Pantheon Report

Data path: Colombia Ethernet (remote) \rightarrow AWS Brazil 2 Ethernet (local).
Repeated the test of 16 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436bd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169af381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc44f0e9c9bf90c77e6a4
third_party/libutp @ b34655b942e2826f2b179eaab4a906ce667cf3c
third_party/pantheon-tunnel @ 6f038ed31259df366f9840f65b82cb8f464b1b39
third_party/pcc @ 1afcc958fa0d66d18b623c091a555ec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac0d8f9a92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143eb978f3cfd42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f945f19a26
third_party/verus @ d4b447ea74c6c60a261149af262956293f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9d8de4753770d143a1fa2851
test from Colombia to AWS Brazil 2, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

Average throughput (Mbit/s) vs 95th percentile one-way delay (ms)
<table>
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<td>PCC-Allegro</td>
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<td>49.29</td>
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<td>QUIC Cubic</td>
<td>10</td>
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<td>22.50</td>
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<td>0.22</td>
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<td>0.43</td>
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<td>10</td>
<td>26.95</td>
<td>22.09</td>
<td>20.96</td>
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<tr>
<td>Verus</td>
<td>10</td>
<td>32.73</td>
<td>25.75</td>
<td>19.08</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>48.72</td>
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<td>14.42</td>
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<td>WebRTC media</td>
<td>10</td>
<td>1.74</td>
<td>0.97</td>
<td>0.37</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-19 09:06:25
End at: 2018-06-19 09:06:55
Local clock offset: -2.932 ms
Remote clock offset: 10.956 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.59 Mbit/s
  95th percentile per-packet one-way delay: 111.325 ms
  Loss rate: 1.41%
-- Flow 1:
  Average throughput: 48.06 Mbit/s
  95th percentile per-packet one-way delay: 110.935 ms
  Loss rate: 1.04%
-- Flow 2:
  Average throughput: 35.17 Mbit/s
  95th percentile per-packet one-way delay: 111.622 ms
  Loss rate: 1.62%
-- Flow 3:
  Average throughput: 27.96 Mbit/s
  95th percentile per-packet one-way delay: 111.556 ms
  Loss rate: 2.75%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

Start at: 2018-06-19 09:26:13
End at: 2018-06-19 09:26:43
Local clock offset: -3.545 ms
Remote clock offset: 6.198 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.32 Mbit/s
  95th percentile per-packet one-way delay: 115.454 ms
  Loss rate: 13.14%
-- Flow 1:
  Average throughput: 38.14 Mbit/s
  95th percentile per-packet one-way delay: 110.632 ms
  Loss rate: 12.17%
-- Flow 2:
  Average throughput: 25.11 Mbit/s
  95th percentile per-packet one-way delay: 115.600 ms
  Loss rate: 13.93%
-- Flow 3:
  Average throughput: 22.78 Mbit/s
  95th percentile per-packet one-way delay: 116.101 ms
  Loss rate: 16.15%
Run 2: Report of TCP BBR — Data Link

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**Throughput (Mbit/s)**

- **Flow 1 ingress (mean 43.18 Mbit/s)**
- **Flow 1 egress (mean 38.14 Mbit/s)**
- **Flow 2 ingress (mean 28.94 Mbit/s)**
- **Flow 2 egress (mean 25.11 Mbit/s)**
- **Flow 3 ingress (mean 26.69 Mbit/s)**
- **Flow 3 egress (mean 22.78 Mbit/s)**

**Delay (ms)**

- **Flow 1 (95th percentile 110.63 ms)**
- **Flow 2 (95th percentile 115.60 ms)**
- **Flow 3 (95th percentile 116.10 ms)**

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Run 3: Statistics of TCP BBR

Start at: 2018-06-19 09:46:00
End at: 2018-06-19 09:46:30
Local clock offset: -2.187 ms
Remote clock offset: 8.03 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.07 Mbit/s
95th percentile per-packet one-way delay: 119.974 ms
Loss rate: 2.32%
-- Flow 1:
Average throughput: 43.44 Mbit/s
95th percentile per-packet one-way delay: 113.228 ms
Loss rate: 1.47%
-- Flow 2:
Average throughput: 31.49 Mbit/s
95th percentile per-packet one-way delay: 124.694 ms
Loss rate: 2.86%
-- Flow 3:
Average throughput: 26.50 Mbit/s
95th percentile per-packet one-way delay: 132.753 ms
Loss rate: 5.13%
Run 3: Report of TCP BBR — Data Link

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**Throughput (Mbps)**

- Flow 1 ingress (mean 43.83 Mbps)
- Flow 1 egress (mean 43.44 Mbps)
- Flow 2 ingress (mean 32.15 Mbps)
- Flow 2 egress (mean 31.49 Mbps)
- Flow 3 ingress (mean 27.47 Mbps)
- Flow 3 egress (mean 26.50 Mbps)

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

- Flow 1 (95th percentile 113.23 ms)
- Flow 2 (95th percentile 124.69 ms)
- Flow 3 (95th percentile 132.75 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-06-19 10:05:59  
End at: 2018-06-19 10:06:29  
Local clock offset: -1.697 ms  
Remote clock offset: 7.6 ms

# Below is generated by plot.py at 2018-06-19 12:25:04  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 59.26 Mbit/s  
95th percentile per-packet one-way delay: 114.504 ms  
Loss rate: 13.68%  
-- Flow 1:  
Average throughput: 36.00 Mbit/s  
95th percentile per-packet one-way delay: 113.216 ms  
Loss rate: 12.66%  
-- Flow 2:  
Average throughput: 26.08 Mbit/s  
95th percentile per-packet one-way delay: 116.531 ms  
Loss rate: 15.28%  
-- Flow 3:  
Average throughput: 18.04 Mbit/s  
95th percentile per-packet one-way delay: 107.593 ms  
Loss rate: 15.00%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput over time for different flows.](image1)

- **Flow 1 Ingress**: mean 40.99 Mbit/s
- **Flow 1 Egress**: mean 36.00 Mbit/s
- **Flow 2 Ingress**: mean 30.53 Mbit/s
- **Flow 2 Egress**: mean 26.08 Mbit/s
- **Flow 3 Ingress**: mean 20.88 Mbit/s
- **Flow 3 Egress**: mean 16.04 Mbit/s

![Graph showing per-packet one-way delay over time.](image2)

- **Flow 1**: 95th percentile 113.22 ms
- **Flow 2**: 95th percentile 116.53 ms
- **Flow 3**: 95th percentile 107.59 ms
Run 5: Statistics of TCP BBR

Start at: 2018-06-19 10:25:49
End at: 2018-06-19 10:26:19
Local clock offset: -1.785 ms
Remote clock offset: 8.571 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.59 Mbit/s
95th percentile per-packet one-way delay: 120.304 ms
Loss rate: 2.18%
-- Flow 1:
Average throughput: 44.64 Mbit/s
95th percentile per-packet one-way delay: 115.024 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 34.17 Mbit/s
95th percentile per-packet one-way delay: 122.793 ms
Loss rate: 3.03%
-- Flow 3:
Average throughput: 25.12 Mbit/s
95th percentile per-packet one-way delay: 131.351 ms
Loss rate: 3.98%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-06-19 10:45:40
End at: 2018-06-19 10:46:10
Local clock offset: -1.682 ms
Remote clock offset: 12.641 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.74 Mbit/s
  95th percentile per-packet one-way delay: 115.360 ms
  Loss rate: 2.23%
-- Flow 1:
  Average throughput: 42.10 Mbit/s
  95th percentile per-packet one-way delay: 113.727 ms
  Loss rate: 1.65%
-- Flow 2:
  Average throughput: 34.81 Mbit/s
  95th percentile per-packet one-way delay: 117.924 ms
  Loss rate: 2.03%
-- Flow 3:
  Average throughput: 25.91 Mbit/s
  95th percentile per-packet one-way delay: 125.688 ms
  Loss rate: 5.55%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

Start at: 2018-06-19 11:05:38
End at: 2018-06-19 11:06:08
Local clock offset: -1.575 ms
Remote clock offset: 15.691 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.89 Mbit/s
95th percentile per-packet one-way delay: 113.843 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 44.63 Mbit/s
95th percentile per-packet one-way delay: 112.070 ms
Loss rate: 1.20%
-- Flow 2:
Average throughput: 36.00 Mbit/s
95th percentile per-packet one-way delay: 114.306 ms
Loss rate: 2.10%
-- Flow 3:
Average throughput: 28.48 Mbit/s
95th percentile per-packet one-way delay: 123.865 ms
Loss rate: 3.28%
Run 7: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps) vs. Time (s)]
- Flow 1 ingress (mean 44.90 Mbps)
- Flow 1 egress (mean 44.63 Mbps)
- Flow 2 ingress (mean 36.43 Mbps)
- Flow 2 egress (mean 36.00 Mbps)
- Flow 3 ingress (mean 28.96 Mbps)
- Flow 3 egress (mean 20.48 Mbps)

![Graph 2: Packet one-way delay (ms) vs. Time (s)]
- Flow 1 (95th percentile 112.07 ms)
- Flow 2 (95th percentile 114.31 ms)
- Flow 3 (95th percentile 123.86 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-06-19 11:25:26
End at: 2018-06-19 11:25:56
Local clock offset: -2.35 ms
Remote clock offset: 13.176 ms

# Below is generated by plot.py at 2018-06-19 12:25:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.27 Mbit/s
  95th percentile per-packet one-way delay: 118.511 ms
  Loss rate: 1.85%
-- Flow 1:
  Average throughput: 46.61 Mbit/s
  95th percentile per-packet one-way delay: 116.070 ms
  Loss rate: 1.19%
-- Flow 2:
  Average throughput: 34.32 Mbit/s
  95th percentile per-packet one-way delay: 119.038 ms
  Loss rate: 2.18%
-- Flow 3:
  Average throughput: 26.98 Mbit/s
  95th percentile per-packet one-way delay: 119.570 ms
  Loss rate: 4.32%
Run 8: Report of TCP BBR — Data Link

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

![Graph 2: Per-packet delay vs Time (ms)]
Run 9: Statistics of TCP BBR

Start at: 2018-06-19 11:45:41
End at: 2018-06-19 11:46:11
Local clock offset: -2.98 ms
Remote clock offset: 16.696 ms

# Below is generated by plot.py at 2018-06-19 12:25:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.08 Mbit/s
95th percentile per-packet one-way delay: 113.843 ms
Loss rate: 1.96%
-- Flow 1:
Average throughput: 47.63 Mbit/s
95th percentile per-packet one-way delay: 113.886 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 112.423 ms
Loss rate: 2.14%
-- Flow 3:
Average throughput: 25.95 Mbit/s
95th percentile per-packet one-way delay: 114.490 ms
Loss rate: 4.93%
Run 9: Report of TCP BBR — Data Link

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

- **Flow 1 ingress (mean 47.97 Mbps)**
- **Flow 1 egress (mean 47.63 Mbps)**
- **Flow 2 ingress (mean 36.52 Mbps)**
- **Flow 2 egress (mean 36.04 Mbps)**
- **Flow 3 ingress (mean 26.84 Mbps)**
- **Flow 3 egress (mean 25.95 Mbps)**

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

- **Flow 1 (95th percentile 113.89 ms)**
- **Flow 2 (95th percentile 112.42 ms)**
- **Flow 3 (95th percentile 114.49 ms)**
Run 10: Statistics of TCP BBR

Start at: 2018-06-19 12:05:43
End at: 2018-06-19 12:06:13
Local clock offset: -3.113 ms
Remote clock offset: 8.855 ms

# Below is generated by plot.py at 2018-06-19 12:25:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.72 Mbit/s
  95th percentile per-packet one-way delay: 111.921 ms
  Loss rate: 2.06%
-- Flow 1:
  Average throughput: 47.91 Mbit/s
  95th percentile per-packet one-way delay: 111.786 ms
  Loss rate: 1.25%
-- Flow 2:
  Average throughput: 35.25 Mbit/s
  95th percentile per-packet one-way delay: 111.089 ms
  Loss rate: 2.75%
-- Flow 3:
  Average throughput: 28.59 Mbit/s
  95th percentile per-packet one-way delay: 112.654 ms
  Loss rate: 4.40%
Run 10: Report of TCP BBR — Data Link

![Graph showing throughput and End-to-End (e2e) one-way delay over time for different flows.](image_url)
Run 1: Statistics of Copa

Start at: 2018-06-19 09:20:03
End at: 2018-06-19 09:20:33
Local clock offset: -3.42 ms
Remote clock offset: 11.285 ms

# Below is generated by plot.py at 2018-06-19 12:26:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.58 Mbit/s
95th percentile per-packet one-way delay: 102.481 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 53.21 Mbit/s
95th percentile per-packet one-way delay: 98.085 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 27.32 Mbit/s
95th percentile per-packet one-way delay: 96.674 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 28.03 Mbit/s
95th percentile per-packet one-way delay: 108.043 ms
Loss rate: 2.01%
Run 1: Report of Copa — Data Link

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

- **Flow 1 ingress** (mean 53.09 Mbps)
- **Flow 1 egress** (mean 53.21 Mbps)
- **Flow 2 ingress** (mean 27.34 Mbps)
- **Flow 2 egress** (mean 27.32 Mbps)
- **Flow 3 ingress** (mean 28.14 Mbps)
- **Flow 3 egress** (mean 26.03 Mbps)

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

- **Flow 1** (95th percentile 98.08 ms)
- **Flow 2** (95th percentile 96.67 ms)
- **Flow 3** (95th percentile 108.04 ms)
Run 2: Statistics of Copa

Start at: 2018-06-19 09:39:51
End at: 2018-06-19 09:40:21
Local clock offset: -2.695 ms
Remote clock offset: 9.307 ms

# Below is generated by plot.py at 2018-06-19 12:26:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.64 Mbit/s
95th percentile per-packet one-way delay: 106.084 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 53.87 Mbit/s
95th percentile per-packet one-way delay: 101.701 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 108.038 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 21.59 Mbit/s
95th percentile per-packet one-way delay: 108.490 ms
Loss rate: 1.27%
Run 2: Report of Copa — Data Link

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**Throughput (Mb/s)**

- **Flow 1 ingress** (mean 53.82 Mb/s)
- **Flow 1 egress** (mean 53.87 Mb/s)
- **Flow 2 ingress** (mean 29.66 Mb/s)
- **Flow 2 egress** (mean 29.61 Mb/s)
- **Flow 3 ingress** (mean 21.51 Mb/s)
- **Flow 3 egress** (mean 21.59 Mb/s)

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

- **Flow 1** (95th percentile 101.70 ms)
- **Flow 2** (95th percentile 108.04 ms)
- **Flow 3** (95th percentile 108.49 ms)
Run 3: Statistics of Copa

Start at: 2018-06-19 09:59:49
End at: 2018-06-19 10:00:19
Local clock offset: -1.654 ms
Remote clock offset: 5.237 ms

# Below is generated by plot.py at 2018-06-19 12:26:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.05 Mbit/s
95th percentile per-packet one-way delay: 111.778 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 50.30 Mbit/s
95th percentile per-packet one-way delay: 109.810 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 27.31 Mbit/s
95th percentile per-packet one-way delay: 110.123 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 26.17 Mbit/s
95th percentile per-packet one-way delay: 124.343 ms
Loss rate: 2.20%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2018-06-19 10:19:37
End at: 2018-06-19 10:20:07
Local clock offset: -1.812 ms
Remote clock offset: 4.831 ms

# Below is generated by plot.py at 2018-06-19 12:26:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.71 Mbit/s
95th percentile per-packet one-way delay: 109.678 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 45.04 Mbit/s
95th percentile per-packet one-way delay: 105.598 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 25.16 Mbit/s
95th percentile per-packet one-way delay: 111.936 ms
Loss rate: 1.72%
-- Flow 3:
Average throughput: 24.20 Mbit/s
95th percentile per-packet one-way delay: 112.324 ms
Loss rate: 1.75%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

End at: 2018-06-19 10:40:01
Local clock offset: -1.67 ms
Remote clock offset: 5.216 ms

# Below is generated by plot.py at 2018-06-19 12:26:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 69.71 Mbit/s
  95th percentile per-packet one-way delay: 113.268 ms
  Loss rate: 15.47%
-- Flow 1:
  Average throughput: 42.61 Mbit/s
  95th percentile per-packet one-way delay: 105.632 ms
  Loss rate: 15.87%
-- Flow 2:
  Average throughput: 31.76 Mbit/s
  95th percentile per-packet one-way delay: 114.145 ms
  Loss rate: 14.63%
-- Flow 3:
  Average throughput: 18.22 Mbit/s
  95th percentile per-packet one-way delay: 114.604 ms
  Loss rate: 15.51%
Run 5: Report of Copa — Data Link
Run 6: Statistics of Copa

Start at: 2018-06-19 10:59:29
End at: 2018-06-19 10:59:59
Local clock offset: -1.449 ms
Remote clock offset: 13.878 ms

# Below is generated by plot.py at 2018-06-19 12:26:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.33 Mbit/s
95th percentile per-packet one-way delay: 107.997 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 52.93 Mbit/s
95th percentile per-packet one-way delay: 104.632 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 28.29 Mbit/s
95th percentile per-packet one-way delay: 110.203 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 109.439 ms
Loss rate: 2.04%
Run 6: Report of Copa — Data Link
Run 7: Statistics of Copa

Start at: 2018-06-19 11:19:17
End at: 2018-06-19 11:19:47
Local clock offset: -2.252 ms
Remote clock offset: 12.767 ms

# Below is generated by plot.py at 2018-06-19 12:27:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.07 Mbit/s
95th percentile per-packet one-way delay: 109.912 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 48.59 Mbit/s
95th percentile per-packet one-way delay: 101.366 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 29.14 Mbit/s
95th percentile per-packet one-way delay: 106.060 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 27.73 Mbit/s
95th percentile per-packet one-way delay: 113.178 ms
Loss rate: 2.18%
Run 7: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 48.50 Mbps)**
- **Flow 1 egress (mean 48.59 Mbps)**
- **Flow 2 ingress (mean 29.16 Mbps)**
- **Flow 2 egress (mean 29.14 Mbps)**
- **Flow 3 ingress (mean 27.88 Mbps)**
- **Flow 3 egress (mean 27.73 Mbps)**

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

- **Flow 1 (95th percentile 101.37 ms)**
- **Flow 2 (95th percentile 106.06 ms)**
- **Flow 3 (95th percentile 113.18 ms)**
Run 8: Statistics of Copa

End at: 2018-06-19 11:39:59
Local clock offset: -2.732 ms
Remote clock offset: 13.228 ms

# Below is generated by plot.py at 2018-06-19 12:27:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.87 Mbit/s
95th percentile per-packet one-way delay: 107.432 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 46.35 Mbit/s
95th percentile per-packet one-way delay: 93.761 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: 104.402 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 30.34 Mbit/s
95th percentile per-packet one-way delay: 114.091 ms
Loss rate: 1.52%
Run 8: Report of Copa — Data Link
Run 9: Statistics of Copa

Start at: 2018-06-19 11:59:33  
End at: 2018-06-19 12:00:03  
Local clock offset: -3.161 ms  
Remote clock offset: 9.228 ms

# Below is generated by plot.py at 2018-06-19 12:28:16  
# Datalink statistics  
-- Total of 3 flows:
  Average throughput: 78.54 Mbit/s
  95th percentile per-packet one-way delay: 106.496 ms
  Loss rate: 0.72%
  -- Flow 1:
  Average throughput: 48.37 Mbit/s
  95th percentile per-packet one-way delay: 93.836 ms
  Loss rate: 0.39%
  -- Flow 2:
  Average throughput: 33.64 Mbit/s
  95th percentile per-packet one-way delay: 108.470 ms
  Loss rate: 0.75%
  -- Flow 3:
  Average throughput: 23.79 Mbit/s
  95th percentile per-packet one-way delay: 109.121 ms
  Loss rate: 2.67%
Run 9: Report of Copa — Data Link

![Graph showing throughput and round-trip delay over time for different flows.]

- Flow 1 ingress (mean 48.30 Mbit/s)
- Flow 1 egress (mean 48.37 Mbit/s)
- Flow 2 ingress (mean 33.62 Mbit/s)
- Flow 2 egress (mean 33.64 Mbit/s)
- Flow 3 ingress (mean 24.04 Mbit/s)
- Flow 3 egress (mean 23.79 Mbit/s)
Run 10: Statistics of Copa

End at: 2018-06-19 12:19:57
Local clock offset: -2.758 ms
Remote clock offset: 8.297 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.24 Mbit/s
95th percentile per-packet one-way delay: 102.957 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 49.74 Mbit/s
95th percentile per-packet one-way delay: 91.866 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 105.086 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 30.07 Mbit/s
95th percentile per-packet one-way delay: 105.631 ms
Loss rate: 2.01%
Run 10: Report of Copa — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows]
Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 09:21:21
End at: 2018-06-19 09:21:51
Local clock offset: -3.44 ms
Remote clock offset: 6.294 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.35 Mbit/s
95th percentile per-packet one-way delay: 99.636 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 96.284 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 100.747 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 22.65 Mbit/s
95th percentile per-packet one-way delay: 111.637 ms
Loss rate: 1.89%
Run 1: Report of TCP Cubic — Data Link

![Graph of Throughput and Packet Delay]

- Flow 1 Ingress (mean 40.56 Mbit/s)
- Flow 1 Egress (mean 40.65 Mbit/s)
- Flow 2 Ingress (mean 27.44 Mbit/s)
- Flow 2 Egress (mean 27.48 Mbit/s)
- Flow 3 Ingress (mean 22.69 Mbit/s)
- Flow 3 Egress (mean 22.65 Mbit/s)
Run 2: Statistics of TCP Cubic

Start at: 2018-06-19 09:41:09
End at: 2018-06-19 09:41:39
Local clock offset: -2.542 ms
Remote clock offset: 10.359 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 99.806 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 34.60 Mbit/s
95th percentile per-packet one-way delay: 97.998 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 21.82 Mbit/s
95th percentile per-packet one-way delay: 98.284 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 18.55 Mbit/s
95th percentile per-packet one-way delay: 113.681 ms
Loss rate: 1.81%
Run 2: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet end-to-end delay over time for different flows.](image-url)
Run 3: Statistics of TCP Cubic

Start at: 2018-06-19 10:01:08
End at: 2018-06-19 10:01:38
Local clock offset: -1.627 ms
Remote clock offset: 8.971 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.50 Mbit/s
  95th percentile per-packet one-way delay: 99.223 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 31.07 Mbit/s
  95th percentile per-packet one-way delay: 94.876 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 22.99 Mbit/s
  95th percentile per-packet one-way delay: 99.377 ms
  Loss rate: 0.79%
-- Flow 3:
  Average throughput: 21.78 Mbit/s
  95th percentile per-packet one-way delay: 106.196 ms
  Loss rate: 1.71%
Run 3: Report of TCP Cubic — Data Link

![Graph 1: Throughput (Mbps) over Time (s)]
- Flow 1 ingress (mean 31.02 Mbit/s)
- Flow 1 egress (mean 31.07 Mbit/s)
- Flow 2 ingress (mean 22.99 Mbit/s)
- Flow 2 egress (mean 22.99 Mbit/s)
- Flow 3 ingress (mean 21.80 Mbit/s)
- Flow 3 egress (mean 21.78 Mbit/s)

![Graph 2: Per packet one-way delay (ms) over Time (s)]
- Flow 1 (95th percentile 94.88 ms)
- Flow 2 (95th percentile 99.38 ms)
- Flow 3 (95th percentile 106.20 ms)
Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 10:20:54
End at: 2018-06-19 10:21:24
Local clock offset: -1.879 ms
Remote clock offset: 8.69 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.07 Mbit/s
95th percentile per-packet one-way delay: 100.504 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 33.61 Mbit/s
95th percentile per-packet one-way delay: 94.945 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 25.19 Mbit/s
95th percentile per-packet one-way delay: 100.979 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 26.52 Mbit/s
95th percentile per-packet one-way delay: 107.414 ms
Loss rate: 1.95%
Run 4: Report of TCP Cubic — Data Link

![Graph showing throughput and packet loss latency over time for different flows.]

Legend:
- **Flow 1 ingress** (mean 33.55 Mbit/s)
- **Flow 1 egress** (mean 33.61 Mbit/s)
- **Flow 2 ingress** (mean 25.15 Mbit/s)
- **Flow 2 egress** (mean 25.19 Mbit/s)
- **Flow 3 ingress** (mean 26.61 Mbit/s)
- **Flow 3 egress** (mean 26.52 Mbit/s)
Run 5: Statistics of TCP Cubic

Start at: 2018-06-19 10:40:49
End at: 2018-06-19 10:41:19
Local clock offset: -1.655 ms
Remote clock offset: 10.829 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.02 Mbit/s
95th percentile per-packet one-way delay: 92.004 ms
Loss rate: 2.02%
-- Flow 1:
Average throughput: 19.61 Mbit/s
95th percentile per-packet one-way delay: 91.849 ms
Loss rate: 1.98%
-- Flow 2:
Average throughput: 23.53 Mbit/s
95th percentile per-packet one-way delay: 94.080 ms
Loss rate: 1.70%
-- Flow 3:
Average throughput: 17.58 Mbit/s
95th percentile per-packet one-way delay: 98.691 ms
Loss rate: 3.04%
Run 5: Report of TCP Cubic — Data Link

![Graph showing throughput and round-trip time data for different flows.]

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 19.90 Mbps)
  - Flow 1 egress (mean 19.61 Mbps)
  - Flow 2 ingress (mean 23.74 Mbps)
  - Flow 2 egress (mean 23.53 Mbps)
  - Flow 3 ingress (mean 17.84 Mbps)
  - Flow 3 egress (mean 17.58 Mbps)

- **Per-packet end-to-end delay (ms)**
  - Flow 1 (95th percentile 91.85 ms)
  - Flow 2 (95th percentile 94.08 ms)
  - Flow 3 (95th percentile 98.69 ms)
Run 6: Statistics of TCP Cubic

Start at: 2018-06-19 11:00:47
End at: 2018-06-19 11:01:17
Local clock offset: -1.506 ms
Remote clock offset: 16.224 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.95 Mbit/s
  95th percentile per-packet one-way delay: 97.254 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 36.54 Mbit/s
  95th percentile per-packet one-way delay: 92.716 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 23.70 Mbit/s
  95th percentile per-packet one-way delay: 96.919 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 17.23 Mbit/s
  95th percentile per-packet one-way delay: 113.890 ms
  Loss rate: 1.51%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-06-19 11:20:35
End at: 2018-06-19 11:21:05
Local clock offset: -2.273 ms
Remote clock offset: 16.913 ms

# Below is generated by plot.py at 2018-06-19 12:28:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.68 Mbit/s
95th percentile per-packet one-way delay: 96.269 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 35.78 Mbit/s
95th percentile per-packet one-way delay: 90.342 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 24.74 Mbit/s
95th percentile per-packet one-way delay: 102.946 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 22.73 Mbit/s
95th percentile per-packet one-way delay: 104.658 ms
Loss rate: 1.75%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

End at: 2018-06-19 11:41:18
Local clock offset: -2.844 ms
Remote clock offset: 14.394 ms

# Below is generated by plot.py at 2018-06-19 12:28:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 93.962 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 48.89 Mbit/s
95th percentile per-packet one-way delay: 93.886 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 99.736 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 23.13 Mbit/s
95th percentile per-packet one-way delay: 110.353 ms
Loss rate: 1.86%
Run 8: Report of TCP Cubic — Data Link

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

- **Flow 1 ingress** (mean 48.84 Mbit/s)
- **Flow 1 egress** (mean 48.89 Mbit/s)
- **Flow 2 ingress** (mean 32.11 Mbit/s)
- **Flow 2 egress** (mean 32.16 Mbit/s)
- **Flow 3 ingress** (mean 23.18 Mbit/s)
- **Flow 3 egress** (mean 23.13 Mbit/s)

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

- **Flow 1** (95th percentile 93.89 ms)
- **Flow 2** (95th percentile 99.74 ms)
- **Flow 3** (95th percentile 110.35 ms)

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Run 9: Statistics of TCP Cubic

Start at: 2018-06-19 12:00:51
End at: 2018-06-19 12:01:21
Local clock offset: -3.17 ms
Remote clock offset: 8.889 ms

# Below is generated by plot.py at 2018-06-19 12:28:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.10 Mbit/s
95th percentile per-packet one-way delay: 92.647 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 48.48 Mbit/s
95th percentile per-packet one-way delay: 92.440 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 97.095 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 22.78 Mbit/s
95th percentile per-packet one-way delay: 109.508 ms
Loss rate: 1.90%
Run 9: Report of TCP Cubic — Data Link

Graph 1: Throughput (Mbps/s) over time (s)
- Flow 1 ingress (mean 48.42 Mbps/s)
- Flow 1 egress (mean 48.48 Mbps/s)
- Flow 2 ingress (mean 31.79 Mbps/s)
- Flow 2 egress (mean 31.81 Mbps/s)
- Flow 3 ingress (mean 22.83 Mbps/s)
- Flow 3 egress (mean 22.78 Mbps/s)

Graph 2: Per-packet one-way delay (ms) over time (s)
- Flow 1 (95th percentile 92.44 ms)
- Flow 2 (95th percentile 97.09 ms)
- Flow 3 (95th percentile 109.51 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-06-19 12:20:46
End at: 2018-06-19 12:21:16
Local clock offset: -2.801 ms
Remote clock offset: 2.399 ms

# Below is generated by plot.py at 2018-06-19 12:28:32
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 70.90 Mbit/s
  95th percentile per-packet one-way delay: 94.752 ms
 Loss rate: 0.69%
-- Flow 1:
 Average throughput: 41.36 Mbit/s
  95th percentile per-packet one-way delay: 94.524 ms
 Loss rate: 0.50%
-- Flow 2:
 Average throughput: 32.56 Mbit/s
  95th percentile per-packet one-way delay: 102.964 ms
 Loss rate: 0.61%
-- Flow 3:
 Average throughput: 24.09 Mbit/s
  95th percentile per-packet one-way delay: 95.657 ms
 Loss rate: 1.90%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of FillP

Start at: 2018-06-19 09:18:49
End at: 2018-06-19 09:19:19
Local clock offset: -3.348 ms
Remote clock offset: 9.0 ms

# Below is generated by plot.py at 2018-06-19 12:29:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 108.217 ms
Loss rate: 2.67%
-- Flow 1:
Average throughput: 56.07 Mbit/s
95th percentile per-packet one-way delay: 106.684 ms
Loss rate: 1.86%
-- Flow 2:
Average throughput: 37.78 Mbit/s
95th percentile per-packet one-way delay: 108.043 ms
Loss rate: 3.48%
-- Flow 3:
Average throughput: 28.79 Mbit/s
95th percentile per-packet one-way delay: 110.247 ms
Loss rate: 5.28%
Run 1: Report of FillP — Data Link
Run 2: Statistics of FillP

Start at: 2018-06-19 09:38:36
End at: 2018-06-19 09:39:06
Local clock offset: -2.83 ms
Remote clock offset: 9.352 ms

# Below is generated by plot.py at 2018-06-19 12:29:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.25 Mbit/s
95th percentile per-packet one-way delay: 114.157 ms
Loss rate: 4.58%
-- Flow 1:
Average throughput: 48.63 Mbit/s
95th percentile per-packet one-way delay: 107.461 ms
Loss rate: 3.21%
-- Flow 2:
Average throughput: 35.99 Mbit/s
95th percentile per-packet one-way delay: 116.192 ms
Loss rate: 5.91%
-- Flow 3:
Average throughput: 26.66 Mbit/s
95th percentile per-packet one-way delay: 126.772 ms
Loss rate: 8.28%
Run 2: Report of FillP — Data Link

Throughput (Mbit/s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 49.95 Mbit/s)  Flow 1 egress (mean 48.63 Mbit/s)
Flow 2 ingress (mean 37.94 Mbit/s)  Flow 2 egress (mean 35.99 Mbit/s)
Flow 3 ingress (mean 26.55 Mbit/s)  Flow 3 egress (mean 26.66 Mbit/s)

Per-packet one-way delay (ms)

0 200 400 600 800 1000 1200 1400

Flow 1 (95th percentile 107.46 ms)  Flow 2 (95th percentile 116.19 ms)  Flow 3 (95th percentile 126.77 ms)
Run 3: Statistics of FillP

Start at: 2018-06-19 09:58:34
End at: 2018-06-19 09:59:04
Local clock offset: -1.691 ms
Remote clock offset: 4.094 ms

# Below is generated by plot.py at 2018-06-19 12:29:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.81 Mbit/s
  95th percentile per-packet one-way delay: 117.199 ms
  Loss rate: 3.92%
-- Flow 1:
  Average throughput: 54.11 Mbit/s
  95th percentile per-packet one-way delay: 111.471 ms
  Loss rate: 2.36%
-- Flow 2:
  Average throughput: 36.25 Mbit/s
  95th percentile per-packet one-way delay: 121.026 ms
  Loss rate: 5.74%
-- Flow 3:
  Average throughput: 27.21 Mbit/s
  95th percentile per-packet one-way delay: 129.742 ms
  Loss rate: 8.11%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 55.11 Mbps)
- Flow 1 egress (mean 54.11 Mbps)
- Flow 2 ingress (mean 38.12 Mbps)
- Flow 2 egress (mean 36.25 Mbps)
- Flow 3 ingress (mean 29.10 Mbps)
- Flow 3 egress (mean 27.21 Mbps)

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

- Flow 1 (95th percentile 111.47 ms)
- Flow 2 (95th percentile 121.03 ms)
- Flow 3 (95th percentile 129.74 ms)
Run 4: Statistics of FillP

Start at: 2018-06-19 10:18:22
End at: 2018-06-19 10:18:52
Local clock offset: -1.798 ms
Remote clock offset: 7.523 ms

# Below is generated by plot.py at 2018-06-19 12:29:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.51 Mbit/s
95th percentile per-packet one-way delay: 113.198 ms
Loss rate: 3.47%
-- Flow 1:
Average throughput: 53.38 Mbit/s
95th percentile per-packet one-way delay: 110.779 ms
Loss rate: 2.01%
-- Flow 2:
Average throughput: 36.27 Mbit/s
95th percentile per-packet one-way delay: 114.231 ms
Loss rate: 5.51%
-- Flow 3:
Average throughput: 27.64 Mbit/s
95th percentile per-packet one-way delay: 123.539 ms
Loss rate: 6.36%
Run 4: Report of FillP — Data Link

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 54.16 Mbit/s)
- Flow 1 egress (mean 53.38 Mbit/s)
- Flow 2 ingress (mean 38.05 Mbit/s)
- Flow 2 egress (mean 36.27 Mbit/s)
- Flow 3 ingress (mean 26.99 Mbit/s)
- Flow 3 egress (mean 27.64 Mbit/s)

Per packet one-way delay (ms)

Time (s)

- Flow 1 (95th percentile 110.78 ms)
- Flow 2 (95th percentile 114.23 ms)
- Flow 3 (95th percentile 123.54 ms)
Run 5: Statistics of FillP

Start at: 2018-06-19 10:38:15
End at: 2018-06-19 10:38:45
Local clock offset: -1.735 ms
Remote clock offset: 9.508 ms

# Below is generated by plot.py at 2018-06-19 12:29:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 88.34 Mbit/s
  95th percentile per-packet one-way delay: 109.926 ms
  Loss rate: 3.41%
-- Flow 1:
  Average throughput: 54.60 Mbit/s
  95th percentile per-packet one-way delay: 108.666 ms
  Loss rate: 2.19%
-- Flow 2:
  Average throughput: 36.96 Mbit/s
  95th percentile per-packet one-way delay: 112.614 ms
  Loss rate: 4.64%
-- Flow 3:
  Average throughput: 28.08 Mbit/s
  95th percentile per-packet one-way delay: 121.950 ms
  Loss rate: 7.05%
Run 5: Report of FillP — Data Link

![Graph showing packet delay and throughput for different flows over time.]
Run 6: Statistics of FillP

Start at: 2018-06-19 10:58:14
End at: 2018-06-19 10:58:44
Local clock offset: -1.477 ms
Remote clock offset: 13.802 ms

# Below is generated by plot.py at 2018-06-19 12:29:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.48 Mbit/s
95th percentile per-packet one-way delay: 113.901 ms
Loss rate: 3.61%
-- Flow 1:
Average throughput: 54.38 Mbit/s
95th percentile per-packet one-way delay: 109.817 ms
Loss rate: 2.65%
-- Flow 2:
Average throughput: 36.59 Mbit/s
95th percentile per-packet one-way delay: 116.991 ms
Loss rate: 4.42%
-- Flow 3:
Average throughput: 26.99 Mbit/s
95th percentile per-packet one-way delay: 125.696 ms
Loss rate: 7.09%
Run 6: Report of FillP — Data Link

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

- Flow 1 ingress (mean 55.55 Mbps)
- Flow 1 egress (mean 54.38 Mbps)
- Flow 2 ingress (mean 37.97 Mbps)
- Flow 2 egress (mean 36.59 Mbps)
- Flow 3 ingress (mean 26.53 Mbps)
- Flow 3 egress (mean 26.99 Mbps)

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

- Flow 1 (95th percentile 109.82 ms)
- Flow 2 (95th percentile 116.99 ms)
- Flow 3 (95th percentile 125.70 ms)
Run 7: Statistics of FillP

Start at: 2018-06-19 11:18:03
End at: 2018-06-19 11:18:33
Local clock offset: -2.224 ms
Remote clock offset: 16.672 ms

# Below is generated by plot.py at 2018-06-19 12:29:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.71 Mbit/s
95th percentile per-packet one-way delay: 108.113 ms
Loss rate: 3.19%
-- Flow 1:
Average throughput: 55.73 Mbit/s
95th percentile per-packet one-way delay: 108.025 ms
Loss rate: 1.95%
-- Flow 2:
Average throughput: 37.12 Mbit/s
95th percentile per-packet one-way delay: 106.970 ms
Loss rate: 5.09%
-- Flow 3:
Average throughput: 28.51 Mbit/s
95th percentile per-packet one-way delay: 112.615 ms
Loss rate: 5.29%
Run 7: Report of FillP — Data Link

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

![Graph 2: Per-packet one-way delay over Time](image2)
Run 8: Statistics of FillP

Start at: 2018-06-19 11:38:05
End at: 2018-06-19 11:38:35
Local clock offset: -2.664 ms
Remote clock offset: 17.125 ms

# Below is generated by plot.py at 2018-06-19 12:29:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.55 Mbit/s
95th percentile per-packet one-way delay: 104.156 ms
Loss rate: 15.37%
-- Flow 1:
Average throughput: 47.69 Mbit/s
95th percentile per-packet one-way delay: 100.954 ms
Loss rate: 14.55%
-- Flow 2:
Average throughput: 31.50 Mbit/s
95th percentile per-packet one-way delay: 106.232 ms
Loss rate: 16.34%
-- Flow 3:
Average throughput: 21.20 Mbit/s
95th percentile per-packet one-way delay: 107.257 ms
Loss rate: 17.93%
Run 8: Report of FillP — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Flow 1 ingress (mean 55.51 Mbps)
  - Flow 1 egress (mean 47.69 Mbps)
  - Flow 2 ingress (mean 37.36 Mbps)
  - Flow 2 egress (mean 31.50 Mbps)
  - Flow 3 ingress (mean 25.39 Mbps)
  - Flow 3 egress (mean 21.20 Mbps)

**Graph 2:**
- **Per-packet one way delay (ms):**
  - Flow 1 (95th percentile 100.95 ms)
  - Flow 2 (95th percentile 106.23 ms)
  - Flow 3 (95th percentile 107.26 ms)
Run 9: Statistics of FillP

Start at: 2018-06-19 11:58:18
End at: 2018-06-19 11:58:48
Local clock offset: -3.129 ms
Remote clock offset: 11.91 ms

# Below is generated by plot.py at 2018-06-19 12:30:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.88 Mbit/s
95th percentile per-packet one-way delay: 106.765 ms
Loss rate: 2.50%
-- Flow 1:
Average throughput: 58.13 Mbit/s
95th percentile per-packet one-way delay: 106.371 ms
Loss rate: 1.65%
-- Flow 2:
Average throughput: 39.24 Mbit/s
95th percentile per-packet one-way delay: 107.380 ms
Loss rate: 3.59%
-- Flow 3:
Average throughput: 29.61 Mbit/s
95th percentile per-packet one-way delay: 105.664 ms
Loss rate: 4.57%
Run 9: Report of FillP — Data Link

![Graphs showing throughput and per-packet one-way delay over time for different flows.](image-url)
Run 10: Statistics of FillP

Start at: 2018-06-19 12:18:12
End at: 2018-06-19 12:18:42
Local clock offset: -2.808 ms
Remote clock offset: 7.31 ms

# Below is generated by plot.py at 2018-06-19 12:30:42
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 93.94 Mbit/s
   95th percentile per-packet one-way delay: 107.536 ms
   Loss rate: 2.39%
-- Flow 1:
   Average throughput: 58.21 Mbit/s
   95th percentile per-packet one-way delay: 106.963 ms
   Loss rate: 1.56%
-- Flow 2:
   Average throughput: 39.15 Mbit/s
   95th percentile per-packet one-way delay: 105.647 ms
   Loss rate: 3.21%
-- Flow 3:
   Average throughput: 29.76 Mbit/s
   95th percentile per-packet one-way delay: 109.430 ms
   Loss rate: 4.98%
Run 10: Report of FillIP — Data Link
Run 1: Statistics of Indigo

Start at: 2018-06-19 09:15:03
End at: 2018-06-19 09:15:33
Local clock offset: -3.311 ms
Remote clock offset: 5.178 ms

# Below is generated by plot.py at 2018-06-19 12:30:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.76 Mbit/s
95th percentile per-packet one-way delay: 117.321 ms
Loss rate: 4.74%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: 112.557 ms
Loss rate: 6.77%
-- Flow 2:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: 119.213 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 27.58 Mbit/s
95th percentile per-packet one-way delay: 119.949 ms
Loss rate: 1.27%
Run 1: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 60.59 Mbps)  Flow 1 egress (mean 56.80 Mbps)
Flow 2 ingress (mean 37.80 Mbps)  Flow 2 egress (mean 37.70 Mbps)
Flow 3 ingress (mean 27.46 Mbps)  Flow 3 egress (mean 27.58 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 112.56 ms)  Flow 2 (95th percentile 119.21 ms)  Flow 3 (95th percentile 119.95 ms)
Run 2: Statistics of Indigo

Start at: 2018-06-19 09:34:52
End at: 2018-06-19 09:35:22
Local clock offset: -3.415 ms
Remote clock offset: 8.486 ms

# Below is generated by plot.py at 2018-06-19 12:30:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.59 Mbit/s
  95th percentile per-packet one-way delay: 115.509 ms
  Loss rate: 1.60%
-- Flow 1:
  Average throughput: 53.77 Mbit/s
  95th percentile per-packet one-way delay: 112.627 ms
  Loss rate: 1.60%
-- Flow 2:
  Average throughput: 36.12 Mbit/s
  95th percentile per-packet one-way delay: 117.625 ms
  Loss rate: 1.39%
-- Flow 3:
  Average throughput: 24.18 Mbit/s
  95th percentile per-packet one-way delay: 127.922 ms
  Loss rate: 2.27%
Run 2: Report of Indigo — Data Link

**Throughput (Mbit/s)**

- **Flow 1 ingress** (mean 54.35 Mbit/s)
- **Flow 1 egress** (mean 53.77 Mbit/s)
- **Flow 2 ingress** (mean 36.34 Mbit/s)
- **Flow 2 egress** (mean 36.12 Mbit/s)
- **Flow 3 ingress** (mean 24.33 Mbit/s)
- **Flow 3 egress** (mean 24.18 Mbit/s)

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

- **Flow 1 (95th percentile 112.63 ms)**
- **Flow 2 (95th percentile 117.62 ms)**
- **Flow 3 (95th percentile 127.92 ms)**
Run 3: Statistics of Indigo

Start at: 2018-06-19 09:54:48
End at: 2018-06-19 09:55:18
Local clock offset: -1.794 ms
Remote clock offset: 9.041 ms

# Below is generated by plot.py at 2018-06-19 12:30:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.98 Mbit/s
95th percentile per-packet one-way delay: 114.270 ms
Loss rate: 1.62%
-- Flow 1:
Average throughput: 52.92 Mbit/s
95th percentile per-packet one-way delay: 112.148 ms
Loss rate: 1.59%
-- Flow 2:
Average throughput: 35.53 Mbit/s
95th percentile per-packet one-way delay: 117.618 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 26.17 Mbit/s
95th percentile per-packet one-way delay: 112.237 ms
Loss rate: 2.16%
Run 3: Report of Indigo — Data Link

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

- **Flow 1** (ingress: mean 53.48 Mbps, egress: mean 52.92 Mbps)
- **Flow 2** (ingress: mean 35.77 Mbps, egress: mean 35.53 Mbps)
- **Flow 3** (ingress: mean 26.31 Mbps, egress: mean 26.17 Mbps)

![Graph showing packet delay distribution over time.]

- **Flow 1** (95th percentile delay: 112.15 ms)
- **Flow 2** (95th percentile delay: 117.62 ms)
- **Flow 3** (95th percentile delay: 112.24 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-19 10:14:37
End at: 2018-06-19 10:15:07
Local clock offset: -1.865 ms
Remote clock offset: 7.628 ms

# Below is generated by plot.py at 2018-06-19 12:30:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.27 Mbit/s
95th percentile per-packet one-way delay: 115.935 ms
Loss rate: 1.26%
-- Flow 1:
Average throughput: 52.78 Mbit/s
95th percentile per-packet one-way delay: 115.062 ms
Loss rate: 1.13%
-- Flow 2:
Average throughput: 34.58 Mbit/s
95th percentile per-packet one-way delay: 117.215 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 116.209 ms
Loss rate: 2.39%
Run 4: Report of Indigo — Data Link

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

![Graph 2: 95th Percentile One-Way Delay](image2.png)
Run 5: Statistics of Indigo

Start at: 2018-06-19 10:34:30
End at: 2018-06-19 10:35:00
Local clock offset: -1.713 ms
Remote clock offset: 7.565 ms

# Below is generated by plot.py at 2018-06-19 12:30:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.41 Mbit/s
95th percentile per-packet one-way delay: 115.160 ms
Loss rate: 1.31%
-- Flow 1:
Average throughput: 51.82 Mbit/s
95th percentile per-packet one-way delay: 115.190 ms
Loss rate: 1.38%
-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 115.011 ms
Loss rate: 0.93%
-- Flow 3:
Average throughput: 26.30 Mbit/s
95th percentile per-packet one-way delay: 115.519 ms
Loss rate: 1.93%
Run 5: Report of Indigo — Data Link

[Graph showing throughput and packet delay over time for different flows.]
Run 6: Statistics of Indigo

Start at: 2018-06-19 10:54:29
End at: 2018-06-19 10:54:59
Local clock offset: -1.512 ms
Remote clock offset: 9.365 ms

# Below is generated by plot.py at 2018-06-19 12:30:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.35 Mbit/s
  95th percentile per-packet one-way delay: 119.692 ms
  Loss rate: 1.43%
-- Flow 1:
  Average throughput: 57.78 Mbit/s
  95th percentile per-packet one-way delay: 117.011 ms
  Loss rate: 1.40%
-- Flow 2:
  Average throughput: 30.03 Mbit/s
  95th percentile per-packet one-way delay: 118.112 ms
  Loss rate: 1.01%
-- Flow 3:
  Average throughput: 26.63 Mbit/s
  95th percentile per-packet one-way delay: 127.001 ms
  Loss rate: 2.59%
Run 6: Report of Indigo — Data Link

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

*Flow 1 ingress (mean 58.28 Mbit/s)*
*Flow 1 egress (mean 57.78 Mbit/s)*
*Flow 2 ingress (mean 30.09 Mbit/s)*
*Flow 2 egress (mean 30.03 Mbit/s)*
*Flow 3 ingress (mean 26.90 Mbit/s)*
*Flow 3 egress (mean 26.63 Mbit/s)*

*Flow 1 (95th percentile 117.01 ms)*
*Flow 2 (95th percentile 118.11 ms)*
*Flow 3 (95th percentile 127.00 ms)*
Run 7: Statistics of Indigo

Start at: 2018-06-19 11:14:17
End at: 2018-06-19 11:14:47
Local clock offset: -2.104 ms
Remote clock offset: 12.526 ms

# Below is generated by plot.py at 2018-06-19 12:31:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.24 Mbit/s
95th percentile per-packet one-way delay: 117.315 ms
Loss rate: 1.73%
-- Flow 1:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 117.594 ms
Loss rate: 1.76%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: 116.483 ms
Loss rate: 1.51%
-- Flow 3:
Average throughput: 27.75 Mbit/s
95th percentile per-packet one-way delay: 118.354 ms
Loss rate: 2.14%
Run 7: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 54.81 Mbit/s)
- Flow 1 egress (mean 54.14 Mbit/s)
- Flow 2 ingress (mean 38.68 Mbit/s)
- Flow 2 egress (mean 37.81 Mbit/s)
- Flow 3 ingress (mean 27.89 Mbit/s)
- Flow 3 egress (mean 27.75 Mbit/s)
Run 8: Statistics of Indigo

Start at: 2018-06-19 11:34:17
End at: 2018-06-19 11:34:47
Local clock offset: -2.493 ms
Remote clock offset: 12.932 ms

# Below is generated by plot.py at 2018-06-19 12:31:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.01 Mbit/s
  95th percentile per-packet one-way delay: 113.667 ms
  Loss rate: 8.46%
-- Flow 1:
  Average throughput: 58.35 Mbit/s
  95th percentile per-packet one-way delay: 110.343 ms
  Loss rate: 12.18%
-- Flow 2:
  Average throughput: 39.07 Mbit/s
  95th percentile per-packet one-way delay: 118.622 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 29.97 Mbit/s
  95th percentile per-packet one-way delay: 117.599 ms
  Loss rate: 3.25%
Run 8: Report of Indigo — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 9: Statistics of Indigo

Start at: 2018-06-19 11:54:22
End at: 2018-06-19 11:54:52
Local clock offset: -3.075 ms
Remote clock offset: 13.129 ms

# Below is generated by plot.py at 2018-06-19 12:31:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.81 Mbit/s
95th percentile per-packet one-way delay: 110.974 ms
Loss rate: 16.81%
-- Flow 1:
Average throughput: 48.73 Mbit/s
95th percentile per-packet one-way delay: 110.006 ms
Loss rate: 15.38%
-- Flow 2:
Average throughput: 33.10 Mbit/s
95th percentile per-packet one-way delay: 113.035 ms
Loss rate: 18.37%
-- Flow 3:
Average throughput: 21.11 Mbit/s
95th percentile per-packet one-way delay: 102.478 ms
Loss rate: 21.93%
Run 9: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 57.27 Mbit/s)
Flow 1 egress (mean 48.73 Mbit/s)
Flow 2 ingress (mean 40.21 Mbit/s)
Flow 2 egress (mean 33.10 Mbit/s)
Flow 3 ingress (mean 23.83 Mbit/s)
Flow 3 egress (mean 21.11 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 110.01 ms)
Flow 2 (95th percentile 113.03 ms)
Flow 3 (95th percentile 102.48 ms)
Run 10: Statistics of Indigo

Local clock offset: -2.894 ms
Remote clock offset: 7.707 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.14 Mbit/s
95th percentile per-packet one-way delay: 110.915 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 58.86 Mbit/s
95th percentile per-packet one-way delay: 110.871 ms
Loss rate: 2.12%
-- Flow 2:
Average throughput: 38.90 Mbit/s
95th percentile per-packet one-way delay: 111.549 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 29.14 Mbit/s
95th percentile per-packet one-way delay: 96.417 ms
Loss rate: 1.95%
Run 10: Report of Indigo — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 59.80 Mbps)
- Flow 1 egress (mean 58.86 Mbps)
- Flow 2 ingress (mean 38.98 Mbps)
- Flow 2 egress (mean 38.90 Mbps)
- Flow 3 ingress (mean 29.22 Mbps)
- Flow 3 egress (mean 29.14 Mbps)

Delay (ms):
- Flow 1 (95th percentile 110.87 ms)
- Flow 2 (95th percentile 111.55 ms)
- Flow 3 (95th percentile 96.42 ms)
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 09:02:48
End at: 2018-06-19 09:03:18
Local clock offset: -2.774 ms
Remote clock offset: 9.984 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 20.10 Mbit/s
  95th percentile per-packet one-way delay: 82.057 ms
  Loss rate: 1.43%
-- Flow 1:
  Average throughput: 12.94 Mbit/s
  95th percentile per-packet one-way delay: 81.395 ms
  Loss rate: 1.11%
-- Flow 2:
  Average throughput: 8.72 Mbit/s
  95th percentile per-packet one-way delay: 82.738 ms
  Loss rate: 1.66%
-- Flow 3:
  Average throughput: 4.23 Mbit/s
  95th percentile per-packet one-way delay: 79.634 ms
  Loss rate: 3.38%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

End at: 2018-06-19 09:23:05
Local clock offset: -3.414 ms
Remote clock offset: 10.134 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.47 Mbit/s
95th percentile per-packet one-way delay: 80.560 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 13.31 Mbit/s
95th percentile per-packet one-way delay: 79.996 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 8.71 Mbit/s
95th percentile per-packet one-way delay: 81.547 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 78.572 ms
Loss rate: 3.37%
Run 2: Report of LEDBAT — Data Link

![Graph showing throughput over time for different flows.](image)

![Graph showing packet delay over time for different flows.](image)
Run 3: Statistics of LEDBAT

End at: 2018-06-19 09:42:53
Local clock offset: -2.488 ms
Remote clock offset: 9.166 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.30 Mbit/s
95th percentile per-packet one-way delay: 84.195 ms
Loss rate: 1.44%
-- Flow 1:
Average throughput: 12.27 Mbit/s
95th percentile per-packet one-way delay: 82.645 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.45 Mbit/s
95th percentile per-packet one-way delay: 86.248 ms
Loss rate: 1.67%
-- Flow 3:
Average throughput: 4.33 Mbit/s
95th percentile per-packet one-way delay: 82.661 ms
Loss rate: 3.30%
Run 3: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 12.34 Mbit/s)
- Flow 1 egress (mean 12.27 Mbit/s)
- Flow 2 ingress (mean 8.52 Mbit/s)
- Flow 2 egress (mean 8.45 Mbit/s)
- Flow 3 ingress (mean 4.40 Mbit/s)
- Flow 3 egress (mean 4.33 Mbit/s)

![Graph showing per-packet one-way delay over time for different flows.]

- Flow 1 (95th percentile 82.64 ms)
- Flow 2 (95th percentile 86.25 ms)
- Flow 3 (95th percentile 82.66 ms)
Run 4: Statistics of LEDBAT

Start at: 2018-06-19 10:02:21
End at: 2018-06-19 10:02:51
Local clock offset: -1.651 ms
Remote clock offset: 10.076 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 19.69 Mbit/s
  95th percentile per-packet one-way delay: 84.414 ms
  Loss rate: 1.42%
-- Flow 1:
  Average throughput: 13.05 Mbit/s
  95th percentile per-packet one-way delay: 83.512 ms
  Loss rate: 1.10%
-- Flow 2:
  Average throughput: 7.85 Mbit/s
  95th percentile per-packet one-way delay: 86.156 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 4.31 Mbit/s
  95th percentile per-packet one-way delay: 81.172 ms
  Loss rate: 3.30%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Local clock offset: -1.787 ms
Remote clock offset: 3.745 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 18.08 Mbit/s
95th percentile per-packet one-way delay: 87.170 ms
Loss rate: 1.27%
-- Flow 1:
Average throughput: 11.25 Mbit/s
95th percentile per-packet one-way delay: 88.350 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 8.73 Mbit/s
95th percentile per-packet one-way delay: 84.122 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 3.18 Mbit/s
95th percentile per-packet one-way delay: 89.768 ms
Loss rate: 3.95%
Run 5: Report of LEDBAT — Data Link

[Graph showing throughput and delay over time for different flows.]

- Flow 1 ingress (mean 11.28 Mbit/s)
- Flow 1 egress (mean 11.25 Mbit/s)
- Flow 2 ingress (mean 8.80 Mbit/s)
- Flow 2 egress (mean 8.73 Mbit/s)
- Flow 3 ingress (mean 3.26 Mbit/s)
- Flow 3 egress (mean 3.16 Mbit/s)
Run 6: Statistics of LEDBAT

Start at: 2018-06-19 10:42:02
End at: 2018-06-19 10:42:32
Local clock offset: -1.722 ms
Remote clock offset: 10.321 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.89 Mbit/s
95th percentile per-packet one-way delay: 86.507 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 12.73 Mbit/s
95th percentile per-packet one-way delay: 87.827 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.85 Mbit/s
95th percentile per-packet one-way delay: 84.661 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 3.91 Mbit/s
95th percentile per-packet one-way delay: 83.532 ms
Loss rate: 3.47%
Run 6: Report of LEDBAT — Data Link
Run 7: Statistics of LEDBAT

Start at: 2018-06-19 11:02:01
End at: 2018-06-19 11:02:31
Local clock offset: -1.517 ms
Remote clock offset: 11.246 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.65 Mbit/s
95th percentile per-packet one-way delay: 90.773 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 91.310 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 8.31 Mbit/s
95th percentile per-packet one-way delay: 87.132 ms
Loss rate: 1.64%
-- Flow 3:
Average throughput: 4.05 Mbit/s
95th percentile per-packet one-way delay: 94.375 ms
Loss rate: 3.42%
Run 8: Statistics of LEDBAT

Local clock offset: -2.345 ms
Remote clock offset: 15.737 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.68 Mbit/s
95th percentile per-packet one-way delay: 83.460 ms
Loss rate: 1.43%
-- Flow 1:
Average throughput: 12.68 Mbit/s
95th percentile per-packet one-way delay: 83.525 ms
Loss rate: 1.11%
-- Flow 2:
Average throughput: 8.42 Mbit/s
95th percentile per-packet one-way delay: 83.718 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 4.28 Mbit/s
95th percentile per-packet one-way delay: 81.878 ms
Loss rate: 3.33%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-06-19 11:42:03
End at: 2018-06-19 11:42:33
Local clock offset: -2.823 ms
Remote clock offset: 14.583 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.24 Mbit/s
95th percentile per-packet one-way delay: 85.132 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 13.17 Mbit/s
95th percentile per-packet one-way delay: 85.574 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 8.59 Mbit/s
95th percentile per-packet one-way delay: 84.657 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 85.019 ms
Loss rate: 3.38%
Run 9: Report of LEDBAT — Data Link

![Graph of throughput vs. time for different flows]

- Flow 1 ingress (mean 13.24 Mbit/s)
- Flow 1 egress (mean 13.17 Mbit/s)
- Flow 2 ingress (mean 8.66 Mbit/s)
- Flow 2 egress (mean 8.59 Mbit/s)
- Flow 3 ingress (mean 4.28 Mbit/s)
- Flow 3 egress (mean 4.21 Mbit/s)

![Graph of packet inter-arrival time delay vs. time for different flows]

- Flow 1 (95th percentile 85.57 ms)
- Flow 2 (95th percentile 84.66 ms)
- Flow 3 (95th percentile 85.02 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-06-19 12:02:06
End at: 2018-06-19 12:02:36
Local clock offset: -3.206 ms
Remote clock offset: 5.709 ms

# Below is generated by plot.py at 2018-06-19 12:31:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.43 Mbit/s
95th percentile per-packet one-way delay: 84.237 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: 82.294 ms
Loss rate: 1.10%
-- Flow 2:
Average throughput: 8.75 Mbit/s
95th percentile per-packet one-way delay: 84.345 ms
Loss rate: 1.66%
-- Flow 3:
Average throughput: 4.23 Mbit/s
95th percentile per-packet one-way delay: 82.333 ms
Loss rate: 3.37%
Run 10: Report of LEDBAT — Data Link

![Graph showing throughput and packet drop delay over time for different flows.]

- **Flow 1** (ingress mean 13.34 Mbit/s, egress mean 13.26 Mbit/s)
- **Flow 2** (ingress mean 8.82 Mbit/s, egress mean 8.75 Mbit/s)
- **Flow 3** (ingress mean 4.30 Mbit/s, egress mean 4.23 Mbit/s)
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 09:13:50
End at: 2018-06-19 09:14:20
Local clock offset: -3.215 ms
Remote clock offset: 5.067 ms

# Below is generated by plot.py at 2018-06-19 12:32:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.90 Mbit/s
95th percentile per-packet one-way delay: 117.986 ms
Loss rate: 6.36%
-- Flow 1:
Average throughput: 53.97 Mbit/s
95th percentile per-packet one-way delay: 112.790 ms
Loss rate: 6.65%
-- Flow 2:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: 119.934 ms
Loss rate: 4.83%
-- Flow 3:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 132.296 ms
Loss rate: 8.01%

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Run 1: Report of PCC-Allegro — Data Link

[Graphs showing throughput and per-packet one-way delay over time for different flows.]
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-19 09:33:38
End at: 2018-06-19 09:34:08
Local clock offset: -3.58 ms
Remote clock offset: 9.583 ms

# Below is generated by plot.py at 2018-06-19 12:32:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.61 Mbit/s
95th percentile per-packet one-way delay: 112.937 ms
Loss rate: 6.59%
-- Flow 1:
Average throughput: 51.22 Mbit/s
95th percentile per-packet one-way delay: 106.058 ms
Loss rate: 6.97%
-- Flow 2:
Average throughput: 32.23 Mbit/s
95th percentile per-packet one-way delay: 119.785 ms
Loss rate: 4.81%
-- Flow 3:
Average throughput: 27.63 Mbit/s
95th percentile per-packet one-way delay: 125.731 ms
Loss rate: 8.52%
Run 2: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress** (mean 54.76 Mbit/s)
- **Flow 1 egress** (mean 51.22 Mbit/s)
- **Flow 2 ingress** (mean 33.59 Mbit/s)
- **Flow 2 egress** (mean 32.23 Mbit/s)
- **Flow 3 ingress** (mean 29.67 Mbit/s)
- **Flow 3 egress** (mean 27.63 Mbit/s)

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

- **Flow 1** (95th percentile 106.06 ms)
- **Flow 2** (95th percentile 119.78 ms)
- **Flow 3** (95th percentile 125.73 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 09:53:34
End at: 2018-06-19 09:54:04
Local clock offset: -1.899 ms
Remote clock offset: 4.254 ms

# Below is generated by plot.py at 2018-06-19 12:32:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.09 Mbit/s
95th percentile per-packet one-way delay: 111.530 ms
Loss rate: 4.90%
-- Flow 1:
Average throughput: 52.79 Mbit/s
95th percentile per-packet one-way delay: 111.156 ms
Loss rate: 6.69%
-- Flow 2:
Average throughput: 32.81 Mbit/s
95th percentile per-packet one-way delay: 111.803 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 16.99 Mbit/s
95th percentile per-packet one-way delay: 113.562 ms
Loss rate: 1.85%
Run 3: Report of PCC-Allegro — Data Link

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

- **Flow 1 Ingress (mean 56.25 Mbps/s)**
- **Flow 1 Egress (mean 52.79 Mbps/s)**
- **Flow 2 Ingress (mean 32.89 Mbps/s)**
- **Flow 2 Egress (mean 32.81 Mbps/s)**
- **Flow 3 Ingress (mean 17.03 Mbps/s)**
- **Flow 3 Egress (mean 16.99 Mbps/s)**

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

- **Flow 1 (95th percentile 111.16 ms)**
- **Flow 2 (95th percentile 111.80 ms)**
- **Flow 3 (95th percentile 113.56 ms)**
Run 4: Statistics of PCC-Allegro

Local clock offset: -1.791 ms
Remote clock offset: 3.731 ms

# Below is generated by plot.py at 2018-06-19 12:32:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.18 Mbit/s
95th percentile per-packet one-way delay: 115.175 ms
Loss rate: 5.62%
-- Flow 1:
Average throughput: 51.96 Mbit/s
95th percentile per-packet one-way delay: 111.249 ms
Loss rate: 7.01%
-- Flow 2:
Average throughput: 34.42 Mbit/s
95th percentile per-packet one-way delay: 118.804 ms
Loss rate: 3.17%
-- Flow 3:
Average throughput: 16.53 Mbit/s
95th percentile per-packet one-way delay: 117.652 ms
Loss rate: 1.95%
Run 4: Report of PCC-Allegro — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 ingress** (mean 55.57 Mbit/s)
- **Flow 1 egress** (mean 51.96 Mbit/s)
- **Flow 2 ingress** (mean 35.23 Mbit/s)
- **Flow 2 egress** (mean 34.42 Mbit/s)
- **Flow 3 ingress** (mean 16.58 Mbit/s)
- **Flow 3 egress** (mean 16.53 Mbit/s)

![Graph 2: Delay](image2)

- **Flow 1** (95th percentile 111.25 ms)
- **Flow 2** (95th percentile 118.80 ms)
- **Flow 3** (95th percentile 117.65 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-19 10:33:17
End at: 2018-06-19 10:33:47
Local clock offset: -1.745 ms
Remote clock offset: 3.636 ms

# Below is generated by plot.py at 2018-06-19 12:32:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.72 Mbit/s
95th percentile per-packet one-way delay: 114.436 ms
Loss rate: 5.13%
-- Flow 1:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 113.427 ms
Loss rate: 6.92%
-- Flow 2:
Average throughput: 31.67 Mbit/s
95th percentile per-packet one-way delay: 115.680 ms
Loss rate: 1.05%
-- Flow 3:
Average throughput: 18.04 Mbit/s
95th percentile per-packet one-way delay: 117.019 ms
Loss rate: 2.66%
Run 5: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 56.45 Mbit/s)
- Flow 1 egress (mean 52.83 Mbit/s)
- Flow 2 ingress (mean 31.74 Mbit/s)
- Flow 2 egress (mean 31.67 Mbit/s)
- Flow 3 ingress (mean 18.23 Mbit/s)
- Flow 3 egress (mean 16.04 Mbit/s)
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-19 10:53:15
End at: 2018-06-19 10:53:45
Local clock offset: -1.515 ms
Remote clock offset: 10.21 ms

# Below is generated by plot.py at 2018-06-19 12:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.93 Mbit/s
95th percentile per-packet one-way delay: 117.426 ms
Loss rate: 6.63%
-- Flow 1:
Average throughput: 49.79 Mbit/s
95th percentile per-packet one-way delay: 110.807 ms
Loss rate: 7.04%
-- Flow 2:
Average throughput: 31.95 Mbit/s
95th percentile per-packet one-way delay: 120.865 ms
Loss rate: 4.44%
-- Flow 3:
Average throughput: 27.48 Mbit/s
95th percentile per-packet one-way delay: 129.697 ms
Loss rate: 9.30%
Run 6: Report of PCC-Allegro — Data Link

![Graph showing data link performance metrics](image)

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 53.27 Mbps)
  - Flow 1 egress (mean 49.79 Mbps)
  - Flow 2 ingress (mean 33.17 Mbps)
  - Flow 2 egress (mean 31.95 Mbps)
  - Flow 3 ingress (mean 29.80 Mbps)
  - Flow 3 egress (mean 27.48 Mbps)

- **Round-trip packet one-way delay (ms):**
  - Flow 1 (95th percentile 110.81 ms)
  - Flow 2 (95th percentile 120.86 ms)
  - Flow 3 (95th percentile 129.70 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-19 11:13:03
Local clock offset: -2.111 ms
Remote clock offset: 16.278 ms

# Below is generated by plot.py at 2018-06-19 12:32:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.13 Mbit/s
95th percentile per-packet one-way delay: 110.800 ms
Loss rate: 6.11%
-- Flow 1:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: 106.419 ms
Loss rate: 6.64%
-- Flow 2:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: 111.753 ms
Loss rate: 4.38%
-- Flow 3:
Average throughput: 28.14 Mbit/s
95th percentile per-packet one-way delay: 122.223 ms
Loss rate: 6.92%
Run 7: Report of PCC-Allegro — Data Link

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

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

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Run 8: Statistics of PCC-Allegro

End at: 2018-06-19 11:33:25
Local clock offset: -2.462 ms
Remote clock offset: 12.799 ms

# Below is generated by plot.py at 2018-06-19 12:32:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.96 Mbit/s
  95th percentile per-packet one-way delay: 85.541 ms
  Loss rate: 3.53%
-- Flow 1:
  Average throughput: 71.91 Mbit/s
  95th percentile per-packet one-way delay: 85.722 ms
  Loss rate: 3.51%
-- Flow 2:
  Average throughput: 2.49 Mbit/s
  95th percentile per-packet one-way delay: 83.710 ms
  Loss rate: 3.98%
-- Flow 3:
  Average throughput: 4.30 Mbit/s
  95th percentile per-packet one-way delay: 83.619 ms
  Loss rate: 4.24%
Run 8: Report of PCC-Allegro — Data Link

![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 74.11 Mbit/s)
- Flow 1 egress (mean 71.91 Mbit/s)
- Flow 2 ingress (mean 2.57 Mbit/s)
- Flow 2 egress (mean 2.49 Mbit/s)
- Flow 3 ingress (mean 4.42 Mbit/s)
- Flow 3 egress (mean 4.30 Mbit/s)

![Graph 2: Packet Error Rate](image2)

- Flow 1 (95th percentile 85.72 ms)
- Flow 2 (95th percentile 83.71 ms)
- Flow 3 (95th percentile 83.62 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-19 11:53:08
End at: 2018-06-19 11:53:38
Local clock offset: -3.044 ms
Remote clock offset: 7.64 ms

# Below is generated by plot.py at 2018-06-19 12:33:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 74.12 Mbit/s
95th percentile per-packet one-way delay: 85.086 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 69.96 Mbit/s
95th percentile per-packet one-way delay: 84.955 ms
Loss rate: 2.42%
-- Flow 2:
Average throughput: 3.95 Mbit/s
95th percentile per-packet one-way delay: 85.214 ms
Loss rate: 2.83%
-- Flow 3:
Average throughput: 4.74 Mbit/s
95th percentile per-packet one-way delay: 83.028 ms
Loss rate: 3.73%
Run 9: Report of PCC-Allegro — Data Link
Run 10: Statistics of PCC-Allegro

Local clock offset: -2.846 ms
Remote clock offset: 7.828 ms

# Below is generated by plot.py at 2018-06-19 12:33:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 109.609 ms
Loss rate: 5.71%
-- Flow 1:
Average throughput: 55.25 Mbit/s
95th percentile per-packet one-way delay: 104.070 ms
Loss rate: 6.46%
-- Flow 2:
Average throughput: 35.24 Mbit/s
95th percentile per-packet one-way delay: 109.930 ms
Loss rate: 4.57%
-- Flow 3:
Average throughput: 29.47 Mbit/s
95th percentile per-packet one-way delay: 112.514 ms
Loss rate: 4.09%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2018-06-19 09:07:41
End at: 2018-06-19 09:08:11
Local clock offset: -3.036 ms
Remote clock offset: 8.903 ms

# Below is generated by plot.py at 2018-06-19 12:33:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.04 Mbit/s
95th percentile per-packet one-way delay: 89.517 ms
Loss rate: 4.31%
-- Flow 1:
Average throughput: 45.29 Mbit/s
95th percentile per-packet one-way delay: 91.506 ms
Loss rate: 4.11%
-- Flow 2:
Average throughput: 23.25 Mbit/s
95th percentile per-packet one-way delay: 80.345 ms
Loss rate: 4.53%
-- Flow 3:
Average throughput: 7.13 Mbit/s
95th percentile per-packet one-way delay: 80.400 ms
Loss rate: 6.63%
Run 1: Report of PCC-Expr — Data Link

![Graph showing throughput and packet delay over time for different flows with their mean rates.]

- **Flow 1 ingress (mean 46.97 Mbit/s)**
- **Flow 1 egress (mean 45.29 Mbit/s)**
- **Flow 2 ingress (mean 24.15 Mbit/s)**
- **Flow 2 egress (mean 23.25 Mbit/s)**
- **Flow 3 ingress (mean 7.51 Mbit/s)**
- **Flow 3 egress (mean 7.13 Mbit/s)**

![Graph showing packet one-way delay over time for different flows.]

- **Flow 1 (95th percentile 91.51 ms)**
- **Flow 2 (95th percentile 80.34 ms)**
- **Flow 3 (95th percentile 80.40 ms)**
Run 2: Statistics of PCC-Expr

End at: 2018-06-19 09:27:58
Local clock offset: -3.502 ms
Remote clock offset: 9.23 ms

# Below is generated by plot.py at 2018-06-19 12:34:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.35 Mbit/s
  95th percentile per-packet one-way delay: 107.001 ms
  Loss rate: 1.31%
-- Flow 1:
  Average throughput: 55.35 Mbit/s
  95th percentile per-packet one-way delay: 104.794 ms
  Loss rate: 1.36%
-- Flow 2:
  Average throughput: 36.40 Mbit/s
  95th percentile per-packet one-way delay: 108.961 ms
  Loss rate: 0.99%
-- Flow 3:
  Average throughput: 24.06 Mbit/s
  95th percentile per-packet one-way delay: 109.419 ms
  Loss rate: 1.93%
Run 2: Report of PCC-Expr — Data Link

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

**Throughput (Mbps)**

- Flow 1 ingress (mean 55.81 Mbps)
- Flow 1 egress (mean 55.35 Mbps)
- Flow 2 ingress (mean 36.46 Mbps)
- Flow 2 egress (mean 36.40 Mbps)
- Flow 3 ingress (mean 24.12 Mbps)
- Flow 3 egress (mean 24.06 Mbps)

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

- Flow 1 (95th percentile 104.79 ms)
- Flow 2 (95th percentile 108.96 ms)
- Flow 3 (95th percentile 109.42 ms)
Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 09:47:15
End at: 2018-06-19 09:47:45
Local clock offset: -2.1 ms
Remote clock offset: 10.201 ms

# Below is generated by plot.py at 2018-06-19 12:34:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.40 Mbit/s
  95th percentile per-packet one-way delay: 107.041 ms
  Loss rate: 4.07%
-- Flow 1:
  Average throughput: 44.82 Mbit/s
  95th percentile per-packet one-way delay: 107.175 ms
  Loss rate: 3.29%
-- Flow 2:
  Average throughput: 22.44 Mbit/s
  95th percentile per-packet one-way delay: 104.604 ms
  Loss rate: 3.57%
-- Flow 3:
  Average throughput: 20.49 Mbit/s
  95th percentile per-packet one-way delay: 107.380 ms
  Loss rate: 9.97%
Run 3: Report of PCC-Expr — Data Link

![Graph showing throughput and delay over time for different flows.]

- **Flow 1**: Ingress (mean 46.09 Mbit/s) and Egress (mean 44.82 Mbit/s)
- **Flow 2**: Ingress (mean 23.08 Mbit/s) and Egress (mean 22.44 Mbit/s)
- **Flow 3**: Ingress (mean 22.38 Mbit/s) and Egress (mean 20.49 Mbit/s)

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Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 10:07:14
End at: 2018-06-19 10:07:44
Local clock offset: -1.742 ms
Remote clock offset: 4.988 ms

# Below is generated by plot.py at 2018-06-19 12:34:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.25 Mbit/s
  95th percentile per-packet one-way delay: 98.959 ms
  Loss rate: 6.31%
-- Flow 1:
  Average throughput: 44.20 Mbit/s
  95th percentile per-packet one-way delay: 100.027 ms
  Loss rate: 5.25%
-- Flow 2:
  Average throughput: 18.61 Mbit/s
  95th percentile per-packet one-way delay: 96.207 ms
  Loss rate: 8.38%
-- Flow 3:
  Average throughput: 11.35 Mbit/s
  95th percentile per-packet one-way delay: 83.302 ms
  Loss rate: 11.53%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2018-06-19 10:27:06
End at: 2018-06-19 10:27:36
Local clock offset: -1.763 ms
Remote clock offset: 3.534 ms

# Below is generated by plot.py at 2018-06-19 12:34:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.68 Mbit/s
  95th percentile per-packet one-way delay: 113.705 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 45.26 Mbit/s
  95th percentile per-packet one-way delay: 113.499 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 26.64 Mbit/s
  95th percentile per-packet one-way delay: 113.866 ms
  Loss rate: 0.89%
-- Flow 3:
  Average throughput: 23.75 Mbit/s
  95th percentile per-packet one-way delay: 121.253 ms
  Loss rate: 1.82%
Run 5: Report of PCC-Expr — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 6: Statistics of PCC-Expr

Start at: 2018-06-19 10:46:56
End at: 2018-06-19 10:47:26
Local clock offset: -1.606 ms
Remote clock offset: 7.914 ms

# Below is generated by plot.py at 2018-06-19 12:34:37
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 79.35 Mbit/s
  95th percentile per-packet one-way delay: 111.221 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 53.63 Mbit/s
  95th percentile per-packet one-way delay: 111.203 ms
  Loss rate: 1.18%
-- Flow 2:
  Average throughput: 31.72 Mbit/s
  95th percentile per-packet one-way delay: 113.750 ms
  Loss rate: 0.78%
-- Flow 3:
  Average throughput: 14.33 Mbit/s
  95th percentile per-packet one-way delay: 102.801 ms
  Loss rate: 2.16%
Run 6: Report of PCC-Expr — Data Link

---

**Throughput (Mb/s)**

- **Flow 1 ingress**: (mean 53.97 Mb/s)
- **Flow 1 egress**: (mean 53.63 Mb/s)
- **Flow 2 ingress**: (mean 31.71 Mb/s)
- **Flow 2 egress**: (mean 31.72 Mb/s)
- **Flow 3 ingress**: (mean 14.41 Mb/s)
- **Flow 3 egress**: (mean 14.33 Mb/s)

---

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

- **Flow 1**: (95th percentile 111.20 ms)
- **Flow 2**: (95th percentile 113.75 ms)
- **Flow 3**: (95th percentile 102.80 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-19 11:06:54
End at: 2018-06-19 11:07:24
Local clock offset: -1.707 ms
Remote clock offset: 11.731 ms

# Below is generated by plot.py at 2018-06-19 12:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.01 Mbit/s
95th percentile per-packet one-way delay: 109.288 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 108.637 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 28.95 Mbit/s
95th percentile per-packet one-way delay: 108.591 ms
Loss rate: 1.49%
-- Flow 3:
Average throughput: 21.23 Mbit/s
95th percentile per-packet one-way delay: 111.908 ms
Loss rate: 1.82%
Run 7: Report of PCC-Expr — Data Link

![Graphs showing network performance metrics over time.](image-url)

Legend:
- Flow 1 Ingress (mean 39.85 Mbit/s)
- Flow 1 Egress (mean 39.88 Mbit/s)
- Flow 2 Ingress (mean 29.15 Mbit/s)
- Flow 2 Egress (mean 26.95 Mbit/s)
- Flow 3 Ingress (mean 21.26 Mbit/s)
- Flow 3 Egress (mean 21.23 Mbit/s)

Legend for packet delay:
- Flow 1 (95th percentile 108.64 ms)
- Flow 2 (95th percentile 108.59 ms)
- Flow 3 (95th percentile 111.91 ms)
Run 8: Statistics of PCC-Expr

Start at: 2018-06-19 11:26:42
End at: 2018-06-19 11:27:12
Local clock offset: -2.392 ms
Remote clock offset: 17.368 ms

# Below is generated by plot.py at 2018-06-19 12:35:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.22 Mbit/s
95th percentile per-packet one-way delay: 107.378 ms
Loss rate: 1.10%
-- Flow 1:
Average throughput: 53.64 Mbit/s
95th percentile per-packet one-way delay: 107.304 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 107.646 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 26.09 Mbit/s
95th percentile per-packet one-way delay: 105.890 ms
Loss rate: 2.52%
Run 8: Report of PCC-Expr — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 53.72 Mbit/s) — Flow 1 egress (mean 53.64 Mbit/s)
Flow 2 ingress (mean 39.53 Mbit/s) — Flow 2 egress (mean 39.27 Mbit/s)
Flow 3 ingress (mean 26.32 Mbit/s) — Flow 3 egress (mean 26.09 Mbit/s)

Per packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 107.30 ms) — Flow 2 (95th percentile 107.65 ms) — Flow 3 (95th percentile 105.89 ms)
Run 9: Statistics of PCC-Expr

End at: 2018-06-19 11:47:27
Local clock offset: -2.94 ms
Remote clock offset: 11.76 ms

# Below is generated by plot.py at 2018-06-19 12:36:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.38 Mbit/s
95th percentile per-packet one-way delay: 109.014 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 55.35 Mbit/s
95th percentile per-packet one-way delay: 108.641 ms
Loss rate: 1.39%
-- Flow 2:
Average throughput: 36.66 Mbit/s
95th percentile per-packet one-way delay: 107.820 ms
Loss rate: 0.98%
-- Flow 3:
Average throughput: 26.67 Mbit/s
95th percentile per-packet one-way delay: 112.528 ms
Loss rate: 2.41%
Run 9: Report of PCC-Expr — Data Link

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

Legend:
- Flow 1 ingress (mean 55.82 Mbit/s)
- Flow 1 egress (mean 55.35 Mbit/s)
- Flow 2 ingress (mean 36.72 Mbit/s)
- Flow 2 egress (mean 36.66 Mbit/s)
- Flow 3 ingress (mean 26.87 Mbit/s)
- Flow 3 egress (mean 26.67 Mbit/s)
Run 10: Statistics of PCC-Expr

Start at: 2018-06-19 12:06:59
End at: 2018-06-19 12:07:29
Local clock offset: -3.128 ms
Remote clock offset: 3.588 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.26 Mbit/s
95th percentile per-packet one-way delay: 112.558 ms
Loss rate: 1.12%
-- Flow 1:
Average throughput: 55.47 Mbit/s
95th percentile per-packet one-way delay: 111.767 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 39.60 Mbit/s
95th percentile per-packet one-way delay: 112.759 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 26.12 Mbit/s
95th percentile per-packet one-way delay: 113.084 ms
Loss rate: 2.47%
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 09:11:25
End at: 2018-06-19 09:11:55
Local clock offset: -3.132 ms
Remote clock offset: 9.927 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.03 Mbit/s
95th percentile per-packet one-way delay: 99.905 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 32.12 Mbit/s
95th percentile per-packet one-way delay: 99.578 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 23.99 Mbit/s
95th percentile per-packet one-way delay: 100.572 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 27.50 Mbit/s
95th percentile per-packet one-way delay: 101.452 ms
Loss rate: 1.70%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 09:31:14
End at: 2018-06-19 09:31:44
Local clock offset: -3.623 ms
Remote clock offset: 9.873 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.85 Mbit/s
95th percentile per-packet one-way delay: 101.830 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 25.25 Mbit/s
95th percentile per-packet one-way delay: 101.775 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 19.62 Mbit/s
95th percentile per-packet one-way delay: 102.133 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 81.356 ms
Loss rate: 2.64%
Run 2: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 25.29 Mbps)
- Flow 1 egress (mean 25.25 Mbps)
- Flow 2 ingress (mean 19.68 Mbps)
- Flow 2 egress (mean 19.62 Mbps)
- Flow 3 ingress (mean 7.97 Mbps)
- Flow 3 egress (mean 7.89 Mbps)

**Packet loss (ms)**
- Flow 1 (95th percentile 101.78 ms)
- Flow 2 (95th percentile 102.13 ms)
- Flow 3 (95th percentile 81.36 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 09:51:10
End at: 2018-06-19 09:51:40
Local clock offset: -1.931 ms
Remote clock offset: 10.142 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: 92.494 ms
Loss rate: 3.76%
-- Flow 1:
Average throughput: 22.34 Mbit/s
95th percentile per-packet one-way delay: 87.417 ms
Loss rate: 3.47%
-- Flow 2:
Average throughput: 25.96 Mbit/s
95th percentile per-packet one-way delay: 96.206 ms
Loss rate: 4.18%
-- Flow 3:
Average throughput: 4.15 Mbit/s
95th percentile per-packet one-way delay: 77.324 ms
Loss rate: 3.10%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 10:10:59  
End at: 2018-06-19 10:11:29  
Local clock offset: -1.746 ms  
Remote clock offset: 3.79 ms

# Below is generated by plot.py at 2018-06-19 12:36:21  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 48.02 Mbit/s  
95th percentile per-packet one-way delay: 111.403 ms  
Loss rate: 0.88%  
-- Flow 1:  
Average throughput: 21.81 Mbit/s  
95th percentile per-packet one-way delay: 105.144 ms  
Loss rate: 0.51%  
-- Flow 2:  
Average throughput: 28.08 Mbit/s  
95th percentile per-packet one-way delay: 108.675 ms  
Loss rate: 0.68%  
-- Flow 3:  
Average throughput: 23.14 Mbit/s  
95th percentile per-packet one-way delay: 118.490 ms  
Loss rate: 2.40%
Run 4: Report of QUIC Cubic — Data Link

[Graph showing throughput and packet rate over time for different flows, with legend explaining the mean throughput and egress for each flow.]

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Run 5: Statistics of QUIC Cubic

Start at: 2018-06-19 10:30:53
End at: 2018-06-19 10:31:23
Local clock offset: -1.817 ms
Remote clock offset: 8.717 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 50.02 Mbit/s
95th percentile per-packet one-way delay: 107.398 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 26.76 Mbit/s
95th percentile per-packet one-way delay: 100.029 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 23.61 Mbit/s
95th percentile per-packet one-way delay: 106.549 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 23.23 Mbit/s
95th percentile per-packet one-way delay: 110.664 ms
Loss rate: 1.86%
Run 5: Report of QUIC Cubic — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 26.75 Mbit/s)  
Flow 1 egress (mean 26.76 Mbit/s)  
Flow 2 ingress (mean 23.61 Mbit/s)  
Flow 2 egress (mean 23.61 Mbit/s)  
Flow 3 ingress (mean 23.28 Mbit/s)  
Flow 3 egress (mean 23.23 Mbit/s)

Round-trip time (ms) vs Time (s)

Flow 1 (95th percentile 100.03 ms)  
Flow 2 (95th percentile 106.55 ms)  
Flow 3 (95th percentile 110.66 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-19 10:50:52
End at: 2018-06-19 10:51:22
Local clock offset: -1.61 ms
Remote clock offset: 9.949 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.70 Mbit/s
95th percentile per-packet one-way delay: 94.876 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 25.45 Mbit/s
95th percentile per-packet one-way delay: 94.931 ms
Loss rate: 2.34%
-- Flow 2:
Average throughput: 6.60 Mbit/s
95th percentile per-packet one-way delay: 85.452 ms
Loss rate: 1.44%
-- Flow 3:
Average throughput: 21.01 Mbit/s
95th percentile per-packet one-way delay: 92.988 ms
Loss rate: 2.56%
Run 6: Report of QUIC Cubic — Data Link

![Graph showing throughput and round-trip time for different flows.]

- Flow 1 ingress (mean 25.92 Mbit/s)
- Flow 1 egress (mean 25.45 Mbit/s)
- Flow 2 ingress (mean 6.64 Mbit/s)
- Flow 2 egress (mean 6.60 Mbit/s)
- Flow 3 ingress (mean 21.20 Mbit/s)
- Flow 3 egress (mean 21.01 Mbit/s)

![Graph showing per-packet end-to-end delay for different flows.]

- Flow 1 (95th percentile 94.93 ms)
- Flow 2 (95th percentile 85.45 ms)
- Flow 3 (95th percentile 92.99 ms)
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-19 11:10:39
End at: 2018-06-19 11:11:09
Local clock offset: -1.949 ms
Remote clock offset: 12.229 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.29 Mbit/s
95th percentile per-packet one-way delay: 104.456 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 30.48 Mbit/s
95th percentile per-packet one-way delay: 104.989 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 22.32 Mbit/s
95th percentile per-packet one-way delay: 103.509 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 21.44 Mbit/s
95th percentile per-packet one-way delay: 111.370 ms
Loss rate: 1.93%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-19 11:30:31
End at: 2018-06-19 11:31:01
Local clock offset: -2.497 ms
Remote clock offset: 13.742 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.52 Mbit/s
95th percentile per-packet one-way delay: 105.479 ms
Loss rate: 1.08%
-- Flow 1:
Average throughput: 28.34 Mbit/s
95th percentile per-packet one-way delay: 103.034 ms
Loss rate: 0.65%
-- Flow 2:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: 105.510 ms
Loss rate: 1.24%
-- Flow 3:
Average throughput: 24.66 Mbit/s
95th percentile per-packet one-way delay: 115.855 ms
Loss rate: 2.27%
Run 8: Report of QUIC Cubic — Data Link

![Graphs showing throughput and packet one-way delay over time for different flows.]

- Flow 1 ingress (mean 28.37 Mbit/s)
- Flow 1 egress (mean 28.34 Mbit/s)
- Flow 2 ingress (mean 24.38 Mbit/s)
- Flow 2 egress (mean 24.28 Mbit/s)
- Flow 3 ingress (mean 24.82 Mbit/s)
- Flow 3 egress (mean 24.66 Mbit/s)

- Flow 1 (95th percentile 103.03 ms)
- Flow 2 (95th percentile 105.51 ms)
- Flow 3 (95th percentile 115.86 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-19 11:50:44
End at: 2018-06-19 11:51:14
Local clock offset: -3.0 ms
Remote clock offset: 9.86 ms

# Below is generated by plot.py at 2018-06-19 12:36:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.65 Mbit/s
95th percentile per-packet one-way delay: 105.533 ms
Loss rate: 1.03%

-- Flow 1:
Average throughput: 31.20 Mbit/s
95th percentile per-packet one-way delay: 102.976 ms
Loss rate: 0.64%

-- Flow 2:
Average throughput: 25.21 Mbit/s
95th percentile per-packet one-way delay: 106.362 ms
Loss rate: 1.22%

-- Flow 3:
Average throughput: 23.61 Mbit/s
95th percentile per-packet one-way delay: 114.024 ms
Loss rate: 2.17%
Run 9: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 31.24 Mbps)
- Flow 1 egress (mean 31.20 Mbps)
- Flow 2 ingress (mean 25.32 Mbps)
- Flow 2 egress (mean 25.21 Mbps)
- Flow 3 ingress (mean 23.77 Mbps)
- Flow 3 egress (mean 23.61 Mbps)

![Graph 2: RTT per packet vs Time (s)]

- Flow 1 (95th percentile 102.98 ms)
- Flow 2 (95th percentile 106.36 ms)
- Flow 3 (95th percentile 114.02 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-19 12:10:46
End at: 2018-06-19 12:11:16
Local clock offset: -2.974 ms
Remote clock offset: 9.247 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.36 Mbit/s
  95th percentile per-packet one-way delay: 98.453 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 37.07 Mbit/s
  95th percentile per-packet one-way delay: 94.275 ms
  Loss rate: 0.50%
-- Flow 2:
  Average throughput: 25.29 Mbit/s
  95th percentile per-packet one-way delay: 98.665 ms
  Loss rate: 1.12%
-- Flow 3:
  Average throughput: 22.99 Mbit/s
  95th percentile per-packet one-way delay: 111.523 ms
  Loss rate: 2.33%
Run 10: Report of QUIC Cubic — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 37.05 Mbit/s)
Flow 1 egress (mean 37.07 Mbit/s)
Flow 2 ingress (mean 25.37 Mbit/s)
Flow 2 egress (mean 25.29 Mbit/s)
Flow 3 ingress (mean 23.15 Mbit/s)
Flow 3 egress (mean 22.90 Mbit/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 94.28 ms)
Flow 2 (95th percentile 98.67 ms)
Flow 3 (95th percentile 111.52 ms)
Run 1: Statistics of SCReAM

Start at: 2018-06-19 09:12:39
End at: 2018-06-19 09:13:09
Local clock offset: -3.183 ms
Remote clock offset: 9.954 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 79.927 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 78.093 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.350 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 80.131 ms
Loss rate: 1.84%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-06-19 09:32:27
End at: 2018-06-19 09:32:57
Local clock offset: -3.57 ms
Remote clock offset: 9.651 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 79.500 ms
  Loss rate: 0.83%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 79.044 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 78.810 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 79.541 ms
  Loss rate: 1.84%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-06-19 09:52:23
End at: 2018-06-19 09:52:53
Local clock offset: -1.937 ms
Remote clock offset: 4.171 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 85.007 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.651 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.318 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.968 ms
Loss rate: 1.84%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-06-19 10:12:13
End at: 2018-06-19 10:12:43
Local clock offset: -1.829 ms
Remote clock offset: 3.848 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 85.130 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 83.775 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.676 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.146 ms
  Loss rate: 1.45%
Run 4: Report of SCReAM — Data Link

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

![Graph 2: Delay vs Time (ms)](image2)
Run 5: Statistics of SCReAM

Start at: 2018-06-19 10:32:06
End at: 2018-06-19 10:32:36
Local clock offset: -1.734 ms
Remote clock offset: 4.71 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 84.128 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 83.075 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 83.067 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.164 ms
  Loss rate: 1.84%
Run 6: Statistics of SCReAM

Start at: 2018-06-19 10:52:05
End at: 2018-06-19 10:52:35
Local clock offset: -1.609 ms
Remote clock offset: 8.904 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 84.995 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.576 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 85.985 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 84.066 ms
Loss rate: 1.84%
Run 6: Report of SCReAM — Data Link

![Graphs showing network performance metrics over time for different flows.]

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.22 Mbit/s)
- Flow 2 egress (mean 0.22 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

For packet loss and round-trip delay, the graphs show the 95th percentile values:
- Flow 1: 85.58 ms
- Flow 2: 85.98 ms
- Flow 3: 84.07 ms

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Run 7: Statistics of SCReAM

End at: 2018-06-19 11:12:23
Local clock offset: -2.014 ms
Remote clock offset: 12.169 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  95th percentile per-packet one-way delay: 83.385 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 81.760 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 83.382 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 83.405 ms
  Loss rate: 1.84%
Run 7: Report of SCReAM — Data Link

![Graph showing data link performance metrics](image)

**Throughput (Mbps)**
- Flow 1 ingress (mean 0.22 Mbps)
- Flow 1 egress (mean 0.22 Mbps)
- Flow 2 ingress (mean 0.22 Mbps)
- Flow 2 egress (mean 0.22 Mbps)
- Flow 3 ingress (mean 0.22 Mbps)
- Flow 3 egress (mean 0.22 Mbps)

**Per-packet core CPU delay (ms)**
- Flow 1 (95th percentile 81.76 ms)
- Flow 2 (95th percentile 83.38 ms)
- Flow 3 (95th percentile 83.41 ms)
Run 8: Statistics of SCReAM

Start at: 2018-06-19 11:31:44
End at: 2018-06-19 11:32:14
Local clock offset: -2.51 ms
Remote clock offset: 17.649 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 79.858 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.151 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 79.869 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 77.589 ms
Loss rate: 1.45%
Run 8: Report of SCReAM — Data Link

[Graph 1: Throughput (Mbps) vs Time (s) shows fluctuating lines for Flow 1 ingress, Flow 1 egress, Flow 2 ingress, Flow 2 egress, Flow 3 ingress, Flow 3 egress, with mean 0.22 Mbps.]

[Graph 2: One-way delay (ms) vs Time (s) shows lines for Flow 1 (95th percentile 77.15 ms), Flow 2 (95th percentile 79.87 ms), Flow 3 (95th percentile 77.59 ms).]
Run 9: Statistics of SCReAM

End at: 2018-06-19 11:52:28
Local clock offset: -3.034 ms
Remote clock offset: 9.373 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 83.673 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 81.886 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.702 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 83.450 ms
Loss rate: 1.84%
Run 9: Report of SCReAM — Data Link

[Graph showing throughput and per-packet round-trip delay over time for different flows]
Run 10: Statistics of SCReAM

Start at: 2018-06-19 12:12:00
End at: 2018-06-19 12:12:30
Local clock offset: -2.898 ms
Remote clock offset: 2.857 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 85.351 ms
  Loss rate: 0.77%
  -- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 85.365 ms
  Loss rate: 0.51%
  -- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 84.517 ms
  Loss rate: 0.82%
  -- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 82.167 ms
  Loss rate: 1.45%
Run 10: Report of SCReAM — Data Link

![Graph showing throughput and per-packet communication delay over time for different flows.]

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.22 Mbit/s)
- Flow 2 egress (mean 0.22 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

![Graph showing per-packet communication delay over time for different flows.]

- Flow 1 (95th percentile 85.36 ms)
- Flow 2 (95th percentile 84.52 ms)
- Flow 3 (95th percentile 82.17 ms)
Run 1: Statistics of Sprout

Start at: 2018-06-19 09:08:57
End at: 2018-06-19 09:09:27
Local clock offset: -3.034 ms
Remote clock offset: 10.038 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1.42 Mbit/s
  95th percentile per-packet one-way delay: 83.456 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 0.98 Mbit/s
  95th percentile per-packet one-way delay: 84.187 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 78.436 ms
  Loss rate: 0.41%
-- Flow 3:
  Average throughput: 0.47 Mbit/s
  95th percentile per-packet one-way delay: 79.097 ms
  Loss rate: 0.51%
Run 2: Statistics of Sprout

Start at: 2018-06-19 09:28:47
End at: 2018-06-19 09:29:17
Local clock offset: -3.525 ms
Remote clock offset: 6.414 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 84.693 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 84.898 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 0.70 Mbit/s
95th percentile per-packet one-way delay: 83.389 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 1.34 Mbit/s
95th percentile per-packet one-way delay: 84.141 ms
Loss rate: 0.88%
Run 2: Report of Sprout — Data Link

![Graph showing throughput and packet delay for different flows.]

Key:
- Flow 1 ingress (mean 0.38 Mbit/s)
- Flow 1 egress (mean 0.38 Mbit/s)
- Flow 2 ingress (mean 0.70 Mbit/s)
- Flow 2 egress (mean 0.70 Mbit/s)
- Flow 3 ingress (mean 1.33 Mbit/s)
- Flow 3 egress (mean 1.34 Mbit/s)
Run 3: Statistics of Sprout

Start at: 2018-06-19 09:48:42
End at: 2018-06-19 09:49:12
Local clock offset: -2.019 ms
Remote clock offset: 5.283 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.89 Mbit/s
  95th percentile per-packet one-way delay: 85.204 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 0.51 Mbit/s
  95th percentile per-packet one-way delay: 85.113 ms
  Loss rate: 0.89%
-- Flow 2:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 85.263 ms
  Loss rate: 0.33%
-- Flow 3:
  Average throughput: 0.41 Mbit/s
  95th percentile per-packet one-way delay: 84.857 ms
  Loss rate: 0.59%
Run 3: Report of Sprout — Data Link

![Graph of Throughput (Mbps)]

- Flow 1 ingress (mean 0.51 Mbps)
- Flow 1 egress (mean 0.51 Mbps)
- Flow 2 ingress (mean 0.36 Mbps)
- Flow 2 egress (mean 0.36 Mbps)
- Flow 3 ingress (mean 0.40 Mbps)
- Flow 3 egress (mean 0.41 Mbps)

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

- Flow 1 (95th percentile 85.11 ms)
- Flow 2 (95th percentile 85.26 ms)
- Flow 3 (95th percentile 84.86 ms)
Run 4: Statistics of Sprout

Start at: 2018-06-19 10:08:31
End at: 2018-06-19 10:09:01
Local clock offset: -1.767 ms
Remote clock offset: 8.863 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.76 Mbit/s
95th percentile per-packet one-way delay: 81.404 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 0.23 Mbit/s
95th percentile per-packet one-way delay: 81.322 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 0.45 Mbit/s
95th percentile per-packet one-way delay: 82.032 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 0.71 Mbit/s
95th percentile per-packet one-way delay: 78.793 ms
Loss rate: 0.68%
Run 4: Report of Sprout — Data Link
Run 5: Statistics of Sprout

Local clock offset: -1.753 ms
Remote clock offset: 9.757 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.62 Mbit/s
95th percentile per-packet one-way delay: 79.739 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 77.619 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 80.320 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 0.24 Mbit/s
95th percentile per-packet one-way delay: 79.669 ms
Loss rate: 0.10%
Run 5: Report of Sprout — Data Link

![Graph showing throughput and packet latency over time for different flows.]

- Flow 1 ingress (mean 0.37 Mbps)
- Flow 1 egress (mean 0.37 Mbps)
- Flow 2 ingress (mean 0.26 Mbps)
- Flow 2 egress (mean 0.26 Mbps)
- Flow 3 ingress (mean 0.24 Mbps)
- Flow 3 egress (mean 0.24 Mbps)

![Graph showing per-packet one-way delay for different flows.]

- Flow 1 (95th percentile 77.62 ms)
- Flow 2 (95th percentile 80.32 ms)
- Flow 3 (95th percentile 79.67 ms)
Run 6: Statistics of Sprout

End at: 2018-06-19 10:48:44
Local clock offset: -1.585 ms
Remote clock offset: 9.291 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
--- Total of 3 flows:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 85.479 ms
Loss rate: 0.48%
--- Flow 1:
Average throughput: 0.50 Mbit/s
95th percentile per-packet one-way delay: 85.475 ms
Loss rate: 0.64%
--- Flow 2:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 83.046 ms
Loss rate: 0.28%
--- Flow 3:
Average throughput: 0.64 Mbit/s
95th percentile per-packet one-way delay: 85.701 ms
Loss rate: 0.39%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-06-19 11:08:11
End at: 2018-06-19 11:08:41
Local clock offset: -1.795 ms
Remote clock offset: 11.866 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.86 Mbit/s
  95th percentile per-packet one-way delay: 85.557 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 0.38 Mbit/s
  95th percentile per-packet one-way delay: 83.266 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 0.53 Mbit/s
  95th percentile per-packet one-way delay: 86.252 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 86.180 ms
  Loss rate: 1.94%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 0.38 Mbit/s)
- Flow 1 egress (mean 0.38 Mbit/s)
- Flow 2 ingress (mean 0.52 Mbit/s)
- Flow 2 egress (mean 0.53 Mbit/s)
- Flow 3 ingress (mean 0.42 Mbit/s)
- Flow 3 egress (mean 0.42 Mbit/s)

- Flow 1 (95th percentile 83.27 ms)
- Flow 2 (95th percentile 86.25 ms)
- Flow 3 (95th percentile 86.18 ms)
Run 8: Statistics of Sprout

Start at: 2018-06-19 11:28:01
End at: 2018-06-19 11:28:31
Local clock offset: -2.394 ms
Remote clock offset: 16.289 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 82.229 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 79.200 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 0.29 Mbit/s
95th percentile per-packet one-way delay: 79.864 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 82.766 ms
Loss rate: 0.62%
Run 8: Report of Sprout — Data Link

![Graph showing throughput and per-packet one-way delay over time for multiple flows with specific mean and 95th percentile values.]

- Flow 1 ingress (mean 0.38 Mbit/s)
- Flow 1 egress (mean 0.38 Mbit/s)
- Flow 2 ingress (mean 0.29 Mbit/s)
- Flow 2 egress (mean 0.29 Mbit/s)
- Flow 3 ingress (mean 0.78 Mbit/s)
- Flow 3 egress (mean 0.79 Mbit/s)

- Flow 1 (95th percentile 79.20 ms)
- Flow 2 (95th percentile 79.86 ms)
- Flow 3 (95th percentile 82.77 ms)
Run 9: Statistics of Sprout

End at: 2018-06-19 11:48:45
Local clock offset: -2.979 ms
Remote clock offset: 11.72 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.83 Mbit/s
95th percentile per-packet one-way delay: 84.948 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: 84.371 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 81.855 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 85.806 ms
Loss rate: 1.36%
Run 9: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-06-19 12:08:18
End at: 2018-06-19 12:08:48
Local clock offset: -2.988 ms
Remote clock offset: 3.361 ms

# Below is generated by plot.py at 2018-06-19 12:36:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.66 Mbit/s
95th percentile per-packet one-way delay: 85.715 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 0.32 Mbit/s
95th percentile per-packet one-way delay: 85.896 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 0.33 Mbit/s
95th percentile per-packet one-way delay: 85.715 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 83.703 ms
Loss rate: 1.27%
Run 10: Report of Sprout — Data Link

[Graph showing network performance data]

[Graph showing packet loss and delay data]

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Run 1: Statistics of TaoVA-100x

Start at: 2018-06-19 09:10:08
End at: 2018-06-19 09:10:38
Local clock offset: -3.086 ms
Remote clock offset: 10.07 ms

# Below is generated by plot.py at 2018-06-19 12:37:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.56 Mbit/s
95th percentile per-packet one-way delay: 108.394 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 48.18 Mbit/s
95th percentile per-packet one-way delay: 108.506 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 35.74 Mbit/s
95th percentile per-packet one-way delay: 106.531 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 29.27 Mbit/s
95th percentile per-packet one-way delay: 107.157 ms
Loss rate: 2.23%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-19 09:29:57
End at: 2018-06-19 09:30:27
Local clock offset: -3.554 ms
Remote clock offset: 10.029 ms

# Below is generated by plot.py at 2018-06-19 12:37:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.55 Mbit/s
95th percentile per-packet one-way delay: 108.248 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 45.09 Mbit/s
95th percentile per-packet one-way delay: 106.652 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 33.49 Mbit/s
95th percentile per-packet one-way delay: 108.380 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 24.97 Mbit/s
95th percentile per-packet one-way delay: 113.089 ms
Loss rate: 2.90%
Run 2: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 44.99 Mbit/s)**
- **Flow 1 egress (mean 45.09 Mbit/s)**
- **Flow 2 ingress (mean 33.39 Mbit/s)**
- **Flow 2 egress (mean 33.49 Mbit/s)**
- **Flow 3 ingress (mean 25.30 Mbit/s)**
- **Flow 3 egress (mean 24.97 Mbit/s)**

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

- **Flow 1 (95th percentile 106.65 ms)**
- **Flow 2 (95th percentile 108.38 ms)**
- **Flow 3 (95th percentile 113.09 ms)**
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 09:49:52
End at: 2018-06-19 09:50:22
Local clock offset: -2.039 ms
Remote clock offset: 8.985 ms

# Below is generated by plot.py at 2018-06-19 12:37:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.03 Mbit/s
  95th percentile per-packet one-way delay: 105.998 ms
  Loss rate: 11.07%
-- Flow 1:
  Average throughput: 38.14 Mbit/s
  95th percentile per-packet one-way delay: 101.928 ms
  Loss rate: 9.74%
-- Flow 2:
  Average throughput: 27.82 Mbit/s
  95th percentile per-packet one-way delay: 107.315 ms
  Loss rate: 12.28%
-- Flow 3:
  Average throughput: 22.51 Mbit/s
  95th percentile per-packet one-way delay: 109.624 ms
  Loss rate: 14.63%
Run 3: Report of TaoVA-100x — Data Link

![Graph showing network throughput and packet delay over time for different flows.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 42.04 Mbps)
  - Flow 2 ingress (mean 31.45 Mbps)
  - Flow 3 ingress (mean 25.94 Mbps)
  - Flow 1 egress (mean 38.34 Mbps)
  - Flow 2 egress (mean 27.82 Mbps)
  - Flow 3 egress (mean 22.51 Mbps)

- **Packet One-Way Delay (ms):**
  - Flow 1 (95th percentile 101.93 ms)
  - Flow 2 (95th percentile 107.31 ms)
  - Flow 3 (95th percentile 109.62 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-19 10:09:41
End at: 2018-06-19 10:10:11
Local clock offset: -1.716 ms
Remote clock offset: 4.892 ms

# Below is generated by plot.py at 2018-06-19 12:37:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.28 Mbit/s
  95th percentile per-packet one-way delay: 111.908 ms
  Loss rate: 0.85%
-- Flow 1:
  Average throughput: 45.01 Mbit/s
  95th percentile per-packet one-way delay: 109.791 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 34.39 Mbit/s
  95th percentile per-packet one-way delay: 114.766 ms
  Loss rate: 0.92%
-- Flow 3:
  Average throughput: 19.55 Mbit/s
  95th percentile per-packet one-way delay: 120.954 ms
  Loss rate: 3.13%
Run 4: Report of TaoVA-100x — Data Link

![Graph 1](Run 4: Report of TaoVA-100x — Data Link.png)

![Graph 2](Run 4: Report of TaoVA-100x — Data Link.png)
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-19 10:29:35
End at: 2018-06-19 10:30:05
Local clock offset: -1.822 ms
Remote clock offset: 4.693 ms

# Below is generated by plot.py at 2018-06-19 12:37:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.84 Mbit/s
95th percentile per-packet one-way delay: 112.781 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 45.26 Mbit/s
95th percentile per-packet one-way delay: 112.700 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 33.77 Mbit/s
95th percentile per-packet one-way delay: 112.364 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 24.77 Mbit/s
95th percentile per-packet one-way delay: 121.862 ms
Loss rate: 2.23%
Run 5: Report of TaoVA-100x — Data Link

![Graph showing throughput over time for different flows](image)

![Graph showing per-packet one-way delay over time for different flows](image)

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Run 6: Statistics of TaoVA-100x

Local clock offset: -1.579 ms
Remote clock offset: 9.616 ms

# Below is generated by plot.py at 2018-06-19 12:37:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.01 Mbit/s
  95th percentile per-packet one-way delay: 111.005 ms
  Loss rate: 10.89%
-- Flow 1:
  Average throughput: 37.97 Mbit/s
  95th percentile per-packet one-way delay: 107.082 ms
  Loss rate: 9.43%
-- Flow 2:
  Average throughput: 29.95 Mbit/s
  95th percentile per-packet one-way delay: 111.588 ms
  Loss rate: 12.56%
-- Flow 3:
  Average throughput: 19.48 Mbit/s
  95th percentile per-packet one-way delay: 114.681 ms
  Loss rate: 14.15%
Run 6: Report of TaoVA-100x — Data Link

[Graph showing throughput and packet delay over time for different flows]
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-19 11:09:22
End at: 2018-06-19 11:09:52
Local clock offset: -1.866 ms
Remote clock offset: 10.94 ms

# Below is generated by plot.py at 2018-06-19 12:38:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 76.88 Mbit/s
  95th percentile per-packet one-way delay: 114.183 ms
  Loss rate: 4.15%
-- Flow 1:
  Average throughput: 45.09 Mbit/s
  95th percentile per-packet one-way delay: 114.195 ms
  Loss rate: 5.14%
-- Flow 2:
  Average throughput: 35.18 Mbit/s
  95th percentile per-packet one-way delay: 112.128 ms
  Loss rate: 2.71%
-- Flow 3:
  Average throughput: 25.55 Mbit/s
  95th percentile per-packet one-way delay: 119.805 ms
  Loss rate: 2.68%
Run 7: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 47.28 Mbps)
- Flow 1 egress (mean 45.09 Mbps)
- Flow 2 ingress (mean 35.86 Mbps)
- Flow 2 egress (mean 35.18 Mbps)
- Flow 3 ingress (mean 25.79 Mbps)
- Flow 3 egress (mean 25.55 Mbps)

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

- Flow 1 (95th percentile 114.19 ms)
- Flow 2 (95th percentile 112.13 ms)
- Flow 3 (95th percentile 119.81 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-19 11:29:12
End at: 2018-06-19 11:29:42
Local clock offset: -2.474 ms
Remote clock offset: 17.576 ms

# Below is generated by plot.py at 2018-06-19 12:38:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.75 Mbit/s
95th percentile per-packet one-way delay: 108.295 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 50.70 Mbit/s
95th percentile per-packet one-way delay: 108.619 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 37.66 Mbit/s
95th percentile per-packet one-way delay: 106.844 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: 106.223 ms
Loss rate: 2.03%
Run 8: Report of TaoVA-100x — Data Link

![Data Link Graph]

**Throughput (Mbps)**

- Flow 1 ingress (mean 50.63 Mbps)
- Flow 1 egress (mean 50.70 Mbps)
- Flow 2 ingress (mean 37.71 Mbps)
- Flow 2 egress (mean 37.66 Mbps)
- Flow 3 ingress (mean 30.58 Mbps)
- Flow 3 egress (mean 30.46 Mbps)

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

- Flow 1 (95th percentile 108.62 ms)
- Flow 2 (95th percentile 106.84 ms)
- Flow 3 (95th percentile 106.22 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-19 11:49:26  
End at: 2018-06-19 11:49:56  
Local clock offset: -2.987 ms  
Remote clock offset: 10.76 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.59 Mbit/s
95th percentile per-packet one-way delay: 112.094 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 50.98 Mbit/s
95th percentile per-packet one-way delay: 109.926 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 37.13 Mbit/s
95th percentile per-packet one-way delay: 109.513 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 30.23 Mbit/s
95th percentile per-packet one-way delay: 112.801 ms
Loss rate: 2.14%
Run 9: Report of TaoVA-100x — Data Link

![Line graph showing throughput and packet delay over time for different flows.]

- **Flow 1 ( ingress mean 50.96 Mbit/s )**
- **Flow 1 ( egress mean 50.98 Mbit/s )**
- **Flow 2 ( ingress mean 37.20 Mbit/s )**
- **Flow 2 ( egress mean 37.13 Mbit/s )**
- **Flow 3 ( ingress mean 30.38 Mbit/s )**
- **Flow 3 ( egress mean 30.23 Mbit/s )**

![Bar graph showing per-packet one way delay over time for different flows.]

- **Flow 1 (95th percentile 109.93 ms )**
- **Flow 2 (95th percentile 109.51 ms )**
- **Flow 3 (95th percentile 112.80 ms )**

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Run 10: Statistics of TaoVA-100x

End at: 2018-06-19 12:09:58
Local clock offset: -2.961 ms
Remote clock offset: 9.396 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.93 Mbit/s
  95th percentile per-packet one-way delay: 102.822 ms
  Loss rate: 12.67%
-- Flow 1:
  Average throughput: 46.81 Mbit/s
  95th percentile per-packet one-way delay: 97.766 ms
  Loss rate: 11.06%
-- Flow 2:
  Average throughput: 33.68 Mbit/s
  95th percentile per-packet one-way delay: 107.052 ms
  Loss rate: 14.62%
-- Flow 3:
  Average throughput: 15.09 Mbit/s
  95th percentile per-packet one-way delay: 106.824 ms
  Loss rate: 18.37%
Run 1: Statistics of TCP Vegas

Start at: 2018-06-19 09:17:36
End at: 2018-06-19 09:18:06
Local clock offset: -3.372 ms
Remote clock offset: 5.169 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.15 Mbit/s
95th percentile per-packet one-way delay: 96.689 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 96.600 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 26.54 Mbit/s
95th percentile per-packet one-way delay: 97.221 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 22.37 Mbit/s
95th percentile per-packet one-way delay: 104.053 ms
Loss rate: 1.90%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 09:37:23
End at: 2018-06-19 09:37:53
Local clock offset: -2.986 ms
Remote clock offset: 9.432 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 45.66 Mbit/s
95th percentile per-packet one-way delay: 94.854 ms
Loss rate: 0.57%

-- Flow 1:
Average throughput: 27.26 Mbit/s
95th percentile per-packet one-way delay: 92.055 ms
Loss rate: 0.33%

-- Flow 2:
Average throughput: 19.05 Mbit/s
95th percentile per-packet one-way delay: 99.286 ms
Loss rate: 0.73%

-- Flow 3:
Average throughput: 17.49 Mbit/s
95th percentile per-packet one-way delay: 92.386 ms
Loss rate: 1.31%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 09:57:21
End at: 2018-06-19 09:57:51
Local clock offset: -1.79 ms
Remote clock offset: 10.147 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.70 Mbit/s
95th percentile per-packet one-way delay: 94.952 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 19.39 Mbit/s
95th percentile per-packet one-way delay: 90.180 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 21.80 Mbit/s
95th percentile per-packet one-way delay: 97.098 ms
Loss rate: 0.87%
-- Flow 3:
Average throughput: 17.72 Mbit/s
95th percentile per-packet one-way delay: 100.188 ms
Loss rate: 1.80%
Run 3: Report of TCP Vegas — Data Link

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

Throughput: 0 to 50 Mbit/s

Time (s): 0 to 30

Packet Delay: 0 to 130 ms

Legend:
- Flow 1 ingress (mean 19.39 Mbit/s)
- Flow 1 egress (mean 19.39 Mbit/s)
- Flow 2 ingress (mean 21.82 Mbit/s)
- Flow 2 egress (mean 21.80 Mbit/s)
- Flow 3 ingress (mean 17.75 Mbit/s)
- Flow 3 egress (mean 17.72 Mbit/s)

![Graph showing packet delay](image)

Per packet one-way delay (ms)

Time (s): 0 to 30

Legend:
- Flow 1 (95th percentile 90.18 ms)
- Flow 2 (95th percentile 97.10 ms)
- Flow 3 (95th percentile 100.19 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 10:17:09
End at: 2018-06-19 10:17:39
Local clock offset: -1.798 ms
Remote clock offset: 7.601 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.65 Mbit/s
95th percentile per-packet one-way delay: 97.042 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 30.75 Mbit/s
95th percentile per-packet one-way delay: 94.451 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 20.63 Mbit/s
95th percentile per-packet one-way delay: 99.863 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 12.80 Mbit/s
95th percentile per-packet one-way delay: 102.199 ms
Loss rate: 1.87%
Run 4: Report of TCP Vegas — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2)
Run 5: Statistics of TCP Vegas

Start at: 2018-06-19 10:37:02
End at: 2018-06-19 10:37:32
Local clock offset: -1.712 ms
Remote clock offset: 7.621 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 47.11 Mbit/s
  95th percentile per-packet one-way delay: 96.168 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 27.07 Mbit/s
  95th percentile per-packet one-way delay: 90.766 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 19.78 Mbit/s
  95th percentile per-packet one-way delay: 99.680 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 20.98 Mbit/s
  95th percentile per-packet one-way delay: 108.695 ms
  Loss rate: 1.83%
Run 5: Report of TCP Vegas — Data Link

![Graph showing TCP Vegas data link performance with throughput and packet one-way delay metrics over time.](image-url)
Run 6: Statistics of TCP Vegas

Start at: 2018-06-19 10:57:01
End at: 2018-06-19 10:57:31
Local clock offset: -1.487 ms
Remote clock offset: 10.671 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 43.32 Mbit/s
  95th percentile per-packet one-way delay: 98.431 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 21.21 Mbit/s
  95th percentile per-packet one-way delay: 96.276 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 16.66 Mbit/s
  95th percentile per-packet one-way delay: 98.540 ms
  Loss rate: 0.70%
-- Flow 3:
  Average throughput: 33.59 Mbit/s
  95th percentile per-packet one-way delay: 102.043 ms
  Loss rate: 0.98%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-06-19 11:16:50
End at: 2018-06-19 11:17:20
Local clock offset: -2.186 ms
Remote clock offset: 16.596 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.39 Mbit/s
95th percentile per-packet one-way delay: 90.125 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 16.49 Mbit/s
95th percentile per-packet one-way delay: 90.047 ms
Loss rate: 1.03%
-- Flow 2:
Average throughput: 17.97 Mbit/s
95th percentile per-packet one-way delay: 92.670 ms
Loss rate: 1.55%
-- Flow 3:
Average throughput: 24.22 Mbit/s
95th percentile per-packet one-way delay: 92.565 ms
Loss rate: 2.85%
Run 7: Report of TCP Vegas — Data Link

![Graph showing throughput and delay for different flows over time.]

Flow 1 ingress (mean 16.58 Mbit/s)  
Flow 1 egress (mean 16.49 Mbit/s)  
Flow 2 ingress (mean 18.11 Mbit/s)  
Flow 2 egress (mean 17.97 Mbit/s)  
Flow 3 ingress (mean 24.52 Mbit/s)  
Flow 3 egress (mean 24.22 Mbit/s)

![Graph showing per-packet one-way delay for different flows over time.]

Flow 1 (95th percentile 90.05 ms)  
Flow 2 (95th percentile 92.67 ms)  
Flow 3 (95th percentile 92.56 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-06-19 11:36:51
End at: 2018-06-19 11:37:21
Local clock offset: -2.702 ms
Remote clock offset: 13.115 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.62 Mbit/s
95th percentile per-packet one-way delay: 94.395 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 93.996 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 24.17 Mbit/s
95th percentile per-packet one-way delay: 94.471 ms
Loss rate: 0.99%
-- Flow 3:
Average throughput: 18.67 Mbit/s
95th percentile per-packet one-way delay: 113.355 ms
Loss rate: 2.00%
Run 8: Report of TCP Vegas — Data Link

![Graphs showing throughput and packet delay over time for different flows.](image-url)

**Throughput (Mbit/s):**
- **Flow 1 Ingress:** Mean 37.38 Mbit/s
- **Flow 1 Egress:** Mean 37.43 Mbit/s
- **Flow 2 Ingress:** Mean 24.22 Mbit/s
- **Flow 2 Egress:** Mean 24.17 Mbit/s
- **Flow 3 Ingress:** Mean 18.73 Mbit/s
- **Flow 3 Egress:** Mean 10.67 Mbit/s

**Packet Delay (ms):**
- **Flow 1:** 95th percentile 94.00 ms
- **Flow 2:** 95th percentile 94.47 ms
- **Flow 3:** 95th percentile 113.36 ms
Run 9: Statistics of TCP Vegas

Start at: 2018-06-19 11:57:04
End at: 2018-06-19 11:57:34
Local clock offset: -3.197 ms
Remote clock offset: 11.051 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.09 Mbit/s
95th percentile per-packet one-way delay: 88.129 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 31.52 Mbit/s
95th percentile per-packet one-way delay: 85.730 ms
Loss rate: 1.12%
-- Flow 2:
Average throughput: 30.35 Mbit/s
95th percentile per-packet one-way delay: 85.988 ms
Loss rate: 1.12%
-- Flow 3:
Average throughput: 19.55 Mbit/s
95th percentile per-packet one-way delay: 102.740 ms
Loss rate: 2.06%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

End at: 2018-06-19 12:17:28
Local clock offset: -2.772 ms
Remote clock offset: 2.244 ms

# Below is generated by plot.py at 2018-06-19 12:39:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.43 Mbit/s
  95th percentile per-packet one-way delay: 94.158 ms
  Loss rate: 0.84%
-- Flow 1:
  Average throughput: 31.25 Mbit/s
  95th percentile per-packet one-way delay: 92.009 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 23.93 Mbit/s
  95th percentile per-packet one-way delay: 96.563 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 22.21 Mbit/s
  95th percentile per-packet one-way delay: 105.719 ms
  Loss rate: 1.83%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-06-19 09:04:00
End at: 2018-06-19 09:04:30
Local clock offset: -2.772 ms
Remote clock offset: 11.05 ms

# Below is generated by plot.py at 2018-06-19 12:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.19 Mbit/s
95th percentile per-packet one-way delay: 110.407 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: 106.952 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 29.16 Mbit/s
95th percentile per-packet one-way delay: 110.811 ms
Loss rate: 1.48%
-- Flow 3:
Average throughput: 18.12 Mbit/s
95th percentile per-packet one-way delay: 112.327 ms
Loss rate: 5.61%
Run 1: Report of Verus — Data Link
Run 2: Statistics of Verus

End at: 2018-06-19 09:24:18
Local clock offset: -3.485 ms
Remote clock offset: 10.172 ms

# Below is generated by plot.py at 2018-06-19 12:39:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 61.00 Mbit/s
  95th percentile per-packet one-way delay: 112.266 ms
  Loss rate: 0.94%
-- Flow 1:
  Average throughput: 36.13 Mbit/s
  95th percentile per-packet one-way delay: 111.471 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 26.25 Mbit/s
  95th percentile per-packet one-way delay: 113.755 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 22.74 Mbit/s
  95th percentile per-packet one-way delay: 112.598 ms
  Loss rate: 2.36%
Run 2: Report of Verus — Data Link

![Graph showing data link performance metrics for different flows.](image)

- **Flow 1** (ingress mean 35.20 Mbit/s, egress mean 36.13 Mbit/s)
- **Flow 2** (ingress mean 26.18 Mbit/s, egress mean 26.25 Mbit/s)
- **Flow 3** (ingress mean 22.91 Mbit/s, egress mean 22.74 Mbit/s)

![Graph showing packet loss distribution for different flows.](image)

- **Flow 1** (95th percentile 111.47 ms)
- **Flow 2** (95th percentile 113.75 ms)
- **Flow 3** (95th percentile 112.60 ms)
Run 3: Statistics of Verus

Start at: 2018-06-19 09:43:35
End at: 2018-06-19 09:44:05
Local clock offset: -2.332 ms
Remote clock offset: 4.247 ms

# Below is generated by plot.py at 2018-06-19 12:39:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 118.499 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 30.81 Mbit/s
95th percentile per-packet one-way delay: 117.006 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 119.205 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 14.75 Mbit/s
95th percentile per-packet one-way delay: 129.204 ms
Loss rate: 2.13%
Run 4: Statistics of Verus

Start at: 2018-06-19 10:03:33
End at: 2018-06-19 10:04:03
Local clock offset: -1.569 ms
Remote clock offset: 4.06 ms

# Below is generated by plot.py at 2018-06-19 12:39:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.61 Mbit/s
95th percentile per-packet one-way delay: 113.914 ms
Loss rate: 13.16%
-- Flow 1:
Average throughput: 31.91 Mbit/s
95th percentile per-packet one-way delay: 109.807 ms
Loss rate: 12.24%
-- Flow 2:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: 115.799 ms
Loss rate: 14.80%
-- Flow 3:
Average throughput: 5.38 Mbit/s
95th percentile per-packet one-way delay: 126.802 ms
Loss rate: 14.50%
Run 4: Report of Verus — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 35.16 Mb/s)
Flow 1 egress (mean 31.91 Mb/s)
Flow 2 ingress (mean 28.04 Mb/s)
Flow 2 egress (mean 24.02 Mb/s)
Flow 3 ingress (mean 6.19 Mb/s)
Flow 3 egress (mean 5.38 Mb/s)

Round-trip time (ms)

Time (s)

Flow 1 (95th percentile 109.81 ms)
Flow 2 (95th percentile 115.80 ms)
Flow 3 (95th percentile 126.80 ms)
Run 5: Statistics of Verus

End at: 2018-06-19 10:23:51
Local clock offset: -1.84 ms
Remote clock offset: 8.651 ms

# Below is generated by plot.py at 2018-06-19 12:39:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.78 Mbit/s
95th percentile per-packet one-way delay: 111.493 ms
Loss rate: 11.75%
-- Flow 1:
Average throughput: 35.04 Mbit/s
95th percentile per-packet one-way delay: 108.475 ms
Loss rate: 11.12%
-- Flow 2:
Average throughput: 9.79 Mbit/s
95th percentile per-packet one-way delay: 111.596 ms
Loss rate: 12.41%
-- Flow 3:
Average throughput: 15.98 Mbit/s
95th percentile per-packet one-way delay: 119.047 ms
Loss rate: 14.99%
Run 5: Report of Verus — Data Link

![Graph of throughput and per-packet round-trip time over time for different flows.](Image)

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Run 6: Statistics of Verus

End at: 2018-06-19 10:43:44
Local clock offset: -1.638 ms
Remote clock offset: 10.778 ms

# Below is generated by plot.py at 2018-06-19 12:39:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.96 Mbit/s
95th percentile per-packet one-way delay: 118.180 ms
Loss rate: 1.23%
-- Flow 1:
Average throughput: 30.51 Mbit/s
95th percentile per-packet one-way delay: 114.332 ms
Loss rate: 0.89%
-- Flow 2:
Average throughput: 32.75 Mbit/s
95th percentile per-packet one-way delay: 119.292 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 23.72 Mbit/s
95th percentile per-packet one-way delay: 127.452 ms
Loss rate: 2.52%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-06-19 11:03:13
End at: 2018-06-19 11:03:43
Local clock offset: -1.435 ms
Remote clock offset: 15.374 ms

# Below is generated by plot.py at 2018-06-19 12:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 59.18 Mbit/s
95th percentile per-packet one-way delay: 105.775 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 34.78 Mbit/s
95th percentile per-packet one-way delay: 103.995 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 27.57 Mbit/s
95th percentile per-packet one-way delay: 106.647 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 18.84 Mbit/s
95th percentile per-packet one-way delay: 112.830 ms
Loss rate: 0.99%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 34.96 Mbit/s)
- Flow 1 egress (mean 34.78 Mbit/s)
- Flow 2 ingress (mean 27.63 Mbit/s)
- Flow 2 egress (mean 27.57 Mbit/s)
- Flow 3 ingress (mean 18.71 Mbit/s)
- Flow 3 egress (mean 16.64 Mbit/s)

![Graph showing packet delay over time for different flows.]

- Flow 1 (95th percentile 104.00 ms)
- Flow 2 (95th percentile 106.65 ms)
- Flow 3 (95th percentile 112.83 ms)
Run 8: Statistics of Verus

Start at: 2018-06-19 11:23:01
Local clock offset: -2.395 ms
Remote clock offset: 13.153 ms

# Below is generated by plot.py at 2018-06-19 12:40:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.85 Mbit/s
95th percentile per-packet one-way delay: 116.874 ms
Loss rate: 12.00%
-- Flow 1:
Average throughput: 25.69 Mbit/s
95th percentile per-packet one-way delay: 116.657 ms
Loss rate: 11.59%
-- Flow 2:
Average throughput: 27.49 Mbit/s
95th percentile per-packet one-way delay: 114.957 ms
Loss rate: 11.31%
-- Flow 3:
Average throughput: 14.92 Mbit/s
95th percentile per-packet one-way delay: 117.824 ms
Loss rate: 16.44%
Run 8: Report of Verus — Data Link

![Graph showing throughput and packet loss over time for different flows.]

- **Flow 1 ingress (mean 28.96 Mbit/s)**
- **Flow 1 egress (mean 25.69 Mbit/s)**
- **Flow 2 ingress (mean 30.74 Mbit/s)**
- **Flow 2 egress (mean 27.49 Mbit/s)**
- **Flow 3 ingress (mean 17.35 Mbit/s)**
- **Flow 3 egress (mean 14.92 Mbit/s)**

![Graph showing packet loss over time for different flows.]

- **Flow 1 (95th percentile 116.66 ms)**
- **Flow 2 (95th percentile 114.96 ms)**
- **Flow 3 (95th percentile 117.82 ms)**
Run 9: Statistics of Verus

Start at: 2018-06-19 11:43:15
End at: 2018-06-19 11:43:45
Local clock offset: -2.852 ms
Remote clock offset: 14.531 ms

# Below is generated by plot.py at 2018-06-19 12:40:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.65 Mbit/s
95th percentile per-packet one-way delay: 110.102 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: 106.914 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 24.79 Mbit/s
95th percentile per-packet one-way delay: 109.676 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 36.04 Mbit/s
95th percentile per-packet one-way delay: 115.249 ms
Loss rate: 2.64%
Run 9: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 33.49 Mbps)  Flow 1 egress (mean 33.38 Mbps)
Flow 2 ingress (mean 24.63 Mbps)  Flow 2 egress (mean 24.79 Mbps)
Flow 3 ingress (mean 36.41 Mbps)  Flow 3 egress (mean 36.04 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 106.91 ms)  Flow 2 (95th percentile 109.68 ms)  Flow 3 (95th percentile 115.25 ms)
Run 10: Statistics of Verus

Start at: 2018-06-19 12:03:18
End at: 2018-06-19 12:03:48
Local clock offset: -3.21 ms
Remote clock offset: 9.498 ms

# Below is generated by plot.py at 2018-06-19 12:40:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.81 Mbit/s
95th percentile per-packet one-way delay: 111.025 ms
Loss rate: 0.91%
-- Flow 1:
Average throughput: 33.96 Mbit/s
95th percentile per-packet one-way delay: 105.866 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 26.14 Mbit/s
95th percentile per-packet one-way delay: 110.071 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 20.35 Mbit/s
95th percentile per-packet one-way delay: 113.750 ms
Loss rate: 3.98%
Run 10: Report of Verus — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-19 09:16:20
End at: 2018-06-19 09:16:50
Local clock offset: -3.289 ms
Remote clock offset: 5.104 ms

# Below is generated by plot.py at 2018-06-19 12:40:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.95 Mbit/s
95th percentile per-packet one-way delay: 115.270 ms
Loss rate: 2.04%
-- Flow 1:
Average throughput: 46.99 Mbit/s
95th percentile per-packet one-way delay: 113.835 ms
Loss rate: 2.11%
-- Flow 2:
Average throughput: 26.90 Mbit/s
95th percentile per-packet one-way delay: 115.426 ms
Loss rate: 1.68%
-- Flow 3:
Average throughput: 21.77 Mbit/s
95th percentile per-packet one-way delay: 116.076 ms
Loss rate: 2.45%
Run 1: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)

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

Start at: 2018-06-19 09:36:08
End at: 2018-06-19 09:36:38
Local clock offset: -3.263 ms
Remote clock offset: 4.688 ms

# Below is generated by plot.py at 2018-06-19 12:40:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.39 Mbit/s
95th percentile per-packet one-way delay: 113.051 ms
Loss rate: 1.67%
-- Flow 1:
Average throughput: 46.85 Mbit/s
95th percentile per-packet one-way delay: 112.035 ms
Loss rate: 1.57%
-- Flow 2:
Average throughput: 18.85 Mbit/s
95th percentile per-packet one-way delay: 115.007 ms
Loss rate: 1.59%
-- Flow 3:
Average throughput: 21.58 Mbit/s
95th percentile per-packet one-way delay: 117.005 ms
Loss rate: 2.47%
Run 2: Report of PCC-Vivace — Data Link

![Graph of data link performance](image1)

- **Flow 1 ingress** (mean 47.34 Mbit/s)
- **Flow 1 egress** (mean 46.85 Mbit/s)
- **Flow 2 ingress** (mean 18.99 Mbit/s)
- **Flow 2 egress** (mean 18.85 Mbit/s)
- **Flow 3 ingress** (mean 21.75 Mbit/s)
- **Flow 3 egress** (mean 21.58 Mbit/s)

![Graph of packet delay](image2)

- **Flow 1 (95th percentile 112.03 ms)**
- **Flow 2 (95th percentile 115.01 ms)**
- **Flow 3 (95th percentile 117.00 ms)**
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 09:56:05  
End at: 2018-06-19 09:56:35  
Local clock offset: -1.755 ms  
Remote clock offset: 5.231 ms  

# Below is generated by plot.py at 2018-06-19 12:40:34  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 65.34 Mbit/s  
95th percentile per-packet one-way delay: 103.823 ms  
Loss rate: 5.06%  
-- Flow 1:  
Average throughput: 48.11 Mbit/s  
95th percentile per-packet one-way delay: 105.671 ms  
Loss rate: 6.45%  
-- Flow 2:  
Average throughput: 24.57 Mbit/s  
95th percentile per-packet one-way delay: 103.505 ms  
Loss rate: 0.84%  
-- Flow 3:  
Average throughput: 2.86 Mbit/s  
95th percentile per-packet one-way delay: 84.566 ms  
Loss rate: 3.23%
Run 3: Report of PCC-Vivace — Data Link

- **Flow 1 Ingress (mean 51.15 Mbit/s)**
- **Flow 1 Egress (mean 48.11 Mbit/s)**
- **Flow 2 Ingress (mean 24.38 Mbit/s)**
- **Flow 2 Egress (mean 24.57 Mbit/s)**
- **Flow 3 Ingress (mean 2.91 Mbit/s)**
- **Flow 3 Egress (mean 2.86 Mbit/s)**

**Per-packet one-way delay (ms)**
- **Flow 1 (95th percentile 105.67 ms)**
- **Flow 2 (95th percentile 103.50 ms)**
- **Flow 3 (95th percentile 84.57 ms)**
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 10:15:54
End at: 2018-06-19 10:16:24
Local clock offset: -1.801 ms
Remote clock offset: 7.625 ms

# Below is generated by plot.py at 2018-06-19 12:40:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.61 Mbit/s
95th percentile per-packet one-way delay: 111.776 ms
Loss rate: 1.90%
-- Flow 1:
Average throughput: 46.47 Mbit/s
95th percentile per-packet one-way delay: 113.089 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 27.60 Mbit/s
95th percentile per-packet one-way delay: 111.996 ms
Loss rate: 1.42%
-- Flow 3:
Average throughput: 14.78 Mbit/s
95th percentile per-packet one-way delay: 93.508 ms
Loss rate: 2.40%
Run 4: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 47.16 Mbit/s)
- Flow 1 egress (mean 46.47 Mbit/s)
- Flow 2 ingress (mean 27.77 Mbit/s)
- Flow 2 egress (mean 27.60 Mbit/s)
- Flow 3 ingress (mean 14.90 Mbit/s)
- Flow 3 egress (mean 14.78 Mbit/s)

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

- Flow 1 (95th percentile 113.09 ms)
- Flow 2 (95th percentile 112.00 ms)
- Flow 3 (95th percentile 93.51 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-19 10:35:47
End at: 2018-06-19 10:36:17
Local clock offset: -1.787 ms
Remote clock offset: 4.817 ms

# Below is generated by plot.py at 2018-06-19 12:41:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 71.12 Mbit/s
95th percentile per-packet one-way delay: 116.772 ms
Loss rate: 1.63%
-- Flow 1:
Average throughput: 46.44 Mbit/s
95th percentile per-packet one-way delay: 115.031 ms
Loss rate: 1.26%
-- Flow 2:
Average throughput: 27.17 Mbit/s
95th percentile per-packet one-way delay: 122.023 ms
Loss rate: 2.19%
-- Flow 3:
Average throughput: 20.37 Mbit/s
95th percentile per-packet one-way delay: 126.622 ms
Loss rate: 2.69%
Run 5: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 45.77 Mbit/s)
- Flow 1 egress (mean 46.44 Mbit/s)
- Flow 2 ingress (mean 27.55 Mbit/s)
- Flow 2 egress (mean 27.17 Mbit/s)
- Flow 3 ingress (mean 20.56 Mbit/s)
- Flow 3 egress (mean 20.37 Mbit/s)

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

- Flow 1 (95th percentile 115.03 ms)
- Flow 2 (95th percentile 122.02 ms)
- Flow 3 (95th percentile 126.62 ms)
Run 6: Statistics of PCC-Vivace

End at: 2018-06-19 10:56:16
Local clock offset: -1.564 ms
Remote clock offset: 10.627 ms

# Below is generated by plot.py at 2018-06-19 12:41:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.41 Mbit/s
  95th percentile per-packet one-way delay: 107.758 ms
  Loss rate: 1.96%
-- Flow 1:
  Average throughput: 45.76 Mbit/s
  95th percentile per-packet one-way delay: 107.942 ms
  Loss rate: 2.19%
-- Flow 2:
  Average throughput: 30.07 Mbit/s
  95th percentile per-packet one-way delay: 107.906 ms
  Loss rate: 1.34%
-- Flow 3:
  Average throughput: 14.39 Mbit/s
  95th percentile per-packet one-way delay: 90.196 ms
  Loss rate: 2.28%
Run 6: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 46.53 Mbit/s)
- Flow 1 egress (mean 45.76 Mbit/s)
- Flow 2 ingress (mean 30.23 Mbit/s)
- Flow 2 egress (mean 30.07 Mbit/s)
- Flow 3 ingress (mean 14.40 Mbit/s)
- Flow 3 egress (mean 14.39 Mbit/s)
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-19 11:15:34
End at: 2018-06-19 11:16:04
Local clock offset: -2.224 ms
Remote clock offset: 12.526 ms

# Below is generated by plot.py at 2018-06-19 12:41:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 72.38 Mbit/s
95th percentile per-packet one-way delay: 108.320 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 45.78 Mbit/s
95th percentile per-packet one-way delay: 108.312 ms
Loss rate: 3.69%
-- Flow 2:
Average throughput: 33.01 Mbit/s
95th percentile per-packet one-way delay: 111.506 ms
Loss rate: 3.31%
-- Flow 3:
Average throughput: 14.42 Mbit/s
95th percentile per-packet one-way delay: 97.985 ms
Loss rate: 2.45%
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-19 11:35:35
End at: 2018-06-19 11:36:05
Local clock offset: -2.57 ms
Remote clock offset: 12.969 ms

# Below is generated by plot.py at 2018-06-19 12:41:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 73.97 Mbit/s
  95th percentile per-packet one-way delay: 108.152 ms
  Loss rate: 2.81%
-- Flow 1:
  Average throughput: 43.98 Mbit/s
  95th percentile per-packet one-way delay: 105.291 ms
  Loss rate: 2.93%
-- Flow 2:
  Average throughput: 34.05 Mbit/s
  95th percentile per-packet one-way delay: 111.026 ms
  Loss rate: 2.71%
-- Flow 3:
  Average throughput: 22.65 Mbit/s
  95th percentile per-packet one-way delay: 111.824 ms
  Loss rate: 2.41%
Run 8: Report of PCC-Vivace — Data Link

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

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

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Run 9: Statistics of PCC-Vivace

End at: 2018-06-19 11:56:17
Local clock offset: -3.103 ms
Remote clock offset: 7.5 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.54 Mbit/s
  95th percentile per-packet one-way delay: 82.015 ms
  Loss rate: 2.91%
-- Flow 1:
  Average throughput: 56.95 Mbit/s
  95th percentile per-packet one-way delay: 81.574 ms
  Loss rate: 2.81%
-- Flow 2:
  Average throughput: 14.60 Mbit/s
  95th percentile per-packet one-way delay: 82.027 ms
  Loss rate: 3.37%
-- Flow 3:
  Average throughput: 2.79 Mbit/s
  95th percentile per-packet one-way delay: 83.667 ms
  Loss rate: 4.23%
Run 9: Report of PCC-Vivace — Data Link

![Graph showing throughput and per-packet one-way delay for different flows.]

- **Flow 1**: Ingress (mean 58.28 Mbit/s), Egress (mean 56.95 Mbit/s)
- **Flow 2**: Ingress (mean 14.98 Mbit/s), Egress (mean 14.60 Mbit/s)
- **Flow 3**: Ingress (mean 2.86 Mbit/s), Egress (mean 2.79 Mbit/s)
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-19 12:15:42
End at: 2018-06-19 12:16:12
Local clock offset: -2.806 ms
Remote clock offset: 3.526 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 67.56 Mbit/s
  95th percentile per-packet one-way delay: 84.235 ms
  Loss rate: 2.75%
-- Flow 1:
  Average throughput: 59.89 Mbit/s
  95th percentile per-packet one-way delay: 83.890 ms
  Loss rate: 2.52%
-- Flow 2:
  Average throughput: 7.31 Mbit/s
  95th percentile per-packet one-way delay: 83.949 ms
  Loss rate: 3.74%
-- Flow 3:
  Average throughput: 8.60 Mbit/s
  95th percentile per-packet one-way delay: 84.366 ms
  Loss rate: 5.86%
Run 10: Report of PCC-Vivace — Data Link

![Graph showing throughput and per-packet one-way delay for three flows: Flow 1 ingress (mean 61.10 Mbit/s), Flow 1 egress (mean 59.89 Mbit/s), Flow 2 ingress (mean 7.53 Mbit/s), Flow 2 egress (mean 7.31 Mbit/s), Flow 3 ingress (mean 8.99 Mbit/s), Flow 3 egress (mean 8.60 Mbit/s).]
Run 1: Statistics of WebRTC media

Start at: 2018-06-19 09:05:14
End at: 2018-06-19 09:05:44
Local clock offset: -2.917 ms
Remote clock offset: 11.113 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.11 Mbit/s
95th percentile per-packet one-way delay: 77.361 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 76.489 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 1.00 Mbit/s
95th percentile per-packet one-way delay: 77.530 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 77.243 ms
Loss rate: 1.75%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-06-19 09:25:02
End at: 2018-06-19 09:25:32
Local clock offset: -3.481 ms
Remote clock offset: 10.134 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 79.985 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 1.76 Mbit/s
95th percentile per-packet one-way delay: 77.934 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 78.501 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 80.698 ms
Loss rate: 2.15%
Run 2: Report of WebRTC media — Data Link

[Graph showing throughput and packet loss over time for different flows.]
Run 3: Statistics of WebRTC media

Start at: 2018-06-19 09:44:49
End at: 2018-06-19 09:45:19
Local clock offset: -2.292 ms
Remote clock offset: 5.397 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.04 Mbit/s
95th percentile per-packet one-way delay: 84.782 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 82.885 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 86.147 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.37 Mbit/s
95th percentile per-packet one-way delay: 84.961 ms
Loss rate: 1.87%
Run 3: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss over time for different flows.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 1.73 Mbps)
  - Flow 1 egress (mean 1.73 Mbps)
  - Flow 2 ingress (mean 0.96 Mbps)
  - Flow 2 egress (mean 0.96 Mbps)
  - Flow 3 ingress (mean 0.37 Mbps)
  - Flow 3 egress (mean 0.37 Mbps)

- **Packet Loss (ms):**
  - Flow 1 (95th percentile 82.89 ms)
  - Flow 2 (95th percentile 86.15 ms)
  - Flow 3 (95th percentile 84.96 ms)
Run 4: Statistics of WebRTC media

Start at: 2018-06-19 10:04:48
End at: 2018-06-19 10:05:18
Local clock offset: -1.589 ms
Remote clock offset: 7.891 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
95th percentile per-packet one-way delay: 82.439 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 82.326 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 83.439 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.25 Mbit/s
95th percentile per-packet one-way delay: 80.029 ms
Loss rate: 2.52%
Run 4: Report of WebRTC media — Data Link

[Graph showing throughput and packet one way delay over time for different flows, with legends indicating the mean throughput and 95th percentile delay for each flow.]
Run 5: Statistics of WebRTC media

End at: 2018-06-19 10:25:08
Local clock offset: -1.784 ms
Remote clock offset: 3.58 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.09 Mbit/s
95th percentile per-packet one-way delay: 86.682 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 87.021 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 84.428 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 87.587 ms
Loss rate: 1.78%
Run 5: Report of WebRTC media — Data Link

![Graph 1](image1)

**Throughput (Mbit/s)**

Legend:
- Flow 1 ingress (mean 1.74 Mbit/s)
- Flow 1 egress (mean 1.75 Mbit/s)
- Flow 2 ingress (mean 0.97 Mbit/s)
- Flow 2 egress (mean 0.97 Mbit/s)
- Flow 3 ingress (mean 0.40 Mbit/s)
- Flow 3 egress (mean 0.39 Mbit/s)

![Graph 2](image2)

**Packet one way delay (ms)**

Legend:
- Flow 1 (95th percentile 87.02 ms)
- Flow 2 (95th percentile 84.43 ms)
- Flow 3 (95th percentile 87.59 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-06-19 10:44:29
End at: 2018-06-19 10:44:59
Local clock offset: -1.622 ms
Remote clock offset: 12.231 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.10 Mbit/s
95th percentile per-packet one-way delay: 81.670 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 81.569 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 0.99 Mbit/s
95th percentile per-packet one-way delay: 82.122 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 79.801 ms
Loss rate: 1.74%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-06-19 11:04:28
End at: 2018-06-19 11:04:58
Local clock offset: -1.465 ms
Remote clock offset: 11.665 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.07 Mbit/s
95th percentile per-packet one-way delay: 85.470 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 1.72 Mbit/s
95th percentile per-packet one-way delay: 85.814 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 0.97 Mbit/s
95th percentile per-packet one-way delay: 82.813 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 84.008 ms
Loss rate: 1.75%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-06-19 11:24:15
End at: 2018-06-19 11:24:45
Local clock offset: -2.403 ms
Remote clock offset: 12.153 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.08 Mbit/s
95th percentile per-packet one-way delay: 86.171 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 1.74 Mbit/s
95th percentile per-packet one-way delay: 85.992 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 0.98 Mbit/s
95th percentile per-packet one-way delay: 86.392 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: 86.209 ms
Loss rate: 1.80%
Run 8: Report of WebRTC media — Data Link

![Graph showing WebRTC media performance metrics]

**Throughput** (Mbps)
- Flow 1 ingress (mean 1.74 Mbps)
- Flow 2 ingress (mean 0.98 Mbps)
- Flow 3 ingress (mean 0.39 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 85.99 ms)
- Flow 2 (95th percentile 86.39 ms)
- Flow 3 (95th percentile 86.21 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-06-19 11:44:30
End at: 2018-06-19 11:45:00
Local clock offset: -2.892 ms
Remote clock offset: 19.622 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.06 Mbit/s
95th percentile per-packet one-way delay: 79.335 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 1.75 Mbit/s
95th percentile per-packet one-way delay: 79.386 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 0.96 Mbit/s
95th percentile per-packet one-way delay: 77.307 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 0.36 Mbit/s
95th percentile per-packet one-way delay: 79.735 ms
Loss rate: 1.95%
Run 9: Report of WebRTC media — Data Link

![Graph showing throughput and packet delay over time for different flows with specified mean speeds.]

- Flow 1 ingress (mean 1.75 Mbit/s)
- Flow 1 egress (mean 1.75 Mbit/s)
- Flow 2 ingress (mean 0.97 Mbit/s)
- Flow 2 egress (mean 0.96 Mbit/s)
- Flow 3 ingress (mean 0.37 Mbit/s)
- Flow 3 egress (mean 0.36 Mbit/s)

![Graph showing packet delay over time for different flows with specified 95th percentile delays.]

- Flow 1 (95th percentile 79.39 ms)
- Flow 2 (95th percentile 77.31 ms)
- Flow 3 (95th percentile 79.73 ms)
Run 10: Statistics of WebRTC media

Start at: 2018-06-19 12:04:32
End at: 2018-06-19 12:05:02
Local clock offset: -3.188 ms
Remote clock offset: 9.079 ms

# Below is generated by plot.py at 2018-06-19 12:41:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.09 Mbit/s
  95th percentile per-packet one-way delay: 80.534 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 1.75 Mbit/s
  95th percentile per-packet one-way delay: 78.612 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 0.96 Mbit/s
  95th percentile per-packet one-way delay: 80.809 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 80.258 ms
  Loss rate: 2.11%
Run 10: Report of WebRTC media — Data Link

![Graph showing throughput and delay for different flows.](image-url)