Pantheon Report

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

Git summary:
branch: master @ 715dc5f09d172e4196999f6f17f1cb4c45064f212
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/fillp-sheep @ 30060ab034deb3424347f5cc3db86198eac35d2a
third_party/genericCC @ d0153f8e594aa89e893b032143cedb2fe58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edbf90c077e64d
third_party/libutp @ b3465b942e82862f2b179eaaab4a906ce6bb7cf3c39
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f82cbe8f464b1b39
third_party/pcc @ 1af9c958fa0d66d18b623c091a55f8c872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08f29b24f974ab
third_party/proto-quic @ 77961f1a82733a86b42e1bc8143ec978f3c3f42
third_party/scream-reproduce @ f099118d1421d3131bf11ff1964974e1da3b3b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366c35c6178b01e31d4a46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2ba68e211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE London to GCE Tokyo, 10 runs of 30s each per scheme (mean of all runs by scheme)

test from GCE London to GCE Tokyo, 10 runs of 30s each per scheme
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<tr>
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<td>37.87</td>
<td>113.55</td>
<td>0.78</td>
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<tr>
<td>Verus</td>
<td>10</td>
<td>195.38</td>
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<td>347.47</td>
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<td>10</td>
<td>1.85</td>
<td>111.43</td>
<td>0.87</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

End at: 2018-06-29 23:23:45
Local clock offset: 0.15 ms
Remote clock offset: 0.002 ms

# Below is generated by plot.py at 2018-06-30 02:57:15
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.73 Mbit/s
95th percentile per-packet one-way delay: 111.755 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 96.73 Mbit/s
95th percentile per-packet one-way delay: 111.755 ms
Loss rate: 0.75%
Run 1: Report of TCP BBR — Data Link

![Throughput Graph]

![Per Packet One-Way Delay Graph]

Flow 1 ingress (mean 96.74 Mbit/s)  Flow 1 egress (mean 96.73 Mbit/s)

Flow 1 (95th percentile 111.75 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-06-29 23:45:48
End at: 2018-06-29 23:46:18
Local clock offset: 0.25 ms
Remote clock offset: 0.426 ms

# Below is generated by plot.py at 2018-06-30 02:57:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.51 Mbit/s
95th percentile per-packet one-way delay: 111.409 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 98.51 Mbit/s
95th percentile per-packet one-way delay: 111.409 ms
Loss rate: 0.73%
Run 2: Report of TCP BBR — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 98.50 Mbps)
  - Flow 1 egress (mean 98.51 Mbps)

- **Packet Delay (ms)**:
  - Flow 1 (95th percentile 111.41 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-06-30 00:07:51
End at: 2018-06-30 00:08:21
Local clock offset: 1.273 ms
Remote clock offset: 0.107 ms

# Below is generated by plot.py at 2018-06-30 02:57:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 112.697 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 96.52 Mbit/s
95th percentile per-packet one-way delay: 112.697 ms
Loss rate: 0.85%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-06-30 00:29:51
End at: 2018-06-30 00:30:21
Local clock offset: 0.027 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2018-06-30 02:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 111.412 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 101.88 Mbit/s
95th percentile per-packet one-way delay: 111.412 ms
Loss rate: 0.75%
Run 4: Report of TCP BBR — Data Link

![Graph showing Throughput vs Time for Flow 1 ingress and egress]

![Graph showing Per packet one way delay vs Time for Flow 1]
Run 5: Statistics of TCP BBR

Start at: 2018-06-30 00:52:12
End at: 2018-06-30 00:52:42
Local clock offset: 0.137 ms
Remote clock offset: 0.463 ms

# Below is generated by plot.py at 2018-06-30 02:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 97.72 Mbit/s
95th percentile per-packet one-way delay: 112.256 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 97.72 Mbit/s
95th percentile per-packet one-way delay: 112.256 ms
Loss rate: 0.83%
Run 5: Report of TCP BBR — Data Link

![Graph of Throughput (Mbps)]

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

Flow 1 ingress (mean 97.74 Mbit/s)
Flow 1 egress (mean 97.72 Mbit/s)
Flow 1 (95th percentile 132.26 ms)
Run 6: Statistics of TCP BBR

Start at: 2018-06-30 01:14:24
End at: 2018-06-30 01:14:54
Local clock offset: -0.001 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-30 02:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.17 Mbit/s
95th percentile per-packet one-way delay: 112.372 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 99.17 Mbit/s
95th percentile per-packet one-way delay: 112.372 ms
Loss rate: 0.73%
Run 6: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 99.15 Mbit/s)
- Flow 1 egress (mean 99.17 Mbit/s)
Run 7: Statistics of TCP BBR

Start at: 2018-06-30 01:36:57
End at: 2018-06-30 01:37:27
Local clock offset: 0.279 ms
Remote clock offset: -0.005 ms

# Below is generated by plot.py at 2018-06-30 02:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.89 Mbit/s
95th percentile per-packet one-way delay: 111.819 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 99.89 Mbit/s
95th percentile per-packet one-way delay: 111.819 ms
Loss rate: 0.71%
Run 7: Report of TCP BBR — Data Link
Run 8: Statistics of TCP BBR

Start at: 2018-06-30 01:59:37
End at: 2018-06-30 02:00:07
Local clock offset: 0.092 ms
Remote clock offset: -0.383 ms

# Below is generated by plot.py at 2018-06-30 02:57:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 99.22 Mbit/s
95th percentile per-packet one-way delay: 112.362 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 99.22 Mbit/s
95th percentile per-packet one-way delay: 112.362 ms
Loss rate: 0.74%
Run 8: Report of TCP BBR — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 9: Statistics of TCP BBR

Start at: 2018-06-30 02:21:58
End at: 2018-06-30 02:22:28
Local clock offset: -0.085 ms
Remote clock offset: -0.393 ms

# Below is generated by plot.py at 2018-06-30 02:58:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 96.24 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.75%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-06-30 02:44:08
End at: 2018-06-30 02:44:38
Local clock offset: 1.354 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-30 02:58:31
# Datalink statistics
-- Total of 1 flow:
Average throughput: 98.10 Mbit/s
95th percentile per-packet one-way delay: 113.166 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 98.10 Mbit/s
95th percentile per-packet one-way delay: 113.166 ms
Loss rate: 0.79%
Run 1: Statistics of Copa

End at: 2018-06-29 23:14:01
Local clock offset: -0.255 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-30 03:01:41
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 171.04 Mbit/s
  95th percentile per-packet one-way delay: 116.882 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 171.04 Mbit/s
  95th percentile per-packet one-way delay: 116.882 ms
  Loss rate: 0.72%
Run 1: Report of Copa — Data Link

![Graph showing throughput and latency](Image)

- Flow 1 ingress (mean 171.14 Mbit/s)
- Flow 1 egress (mean 171.04 Mbit/s)

![Graph showing packet delay](Image)

- Flow 1 (95th percentile 116.88 ms)
Run 2: Statistics of Copa

Start at: 2018-06-29 23:35:44
End at: 2018-06-29 23:36:14
Local clock offset: -0.033 ms
Remote clock offset: 0.46 ms

# Below is generated by plot.py at 2018-06-30 03:05:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 267.17 Mbit/s
95th percentile per-packet one-way delay: 124.509 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 267.17 Mbit/s
95th percentile per-packet one-way delay: 124.509 ms
Loss rate: 1.07%
Run 2: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]
- Flow 1 ingress (mean 268.07 Mbit/s)
- Flow 1 egress (mean 267.17 Mbit/s)

![Graph 2: Per packet one way delay (ms)]
- Flow 1 (95th percentile 124.53 ms)
Run 3: Statistics of Copa

Start at: 2018-06-29 23:58:12
End at: 2018-06-29 23:58:42
Local clock offset: 0.156 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-06-30 03:05:16
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 207.53 Mbit/s
  95th percentile per-packet one-way delay: 121.516 ms
  Loss rate: 1.34%
-- Flow 1:
  Average throughput: 207.53 Mbit/s
  95th percentile per-packet one-way delay: 121.516 ms
  Loss rate: 1.34%
Run 3: Report of Copa — Data Link

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

- Flow 1 ingress (mean 208.79 Mbit/s)
- Flow 1 egress (mean 207.53 Mbit/s)

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

- Flow 1 (95th percentile 121.52 ms)
Run 4: Statistics of Copa

Start at: 2018-06-30 00:20:22
End at: 2018-06-30 00:20:52
Local clock offset: ~1.236 ms
Remote clock offset: 0.463 ms

# Below is generated by plot.py at 2018-06-30 03:05:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 157.73 Mbit/s
95th percentile per-packet one-way delay: 120.181 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 157.73 Mbit/s
95th percentile per-packet one-way delay: 120.181 ms
Loss rate: 1.20%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 158.43 Mbit/s)
- Flow 1 egress (mean 157.73 Mbit/s)
Run 5: Statistics of Copa

Start at: 2018-06-30 00:42:12
End at: 2018-06-30 00:42:42
Local clock offset: -1.245 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-30 03:05:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.82 Mbit/s
95th percentile per-packet one-way delay: 129.998 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 239.82 Mbit/s
95th percentile per-packet one-way delay: 129.998 ms
Loss rate: 0.78%
Run 5: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

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

Flow 1 ingress (mean 239.88 Mbit/s)  Flow 1 egress (mean 239.82 Mbits)

Flow 1 (95th percentile 130.00 ms)
Run 6: Statistics of Copa

Start at: 2018-06-30 01:04:35
End at: 2018-06-30 01:05:05
Local clock offset: -0.131 ms
Remote clock offset: 0.475 ms

# Below is generated by plot.py at 2018-06-30 03:05:16
# Datalink statistics
-- Total of 1 flow:
Average throughput: 159.23 Mbit/s
95th percentile per-packet one-way delay: 137.781 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 159.23 Mbit/s
95th percentile per-packet one-way delay: 137.781 ms
Loss rate: 1.07%
Run 6: Report of Copa — Data Link

![Graph of throughput and delay over time for Flow 1 ingressing and egressing with mean values and 95th percentile delay.]

- Flow 1 ingress (mean 159.77 Mbit/s)
- Flow 1 egress (mean 159.23 Mbit/s)

- Flow 1 (95th percentile 137.78 ms)
Run 7: Statistics of Copa

Start at: 2018-06-30 01:26:55
End at: 2018-06-30 01:27:25
Local clock offset: -0.028 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-30 03:05:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 239.39 Mbit/s
95th percentile per-packet one-way delay: 119.819 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 239.39 Mbit/s
95th percentile per-packet one-way delay: 119.819 ms
Loss rate: 0.54%
Run 7: Report of Copa — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with mean speeds of 238.91 Mbps and 239.39 Mbps respectively.](image1)

![Graph showing per packet one way delay for Flow 1 with 95th percentile of 119.82 ms.](image2)
Run 8: Statistics of Copa

Start at: 2018-06-30 01:49:35
End at: 2018-06-30 01:50:05
Local clock offset: 0.08 ms
Remote clock offset: 0.39 ms

# Below is generated by plot.py at 2018-06-30 03:07:22
# Datalink statistics
-- Total of 1 flow:
Average throughput: 294.50 Mbit/s
95th percentile per-packet one-way delay: 135.222 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 294.50 Mbit/s
95th percentile per-packet one-way delay: 135.222 ms
Loss rate: 0.95%
Run 8: Report of Copa — Data Link

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

- Flow 1 ingress (mean 295.74 Mbps)
- Flow 1 egress (mean 294.50 Mbps)

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

- Flow 1 (95th percentile 135.22 ms)
Run 9: Statistics of Copa

Start at: 2018-06-30 02:11:57
End at: 2018-06-30 02:12:27
Local clock offset: 1.402 ms
Remote clock offset: -0.298 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 277.97 Mbit/s
95th percentile per-packet one-way delay: 135.292 ms
Loss rate: 0.93%
-- Flow 1:
Average throughput: 277.97 Mbit/s
95th percentile per-packet one-way delay: 135.292 ms
Loss rate: 0.93%
Run 9: Report of Copa — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 278.59 Mbps)
- Flow 1 egress (mean 277.97 Mbps)

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

- Flow 1 (95th percentile 135.29 ms)
Run 10: Statistics of Copa

Start at: 2018-06-30 02:34:21
End at: 2018-06-30 02:34:51
Local clock offset: 0.216 ms
Remote clock offset: -0.408 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.28 Mbit/s
95th percentile per-packet one-way delay: 119.520 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 151.28 Mbit/s
95th percentile per-packet one-way delay: 119.520 ms
Loss rate: 0.76%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-06-29 23:05:19
End at: 2018-06-29 23:05:49
Local clock offset: -0.118 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 64.44 Mbit/s
95th percentile per-packet one-way delay: 118.574 ms
Loss rate: 1.30%
-- Flow 1:
Average throughput: 64.44 Mbit/s
95th percentile per-packet one-way delay: 118.574 ms
Loss rate: 1.30%
Run 1: Report of TCP Cubic — Data Link

![Graph showing throughput and packet delay over time]

Throughput (Mbit/s)

- **Flow 1 ingress (mean 64.81 Mbit/s)**
- **Flow 1 egress (mean 64.44 Mbit/s)**

Packet Delay (ms)

- **Flow 1 (95th percentile 118.57 ms)**
Run 2: Statistics of TCP Cubic

Start at: 2018-06-29 23:27:30
End at: 2018-06-29 23:28:00
Local clock offset: ~1.296 ms
Remote clock offset: 0.391 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 101.00 Mbit/s
  95th percentile per-packet one-way delay: 117.262 ms
  Loss rate: 0.26%
-- Flow 1:
  Average throughput: 101.00 Mbit/s
  95th percentile per-packet one-way delay: 117.262 ms
  Loss rate: 0.26%
Run 2: Report of TCP Cubic — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 100.51 Mbit/s)
- Flow 1 egress (mean 101.00 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 117.26 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-06-29 23:50:03
End at: 2018-06-29 23:50:33
Local clock offset: -0.477 ms
Remote clock offset: -0.282 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 104.69 Mbit/s
  95th percentile per-packet one-way delay: 118.384 ms
  Loss rate: 0.79%
-- Flow 1:
  Average throughput: 104.69 Mbit/s
  95th percentile per-packet one-way delay: 118.384 ms
  Loss rate: 0.79%
Run 3: Report of TCP Cubic — Data Link

![Graph showing throughput and round trip time over time]
Run 4: Statistics of TCP Cubic

Start at: 2018-06-30 00:12:04
End at: 2018-06-30 00:12:34
Local clock offset: -1.377 ms
Remote clock offset: 0.457 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.87 Mbit/s
95th percentile per-packet one-way delay: 116.901 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 65.87 Mbit/s
95th percentile per-packet one-way delay: 116.901 ms
Loss rate: 1.23%
Run 4: Report of TCP Cubic — Data Link

![Graph 1](image1.png)

*Flow 1 ingress (mean 66.21 Mbit/s)  Flow 1 egress (mean 65.87 Mbit/s)*

![Graph 2](image2.png)

*Flow 1 (95th percentile 116.90 ms)*
Run 5: Statistics of TCP Cubic

Start at: 2018-06-30 00:33:59  
End at: 2018-06-30 00:34:29  
Local clock offset: 0.041 ms  
Remote clock offset: 0.111 ms

# Below is generated by plot.py at 2018-06-30 03:09:37  
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.61 Mbit/s
95th percentile per-packet one-way delay: 118.102 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 74.61 Mbit/s
95th percentile per-packet one-way delay: 118.102 ms
Loss rate: 1.08%
Run 5: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for TCP Cubic data link run 5.]

- Flow 1 ingress (mean 74.87 Mbit/s)
- Flow 1 egress (mean 74.61 Mbit/s)

- Flow 1 (95th percentile 118.10 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-06-30 00:56:28
End at: 2018-06-30 00:56:58
Local clock offset: 1.257 ms
Remote clock offset: -0.303 ms

# Below is generated by plot.py at 2018-06-30 03:09:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.35 Mbit/s
95th percentile per-packet one-way delay: 119.429 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 62.35 Mbit/s
95th percentile per-packet one-way delay: 119.429 ms
Loss rate: 0.73%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-06-30 01:18:40
End at: 2018-06-30 01:19:10
Local clock offset: 0.171 ms
Remote clock offset: 0.078 ms

# Below is generated by plot.py at 2018-06-30 03:09:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 67.39 Mbit/s
95th percentile per-packet one-way delay: 116.665 ms
Loss rate: 1.20%
-- Flow 1:
Average throughput: 67.39 Mbit/s
95th percentile per-packet one-way delay: 116.665 ms
Loss rate: 1.20%
Run 7: Report of TCP Cubic — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 67.70 Mbit/s)
- Flow 1 egress (mean 67.39 Mbit/s)

![Graph 2: Per Packet One Way Delay](image2)

- Flow 1 (95th percentile 116.67 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-06-30 01:41:15
End at: 2018-06-30 01:41:45
Local clock offset: -0.062 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-06-30 03:09:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 104.09 Mbit/s
95th percentile per-packet one-way delay: 118.518 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 104.09 Mbit/s
95th percentile per-packet one-way delay: 118.518 ms
Loss rate: 0.80%
Run 8: Report of TCP Cubic — Data Link

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

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

- Flow 1 ingress (mean 104.16 Mbit/s)
- Flow 1 egress (mean 104.09 Mbit/s)
- Flow 1 (95th percentile 118.52 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-06-30 02:03:53
End at: 2018-06-30 02:04:23
Local clock offset: -0.224 ms
Remote clock offset: -0.376 ms

# Below is generated by plot.py at 2018-06-30 03:09:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 104.02 Mbit/s
95th percentile per-packet one-way delay: 118.882 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 104.02 Mbit/s
95th percentile per-packet one-way delay: 118.882 ms
Loss rate: 0.80%
Run 9: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time.](image-url)
Run 10: Statistics of TCP Cubic

Start at: 2018-06-30 02:26:12
End at: 2018-06-30 02:26:42
Local clock offset: 1.299 ms
Remote clock offset: 0.353 ms

# Below is generated by plot.py at 2018-06-30 03:09:38
# Datalink statistics
-- Total of 1 flow:
Average throughput: 104.24 Mbit/s
95th percentile per-packet one-way delay: 117.618 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 104.24 Mbit/s
95th percentile per-packet one-way delay: 117.618 ms
Loss rate: 0.79%
Run 10: Report of TCP Cubic — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 1: Statistics of FillP

Start at: 2018-06-29 23:11:46
End at: 2018-06-29 23:12:16
Local clock offset: -0.111 ms
Remote clock offset: 0.447 ms

# Below is generated by plot.py at 2018-06-30 03:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 872.22 Mbit/s
95th percentile per-packet one-way delay: 261.484 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 872.22 Mbit/s
95th percentile per-packet one-way delay: 261.484 ms
Loss rate: 1.28%
Run 1: Report of FillP — Data Link

![Graph showing network performance metrics over time for Flow 1 ingress and egress, with throughput and delay measurements.]
Run 2: Statistics of FillP

Start at: 2018-06-29 23:34:02
End at: 2018-06-29 23:34:32
Local clock offset: 0.034 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2018-06-30 03:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 816.79 Mbit/s
95th percentile per-packet one-way delay: 265.986 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 816.79 Mbit/s
95th percentile per-packet one-way delay: 265.986 ms
Loss rate: 2.11%
Run 2: Report of FillP — Data Link
Run 3: Statistics of FillP

Start at: 2018-06-29 23:56:29
End at: 2018-06-29 23:56:59
Local clock offset: 0.088 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2018-06-30 03:23:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 822.78 Mbit/s
95th percentile per-packet one-way delay: 258.553 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 822.78 Mbit/s
95th percentile per-packet one-way delay: 258.553 ms
Loss rate: 0.89%
Run 3: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 824.04 Mbits/s)
- Flow 1 Egress (mean 822.78 Mbits/s)

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

- Flow 1 (95th percentile 258.55 ms)
Run 4: Statistics of FillP

Start at: 2018-06-30 00:18:38
End at: 2018-06-30 00:19:08
Local clock offset: -1.129 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-30 03:23:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 860.71 Mbit/s
95th percentile per-packet one-way delay: 239.802 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 860.71 Mbit/s
95th percentile per-packet one-way delay: 239.802 ms
Loss rate: 1.22%
Run 4: Report of FillP — Data Link

![Bar chart](chart1)

- Flow 1 ingress (mean 864.84 Mbits/s)
- Flow 1 egress (mean 860.71 Mbits/s)

![Bar chart](chart2)

- Flow 1 (95th percentile 239.80 ms)
Run 5: Statistics of FillP

Start at: 2018-06-30 00:40:28
End at: 2018-06-30 00:40:58
Local clock offset: 0.33 ms
Remote clock offset: 0.075 ms

# Below is generated by plot.py at 2018-06-30 03:23:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 833.77 Mbit/s
95th percentile per-packet one-way delay: 187.053 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 833.77 Mbit/s
95th percentile per-packet one-way delay: 187.053 ms
Loss rate: 2.71%
Run 5: Report of FillP — Data Link
Run 6: Statistics of FillP

Start at: 2018-06-30 01:02:53
End at: 2018-06-30 01:03:23
Local clock offset: -1.451 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-06-30 03:23:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 802.39 Mbit/s
95th percentile per-packet one-way delay: 223.456 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 802.39 Mbit/s
95th percentile per-packet one-way delay: 223.456 ms
Loss rate: 2.61%
Run 6: Report of FillP — Data Link

![Data Link Throughput Graph]

- Flow 1 Ingress (mean 817.69 Mbit/s)
- Flow 1 Egress (mean 802.39 Mbit/s)

![Data Link Per-Socket One-Way Delay Graph]

- Flow 1 (95th percentile 223.46 ms)
Run 7: Statistics of FillP

Start at: 2018-06-30 01:25:09
End at: 2018-06-30 01:25:39
Local clock offset: 0.225 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2018-06-30 03:24:33
# Datalink statistics
-- Total of 1 flow:
Average throughput: 868.58 Mbit/s
95th percentile per-packet one-way delay: 173.675 ms
Loss rate: 2.34%
-- Flow 1:
Average throughput: 868.58 Mbit/s
95th percentile per-packet one-way delay: 173.675 ms
Loss rate: 2.34%
Run 7: Report of FillP — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 Ingress (mean 852.71 Mbit/s)
- Flow 1 Egress (mean 868.58 Mbit/s)

![Graph of Per Socket One Way Delay vs Time](image2)

- Flow 1 (95th percentile 173.68 ms)
Run 8: Statistics of FillP

Start at: 2018-06-30 01:47:53
End at: 2018-06-30 01:48:23
Local clock offset: -0.035 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-06-30 03:26:27
# Datalink statistics
-- Total of 1 flow:
Average throughput: 796.60 Mbit/s
95th percentile per-packet one-way delay: 225.262 ms
Loss rate: 4.62%
-- Flow 1:
Average throughput: 796.60 Mbit/s
95th percentile per-packet one-way delay: 225.262 ms
Loss rate: 4.62%
Run 8: Report of FillP — Data Link

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**Graph 1:**
- **Flow 1 Ingress (mean 826.88 Mbit/s)**
- **Flow 1 Egress (mean 796.60 Mbit/s)**

**Graph 2:**
- **Flow 1 (95th percentile 225.26 ms)**
Run 9: Statistics of FillP

Start at: 2018-06-30 02:10:15
End at: 2018-06-30 02:10:45
Local clock offset: -0.129 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-30 03:37:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 794.64 Mbit/s
95th percentile per-packet one-way delay: 243.804 ms
Loss rate: 4.50%
-- Flow 1:
Average throughput: 794.64 Mbit/s
95th percentile per-packet one-way delay: 243.804 ms
Loss rate: 4.50%
Run 9: Report of FillP — Data Link

![Graph of throughput and packet delay over time]

Flow 1 ingress (mean 825.88 Mbits/s)  Flow 1 egress (mean 794.64 Mbits/s)

Flow 1 (95th percentile 243.80 ms)
Run 10: Statistics of FillP

Start at: 2018-06-30 02:32:35
End at: 2018-06-30 02:33:06
Local clock offset: -0.21 ms
Remote clock offset: -0.399 ms

# Below is generated by plot.py at 2018-06-30 03:39:29
# Datalink statistics
-- Total of 1 flow:
Average throughput: 888.28 Mbit/s
95th percentile per-packet one-way delay: 228.950 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 888.28 Mbit/s
95th percentile per-packet one-way delay: 228.950 ms
Loss rate: 1.07%
Run 10: Report of FillIP — Data Link

![Graph of network throughput and packet delay](image-url)
Run 1: Statistics of FillP-Sheep

Start at: 2018-06-29 23:16:10
End at: 2018-06-29 23:16:40
Local clock offset: 1.175 ms
Remote clock offset: 0.429 ms
Run 1: Report of FillP-Sheep — Data Link
Run 2: Statistics of FillP-Sheep

Start at: 2018-06-29 23:38:39
End at: 2018-06-29 23:39:09
Local clock offset: -0.175 ms
Remote clock offset: 0.073 ms
Run 2: Report of FillP-Sheep — Data Link

![Graph 1](image1)

- **Flow 1 ingress (mean 0.00 Mbit/s)**
- **Flow 1 egress (mean 0.00 Mbit/s)**

![Graph 2](image2)

- **Flow 1 95th percentile 111.45 ms**
Run 3: Statistics of FillP-Sheep

Start at: 2018-06-30 00:01:02
End at: 2018-06-30 00:01:32
Local clock offset: 0.224 ms
Remote clock offset: 0.073 ms
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2018-06-30 00:23:02
End at: 2018-06-30 00:23:32
Local clock offset: -1.408 ms
Remote clock offset: 0.414 ms
Run 4: Report of FillP-Sheep — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 5: Statistics of FillP-Sheep

Start at: 2018-06-30 00:45:03
End at: 2018-06-30 00:45:34
Local clock offset: -0.1 ms
Remote clock offset: 0.112 ms
Run 5: Report of FillP-Sheep — Data Link
Run 6: Statistics of FillP-Sheep

Start at: 2018-06-30 01:07:16
End at: 2018-06-30 01:07:46
Local clock offset: ~0.026 ms
Remote clock offset: 0.089 ms
Run 6: Report of FillP-Sheep — Data Link

![Graph showing network throughput and packet delay over time.]
Run 7: Statistics of FillP-Sheep

Start at: 2018-06-30 01:29:47
End at: 2018-06-30 01:30:17
Local clock offset: -0.063 ms
Remote clock offset: -0.011 ms
Run 7: Report of FillP-Sheep — Data Link

![Graph of throughput over time showing periodic variation.]

![Graph of packet one-way delay showing distribution with 95th percentile marked.]

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Run 8: Statistics of FillP-Sheep

Start at: 2018-06-30 01:52:28
End at: 2018-06-30 01:52:58
Local clock offset: 0.997 ms
Remote clock offset: 0.055 ms
Run 8: Report of FillP-Sheep — Data Link

![Data Link Graph]

- Flow 1 ingress (mean 0.00 Mbit/s)
- Flow 1 egress (mean 0.00 Mbit/s)

![Packet One-Way Delay Graph]

- Flow 1 (95th percentile 112.19 ms)
Run 9: Statistics of FillP-Sheep

Start at: 2018-06-30 02:14:49
End at: 2018-06-30 02:15:19
Local clock offset: -0.23 ms
Remote clock offset: 0.005 ms
Run 9: Report of FillP-Sheep — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 0.00 Mb/s)  Flow 1 egress (mean 0.00 Mb/s)

Post-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.07 ms)
Run 10: Statistics of FillP-Sheep

Start at: 2018-06-30 02:37:00
End at: 2018-06-30 02:37:30
Local clock offset: -0.089 ms
Remote clock offset: -0.065 ms
Run 10: Report of FillIP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2018-06-29 23:14:54
End at: 2018-06-29 23:15:24
Local clock offset: -0.195 ms
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2018-06-30 03:39:29
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 122.65 Mbit/s
  95th percentile per-packet one-way delay: 111.513 ms
  Loss rate: 1.01%
-- Flow 1:
  Average throughput: 122.65 Mbit/s
  95th percentile per-packet one-way delay: 111.513 ms
  Loss rate: 1.01%
Run 1: Report of Indigo — Data Link

[Graphs showing network throughput and packet delay over time]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 122.93 Mbps)
Flow 1 egress (mean 122.65 Mbps)

Per-packet end-to-end delay (ms)

Time (s)

Flow 1 (95th percentile 111.51 ms)
Run 2: Statistics of Indigo

Start at: 2018-06-29 23:37:17
End at: 2018-06-29 23:37:47
Local clock offset: -0.181 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.28 Mbit/s
95th percentile per-packet one-way delay: 111.311 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 216.28 Mbit/s
95th percentile per-packet one-way delay: 111.311 ms
Loss rate: 0.75%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-06-29 23:59:39
End at: 2018-06-30 00:00:09
Local clock offset: -0.019 ms
Remote clock offset: 0.067 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 218.05 Mbit/s
  95th percentile per-packet one-way delay: 111.550 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 218.05 Mbit/s
  95th percentile per-packet one-way delay: 111.550 ms
  Loss rate: 0.76%
Run 3: Report of Indigo — Data Link

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First graph:
- Y-axis: Throughput (Mbps)
- X-axis: Time (s)
- Legend: 
  - Flow 1 ingress (mean 218.09 Mbit/s)
  - Flow 1 egress (mean 218.05 Mbit/s)

Second graph:
- Y-axis: Per-packet one-way delay (ms)
- X-axis: Time (s)
- Legend: 
  - Flow 1 (95th percentile 111.55 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-30 00:21:44
End at: 2018-06-30 00:22:14
Local clock offset: 1.239 ms
Remote clock offset: 0.13 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 151.71 Mbit/s
95th percentile per-packet one-way delay: 113.461 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 151.71 Mbit/s
95th percentile per-packet one-way delay: 113.461 ms
Loss rate: 0.78%
Run 4: Report of Indigo — Data Link

[Graph of throughput versus time showing two curves for flow ingress and egress with labels: Flow 1 ingress (mean 151.77 Mbit/s), Flow 1 egress (mean 151.71 Mbit/s).]

[Graph of packet one-way delay versus time showing a single curve for flow 1 (95th percentile 113.46 ms).]
Run 5: Statistics of Indigo

Start at: 2018-06-30 00:43:41
End at: 2018-06-30 00:44:11
Local clock offset: 0.026 ms
Remote clock offset: 0.099 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 215.95 Mbit/s
95th percentile per-packet one-way delay: 112.341 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 215.95 Mbit/s
95th percentile per-packet one-way delay: 112.341 ms
Loss rate: 0.76%
Run 5: Report of Indigo — Data Link
Run 6: Statistics of Indigo

Start at: 2018-06-30 01:05:58
End at: 2018-06-30 01:06:28
Local clock offset: -0.368 ms
Remote clock offset: 0.072 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 110.923 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 146.82 Mbit/s
95th percentile per-packet one-way delay: 110.923 ms
Loss rate: 0.80%
Run 6: Report of Indigo — Data Link

![Graph showing throughputs and packet delay for two flows.](image)

- Flow 1 ingress (mean 146.90 Mbit/s)
- Flow 1 egress (mean 146.82 Mbit/s)
- Flow 1 (95th percentile 110.92 ms)
Run 7: Statistics of Indigo

Start at: 2018-06-30 01:28:25  
End at: 2018-06-30 01:28:55  
Local clock offset: -0.049 ms  
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 218.78 Mbit/s
95th percentile per-packet one-way delay: 111.245 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 218.78 Mbit/s
95th percentile per-packet one-way delay: 111.245 ms
Loss rate: 0.71%
Run 7: Report of Indigo — Data Link
Run 8: Statistics of Indigo

Start at: 2018-06-30 01:51:10
End at: 2018-06-30 01:51:40
Local clock offset: -0.114 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 149.61 Mbit/s
95th percentile per-packet one-way delay: 111.612 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 149.61 Mbit/s
95th percentile per-packet one-way delay: 111.612 ms
Loss rate: 0.80%
Run 9: Statistics of Indigo

Start at: 2018-06-30 02:13:31
End at: 2018-06-30 02:14:01
Local clock offset: 0.113 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 147.49 Mbit/s
95th percentile per-packet one-way delay: 111.481 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 147.49 Mbit/s
95th percentile per-packet one-way delay: 111.481 ms
Loss rate: 0.78%
Run 10: Statistics of Indigo

Start at: 2018-06-30 02:35:42
End at: 2018-06-30 02:36:12
Local clock offset: -0.008 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 146.48 Mbit/s
95th percentile per-packet one-way delay: 111.826 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 146.48 Mbit/s
95th percentile per-packet one-way delay: 111.826 ms
Loss rate: 0.79%
Run 10: Report of Indigo — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-06-29 23:09:30
End at: 2018-06-29 23:10:00
Local clock offset: ~0.032 ms
Remote clock offset: 0.052 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 112.690 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 112.690 ms
Loss rate: 1.49%
Run 1: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.26 Mbit/s)
- Flow 1 egress (mean 7.21 Mbit/s)

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

- Flow 1 (95th percentile 112.69 ms)
Run 2: Statistics of LEDBAT

Start at: 2018-06-29 23:31:46
End at: 2018-06-29 23:32:16
Local clock offset: 0.197 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 7.12 Mbit/s
95th percentile per-packet one-way delay: 112.495 ms
Loss rate: 1.49%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-06-29 23:54:09
End at: 2018-06-29 23:54:39
Local clock offset: -0.215 ms
Remote clock offset: 0.09 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 112.333 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 3.49 Mbit/s
95th percentile per-packet one-way delay: 112.333 ms
Loss rate: 2.11%

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Run 3: Report of LEDBAT — Data Link

![Graph 1: Throughput](image1)

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 3.53 Mbps)
- **Flow 1 egress** (mean 3.46 Mbps)

![Graph 2: Packet Delay](image2)

**Packet Delay (ms)**

- **Flow 1 (99th percentile 112.33 ms)**
Run 4: Statistics of LEDBAT

Start at: 2018-06-30 00:16:18
End at: 2018-06-30 00:16:48
Local clock offset: 0.128 ms
Remote clock offset: 0.116 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 112.332 ms
Loss rate: 1.53%
-- Flow 1:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 112.332 ms
Loss rate: 1.53%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 6.94 Mbit/s)
- Flow 1 egress (mean 6.89 Mbit/s)

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

- Flow 1 (95th percentile 112.33 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-06-30 00:38:08
End at: 2018-06-30 00:38:38
Local clock offset: 1.229 ms
Remote clock offset: 0.123 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 113.176 ms
Loss rate: 1.55%
-- Flow 1:
Average throughput: 6.65 Mbit/s
95th percentile per-packet one-way delay: 113.176 ms
Loss rate: 1.55%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-06-30 01:00:33
End at: 2018-06-30 01:01:03
Local clock offset: 0.218 ms
Remote clock offset: 0.128 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 113.368 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 7.21 Mbit/s
95th percentile per-packet one-way delay: 113.368 ms
Loss rate: 1.49%
Run 6: Report of LEDBAT — Data Link

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

Flow 1 ingress (mean 7.26 Mbps)  Flow 1 egress (mean 7.21 Mbps)

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

Flow 1 (95th percentile 113.37 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-06-30 01:22:49
End at: 2018-06-30 01:23:19
Local clock offset: -1.418 ms
Remote clock offset: 0.021 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 110.761 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 110.761 ms
Loss rate: 1.49%
Run 7: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 7.28 Mbps)
- Flow 1 egress (mean 7.23 Mbps)

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

- Flow 1 (95th percentile 110.76 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-06-30 01:45:33
End at: 2018-06-30 01:46:03
Local clock offset: 0.144 ms
Remote clock offset: 0.409 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 111.579 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 3.53 Mbit/s
95th percentile per-packet one-way delay: 111.579 ms
Loss rate: 2.10%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-06-30 02:07:56
End at: 2018-06-30 02:08:26
Local clock offset: 1.337 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 113.803 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 113.803 ms
Loss rate: 1.49%
Run 9: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 7.28 Mbit/s)
- Flow 1 egress (mean 7.23 Mbit/s)

![Graph of Packet Error vs Time](image2)

- Flow 1 (95th percentile 113.80 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-06-30 02:30:20  
End at: 2018-06-30 02:30:50  
Local clock offset: 0.01 ms  
Remote clock offset: -0.351 ms

# Below is generated by plot.py at 2018-06-30 03:39:30  
# Datalink statistics
-- Total of 1 flow: 
  Average throughput: 7.23 Mbit/s
  95th percentile per-packet one-way delay: 112.776 ms
  Loss rate: 1.49%
-- Flow 1:
  Average throughput: 7.23 Mbit/s
  95th percentile per-packet one-way delay: 112.776 ms
  Loss rate: 1.49%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-29 23:03:52
End at: 2018-06-29 23:04:22
Local clock offset: -0.006 ms
Remote clock offset: 0.451 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 506.26 Mbit/s
95th percentile per-packet one-way delay: 247.152 ms
Loss rate: 2.61%
-- Flow 1:
Average throughput: 506.26 Mbit/s
95th percentile per-packet one-way delay: 247.152 ms
Loss rate: 2.61%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-29 23:26:02
End at: 2018-06-29 23:26:32
Local clock offset: -0.056 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 514.66 Mbit/s
95th percentile per-packet one-way delay: 238.350 ms
Loss rate: 2.36%
-- Flow 1:
Average throughput: 514.66 Mbit/s
95th percentile per-packet one-way delay: 238.350 ms
Loss rate: 2.36%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

End at: 2018-06-29 23:49:05
Local clock offset: -1.281 ms
Remote clock offset: 0.431 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 525.45 Mbit/s
95th percentile per-packet one-way delay: 239.760 ms
Loss rate: 2.33%
-- Flow 1:
Average throughput: 525.45 Mbit/s
95th percentile per-packet one-way delay: 239.760 ms
Loss rate: 2.33%
Run 3: Report of PCC-Allegro — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 333.97 Mb/s)
- Blue solid line: Flow 1 egress (mean 525.45 Mb/s)

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

- Blue line: Flow 1 (95th percentile 239.76 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-30 00:10:37
End at: 2018-06-30 00:11:07
Local clock offset: -0.159 ms
Remote clock offset: 0.086 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 503.52 Mbit/s
95th percentile per-packet one-way delay: 248.463 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 503.52 Mbit/s
95th percentile per-packet one-way delay: 248.463 ms
Loss rate: 2.10%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 510.49 Mbps)
- Flow 1 egress (mean 503.52 Mbps)

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

- Flow 1 (95th percentile 248.46 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-30 00:32:32
End at: 2018-06-30 00:33:02
Local clock offset: -0.293 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 504.30 Mbit/s
95th percentile per-packet one-way delay: 154.153 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 504.30 Mbit/s
95th percentile per-packet one-way delay: 154.153 ms
Loss rate: 1.81%
Run 5: Report of PCC-Allegro — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 509.71 Mb/s)  Flow 1 egress (mean 504.30 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 154.15 ms)
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-30 00:55:00
End at: 2018-06-30 00:55:30
Local clock offset: 1.381 ms
Remote clock offset: 0.101 ms

# Below is generated by plot.py at 2018-06-30 03:39:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 521.14 Mbit/s
95th percentile per-packet one-way delay: 181.048 ms
Loss rate: 1.85%
-- Flow 1:
Average throughput: 521.14 Mbit/s
95th percentile per-packet one-way delay: 181.048 ms
Loss rate: 1.85%
Run 6: Report of PCC-Allegro — Data Link

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

- **Flow 1 Ingress (mean 527.01 Mbits)**
- **Flow 1 Egress (mean 521.14 Mbits)**

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

- **Flow 1 (95th percentile 181.05 ms)**
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-30 01:17:12
End at: 2018-06-30 01:17:42
Local clock offset: -1.266 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-30 03:44:55
# Datalink statistics
-- Total of 1 flow:
Average throughput: 523.01 Mbit/s
95th percentile per-packet one-way delay: 239.064 ms
Loss rate: 2.71%
-- Flow 1:
Average throughput: 523.01 Mbit/s
95th percentile per-packet one-way delay: 239.064 ms
Loss rate: 2.71%
Run 7: Report of PCC-Allegro — Data Link
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-30 01:39:46
End at: 2018-06-30 01:40:16
Local clock offset: 0.174 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-30 03:45:11
# Datalink statistics
-- Total of 1 flow:
Average throughput: 541.11 Mbit/s
95th percentile per-packet one-way delay: 238.772 ms
Loss rate: 3.03%
-- Flow 1:
Average throughput: 541.11 Mbit/s
95th percentile per-packet one-way delay: 238.772 ms
Loss rate: 3.03%
Run 8: Report of PCC-Allegro — Data Link

[Graph showing throughput and packet delay over time]

- Flow 1 Ingress (mean 353.89 Mbits)
- Flow 1 Egress (mean 541.11 Mbits)

[Graph showing packet delay over time]

- Flow 1 (95th percentile 238.77 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-30 02:02:25
End at: 2018-06-30 02:02:55
Local clock offset: -0.068 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-30 03:45:52
# Datalink statistics
-- Total of 1 flow:
Average throughput: 528.41 Mbit/s
95th percentile per-packet one-way delay: 181.368 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 528.41 Mbit/s
95th percentile per-packet one-way delay: 181.368 ms
Loss rate: 2.12%
Run 9: Report of PCC-Allegro — Data Link

![Throughput Graph](image1)

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

Flow 1 ingress (mean 535.83 Mbit/s)  Flow 1 egress (mean 528.41 Mbit/s)

Flow 1 (95th percentile 181.37 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-30 02:24:44
End at: 2018-06-30 02:25:14
Local clock offset: -0.167 ms
Remote clock offset: 0.429 ms

# Below is generated by plot.py at 2018-06-30 03:45:59
# Datalink statistics
-- Total of 1 flow:
Average throughput: 515.28 Mbit/s
95th percentile per-packet one-way delay: 198.500 ms
Loss rate: 1.79%
-- Flow 1:
Average throughput: 515.28 Mbit/s
95th percentile per-packet one-way delay: 198.500 ms
Loss rate: 1.79%
Run 10: Report of PCC-Allegro — Data Link

![Graph of throughput vs time](chart1.png)

- Flow 1 ingress (mean 520.76 Mbit/s)
- Flow 1 egress (mean 515.28 Mbit/s)

![Graph of packet interarrival time delay vs time](chart2.png)

- Flow 1 (95th percentile 198.50 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-06-29 23:07:52
End at: 2018-06-29 23:08:23
Local clock offset: -0.233 ms
Remote clock offset: 0.411 ms

# Below is generated by plot.py at 2018-06-30 03:47:25
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 323.37 Mbit/s
  95th percentile per-packet one-way delay: 154.913 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 323.37 Mbit/s
  95th percentile per-packet one-way delay: 154.913 ms
  Loss rate: 0.72%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2018-06-29 23:30:05
End at: 2018-06-29 23:30:35
Local clock offset: -0.143 ms
Remote clock offset: -0.292 ms

# Below is generated by plot.py at 2018-06-30 03:48:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 355.80 Mbit/s
95th percentile per-packet one-way delay: 186.128 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 355.80 Mbit/s
95th percentile per-packet one-way delay: 186.128 ms
Loss rate: 1.49%
Run 2: Report of PCC-Expr — Data Link

[Graph showing throughput and latency over time]

[Graph showing packet delay over time]
Run 3: Statistics of PCC-Expr

Start at: 2018-06-29 23:52:39  
End at: 2018-06-29 23:53:09  
Local clock offset: 0.345 ms  
Remote clock offset: 0.083 ms

# Below is generated by plot.py at 2018-06-30 03:48:21
# Datalink statistics
-- Total of 1 flow:
Average throughput: 240.63 Mbit/s  
95th percentile per-packet one-way delay: 204.489 ms  
Loss rate: 1.21%
-- Flow 1:
Average throughput: 240.63 Mbit/s  
95th percentile per-packet one-way delay: 204.489 ms  
Loss rate: 1.21%
Run 3: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 241.78 Mbit/s)
- Flow 1 egress (mean 240.63 Mbit/s)

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

- Flow 1 (95th percentile 204.49 ms)
Run 4: Statistics of PCC-Expr

Start at: 2018-06-30 00:14:38
End at: 2018-06-30 00:15:08
Local clock offset: -0.053 ms
Remote clock offset: 0.449 ms

# Below is generated by plot.py at 2018-06-30 03:49:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 334.68 Mbit/s
95th percentile per-packet one-way delay: 162.169 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 334.68 Mbit/s
95th percentile per-packet one-way delay: 162.169 ms
Loss rate: 1.07%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-06-30 00:36:27
End at: 2018-06-30 00:36:57
Local clock offset: 1.345 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2018-06-30 03:55:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 348.20 Mbit/s
95th percentile per-packet one-way delay: 193.000 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 348.20 Mbit/s
95th percentile per-packet one-way delay: 193.000 ms
Loss rate: 1.02%
Run 5: Report of PCC-Expr — Data Link

![Throughput Graph]

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 349.19 Mbit/s)
- Flow 1 egress (mean 348.20 Mbit/s)

![Delay Graph]

Per packet one way delay (ms) vs Time (s)

- Flow 1 (95th percentile 193.00 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-06-30 00:59:01
End at: 2018-06-30 00:59:32
Local clock offset: 0.171 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2018-06-30 03:55:57
# Datalink statistics
-- Total of 1 flow:
Average throughput: 247.46 Mbit/s
95th percentile per-packet one-way delay: 162.780 ms
Loss rate: 1.74%
-- Flow 1:
Average throughput: 247.46 Mbit/s
95th percentile per-packet one-way delay: 162.780 ms
Loss rate: 1.74%
Run 6: Report of PCC-Expr — Data Link

![Graph of throughput](image1)

![Graph of packet delay](image2)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-30 01:21:11
End at: 2018-06-30 01:21:41
Local clock offset: -0.016 ms
Remote clock offset: 0.385 ms

# Below is generated by plot.py at 2018-06-30 03:56:24
# Datalink statistics
-- Total of 1 flow:
Average throughput: 356.03 Mbit/s
95th percentile per-packet one-way delay: 199.169 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 356.03 Mbit/s
95th percentile per-packet one-way delay: 199.169 ms
Loss rate: 1.22%
Run 7: Report of PCC-Expr — Data Link
Run 8: Statistics of PCC-Expr

Start at: 2018-06-30 01:43:52
End at: 2018-06-30 01:44:22
Local clock offset: 0.084 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 347.86 Mbit/s
95th percentile per-packet one-way delay: 221.442 ms
Loss rate: 4.11%
-- Flow 1:
Average throughput: 347.86 Mbit/s
95th percentile per-packet one-way delay: 221.442 ms
Loss rate: 4.11%
Run 8: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 360.07 Mbit/s)**
- **Flow 1 egress (mean 347.86 Mbit/s)**

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

Flow 1 (95th percentile 221.44 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-06-30 02:06:31
End at: 2018-06-30 02:07:01
Local clock offset: -0.106 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 180.93 Mbit/s
95th percentile per-packet one-way delay: 113.092 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 180.93 Mbit/s
95th percentile per-packet one-way delay: 113.092 ms
Loss rate: 0.82%
Run 9: Report of PCC-Expr — Data Link
Run 10: Statistics of PCC-Expr

Start at: 2018-06-30 02:28:45
End at: 2018-06-30 02:29:15
Local clock offset: 0.16 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 285.06 Mbit/s
95th percentile per-packet one-way delay: 177.265 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 285.06 Mbit/s
95th percentile per-packet one-way delay: 177.265 ms
Loss rate: 1.32%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 286.73 Mbit/s)
- Flow 1 egress (mean 285.06 Mbit/s)

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

- Flow 1 (95th percentile 177.26 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-29 23:10:39
End at: 2018-06-29 23:11:09
Local clock offset: -1.173 ms
Remote clock offset: 0.025 ms
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

End at: 2018-06-29 23:33:25
Local clock offset: 1.296 ms
Remote clock offset: 0.076 ms
Run 2: Report of QUIC Cubic — Data Link

![Throughput vs Time Diagram]

- Flow 1 ingress (mean 0.03 Mbit/s)
- Flow 1 egress (mean 0.03 Mbit/s)

![Per-packet one-way delay vs Time Diagram]

- Flow 1 (95th percentile 112.68 ms)
Run 3: Statistics of QUIC Cubic

Local clock offset: 1.417 ms
Remote clock offset: 0.063 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 112.670 ms
Loss rate: 1.07%
-- Flow 1:
Average throughput: 65.65 Mbit/s
95th percentile per-packet one-way delay: 112.670 ms
Loss rate: 1.07%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-30 00:17:26
End at: 2018-06-30 00:17:56
Local clock offset: -0.04 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 64.41 Mbit/s
  95th percentile per-packet one-way delay: 112.796 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 64.41 Mbit/s
  95th percentile per-packet one-way delay: 112.796 ms
  Loss rate: 1.10%
Run 4: Report of QUIC Cubic — Data Link

![Graph of throughput and per-packet one-way delay over time for a QUIC Cubic data link run.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 64.64 Mbps)
  - Flow 1 egress (mean 64.41 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 112.80 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-30 00:39:16
End at: 2018-06-30 00:39:46
Local clock offset: -0.029 ms
Remote clock offset: 0.129 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 74.83 Mbit/s
95th percentile per-packet one-way delay: 111.232 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 74.83 Mbit/s
95th percentile per-packet one-way delay: 111.232 ms
Loss rate: 0.98%
Run 5: Report of QUIC Cubic — Data Link

![Graphs showing network data link performance metrics](image1)

- **Throughput**: The throughput is represented in the top graph, showing two distinct lines. The solid blue line represents Flow 1 ingress (mean 75.00 Mbit/s), and the dashed blue line represents Flow 1 egress (mean 74.83 Mbit/s).

- **Packet Delays**: The bottom graph illustrates packet delays, with the solid blue line indicating Flow 1 (95th percentile 111.23 ms).

These graphs provide insights into the performance of QUIC Cubic over the network link, highlighting both throughput and packet delay characteristics under varying conditions.
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-30 01:01:42
End at: 2018-06-30 01:02:12
Local clock offset: 0.11 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 60.99 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 60.99 Mbit/s
95th percentile per-packet one-way delay: 112.290 ms
Loss rate: 0.91%
Run 6: Report of QUIC Cubic — Data Link

![Throughput Graph]

![Packet Delay Graph]

- Flow 1 ingress (mean 61.09 Mbit/s)
- Flow 1 egress (mean 60.99 Mbit/s)
- Flow 1 (95th percentile 112.29 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-30 01:23:58
End at: 2018-06-30 01:24:28
Local clock offset: -0.004 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 111.380 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 62.76 Mbit/s
95th percentile per-packet one-way delay: 111.380 ms
Loss rate: 0.88%
Run 7: Report of QUIC Cubic — Data Link

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

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

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Run 8: Statistics of QUIC Cubic

Start at: 2018-06-30 01:46:41
End at: 2018-06-30 01:47:11
Local clock offset: -0.251 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 68.72 Mbit/s
95th percentile per-packet one-way delay: 111.184 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 68.72 Mbit/s
95th percentile per-packet one-way delay: 111.184 ms
Loss rate: 0.99%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-30 02:09:04
End at: 2018-06-30 02:09:34
Local clock offset: -0.281 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 110.854 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 45.95 Mbit/s
95th percentile per-packet one-way delay: 110.854 ms
Loss rate: 0.95%
Run 9: Report of QUIC Cubic — Data Link
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-30 02:31:28
End at: 2018-06-30 02:31:58
Local clock offset: -0.092 ms
Remote clock offset: -0.029 ms
Run 10: Report of QUIC Cubic — Data Link

![Graph 1: Throughput vs. Time]

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

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Run 1: Statistics of SCReAM

Local clock offset: -0.014 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.324 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.324 ms
  Loss rate: 0.77%
Run 1: Report of SCReAM — Data Link

![Graph showing throughput and delay over time for different flow types.](image)

**Throughput (Mbps)**

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

**Delay (ms)**

- **Flow 1 (95th percentile 111.32 ms)**

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Run 2: Statistics of SCReAM

Start at: 2018-06-29 23:44:41
End at: 2018-06-29 23:45:11
Local clock offset: 1.305 ms
Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.018 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 113.018 ms
Loss rate: 0.77%
Run 3: Statistics of SCReAM

Start at: 2018-06-30 00:06:44
End at: 2018-06-30 00:07:14
Local clock offset: 0.025 ms
Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.513 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 111.513 ms
  Loss rate: 0.77%
Run 4: Statistics of SCReAM

Start at: 2018-06-30 00:28:44
End at: 2018-06-30 00:29:14
Local clock offset: 0.244 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.294 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.294 ms
Loss rate: 0.77%
Run 4: Report of SCReAM — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)

Graph 2: End-to-end delay (ms) vs. Time (s)
- Flow 1 (95th percentile 111.29 ms)
Run 5: Statistics of SCReAM

Start at: 2018-06-30 00:51:04
End at: 2018-06-30 00:51:34
Local clock offset: 0.002 ms
Remote clock offset: 0.1 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 111.249 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 0.11 Mbit/s
  95th percentile per-packet one-way delay: 111.249 ms
  Loss rate: 0.73%
Run 5: Report of SCReAM — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 0.11 Mbit/s)  Flow 1 egress (mean 0.11 Mbit/s)

Packet one way delay (ms)

Flow 1 (95th percentile 111.25 ms)
Run 6: Statistics of SCReAM

Start at: 2018-06-30 01:13:17
End at: 2018-06-30 01:13:47
Local clock offset: 0.029 ms
Remote clock offset: 0.509 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.240 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.240 ms
Loss rate: 0.77%
Run 6: Report of SCReAM — Data Link
Run 7: Statistics of SCReAM

Start at: 2018-06-30 01:35:49
End at: 2018-06-30 01:36:19
Local clock offset: -0.016 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.386 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.386 ms
Loss rate: 0.77%
Run 7: Report of SCReAM — Data Link

![Graph of throughput and packet loss](Image)

Throughput (Mbps)

Time (s)

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

Packet loss rate

Per-packet one-way delay (ms)

- Flow 1 (99th percentile 111.39 ms)
Run 8: Statistics of SCReAM

Start at: 2018-06-30 01:58:30
End at: 2018-06-30 01:59:00
Local clock offset: -0.123 ms
Remote clock offset: -0.367 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.959 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.959 ms
Loss rate: 0.77%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-06-30 02:20:50
End at: 2018-06-30 02:21:20
Local clock offset: 0.075 ms
Remote clock offset: 0.362 ms

# Below is generated by plot.py at 2018-06-30 03:56:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 111.169 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 111.169 ms
Loss rate: 0.77%
Run 9: Report of SCReAM — Data Link

![Graph 1: Throughput (Mbps)]

![Graph 2: Per-packet one way delay (ms)]
Run 10: Statistics of SCReAM

Start at: 2018-06-30 02:43:01
End at: 2018-06-30 02:43:31
Local clock offset: 0.156 ms
Remote clock offset: 0.016 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.286 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 111.286 ms
Loss rate: 0.77%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2018-06-29 23:19:35
End at: 2018-06-29 23:20:05
Local clock offset: 0.219 ms
Remote clock offset: 0.373 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 111.482 ms
Loss rate: 1.74%

-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 111.482 ms
Loss rate: 1.74%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

End at: 2018-06-29 23:42:34
Local clock offset: -0.049 ms
Remote clock offset: 0.44 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 111.038 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 111.038 ms
Loss rate: 1.37%
Run 2: Report of Sprout — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.19 Mbit/s)  Flow 1 egress (mean 0.19 Mbit/s)

One-way delay (ms)

Time (s)

Flow 1 (95th percentile 111.04 ms)
Run 3: Statistics of Sprout

Start at: 2018-06-30 00:04:27
End at: 2018-06-30 00:04:57
Local clock offset: -0.192 ms
Remote clock offset: -0.255 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.490 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 111.490 ms
Loss rate: 0.57%
Run 3: Report of Sprout — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 0.21 Mbit/s)
  - Flow 1 egress (mean 0.21 Mbit/s)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 111.49 ms)
Run 4: Statistics of Sprout

Start at: 2018-06-30 00:26:27
End at: 2018-06-30 00:26:57
Local clock offset: ~0.096 ms
Remote clock offset: 0.045 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 112.316 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 0.19 Mbit/s
95th percentile per-packet one-way delay: 112.316 ms
Loss rate: 0.63%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.19 Mbit/s)
- Flow 1 egress (mean 0.19 Mbit/s)

Flow 1 (95th percentile 112.32 ms)
Run 5: Statistics of Sprout

Start at: 2018-06-30 00:48:29
End at: 2018-06-30 00:48:59
Local clock offset: -1.273 ms
Remote clock offset: -0.333 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 110.772 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 110.772 ms
  Loss rate: 0.66%
Run 5: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 0.19 Mbit/s)**
- **Flow 1 egress (mean 0.19 Mbit/s)**

![Graph 2: Ping vs. Time (ms)]

- **Flow 1 (95th percentile 110.77 ms)**

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Run 6: Statistics of Sprout

Start at: 2018-06-30 01:10:41
End at: 2018-06-30 01:11:11
Local clock offset: 0.041 ms
Remote clock offset: 0.483 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 111.990 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 0.20 Mbit/s
95th percentile per-packet one-way delay: 111.990 ms
Loss rate: 0.39%
Run 7: Statistics of Sprout

Start at: 2018-06-30 01:33:12  
End at: 2018-06-30 01:33:42  
Local clock offset: -0.057 ms  
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-30 03:56:35  
# Datalink statistics  
-- Total of 1 flow:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 111.580 ms  
Loss rate: 0.41%  
-- Flow 1:  
Average throughput: 0.19 Mbit/s  
95th percentile per-packet one-way delay: 111.580 ms  
Loss rate: 0.41%
Run 7: Report of Sprout — Data Link

![Graph showing throughput over time for Flow 1 ingress and egress with a mean of 0.19 Mbit/s.](image)

![Graph showing per-packet one-way delay for Flow 1 with a 95th percentile of 111.58 ms.](image)
Run 8: Statistics of Sprout

Start at: 2018-06-30 01:55:54
End at: 2018-06-30 01:56:24
Local clock offset: 1.223 ms
Remote clock offset: 0.369 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.520 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 112.520 ms
  Loss rate: 0.56%
Run 8: Report of Sprout — Data Link

[Graph showing throughput and packet delay over time for Flow 1 ingress and egress with mean 0.21 Mbps]

[Graph showing packet delay over time for Flow 1 with 95th percentile 112.52 ms]
Run 9: Statistics of Sprout

Start at: 2018-06-30 02:18:14
End at: 2018-06-30 02:18:44
Local clock offset: -0.038 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 111.757 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 111.757 ms
  Loss rate: 0.43%
Run 10: Statistics of Sprout

Start at: 2018-06-30 02:40:25
End at: 2018-06-30 02:40:55
Local clock offset: -0.114 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-30 03:56:35
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 111.542 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 111.542 ms
  Loss rate: 0.47%
Run 10: Report of Sprout — Data Link

![Graph of throughput and delay](image)

*Flow 1 ingress (mean 0.19 Mbit/s) — Flow 1 egress (mean 0.19 Mbit/s)*

![Graph of packet delay](image)

*Flow 1 (95th percentile 111.54 ms)*
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-29 23:20:42
End at: 2018-06-29 23:21:12
Local clock offset: -0.05 ms
Remote clock offset: 0.412 ms

# Below is generated by plot.py at 2018-06-30 03:59:08
# Datalink statistics
-- Total of 1 flow:
Average throughput: 191.45 Mbit/s
95th percentile per-packet one-way delay: 110.942 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 191.45 Mbit/s
95th percentile per-packet one-way delay: 110.942 ms
Loss rate: 0.94%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-29 23:43:12
End at: 2018-06-29 23:43:42
Local clock offset: -1.32 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2018-06-30 03:59:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 227.27 Mbit/s
95th percentile per-packet one-way delay: 109.970 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 227.27 Mbit/s
95th percentile per-packet one-way delay: 109.970 ms
Loss rate: 0.73%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-30 00:05:34
End at: 2018-06-30 00:06:04
Local clock offset: 1.207 ms
Remote clock offset: 0.108 ms

# Below is generated by plot.py at 2018-06-30 03:59:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.13 Mbit/s
95th percentile per-packet one-way delay: 112.569 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 16.13 Mbit/s
95th percentile per-packet one-way delay: 112.569 ms
Loss rate: 0.75%
Run 3: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 16.14 Mbit/s)
- Flow 1 egress (mean 16.13 Mbit/s)

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

- Flow 1 (95th percentile 112.57 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-30 00:27:34
End at: 2018-06-30 00:28:04
Local clock offset: -0.03 ms
Remote clock offset: -0.272 ms

# Below is generated by plot.py at 2018-06-30 03:59:47
# Datalink statistics
-- Total of 1 flow:
Average throughput: 16.10 Mbit/s
95th percentile per-packet one-way delay: 112.550 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 16.10 Mbit/s
95th percentile per-packet one-way delay: 112.550 ms
Loss rate: 0.76%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1: Throughput vs Time](image1)
- Flow 1 ingress (mean 16.11 Mbit/s)
- Flow 1 egress (mean 16.10 Mbit/s)

![Graph 2: Per-packet one-way delay](image2)
- Flow 1 (95th percentile 112.55 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-30 00:49:36
End at: 2018-06-30 00:50:06
Local clock offset: 0.176 ms
Remote clock offset: -0.252 ms

# Below is generated by plot.py at 2018-06-30 04:00:00
# Datalink statistics
-- Total of 1 flow:
Average throughput: 214.76 Mbit/s
95th percentile per-packet one-way delay: 112.006 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 214.76 Mbit/s
95th percentile per-packet one-way delay: 112.006 ms
Loss rate: 0.80%
Run 5: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 214.88 Mbit/s)  Flow 1 egress (mean 214.76 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 112.01 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-30 01:11:48
End at: 2018-06-30 01:12:18
Local clock offset: 1.26 ms
Remote clock offset: 0.486 ms

# Below is generated by plot.py at 2018-06-30 04:00:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 222.97 Mbit/s
95th percentile per-packet one-way delay: 112.207 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 222.97 Mbit/s
95th percentile per-packet one-way delay: 112.207 ms
Loss rate: 0.76%
Run 6: Report of TaoVA-100x — Data Link

![Graph 1]

- Flow 1 ingress (mean 223.01 Mbit/s)
- Flow 1 egress (mean 222.97 Mbit/s)

![Graph 2]

Flow 1 (95th percentile 112.21 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-30 01:34:20
End at: 2018-06-30 01:34:50
Local clock offset: -0.286 ms
Remote clock offset: 0.034 ms

# Below is generated by plot.py at 2018-06-30 04:03:04
# Datalink statistics
-- Total of 1 flow:
Average throughput: 229.62 Mbit/s
95th percentile per-packet one-way delay: 110.953 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 229.62 Mbit/s
95th percentile per-packet one-way delay: 110.953 ms
Loss rate: 0.80%
Run 7: Report of TaoVA-100x — Data Link

![Throughput Graph]

- **Flow 1 ingress** (mean 229.74 Mbit/s)
- **Flow 1 egress** (mean 229.62 Mbit/s)

![Delay Graph]

- **Flow 1** (95th percentile 110.95 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-30 01:57:02
End at: 2018-06-30 01:57:32
Local clock offset: -0.315 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-30 04:03:06
# Datalink statistics
-- Total of 1 flow:
Average throughput: 216.29 Mbit/s
95th percentile per-packet one-way delay: 111.251 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 216.29 Mbit/s
95th percentile per-packet one-way delay: 111.251 ms
Loss rate: 0.75%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-30 02:19:21
End at: 2018-06-30 02:19:51
Local clock offset: 1.018 ms
Remote clock offset: 0.408 ms

# Below is generated by plot.py at 2018-06-30 04:03:27
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 224.84 Mbit/s
  95th percentile per-packet one-way delay: 112.246 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 224.84 Mbit/s
  95th percentile per-packet one-way delay: 112.246 ms
  Loss rate: 0.77%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-30 02:41:32
End at: 2018-06-30 02:42:02
Local clock offset: -0.104 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 220.18 Mbit/s
95th percentile per-packet one-way delay: 111.470 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 220.18 Mbit/s
95th percentile per-packet one-way delay: 111.470 ms
Loss rate: 0.76%
Run 10: Report of TaoVA-100x — Data Link

![Graph of over time throughput and latency vs time](image-url)

- **Throughput**:
  - Flow 1 ingress (mean 220.22 Mbit/s)
  - Flow 1 egress (mean 220.18 Mbit/s)

- **Packet Delay**:
  - Flow 1 (95th percentile 111.47 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-06-29 23:17:17
End at: 2018-06-29 23:17:47
Local clock offset: -0.11 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 35.01 Mbit/s
95th percentile per-packet one-way delay: 112.934 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 35.01 Mbit/s
95th percentile per-packet one-way delay: 112.934 ms
Loss rate: 0.78%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

End at: 2018-06-29 23:40:16
Local clock offset: -0.038 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 112.423 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 37.60 Mbit/s
95th percentile per-packet one-way delay: 112.423 ms
Loss rate: 0.74%
Run 2: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 37.60 Mbit/s)
  - Flow 1 egress (mean 37.60 Mbit/s)

- **Packet one-way delay (ms):**
  - Flow 1 (95th percentile 112.42 ms)
Run 3: Statistics of TCP Vegas

Start at: 2018-06-30 00:02:09
End at: 2018-06-30 00:02:39
Local clock offset: -1.481 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 113.111 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 29.72 Mbit/s
95th percentile per-packet one-way delay: 113.111 ms
Loss rate: 0.77%
Run 3: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time]
Run 4: Statistics of TCP Vegas

Start at: 2018-06-30 00:24:09
End at: 2018-06-30 00:24:39
Local clock offset: 0.204 ms
Remote clock offset: -0.336 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 28.99 Mbit/s
95th percentile per-packet one-way delay: 113.587 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 28.99 Mbit/s
95th percentile per-packet one-way delay: 113.587 ms
Loss rate: 0.75%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas

Start at: 2018-06-30 00:46:11
End at: 2018-06-30 00:46:41
Local clock offset: 1.251 ms
Remote clock offset: 0.105 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 115.574 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 115.574 ms
Loss rate: 0.73%
Run 5: Report of TCP Vegas — Data Link
Run 6: Statistics of TCP Vegas

Start at: 2018-06-30 01:08:23
End at: 2018-06-30 01:08:53
Local clock offset: 1.264 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 44.28 Mbit/s
95th percentile per-packet one-way delay: 114.199 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 44.28 Mbit/s
95th percentile per-packet one-way delay: 114.199 ms
Loss rate: 0.83%
Run 6: Report of TCP Vegas — Data Link

![Graph showing throughput over time](image)

- **Flow 1 ingress (mean 44.32 Mbit/s)**
- **Flow 1 egress (mean 44.28 Mbit/s)**

![Graph showing packet round-trip delay over time](image)

- **Flow 1 (95th percentile 114.20 ms)**
Run 7: Statistics of TCP Vegas

Start at: 2018-06-30 01:30:54
End at: 2018-06-30 01:31:24
Local clock offset: 1.218 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 113.304 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 113.304 ms
Loss rate: 0.84%
Run 7: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 36.31 Mb/s)
- Flow 1 egress (mean 36.27 Mb/s)

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

- Flow 1 (95th percentile 113.30 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-06-30 01:53:36
End at: 2018-06-30 01:54:06
Local clock offset: -0.038 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 54.69 Mbit/s
  95th percentile per-packet one-way delay: 112.988 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 54.69 Mbit/s
  95th percentile per-packet one-way delay: 112.988 ms
  Loss rate: 0.81%
Run 8: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay over time.](image)
Run 9: Statistics of TCP Vegas

Start at: 2018-06-30 02:15:56
End at: 2018-06-30 02:16:26
Local clock offset: 0.078 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 40.27 Mbit/s
  95th percentile per-packet one-way delay: 112.882 ms
  Loss rate: 0.79%
-- Flow 1:
  Average throughput: 40.27 Mbit/s
  95th percentile per-packet one-way delay: 112.882 ms
  Loss rate: 0.79%
Run 9: Report of TCP Vegas — Data Link

[Graph showing throughput and delay over time]

Throughput (Mbit/s)

Flow 1 ingress (mean 40.29 Mbit/s)    Flow 1 egress (mean 40.27 Mbit/s)

Packet one-way delay (ms)

Flow 1 (95th percentile 112.80 ms)
Run 10: Statistics of TCP Vegas

Start at: 2018-06-30 02:38:07
End at: 2018-06-30 02:38:37
Local clock offset: -0.068 ms
Remote clock offset: 0.006 ms

# Below is generated by plot.py at 2018-06-30 04:03:32
# Datalink statistics
-- Total of 1 flow:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 114.489 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 30.55 Mbit/s
95th percentile per-packet one-way delay: 114.489 ms
Loss rate: 0.80%
Run 10: Report of TCP Vegas — Data Link

![Graph 1](image1)

- Flow 1 ingress (mean 30.57 Mbit/s)
- Flow 1 egress (mean 30.55 Mbit/s)

![Graph 2](image2)

- Flow 1 (95th percentile 114.49 ms)
Run 1: Statistics of Verus

Start at: 2018-06-29 23:06:30
End at: 2018-06-29 23:07:00
Local clock offset: -0.011 ms
Remote clock offset: 0.03 ms

# Below is generated by plot.py at 2018-06-30 04:05:01
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.86 Mbit/s
95th percentile per-packet one-way delay: 127.971 ms
Loss rate: 1.03%

-- Flow 1:
Average throughput: 207.86 Mbit/s
95th percentile per-packet one-way delay: 127.971 ms
Loss rate: 1.03%
Run 1: Report of Verus — Data Link

![Graph of throughput and packet delay vs time]
Run 2: Statistics of Verus

Local clock offset: -1.398 ms
Remote clock offset: -0.312 ms

# Below is generated by plot.py at 2018-06-30 04:05:12
# Datalink statistics
-- Total of 1 flow:
Average throughput: 202.76 Mbit/s
95th percentile per-packet one-way delay: 169.912 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 202.76 Mbit/s
95th percentile per-packet one-way delay: 169.912 ms
Loss rate: 0.22%
Run 2: Report of Verus — Data Link

![Graph 1: Throughput Over Time]

![Graph 2: Per Packet End-to-End Delay]

Flow 1 ingress (mean 201.49 Mbit/s) and Flow 1 egress (mean 202.76 Mbit/s)

Flow 1 (95th percentile 169.91 ms)
Run 3: Statistics of Verus

Start at: 2018-06-29 23:51:16
End at: 2018-06-29 23:51:46
Local clock offset: 0.427 ms
Remote clock offset: 0.059 ms

# Below is generated by plot.py at 2018-06-30 04:05:19
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.31 Mbit/s
95th percentile per-packet one-way delay: 232.640 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 212.31 Mbit/s
95th percentile per-packet one-way delay: 232.640 ms
Loss rate: 0.87%
Run 3: Report of Verus — Data Link

![Graph showing throughput and packet delay over time]

- Flow 1 ingress (mean 212.76 Mbit/s)
- Flow 1 egress (mean 212.31 Mbit/s)

- Flow 1 (95th percentile 232.64 ms)
Run 4: Statistics of Verus

Start at: 2018-06-30 00:13:15
End at: 2018-06-30 00:13:45
Local clock offset: -0.298 ms
Remote clock offset: 0.126 ms

# Below is generated by plot.py at 2018-06-30 04:05:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 207.58 Mbit/s
95th percentile per-packet one-way delay: 220.209 ms
Loss rate: 1.92%
-- Flow 1:
Average throughput: 207.58 Mbit/s
95th percentile per-packet one-way delay: 220.209 ms
Loss rate: 1.92%
Run 4: Report of Verus — Data Link

---

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 210.40 Mbit/s)
- **Flow 1 egress** (mean 207.58 Mbit/s)

---

**Packet one way delay (ms)**

*Flow 1 (95th percentile 220.21 ms)*
Run 5: Statistics of Verus

Start at: 2018-06-30 00:35:11
End at: 2018-06-30 00:35:41
Local clock offset: 1.042 ms
Remote clock offset: 0.085 ms

# Below is generated by plot.py at 2018-06-30 04:05:20
# Datalink statistics
-- Total of 1 flow:
Average throughput: 115.35 Mbit/s
95th percentile per-packet one-way delay: 130.197 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 115.35 Mbit/s
95th percentile per-packet one-way delay: 130.197 ms
Loss rate: 0.87%
Run 5: Report of Verus — Data Link

![Graph showing throughput and ping latency for Flow 1]

- Flow 1 ingress (mean 116.05 Mbit/s)
- Flow 1 egress (mean 115.35 Mbit/s)

- Flow 1 (95th percentile 130.20 ms)
Run 6: Statistics of Verus

Start at: 2018-06-30 00:57:39
End at: 2018-06-30 00:58:09
Local clock offset: 1.47 ms
Remote clock offset: 0.098 ms

# Below is generated by plot.py at 2018-06-30 04:06:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 212.13 Mbit/s
95th percentile per-packet one-way delay: 187.917 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 212.13 Mbit/s
95th percentile per-packet one-way delay: 187.917 ms
Loss rate: 1.31%
Run 6: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 213.37 Mbit/s)**
- **Flow 1 egress (mean 212.13 Mbit/s)**

Flow 1 (95th percentile 187.92 ms)
Run 7: Statistics of Verus

Start at: 2018-06-30 01:19:51
End at: 2018-06-30 01:20:22
Local clock offset: -0.056 ms
Remote clock offset: 0.439 ms

# Below is generated by plot.py at 2018-06-30 04:06:37
# Datalink statistics
-- Total of 1 flow:
Average throughput: 168.00 Mbit/s
95th percentile per-packet one-way delay: 176.560 ms
Loss rate: 2.11%
-- Flow 1:
Average throughput: 168.00 Mbit/s
95th percentile per-packet one-way delay: 176.560 ms
Loss rate: 2.11%
Run 7: Report of Verus — Data Link
Run 8: Statistics of Verus

Start at: 2018-06-30 01:42:28
End at: 2018-06-30 01:42:58
Local clock offset: -0.04 ms
Remote clock offset: -0.423 ms

# Below is generated by plot.py at 2018-06-30 04:07:30
# Datalink statistics
-- Total of 1 flow:
Average throughput: 232.88 Mbit/s
95th percentile per-packet one-way delay: 168.704 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 232.88 Mbit/s
95th percentile per-packet one-way delay: 168.704 ms
Loss rate: 0.84%
Run 8: Report of Verus — Data Link

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

- **Flow 1 ingress (mean 232.54 Mbit/s)**
- **Flow 1 egress (mean 232.88 Mbit/s)**

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

- **Flow 1 (95th percentile 168.70 ms)**
Run 9: Statistics of Verus

Start at: 2018-06-30 02:05:07
End at: 2018-06-30 02:05:37
Local clock offset: 0.134 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-30 04:08:18
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 225.42 Mbit/s
  95th percentile per-packet one-way delay: 195.308 ms
  Loss rate: 1.77%
-- Flow 1:
  Average throughput: 225.42 Mbit/s
  95th percentile per-packet one-way delay: 195.308 ms
  Loss rate: 1.77%
Run 9: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 228.60 Mbps)
  - Flow 1 egress (mean 225.42 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 195.31 ms)
Run 10: Statistics of Verus

Start at: 2018-06-30 02:27:26
End at: 2018-06-30 02:27:56
Local clock offset: 0.037 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-30 04:08:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 169.51 Mbit/s
95th percentile per-packet one-way delay: 135.006 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 169.51 Mbit/s
95th percentile per-packet one-way delay: 135.006 ms
Loss rate: 0.02%
Run 10: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

End at: 2018-06-29 23:24:58
Local clock offset: -0.131 ms
Remote clock offset: 0.057 ms

# Below is generated by plot.py at 2018-06-30 04:11:18
# Datalink statistics
-- Total of 1 flow:
Average throughput: 366.53 Mbit/s
95th percentile per-packet one-way delay: 157.624 ms
Loss rate: 1.52%
-- Flow 1:
Average throughput: 366.53 Mbit/s
95th percentile per-packet one-way delay: 157.624 ms
Loss rate: 1.52%
Run 1: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 369.41 Mbit/s)**
- **Flow 1 egress (mean 366.53 Mbit/s)**

- **Flow 1 (95th percentile 157.62 ms)**
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-29 23:47:01
End at: 2018-06-29 23:47:31
Local clock offset: 0.09 ms
Remote clock offset: 0.054 ms

# Below is generated by plot.py at 2018-06-30 04:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 363.62 Mbit/s
95th percentile per-packet one-way delay: 111.771 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 363.62 Mbit/s
95th percentile per-packet one-way delay: 111.771 ms
Loss rate: 0.83%
Run 2: Report of PCC-Vivace — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress (mean 363.95 Mbit/s)**
- **Flow 1 egress (mean 363.62 Mbit/s)**

![Graph showing packet delay distribution]

- **Flow 1 (95th percentile 111.77 ms)**
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-30 00:09:04
End at: 2018-06-30 00:09:34
Local clock offset: -0.01 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-30 04:11:25
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 356.13 Mbit/s
  95th percentile per-packet one-way delay: 111.716 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 356.13 Mbit/s
  95th percentile per-packet one-way delay: 111.716 ms
  Loss rate: 0.72%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-30 00:31:04
End at: 2018-06-30 00:31:34
Local clock offset: -0.147 ms
Remote clock offset: 0.502 ms

# Below is generated by plot.py at 2018-06-30 04:11:25
# Datalink statistics
-- Total of 1 flow:
Average throughput: 282.96 Mbit/s
95th percentile per-packet one-way delay: 112.246 ms
Loss rate: 1.11%
-- Flow 1:
Average throughput: 282.96 Mbit/s
95th percentile per-packet one-way delay: 112.246 ms
Loss rate: 1.11%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-30 00:53:25
End at: 2018-06-30 00:53:55
Local clock offset: -0.027 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2018-06-30 04:12:51
# Datalink statistics
-- Total of 1 flow:
Average throughput: 385.86 Mbit/s
95th percentile per-packet one-way delay: 117.150 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 385.86 Mbit/s
95th percentile per-packet one-way delay: 117.150 ms
Loss rate: 0.80%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing throughput over time with two curves: one for flow ingress and one for flow egress.]

![Graph showing per-packet one-way delay over time with a single curve for flow 1, indicating 95th percentile delay.]
Run 6: Statistics of PCC-Vivace

Start at: 2018-06-30 01:15:38
End at: 2018-06-30 01:16:08
Local clock offset: 0.115 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2018-06-30 04:13:17
# Datalink statistics
-- Total of 1 flow:
Average throughput: 374.05 Mbit/s
95th percentile per-packet one-way delay: 113.574 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 374.05 Mbit/s
95th percentile per-packet one-way delay: 113.574 ms
Loss rate: 0.84%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-30 01:38:10
End at: 2018-06-30 01:38:40
Local clock offset: 1.167 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-30 04:13:34
# Datalink statistics
-- Total of 1 flow:
Average throughput: 398.32 Mbit/s
95th percentile per-packet one-way delay: 115.554 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 398.32 Mbit/s
95th percentile per-packet one-way delay: 115.554 ms
Loss rate: 1.06%
Run 7: Report of PCC-Vivace — Data Link
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-30 02:00:50
End at: 2018-06-30 02:01:20
Local clock offset: -0.253 ms
Remote clock offset: -0.349 ms

# Below is generated by plot.py at 2018-06-30 04:13:39
# Datalink statistics
-- Total of 1 flow:
Average throughput: 369.35 Mbit/s
95th percentile per-packet one-way delay: 112.605 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 369.35 Mbit/s
95th percentile per-packet one-way delay: 112.605 ms
Loss rate: 0.91%
Run 8: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 369.96 Mbit/s)
- Flow 1 egress (mean 369.35 Mbit/s)

- Flow 1 (95th percentile 112.61 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-30 02:23:11
End at: 2018-06-30 02:23:41
Local clock offset: 1.346 ms
Remote clock offset: -0.373 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 366.08 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 366.08 Mbit/s
95th percentile per-packet one-way delay: 114.316 ms
Loss rate: 0.94%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-30 02:45:21
End at: 2018-06-30 02:45:51
Local clock offset: -0.127 ms
Remote clock offset: -0.403 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
  Average throughput: 211.82 Mbit/s
  95th percentile per-packet one-way delay: 134.921 ms
  Loss rate: 2.76%
-- Flow 1:
  Average throughput: 211.82 Mbit/s
  95th percentile per-packet one-way delay: 134.921 ms
  Loss rate: 2.76%
Run 10: Report of PCC-Vivace — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 216.21 Mbit/s)
- Flow 1 egress (mean 211.82 Mbit/s)

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

- Flow 1 (95th percentile 134.92 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-29 23:18:27
End at: 2018-06-29 23:18:57
Local clock offset: -1.356 ms
Remote clock offset: 0.044 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 109.909 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 1.57 Mbit/s
95th percentile per-packet one-way delay: 109.909 ms
Loss rate: 1.06%
Run 1: Report of WebRTC media — Data Link

![Graph of Throughput](image1)

- **Flow 1 ingress (mean 1.57 Mbit/s)**
- **Flow 1 egress (mean 1.57 Mbit/s)**

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

- **Flow 1 (95th percentile 109.91 ms)**
Run 2: Statistics of WebRTC media

Start at: 2018-06-29 23:40:56
End at: 2018-06-29 23:41:26
Local clock offset: 0.051 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 111.516 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile per-packet one-way delay: 111.516 ms
Loss rate: 0.89%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-06-30 00:03:19
End at: 2018-06-30 00:03:49
Local clock offset: -0.12 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 111.316 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 111.316 ms
Loss rate: 0.81%
Run 3: Report of WebRTC media — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 1.89 Mbit/s)**
- **Flow 1 egress (mean 1.89 Mbit/s)**

**Packet one-way delay (ms)**

- **Flow 1 (90th percentile 111.32 ms)**

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Run 4: Statistics of WebRTC media

Start at: 2018-06-30 00:25:19
End at: 2018-06-30 00:25:49
Local clock offset: -0.201 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 112.887 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 112.887 ms
Loss rate: 0.87%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-06-30 00:47:21
End at: 2018-06-30 00:47:51
Local clock offset: -0.219 ms
Remote clock offset: 0.05 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 111.069 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 111.069 ms
Loss rate: 0.86%
Run 5: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 1.91 Mbps)
  - Flow 1 egress (mean 1.90 Mbps)

- **Packet delay (ms):**
  - Flow 1 (95th percentile 111.07 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-06-30 01:09:33
End at: 2018-06-30 01:10:03
Local clock offset: -0.176 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 111.472 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 111.472 ms
Loss rate: 0.81%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.90 Mbit/s)
- Flow 1 egress (mean 1.90 Mbit/s)

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

- Flow 1 (95th percentile 111.47 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-06-30 01:32:05
End at: 2018-06-30 01:32:35
Local clock offset: -0.48 ms
Remote clock offset: -0.386 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 111.153 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.88 Mbit/s
95th percentile per-packet one-way delay: 111.153 ms
Loss rate: 0.81%
Run 7: Report of WebRTC media — Data Link

The graph above shows the throughput (Mbps) over time. There are two lines:
- Dashed line: Flow 1 ingress (mean 1.88 Mbps)
- Solid line: Flow 1 egress (mean 1.88 Mbps)

The second graph illustrates the packet one-way delay (ms) over time.
- Dots: Flow 1 (95th percentile 111.15 ms)
Run 8: Statistics of WebRTC media

Start at: 2018-06-30 01:54:46
End at: 2018-06-30 01:55:16
Local clock offset: -1.374 ms
Remote clock offset: -0.28 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 110.550 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 1.89 Mbit/s
95th percentile per-packet one-way delay: 110.550 ms
Loss rate: 0.87%
Run 8: Report of WebRTC media — Data Link

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

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

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Run 9: Statistics of WebRTC media

Start at: 2018-06-30 02:17:06
End at: 2018-06-30 02:17:36
Local clock offset: 1.241 ms
Remote clock offset: 0.418 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.87 Mbit/s
95th percentile perpacket one-way delay: 112.235 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 1.87 Mbit/s
95th percentile perpacket one-way delay: 112.235 ms
Loss rate: 0.81%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-06-30 02:39:17
End at: 2018-06-30 02:39:47
Local clock offset: 1.259 ms
Remote clock offset: 0.376 ms

# Below is generated by plot.py at 2018-06-30 04:13:53
# Datalink statistics
-- Total of 1 flow:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 1.90 Mbit/s
95th percentile per-packet one-way delay: 112.195 ms
Loss rate: 0.88%
Run 10: Report of WebRTC media — Data Link