879 ms
Loss rate: 0.00%
Run 4: Report of Indigo — Data Link

![Graph of throughput and packet delay over time]

*Flow 1 ingress (mean 213.21 Mbit/s)  Flow 1 egress (mean 213.21 Mbit/s)*

*Flow 1 (95th percentile 50.88 ms)*
Run 5: Statistics of Indigo

Start at: 2018-07-05 14:26:37
End at: 2018-07-05 14:27:07
Local clock offset: -0.104 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 219.39 Mbit/s
95th percentile per-packet one-way delay: 50.609 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 219.39 Mbit/s
95th percentile per-packet one-way delay: 50.609 ms
Loss rate: 0.00%
Run 5: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 219.39 Mbit/s)**
- **Flow 1 egress (mean 219.39 Mbit/s)**

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

- **Flow 1 (95th percentile 50.61 ms)**
Run 6: Statistics of Indigo

Start at: 2018-07-05 14:48:24
End at: 2018-07-05 14:48:54
Local clock offset: 0.104 ms
Remote clock offset: 0.042 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 198.38 Mbit/s
  95th percentile per-packet one-way delay: 50.481 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 198.38 Mbit/s
  95th percentile per-packet one-way delay: 50.481 ms
  Loss rate: 0.00%
Run 6: Report of Indigo — Data Link

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

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![Graph 2: Packet delay vs Time](image2)
Run 7: Statistics of Indigo

Start at: 2018-07-05 15:10:05
End at: 2018-07-05 15:10:35
Local clock offset: -0.222 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 188.72 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 188.72 Mbit/s
95th percentile per-packet one-way delay: 50.725 ms
Loss rate: 0.00%
Run 7: Report of Indigo — Data Link

![Graph of throughput and packet delay over time]

- Flow 1 ingress (mean 188.71 Mbit/s)
- Flow 1 egress (mean 188.72 Mbit/s)

![Graph of packet delay over time]

- Flow 1 (95th percentile 50.73 ms)
Run 8: Statistics of Indigo

End at: 2018-07-05 15:32:43
Local clock offset: -0.026 ms
Remote clock offset: -0.218 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 203.02 Mbit/s
95th percentile per-packet one-way delay: 50.012 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 203.02 Mbit/s
95th percentile per-packet one-way delay: 50.012 ms
Loss rate: 0.00%
Run 8: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Pre-packet one-way delay (ms)]
Run 9: Statistics of Indigo

Start at: 2018-07-05 15:54:14
End at: 2018-07-05 15:54:44
Local clock offset: -0.17 ms
Remote clock offset: -1.24 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.13 Mbit/s
95th percentile per-packet one-way delay: 49.427 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.13 Mbit/s
95th percentile per-packet one-way delay: 49.427 ms
Loss rate: 0.00%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

Start at: 2018-07-05 16:16:18
End at: 2018-07-05 16:16:48
Local clock offset: -0.004 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 205.97 Mbit/s
95th percentile per-packet one-way delay: 50.557 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 205.97 Mbit/s
95th percentile per-packet one-way delay: 50.557 ms
Loss rate: 0.00%
Run 10: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 205.97 Mbit/s)
- Flow 1 egress (mean 205.97 Mbit/s)

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

- Flow 1 (95th percentile 50.56 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-07-05 12:51:07
End at: 2018-07-05 12:51:37
Local clock offset: 0.079 ms
Remote clock offset: 1.203 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: 53.455 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-07-05 13:12:39
Local clock offset: -0.034 ms
Remote clock offset: -0.338 ms

# Below is generated by plot.py at 2018-07-05 17:43:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.03 Mbit/s
95th percentile per-packet one-way delay: 51.266 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 16.03 Mbit/s
95th percentile per-packet one-way delay: 51.266 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-07-05 13:34:10
End at: 2018-07-05 13:34:40
Local clock offset: -0.09 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 51.820 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 51.820 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

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

Flow 1 ingress (mean 33.23 Mbps)  Flow 1 egress (mean 33.23 Mbps)

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

Flow 1 (95th percentile 51.82 ms)
Run 4: Statistics of LEDBAT

End at: 2018-07-05 13:56:20
Local clock offset: 0.142 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 51.541 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: 51.541 ms
Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

[Graphs showing throughput and packet delay over time]
Run 5: Statistics of LEDBAT

Start at: 2018-07-05 14:17:47
End at: 2018-07-05 14:18:17
Local clock offset: -0.191 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 51.766 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 51.766 ms
Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link

![Graph showing throughput over time]

- **Flow 1 ingress (mean 32.70 Mbit/s)**
- **Flow 1 egress (mean 32.70 Mbit/s)**

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

- **Flow 1 (95th percentile 51.77 ms)**
Run 6: Statistics of LEDBAT

Start at: 2018-07-05 14:39:45
End at: 2018-07-05 14:40:15
Local clock offset: -0.135 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 51.563 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.95 Mbit/s
95th percentile per-packet one-way delay: 51.563 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

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

- **Flow 1 ingress (mean 33.94 Mbit/s)**
- **Flow 1 egress (mean 33.95 Mbit/s)**

![Graph 2: In-Sequence vs Time](Image)

- **Flow 1 (95th percentile 51.36 ms)**
Run 7: Statistics of LEDBAT

Start at: 2018-07-05 15:01:31
End at: 2018-07-05 15:02:01
Local clock offset: -0.082 ms
Remote clock offset: -1.343 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 32.93 Mbit/s
  95th percentile per-packet one-way delay: 50.484 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 32.93 Mbit/s
  95th percentile per-packet one-way delay: 50.484 ms
  Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

![Graph 1: Throughput over time for Flow 1 ingress and egress](image1)

![Graph 2: Packet delay distribution for Flow 1](image2)
Run 8: Statistics of LEDBAT

Start at: 2018-07-05 15:23:29
End at: 2018-07-05 15:23:59
Local clock offset: -0.227 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 51.770 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: 51.770 ms
Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

![Graph 1: Data throughput over time for Flow 1 ingress and egress]

![Graph 2: Packet delay time for Flow 1]

- Flow 1 ingress (mean 34.97 Mbit/s)
- Flow 1 egress (mean 34.97 Mbit/s)
- Flow 1 (95th percentile 51.77 ms)
Run 9: Statistics of LEDBAT

Start at: 2018-07-05 15:45:24
End at: 2018-07-05 15:45:54
Local clock offset: -0.027 ms
Remote clock offset: -1.034 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 50.835 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 50.835 ms
Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link

![Graph showing throughput over time with two lines representing flow ingress and egress. The graph has a y-axis labeled 'Throughput (Mbit/s)' and an x-axis labeled 'Time (s).']

![Graph showing per packet one-way delay with two lines representing flow ingress and egress. The graph has a y-axis labeled 'Per packet one-way delay (ms)' and an x-axis labeled 'Time (s).']

Flow 1 ingress (mean 24.39 Mbit/s) | Flow 1 egress (mean 24.39 Mbit/s)
Run 10: Statistics of LEDBAT

Start at: 2018-07-05 16:07:18
End at: 2018-07-05 16:07:48
Local clock offset: -0.028 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 33.89 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 33.89 Mbit/s
95th percentile per-packet one-way delay: 51.623 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

[Graph showing network performance metrics over time]

- **Flow 1 ingress (mean 33.89 Mbit/s)**
- **Flow 1 egress (mean 33.89 Mbit/s)**

[Graph showing packet delay over time]

- **Flow 1 (95th percentile 51.62 ms)**
Run 1: Statistics of PCC-Allegro

Start at: 2018-07-05 13:03:29
End at: 2018-07-05 13:03:59
Local clock offset: 0.075 ms
Remote clock offset: 1.185 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 481.25 Mbit/s
95th percentile per-packet one-way delay: 209.548 ms
Loss rate: 2.20%
-- Flow 1:
Average throughput: 481.25 Mbit/s
95th percentile per-packet one-way delay: 209.548 ms
Loss rate: 2.20%
Run 1: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet delay over time for two flow types: ingress and egress.]

**Throughput (Mbps):**
- Flow 1 ingress: mean 492.07 Mbps
- Flow 1 egress: mean 481.23 Mbps

**Packet Delay (ms):**
- Flow 1 (95th percentile): 209.55 ms
Run 2: Statistics of PCC-Allegro

Start at: 2018-07-05 13:24:50
End at: 2018-07-05 13:25:21
Local clock offset: 0.063 ms
Remote clock offset: 1.111 ms

# Below is generated by plot.py at 2018-07-05 17:43:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 519.50 Mbit/s
95th percentile per-packet one-way delay: 213.671 ms
Loss rate: 3.56%
-- Flow 1:
Average throughput: 519.50 Mbit/s
95th percentile per-packet one-way delay: 213.671 ms
Loss rate: 3.56%
Run 2: Report of PCC-Allegro — Data Link

---

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

- Flow 1 ingress (mean 539.22 Mbps)
- Flow 1 egress (mean 519.50 Mbps)

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

- Flow 1 (95th percentile 213.67 ms)
Run 3: Statistics of PCC-Allegro

End at: 2018-07-05 13:46:56
Local clock offset: -0.065 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2018-07-05 17:44:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 543.55 Mbit/s
95th percentile per-packet one-way delay: 167.888 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 543.55 Mbit/s
95th percentile per-packet one-way delay: 167.888 ms
Loss rate: 0.59%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2018-07-05 14:08:14
End at: 2018-07-05 14:08:44
Local clock offset: -0.185 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-07-05 17:45:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 594.54 Mbit/s
95th percentile per-packet one-way delay: 168.053 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 594.54 Mbit/s
95th percentile per-packet one-way delay: 168.053 ms
Loss rate: 0.52%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2018-07-05 14:30:15
End at: 2018-07-05 14:30:45
Local clock offset: -0.314 ms
Remote clock offset: 1.338 ms

# Below is generated by plot.py at 2018-07-05 17:45:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 596.70 Mbit/s
95th percentile per-packet one-way delay: 170.843 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 596.70 Mbit/s
95th percentile per-packet one-way delay: 170.843 ms
Loss rate: 1.08%
Run 5: Report of PCC-Allegro — Data Link

[Graph showing throughput and per-packet end-to-end delay over time]
Run 6: Statistics of PCC-Allegro

Start at: 2018-07-05 14:52:00
End at: 2018-07-05 14:52:30
Local clock offset: -0.119 ms
Remote clock offset: 0.211 ms

# Below is generated by plot.py at 2018-07-05 17:46:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.54 Mbit/s
95th percentile per-packet one-way delay: 114.158 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 590.54 Mbit/s
95th percentile per-packet one-way delay: 114.158 ms
Loss rate: 0.32%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-07-05 15:13:43
End at: 2018-07-05 15:14:13
Local clock offset: -0.035 ms
Remote clock offset: 0.142 ms

# Below is generated by plot.py at 2018-07-05 17:52:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 594.19 Mbit/s
95th percentile per-packet one-way delay: 169.986 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 594.19 Mbit/s
95th percentile per-packet one-way delay: 169.986 ms
Loss rate: 1.02%
Run 7: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 600.24 Mbit/s)
- Flow 1 egress (mean 594.19 Mbit/s)

![Graph of Packet Loss vs Time (s)]

- Flow 1 (95th percentile 169.99 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-07-05 15:35:44
End at: 2018-07-05 15:36:14
Local clock offset: -0.074 ms
Remote clock offset: -0.259 ms

# Below is generated by plot.py at 2018-07-05 17:52:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 578.26 Mbit/s
95th percentile per-packet one-way delay: 111.919 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 578.26 Mbit/s
95th percentile per-packet one-way delay: 111.919 ms
Loss rate: 0.19%
Run 8: Report of PCC-AlLEGRO — Data Link

Throughput (Mbps)

0 5 10 15 20 25 30

Time (s)

Flow 1 ingress (mean 579.32 Mbit/s)  Flow 1 egress (mean 578.26 Mbit/s)

Per-packet one-way delay (ms)

0 5 10 15 20 25 30

Time (s)

Flow 1 (95th percentile 111.92 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-07-05 15:57:50
End at: 2018-07-05 15:58:20
Local clock offset: -0.093 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-07-05 17:52:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 557.80 Mbit/s
95th percentile per-packet one-way delay: 182.762 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 557.80 Mbit/s
95th percentile per-packet one-way delay: 182.762 ms
Loss rate: 1.28%
Run 9: Report of PCC-Allegro — Data Link

![Graph showing throughput and packet delay over time for Flow 1 with ingress (mean 565.05 Mbit/s) and egress (mean 557.80 Mbit/s) metrics.]

![Graph showing per-packet delay over time with 95th percentile at 182.76 ms for Flow 1.]

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Run 10: Statistics of PCC-Allegro

Start at: 2018-07-05 16:19:54
End at: 2018-07-05 16:20:24
Local clock offset: -0.023 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-07-05 17:53:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.96 Mbit/s
95th percentile per-packet one-way delay: 173.471 ms
Loss rate: 1.61%
-- Flow 1:
Average throughput: 574.96 Mbit/s
95th percentile per-packet one-way delay: 173.471 ms
Loss rate: 1.61%
Run 10: Report of PCC-Allegro — Data Link

[Graph showing throughput and packet delay]

- Flow 1 ingress (mean 584.33 Mbit/s)
- Flow 1 egress (mean 574.96 Mbit/s)

[Graph showing packet delay]

- Flow 1 (95th percentile 173.47 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-07-05 13:10:03
End at: 2018-07-05 13:10:33
Local clock offset: -0.221 ms
Remote clock offset: -1.552 ms

# Below is generated by plot.py at 2018-07-05 17:54:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 348.55 Mbit/s
95th percentile per-packet one-way delay: 112.677 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 348.55 Mbit/s
95th percentile per-packet one-way delay: 112.677 ms
Loss rate: 1.03%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 352.23 Mbps)
- Flow 1 egress (mean 348.55 Mbps)

- Flow 1 (95th percentile 132.68 ms)
Run 2: Statistics of PCC-Expr

End at: 2018-07-05 13:31:57
Local clock offset: -0.061 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2018-07-05 17:56:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 348.18 Mbit/s
95th percentile per-packet one-way delay: 209.528 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 348.18 Mbit/s
95th percentile per-packet one-way delay: 209.528 ms
Loss rate: 0.71%
Run 2: Report of PCC-Expr — Data Link

![Graph of throughput over time](image1)

- **Flow 1 ingress (mean 350.66 Mbit/s)**
- **Flow 1 egress (mean 348.18 Mbit/s)**

![Graph of per-packet delay over time](image2)

- **Flow 1 (95th percentile 209.53 ms)**
Run 3: Statistics of PCC-Expr

End at: 2018-07-05 13:53:58
Local clock offset: 0.065 ms
Remote clock offset: 0.117 ms

# Below is generated by plot.py at 2018-07-05 17:56:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 118.15 Mbit/s
95th percentile per-packet one-way delay: 53.559 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 118.15 Mbit/s
95th percentile per-packet one-way delay: 53.559 ms
Loss rate: 0.00%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-07-05 14:15:24  
End at: 2018-07-05 14:15:54  
Local clock offset: 0.092 ms  
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2018-07-05 17:56:28  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 145.37 Mbit/s  
95th percentile per-packet one-way delay: 53.221 ms  
Loss rate: 0.00%  
-- Flow 1:  
Average throughput: 145.37 Mbit/s  
95th percentile per-packet one-way delay: 53.221 ms  
Loss rate: 0.00%
Run 4: Report of PCC-Expr — Data Link

![Graph of throughput vs time for Flow 1 ingress and egress](image)

*Flow 1 ingress (mean 145.36 Mbit/s) — Flow 1 egress (mean 145.37 Mbit/s)*

![Graph of one-way delay vs time for Flow 1](image)

*Flow 1 (99th percentile 53.22 ms)*
Run 5: Statistics of PCC-Expr

Start at: 2018-07-05 14:37:20
End at: 2018-07-05 14:37:50
Local clock offset: 0.026 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-07-05 17:56:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.06 Mbit/s
95th percentile per-packet one-way delay: 53.660 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 214.06 Mbit/s
95th percentile per-packet one-way delay: 53.660 ms
Loss rate: 0.00%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Start at: 2018-07-05 14:59:05
End at: 2018-07-05 14:59:35
Local clock offset: ~0.11 ms
Remote clock offset: 1.276 ms

# Below is generated by plot.py at 2018-07-05 17:57:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.43 Mbit/s
95th percentile per-packet one-way delay: 54.966 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 181.43 Mbit/s
95th percentile per-packet one-way delay: 54.966 ms
Loss rate: 0.00%
Run 6: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 181.43 Mbit/s)
- Flow 1 egress (mean 181.43 Mbit/s)

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

- Flow 1 (95th percentile 54.97 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-07-05 15:20:52
End at: 2018-07-05 15:21:22
Local clock offset: -0.098 ms
Remote clock offset: -0.073 ms

# Below is generated by plot.py at 2018-07-05 18:04:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 331.86 Mbit/s
95th percentile per-packet one-way delay: 53.719 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 331.86 Mbit/s
95th percentile per-packet one-way delay: 53.719 ms
Loss rate: 0.00%
Run 7: Report of PCC-Expr — Data Link

[Graphs showing throughput and packet delay over time]
Run 8: Statistics of PCC-Expr

Start at: 2018-07-05 15:42:40
End at: 2018-07-05 15:43:10
Local clock offset: 0.059 ms
Remote clock offset: 1.154 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 350.12 Mbit/s
95th percentile per-packet one-way delay: 162.917 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 350.12 Mbit/s
95th percentile per-packet one-way delay: 162.917 ms
Loss rate: 0.88%
Run 8: Report of PCC-Expr — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)

Flow 1 ingress (mean 353.21 Mbit/s)  Flow 1 egress (mean 350.12 Mbit/s)

Flow 1 (95th percentile 162.92 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-07-05 16:04:57
End at: 2018-07-05 16:05:27
Local clock offset: 0.178 ms
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 119.64 Mbit/s
95th percentile per-packet one-way delay: 53.029 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 119.64 Mbit/s
95th percentile per-packet one-way delay: 53.029 ms
Loss rate: 0.01%
Run 9: Report of PCC-Expr — Data Link

![Graph of throughput and packet delay over time for Flow 1]
Run 10: Statistics of PCC-Expr

Start at: 2018-07-05 16:26:58
End at: 2018-07-05 16:27:28
Local clock offset: -0.059 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.64 Mbit/s
95th percentile per-packet one-way delay: 53.272 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.64 Mbit/s
95th percentile per-packet one-way delay: 53.272 ms
Loss rate: 0.00%
Run 1: Statistics of QUIC Cubic

Start at: 2018-07-05 13:01:16
End at: 2018-07-05 13:01:46
Local clock offset: 0.133 ms
Remote clock offset: -1.418 ms
Run 1: Report of QUIC Cubic — Data Link

Graph 1: Throughput vs. Time

Graph 2: Packet one-way delay vs. Time

Flow 1 (95th percentile 52.53 ms)
Run 2: Statistics of QUIC Cubic

Local clock offset: -0.151 ms
Remote clock offset: 1.197 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 54.615 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 61.07 Mbit/s
95th percentile per-packet one-way delay: 54.615 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-07-05 13:44:09
End at: 2018-07-05 13:44:39
Local clock offset: 0.027 ms
Remote clock offset: -0.194 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 78.67 Mbit/s
95th percentile per-packet one-way delay: 50.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.67 Mbit/s
95th percentile per-packet one-way delay: 50.229 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-07-05 14:05:57
End at: 2018-07-05 14:06:27
Local clock offset: -0.158 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.16 Mbit/s
95th percentile per-packet one-way delay: 56.218 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.16 Mbit/s
95th percentile per-packet one-way delay: 56.218 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 67.14 Mbps)**
- **Flow 1 egress (mean 67.16 Mbps)**

**Graph 2:** Packet inter-arrival delay (ms) vs. Time (s)

- **Flow 1 (99th percentile 36.22 ms)**
Run 5: Statistics of QUIC Cubic

Start at: 2018-07-05 14:27:56
End at: 2018-07-05 14:28:26
Local clock offset: -0.063 ms
Remote clock offset: 0.291 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 70.73 Mbit/s
95th percentile per-packet one-way delay: 53.895 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.73 Mbit/s
95th percentile per-packet one-way delay: 53.895 ms
Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delay over time for flow 1.]

- Flow 1 ingress (mean 70.72 Mbit/s)
- Flow 1 egress (mean 70.73 Mbit/s)

- Flow 1 (95th percentile 53.90 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-07-05 14:49:44
End at: 2018-07-05 14:50:14
Local clock offset: -0.085 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 63.69 Mbit/s
95th percentile per-packet one-way delay: 53.749 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 63.69 Mbit/s
95th percentile per-packet one-way delay: 53.749 ms
Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-07-05 15:11:24
End at: 2018-07-05 15:11:54
Local clock offset: -0.028 ms
Remote clock offset: -0.046 ms
Run 7: Report of QUIC Cubic — Data Link

![Data Link Diagram]

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)

![Packet Delay Diagram]

- Flow 1 (95th percentile 53.36 ms)
Run 8: Statistics of QUIC Cubic

Start at: 2018-07-05 15:33:31
End at: 2018-07-05 15:34:01
Local clock offset: −0.056 ms
Remote clock offset: 1.373 ms
Run 8: Report of QUIC Cubic — Data Link

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

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

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

- Flow 1 (95th percentile 56.11 ms)
Run 9: Statistics of QUIC Cubic

End at: 2018-07-05 15:56:04
Local clock offset: -0.144 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.91 Mbit/s
95th percentile per-packet one-way delay: 53.679 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 64.91 Mbit/s
95th percentile per-packet one-way delay: 53.679 ms
Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-07-05 16:17:37
End at: 2018-07-05 16:18:07
Local clock offset: -0.043 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 66.28 Mbit/s
95th percentile per-packet one-way delay: 50.103 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.28 Mbit/s
95th percentile per-packet one-way delay: 50.103 ms
Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-07-05 12:50:02
End at: 2018-07-05 12:50:32
Local clock offset: -0.04 ms
Remote clock offset: 0.093 ms

# Below is generated by plot.py at 2018-07-05 18:04:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.447 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.447 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile 53.45 ms)
Run 2: Statistics of SCReAM

Start at: 2018-07-05 13:11:33
End at: 2018-07-05 13:12:03
Local clock offset: 0.066 ms
Remote clock offset: 1.34 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.127 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 52.127 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-07-05 13:33:05
End at: 2018-07-05 13:33:35
Local clock offset: 0.071 ms
Remote clock offset: -1.214 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.683 ms
Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Graph showing time vs throughput and time vs packet one-way delay]
Run 4: Statistics of SCReAM

Start at: 2018-07-05 13:54:44
Local clock offset: -0.041 ms
Remote clock offset: 1.161 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.968 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.968 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

![Graph showing throughput and packet delay over time for Flow 1 ingress and egress.]
Run 5: Statistics of SCReAM

Start at: 2018-07-05 14:16:42
End at: 2018-07-05 14:17:12
Local clock offset: 0.063 ms
Remote clock offset: -0.195 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.565 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.565 ms
Loss rate: 0.13%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-07-05 14:38:39
End at: 2018-07-05 14:39:09
Local clock offset: 0.099 ms
Remote clock offset: 0.017 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.065 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.065 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Throughput Graph]

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

![Round Trip Time Graph]

- **Flow 1 (95th percentile 53.06 ms)**
Run 7: Statistics of SCRеAM

Start at: 2018-07-05 15:00:25
End at: 2018-07-05 15:00:55
Local clock offset: -0.271 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.099 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 54.099 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress (mean 0.21 Mbps)**
- **Flow 1 egress (mean 0.21 Mbps)**

---

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

- **Flow 1 (95th percentile 54.10 ms)**

---

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Run 8: Statistics of SCReAM

Local clock offset: -0.119 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
**-- Total of 1 flow:**
Average throughput: **0.22 Mbit/s**
95th percentile per-packet one-way delay: **53.551 ms**
Loss rate: **0.00%**

**-- Flow 1:**
Average throughput: **0.22 Mbit/s**
95th percentile per-packet one-way delay: **53.551 ms**
Loss rate: **0.00%**
Run 8: Report of SCReAM — Data Link

![Graph showing network traffic over time]

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

![Graph showing network delay over time]

- Flow 1 (95th percentile 53.55 ms)
Run 9: Statistics of SCReAM

Start at: 2018-07-05 15:44:18
End at: 2018-07-05 15:44:48
Local clock offset: 0.067 ms
Remote clock offset: -0.194 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.600 ms
Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-07-05 16:06:12
End at: 2018-07-05 16:06:42
Local clock offset: -0.016 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.332 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.332 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

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

**Throughput (Mbps)**

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

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

**Packet Delay (ms)**

- **Flow 1 (95th percentile 50.33 ms)**
Run 1: Statistics of Sprout

Start at: 2018-07-05 12:58:54
End at: 2018-07-05 12:59:24
Local clock offset: -0.285 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 51.803 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.59 Mbit/s
95th percentile per-packet one-way delay: 51.803 ms
Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

![Graph of throughput and packet delay over time. The throughput graph shows fluctuating values between 0 and 10 Mbps, with two distinct lines indicating ingress and egress flows. The packet delay graph displays a scatter of points indicating delay variations between 50 and 35 ms.]

- Flow 1 ingress (mean 7.59 Mbit/s)
- Flow 1 egress (mean 7.59 Mbit/s)
- Flow 1 (95th percentile 51.80 ms)
Run 2: Statistics of Sprout

Start at: 2018-07-05 13:20:09
End at: 2018-07-05 13:20:39
Local clock offset: 0.102 ms
Remote clock offset: 1.058 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 54.689 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 54.689 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean 6.92 Mbit/s.](image-url)
Run 3: Statistics of Sprout

Start at: 2018-07-05 13:41:42
End at: 2018-07-05 13:42:12
Local clock offset: 0.028 ms
Remote clock offset: 0.214 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 51.549 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 51.549 ms
Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 6.99 Mbit/s)
Flow 1 egress (mean 6.99 Mbit/s)

Round-trip one-way delay (ms)

Time (s)

Flow 1 (99th percentile 51.35 ms)
Run 4: Statistics of Sprout

Start at: 2018-07-05 14:03:31
End at: 2018-07-05 14:04:01
Local clock offset: -0.139 ms
Remote clock offset: -0.283 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 6.58 Mbit/s
  95th percentile per-packet one-way delay: 51.383 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 6.58 Mbit/s
  95th percentile per-packet one-way delay: 51.383 ms
  Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

![Graphs showing throughput and packet delay over time](image-url)
Run 5: Statistics of Sprout

Start at: 2018-07-05 14:25:30
End at: 2018-07-05 14:26:00
Local clock offset: 0.01 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 51.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.72 Mbit/s
95th percentile per-packet one-way delay: 51.363 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-07-05 14:47:17
End at: 2018-07-05 14:47:47
Local clock offset: -0.27 ms
Remote clock offset: 1.431 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 55.141 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.99 Mbit/s
95th percentile per-packet one-way delay: 55.141 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-07-05 15:08:59
End at: 2018-07-05 15:09:29
Local clock offset: 0.008 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 53.368 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: 53.368 ms
Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

\[
\text{Throughput (Mbps)}
\]

- Flow 1 ingress (mean 6.19 Mbit/s)
- Flow 1 egress (mean 6.19 Mbit/s)

\[
\text{Per-packet one-way delay (ms)}
\]

- Flow 1 (95th percentile 53.37 ms)
Run 8: Statistics of Sprout

Start at: 2018-07-05 15:31:07
End at: 2018-07-05 15:31:37
Local clock offset: 0.117 ms
Remote clock offset: -1.307 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 49.726 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.28 Mbit/s
95th percentile per-packet one-way delay: 49.726 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

![Graphs showing throughput and packet delay over time for a network flow.]

- Throughput (Mbps)
- Packet delay (ms)

Legend:
- Flow 1 ingress (mean 7.28 Mbps)
- Flow 1 egress (mean 7.28 Mbps)

Flow 1 (95th percentile 49.73 ms)
Run 9: Statistics of Sprout

Start at: 2018-07-05 15:53:08
End at: 2018-07-05 15:53:38
Local clock offset: -0.028 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 51.363 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 51.363 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

![Graph showing throughput and packet one-way delay over time for Flow 1](image)

- Flow 1 ingress (mean 7.69 Mbit/s)
- Flow 1 egress (mean 7.69 Mbit/s)
Run 10: Statistics of Sprout

Start at: 2018-07-05 16:15:12
End at: 2018-07-05 16:15:42
Local clock offset: -0.022 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 51.065 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: 51.065 ms
Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Time (s)
  - Flow 1 ingress (mean 5.51 Mbps)
  - Flow 1 egress (mean 5.51 Mbps)

**Graph 2:**
- **Packet Delay (ms):**
  - Time (s)
  - Flow 1 (95th percentile 51.06 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-07-05 13:02:22
End at: 2018-07-05 13:02:52
Local clock offset: -0.016 ms
Remote clock offset: 1.251 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 15.34 Mbit/s
95th percentile per-packet one-way delay: 55.087 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 15.34 Mbit/s
95th percentile per-packet one-way delay: 55.087 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Local clock offset: -0.014 ms
Remote clock offset: -0.309 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 14.15 Mbit/s
  95th percentile per-packet one-way delay: 52.925 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 14.15 Mbit/s
  95th percentile per-packet one-way delay: 52.925 ms
  Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link

![Graph showing throughput and packet delay over time]

- **Throughput**:
  - Flow 1 ingress (mean 14.15 Mbit/s)
  - Flow 1 egress (mean 14.15 Mbit/s)

- **Packet Delay**:
  - Flow 1 (95th percentile 52.92 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-07-05 13:45:18
End at: 2018-07-05 13:45:48
Local clock offset: -0.158 ms
Remote clock offset: 0.169 ms
Run 3: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 112.47 Mbit/s)
- Flow 1 egress (mean 112.48 Mbit/s)

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

- Flow 1 (95th percentile 54.19 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-07-05 14:07:07
End at: 2018-07-05 14:07:37
Local clock offset: -0.032 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics

-- Total of 1 flow:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 50.338 ms
Loss rate: 0.00%

-- Flow 1:
Average throughput: 14.28 Mbit/s
95th percentile per-packet one-way delay: 50.338 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbps)

0.0  2.5  5.0  7.5 10.0 12.5 15.0 17.5
0 5 10 15 20 25 30
Time (s)

Flow 1 ingress (mean 14.28 Mbps)  Flow 1 egress (mean 14.28 Mbps)

Per packet one way delay (ms)

50.0 50.5 51.0 51.5 52.0 52.5 53.0 53.5
0 5 10 15 20 25 30
Time (s)

Flow 1 (95th percentile 50.34 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-07-05 14:29:06
End at: 2018-07-05 14:29:36
Local clock offset: -0.051 ms
Remote clock offset: 1.227 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 32.83 Mbit/s
  95th percentile per-packet one-way delay: 54.787 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 32.83 Mbit/s
  95th percentile per-packet one-way delay: 54.787 ms
  Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

[Graph showing throughput and packet delay over time for Flow 1 ingress and egress, with mean 32.83 Mbit/s and 95th percentile 54.79 ms].
Run 6: Statistics of TaoVA-100x

Start at: 2018-07-05 14:50:53
End at: 2018-07-05 14:51:23
Local clock offset: -0.044 ms
Remote clock offset: -0.062 ms
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-07-05 15:12:30
End at: 2018-07-05 15:13:00
Local clock offset: 0.024 ms
Remote clock offset: 1.27 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 54.369 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.71 Mbit/s
95th percentile per-packet one-way delay: 54.369 ms
Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-07-05 15:34:37
End at: 2018-07-05 15:35:07
Local clock offset: 0.043 ms
Remote clock offset: -0.221 ms
Run 8: Report of TaoVA-100x — Data Link

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

Flow 1 ingress (mean 112.37 Mbps) vs. Flow 1 egress (mean 112.37 Mbps)

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

Flow 1 (95th percentile 53.48 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-07-05 15:56:43
End at: 2018-07-05 15:57:13
Local clock offset: -0.247 ms
Remote clock offset: -0.945 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 52.905 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 14.80 Mbit/s
95th percentile per-packet one-way delay: 52.905 ms
Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-07-05 16:18:46
End at: 2018-07-05 16:19:17
Local clock offset: -0.075 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 53.344 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 24.04 Mbit/s
95th percentile per-packet one-way delay: 53.344 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

[Graphs showing throughput and delay over time]
Run 1: Statistics of TCP Vegas

Start at: 2018-07-05 12:56:24
End at: 2018-07-05 12:56:54
Local clock offset: 0.007 ms
Remote clock offset: 0.222 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.69 Mbit/s
95th percentile per-packet one-way delay: 51.566 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 169.69 Mbit/s
95th percentile per-packet one-way delay: 51.566 ms
Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link

[Graph showing throughput and delay over time for TCP Vegas data link]
Run 2: Statistics of TCP Vegas

Start at: 2018-07-05 13:17:44
End at: 2018-07-05 13:18:14
Local clock offset: 0.248 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 51.509 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.03 Mbit/s
95th percentile per-packet one-way delay: 51.509 ms
Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Local clock offset: 0.195 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 120.95 Mbit/s
95th percentile per-packet one-way delay: 52.464 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 120.95 Mbit/s
95th percentile per-packet one-way delay: 52.464 ms
Loss rate: 0.00%
Run 3: Report of TCP Vegas — Data Link

![Graph showing network throughput over time]

- Flow 1 ingress (mean 120.96 Mbit/s)
- Flow 1 egress (mean 120.95 Mbit/s)

![Graph showing packet loss over time]

- Flow 1 (95th percentile 52.46 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-07-05 14:01:05
End at: 2018-07-05 14:01:35
Local clock offset: -0.111 ms
Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 51.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 91.17 Mbit/s
95th percentile per-packet one-way delay: 51.958 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-07-05 14:23:04
End at: 2018-07-05 14:23:34
Local clock offset: -0.2 ms
Remote clock offset: 0.154 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: 52.130 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: 52.130 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link

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

![Graph 2: Per-Packet One-Way Delay vs Time](image2)
Run 6: Statistics of TCP Vegas

Start at: 2018-07-05 14:44:50
End at: 2018-07-05 14:45:20
Local clock offset: -0.182 ms
Remote clock offset: 0.077 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 81.84 Mbit/s
95th percentile per-packet one-way delay: 51.596 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 81.84 Mbit/s
95th percentile per-packet one-way delay: 51.596 ms
Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-07-05 15:06:33
End at: 2018-07-05 15:07:03
Local clock offset: -0.051 ms
Remote clock offset: -0.159 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.70 Mbit/s
95th percentile per-packet one-way delay: 51.535 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 74.70 Mbit/s
95th percentile per-packet one-way delay: 51.535 ms
Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-07-05 15:28:40
End at: 2018-07-05 15:29:10
Local clock offset: -0.069 ms
Remote clock offset: -0.509 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 51.260 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 85.36 Mbit/s
95th percentile per-packet one-way delay: 51.260 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-07-05 15:50:42
End at: 2018-07-05 15:51:12
Local clock offset: -0.037 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 89.45 Mbit/s
  95th percentile per-packet one-way delay: 51.683 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 89.45 Mbit/s
  95th percentile per-packet one-way delay: 51.683 ms
  Loss rate: 0.00%
Run 9: Report of TCP Vegas — Data Link

![Graph of Throughput vs Time]

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

Flow 1 ingress (mean 89.45 Mbit/s)
Flow 1 egress (mean 89.45 Mbit/s)
Flow 1 (95th percentile 51.68 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-07-05 16:12:44
End at: 2018-07-05 16:13:14
Local clock offset: 0.205 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-07-05 18:04:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 52.197 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 126.88 Mbit/s
95th percentile per-packet one-way delay: 52.197 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-07-05 12:53:37
End at: 2018-07-05 12:54:07
Local clock offset: -0.209 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-07-05 18:06:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 78.321 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 78.321 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

![Graph showing data link throughput and packet delay over time.]
Run 2: Statistics of Verus

Start at: 2018-07-05 13:14:56
End at: 2018-07-05 13:15:26
Local clock offset: 0.049 ms
Remote clock offset: 1.009 ms

# Below is generated by plot.py at 2018-07-05 18:07:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 261.74 Mbit/s
95th percentile per-packet one-way delay: 178.282 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 261.74 Mbit/s
95th percentile per-packet one-way delay: 178.282 ms
Loss rate: 0.15%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2018-07-05 13:36:32
End at: 2018-07-05 13:37:02
Local clock offset: -0.023 ms
Remote clock offset: 1.244 ms

# Below is generated by plot.py at 2018-07-05 18:07:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 190.23 Mbit/s
95th percentile per-packet one-way delay: 61.784 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 190.23 Mbit/s
95th percentile per-packet one-way delay: 61.784 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-07-05 13:58:14
End at: 2018-07-05 13:58:44
Local clock offset: -0.003 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-07-05 18:08:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 307.45 Mbit/s
  95th percentile per-packet one-way delay: 173.897 ms
  Loss rate: 0.31%
-- Flow 1:
  Average throughput: 307.45 Mbit/s
  95th percentile per-packet one-way delay: 173.897 ms
  Loss rate: 0.31%
Run 4: Report of Verus — Data Link

[Graphs showing throughput and packet delay over time]
Run 5: Statistics of Verus

Start at: 2018-07-05 14:20:19
End at: 2018-07-05 14:20:49
Local clock offset: -0.013 ms
Remote clock offset: 0.962 ms

# Below is generated by plot.py at 2018-07-05 18:08:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.04 Mbit/s
95th percentile per-packet one-way delay: 69.601 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 227.04 Mbit/s
95th percentile per-packet one-way delay: 69.601 ms
Loss rate: 0.01%
Run 5: Report of Verus — Data Link

---

**Graph 1:**

- Y-axis: Throughput (Mbps)
- X-axis: Time (s)
- Legend:
  - Flow 1 ingress (mean 227.06 Mbit/s)
  - Flow 1 egress (mean 227.04 Mbit/s)

**Graph 2:**

- Y-axis: End-to-end delay (ms)
- X-axis: Time (s)
- Legend:
  - Flow 1 (95th percentile 69.60 ms)
Run 6: Statistics of Verus

Start at: 2018-07-05 14:42:02
End at: 2018-07-05 14:42:32
Local clock offset: -0.087 ms
Remote clock offset: 1.501 ms

# Below is generated by plot.py at 2018-07-05 18:08:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 246.28 Mbit/s
95th percentile per-packet one-way delay: 91.491 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 246.28 Mbit/s
95th percentile per-packet one-way delay: 91.491 ms
Loss rate: 0.00%
Run 6: Report of Verus — Data Link

![Graph showing throughput over time with two lines indicating flow ingress and egress](image1)

![Graph showing packet one-way delay with a single line indicating flow ingress](image2)
Run 7: Statistics of Verus

Start at: 2018-07-05 15:03:48
End at: 2018-07-05 15:04:18
Local clock offset: -0.143 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2018-07-05 18:08:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 217.99 Mbit/s
  95th percentile per-packet one-way delay: 69.379 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 217.99 Mbit/s
  95th percentile per-packet one-way delay: 69.379 ms
  Loss rate: 0.05%
Run 7: Report of Verus — Data Link

![Graph of throughput and packet delay over time]
Run 8: Statistics of Verus

Start at: 2018-07-05 15:25:54
End at: 2018-07-05 15:26:24
Local clock offset: -0.216 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2018-07-05 18:09:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.85 Mbit/s
95th percentile per-packet one-way delay: 91.807 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 247.85 Mbit/s
95th percentile per-packet one-way delay: 91.807 ms
Loss rate: 0.00%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 248.21 Mbit/s)
- Flow 1 egress (mean 247.85 Mbit/s)

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

- Flow 1 (95th percentile 91.81 ms)
Run 9: Statistics of Verus

Start at: 2018-07-05 15:47:52
End at: 2018-07-05 15:48:22
Local clock offset: -0.106 ms
Remote clock offset: -1.325 ms

# Below is generated by plot.py at 2018-07-05 18:10:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.46 Mbit/s
95th percentile per-packet one-way delay: 74.240 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 225.46 Mbit/s
95th percentile per-packet one-way delay: 74.240 ms
Loss rate: 0.00%
Run 9: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 225.46 Mbit/s)**
- **Flow 1 egress (mean 225.46 Mbit/s)**

![Graph 2: Packet delay (ms) over time (s)](image)

- **Flow 1 (95th percentile 74.24 ms)**

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Run 10: Statistics of Verus

Start at: 2018-07-05 16:09:52
End at: 2018-07-05 16:10:22
Local clock offset: 0.005 ms
Remote clock offset: -1.049 ms

# Below is generated by plot.py at 2018-07-05 18:11:28
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 275.31 Mbit/s
  95th percentile per-packet one-way delay: 170.147 ms
  Loss rate: 0.18%
-- Flow 1:
  Average throughput: 275.31 Mbit/s
  95th percentile per-packet one-way delay: 170.147 ms
  Loss rate: 0.18%
Run 10: Report of Verus — Data Link

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

- **Throughput (Mbps)**
  - X-axis: Time (s)
  - Y-axis: Throughput (Mbps)
  - Legend: Flow 1 ingress (mean 276.14 Mbit/s), Flow 1 egress (mean 275.31 Mbit/s)

- **Packet delay (ms)**
  - X-axis: Time (s)
  - Y-axis: Packet delay (ms)
  - Legend: Flow 1 (95th percentile 170.15 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-07-05 12:54:57
Local clock offset: -0.175 ms
Remote clock offset: -0.35 ms

# Below is generated by plot.py at 2018-07-05 18:13:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 313.41 Mbit/s
95th percentile per-packet one-way delay: 53.645 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 313.41 Mbit/s
95th percentile per-packet one-way delay: 53.645 ms
Loss rate: 0.01%
Run 1: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time for PCC-Vivace Data Link.](image-url)
Run 2: Statistics of PCC-Vivace

Start at: 2018-07-05 13:16:18
End at: 2018-07-05 13:16:48
Local clock offset: 0.116 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-07-05 18:13:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 289.43 Mbit/s
95th percentile per-packet one-way delay: 53.664 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 289.43 Mbit/s
95th percentile per-packet one-way delay: 53.664 ms
Loss rate: 0.00%
Run 3: Statistics of PCC-Vivace

Start at: 2018-07-05 13:37:50
End at: 2018-07-05 13:38:20
Local clock offset: -0.076 ms
Remote clock offset: 1.227 ms

# Below is generated by plot.py at 2018-07-05 18:13:28
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 285.20 Mbit/s
  95th percentile per-packet one-way delay: 54.912 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 285.20 Mbit/s
  95th percentile per-packet one-way delay: 54.912 ms
  Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link

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

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

Flow 1 ingress (mean 285.20 Mbit/s)  Flow 1 egress (mean 285.20 Mbit/s)
Run 4: Statistics of PCC-Vivace

Start at: 2018-07-05 13:59:40
End at: 2018-07-05 14:00:10
Local clock offset: -0.185 ms
Remote clock offset: -0.206 ms

# Below is generated by plot.py at 2018-07-05 18:13:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 276.05 Mbit/s
95th percentile per-packet one-way delay: 50.263 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 276.05 Mbit/s
95th percentile per-packet one-way delay: 50.263 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-07-05 14:21:41
End at: 2018-07-05 14:22:11
Local clock offset: -0.121 ms
Remote clock offset: -1.476 ms

# Below is generated by plot.py at 2018-07-05 18:13:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 266.22 Mbit/s
95th percentile per-packet one-way delay: 52.276 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 266.22 Mbit/s
95th percentile per-packet one-way delay: 52.276 ms
Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 266.21 Mbit/s)
- **Flow 1 egress** (mean 266.22 Mbit/s)

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

- **Flow 1** (95th percentile 52.28 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-07-05 14:43:24
End at: 2018-07-05 14:43:54
Local clock offset: -0.247 ms
Remote clock offset: 1.471 ms

# Below is generated by plot.py at 2018-07-05 18:14:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.92 Mbit/s
95th percentile per-packet one-way delay: 55.077 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 300.92 Mbit/s
95th percentile per-packet one-way delay: 55.077 ms
Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress with mean values of 300.89 MBps and 300.92 MBps respectively.](image)

![Graph showing packet delay over time for Flow 1 with 95th percentile of 55.08 ms.](image)
Run 7: Statistics of PCC-Vivace

Start at: 2018-07-05 15:05:08
End at: 2018-07-05 15:05:38
Local clock offset: -0.018 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-07-05 18:14:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 280.74 Mbit/s
95th percentile per-packet one-way delay: 50.561 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 280.74 Mbit/s
95th percentile per-packet one-way delay: 50.561 ms
Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

- Throughput (Mbps)
- Time (s)
- Flow 1 ingress (mean 280.74 Mbps) - Flow 1 egress (mean 280.74 Mbps)

- Per packet one way delay (ms)
- Time (s)
- Flow 1 (95th percentile 50.56 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-07-05 15:27:15
End at: 2018-07-05 15:27:45
Local clock offset: -0.097 ms
Remote clock offset: -0.23 ms

# Below is generated by plot.py at 2018-07-05 18:14:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 281.93 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 281.93 Mbit/s
95th percentile per-packet one-way delay: 53.578 ms
Loss rate: 0.00\%
Run 9: Statistics of PCC-Vivace

Start at: 2018-07-05 15:49:12
End at: 2018-07-05 15:49:42
Local clock offset: 0.068 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-07-05 18:15:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 364.09 Mbit/s
95th percentile per-packet one-way delay: 53.612 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 364.09 Mbit/s
95th percentile per-packet one-way delay: 53.612 ms
Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link

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

![Graph 2: Packet Loss vs. Time](image2)
Run 10: Statistics of PCC-Vivace

Start at: 2018-07-05 16:11:14
End at: 2018-07-05 16:11:45
Local clock offset: -0.062 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-07-05 18:15:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 371.36 Mbit/s
95th percentile per-packet one-way delay: 53.261 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 371.36 Mbit/s
95th percentile per-packet one-way delay: 53.261 ms
Loss rate: 0.01%
Run 1: Statistics of WebRTC media

Start at: 2018-07-05 13:04:52
End at: 2018-07-05 13:05:22
Local clock offset: 0.103 ms
Remote clock offset: -0.193 ms

# Below is generated by plot.py at 2018-07-05 18:15:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 53.646 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.18 Mbit/s
95th percentile per-packet one-way delay: 53.646 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.18 Mbit/s)
- Flow 1 egress (mean 2.18 Mbit/s)

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

- Flow 1 (90th percentile 53.65 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-07-05 13:26:15
End at: 2018-07-05 13:26:45
Local clock offset: 0.113 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-07-05 18:15:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.753 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-07-05 13:47:51
Local clock offset: -0.025 ms
Remote clock offset: -1.442 ms

# Below is generated by plot.py at 2018-07-05 18:15:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 52.370 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.92 Mbit/s
95th percentile per-packet one-way delay: 52.370 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

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

- **Flow 1 ingress** (mean 1.92 Mbit/s)
- **Flow 1 egress** (mean 1.92 Mbit/s)

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

- **Flow 1** (95th percentile 52.37 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-07-05 14:09:40
End at: 2018-07-05 14:10:10
Local clock offset: -0.236 ms
Remote clock offset: 0.298 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 54.391 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 2.16 Mbit/s
95th percentile per-packet one-way delay: 54.391 ms
Loss rate: 0.01%
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.15 Mbit/s)
- Flow 1 egress (mean 2.16 Mbit/s)

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

- Flow 1 (95th percentile 54.39 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-07-05 14:31:41
End at: 2018-07-05 14:32:11
Local clock offset:  -0.267 ms
Remote clock offset:  0.059 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 54.035 ms
Loss rate:  0.00%

-- Flow 1:
Average throughput: 1.97 Mbit/s
95th percentile per-packet one-way delay: 54.035 ms
Loss rate:  0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-07-05 14:53:27
End at: 2018-07-05 14:53:57
Local clock offset: 0.0 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.863 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.863 ms
Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.95 Mbit/s)
- Flow 1 egress (mean 1.95 Mbit/s)

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

- Flow 1 (95th percentile 53.86 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-07-05 15:15:11
End at: 2018-07-05 15:15:41
Local clock offset: -0.244 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.958 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.95 Mbit/s
95th percentile per-packet one-way delay: 53.958 ms
Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.95 Mbit/s)
- Flow 1 egress (mean 1.95 Mbit/s)

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

- Flow 1 (95th percentile 53.96 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-07-05 15:37:10
End at: 2018-07-05 15:37:40
Local clock offset: -0.212 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 54.191 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.94 Mbit/s
95th percentile per-packet one-way delay: 54.191 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

![Throughput Graph]

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

![Packet Delay Graph]

- Flow 1 (95th percentile 54.19 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-07-05 15:59:15
End at: 2018-07-05 15:59:45
Local clock offset: -0.114 ms
Remote clock offset: 1.206 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.96 Mbit/s
95th percentile per-packet one-way delay: 54.692 ms
Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-07-05 16:21:20
End at: 2018-07-05 16:21:50
Local clock offset: 0.009 ms
Remote clock offset: 1.325 ms

# Below is generated by plot.py at 2018-07-05 18:15:36
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.92 Mbit/s
  95th percentile per-packet one-way delay: 55.017 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.92 Mbit/s
  95th percentile per-packet one-way delay: 55.017 ms
  Loss rate: 0.00%