Pantheon Report

Data path: GCE Tokyo 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 4.15.0-1021-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ 794ca3866981572cb73700a276691ac79c60f2b
third_party/fillp @ d6aa1459332fcee56963885d7eba17e6a32d4519
third_party/genericCC @ d0153f8e694a89e93b032143cedbdf858e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edbf9c077e64d
third_party/indigo-96d2da3 @ 8413272d46f8aa0cb967ed7048b6a8f994abb95
third_party/libutp @ b3465942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ 65ac1b19bbed0d0c6349ae986009b4fa8643c40a
third_party/pantheon-tunnel @ f8663df58d27af942717625e3a354cc2e802bd
third_party/pcc @ 1afc958fa0d66d18b23c091a55f9c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd433e34e3f5f5613e8acd08fa92c4ebf24f974ab
third_party/proto-quic @ 77961f1a8273aa86b42f1bc8143ebc978f3c4f2
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1a33adb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a6d18c74f9415f91a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
test from GCE Tokyo 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) flow 1</th>
<th>mean 95th-%ile delay (ms) flow 1</th>
<th>mean loss rate (%) flow 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP BBR</td>
<td>5</td>
<td>571.92</td>
<td>69.35</td>
<td>0.39</td>
</tr>
<tr>
<td>Copa</td>
<td>5</td>
<td>270.95</td>
<td>67.15</td>
<td>0.38</td>
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<tr>
<td>TCP Cubic</td>
<td>5</td>
<td>578.14</td>
<td>65.74</td>
<td>0.41</td>
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<td>FillP</td>
<td>5</td>
<td>922.80</td>
<td>97.42</td>
<td>0.94</td>
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<td>Indigo</td>
<td>5</td>
<td>219.38</td>
<td>58.38</td>
<td>0.40</td>
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<td>Indigo-96d2da3</td>
<td>5</td>
<td>296.43</td>
<td>85.66</td>
<td>0.30</td>
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<td>LEDBAT</td>
<td>5</td>
<td>27.73</td>
<td>58.43</td>
<td>0.77</td>
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<td>Indigo-Muses</td>
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<td>653.86</td>
<td>79.96</td>
<td>0.43</td>
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<tr>
<td>PCC-Allegro</td>
<td>5</td>
<td>430.71</td>
<td>153.18</td>
<td>2.24</td>
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<td>PCC-Expr</td>
<td>5</td>
<td>337.79</td>
<td>139.19</td>
<td>3.51</td>
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<td>QUIC Cubic</td>
<td>5</td>
<td>57.51</td>
<td>58.16</td>
<td>0.63</td>
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<td>SCReAM</td>
<td>5</td>
<td>0.22</td>
<td>58.26</td>
<td>0.39</td>
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<td>Sprout</td>
<td>5</td>
<td>7.56</td>
<td>57.91</td>
<td>0.43</td>
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<td>TaoVA-100x</td>
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<td>225.19</td>
<td>58.13</td>
<td>0.40</td>
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<td>TCP Vegas</td>
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<td>556.83</td>
<td>63.05</td>
<td>0.36</td>
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<tr>
<td>Verus</td>
<td>5</td>
<td>165.27</td>
<td>137.39</td>
<td>1.77</td>
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<tr>
<td>PCC-Vivace</td>
<td>5</td>
<td>391.61</td>
<td>68.20</td>
<td>0.45</td>
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<td>WebRTC media</td>
<td>5</td>
<td>1.97</td>
<td>58.14</td>
<td>0.51</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-11-15 20:11:41
End at: 2018-11-15 20:12:11
Local clock offset: -1.013 ms
Remote clock offset: 1.19 ms

# Below is generated by plot.py at 2018-11-15 22:28:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 575.13 Mbit/s
95th percentile per-packet one-way delay: 61.927 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 575.13 Mbit/s
95th percentile per-packet one-way delay: 61.927 ms
Loss rate: 0.41%
Run 1: Report of TCP BBR — Data Link

![Graph showing TCP BBR data link throughput and packet one-way delay over time.]

- **Flow 1 ingress (mean 575.31 Mbit/s)**
- **Flow 1 egress (mean 575.13 Mbit/s)**

![Graph showing packet one-way delay over time for Flow 1 with 95th percentile 61.93 ms.]

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Run 2: Statistics of TCP BBR

Start at: 2018-11-15 20:40:02
End at: 2018-11-15 20:40:32
Local clock offset: -1.339 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-11-15 22:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 575.66 Mbit/s
95th percentile per-packet one-way delay: 65.309 ms
Loss rate: 0.41%

-- Flow 1:
Average throughput: 575.66 Mbit/s
95th percentile per-packet one-way delay: 65.309 ms
Loss rate: 0.41%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-11-15 21:07:37
End at: 2018-11-15 21:08:07
Local clock offset: -0.166 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-11-15 22:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 569.73 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 569.73 Mbit/s
95th percentile per-packet one-way delay: 64.211 ms
Loss rate: 0.42%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-11-15 21:35:33
End at: 2018-11-15 21:36:03
Local clock offset: 0.095 ms
Remote clock offset: -0.653 ms

# Below is generated by plot.py at 2018-11-15 22:28:02
# Datalink statistics
-- Total of 1 flow:
Average throughput: 567.23 Mbit/s
95th percentile per-packet one-way delay: 80.619 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 567.23 Mbit/s
95th percentile per-packet one-way delay: 80.619 ms
Loss rate: 0.30%
Run 4: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 566.74 Mbps)
- Flow 1 egress (mean 567.23 Mbps)

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

- Flow 1 (95th percentile 80.62 ms)
Run 5: Statistics of TCP BBR

End at: 2018-11-15 22:04:09
Local clock offset: 0.922 ms
Remote clock offset: 0.217 ms

# Below is generated by plot.py at 2018-11-15 22:28:02
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 571.84 Mbit/s
  95th percentile per-packet one-way delay: 74.686 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 571.84 Mbit/s
  95th percentile per-packet one-way delay: 74.686 ms
  Loss rate: 0.42%
Run 5: Report of TCP BBR — Data Link

![Graph showing throughput and packet loss over time for TCP BBR.](image-url)
Run 1: Statistics of Copa

Local clock offset: -0.367 ms
Remote clock offset: 0.07 ms

# Below is generated by plot.py at 2018-11-15 22:28:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 309.72 Mbit/s
95th percentile per-packet one-way delay: 91.707 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 309.72 Mbit/s
95th percentile per-packet one-way delay: 91.707 ms
Loss rate: 0.36%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-11-15 20:15:21
End at: 2018-11-15 20:15:51
Local clock offset: -1.253 ms
Remote clock offset: -0.197 ms

# Below is generated by plot.py at 2018-11-15 22:28:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 255.29 Mbit/s
95th percentile per-packet one-way delay: 59.133 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 255.29 Mbit/s
95th percentile per-packet one-way delay: 59.133 ms
Loss rate: 0.38%
Run 2: Report of Copa — Data Link

![Graph 1: Throughput over time showing two distinct lines, one labeled "Flow 1 ingress (mean 255.28 Mbit/s)" and the other "Flow 1 egress (mean 255.29 Mbit/s)."

![Graph 2: Packet in delay over time showing a single line labeled "Flow 1 (95th percentile 59.13 ms)." ]
Run 3: Statistics of Copa

End at: 2018-11-15 20:43:57
Local clock offset: -1.445 ms
Remote clock offset: 1.347 ms

# Below is generated by plot.py at 2018-11-15 22:28:06
# Datalink statistics
 -- Total of 1 flow:
 Average throughput: 276.94 Mbit/s
 95th percentile per-packet one-way delay: 59.636 ms
 Loss rate: 0.36%
 -- Flow 1:
 Average throughput: 276.94 Mbit/s
 95th percentile per-packet one-way delay: 59.636 ms
 Loss rate: 0.36%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

End at: 2018-11-15 21:11:25
Local clock offset: 0.34 ms
Remote clock offset: 0.405 ms

# Below is generated by plot.py at 2018-11-15 22:33:43
# Datalink statistics
-- Total of 1 flow:
Average throughput: 233.54 Mbit/s
95th percentile per-packet one-way delay: 60.554 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 233.54 Mbit/s
95th percentile per-packet one-way delay: 60.554 ms
Loss rate: 0.44%
Run 4: Report of Copa — Data Link

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

Local clock offset: 0.735 ms
Remote clock offset: -0.606 ms

# Below is generated by plot.py at 2018-11-15 22:38:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 279.24 Mbit/s
95th percentile per-packet one-way delay: 64.725 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 279.24 Mbit/s
95th percentile per-packet one-way delay: 64.725 ms
Loss rate: 0.34%
Run 5: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

End at: 2018-11-15 19:57:03
Local clock offset: -0.859 ms
Remote clock offset: 0.043 ms

# Below is generated by plot.py at 2018-11-15 22:39:28
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 573.60 Mbit/s
  95th percentile per-packet one-way delay: 63.778 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 573.60 Mbit/s
  95th percentile per-packet one-way delay: 63.778 ms
  Loss rate: 0.41%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

End at: 2018-11-15 20:25:17
Local clock offset: -0.799 ms
Remote clock offset: 0.324 ms

# Below is generated by plot.py at 2018-11-15 22:39:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 587.35 Mbit/s
95th percentile per-packet one-way delay: 61.779 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 587.35 Mbit/s
95th percentile per-packet one-way delay: 61.779 ms
Loss rate: 0.40%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

End at: 2018-11-15 20:53:25
Local clock offset: -0.923 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2018-11-15 22:39:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 590.21 Mbit/s
95th percentile per-packet one-way delay: 62.679 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 590.21 Mbit/s
95th percentile per-packet one-way delay: 62.679 ms
Loss rate: 0.40%
Run 3: Report of TCP Cubic — Data Link

![Graph of throughput and packet delay over time for Flow 1, showing mean rates and 95th percentile delay.](image)

- Flow 1 ingress (mean 590.33 Mbit/s)
- Flow 1 egress (mean 590.21 Mbit/s)
- Flow 1 (95th percentile 62.68 ms)
Run 4: Statistics of TCP Cubic

End at: 2018-11-15 21:20:49
Local clock offset: -0.185 ms
Remote clock offset: 0.402 ms

# Below is generated by plot.py at 2018-11-15 22:39:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 574.03 Mbit/s
95th percentile per-packet one-way delay: 69.869 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 574.03 Mbit/s
95th percentile per-packet one-way delay: 69.869 ms
Loss rate: 0.41%
Run 4: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet delay over time for TCP Cubic flow 1.](image)

- Flow 1 ingress (mean 574.20 Mbit/s)
- Flow 1 egress (mean 574.03 Mbit/s)

![Graph showing per-packet delay over time for TCP Cubic flow 1.](image)

- Flow 1 (95th percentile 69.87 ms)
Run 5: Statistics of TCP Cubic

End at: 2018-11-15 21:49:00
Local clock offset: 0.554 ms
Remote clock offset: 0.351 ms

# Below is generated by plot.py at 2018-11-15 22:39:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 565.52 Mbit/s
95th percentile per-packet one-way delay: 70.611 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 565.52 Mbit/s
95th percentile per-packet one-way delay: 70.611 ms
Loss rate: 0.41%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 565.67 Mbit/s)
- Flow 1 egress (mean 565.52 Mbit/s)

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

- Flow 1 (95th percentile 70.61 ms)
Run 1: Statistics of FillP

End at: 2018-11-15 19:51:41
Local clock offset: -0.771 ms
Remote clock offset: -0.12 ms

# Below is generated by plot.py at 2018-11-15 22:50:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 911.24 Mbit/s
95th percentile per-packet one-way delay: 107.120 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 911.24 Mbit/s
95th percentile per-packet one-way delay: 107.120 ms
Loss rate: 1.41%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-11-15 20:19:15
End at: 2018-11-15 20:19:45
Local clock offset: -1.535 ms
Remote clock offset: -0.204 ms

# Below is generated by plot.py at 2018-11-15 22:58:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 891.13 Mbit/s
95th percentile per-packet one-way delay: 98.476 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 891.13 Mbit/s
95th percentile per-packet one-way delay: 98.476 ms
Loss rate: 0.75%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-11-15 20:47:26
End at: 2018-11-15 20:47:56
Local clock offset: -1.442 ms
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2018-11-15 23:02:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 956.15 Mbit/s
95th percentile per-packet one-way delay: 70.522 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 956.15 Mbit/s
95th percentile per-packet one-way delay: 70.522 ms
Loss rate: 0.57%
Run 3: Report of FillP — Data Link
Run 4: Statistics of FillP

Start at: 2018-11-15 21:14:54
End at: 2018-11-15 21:15:24
Local clock offset: 0.162 ms
Remote clock offset: -0.4 ms

# Below is generated by plot.py at 2018-11-15 23:02:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 900.90 Mbit/s
95th percentile per-packet one-way delay: 105.341 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 900.90 Mbit/s
95th percentile per-packet one-way delay: 105.341 ms
Loss rate: 1.16%
Run 4: Report of FillP — Data Link

![Graph of Throughput vs Time]

- **Flow 1 Ingress (mean 907.91 Mbit/s)**
- **Flow 1 Egress (mean 900.90 Mbit/s)**

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

- **Flow 1 (95th percentile 105.34 ms)**
Run 5: Statistics of FillP

Start at: 2018-11-15 21:43:03
Local clock offset: 0.371 ms
Remote clock offset: 0.519 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 954.58 Mbit/s
95th percentile per-packet one-way delay: 105.661 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 954.58 Mbit/s
95th percentile per-packet one-way delay: 105.661 ms
Loss rate: 0.81%
Run 5: Report of FillP — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 1: Statistics of Indigo

Start at: 2018-11-15 19:58:21
End at: 2018-11-15 19:58:51
Local clock offset: -0.726 ms
Remote clock offset: -0.681 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.98 Mbit/s
95th percentile per-packet one-way delay: 58.643 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 216.98 Mbit/s
95th percentile per-packet one-way delay: 58.643 ms
Loss rate: 0.39%
Run 1: Report of Indigo — Data Link

![Throughput Graph]

![Delay Graph]

Flow 1 ingress (mean 216.97 Mbit/s)  Flow 1 egress (mean 216.98 Mbit/s)

Flow 1 (95th percentile 58.64 ms)
Run 2: Statistics of Indigo

Start at: 2018-11-15 20:26:36
End at: 2018-11-15 20:27:06
Local clock offset: -1.17 ms
Remote clock offset: 0.461 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 57.061 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 213.79 Mbit/s
95th percentile per-packet one-way delay: 57.061 ms
Loss rate: 0.43%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-11-15 20:54:34
Local clock offset: ~0.407 ms
Remote clock offset: 0.29 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.79 Mbit/s
95th percentile per-packet one-way delay: 60.809 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 224.79 Mbit/s
95th percentile per-packet one-way delay: 60.809 ms
Loss rate: 0.40%
Run 3: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 224.79 Mbit/s)  Flow 1 egress (mean 224.79 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 60.81 ms)
Run 4: Statistics of Indigo

Local clock offset: 0.544 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 226.23 Mbit/s
95th percentile per-packet one-way delay: 57.708 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 226.23 Mbit/s
95th percentile per-packet one-way delay: 57.708 ms
Loss rate: 0.38%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

End at: 2018-11-15 21:50:41
Local clock offset: 0.33 ms
Remote clock offset: 0.544 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.13 Mbit/s
95th percentile per-packet one-way delay: 57.699 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 215.13 Mbit/s
95th percentile per-packet one-way delay: 57.699 ms
Loss rate: 0.40%
Run 5: Report of Indigo — Data Link
Run 1: Statistics of Indigo-96d2da3

Start at: 2018-11-15 20:02:46
End at: 2018-11-15 20:03:16
Local clock offset: -0.527 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 296.69 Mbit/s
95th percentile per-packet one-way delay: 85.601 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 296.69 Mbit/s
95th percentile per-packet one-way delay: 85.601 ms
Loss rate: 0.27%
Run 1: Report of Indigo-96d2da3 — Data Link
Run 2: Statistics of Indigo-96d2da3

Start at: 2018-11-15 20:31:10
End at: 2018-11-15 20:31:40
Local clock offset: -1.469 ms
Remote clock offset: -0.214 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 284.71 Mbit/s
  95th percentile per-packet one-way delay: 82.428 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 284.71 Mbit/s
  95th percentile per-packet one-way delay: 82.428 ms
  Loss rate: 0.33%
Run 2: Report of Indigo-96d2da3 — Data Link

![Throughput Graph]

- **Flow 1 ingress** (mean 284.45 Mbit/s)
- **Flow 1 egress** (mean 284.71 Mbit/s)

![Packet Delay Graph]

- **Flow 1 (95th percentile 82.43 ms)**
Run 3: Statistics of Indigo-96d2da3

Local clock offset: -0.566 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 308.60 Mbit/s
  95th percentile per-packet one-way delay: 86.796 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 308.60 Mbit/s
  95th percentile per-packet one-way delay: 86.796 ms
  Loss rate: 0.25%
Run 3: Report of Indigo-96d2da3 — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 307.39 Mbit/s)
- Flow 1 egress (mean 308.60 Mbit/s)

![Graph showing packet delay over time]

- Flow 1 (95th percentile 86.80 ms)
Run 4: Statistics of Indigo-96d2da3

Start at: 2018-11-15 21:26:40
End at: 2018-11-15 21:27:10
Local clock offset: 0.657 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 296.98 Mbit/s
95th percentile per-packet one-way delay: 86.767 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 296.98 Mbit/s
95th percentile per-packet one-way delay: 86.767 ms
Loss rate: 0.42%
Run 4: Report of Indigo-96d2da3 — Data Link

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

- Flow 1 ingress (mean 297.05 Mbit/s)
- Flow 1 egress (mean 296.98 Mbit/s)

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

- Flow 1 (95th percentile 86.77 ms)
Run 5: Statistics of Indigo-96d2da3

Local clock offset: 0.488 ms
Remote clock offset: -0.388 ms

# Below is generated by plot.py at 2018-11-15 23:03:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 295.18 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 295.18 Mbit/s
95th percentile per-packet one-way delay: 86.705 ms
Loss rate: 0.25%
Run 5: Report of Indigo-96d2da3 — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 294.84 Mb/s)
- Flow 1 egress (mean 295.18 Mb/s)

![Graph 2: Packet Delay (ms)]

- Flow 1 (95th percentile 86.70 ms)
Run 1: Statistics of LEDBAT

End at: 2018-11-15 20:00:25
Local clock offset: -1.148 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-11-15 23:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.61 Mbit/s
95th percentile per-packet one-way delay: 57.754 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 28.61 Mbit/s
95th percentile per-packet one-way delay: 57.754 ms
Loss rate: 0.76%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDEBAT

Local clock offset: -1.212 ms
Remote clock offset: 0.367 ms

# Below is generated by plot.py at 2018-11-15 23:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.95 Mbit/s
95th percentile per-packet one-way delay: 57.781 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 26.95 Mbit/s
95th percentile per-packet one-way delay: 57.781 ms
Loss rate: 0.78%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-11-15 20:56:04
End at: 2018-11-15 20:56:34
Local clock offset: -0.779 ms
Remote clock offset: -0.847 ms

# Below is generated by plot.py at 2018-11-15 23:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 26.70 Mbit/s
95th percentile per-packet one-way delay: 58.780 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 26.70 Mbit/s
95th percentile per-packet one-way delay: 58.780 ms
Loss rate: 0.79%
Run 3: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 26.80 Mbit/s)
- **Flow 1 egress** (mean 26.70 Mbit/s)

![Graph 2: End-to-End Delay vs Time](image)

- **Flow 1** (95th percentile 38.78 ms)
Run 4: Statistics of LEDBAT

End at: 2018-11-15 21:24:04
Local clock offset: 0.515 ms
Remote clock offset: -0.726 ms

# Below is generated by plot.py at 2018-11-15 23:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.31 Mbit/s
95th percentile per-packet one-way delay: 59.181 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 28.31 Mbit/s
95th percentile per-packet one-way delay: 59.181 ms
Loss rate: 0.76%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 28.42 Mbps)
- Flow 1 egress (mean 28.31 Mbps)

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

- Flow 1 (95th percentile 59.18 ms)
Run 5: Statistics of LEDBAT

Local clock offset: 0.403 ms
Remote clock offset: 0.277 ms

# Below is generated by plot.py at 2018-11-15 23:03:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.07 Mbit/s
95th percentile per-packet one-way delay: 58.646 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 28.07 Mbit/s
95th percentile per-packet one-way delay: 58.646 ms
Loss rate: 0.77%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Indigo-Muses

Start at: 2018-11-15 20:05:38
End at: 2018-11-15 20:06:08
Local clock offset: -1.002 ms
Remote clock offset: -0.667 ms

# Below is generated by plot.py at 2018-11-15 23:12:28
# Datalink statistics
-- Total of 1 flow:
Average throughput: 668.76 Mbit/s
95th percentile per-packet one-way delay: 80.183 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 668.76 Mbit/s
95th percentile per-packet one-way delay: 80.183 ms
Loss rate: 0.43%
Run 1: Report of Indigo-Muses — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress (mean 669.64 Mbps)**
- **Flow 1 egress (mean 668.76 Mbps)**

**Packet Delay (ms)**

- **Flow 1 (95th percentile 80.18 ms)**
Run 2: Statistics of Indigo-Muses

Start at: 2018-11-15 20:34:02
End at: 2018-11-15 20:34:32
Local clock offset: -1.459 ms
Remote clock offset: 1.205 ms

# Below is generated by plot.py at 2018-11-15 23:12:45
# Datalink statistics
-- Total of 1 flow:
Average throughput: 642.99 Mbit/s
95th percentile per-packet one-way delay: 81.480 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 642.99 Mbit/s
95th percentile per-packet one-way delay: 81.480 ms
Loss rate: 0.46%
Run 2: Report of Indigo-Muses — Data Link
Run 3: Statistics of Indigo-Muses

Start at: 2018-11-15 21:01:46
End at: 2018-11-15 21:02:16
Local clock offset: -0.219 ms
Remote clock offset: 1.134 ms

# Below is generated by plot.py at 2018-11-15 23:14:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 650.70 Mbit/s
95th percentile per-packet one-way delay: 78.962 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 650.70 Mbit/s
95th percentile per-packet one-way delay: 78.962 ms
Loss rate: 0.44%
Run 3: Report of Indigo-Muses — Data Link

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

- Flow 1 ingress (mean 651.06 Mbit/s)
- Flow 1 egress (mean 650.70 Mbit/s)

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

- Flow 1 95th percentile: 78.96 ms
Run 4: Statistics of Indigo-Muses

Local clock offset: 0.048 ms
Remote clock offset: 0.175 ms

# Below is generated by plot.py at 2018-11-15 23:14:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 655.59 Mbit/s
95th percentile per-packet one-way delay: 80.236 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 655.59 Mbit/s
95th percentile per-packet one-way delay: 80.236 ms
Loss rate: 0.41%
Run 4: Report of Indigo-Muses — Data Link
Run 5: Statistics of Indigo-Muses

End at: 2018-11-15 21:58:06
Local clock offset: 0.468 ms
Remote clock offset: 0.258 ms

# Below is generated by plot.py at 2018-11-15 23:14:54
# Datalink statistics
-- Total of 1 flow:
Average throughput: 651.26 Mbit/s
95th percentile per-packet one-way delay: 78.917 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 651.26 Mbit/s
95th percentile per-packet one-way delay: 78.917 ms
Loss rate: 0.43%
Run 5: Report of Indigo-Muses — Data Link

![Graph showing throughput over time for two flows with different mean rates.]

- Flow 1 ingress (mean 651.51 Mbit/s)
- Flow 1 egress (mean 651.26 Mbit/s)

![Graph showing packet delay over time for Flow 1 with 95th percentile delay measurement.]

- Flow 1 (95th percentile 78.92 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-11-15 19:54:46
Local clock offset: -0.68 ms
Remote clock offset: 1.114 ms

# Below is generated by plot.py at 2018-11-15 23:18:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 406.26 Mbit/s
95th percentile per-packet one-way delay: 106.075 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 406.26 Mbit/s
95th percentile per-packet one-way delay: 106.075 ms
Loss rate: 0.46%
Run 1: Report of PCC-Allegro — Data Link

![Graph of throughput over time](image)

- Flow 1 ingress (mean 406.51 Mbit/s)
- Flow 1 egress (mean 406.26 Mbit/s)

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

- Flow 1 (95th percentile 106.08 ms)
Run 2: Statistics of PCC-Allegro

End at: 2018-11-15 20:23:19
Local clock offset: -1.2 ms
Remote clock offset: -0.919 ms

# Below is generated by plot.py at 2018-11-15 23:19:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 464.99 Mbit/s
95th percentile per-packet one-way delay: 173.870 ms
Loss rate: 5.04%
-- Flow 1:
Average throughput: 464.99 Mbit/s
95th percentile per-packet one-way delay: 173.870 ms
Loss rate: 5.04%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 487.74 Mbps)**
- **Flow 1 egress (mean 464.99 Mbps)**

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

- **Flow 1 (95th percentile 173.87 ms)**

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Run 3: Statistics of PCC-Allegro

End at: 2018-11-15 20:51:43
Local clock offset: -0.512 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-11-15 23:20:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 468.93 Mbit/s
95th percentile per-packet one-way delay: 168.674 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 468.93 Mbit/s
95th percentile per-packet one-way delay: 168.674 ms
Loss rate: 2.12%
Run 3: Report of PCC-Allegro — Data Link

![Graph showing throughput and delay over time for Flow 1 ingress and egress.]
Run 4: Statistics of PCC-Allegro

End at: 2018-11-15 21:18:57
Local clock offset: 0.547 ms
Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2018-11-15 23:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 420.26 Mbit/s
95th percentile per-packet one-way delay: 140.927 ms
Loss rate: 1.45%
-- Flow 1:
Average throughput: 420.26 Mbit/s
95th percentile per-packet one-way delay: 140.927 ms
Loss rate: 1.45%
Run 4: Report of PCC-Allegro — Data Link

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

**Throughput (Mbps)**
- **Flow 1 ingress** (mean 424.82 Mbps)
- **Flow 1 egress** (mean 420.26 Mbps)

**Packet delay (ms)**
- **Flow 1 (95th percentile 140.93 ms)**
Run 5: Statistics of PCC-Allegro

End at: 2018-11-15 21:47:21
Local clock offset: 0.622 ms
Remote clock offset: -1.278 ms

# Below is generated by plot.py at 2018-11-15 23:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 393.09 Mbit/s
95th percentile per-packet one-way delay: 176.361 ms
Loss rate: 2.15%
-- Flow 1:
Average throughput: 393.09 Mbit/s
95th percentile per-packet one-way delay: 176.361 ms
Loss rate: 2.15%
Run 5: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 400.18 Mbit/s)
- Flow 1 egress (mean 393.09 Mbit/s)
- Flow 1 (95th percentile 176.36 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-11-15 20:09:48
End at: 2018-11-15 20:10:18
Local clock offset: -0.758 ms
Remote clock offset: -1.293 ms

# Below is generated by plot.py at 2018-11-15 23:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 337.03 Mbit/s
95th percentile per-packet one-way delay: 132.395 ms
Loss rate: 1.17%
-- Flow 1:
Average throughput: 337.03 Mbit/s
95th percentile per-packet one-way delay: 132.395 ms
Loss rate: 1.17%
Run 1: Report of PCC-Expr — Data Link

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

*Flow 1 ingress (mean 339.72 Mbit/s)  Flow 1 egress (mean 337.03 Mbit/s)*

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

*Flow 1 (95th percentile 132.40 ms)*
Run 2: Statistics of PCC-Expr

Start at: 2018-11-15 20:38:12
End at: 2018-11-15 20:38:42
Local clock offset: -1.331 ms
Remote clock offset: -0.207 ms

# Below is generated by plot.py at 2018-11-15 23:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 346.57 Mbit/s
95th percentile per-packet one-way delay: 90.271 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 346.57 Mbit/s
95th percentile per-packet one-way delay: 90.271 ms
Loss rate: 0.74%
Run 2: Report of PCC-Expr — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)
Run 3: Statistics of PCC-Expr

Start at: 2018-11-15 21:05:53
End at: 2018-11-15 21:06:23
Local clock offset: -0.034 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-11-15 23:29:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 340.11 Mbit/s
95th percentile per-packet one-way delay: 149.114 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 340.11 Mbit/s
95th percentile per-packet one-way delay: 149.114 ms
Loss rate: 1.85%
Run 3: Report of PCC-Expr — Data Link

![Graph of Throughput and RTT over time]

- Flow 1 ingress (mean 345.18 Mbit/s)
- Flow 1 egress (mean 340.11 Mbit/s)

![Graph of Packet Delivery Ratio over time]

- Flow 1 (95th percentile 149.11 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-11-15 21:33:45
End at: 2018-11-15 21:34:15
Local clock offset: 0.269 ms
Remote clock offset: -0.114 ms

# Below is generated by plot.py at 2018-11-15 23:31:17
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 332.62 Mbit/s
  95th percentile per-packet one-way delay: 175.216 ms
  Loss rate: 11.83%
-- Flow 1:
  Average throughput: 332.62 Mbit/s
  95th percentile per-packet one-way delay: 175.216 ms
  Loss rate: 11.83%
Run 4: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 375.73 Mbit/s)
- Flow 1 egress (mean 332.62 Mbit/s)
- Flow 1 (95th percentile 175.22 ms)
Run 5: Statistics of PCC-Expr

Start at: 2018-11-15 22:01:50
End at: 2018-11-15 22:02:20
Local clock offset: 0.489 ms
Remote clock offset: 0.269 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 332.64 Mbit/s
95th percentile per-packet one-way delay: 148.949 ms
Loss rate: 1.94%
-- Flow 1:
Average throughput: 332.64 Mbit/s
95th percentile per-packet one-way delay: 148.949 ms
Loss rate: 1.94%
Run 5: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-11-15 20:07:27
End at: 2018-11-15 20:07:57
Local clock offset: -0.95 ms
Remote clock offset: 0.033 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 57.67 Mbit/s
  95th percentile per-packet one-way delay: 60.535 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 57.67 Mbit/s
  95th percentile per-packet one-way delay: 60.535 ms
  Loss rate: 0.62%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-11-15 20:35:51
End at: 2018-11-15 20:36:21
Local clock offset: -1.378 ms
Remote clock offset: -0.229 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 56.923 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 62.08 Mbit/s
95th percentile per-packet one-way delay: 56.923 ms
Loss rate: 0.56%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-11-15 21:03:32
End at: 2018-11-15 21:04:02
Local clock offset: 0.113 ms
Remote clock offset: -0.836 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 58.014 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 58.014 ms
Loss rate: 0.72%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

End at: 2018-11-15 21:31:54
Local clock offset: 0.272 ms
Remote clock offset: -0.68 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 57.924 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 52.18 Mbit/s
95th percentile per-packet one-way delay: 57.924 ms
Loss rate: 0.67%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Local clock offset: 0.866 ms
Remote clock offset: 0.415 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 57.387 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 64.64 Mbit/s
95th percentile per-packet one-way delay: 57.387 ms
Loss rate: 0.56%
Run 5: Report of QUIC Cubic — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 64.75 Mbit/s)  Flow 1 egress (mean 64.64 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 57.39 ms)
Run 1: Statistics of SCReAM

Local clock offset: -1.127 ms
Remote clock offset: 1.234 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 55.599 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 55.599 ms
  Loss rate: 0.39%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

End at: 2018-11-15 20:17:29
Local clock offset: -1.104 ms
Remote clock offset: -0.157 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.476 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.476 ms
Loss rate: 0.39%
Run 2: Report of SCReAM — Data Link

The first graph shows the throughput (Mbps) over time (s). The graph has two lines:
- Dashed line: Flow 1 ingress (mean 0.22 Mbps)
- Solid line: Flow 1 egress (mean 0.22 Mbps)

The second graph displays the per-packet one-way delay (ms) over time (s). The graph has one line:
- Line: Flow 1 (95th percentile 57.48 ms)
Run 3: Statistics of SCReAM

Start at: 2018-11-15 20:45:10
End at: 2018-11-15 20:45:40
Local clock offset: -1.428 ms
Remote clock offset: -0.214 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.951 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.951 ms
Loss rate: 0.39%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-11-15 21:12:38
Local clock offset: 0.081 ms
Remote clock offset: -0.223 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.312 ms
  Loss rate: 0.38%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.312 ms
  Loss rate: 0.38%
Run 4: Report of SCReAM — Data Link

![Graph showing throughput and delay over time]

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

- Flow 1 95th percentile 57.31 ms
Run 5: Statistics of SCReAM

End at: 2018-11-15 21:41:17
Local clock offset: 0.258 ms
Remote clock offset: 0.692 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.961 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.961 ms
Loss rate: 0.39%
Run 5: Report of SCReAM — Data Link

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**Throughput (Mbps)**

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

**Packet Round Trip Delay (ms)**

- Flow 1 (95th percentile 59.96 ms)
Run 1: Statistics of Sprout

Start at: 2018-11-15 20:08:39
End at: 2018-11-15 20:09:09
Local clock offset: -1.252 ms
Remote clock offset: -0.175 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 57.967 ms
Loss rate: 0.46%

-- Flow 1:
Average throughput: 7.46 Mbit/s
95th percentile per-packet one-way delay: 57.967 ms
Loss rate: 0.46%
Run 1: Report of Sprout — Data Link

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

- Dashed line: Flow 1 ingress (mean 7.48 Mbit/s)
- Solid line: Flow 1 egress (mean 7.46 Mbit/s)

![Another graph showing packet delay over time.](image-url)

- Dotted line: Flow 1 (95th percentile 57.97 ms)
Run 2: Statistics of Sprout

Start at: 2018-11-15 20:37:03
End at: 2018-11-15 20:37:33
Local clock offset: −1.763 ms
Remote clock offset: 1.296 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 59.309 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 7.07 Mbit/s
95th percentile per-packet one-way delay: 59.309 ms
Loss rate: 0.41%
Run 2: Report of Sprout — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Y-axis from 0 to 8
  - X-axis from 0 to 30 (in seconds)
- **Graph Lines:**
  - "Flow 1 ingress (mean 7.07 Mbit/s)"
  - "Flow 1 egress (mean 7.07 Mbit/s)"

**Graph 2:**
- **Round-trip one way delay (ms):**
  - Y-axis from 58.50 to 60.00
  - X-axis from 0 to 30 (in seconds)
- **Graph Lines:**
  - "Flow 1 (95th percentile 59.31 ms)"
Run 3: Statistics of Sprout

Start at: 2018-11-15 21:04:44
End at: 2018-11-15 21:05:14
Local clock offset: -0.116 ms
Remote clock offset: 1.238 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 56.369 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 7.71 Mbit/s
95th percentile per-packet one-way delay: 56.369 ms
Loss rate: 0.43%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

End at: 2018-11-15 21:33:06
Local clock offset: -0.137 ms
Remote clock offset: -0.595 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 58.223 ms
Loss rate: 0.43%

-- Flow 1:
Average throughput: 7.82 Mbit/s
95th percentile per-packet one-way delay: 58.223 ms
Loss rate: 0.43%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Start at: 2018-11-15 22:00:41
End at: 2018-11-15 22:01:11
Local clock offset: 0.41 ms
Remote clock offset: 0.356 ms

# Below is generated by plot.py at 2018-11-15 23:32:48
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 57.672 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 7.72 Mbit/s
95th percentile per-packet one-way delay: 57.672 ms
Loss rate: 0.43%
Run 5: Report of Sprout — Data Link

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

**Throughput (Mbps)**

- **Flow 1 ingress (mean 7.73 Mbps)**
- **Flow 1 egress (mean 7.72 Mbps)**

**Packet Delay (ms)**

- **Flow 1 (95th percentile 57.67 ms)**

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Run 1: Statistics of TaoVA-100x

End at: 2018-11-15 20:14:15
Local clock offset: -0.766 ms
Remote clock offset: -0.128 ms

# Below is generated by plot.py at 2018-11-15 23:36:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 228.99 Mbit/s
95th percentile per-packet one-way delay: 57.597 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 228.99 Mbit/s
95th percentile per-packet one-way delay: 57.597 ms
Loss rate: 0.37%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-11-15 20:41:51
End at: 2018-11-15 20:42:21
Local clock offset: -0.949 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2018-11-15 23:36:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 224.87 Mbit/s
95th percentile per-packet one-way delay: 57.805 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 224.87 Mbit/s
95th percentile per-packet one-way delay: 57.805 ms
Loss rate: 0.40%
Run 2: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 224.90 Mbit/s)
- Flow 1 egress (mean 224.87 Mbit/s)

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

- Flow 1 (95th percentile 57.80 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2018-11-15 21:09:19
End at: 2018-11-15 21:09:49
Local clock offset: -0.089 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2018-11-15 23:37:09
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.59 Mbit/s
95th percentile per-packet one-way delay: 57.358 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 227.59 Mbit/s
95th percentile per-packet one-way delay: 57.358 ms
Loss rate: 0.44%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 227.72 Mbit/s)**
- **Flow 1 egress (mean 227.59 Mbit/s)**

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

- **Flow 1 (95th percentile 57.36 ms)**
Run 4: Statistics of TaoVA-100x

Local clock offset: 0.694 ms  
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-11-15 23:37:09  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 219.39 Mbit/s  
95th percentile per-packet one-way delay: 61.209 ms  
Loss rate: 0.40%  
-- Flow 1:  
Average throughput: 219.39 Mbit/s  
95th percentile per-packet one-way delay: 61.209 ms  
Loss rate: 0.40%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 219.40 Mbit/s)
- Flow 1 egress (mean 219.39 Mbit/s)

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

- Flow 1 (95th percentile 61.21 ms)
Run 5: Statistics of TaoVA-100x

End at: 2018-11-15 22:05:57
Local clock offset: 0.124 ms
Remote clock offset: 0.429 ms

# Below is generated by plot.py at 2018-11-15 23:37:10
# Datalink statistics
-- Total of 1 flow:
Average throughput: 225.11 Mbit/s
95th percentile per-packet one-way delay: 56.690 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 225.11 Mbit/s
95th percentile per-packet one-way delay: 56.690 ms
Loss rate: 0.40%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-11-15 20:01:06
End at: 2018-11-15 20:01:36
Local clock offset: -1.149 ms
Remote clock offset: 0.466 ms

# Below is generated by plot.py at 2018-11-15 23:38:55
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 489.51 Mbit/s
  95th percentile per-packet one-way delay: 57.329 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 489.51 Mbit/s
  95th percentile per-packet one-way delay: 57.329 ms
  Loss rate: 0.40%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Local clock offset: -1.0 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-11-15 23:43:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 562.21 Mbit/s
95th percentile per-packet one-way delay: 61.515 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 562.21 Mbit/s
95th percentile per-packet one-way delay: 61.515 ms
Loss rate: 0.33%
Run 2: Report of TCP Vegas — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 3: Statistics of TCP Vegas

End at: 2018-11-15 20:57:44
Local clock offset: -0.823 ms
Remote clock offset: -0.355 ms

# Below is generated by plot.py at 2018-11-15 23:45:49
# Datalink statistics
-- Total of 1 flow:
Average throughput: 568.51 Mbit/s
95th percentile per-packet one-way delay: 65.688 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 568.51 Mbit/s
95th percentile per-packet one-way delay: 65.688 ms
Loss rate: 0.34%
Run 3: Report of TCP Vegas — Data Link

![Graph showing network throughput over time]

**Throughput (kbps)**

- **Flow 1 ingress** (mean 568.18 Mbit/s)
- **Flow 1 egress** (mean 568.51 Mbit/s)

![Graph showing per-packet delay over time]

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

- **Flow 1 (95th percentile 65.69 ms)**
Run 4: Statistics of TCP Vegas

End at: 2018-11-15 21:25:16
Local clock offset: 0.227 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-11-15 23:48:45
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 574.30 Mbit/s
  95th percentile per-packet one-way delay: 66.768 ms
  Loss rate: 0.33%
-- Flow 1:
  Average throughput: 574.30 Mbit/s
  95th percentile per-packet one-way delay: 66.768 ms
  Loss rate: 0.33%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 574.02 Mbit/s)
- Flow 1 egress (mean 574.30 Mbit/s)

![Graph showing packet delay over time.]

- Flow 1 (95th percentile 66.77 ms)
Run 5: Statistics of TCP Vegas

Start at: 2018-11-15 21:52:54
Local clock offset: 0.064 ms
Remote clock offset: 0.097 ms

# Below is generated by plot.py at 2018-11-15 23:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 589.62 Mbit/s
95th percentile per-packet one-way delay: 63.961 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 589.62 Mbit/s
95th percentile per-packet one-way delay: 63.961 ms
Loss rate: 0.40%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-11-15 20:04:14
End at: 2018-11-15 20:04:44
Local clock offset: -1.217 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2018-11-15 23:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 134.49 Mbit/s
95th percentile per-packet one-way delay: 86.112 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 134.49 Mbit/s
95th percentile per-packet one-way delay: 86.112 ms
Loss rate: 0.83%
Run 1: Report of Verus — Data Link

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**Throughput (Mbps):**

- Flow 1 ingress (mean 135.10 Mbps)
- Flow 1 egress (mean 134.49 Mbps)

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

- Flow 1 (95th percentile 86.11 ms)
Run 2: Statistics of Verus

Start at: 2018-11-15 20:32:36
End at: 2018-11-15 20:33:06
Local clock offset: -1.102 ms
Remote clock offset: 1.086 ms

# Below is generated by plot.py at 2018-11-15 23:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 164.30 Mbit/s
95th percentile per-packet one-way delay: 150.271 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 164.30 Mbit/s
95th percentile per-packet one-way delay: 150.271 ms
Loss rate: 0.03%
Run 2: Report of Verus — Data Link

![Throughput Graph]

![Packet Delay Graph]

- Flow 1 ingress (mean 163.69 Mbit/s)
- Flow 1 egress (mean 164.30 Mbit/s)
- Flow 1 (95th percentile 150.27 ms)
Run 3: Statistics of Verus

Start at: 2018-11-15 21:00:17
End at: 2018-11-15 21:00:47
Local clock offset: -0.679 ms
Remote clock offset: -0.351 ms

# Below is generated by plot.py at 2018-11-15 23:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 199.80 Mbit/s
95th percentile per-packet one-way delay: 164.812 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 199.80 Mbit/s
95th percentile per-packet one-way delay: 164.812 ms
Loss rate: 0.47%
Run 3: Report of Verus — Data Link

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

Flow 1 ingress (mean 200.06 Mbit/s)  Flow 1 egress (mean 199.80 Mbit/s)

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

Flow 1 (95th percentile 164.81 ms)
Run 4: Statistics of Verus

Local clock offset: 0.29 ms
Remote clock offset: -0.264 ms

# Below is generated by plot.py at 2018-11-15 23:49:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 126.16 Mbit/s
95th percentile per-packet one-way delay: 73.024 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 126.16 Mbit/s
95th percentile per-packet one-way delay: 73.024 ms
Loss rate: 0.89%
Run 4: Report of Verus — Data Link

There are two graphs in the image:

1. The top graph shows the throughput (Mbps) over time (s) for two flows: Flow 1 ingress (mean 126.31 Mbps) and Flow 1 egress (mean 126.16 Mbps).

2. The bottom graph shows the per-packet one-way delay (ms) over time (s) for Flow 1 (95th percentile 73.02 ms).
Run 5: Statistics of Verus

Start at: 2018-11-15 21:56:02
End at: 2018-11-15 21:56:32
Local clock offset: 0.399 ms
Remote clock offset: 0.265 ms

# Below is generated by plot.py at 2018-11-15 23:49:56
# Datalink statistics
-- Total of 1 flow:
Average throughput: 201.59 Mbit/s
95th percentile per-packet one-way delay: 212.709 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 201.59 Mbit/s
95th percentile per-packet one-way delay: 212.709 ms
Loss rate: 6.63%
Run 5: Report of Verus — Data Link

![Graph of throughput and packet delay over time]

- Flow 1 ingress (mean 215.84 Mbit/s)
- Flow 1 egress (mean 201.59 Mbit/s)

![Graph of packet delay over time]

- Flow 1 (95th percentile 212.71 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-11-15 19:53:03
End at: 2018-11-15 19:53:33
Local clock offset: -0.829 ms
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-11-15 23:50:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 357.88 Mbit/s
95th percentile per-packet one-way delay: 58.131 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 357.88 Mbit/s
95th percentile per-packet one-way delay: 58.131 ms
Loss rate: 0.50%
Run 1: Report of PCC-Vivace — Data Link

![Graph of throughput and packet delay over time for Flow 1, showing ingress and egress rates and 95th percentile delay.]
Run 2: Statistics of PCC-Vivace

Local clock offset: -1.194 ms
Remote clock offset: -0.333 ms

# Below is generated by plot.py at 2018-11-15 23:51:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 410.90 Mbit/s
95th percentile per-packet one-way delay: 71.430 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 410.90 Mbit/s
95th percentile per-packet one-way delay: 71.430 ms
Loss rate: 0.43%
Run 2: Report of PCC-Vivace — Data Link

**Throughput Analysis**

- **Flow 1 ingress (mean 411.12 Mbit/s)**
- **Flow 1 egress (mean 410.90 Mbit/s)**

**Delay Analysis**

- **Flow 1 (95th percentile 71.43 ms)**
Run 3: Statistics of PCC-Vivace

End at: 2018-11-15 20:50:02
Local clock offset: -1.141 ms
Remote clock offset: -0.274 ms

# Below is generated by plot.py at 2018-11-15 23:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 411.47 Mbit/s
95th percentile per-packet one-way delay: 58.680 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 411.47 Mbit/s
95th percentile per-packet one-way delay: 58.680 ms
Loss rate: 0.51%
Run 3: Report of PCC-Vivace — Data Link

![Graph 1: Throughput (Mbps)](image1)
- **Flow 1 ingress** (mean 411.98 Mbit/s)
- **Flow 1 egress** (mean 411.47 Mbit/s)

![Graph 2: Per packet one way delay (ms)](image2)
- **Flow 1 (95th percentile 58.68 ms)**
Run 4: Statistics of PCC-Vivace

End at: 2018-11-15 21:17:18
Local clock offset: -0.06 ms
Remote clock offset: -0.343 ms

# Below is generated by plot.py at 2018-11-15 23:51:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 375.45 Mbit/s
95th percentile per-packet one-way delay: 59.023 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 375.45 Mbit/s
95th percentile per-packet one-way delay: 59.023 ms
Loss rate: 0.46%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-11-15 21:45:10
End at: 2018-11-15 21:45:40
Local clock offset: 0.587 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 402.36 Mbit/s
95th percentile per-packet one-way delay: 93.754 ms
Loss rate: 0.36%

-- Flow 1:
Average throughput: 402.36 Mbit/s
95th percentile per-packet one-way delay: 93.754 ms
Loss rate: 0.36%
Run 5: Report of PCC-Vivace — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 402.24 Mbit/s)**
- **Flow 1 egress (mean 402.36 Mbit/s)**

![Graph 2](image2)

- **Flow 1 (95th percentile 93.75 ms)**
Run 1: Statistics of WebRTC media

Start at: 2018-11-15 19:50:03
End at: 2018-11-15 19:50:33
Local clock offset: -0.995 ms
Remote clock offset: 0.419 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 59.701 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 1.63 Mbit/s
95th percentile per-packet one-way delay: 59.701 ms
Loss rate: 0.64%
Run 1: Report of WebRTC media — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 1.63 Mbit/s)**
- **Flow 1 egress (mean 1.63 Mbit/s)**

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

- **Flow 1 (95th percentile 59.70 ms)**
Run 2: Statistics of WebRTC media

Start at: 2018-11-15 20:18:07
End at: 2018-11-15 20:18:37
Local clock offset: -0.838 ms
Remote clock offset: -0.401 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 58.289 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 58.289 ms
Loss rate: 0.44%
Run 2: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss over time]

- **Throughput (Mb/s)**
  - **Flow 1 ingress (mean 2.04 Mb/s)**
  - **Flow 1 egress (mean 2.04 Mb/s)**

- **Packet loss over delay (ms)**
  - **Flow 1 (95th percentile 58.29 ms)**

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Run 3: Statistics of WebRTC media

Local clock offset: -1.223 ms
Remote clock offset: -0.93 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 2.07 Mbit/s
  95th percentile per-packet one-way delay: 58.558 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 2.07 Mbit/s
  95th percentile per-packet one-way delay: 58.558 ms
  Loss rate: 0.45%
Run 3: Report of WebRTC media — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 4: Statistics of WebRTC media

End at: 2018-11-15 21:14:16
Local clock offset: 0.534 ms
Remote clock offset: 0.502 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 57.317 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 2.02 Mbit/s
95th percentile per-packet one-way delay: 57.317 ms
Loss rate: 0.44%
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 2.02 Mbps)
- Flow 1 egress (mean 2.02 Mbps)

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

- Flow 1 95th percentile 57.32 ms
Run 5: Statistics of WebRTC media

Local clock offset: 0.323 ms
Remote clock offset: 0.907 ms

# Below is generated by plot.py at 2018-11-15 23:51:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 2.08 Mbit/s
95th percentile per-packet one-way delay: 56.848 ms
Loss rate: 0.59%
Run 5: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 2.08 Mbit/s)**
- **Flow 1 egress (mean 2.08 Mbit/s)**

![Graph 2: Per-packet delays vs Time](image2)

- **Flow 1 (99th percentile 56.85 ms)**