Pantheon Report

Generated at 2018-09-11 10:29:01 (UTC).
Data path: GCE London on ens4 (remote) -> GCE Sydney on ens4 (local).
Repeated the test of 18 congestion control schemes 5 times.
Each test lasted for 30 seconds running 1 flow.
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1018-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912
net.ipv4.tcp_mem = 190986 254651 381972

Git summary:
branch: muses @ f30bceca2aec2ef14a3cf71e25642f4a30905a03
third_party/fillp @ d47f4fa1b45a45e3c0537115c5a28436db4b834
third_party/fillp-sheep @ daed0c84f98531712514b2231f43ec6901114ffe
third_party/genericCC @ d0f153f8e594a89e93b032143cedbdf5e562f4
third_party/indigo @ 2601c92e4aa9d58d534244dfe0edc6bf90c077e64d
third_party/libutp @ b346b542e2826f2b17e9ab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b9b06ed0c63490e986009b4fa8643c40a
third_party/pantheon-tunnel @ cbf3ce6db5ff5740d7fe1711f813d0e46339e1952
third_party/pcc @ 1afce958fa0d6618b23c091a55fe8c72b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac08f9b2c4ebf974ab
third_party/proto-quic @ 77961f1a8273ca86b42f1b8143edc978f3cfe42
third_party/scream-reproduce @ f09918d1421aa3131bf1ff1964974e1da3adb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b0131d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ 4db447ea74c6c60a26d1149af262952639f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace  @  2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc  @  3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE London to GCE Sydney, 5 runs of 30s each per scheme
(mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>5</td>
<td>476.01</td>
<td>241.02</td>
<td>3.23</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>292.00</td>
<td>181.27</td>
<td>0.98</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>477.39</td>
<td>186.11</td>
<td>1.06</td>
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<tr>
<td>FillP</td>
<td>5</td>
<td>776.77</td>
<td>211.60</td>
<td>5.60</td>
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<td>FillP-Sheep</td>
<td>5</td>
<td>719.70</td>
<td>213.89</td>
<td>6.69</td>
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<tr>
<td>Indigo</td>
<td>5</td>
<td>181.51</td>
<td>136.43</td>
<td>0.91</td>
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<tr>
<td>LEDBAT</td>
<td>5</td>
<td>4.91</td>
<td>137.00</td>
<td>1.69</td>
</tr>
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<td>Indigo-Muses</td>
<td>5</td>
<td>575.65</td>
<td>197.90</td>
<td>1.35</td>
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<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>373.03</td>
<td>220.57</td>
<td>3.02</td>
</tr>
<tr>
<td>PCC-Expr</td>
<td>5</td>
<td>299.81</td>
<td>228.09</td>
<td>3.83</td>
</tr>
<tr>
<td>QUIC Cubic</td>
<td>5</td>
<td>51.45</td>
<td>135.55</td>
<td>1.23</td>
</tr>
<tr>
<td>SCRReAM</td>
<td>5</td>
<td>0.22</td>
<td>135.78</td>
<td>0.84</td>
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<tr>
<td>Sprout</td>
<td>5</td>
<td>0.47</td>
<td>136.13</td>
<td>0.64</td>
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<tr>
<td>TaoVA-100x</td>
<td>5</td>
<td>117.98</td>
<td>135.83</td>
<td>0.99</td>
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<tr>
<td>TCP Vegas</td>
<td>5</td>
<td>349.09</td>
<td>155.72</td>
<td>1.08</td>
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<tr>
<td>Verus</td>
<td>5</td>
<td>109.70</td>
<td>244.02</td>
<td>3.29</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>335.23</td>
<td>165.47</td>
<td>1.52</td>
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<tr>
<td>WebRTC media</td>
<td>5</td>
<td>1.76</td>
<td>136.10</td>
<td>1.20</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-09-11 07:12:29
End at: 2018-09-11 07:12:59
Local clock offset: -0.147 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2018-09-11 09:19:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 493.63 Mbit/s
95th percentile per-packet one-way delay: 248.258 ms
Loss rate: 3.52%
-- Flow 1:
Average throughput: 493.63 Mbit/s
95th percentile per-packet one-way delay: 248.258 ms
Loss rate: 3.52%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 507.00 Mbit/s)
- Flow 1 egress (mean 493.63 Mbit/s)

![Graph 2: Round trip time (ms)](image2)

- Flow 1 (95th percentile 248.26 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-09-11 07:39:18
End at: 2018-09-11 07:39:48
Local clock offset: -0.167 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-09-11 09:19:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 480.21 Mbit/s
95th percentile per-packet one-way delay: 225.587 ms
Loss rate: 2.05%
-- Flow 1:
Average throughput: 480.21 Mbit/s
95th percentile per-packet one-way delay: 225.587 ms
Loss rate: 2.05%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-09-11 08:06:17
End at: 2018-09-11 08:06:47
Local clock offset: -0.201 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2018-09-11 09:19:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 454.57 Mbit/s
95th percentile per-packet one-way delay: 230.494 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 454.57 Mbit/s
95th percentile per-packet one-way delay: 230.494 ms
Loss rate: 2.61%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-09-11 08:32:49
End at: 2018-09-11 08:33:19
Local clock offset: -0.111 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2018-09-11 09:19:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 460.64 Mbit/s
95th percentile per-packet one-way delay: 247.747 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 460.64 Mbit/s
95th percentile per-packet one-way delay: 247.747 ms
Loss rate: 4.25%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-09-11 08:59:34
End at: 2018-09-11 09:00:04
Local clock offset: -0.104 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-09-11 09:19:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 491.00 Mbit/s
95th percentile per-packet one-way delay: 253.012 ms
Loss rate: 3.74%
-- Flow 1:
Average throughput: 491.00 Mbit/s
95th percentile per-packet one-way delay: 253.012 ms
Loss rate: 3.74%
Run 1: Statistics of Copa

Start at: 2018-09-11 07:04:00
End at: 2018-09-11 07:04:30
Local clock offset: -0.045 ms
Remote clock offset: -0.148 ms

# Below is generated by plot.py at 2018-09-11 09:20:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 305.85 Mbit/s
95th percentile per-packet one-way delay: 143.413 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 305.85 Mbit/s
95th percentile per-packet one-way delay: 143.413 ms
Loss rate: 1.06%
Run 1: Report of Copa — Data Link

![Graph showing data link throughput over time]

- Flow 1 ingress (mean 306.33 Mbit/s)
- Flow 1 egress (mean 305.85 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 143.41 ms)
Run 2: Statistics of Copa

Start at: 2018-09-11 07:31:06
End at: 2018-09-11 07:31:36
Local clock offset: 0.01 ms
Remote clock offset: 0.297 ms

# Below is generated by plot.py at 2018-09-11 09:20:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.06 Mbit/s
95th percentile per-packet one-way delay: 145.967 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 279.06 Mbit/s
95th percentile per-packet one-way delay: 145.967 ms
Loss rate: 0.50%
Run 2: Report of Copa — Data Link
Run 3: Statistics of Copa

Start at: 2018-09-11 07:57:49
End at: 2018-09-11 07:58:19
Local clock offset: -0.323 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-09-11 09:21:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 339.17 Mbit/s
95th percentile per-packet one-way delay: 200.908 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 339.17 Mbit/s
95th percentile per-packet one-way delay: 200.908 ms
Loss rate: 1.07%
Run 3: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 339.75 Mbit/s)  Flow 1 egress (mean 339.17 Mbit/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 208.91 ms)
Run 4: Statistics of Copa

Start at: 2018-09-11 08:24:26
End at: 2018-09-11 08:24:56
Local clock offset: -0.293 ms
Remote clock offset: 0.27 ms

# Below is generated by plot.py at 2018-09-11 09:28:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.20 Mbit/s
95th percentile per-packet one-way delay: 158.064 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 294.20 Mbit/s
95th percentile per-packet one-way delay: 158.064 ms
Loss rate: 1.09%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-09-11 08:51:19
End at: 2018-09-11 08:51:49
Local clock offset: -0.22 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-09-11 09:28:56
# Datalink statistics
-- Total of 1 flow:
   Average throughput: 241.74 Mbit/s
   95th percentile per-packet one-way delay: 257.984 ms
   Loss rate: 1.17%
-- Flow 1:
   Average throughput: 241.74 Mbit/s
   95th percentile per-packet one-way delay: 257.984 ms
   Loss rate: 1.17%
Run 5: Report of Copa — Data Link

![Throughput (Mbps)](image1)

![Per packet one way delay (ms)](image2)
Run 1: Statistics of TCP Cubic

Start at: 2018-09-11 07:10:48
End at: 2018-09-11 07:11:18
Local clock offset: 0.141 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-09-11 09:29:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 548.22 Mbit/s
95th percentile per-packet one-way delay: 226.749 ms
Loss rate: 1.21%
-- Flow 1:
Average throughput: 548.22 Mbit/s
95th percentile per-packet one-way delay: 226.749 ms
Loss rate: 1.21%
Run 1: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 549.93 Mbit/s)**
- **Flow 1 egress (mean 548.22 Mbit/s)**

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

- **Flow 1 (95th percentile 226.75 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2018-09-11 07:37:42
End at: 2018-09-11 07:38:12
Local clock offset: -0.019 ms
Remote clock offset: 0.285 ms

# Below is generated by plot.py at 2018-09-11 09:29:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 440.76 Mbit/s
95th percentile per-packet one-way delay: 202.659 ms
Loss rate: 1.25%
-- Flow 1:
Average throughput: 440.76 Mbit/s
95th percentile per-packet one-way delay: 202.659 ms
Loss rate: 1.25%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

Start at: 2018-09-11 08:04:39
End at: 2018-09-11 08:05:09
Local clock offset: -0.307 ms
Remote clock offset: -0.141 ms

# Below is generated by plot.py at 2018-09-11 09:29:13
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 479.40 Mbit/s
  95th percentile per-packet one-way delay: 172.253 ms
  Loss rate: 0.89%
-- Flow 1:
  Average throughput: 479.40 Mbit/s
  95th percentile per-packet one-way delay: 172.253 ms
  Loss rate: 0.89%
Run 3: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress (mean 479.36 Mbit/s)**
- **Flow 1 egress (mean 479.40 Mbit/s)**

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

- **Flow 1 (95th percentile 172.25 ms)**
Run 4: Statistics of TCP Cubic

Start at: 2018-09-11 08:31:13
End at: 2018-09-11 08:31:43
Local clock offset: -0.222 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-09-11 09:29:13
# Datalink statistics
-- Total of 1 flow:
Average throughput: 446.02 Mbit/s
95th percentile per-packet one-way delay: 168.747 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 446.02 Mbit/s
95th percentile per-packet one-way delay: 168.747 ms
Loss rate: 0.96%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2018-09-11 08:57:57
End at: 2018-09-11 08:58:27
Local clock offset: 0.071 ms
Remote clock offset: 0.306 ms

# Below is generated by plot.py at 2018-09-11 09:29:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 472.54 Mbit/s
95th percentile per-packet one-way delay: 160.135 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 472.54 Mbit/s
95th percentile per-packet one-way delay: 160.135 ms
Loss rate: 0.98%
Run 5: Report of TCP Cubic — Data Link

![Graph showing throughput over time](image1)

- Flow 1 ingress (mean 472.93 Mbit/s)
- Flow 1 egress (mean 472.54 Mbit/s)

![Graph showing packet delay over time](image2)

- Flow 1 (95th percentile 160.13 ms)
Run 1: Statistics of FillP

Start at: 2018-09-11 06:51:26
End at: 2018-09-11 06:51:56
Local clock offset: 0.076 ms
Remote clock offset: 0.25 ms

# Below is generated by plot.py at 2018-09-11 09:39:58
# Datalink statistics
-- Total of 1 flow:
Average throughput: 807.79 Mbit/s
95th percentile per-packet one-way delay: 200.944 ms
Loss rate: 3.43%
-- Flow 1:
Average throughput: 807.79 Mbit/s
95th percentile per-packet one-way delay: 200.944 ms
Loss rate: 3.43%
Run 1: Report of FillP — Data Link

![Graph of Data Link Throughput](image1)

![Graph of Data Link Per-Packet one-way delay](image2)

*Flow 1 Ingress (mean 828.91 Mb/s)*, *Flow 1 Egress (mean 807.79 Mb/s)*

*Flow 1 (95th percentile 200.94 ms)*
Run 2: Statistics of FillP

Start at: 2018-09-11 07:18:29
End at: 2018-09-11 07:18:59
Local clock offset: -0.193 ms
Remote clock offset: -0.446 ms

# Below is generated by plot.py at 2018-09-11 09:44:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 724.01 Mbit/s
95th percentile per-packet one-way delay: 212.325 ms
Loss rate: 6.72%
-- Flow 1:
Average throughput: 724.01 Mbit/s
95th percentile per-packet one-way delay: 212.325 ms
Loss rate: 6.72%
Run 2: Report of FillP — Data Link

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**Throughput (Mbps)**

- **Flow 1 Ingress** (mean 769.75 Mbps)
- **Flow 1 Egress** (mean 724.01 Mbps)

**Packet Loss (ms)**

- **Flow 1** (95th percentile 212.32 ms)
Run 3: Statistics of FillP

Start at: 2018-09-11 07:45:18
End at: 2018-09-11 07:45:48
Local clock offset: -0.109 ms
Remote clock offset: -0.104 ms

# Below is generated by plot.py at 2018-09-11 09:44:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 702.56 Mbit/s
95th percentile per-packet one-way delay: 223.318 ms
Loss rate: 8.56%
-- Flow 1:
Average throughput: 702.56 Mbit/s
95th percentile per-packet one-way delay: 223.318 ms
Loss rate: 8.56%
Run 3: Report of FillP — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 761.39 Mbit/s)
- Flow 1 egress (mean 702.56 Mbit/s)

![Round-Trip Time Graph]

- Flow 1 (95th percentile 223.32 ms)
Run 4: Statistics of FillP

Start at: 2018-09-11 08:12:09
End at: 2018-09-11 08:12:39
Local clock offset: -0.266 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2018-09-11 09:47:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 861.81 Mbit/s
95th percentile per-packet one-way delay: 206.226 ms
Loss rate: 3.04%
-- Flow 1:
Average throughput: 861.81 Mbit/s
95th percentile per-packet one-way delay: 206.226 ms
Loss rate: 3.04%
Run 4: Report of FillP — Data Link

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

- **Flow 1 Ingress** (mean 880.78 Mb/s)
- **Flow 1 Egress** (mean 861.81 Mb/s)

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

- **Flow 1** (95th percentile 206.23 ms)
Run 5: Statistics of FillP

Start at: 2018-09-11 08:38:52
End at: 2018-09-11 08:39:22
Local clock offset: -0.565 ms
Remote clock offset: -0.403 ms

# Below is generated by plot.py at 2018-09-11 09:47:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 787.67 Mbit/s
95th percentile per-packet one-way delay: 215.176 ms
Loss rate: 6.24%
-- Flow 1:
Average throughput: 787.67 Mbit/s
95th percentile per-packet one-way delay: 215.176 ms
Loss rate: 6.24%
Run 5: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 832.46 Mbps)**
- **Flow 1 Egress (mean 787.67 Mbps)**

![Graph 2: Per Packet Round-trip Delay (ms) over Time (s)]

- **Flow 1 (95th percentile 215.18 ms)**
Run 1: Statistics of FillP-Sheep

Start at: 2018-09-11 06:48:26
End at: 2018-09-11 06:48:56
Local clock offset: -0.055 ms
Remote clock offset: -0.472 ms

# Below is generated by plot.py at 2018-09-11 09:47:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 719.22 Mbit/s
95th percentile per-packet one-way delay: 209.717 ms
Loss rate: 4.08%
-- Flow 1:
Average throughput: 719.22 Mbit/s
95th percentile per-packet one-way delay: 209.717 ms
Loss rate: 4.08%
Run 1: Report of FillP-Sheep — Data Link

![Throughput](image1)

- **Flow 1 ingress (mean 743.03 Mbit/s)**
- **Flow 1 egress (mean 719.22 Mbit/s)**

![Per packet one way delay](image2)

- **Flow 1 (95th percentile 209.72 ms)**
Run 2: Statistics of FillP-Sheep

Start at: 2018-09-11 07:15:21
End at: 2018-09-11 07:15:51
Local clock offset: 0.009 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-09-11 09:47:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 730.38 Mbit/s
95th percentile per-packet one-way delay: 211.189 ms
Loss rate: 5.75%
-- Flow 1:
Average throughput: 730.38 Mbit/s
95th percentile per-packet one-way delay: 211.189 ms
Loss rate: 5.75%
Run 2: Report of FillP-Sheep — Data Link

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

- Flow 1 ingress (mean 767.88 Mbps)
- Flow 1 egress (mean 730.38 Mbps)

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

- Flow 1 (95th percentile 211.19 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2018-09-11 07:42:07
End at: 2018-09-11 07:42:37
Local clock offset: -0.06 ms
Remote clock offset: -0.051 ms

# Below is generated by plot.py at 2018-09-11 09:47:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 729.65 Mbit/s
95th percentile per-packet one-way delay: 214.623 ms
Loss rate: 6.84%
-- Flow 1:
Average throughput: 729.65 Mbit/s
95th percentile per-packet one-way delay: 214.623 ms
Loss rate: 6.84%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2018-09-11 08:09:06
End at: 2018-09-11 08:09:36
Local clock offset: -0.211 ms
Remote clock offset: 0.228 ms

# Below is generated by plot.py at 2018-09-11 09:57:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 705.28 Mbit/s
95th percentile per-packet one-way delay: 216.309 ms
Loss rate: 8.29%
-- Flow 1:
Average throughput: 705.28 Mbit/s
95th percentile per-packet one-way delay: 216.309 ms
Loss rate: 8.29%
Run 4: Report of FillP-Sheep — Data Link

![Graph of throughput over time showing oscillations between 0 and 1000 Mbps.]

- **Flow 1 ingress** (mean 762.05 Mbps)
- **Flow 1 egress** (mean 705.28 Mbps)

![Graph of packet one-way delay over time, showing variation from 140 to 240 milliseconds.]

- **Flow 1** (95th percentile 216.31 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2018-09-11 08:35:39
End at: 2018-09-11 08:36:09
Local clock offset: -0.327 ms
Remote clock offset: -0.443 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 713.98 Mbit/s
95th percentile per-packet one-way delay: 217.596 ms
Loss rate: 8.48%
-- Flow 1:
Average throughput: 713.98 Mbit/s
95th percentile per-packet one-way delay: 217.596 ms
Loss rate: 8.48%
Run 5: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 773.26 Mbit/s)  Flow 1 egress (mean 713.98 Mbit/s)

Per-packet one way delay (ms)

Flow 1 (95th percentile 217.60 ms)
Run 1: Statistics of Indigo

Start at: 2018-09-11 06:54:23
End at: 2018-09-11 06:54:53
Local clock offset: -0.062 ms
Remote clock offset: -0.462 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 183.88 Mbit/s
95th percentile per-packet one-way delay: 136.813 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 183.88 Mbit/s
95th percentile per-packet one-way delay: 136.813 ms
Loss rate: 0.99%
Run 1: Report of Indigo — Data Link

[Graphs showing throughput and per-packet one-way delay over time]
Run 2: Statistics of Indigo

Start at: 2018-09-11 07:21:23
End at: 2018-09-11 07:21:53
Local clock offset: -0.286 ms
Remote clock offset: 0.247 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 177.89 Mbit/s
95th percentile per-packet one-way delay: 135.475 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 177.89 Mbit/s
95th percentile per-packet one-way delay: 135.475 ms
Loss rate: 0.87%
Run 2: Report of Indigo — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 177.81 Mbit/s)
- **Flow 1 egress** (mean 177.89 Mbit/s)

---

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

- **Flow 1** (95th percentile 135.47 ms)
Run 3: Statistics of Indigo

Start at: 2018-09-11 07:48:12
End at: 2018-09-11 07:48:42
Local clock offset: 0.01 ms
Remote clock offset: -0.489 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 181.67 Mbit/s
95th percentile per-packet one-way delay: 135.778 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 181.67 Mbit/s
95th percentile per-packet one-way delay: 135.778 ms
Loss rate: 0.86%
Run 3: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 181.59 Mbit/s)
- Flow 1 egress (mean 181.67 Mbit/s)

![Graph showing packet delay](image2)

- Flow 1 (95th percentile 135.78 ms)
Run 4: Statistics of Indigo

Start at: 2018-09-11 08:15:10
End at: 2018-09-11 08:15:40
Local clock offset: -0.136 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 184.23 Mbit/s
95th percentile per-packet one-way delay: 136.275 ms
Loss rate: 0.93%

-- Flow 1:
Average throughput: 184.23 Mbit/s
95th percentile per-packet one-way delay: 136.275 ms
Loss rate: 0.93%
Run 4: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 184.27 Mbit/s)
- Flow 1 egress (mean 184.23 Mbit/s)

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

- Flow 1 (95th percentile 136.28 ms)
Run 5: Statistics of Indigo

Start at: 2018-09-11 08:41:50
End at: 2018-09-11 08:42:20
Local clock offset: -0.106 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 179.89 Mbit/s
95th percentile per-packet one-way delay: 137.828 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 179.89 Mbit/s
95th percentile per-packet one-way delay: 137.828 ms
Loss rate: 0.88%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-09-11 07:02:49
End at: 2018-09-11 07:03:19
Local clock offset: 0.061 ms
Remote clock offset: 0.281 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 136.623 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 5.03 Mbit/s
95th percentile per-packet one-way delay: 136.623 ms
Loss rate: 1.82%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2018-09-11 07:29:55
End at: 2018-09-11 07:30:25
Local clock offset: 0.058 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 137.962 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 4.46 Mbit/s
95th percentile per-packet one-way delay: 137.962 ms
Loss rate: 1.16%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-09-11 07:56:38
End at: 2018-09-11 07:57:08
Local clock offset: -0.196 ms
Remote clock offset: -0.075 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 136.526 ms
Loss rate: 1.82%
-- Flow 1:
Average throughput: 5.05 Mbit/s
95th percentile per-packet one-way delay: 136.526 ms
Loss rate: 1.82%
Run 3: Report of LEDBAT — Data Link

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

![Graph 2: Per-packet one-way delay over Time](image2)
Run 4: Statistics of LEDBAT

Start at: 2018-09-11 08:23:15
End at: 2018-09-11 08:23:45
Local clock offset: -0.493 ms
Remote clock offset: -0.118 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 136.438 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 136.438 ms
Loss rate: 1.81%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-09-11 08:50:08
End at: 2018-09-11 08:50:38
Local clock offset: -0.335 ms
Remote clock offset: -0.422 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 137.428 ms
Loss rate: 1.83%
-- Flow 1:
Average throughput: 4.97 Mbit/s
95th percentile per-packet one-way delay: 137.428 ms
Loss rate: 1.83%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Indigo-Muses

Start at: 2018-09-11 07:05:42
End at: 2018-09-11 07:06:12
Local clock offset: -0.363 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2018-09-11 09:59:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 600.17 Mbit/s
95th percentile per-packet one-way delay: 204.103 ms
Loss rate: 1.51%
-- Flow 1:
Average throughput: 600.17 Mbit/s
95th percentile per-packet one-way delay: 204.103 ms
Loss rate: 1.51%
Run 1: Report of Indigo-Muses — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 603.84 Mbit/s)  Flow 1 egress (mean 600.17 Mbit/s)

Packet one way delay (ms)

Flow 1 (95th percentile 204.10 ms)
Run 2: Statistics of Indigo-Muses

Start at: 2018-09-11 07:32:45
End at: 2018-09-11 07:33:15
Local clock offset: -0.071 ms
Remote clock offset: 0.278 ms

# Below is generated by plot.py at 2018-09-11 10:00:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 551.32 Mbit/s
95th percentile per-packet one-way delay: 193.111 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 551.32 Mbit/s
95th percentile per-packet one-way delay: 193.111 ms
Loss rate: 1.28%
Run 2: Report of Indigo-Muses — Data Link

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

- Flow 1 ingress (mean 553.43 Mbit/s)
- Flow 1 egress (mean 551.32 Mbit/s)

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

- Flow 1 (95th percentile 193.11 ms)
Run 3: Statistics of Indigo-Muses

Start at: 2018-09-11 07:59:35
End at: 2018-09-11 08:00:06
Local clock offset: -0.083 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2018-09-11 10:01:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 564.68 Mbit/s
95th percentile per-packet one-way delay: 193.851 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 564.68 Mbit/s
95th percentile per-packet one-way delay: 193.851 ms
Loss rate: 1.18%
Run 3: Report of Indigo-Muses — Data Link

![Graph showing throughput and latency over time]

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 566.25 Mbit/s)
  - Flow 1 egress (mean 564.68 Mbit/s)

- **Per packet one way delay (ms)**
  - Flow 1 (95th percentile 193.85 ms)
Run 4: Statistics of Indigo-Muses

Start at: 2018-09-11 08:26:08
End at: 2018-09-11 08:26:38
Local clock offset: -0.157 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-09-11 10:02:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 579.26 Mbit/s
95th percentile per-packet one-way delay: 197.802 ms
Loss rate: 1.46%
-- Flow 1:
Average throughput: 579.26 Mbit/s
95th percentile per-packet one-way delay: 197.802 ms
Loss rate: 1.46%
Run 4: Report of Indigo-Muses — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 582.54 Mbit/s)  Flow 1 egress (mean 579.26 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 197.80 ms)
Run 5: Statistics of Indigo-Muses

Start at: 2018-09-11 08:52:55
End at: 2018-09-11 08:53:25
Local clock offset: -0.297 ms
Remote clock offset: 0.328 ms

# Below is generated by plot.py at 2018-09-11 10:03:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 582.80 Mbit/s
95th percentile per-packet one-way delay: 200.651 ms
Loss rate: 1.33%
-- Flow 1:
Average throughput: 582.80 Mbit/s
95th percentile per-packet one-way delay: 200.651 ms
Loss rate: 1.33%
Run 5: Report of Indigo-Muses — Data Link

![Graph showing throughput vs time for different flows with legends indicating mean values.]

![Graph showing per packet one way delay vs time with a specific percentile value indicated.]
Run 1: Statistics of PCC-Allegro

Start at: 2018-09-11 07:09:05
End at: 2018-09-11 07:09:35
Local clock offset: -0.251 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-09-11 10:07:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 433.31 Mbit/s
95th percentile per-packet one-way delay: 248.557 ms
Loss rate: 4.38%
-- Flow 1:
Average throughput: 433.31 Mbit/s
95th percentile per-packet one-way delay: 248.557 ms
Loss rate: 4.38%
Run 1: Report of PCC-Allegro — Data Link

![Graph of network traffic over time with throughput and packet delay measurements.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 449.02 Mbit/s)
  - Flow 1 egress (mean 433.31 Mbit/s)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 248.56 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2018-09-11 07:36:05
End at: 2018-09-11 07:36:35
Local clock offset: 0.038 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-09-11 10:10:41
# Datalink statistics
-- Total of 1 flow:
Average throughput: 347.84 Mbit/s
95th percentile per-packet one-way delay: 225.659 ms
Loss rate: 2.31%
-- Flow 1:
Average throughput: 347.84 Mbit/s
95th percentile per-packet one-way delay: 225.659 ms
Loss rate: 2.31%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-09-11 08:03:01
End at: 2018-09-11 08:03:31
Local clock offset: -0.412 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-09-11 10:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 373.94 Mbit/s
95th percentile per-packet one-way delay: 159.000 ms
Loss rate: 1.87%
-- Flow 1:
Average throughput: 373.94 Mbit/s
95th percentile per-packet one-way delay: 159.000 ms
Loss rate: 1.87%
Run 3: Report of PCC-Allegro — Data Link

![Graph 1: Throughput in Mbit/s over time.](image1)
- **Flow 1 ingress (mean 377.61 Mbit/s)**
- **Flow 1 egress (mean 373.94 Mbit/s)**

![Graph 2: Per-packet delay for Flow 1 over time.](image2)
- **Flow 1 (95th percentile 159.60 ms)**
Run 4: Statistics of PCC-Allegro

Start at: 2018-09-11 08:29:33
End at: 2018-09-11 08:30:03
Local clock offset: -0.439 ms
Remote clock offset: -0.45 ms

# Below is generated by plot.py at 2018-09-11 10:13:08
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 369.06 Mbit/s
  95th percentile per-packet one-way delay: 216.579 ms
  Loss rate: 2.19%
-- Flow 1:
  Average throughput: 369.06 Mbit/s
  95th percentile per-packet one-way delay: 216.579 ms
  Loss rate: 2.19%
Run 4: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 373.89 Mbit/s)  Flow 1 egress (mean 369.06 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 216.58 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-09-11 08:56:21
End at: 2018-09-11 08:56:51
Local clock offset: -0.215 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-09-11 10:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 341.00 Mbit/s
95th percentile per-packet one-way delay: 253.031 ms
Loss rate: 4.35%
-- Flow 1:
Average throughput: 341.00 Mbit/s
95th percentile per-packet one-way delay: 253.031 ms
Loss rate: 4.35%
Run 5: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 353.25 Mbit/s)
- Flow 1 egress (mean 341.00 Mbit/s)

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

- Flow 1 (95th percentile 253.03 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-09-11 07:07:26
End at: 2018-09-11 07:07:56
Local clock offset: -0.116 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-09-11 10:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 287.00 Mbit/s
95th percentile per-packet one-way delay: 235.905 ms
Loss rate: 5.29%
-- Flow 1:
Average throughput: 287.00 Mbit/s
95th percentile per-packet one-way delay: 235.905 ms
Loss rate: 5.29%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2018-09-11 07:34:27
End at: 2018-09-11 07:34:57
Local clock offset: 0.159 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-09-11 10:13:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 277.79 Mbit/s
95th percentile per-packet one-way delay: 244.829 ms
Loss rate: 4.74%

-- Flow 1:
Average throughput: 277.79 Mbit/s
95th percentile per-packet one-way delay: 244.829 ms
Loss rate: 4.74%
Run 2: Report of PCC-Expr — Data Link

![Throughput Graph]

- **Flow 1 ingress (mean 288.97 Mbit/s)**
- **Flow 1 egress (mean 277.79 Mbit/s)**

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

- **Flow 1 (95th percentile 244.83 ms)**
Run 3: Statistics of PCC-Expr

Start at: 2018-09-11 08:01:17  
End at: 2018-09-11 08:01:47  
Local clock offset: -0.2 ms  
Remote clock offset: -0.149 ms

# Below is generated by plot.py at 2018-09-11 10:15:08  
# Datalink statistics

-- Total of 1 flow:  
Average throughput: 331.31 Mbit/s  
95th percentile per-packet one-way delay: 225.273 ms  
Loss rate: 3.03%  
-- Flow 1:  
Average throughput: 331.31 Mbit/s  
95th percentile per-packet one-way delay: 225.273 ms  
Loss rate: 3.03%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-09-11 08:27:52
End at: 2018-09-11 08:28:22
Local clock offset: -0.247 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-09-11 10:19:23
# Datalink statistics
-- Total of 1 flow:
Average throughput: 300.55 Mbit/s
95th percentile per-packet one-way delay: 231.529 ms
Loss rate: 3.54%
-- Flow 1:
Average throughput: 300.55 Mbit/s
95th percentile per-packet one-way delay: 231.529 ms
Loss rate: 3.54%
Run 4: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 308.75 Mbit/s)**
- **Flow 1 egress (mean 300.55 Mbit/s)**

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

- **Flow 1 (95th percentile 231.53 ms)**
Run 5: Statistics of PCC-Expr

Start at: 2018-09-11 08:54:39
End at: 2018-09-11 08:55:09
Local clock offset: -0.175 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 302.39 Mbit/s
95th percentile per-packet one-way delay: 202.899 ms
Loss rate: 2.56%
-- Flow 1:
Average throughput: 302.39 Mbit/s
95th percentile per-packet one-way delay: 202.899 ms
Loss rate: 2.56%
Run 5: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-09-11 06:55:51
End at: 2018-09-11 06:56:21
Local clock offset: -0.028 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 135.463 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 57.39 Mbit/s
95th percentile per-packet one-way delay: 135.463 ms
Loss rate: 1.41%
Run 1: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 57.65 Mbit/s)
- Flow 1 egress (mean 57.39 Mbit/s)

- Flow 1 [95th percentile 135.46 ms]
Run 2: Statistics of QUIC Cubic

Start at: 2018-09-11 07:22:52
End at: 2018-09-11 07:23:22
Local clock offset: -0.16 ms
Remote clock offset: 0.277 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 135.781 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 41.04 Mbit/s
95th percentile per-packet one-way delay: 135.781 ms
Loss rate: 0.74%
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 40.97 Mbit/s)
- **Flow 1 egress** (mean 41.04 Mbit/s)

- **Per-packet one-way delay** shown in the lower graph.
  - **Flow 1 (50th percentile 135.78 ms)**
Run 3: Statistics of QUIC Cubic

Start at: 2018-09-11 07:49:42
End at: 2018-09-11 07:50:12
Local clock offset: -0.326 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 47.00 Mbit/s
  95th percentile per-packet one-way delay: 135.087 ms
  Loss rate: 1.46%
-- Flow 1:
  Average throughput: 47.00 Mbit/s
  95th percentile per-packet one-way delay: 135.087 ms
  Loss rate: 1.46%
Run 3: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 47.26 Mbps)**
- **Flow 1 egress (mean 47.00 Mbps)**

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

- **Flow 1 (95th percentile 135.09 ms)**
Run 4: Statistics of QUIC Cubic

Start at: 2018-09-11 08:16:39
End at: 2018-09-11 08:17:09
Local clock offset: -0.289 ms
Remote clock offset: 0.215 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 135.291 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 135.291 ms
Loss rate: 1.13%
Run 4: Report of QUIC Cubic — Data Link

![Graph showing throughput and per-packet one-way delay](image-url)
Run 5: Statistics of QUIC Cubic

Start at: 2018-09-11 08:43:20
End at: 2018-09-11 08:43:50
Local clock offset: -0.135 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 136.107 ms
Loss rate: 1.40%
-- Flow 1:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 136.107 ms
Loss rate: 1.40%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress (mean 52.78 Mbit/s)**
- **Flow 1 egress (mean 52.52 Mbit/s)**

- **Flow 1 (55th percentile 136.11 ms)**
Run 1: Statistics of SCReAM

Start at: 2018-09-11 07:01:39
End at: 2018-09-11 07:02:09
Local clock offset: 0.16 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.113 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.113 ms
Loss rate: 0.89%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-09-11 07:28:45
End at: 2018-09-11 07:29:15
Local clock offset: -0.153 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.241 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.241 ms
Loss rate: 0.76%
Run 2: Report of SCReAM — Data Link

The figure shows the throughput over time for two data flows labeled as 'Flow 1 ingress (mean 0.22 Mbit/s)' and 'Flow 1 egress (mean 0.22 Mbit/s)'. The throughput fluctuates over the 30-second period, with a peak at approximately 0.20 Mbit/s.

The second figure displays the per-packet one-way delay (ms) over the same period. The delay remains relatively constant, with a 95th percentile delay of around 136.24 ms.
Run 3: Statistics of SCReAM

Start at: 2018-09-11 07:55:29
End at: 2018-09-11 07:55:59
Local clock offset: ~0.37 ms
Remote clock offset: 0.248 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.004 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.004 ms
Loss rate: 0.89%
Run 3: Report of SCReAM — Data Link

[Graph showing throughput over time]

[Graph showing packet loss over time]

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

Flow 1 (99th percentile 135.00 ms)
Run 4: Statistics of SCReAM

Start at: 2018-09-11 08:22:05
End at: 2018-09-11 08:22:35
Local clock offset: -0.469 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-09-11 10:21:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.297 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 136.297 ms
Loss rate: 0.89%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-09-11 08:48:58
End at: 2018-09-11 08:49:28
Local clock offset: -0.222 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.248 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 135.248 ms
Loss rate: 0.76%
Run 5: Report of SCReAM — Data Link

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

![Graph of per-packet one-way delay showing Flow 1 with 95th percentile 135.25 ms.]
Run 1: Statistics of Sprout

Start at: 2018-09-11 06:53:13
End at: 2018-09-11 06:53:43
Local clock offset: -0.194 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 136.032 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 136.032 ms
Loss rate: 0.80%
Run 1: Report of Sprout — Data Link

![Graph showing throughput and delay over time](image_url)
Run 2: Statistics of Sprout

Start at: 2018-09-11 07:20:13
End at: 2018-09-11 07:20:43
Local clock offset: -0.323 ms
Remote clock offset: -0.099 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 135.648 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 0.42 Mbit/s
95th percentile per-packet one-way delay: 135.648 ms
Loss rate: 0.76%
Run 2: Report of Sprout — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 0.42 Mbps)
- Flow 1 egress (mean 0.42 Mbps)

Graph 2: End-to-end delay (ms)
- Flow 1 (95th percentile 135.65 ms)
Run 3: Statistics of Sprout

Start at: 2018-09-11 07:47:02
End at: 2018-09-11 07:47:32
Local clock offset: -0.158 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 135.727 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 0.57 Mbit/s
95th percentile per-packet one-way delay: 135.727 ms
Loss rate: 0.05%
Run 3: Report of Sprout — Data Link

![Graph showing throughput and delay over time for two data flows: Flow 1 ingress and egress.]

- Flow 1 ingress (mean 0.56 Mbit/s)
- Flow 1 egress (mean 0.57 Mbit/s)

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

- Flow 1 (95th percentile 135.73 ms)
Run 4: Statistics of Sprout

Start at: 2018-09-11 08:14:00
End at: 2018-09-11 08:14:30
Local clock offset: -0.244 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 136.553 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 136.553 ms
  Loss rate: 0.74%
Run 4: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 0.43 Mbit/s)**
- **Flow 1 egress (mean 0.43 Mbit/s)**
Run 5: Statistics of Sprout

Start at: 2018-09-11 08:40:40
End at: 2018-09-11 08:41:10
Local clock offset: -0.518 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 136.695 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: 136.695 ms
Loss rate: 0.85%
Run 5: Report of Sprout — Data Link

![Graph showing throughput over time]

- **Flow 1 ingress (mean 0.46 Mbit/s)**
- **Flow 1 egress (mean 0.47 Mbit/s)**

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

- **Flow 1 (95th percentile 136.69 ms)**
Run 1: Statistics of TaoVA-100x

Start at: 2018-09-11 06:58:42
End at: 2018-09-11 06:59:12
Local clock offset: 0.079 ms
Remote clock offset: -0.11 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.13 Mbit/s
95th percentile per-packet one-way delay: 135.731 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 191.13 Mbit/s
95th percentile per-packet one-way delay: 135.731 ms
Loss rate: 1.02%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-09-11 07:25:43
End at: 2018-09-11 07:26:13
Local clock offset: -0.065 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 182.15 Mbit/s
  95th percentile per-packet one-way delay: 135.886 ms
  Loss rate: 1.08%
-- Flow 1:
  Average throughput: 182.15 Mbit/s
  95th percentile per-packet one-way delay: 135.886 ms
  Loss rate: 1.08%
Run 2: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 182.48 Mbit/s)
- Flow 1 egress (mean 182.15 Mbit/s)

Graph 2: Average packet delay (ms)
- Flow 1 (95th percentile 135.89 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-09-11 07:52:31
End at: 2018-09-11 07:53:01
Local clock offset: -0.237 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 190.75 Mbit/s
  95th percentile per-packet one-way delay: 136.319 ms
  Loss rate: 1.00%
-- Flow 1:
  Average throughput: 190.75 Mbit/s
  95th percentile per-packet one-way delay: 136.319 ms
  Loss rate: 1.00%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 190.92 Mbit/s)**
- **Flow 1 egress (mean 190.75 Mbit/s)**

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

- **Flow 1 (95th percentile 136.32 ms)**
Run 4: Statistics of TaoVA-100x

Start at: 2018-09-11 08:19:24  
End at: 2018-09-11 08:19:54  
Local clock offset: -0.447 ms  
Remote clock offset: 0.248 ms  

# Below is generated by plot.py at 2018-09-11 10:21:03  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 12.99 Mbit/s  
95th percentile per-packet one-way delay: 135.275 ms  
Loss rate: 0.92%  
-- Flow 1:  
Average throughput: 12.99 Mbit/s  
95th percentile per-packet one-way delay: 135.275 ms  
Loss rate: 0.92%
Run 4: Report of TaoVA-100x — Data Link

![Graph showing throughput and delay over time](image)
Run 5: Statistics of TaoVA-100x

Start at: 2018-09-11 08:46:10
End at: 2018-09-11 08:46:40
Local clock offset: -0.241 ms
Remote clock offset: 0.3 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 135.947 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 12.86 Mbit/s
95th percentile per-packet one-way delay: 135.947 ms
Loss rate: 0.93%
Run 5: Report of TaoVA-100x — Data Link

![Graph of throughput vs. time with two lines indicating flow ingress and egress with mean 12.86 Mbps.](image1)

![Graph of packet delay vs. time with a 95th percentile of 135.95 ms.](image2)
Run 1: Statistics of TCP Vegas

Start at: 2018-09-11 07:00:13
End at: 2018-09-11 07:00:43
Local clock offset: -0.313 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2018-09-11 10:21:03
# Datalink statistics
-- Total of 1 flow:
Average throughput: 273.40 Mbit/s
95th percentile per-packet one-way delay: 136.413 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 273.40 Mbit/s
95th percentile per-packet one-way delay: 136.413 ms
Loss rate: 0.79%
Run 1: Report of TCP Vegas — Data Link

![Graph showing throughput and delays over time.]

- Flow 1 ingress (mean 273.10 Mbit/s)
- Flow 1 egress (mean 273.40 Mbit/s)

![Graph showing packet delay over time.]

- Flow 1 (95th percentile 136.41 ms)
Run 2: Statistics of TCP Vegas

Start at: 2018-09-11 07:27:12
End at: 2018-09-11 07:27:42
Local clock offset: 0.044 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-09-11 10:22:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 391.73 Mbit/s
95th percentile per-packet one-way delay: 157.442 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 391.73 Mbit/s
95th percentile per-packet one-way delay: 157.442 ms
Loss rate: 0.71%
Run 2: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time for TCP Vegas flow 1]
Run 3: Statistics of TCP Vegas

Start at: 2018-09-11 07:54:01
End at: 2018-09-11 07:54:31
Local clock offset: -0.288 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2018-09-11 10:22:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 304.54 Mbit/s
95th percentile per-packet one-way delay: 140.537 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 304.54 Mbit/s
95th percentile per-packet one-way delay: 140.537 ms
Loss rate: 1.31%
Run 3: Report of TCP Vegas — Data Link

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

- **Flow 1 ingress (mean: 305.78 Mbit/s)**
- **Flow 1 egress (mean: 304.54 Mbit/s)**

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

- **Flow 1 (95th percentile: 140.54 ms)**
Run 4: Statistics of TCP Vegas

Start at: 2018-09-11 08:20:36
End at: 2018-09-11 08:21:06
Local clock offset: -0.18 ms
Remote clock offset: -0.115 ms

# Below is generated by plot.py at 2018-09-11 10:25:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 334.76 Mbit/s
95th percentile per-packet one-way delay: 137.304 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 334.76 Mbit/s
95th percentile per-packet one-way delay: 137.304 ms
Loss rate: 1.00%
Run 4: Report of TCP Vegas — Data Link

![Graph showing network throughput over time]

Legend:
- Flow 1 ingress (mean 335.07 Mbit/s)
- Flow 1 egress (mean 334.76 Mbit/s)

![Graph showing packet delay over time]

Legend:
- Flow 1 (95th percentile 137.30 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-09-11 08:47:22  
End at: 2018-09-11 08:47:52  
Local clock offset: -0.111 ms  
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 441.01 Mbit/s
  95th percentile per-packet one-way delay: 206.880 ms
  Loss rate: 1.57%
-- Flow 1:
  Average throughput: 441.01 Mbit/s
  95th percentile per-packet one-way delay: 206.880 ms
  Loss rate: 1.57%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-09-11 06:50:10
End at: 2018-09-11 06:50:40
Local clock offset: 0.093 ms
Remote clock offset: -0.453 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 238.234 ms
Loss rate: 3.67%
-- Flow 1:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 238.234 ms
Loss rate: 3.67%
Run 1: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 53.45 Mbit/s)**
- **Flow 1 egress (mean 51.96 Mbit/s)**

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

- **Flow 1 (95th percentile 238.23 ms)**
Run 2: Statistics of Verus

Start at: 2018-09-11 07:17:07
End at: 2018-09-11 07:17:37
Local clock offset: -0.135 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 108.01 Mbit/s
95th percentile per-packet one-way delay: 223.211 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 108.01 Mbit/s
95th percentile per-packet one-way delay: 223.211 ms
Loss rate: 0.95%
Run 3: Statistics of Verus

Start at: 2018-09-11 07:43:52
End at: 2018-09-11 07:44:22
Local clock offset: 0.106 ms
Remote clock offset: -0.418 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 148.77 Mbit/s
95th percentile per-packet one-way delay: 194.222 ms
Loss rate: 1.05%
-- Flow 1:
Average throughput: 148.77 Mbit/s
95th percentile per-packet one-way delay: 194.222 ms
Loss rate: 1.05%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-09-11 08:10:51
End at: 2018-09-11 08:11:21
Local clock offset: -0.298 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 73.33 Mbit/s
95th percentile per-packet one-way delay: 291.501 ms
Loss rate: 4.99%
-- Flow 1:
Average throughput: 73.33 Mbit/s
95th percentile per-packet one-way delay: 291.501 ms
Loss rate: 4.99%
Run 4: Report of Verus — Data Link

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

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

Legend:
- Flow 1 ingress (mean 76.48 Mbps)
- Flow 1 egress (mean 73.33 Mbps)
- Flow 1 (95th percentile 291.50 ms)
Run 5: Statistics of Verus

Start at: 2018-09-11 08:37:24
End at: 2018-09-11 08:37:54
Local clock offset: -0.35 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-09-11 10:28:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 166.41 Mbit/s
95th percentile per-packet one-way delay: 272.941 ms
Loss rate: 5.78%
-- Flow 1:
Average throughput: 166.41 Mbit/s
95th percentile per-packet one-way delay: 272.941 ms
Loss rate: 5.78%
Run 5: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-09-11 06:57:05
End at: 2018-09-11 06:57:35
Local clock offset: -0.084 ms
Remote clock offset: 0.261 ms

# Below is generated by plot.py at 2018-09-11 10:28:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 360.40 Mbit/s
95th percentile per-packet one-way delay: 138.651 ms
Loss rate: 1.69%
-- Flow 1:
Average throughput: 360.40 Mbit/s
95th percentile per-packet one-way delay: 138.651 ms
Loss rate: 1.69%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2018-09-11 07:24:04
End at: 2018-09-11 07:24:34
Local clock offset: 0.078 ms
Remote clock offset: 0.304 ms

# Below is generated by plot.py at 2018-09-11 10:28:42
# Datalink statistics
-- Total of 1 flow:
Average throughput: 360.61 Mbit/s
95th percentile per-packet one-way delay: 192.033 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 360.61 Mbit/s
95th percentile per-packet one-way delay: 192.033 ms
Loss rate: 1.30%
Run 2: Report of PCC-Vivace — Data Link

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

![Graph 2: Per Packet One Way Delay vs. Time](image2)
Run 3: Statistics of PCC-Vivace

Start at: 2018-09-11 07:50:55  
End at: 2018-09-11 07:51:25  
Local clock offset: -0.057 ms  
Remote clock offset: -0.147 ms  

# Below is generated by plot.py at 2018-09-11 10:28:46  
# Datalink statistics
-- Total of 1 flow:  
Average throughput: 331.72 Mbit/s  
95th percentile per-packet one-way delay: 180.905 ms  
Loss rate: 1.51%  
-- Flow 1:  
Average throughput: 331.72 Mbit/s  
95th percentile per-packet one-way delay: 180.905 ms  
Loss rate: 1.51%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-09-11 08:17:53
End at: 2018-09-11 08:18:23
Local clock offset: -0.447 ms
Remote clock offset: -0.138 ms

# Below is generated by plot.py at 2018-09-11 10:28:46
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.58 Mbit/s
95th percentile per-packet one-way delay: 169.526 ms
Loss rate: 1.91%
-- Flow 1:
Average throughput: 267.58 Mbit/s
95th percentile per-packet one-way delay: 169.526 ms
Loss rate: 1.91%
Run 4: Report of PCC-Vivace — Data Link

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

Flow 1 ingress (mean 270.31 Mb/s)
Flow 1 egress (mean 267.58 Mb/s)

![Graph 2: RTT (ms)](image2)

Flow 1 (95th percentile 169.53 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-09-11 08:44:33
End at: 2018-09-11 08:45:03
Local clock offset: -0.279 ms
Remote clock offset: -0.437 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 355.82 Mbit/s
95th percentile per-packet one-way delay: 146.249 ms
Loss rate: 1.18%
-- Flow 1:
Average throughput: 355.82 Mbit/s
95th percentile per-packet one-way delay: 146.249 ms
Loss rate: 1.18%
Run 5: Report of PCC-Vivace — Data Link

[Graph showing Throughput (Mbps) vs. Time (s) with two lines representing Flow 1 ingress and egress, with mean throughput values of 356.79 Mbps and 355.82 Mbps respectively.]

[Graph showing Per packet one way delay (ms) vs. Time (s) with a single line representing Flow 1, 95th percentile 146.25 ms.]
Run 1: Statistics of WebRTC media

Start at: 2018-09-11 07:14:11
End at: 2018-09-11 07:14:41
Local clock offset: -0.049 ms
Remote clock offset: 0.285 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 136.141 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 1.45 Mbit/s
95th percentile per-packet one-way delay: 136.141 ms
Loss rate: 1.94%
Run 1: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 1.47 Mbps)**
- **Flow 1 egress (mean 1.45 Mbps)**

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

- **Flow 1 (90th percentile 136.14 ms)**
Run 2: Statistics of WebRTC media

Start at: 2018-09-11 07:40:57
End at: 2018-09-11 07:41:27
Local clock offset: 0.008 ms
Remote clock offset: 0.286 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.98 Mbit/s
  95th percentile per-packet one-way delay: 136.012 ms
  Loss rate: 0.94%
-- Flow 1:
  Average throughput: 1.98 Mbit/s
  95th percentile per-packet one-way delay: 136.012 ms
  Loss rate: 0.94%
Run 2: Report of WebRTC media — Data Link

![Throughput Graph](image)

- **Flow 1 ingress (mean 1.99 Mbit/s)**
- **Flow 1 egress (mean 1.98 Mbit/s)**

![Delay Graph](image)

- **Flow 1 (95th percentile 136.01 ms)**
Run 3: Statistics of WebRTC media

Start at: 2018-09-11 08:07:56
End at: 2018-09-11 08:08:26
Local clock offset: -0.165 ms
Remote clock offset: 0.236 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 135.798 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 1.80 Mbit/s
95th percentile per-packet one-way delay: 135.798 ms
Loss rate: 1.03%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-09-11 08:34:28
End at: 2018-09-11 08:34:58
Local clock offset: -0.349 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.599 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 1.79 Mbit/s
95th percentile per-packet one-way delay: 136.599 ms
Loss rate: 1.00%
Run 4: Report of WebRTC media — Data Link

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

Start at: 2018-09-11 09:01:16
End at: 2018-09-11 09:01:46
Local clock offset: -0.267 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-09-11 10:28:59
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 1.76 Mbit/s
  95th percentile per-packet one-way delay: 135.954 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 1.76 Mbit/s
  95th percentile per-packet one-way delay: 135.954 ms
  Loss rate: 1.11%
Run 5: Report of WebRTC media — Data Link

![Graph 1: Throughput vs. Time](image)
- Flow 1 ingress (mean 1.76 Mbit/s)
- Flow 1 egress (mean 1.76 Mbit/s)

![Graph 2: Per-packet one-way delay vs. Time](image)
- Flow 1 (90th percentile 135.95 ms)