Pantheon Report

Data path: GCE Iowa Ethernet (remote) → GCE London 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 time.google.com and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 227fdf9a3757f17b88537cceed5743a33037a3d2
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfbe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaaab4a906ce6bb7cf3c
third_party/pantheon-tunnel @ 6f038ed31259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1af958fa0d66d18b623c091a55fec872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b42f1bc8143ec978f3cffe42
third_party/scream-reproduce @ f099118d1421aa3131bf11f1964974e1da3b2b2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ c838669682f0c19f6baf92afcc9a596a406d48c1f
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2ba8f8621435ae071a32b96b7d8c504587f57f4
third_party/webrtc @ 3ffcc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Iowa to GCE London, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>10</td>
<td>190.28</td>
<td>172.61</td>
<td>138.97</td>
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<tr>
<td>Copa</td>
<td>10</td>
<td>101.67</td>
<td>77.03</td>
<td>69.74</td>
</tr>
<tr>
<td>TCP Cubic</td>
<td>10</td>
<td>160.78</td>
<td>121.35</td>
<td>102.77</td>
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<tr>
<td>FillP</td>
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<td>615.18</td>
<td>605.69</td>
<td>543.50</td>
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<td>Indigo</td>
<td>10</td>
<td>167.16</td>
<td>156.66</td>
<td>109.48</td>
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<tr>
<td>LEDBAT</td>
<td>10</td>
<td>32.16</td>
<td>21.43</td>
<td>11.64</td>
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<tr>
<td>PCC-Allegro</td>
<td>10</td>
<td>331.86</td>
<td>38.14</td>
<td>20.76</td>
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<tr>
<td>PCC-Expr</td>
<td>10</td>
<td>227.72</td>
<td>143.89</td>
<td>30.22</td>
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<tr>
<td>QUIC Cubic</td>
<td>10</td>
<td>63.15</td>
<td>63.87</td>
<td>54.05</td>
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<tr>
<td>SCReAM</td>
<td>10</td>
<td>0.22</td>
<td>0.22</td>
<td>0.22</td>
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<tr>
<td>Sprout</td>
<td>10</td>
<td>6.77</td>
<td>6.29</td>
<td>5.78</td>
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<tr>
<td>TaoVA-100x</td>
<td>10</td>
<td>129.43</td>
<td>122.76</td>
<td>149.72</td>
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<tr>
<td>TCP Vegas</td>
<td>10</td>
<td>95.94</td>
<td>58.91</td>
<td>90.73</td>
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<tr>
<td>Verus</td>
<td>10</td>
<td>190.48</td>
<td>133.71</td>
<td>96.72</td>
</tr>
<tr>
<td>PCC-Vivace</td>
<td>10</td>
<td>271.91</td>
<td>240.07</td>
<td>130.54</td>
</tr>
<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.96</td>
<td>1.30</td>
<td>0.52</td>
</tr>
</tbody>
</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-07 16:49:19
End at: 2018-06-07 16:49:49
Local clock offset: -0.071 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-06-07 20:31:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 348.87 Mbit/s
95th percentile per-packet one-way delay: 116.771 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 187.21 Mbit/s
95th percentile per-packet one-way delay: 114.160 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 169.51 Mbit/s
95th percentile per-packet one-way delay: 116.957 ms
Loss rate: 0.69%
-- Flow 3:
Average throughput: 148.62 Mbit/s
95th percentile per-packet one-way delay: 121.175 ms
Loss rate: 1.65%
Run 1: Report of TCP BBR — Data Link

![Throughput Graph]

![Per-packet one-way delay Graph]
Run 2: Statistics of TCP BBR

Start at: 2018-06-07 17:11:29
End at: 2018-06-07 17:11:59
Local clock offset: 0.01 ms
Remote clock offset: 0.014 ms

# Below is generated by plot.py at 2018-06-07 20:31:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 357.44 Mbit/s
95th percentile per-packet one-way delay: 129.847 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 190.43 Mbit/s
95th percentile per-packet one-way delay: 122.957 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 182.03 Mbit/s
95th percentile per-packet one-way delay: 133.407 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 139.14 Mbit/s
95th percentile per-packet one-way delay: 133.624 ms
Loss rate: 1.75%
Run 2: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 190.52 Mbps)
- **Flow 1 egress** (mean 190.43 Mbps)
- **Flow 2 ingress** (mean 182.83 Mbps)
- **Flow 2 egress** (mean 182.03 Mbps)
- **Flow 3 ingress** (mean 140.25 Mbps)
- **Flow 3 egress** (mean 139.14 Mbps)

![Graph 2: Packet Delay (ms)]

- **Flow 1** (95th percentile 122.96 ms)
- **Flow 2** (95th percentile 133.41 ms)
- **Flow 3** (95th percentile 133.62 ms)
Run 3: Statistics of TCP BBR

Start at: 2018-06-07 17:33:48
End at: 2018-06-07 17:34:18
Local clock offset: -0.345 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-07 20:31:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 335.78 Mbit/s
95th percentile per-packet one-way delay: 130.239 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 186.90 Mbit/s
95th percentile per-packet one-way delay: 126.566 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 163.27 Mbit/s
95th percentile per-packet one-way delay: 129.578 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 121.99 Mbit/s
95th percentile per-packet one-way delay: 137.025 ms
Loss rate: 1.83%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

End at: 2018-06-07 17:56:25  
Local clock offset: -0.002 ms  
Remote clock offset: -0.043 ms

# Below is generated by plot.py at 2018-06-07 20:31:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 347.26 Mbit/s  
  95th percentile per-packet one-way delay: 120.328 ms  
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 189.54 Mbit/s  
  95th percentile per-packet one-way delay: 117.014 ms  
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 172.24 Mbit/s  
  95th percentile per-packet one-way delay: 119.797 ms  
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 130.55 Mbit/s  
  95th percentile per-packet one-way delay: 125.314 ms  
  Loss rate: 1.61%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-06-07 18:18:04
End at: 2018-06-07 18:18:34
Local clock offset: 0.173 ms
Remote clock offset: -0.067 ms

# Below is generated by plot.py at 2018-06-07 20:31:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 350.24 Mbit/s
  95th percentile per-packet one-way delay: 112.986 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 189.00 Mbit/s
  95th percentile per-packet one-way delay: 109.843 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 170.88 Mbit/s
  95th percentile per-packet one-way delay: 112.496 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 144.23 Mbit/s
  95th percentile per-packet one-way delay: 118.574 ms
  Loss rate: 1.45%
Run 5: Report of TCP BBR — Data Link

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

- **Flow 1 ingress** (mean 188.93 Mbps)
- **Flow 1 egress** (mean 189.00 Mbps)
- **Flow 2 ingress** (mean 171.14 Mbps)
- **Flow 2 egress** (mean 170.88 Mbps)
- **Flow 3 ingress** (mean 144.85 Mbps)
- **Flow 3 egress** (mean 144.23 Mbps)
Run 6: Statistics of TCP BBR

End at: 2018-06-07 18:40:43
Local clock offset: 0.597 ms
Remote clock offset: -0.106 ms

# Below is generated by plot.py at 2018-06-07 20:31:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 360.46 Mbit/s
  95th percentile per-packet one-way delay: 106.571 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 193.09 Mbit/s
  95th percentile per-packet one-way delay: 102.987 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 182.08 Mbit/s
  95th percentile per-packet one-way delay: 105.837 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 140.23 Mbit/s
  95th percentile per-packet one-way delay: 110.422 ms
  Loss rate: 1.60%
Run 6: Report of TCP BBR — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 193.34 Mbps)
- Flow 1 egress (mean 193.09 Mbps)
- Flow 2 ingress (mean 182.28 Mbps)
- Flow 2 egress (mean 182.08 Mbps)
- Flow 3 ingress (mean 141.03 Mbps)
- Flow 3 egress (mean 140.23 Mbps)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 102.99 ms)
- Flow 2 (95th percentile 105.84 ms)
- Flow 3 (95th percentile 110.42 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-06-07 19:02:34
End at: 2018-06-07 19:03:04
Local clock offset: 0.265 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-06-07 20:31:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 343.47 Mbit/s
  95th percentile per-packet one-way delay: 120.432 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 191.17 Mbit/s
  95th percentile per-packet one-way delay: 115.395 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 164.18 Mbit/s
  95th percentile per-packet one-way delay: 120.331 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 130.65 Mbit/s
  95th percentile per-packet one-way delay: 129.540 ms
  Loss rate: 1.68%
Run 7: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 191.13 Mbps)
- Flow 1 egress (mean 191.17 Mbps)
- Flow 2 ingress (mean 164.30 Mbps)
- Flow 2 egress (mean 164.18 Mbps)
- Flow 3 ingress (mean 131.53 Mbps)
- Flow 3 egress (mean 130.65 Mbps)

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

- Flow 1 (95th percentile 115.39 ms)
- Flow 2 (95th percentile 120.33 ms)
- Flow 3 (95th percentile 129.54 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-06-07 19:24:44
End at: 2018-06-07 19:25:14
Local clock offset: 0.328 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-07 20:31:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 346.42 Mbit/s
95th percentile per-packet one-way delay: 125.219 ms
Loss rate: 0.52%

-- Flow 1:
Average throughput: 187.41 Mbit/s
95th percentile per-packet one-way delay: 121.971 ms
Loss rate: 0.20%

-- Flow 2:
Average throughput: 170.38 Mbit/s
95th percentile per-packet one-way delay: 124.279 ms
Loss rate: 0.66%

-- Flow 3:
Average throughput: 138.59 Mbit/s
95th percentile per-packet one-way delay: 131.894 ms
Loss rate: 1.47%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-06-07 19:46:54
End at: 2018-06-07 19:47:24
Local clock offset: 0.154 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-07 20:37:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 359.37 Mbit/s
  95th percentile per-packet one-way delay: 121.716 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 191.24 Mbit/s
  95th percentile per-packet one-way delay: 115.033 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 179.77 Mbit/s
  95th percentile per-packet one-way delay: 122.520 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 147.29 Mbit/s
  95th percentile per-packet one-way delay: 126.478 ms
  Loss rate: 1.66%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

Start at: 2018-06-07 20:08:56
End at: 2018-06-07 20:09:26
Local clock offset: -0.468 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-06-07 20:37:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 360.02 Mbit/s
  95th percentile per-packet one-way delay: 115.148 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 196.80 Mbit/s
  95th percentile per-packet one-way delay: 103.835 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 171.77 Mbit/s
  95th percentile per-packet one-way delay: 115.077 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 148.42 Mbit/s
  95th percentile per-packet one-way delay: 133.179 ms
  Loss rate: 1.49%
Run 10: Report of TCP BBR — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress: mean 196.88 Mbps
  - Flow 1 egress: mean 196.88 Mbps
  - Flow 2 ingress: mean 172.02 Mbps
  - Flow 2 egress: mean 171.77 Mbps
  - Flow 3 ingress: mean 149.14 Mbps
  - Flow 3 egress: mean 148.42 Mbps

- **Packet Delay (ms):**
  - Flow 1: 95th percentile 103.83 ms
  - Flow 2: 95th percentile 115.08 ms
  - Flow 3: 95th percentile 113.18 ms
Run 1: Statistics of Copa

Start at: 2018-06-07 16:42:43
End at: 2018-06-07 16:43:13
Local clock offset: -0.451 ms
Remote clock offset: -0.012 ms

# Below is generated by plot.py at 2018-06-07 20:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.86 Mbit/s
95th percentile per-packet one-way delay: 54.987 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 103.86 Mbit/s
95th percentile per-packet one-way delay: 54.273 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 69.82 Mbit/s
95th percentile per-packet one-way delay: 56.886 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 76.96 Mbit/s
95th percentile per-packet one-way delay: 54.229 ms
Loss rate: 0.76%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2018-06-07 17:04:50
End at: 2018-06-07 17:05:20
Local clock offset: -0.005 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-06-07 20:37:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.28 Mbit/s
95th percentile per-packet one-way delay: 55.321 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 97.71 Mbit/s
95th percentile per-packet one-way delay: 53.853 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 90.65 Mbit/s
95th percentile per-packet one-way delay: 56.257 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 28.79 Mbit/s
95th percentile per-packet one-way delay: 64.360 ms
Loss rate: 2.01%
Run 2: Report of Copa — Data Link

![Diagram of network traffic over time showing throughput and per-packet one-way delay.]
Run 3: Statistics of Copa

Start at: 2018-06-07 17:27:01
End at: 2018-06-07 17:27:31
Local clock offset: -0.381 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-07 20:37:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.39 Mbit/s
95th percentile per-packet one-way delay: 52.182 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 136.40 Mbit/s
95th percentile per-packet one-way delay: 51.646 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 75.90 Mbit/s
95th percentile per-packet one-way delay: 53.288 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 81.10 Mbit/s
95th percentile per-packet one-way delay: 54.281 ms
Loss rate: 1.61%
Run 3: Report of Copa — Data Link

[Graph showing throughput and packet delay over time]

Legend:
- Flow 1 ingress (mean 136.22 Mbit/s)
- Flow 1 egress (mean 136.40 Mbit/s)
- Flow 2 ingress (mean 75.93 Mbit/s)
- Flow 2 egress (mean 75.90 Mbit/s)
- Flow 3 ingress (mean 81.57 Mbit/s)
- Flow 3 egress (mean 81.10 Mbit/s)

Legend:
- Flow 1 (95th percentile 51.65 ms)
- Flow 2 (95th percentile 53.29 ms)
- Flow 3 (95th percentile 54.28 ms)
Run 4: Statistics of Copa

Start at: 2018-06-07 17:49:15
End at: 2018-06-07 17:49:45
Local clock offset: 0.021 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-07 20:37:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.01 Mbit/s
95th percentile per-packet one-way delay: 55.636 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 94.85 Mbit/s
95th percentile per-packet one-way delay: 54.742 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 99.37 Mbit/s
95th percentile per-packet one-way delay: 55.576 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 39.62 Mbit/s
95th percentile per-packet one-way delay: 60.397 ms
Loss rate: 3.74%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2018-06-07 18:11:25
End at: 2018-06-07 18:11:55
Local clock offset: 0.116 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2018-06-07 20:37:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.42 Mbit/s
95th percentile per-packet one-way delay: 53.588 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 90.39 Mbit/s
95th percentile per-packet one-way delay: 53.515 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 102.81 Mbit/s
95th percentile per-packet one-way delay: 55.030 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.65 Mbit/s
95th percentile per-packet one-way delay: 52.482 ms
Loss rate: 1.99%
Run 5: Report of Copa — Data Link

![Graph of throughput and per-packet end-to-end delay over time for three flows.]

Flow 1 ingress (mean 89.96 Mbit/s)  Flow 1 egress (mean 90.39 Mbit/s)
Flow 2 ingress (mean 103.23 Mbit/s)  Flow 2 egress (mean 102.61 Mbit/s)
Flow 3 ingress (mean 89.53 Mbit/s)  Flow 3 egress (mean 88.65 Mbit/s)
Run 6: Statistics of Copa

Start at: 2018-06-07 18:33:32
End at: 2018-06-07 18:34:02
Local clock offset: 0.204 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-06-07 20:37:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.10 Mbit/s
95th percentile per-packet one-way delay: 55.292 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 83.29 Mbit/s
95th percentile per-packet one-way delay: 53.294 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 69.14 Mbit/s
95th percentile per-packet one-way delay: 59.837 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 81.82 Mbit/s
95th percentile per-packet one-way delay: 56.009 ms
Loss rate: 0.60%
Run 6: Report of Copa — Data Link

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

- **Flow 1 ingress (mean 83.21 Mbit/s)**
- **Flow 1 egress (mean 83.29 Mbit/s)**
- **Flow 2 ingress (mean 69.20 Mbit/s)**
- **Flow 2 egress (mean 69.14 Mbit/s)**
- **Flow 3 ingress (mean 81.49 Mbit/s)**
- **Flow 3 egress (mean 81.82 Mbit/s)**

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

- **Flow 1 (95th percentile 53.29 ms)**
- **Flow 2 (95th percentile 59.84 ms)**
- **Flow 3 (95th percentile 56.01 ms)**
Run 7: Statistics of Copa

End at: 2018-06-07 18:56:26
Local clock offset: 0.277 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-07 20:41:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.13 Mbit/s
95th percentile per-packet one-way delay: 56.585 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 103.63 Mbit/s
95th percentile per-packet one-way delay: 53.630 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 48.57 Mbit/s
95th percentile per-packet one-way delay: 59.954 ms
Loss rate: 1.54%
-- Flow 3:
Average throughput: 73.58 Mbit/s
95th percentile per-packet one-way delay: 60.276 ms
Loss rate: 1.66%
Run 7: Report of Copa — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 8: Statistics of Copa

Start at: 2018-06-07 19:18:02
End at: 2018-06-07 19:18:32
Local clock offset: 0.287 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-07 20:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 193.90 Mbit/s
95th percentile per-packet one-way delay: 55.065 ms
Loss rate: 0.32%
-- Flow 1:
Average throughput: 108.26 Mbit/s
95th percentile per-packet one-way delay: 53.464 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 82.24 Mbit/s
95th percentile per-packet one-way delay: 55.277 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 93.86 Mbit/s
95th percentile per-packet one-way delay: 58.342 ms
Loss rate: 0.60%
Run 8: Report of Copa — Data Link

[Graph depicting throughput and per-packet one-way delay for different flows over time]
Run 9: Statistics of Copa

Start at: 2018-06-07 19:40:16
End at: 2018-06-07 19:40:46
Local clock offset: 0.321 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-06-07 20:42:16
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 156.79 Mbit/s
 95th percentile per-packet one-way delay: 55.994 ms
 Loss rate: 0.32%
-- Flow 1:
 Average throughput: 106.86 Mbit/s
 95th percentile per-packet one-way delay: 54.327 ms
 Loss rate: 0.15%
-- Flow 2:
 Average throughput: 44.70 Mbit/s
 95th percentile per-packet one-way delay: 59.680 ms
 Loss rate: 1.14%
-- Flow 3:
 Average throughput: 61.48 Mbit/s
 95th percentile per-packet one-way delay: 56.960 ms
 Loss rate: 0.00%
Run 10: Statistics of Copa

Start at: 2018-06-07 20:02:15
End at: 2018-06-07 20:02:45
Local clock offset: 0.347 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2018-06-07 20:42:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 171.06 Mbit/s
  95th percentile per-packet one-way delay: 53.766 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 91.49 Mbit/s
  95th percentile per-packet one-way delay: 53.343 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 87.09 Mbit/s
  95th percentile per-packet one-way delay: 53.773 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 71.51 Mbit/s
  95th percentile per-packet one-way delay: 55.930 ms
  Loss rate: 0.63%
Run 10: Report of Copa — Data Link

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

![Graph 2: Per-packet one-way delay (ms)](image2)
Run 1: Statistics of TCP Cubic

Start at: 2018-06-07 16:45:26
End at: 2018-06-07 16:45:56
Local clock offset: -0.071 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-07 20:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.59 Mbit/s
95th percentile per-packet one-way delay: 59.489 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 185.74 Mbit/s
95th percentile per-packet one-way delay: 58.864 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 152.26 Mbit/s
95th percentile per-packet one-way delay: 60.200 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 5.04 Mbit/s
95th percentile per-packet one-way delay: 66.163 ms
Loss rate: 3.87%
Run 1: Report of TCP Cubic — Data Link

Graph showing throughput and packet delay over time for different flows.
Run 2: Statistics of TCP Cubic

Start at: 2018-06-07 17:07:33
End at: 2018-06-07 17:08:03
Local clock offset: -0.019 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-07 20:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.20 Mbit/s
95th percentile per-packet one-way delay: 85.082 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 155.44 Mbit/s
95th percentile per-packet one-way delay: 83.984 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 112.80 Mbit/s
95th percentile per-packet one-way delay: 85.079 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 120.30 Mbit/s
95th percentile per-packet one-way delay: 87.074 ms
Loss rate: 1.29%
Run 2: Report of TCP Cubic — Data Link

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

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

Legend:
- Blue dashed line: Flow 1 ingress (mean 155.35 Mbit/s)
- Blue solid line: Flow 1 egress (mean 155.44 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 113.12 Mbit/s)
- Green solid line: Flow 2 egress (mean 112.80 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 120.66 Mbit/s)
- Red solid line: Flow 3 egress (mean 120.30 Mbit/s)

Legend for delay:
- Blue circles: Flow 1 (95th percentile 83.98 ms)
- Green circles: Flow 2 (95th percentile 85.08 ms)
- Red circles: Flow 3 (95th percentile 87.07 ms)
Run 3: Statistics of TCP Cubic

Start at: 2018-06-07 17:29:48
End at: 2018-06-07 17:30:18
Local clock offset: -0.349 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-06-07 20:42:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.48 Mbit/s
95th percentile per-packet one-way delay: 121.269 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 203.95 Mbit/s
95th percentile per-packet one-way delay: 113.025 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 105.81 Mbit/s
95th percentile per-packet one-way delay: 124.346 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 140.88 Mbit/s
95th percentile per-packet one-way delay: 128.738 ms
Loss rate: 1.27%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2018-06-07 17:51:57
End at: 2018-06-07 17:52:27
Local clock offset: 0.434 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-07 20:42:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 282.63 Mbit/s
95th percentile per-packet one-way delay: 112.488 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 165.59 Mbit/s
95th percentile per-packet one-way delay: 108.282 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 107.56 Mbit/s
95th percentile per-packet one-way delay: 111.995 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 138.11 Mbit/s
95th percentile per-packet one-way delay: 119.925 ms
Loss rate: 1.72%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 165.87 Mbit/s)
- Flow 1 egress (mean 165.59 Mbit/s)
- Flow 2 ingress (mean 197.74 Mbit/s)
- Flow 2 egress (mean 107.56 Mbit/s)
- Flow 3 ingress (mean 139.11 Mbit/s)
- Flow 3 egress (mean 138.11 Mbit/s)

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

- Flow 1 (95th percentile 108.28 ms)
- Flow 2 (95th percentile 112.00 ms)
- Flow 3 (95th percentile 119.92 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-06-07 18:14:07
End at: 2018-06-07 18:14:37
Local clock offset: 0.141 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-07 20:45:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.39 Mbit/s
95th percentile per-packet one-way delay: 81.453 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 129.66 Mbit/s
95th percentile per-packet one-way delay: 80.658 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 124.01 Mbit/s
95th percentile per-packet one-way delay: 81.044 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 134.40 Mbit/s
95th percentile per-packet one-way delay: 83.738 ms
Loss rate: 1.30%
Run 6: Statistics of TCP Cubic

Start at: 2018-06-07 18:36:13
End at: 2018-06-07 18:36:43
Local clock offset: 0.6 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2018-06-07 20:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 311.22 Mbit/s
95th percentile per-packet one-way delay: 95.030 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 203.94 Mbit/s
95th percentile per-packet one-way delay: 91.339 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 103.09 Mbit/s
95th percentile per-packet one-way delay: 95.670 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 117.93 Mbit/s
95th percentile per-packet one-way delay: 98.895 ms
Loss rate: 0.51%
Run 6: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 203.41 Mbit/s)
- Flow 1 egress (mean 203.94 Mbit/s)
- Flow 2 ingress (mean 102.83 Mbit/s)
- Flow 2 egress (mean 103.09 Mbit/s)
- Flow 3 ingress (mean 117.33 Mbit/s)
- Flow 3 egress (mean 117.93 Mbit/s)
Run 7: Statistics of TCP Cubic

Start at: 2018-06-07 18:58:39
End at: 2018-06-07 18:59:10
Local clock offset: 0.245 ms
Remote clock offset: -0.024 ms

# Below is generated by plot.py at 2018-06-07 20:46:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 217.65 Mbit/s
  95th percentile per-packet one-way delay: 72.181 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 130.28 Mbit/s
  95th percentile per-packet one-way delay: 66.634 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 47.33 Mbit/s
  95th percentile per-packet one-way delay: 76.277 ms
  Loss rate: 2.50%
-- Flow 3:
  Average throughput: 169.26 Mbit/s
  95th percentile per-packet one-way delay: 74.087 ms
  Loss rate: 1.28%
Run 7: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet round-trip time for different flows over time.

Legend:
- Flow 1 ingress (mean 130.23 Mbit/s)
- Flow 1 egress (mean 130.28 Mbit/s)
- Flow 2 ingress (mean 48.30 Mbit/s)
- Flow 2 egress (mean 47.33 Mbit/s)
- Flow 3 ingress (mean 169.75 Mbit/s)
- Flow 3 egress (mean 169.26 Mbit/s)

Legend for per-packet round-trip time:
- Flow 1 (95th percentile 66.63 ms)
- Flow 2 (95th percentile 76.28 ms)
- Flow 3 (95th percentile 74.09 ms)
Run 8: Statistics of TCP Cubic

End at: 2018-06-07 19:21:18
Local clock offset: 0.666 ms
Remote clock offset: 0.007 ms

# Below is generated by plot.py at 2018-06-07 20:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.14 Mbit/s
95th percentile per-packet one-way delay: 58.448 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 158.09 Mbit/s
95th percentile per-packet one-way delay: 58.735 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 129.72 Mbit/s
95th percentile per-packet one-way delay: 57.803 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 5.29 Mbit/s
95th percentile per-packet one-way delay: 59.368 ms
Loss rate: 3.76%
Run 8: Report of TCP Cubic — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows, with flow 1, 2, and 3 ingress and egress data.]
Run 9: Statistics of TCP Cubic

Local clock offset: 0.669 ms
Remote clock offset: -0.03 ms

# Below is generated by plot.py at 2018-06-07 20:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.08 Mbit/s
95th percentile per-packet one-way delay: 89.480 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 126.66 Mbit/s
95th percentile per-packet one-way delay: 83.733 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 143.85 Mbit/s
95th percentile per-packet one-way delay: 88.308 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 75.37 Mbit/s
95th percentile per-packet one-way delay: 92.004 ms
Loss rate: 3.18%
Run 9: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 126.75 Mbps)
- Flow 1 egress (mean 126.66 Mbps)
- Flow 2 ingress (mean 144.11 Mbps)
- Flow 2 egress (mean 143.85 Mbps)
- Flow 3 ingress (mean 77.03 Mbps)
- Flow 3 egress (mean 79.37 Mbps)

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

- Flow 1 (95th percentile 83.73 ms)
- Flow 2 (95th percentile 88.31 ms)
- Flow 3 (95th percentile 92.00 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-06-07 20:04:57
End at: 2018-06-07 20:05:27
Local clock offset: -0.421 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2018-06-07 20:47:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 312.49 Mbit/s
95th percentile per-packet one-way delay: 118.075 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 148.41 Mbit/s
95th percentile per-packet one-way delay: 115.249 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 187.04 Mbit/s
95th percentile per-packet one-way delay: 117.608 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 121.16 Mbit/s
95th percentile per-packet one-way delay: 122.602 ms
Loss rate: 2.05%
Run 10: Report of TCP Cubic — Data Link

[Graph showing throughput and packet delay]
Run 1: Statistics of FillP

Start at: 2018-06-07 16:33:14
End at: 2018-06-07 16:33:44
Local clock offset: -0.466 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-07 21:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1044.99 Mbit/s
95th percentile per-packet one-way delay: 213.383 ms
Loss rate: 1.01%
-- Flow 1:
Average throughput: 582.82 Mbit/s
95th percentile per-packet one-way delay: 212.368 ms
Loss rate: 0.81%
-- Flow 2:
Average throughput: 517.25 Mbit/s
95th percentile per-packet one-way delay: 212.221 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 364.01 Mbit/s
95th percentile per-packet one-way delay: 220.027 ms
Loss rate: 3.40%
Run 1: Report of FillP — Data Link

![Graph showing throughput and delay over time for different flows]
Run 2: Statistics of FillP

End at: 2018-06-07 16:55:44
Local clock offset: 0.344 ms
Remote clock offset: 0.055 ms

# Below is generated by plot.py at 2018-06-07 21:06:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1228.31 Mbit/s
95th percentile per-packet one-way delay: 210.135 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 631.11 Mbit/s
95th percentile per-packet one-way delay: 211.684 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 623.02 Mbit/s
95th percentile per-packet one-way delay: 210.318 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 557.17 Mbit/s
95th percentile per-packet one-way delay: 133.244 ms
Loss rate: 2.28%
Run 2: Report of FillP — Data Link

![Graph showing throughput and delay over time for different flows.](image-url)
Run 3: Statistics of FillP

Start at: 2018-06-07 17:17:18
End at: 2018-06-07 17:17:48
Local clock offset: 0.025 ms
Remote clock offset: -0.015 ms

# Below is generated by plot.py at 2018-06-07 21:10:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1283.11 Mbit/s
  95th percentile per-packet one-way delay: 221.538 ms
  Loss rate: 0.92%
-- Flow 1:
  Average throughput: 673.86 Mbit/s
  95th percentile per-packet one-way delay: 231.771 ms
  Loss rate: 0.94%
-- Flow 2:
  Average throughput: 639.86 Mbit/s
  95th percentile per-packet one-way delay: 217.373 ms
  Loss rate: 0.73%
-- Flow 3:
  Average throughput: 560.31 Mbit/s
  95th percentile per-packet one-way delay: 221.958 ms
  Loss rate: 1.26%
Run 3: Report of FillP — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 677.91 Mbps)
- **Flow 1 egress** (mean 673.86 Mbps)
- **Flow 2 ingress** (mean 641.31 Mbps)
- **Flow 2 egress** (mean 639.86 Mbps)
- **Flow 3 ingress** (mean 561.57 Mbps)
- **Flow 3 egress** (mean 560.31 Mbps)

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

- **Flow 1 (95th percentile 231.77 ms)**
- **Flow 2 (95th percentile 217.37 ms)**
- **Flow 3 (95th percentile 221.96 ms)**
Run 4: Statistics of FillP

Start at: 2018-06-07 17:39:43
End at: 2018-06-07 17:40:13
Local clock offset: 0.025 ms
Remote clock offset: 0.012 ms

# Below is generated by plot.py at 2018-06-07 21:10:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1132.30 Mbit/s
  95th percentile per-packet one-way delay: 214.032 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 522.02 Mbit/s
  95th percentile per-packet one-way delay: 213.778 ms
  Loss rate: 0.72%
-- Flow 2:
  Average throughput: 634.05 Mbit/s
  95th percentile per-packet one-way delay: 219.080 ms
  Loss rate: 0.60%
-- Flow 3:
  Average throughput: 575.58 Mbit/s
  95th percentile per-packet one-way delay: 170.561 ms
  Loss rate: 0.97%
Run 4: Report of FillP — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 524.07 Mbps)
  - Flow 1 egress (mean 522.02 Mbps)
  - Flow 2 ingress (mean 634.62 Mbps)
  - Flow 2 egress (mean 634.05 Mbps)
  - Flow 3 ingress (mean 575.29 Mbps)
  - Flow 3 egress (mean 575.58 Mbps)

- **Packet one-way delay (ms):**
  - Flow 1 (95th percentile 213.78 ms)
  - Flow 2 (95th percentile 219.08 ms)
  - Flow 3 (95th percentile 170.56 ms)
Run 5: Statistics of FillP

Start at: 2018-06-07 18:01:48
End at: 2018-06-07 18:02:18
Local clock offset: 0.05 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-06-07 21:10:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1198.34 Mbit/s
95th percentile per-packet one-way delay: 218.551 ms
Loss rate: 2.03%
-- Flow 1:
Average throughput: 601.23 Mbit/s
95th percentile per-packet one-way delay: 216.919 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 608.13 Mbit/s
95th percentile per-packet one-way delay: 259.323 ms
Loss rate: 2.00%
-- Flow 3:
Average throughput: 585.88 Mbit/s
95th percentile per-packet one-way delay: 193.076 ms
Loss rate: 4.59%
Run 5: Report of FillP — Data Link

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

- Flow 1 ingress (mean 606.45 Mbps)
- Flow 1 egress (mean 601.23 Mbps)
- Flow 2 ingress (mean 617.44 Mbps)
- Flow 2 egress (mean 608.13 Mbps)
- Flow 3 ingress (mean 607.99 Mbps)
- Flow 3 egress (mean 585.89 Mbps)

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

- Flow 1 (95th percentile 216.92 ms)
- Flow 2 (95th percentile 259.32 ms)
- Flow 3 (95th percentile 193.08 ms)
Run 6: Statistics of FillP

End at: 2018-06-07 18:24:25
Local clock offset: 0.19 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2018-06-07 21:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1242.89 Mbit/s
95th percentile per-packet one-way delay: 208.303 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 656.16 Mbit/s
95th percentile per-packet one-way delay: 209.486 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 597.17 Mbit/s
95th percentile per-packet one-way delay: 210.245 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 578.26 Mbit/s
95th percentile per-packet one-way delay: 181.183 ms
Loss rate: 1.39%
Run 6: Report of FillP — Data Link

![Graph of Throughput (Mbps)]

- **Flow 1 ingress (mean 656.37 Mbps)**
- **Flow 1 egress (mean 656.16 Mbps)**
- **Flow 2 ingress (mean 597.80 Mbps)**
- **Flow 2 egress (mean 597.17 Mbps)**
- **Flow 3 ingress (mean 580.40 Mbps)**
- **Flow 3 egress (mean 578.26 Mbps)**

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

- **Flow 1 (95th percentile 209.49 ms)**
- **Flow 2 (95th percentile 210.25 ms)**
- **Flow 3 (95th percentile 181.18 ms)**
Run 7: Statistics of FillP

End at: 2018-06-07 18:46:44
Local clock offset: 0.246 ms
Remote clock offset: -0.028 ms

# Below is generated by plot.py at 2018-06-07 21:10:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1209.17 Mbit/s
95th percentile per-packet one-way delay: 215.976 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 602.32 Mbit/s
95th percentile per-packet one-way delay: 224.046 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 627.01 Mbit/s
95th percentile per-packet one-way delay: 203.741 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 579.12 Mbit/s
95th percentile per-packet one-way delay: 157.428 ms
Loss rate: 0.91%
Run 7: Report of FillP — Data Link

![Graph of Throughput vs Time](image1)

![Graph of Per-Packet One-Way Delay vs Time](image2)
Run 8: Statistics of FillP

Start at: 2018-06-07 19:08:27
End at: 2018-06-07 19:08:57
Local clock offset: 0.293 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2018-06-07 21:11:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1228.91 Mbit/s
95th percentile per-packet one-way delay: 217.193 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 645.91 Mbit/s
95th percentile per-packet one-way delay: 223.288 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 612.68 Mbit/s
95th percentile per-packet one-way delay: 211.257 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 534.33 Mbit/s
95th percentile per-packet one-way delay: 142.811 ms
Loss rate: 1.47%
Run 8: Report of FillP — Data Link

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

Start at: 2018-06-07 19:30:37
End at: 2018-06-07 19:31:07
Local clock offset: 0.287 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-07 21:29:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1231.35 Mbit/s
95th percentile per-packet one-way delay: 217.022 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 657.40 Mbit/s
95th percentile per-packet one-way delay: 202.300 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 590.36 Mbit/s
95th percentile per-packet one-way delay: 251.993 ms
Loss rate: 0.94%
-- Flow 3:
Average throughput: 553.41 Mbit/s
95th percentile per-packet one-way delay: 93.928 ms
Loss rate: 1.13%
Run 9: Report of FillP — Data Link

![Graph showing throughput and delay](image_url)

- Flow 1 ingress (mean 660.47 Mbit/s)
- Flow 1 egress (mean 657.40 Mbit/s)
- Flow 2 ingress (mean 593.66 Mbit/s)
- Flow 2 egress (mean 590.36 Mbit/s)
- Flow 3 ingress (mean 554.06 Mbit/s)
- Flow 3 egress (mean 553.41 Mbit/s)

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

- Flow 1 (95th percentile 202.30 ms)
- Flow 2 (95th percentile 251.99 ms)
- Flow 3 (95th percentile 93.93 ms)
Run 10: Statistics of FillP

Start at: 2018-06-07 19:52:44
End at: 2018-06-07 19:53:14
Local clock offset: 0.454 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1162.94 Mbit/s
95th percentile per-packet one-way delay: 219.204 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 579.01 Mbit/s
95th percentile per-packet one-way delay: 235.050 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 607.40 Mbit/s
95th percentile per-packet one-way delay: 198.447 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 546.92 Mbit/s
95th percentile per-packet one-way delay: 218.372 ms
Loss rate: 1.34%
Run 10: Report of FillP — Data Link

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

- Flow 1 ingress (mean 579.96 Mbit/s)
- Flow 1 egress (mean 579.01 Mbit/s)
- Flow 2 ingress (mean 608.85 Mbit/s)
- Flow 2 egress (mean 607.40 Mbit/s)
- Flow 3 ingress (mean 548.72 Mbit/s)
- Flow 3 egress (mean 546.92 Mbit/s)

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

- Flow 1 (95th percentile 235.05 ms)
- Flow 2 (95th percentile 198.45 ms)
- Flow 3 (95th percentile 211.37 ms)
Run 1: Statistics of Indigo

End at: 2018-06-07 16:47:18
Local clock offset: -0.446 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
<table>
<thead>
<tr>
<th></th>
<th>Average throughput</th>
<th>95th percentile per-packet one-way delay</th>
<th>Loss rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>252.91 Mbit/s</td>
<td>64.320 ms</td>
<td>0.55%</td>
</tr>
<tr>
<td>Flow 1</td>
<td>85.06 Mbit/s</td>
<td>62.268 ms</td>
<td>0.27%</td>
</tr>
<tr>
<td>Flow 2</td>
<td>176.92 Mbit/s</td>
<td>64.167 ms</td>
<td>0.52%</td>
</tr>
<tr>
<td>Flow 3</td>
<td>140.54 Mbit/s</td>
<td>65.834 ms</td>
<td>1.14%</td>
</tr>
</tbody>
</table>
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2018-06-07 17:08:54
End at: 2018-06-07 17:09:24
Local clock offset: 0.002 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.51 Mbit/s
95th percentile per-packet one-way delay: 74.695 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 173.00 Mbit/s
95th percentile per-packet one-way delay: 71.532 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 151.72 Mbit/s
95th percentile per-packet one-way delay: 75.395 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 100.61 Mbit/s
95th percentile per-packet one-way delay: 83.021 ms
Loss rate: 1.20%
Run 2: Report of Indigo — Data Link

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

- **Flow 1 ingress** (mean 173.04 Mbit/s)
- **Flow 1 egress** (mean 173.00 Mbit/s)
- **Flow 2 ingress** (mean 151.79 Mbit/s)
- **Flow 2 egress** (mean 151.72 Mbit/s)
- **Flow 3 ingress** (mean 190.80 Mbit/s)
- **Flow 3 egress** (mean 190.61 Mbit/s)

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

- **Flow 1** (95th percentile 71.53 ms)
- **Flow 2** (95th percentile 75.39 ms)
- **Flow 3** (95th percentile 83.02 ms)
Run 3: Statistics of Indigo

Start at: 2018-06-07 17:31:12
End at: 2018-06-07 17:31:43
Local clock offset: 0.025 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 310.88 Mbit/s
  95th percentile per-packet one-way delay: 66.647 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 180.44 Mbit/s
  95th percentile per-packet one-way delay: 64.282 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 155.48 Mbit/s
  95th percentile per-packet one-way delay: 67.574 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 85.29 Mbit/s
  95th percentile per-packet one-way delay: 77.903 ms
  Loss rate: 1.29%
Run 3: Report of Indigo — Data Link

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

Legend for throughput graph:
- Flow 1 ingress (mean 180.38 Mbit/s)
- Flow 1 egress (mean 180.44 Mbit/s)
- Flow 2 ingress (mean 135.55 Mbit/s)
- Flow 2 egress (mean 135.48 Mbit/s)
- Flow 3 ingress (mean 85.57 Mbit/s)
- Flow 3 egress (mean 85.29 Mbit/s)

Legend for per-packet delay graph:
- Flow 1 (95th percentile 64.28 ms)
- Flow 2 (95th percentile 67.57 ms)
- Flow 3 (95th percentile 77.90 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-07 17:53:19
End at: 2018-06-07 17:53:49
Local clock offset: 0.026 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.40 Mbit/s
95th percentile per-packet one-way delay: 71.005 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 178.85 Mbit/s
95th percentile per-packet one-way delay: 66.898 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 150.23 Mbit/s
95th percentile per-packet one-way delay: 72.389 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 88.85 Mbit/s
95th percentile per-packet one-way delay: 98.255 ms
Loss rate: 1.16%
Run 4: Report of Indigo — Data Link

![Graph of Throughput and Packet Delay]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 178.74 Mbps)
  - Flow 1 egress (mean 178.85 Mbps)
  - Flow 2 ingress (mean 156.31 Mbps)
  - Flow 2 egress (mean 150.23 Mbps)
  - Flow 3 ingress (mean 88.97 Mbps)
  - Flow 3 egress (mean 88.85 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 66.90 ms)
  - Flow 2 (95th percentile 72.39 ms)
  - Flow 3 (95th percentile 98.25 ms)
Run 5: Statistics of Indigo

Start at: 2018-06-07 18:15:28
End at: 2018-06-07 18:15:58
Local clock offset: 0.127 ms
Remote clock offset: -0.074 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.30 Mbit/s
95th percentile per-packet one-way delay: 67.034 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 173.87 Mbit/s
95th percentile per-packet one-way delay: 65.349 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 157.21 Mbit/s
95th percentile per-packet one-way delay: 67.400 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 120.56 Mbit/s
95th percentile per-packet one-way delay: 68.830 ms
Loss rate: 1.32%
Run 5: Report of Indigo — Data Link

![Graph showing throughput and packet loss over time for different flows.](image-url)
Run 6: Statistics of Indigo

Start at: 2018-06-07 18:37:36
End at: 2018-06-07 18:38:06
Local clock offset: 0.226 ms
Remote clock offset: -0.086 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.77 Mbit/s
95th percentile per-packet one-way delay: 64.479 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 175.02 Mbit/s
95th percentile per-packet one-way delay: 63.119 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 156.41 Mbit/s
95th percentile per-packet one-way delay: 65.075 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 126.20 Mbit/s
95th percentile per-packet one-way delay: 68.172 ms
Loss rate: 1.30%
Run 6: Report of Indigo — Data Link
Run 7: Statistics of Indigo

Start at: 2018-06-07 18:59:58
End at: 2018-06-07 19:00:28
Local clock offset: 0.657 ms
Remote clock offset: -0.053 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 311.43 Mbit/s
  95th percentile per-packet one-way delay: 64.661 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 180.70 Mbit/s
  95th percentile per-packet one-way delay: 62.753 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 160.45 Mbit/s
  95th percentile per-packet one-way delay: 65.764 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 74.92 Mbit/s
  95th percentile per-packet one-way delay: 72.357 ms
  Loss rate: 1.14%
Run 7: Report of Indigo — Data Link

![Graph of throughput and delay over time for different flows](image)

- **Flow 1 ingress (mean 180.70 Mbit/s)**
- **Flow 1 egress (mean 180.70 Mbit/s)**
- **Flow 2 ingress (mean 160.58 Mbit/s)**
- **Flow 2 egress (mean 160.45 Mbit/s)**
- **Flow 3 ingress (mean 75.00 Mbit/s)**
- **Flow 3 egress (mean 74.92 Mbit/s)**

![Graph of packet delay distribution](image)

- **Flow 1 (95th percentile 62.75 ms)**
- **Flow 2 (95th percentile 65.76 ms)**
- **Flow 3 (95th percentile 72.36 ms)**
Run 8: Statistics of Indigo

Local clock offset: 0.304 ms
Remote clock offset: -0.038 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.33 Mbit/s
95th percentile per-packet one-way delay: 70.670 ms
Loss rate: 0.49%

-- Flow 1:
Average throughput: 168.79 Mbit/s
95th percentile per-packet one-way delay: 68.471 ms
Loss rate: 0.33%

-- Flow 2:
Average throughput: 168.85 Mbit/s
95th percentile per-packet one-way delay: 70.948 ms
Loss rate: 0.53%

-- Flow 3:
Average throughput: 103.87 Mbit/s
95th percentile per-packet one-way delay: 77.088 ms
Loss rate: 1.12%
Run 8: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 168.77 Mbit/s)  
Flow 1 egress (mean 168.79 Mbit/s)  
Flow 2 ingress (mean 168.89 Mbit/s)  
Flow 2 egress (mean 168.85 Mbit/s)  
Flow 3 ingress (mean 103.94 Mbit/s)  
Flow 3 egress (mean 103.87 Mbit/s)

Per packet round trip delay [ms]

Time (s)

Flow 1 (95th percentile 68.47 ms)  
Flow 2 (95th percentile 70.95 ms)  
Flow 3 (95th percentile 77.09 ms)
Run 9: Statistics of Indigo

Start at: 2018-06-07 19:44:18
End at: 2018-06-07 19:44:48
Local clock offset: 0.252 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.02 Mbit/s
95th percentile per-packet one-way delay: 84.731 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 181.89 Mbit/s
95th percentile per-packet one-way delay: 72.199 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 142.38 Mbit/s
95th percentile per-packet one-way delay: 87.096 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 134.77 Mbit/s
95th percentile per-packet one-way delay: 98.705 ms
Loss rate: 1.26%
Run 9: Report of Indigo — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 181.84 Mbps)
- Flow 1 egress (mean 181.89 Mbps)
- Flow 2 ingress (mean 142.50 Mbps)
- Flow 2 egress (mean 142.38 Mbps)
- Flow 3 ingress (mean 135.09 Mbps)
- Flow 3 egress (mean 134.77 Mbps)

**Packet Loss (percentile)**
- Flow 1 (95th percentile 72.20 ms)
- Flow 2 (95th percentile 87.10 ms)
- Flow 3 (95th percentile 98.70 ms)
Run 10: Statistics of Indigo

Start at: 2018-06-07 20:06:21
End at: 2018-06-07 20:06:51
Local clock offset: -0.087 ms
Remote clock offset: -0.133 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.12 Mbit/s
95th percentile per-packet one-way delay: 79.168 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 173.99 Mbit/s
95th percentile per-packet one-way delay: 75.725 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 146.95 Mbit/s
95th percentile per-packet one-way delay: 79.536 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 119.22 Mbit/s
95th percentile per-packet one-way delay: 84.468 ms
Loss rate: 1.00%
Run 10: Report of Indigo — Data Link

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

- **Flow 1 ingress (mean 173.94 Mbit/s)**
- **Flow 1 egress (mean 173.99 Mbit/s)**
- **Flow 2 ingress (mean 146.81 Mbit/s)**
- **Flow 2 egress (mean 146.95 Mbit/s)**
- **Flow 3 ingress (mean 119.17 Mbit/s)**
- **Flow 3 egress (mean 119.22 Mbit/s)**

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

- **Flow 1 (95th percentile 75.72 ms)**
- **Flow 2 (95th percentile 79.54 ms)**
- **Flow 3 (95th percentile 84.47 ms)**

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Run 1: Statistics of LEDBAT

Start at: 2018-06-07 16:41:33
End at: 2018-06-07 16:42:03
Local clock offset: -0.077 ms
Remote clock offset: -0.002 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.72 Mbit/s
95th percentile per-packet one-way delay: 57.643 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 21.28 Mbit/s
95th percentile per-packet one-way delay: 57.408 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 23.51 Mbit/s
95th percentile per-packet one-way delay: 57.656 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.58 Mbit/s
95th percentile per-packet one-way delay: 59.009 ms
Loss rate: 2.03%
Run 1: Report of LEDBAT — Data Link

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

![Graph 2: Per packet one way delay vs Time](image)
Run 2: Statistics of LEDBAT

Start at: 2018-06-07 17:03:40
End at: 2018-06-07 17:04:10
Local clock offset: 0.003 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 41.58 Mbit/s
95th percentile per-packet one-way delay: 51.993 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 25.94 Mbit/s
95th percentile per-packet one-way delay: 51.861 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 17.96 Mbit/s
95th percentile per-packet one-way delay: 52.076 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 11.40 Mbit/s
95th percentile per-packet one-way delay: 52.706 ms
Loss rate: 2.06%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2018-06-07 17:25:49
End at: 2018-06-07 17:26:19
Local clock offset: 0.006 ms
Remote clock offset: 0.004 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: 51.965 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 35.33 Mbit/s
95th percentile per-packet one-way delay: 51.943 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 23.29 Mbit/s
95th percentile per-packet one-way delay: 51.839 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.66 Mbit/s
95th percentile per-packet one-way delay: 52.520 ms
Loss rate: 2.03%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-06-07 17:48:04  
End at: 2018-06-07 17:48:34  
Local clock offset: 0.018 ms  
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-06-07 21:31:27  
# Datalink statistics
   -- Total of 3 flows:  
   Average throughput: 54.35 Mbit/s  
   95th percentile per-packet one-way delay: 52.043 ms  
   Loss rate: 0.86%
   -- Flow 1:  
   Average throughput: 35.22 Mbit/s  
   95th percentile per-packet one-way delay: 52.102 ms  
   Loss rate: 0.67%
   -- Flow 2:  
   Average throughput: 23.10 Mbit/s  
   95th percentile per-packet one-way delay: 51.874 ms  
   Loss rate: 1.01%
   -- Flow 3:  
   Average throughput: 11.61 Mbit/s  
   95th percentile per-packet one-way delay: 52.332 ms  
   Loss rate: 2.04%
Run 5: Statistics of LEDBAT

Start at: 2018-06-07 18:10:14
End at: 2018-06-07 18:10:44
Local clock offset: 0.139 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: 51.801 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 28.18 Mbit/s
95th percentile per-packet one-way delay: 51.679 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 23.32 Mbit/s
95th percentile per-packet one-way delay: 51.988 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 11.62 Mbit/s
95th percentile per-packet one-way delay: 52.361 ms
Loss rate: 2.02%
Run 5: Report of LEDBAT — Data Link

![Graph of Throughput vs Time](chart1.png)

- **Flow 1 ingress** (mean 28.30 Mbit/s)
- **Flow 2 ingress** (mean 23.44 Mbit/s)
- **Flow 3 ingress** (mean 11.74 Mbit/s)
- **Flow 1 egress** (mean 28.18 Mbit/s)
- **Flow 2 egress** (mean 23.32 Mbit/s)
- **Flow 3 egress** (mean 11.62 Mbit/s)

![Graph of Per Packet End-to-End Delay](chart2.png)

- **Flow 1** (95th percentile 51.68 ms)
- **Flow 2** (95th percentile 51.99 ms)
- **Flow 3** (95th percentile 52.36 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-06-07 18:32:20
End at: 2018-06-07 18:32:50
Local clock offset: -0.15 ms
Remote clock offset: -0.069 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.33 Mbit/s
95th percentile per-packet one-way delay: 52.334 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 34.34 Mbit/s
95th percentile per-packet one-way delay: 52.440 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 22.93 Mbit/s
95th percentile per-packet one-way delay: 52.121 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 11.48 Mbit/s
95th percentile per-packet one-way delay: 52.178 ms
Loss rate: 2.05%
Run 7: Statistics of LEDBAT

Start at: 2018-06-07 18:54:45  
End at: 2018-06-07 18:55:15  
Local clock offset: 0.254 ms  
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.51 Mbit/s
95th percentile per-packet one-way delay: 51.369 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 35.41 Mbit/s
95th percentile per-packet one-way delay: 51.486 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 13.99 Mbit/s
95th percentile per-packet one-way delay: 51.168 ms
Loss rate: 1.30%
-- Flow 3:
Average throughput: 11.63 Mbit/s
95th percentile per-packet one-way delay: 50.708 ms
Loss rate: 2.05%
Run 7: Report of LEDBAT — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 Ingress** (mean 35.53 Mbit/s)
- **Flow 1 Egress** (mean 35.41 Mbit/s)
- **Flow 2 Ingress** (mean 14.10 Mbit/s)
- **Flow 2 Egress** (mean 13.99 Mbit/s)
- **Flow 3 Ingress** (mean 11.75 Mbit/s)
- **Flow 3 Egress** (mean 11.63 Mbit/s)

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

- **Flow 1** (95th percentile 51.49 ms)
- **Flow 2** (95th percentile 51.17 ms)
- **Flow 3** (95th percentile 50.71 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-06-07 19:16:51
End at: 2018-06-07 19:17:21
Local clock offset: 0.286 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.67 Mbit/s
  95th percentile per-packet one-way delay: 52.025 ms
  Loss rate: 0.86%
  -- Flow 1:
  Average throughput: 35.53 Mbit/s
  95th percentile per-packet one-way delay: 51.796 ms
  Loss rate: 0.66%
  -- Flow 2:
  Average throughput: 21.58 Mbit/s
  95th percentile per-packet one-way delay: 52.232 ms
  Loss rate: 1.05%
  -- Flow 3:
  Average throughput: 11.65 Mbit/s
  95th percentile per-packet one-way delay: 52.793 ms
  Loss rate: 2.03%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

End at: 2018-06-07 19:39:34
Local clock offset: 0.319 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.81 Mbit/s
95th percentile per-packet one-way delay: 51.645 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 35.28 Mbit/s
95th percentile per-packet one-way delay: 51.697 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 20.63 Mbit/s
95th percentile per-packet one-way delay: 51.550 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 11.79 Mbit/s
95th percentile per-packet one-way delay: 51.098 ms
Loss rate: 2.02%
Run 9: Report of LEDBAT — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress** (mean 35.40 Mbit/s)
- **Flow 1 egress** (mean 35.28 Mbit/s)
- **Flow 2 ingress** (mean 20.75 Mbit/s)
- **Flow 2 egress** (mean 20.63 Mbit/s)
- **Flow 3 ingress** (mean 11.91 Mbit/s)
- **Flow 3 egress** (mean 11.79 Mbit/s)

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

- **Flow 1** (95th percentile 51.70 ms)
- **Flow 2** (95th percentile 51.55 ms)
- **Flow 3** (95th percentile 51.10 ms)
Run 10: Statistics of LEDBAT

Start at: 2018-06-07 20:01:04
End at: 2018-06-07 20:01:34
Local clock offset: -0.07 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.95 Mbit/s
  95th percentile per-packet one-way delay: 50.875 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 35.09 Mbit/s
  95th percentile per-packet one-way delay: 50.827 ms
  Loss rate: 0.67%
-- Flow 2:
  Average throughput: 23.94 Mbit/s
  95th percentile per-packet one-way delay: 50.706 ms
  Loss rate: 1.00%
-- Flow 3:
  Average throughput: 12.00 Mbit/s
  95th percentile per-packet one-way delay: 51.744 ms
  Loss rate: 2.01%
Run 10: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-07 16:44:05
End at: 2018-06-07 16:44:35
Local clock offset: -0.029 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 358.25 Mbit/s
95th percentile per-packet one-way delay: 196.975 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 307.61 Mbit/s
95th percentile per-packet one-way delay: 196.913 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 74.13 Mbit/s
95th percentile per-packet one-way delay: 198.703 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 4.45 Mbit/s
95th percentile per-packet one-way delay: 62.609 ms
Loss rate: 0.96%
Run 2: Statistics of PCC-Allegro

Start at: 2018-06-07 17:06:12
End at: 2018-06-07 17:06:42
Local clock offset: 0.376 ms
Remote clock offset: 0.009 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 361.04 Mbit/s
95th percentile per-packet one-way delay: 113.205 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 347.34 Mbit/s
95th percentile per-packet one-way delay: 112.888 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 4.54 Mbit/s
95th percentile per-packet one-way delay: 112.020 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 32.83 Mbit/s
95th percentile per-packet one-way delay: 115.319 ms
Loss rate: 1.23%
Run 2: Report of PCC-Allegro — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 347.51 Mbps)
- Flow 1 egress (mean 347.34 Mbps)
- Flow 2 ingress (mean 4.54 Mbps)
- Flow 2 egress (mean 4.54 Mbps)
- Flow 3 ingress (mean 32.90 Mbps)
- Flow 3 egress (mean 32.83 Mbps)

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

- Flow 1 (95th percentile 112.89 ms)
- Flow 2 (95th percentile 112.02 ms)
- Flow 3 (95th percentile 115.32 ms)
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-07 17:28:26
End at: 2018-06-07 17:28:56
Local clock offset: 0.024 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 385.53 Mbit/s
95th percentile per-packet one-way delay: 210.568 ms
Loss rate: 4.15%
-- Flow 1:
Average throughput: 363.59 Mbit/s
95th percentile per-packet one-way delay: 210.526 ms
Loss rate: 4.08%
-- Flow 2:
Average throughput: 31.21 Mbit/s
95th percentile per-packet one-way delay: 211.409 ms
Loss rate: 5.01%
-- Flow 3:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 211.226 ms
Loss rate: 10.20%
Run 3: Report of PCC-Allegro — Data Link

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

Flow 1 ingress (mean 377.76 Mbit/s)
Flow 1 egress (mean 363.59 Mbit/s)
Flow 2 ingress (mean 32.69 Mbit/s)
Flow 2 egress (mean 31.21 Mbit/s)
Flow 3 ingress (mean 4.14 Mbit/s)
Flow 3 egress (mean 3.76 Mbit/s)

Flow 1 (95th percentile 210.53 ms)
Flow 2 (95th percentile 211.41 ms)
Flow 3 (95th percentile 211.23 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-07 17:50:38
End at: 2018-06-07 17:51:08
Local clock offset: 0.025 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 327.67 Mbit/s
   95th percentile per-packet one-way delay: 82.594 ms
   Loss rate: 0.38%
-- Flow 1:
   Average throughput: 318.61 Mbit/s
   95th percentile per-packet one-way delay: 83.091 ms
   Loss rate: 0.36%
-- Flow 2:
   Average throughput: 4.84 Mbit/s
   95th percentile per-packet one-way delay: 79.273 ms
   Loss rate: 0.51%
-- Flow 3:
   Average throughput: 17.93 Mbit/s
   95th percentile per-packet one-way delay: 78.605 ms
   Loss rate: 1.16%
Run 4: Report of PCC-Allegro — Data Link

---

**Throughput (Mbps)**

- Flow 1 ingress (mean 318.72 Mbps)
- Flow 1 egress (mean 318.61 Mbps)
- Flow 2 ingress (mean 4.84 Mbps)
- Flow 2 egress (mean 4.84 Mbps)
- Flow 3 ingress (mean 17.06 Mbps)
- Flow 3 egress (mean 17.93 Mbps)

---

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

- Flow 1 (95th percentile 83.09 ms)
- Flow 2 (95th percentile 79.27 ms)
- Flow 3 (95th percentile 78.61 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-07 18:12:46
End at: 2018-06-07 18:13:16
Local clock offset: -0.205 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 373.38 Mbit/s
  95th percentile per-packet one-way delay: 125.535 ms
  Loss rate: 0.37%
-- Flow 1:
  Average throughput: 344.02 Mbit/s
  95th percentile per-packet one-way delay: 125.801 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 28.29 Mbit/s
  95th percentile per-packet one-way delay: 126.722 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 32.62 Mbit/s
  95th percentile per-packet one-way delay: 100.186 ms
  Loss rate: 1.09%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-07 18:34:52
End at: 2018-06-07 18:35:22
Local clock offset: 0.204 ms
Remote clock offset: -0.061 ms

# Below is generated by plot.py at 2018-06-07 21:31:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.82 Mbit/s
95th percentile per-packet one-way delay: 137.497 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 260.35 Mbit/s
95th percentile per-packet one-way delay: 137.477 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 129.99 Mbit/s
95th percentile per-packet one-way delay: 138.647 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 16.19 Mbit/s
95th percentile per-packet one-way delay: 99.223 ms
Loss rate: 1.45%
Run 6: Report of PCC-Allegro — Data Link

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

- **Flow 1 ingress (mean 260.64 Mbps)**
- **Flow 1 egress (mean 260.35 Mbps)**
- **Flow 2 ingress (mean 130.31 Mbps)**
- **Flow 2 egress (mean 129.99 Mbps)**
- **Flow 3 ingress (mean 16.27 Mbps)**
- **Flow 3 egress (mean 16.19 Mbps)**

![Graph 2: RTT vs Time (ms)]

- **Flow 1 (95th percentile 137.48 ms)**
- **Flow 2 (95th percentile 138.65 ms)**
- **Flow 3 (95th percentile 99.22 ms)**
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-07 18:57:17
End at: 2018-06-07 18:57:47
Local clock offset: 0.25 ms
Remote clock offset: -0.054 ms

# Below is generated by plot.py at 2018-06-07 21:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 431.44 Mbit/s
95th percentile per-packet one-way delay: 208.209 ms
Loss rate: 1.86%
-- Flow 1:
Average throughput: 427.68 Mbit/s
95th percentile per-packet one-way delay: 208.257 ms
Loss rate: 1.87%
-- Flow 2:
Average throughput: 3.61 Mbit/s
95th percentile per-packet one-way delay: 194.310 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 4.25 Mbit/s
95th percentile per-packet one-way delay: 126.321 ms
Loss rate: 0.97%
Run 7: Report of PCC-Allegro — Data Link

![Throughput Graph]

![Per-packet delay Graph]
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-07 19:19:27
End at: 2018-06-07 19:19:57
Local clock offset: 0.658 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-07 21:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 376.27 Mbit/s
95th percentile per-packet one-way delay: 171.849 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 363.15 Mbit/s
95th percentile per-packet one-way delay: 172.023 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 4.37 Mbit/s
95th percentile per-packet one-way delay: 171.862 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 31.29 Mbit/s
95th percentile per-packet one-way delay: 79.294 ms
Loss rate: 1.10%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-06-07 19:41:36
End at: 2018-06-07 19:42:06
Local clock offset: 0.361 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-06-07 21:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 380.67 Mbit/s
95th percentile per-packet one-way delay: 186.324 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 347.52 Mbit/s
95th percentile per-packet one-way delay: 186.725 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 34.65 Mbit/s
95th percentile per-packet one-way delay: 192.740 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 31.03 Mbit/s
95th percentile per-packet one-way delay: 117.276 ms
Loss rate: 1.10%
Run 9: Report of PCC-Allegro — Data Link

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

Legend:
- Flow 1 ingress (mean 347.69 Mbit/s)
- Flow 1 egress (mean 347.52 Mbit/s)
- Flow 2 ingress (mean 34.69 Mbit/s)
- Flow 2 egress (mean 34.65 Mbit/s)
- Flow 3 ingress (mean 31.06 Mbit/s)
- Flow 3 egress (mean 31.03 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 186.72 ms)
- Flow 2 (95th percentile 192.74 ms)
- Flow 3 (95th percentile 117.20 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-07 20:03:38
End at: 2018-06-07 20:04:08
Local clock offset: 0.334 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2018-06-07 21:32:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.27 Mbit/s
95th percentile per-packet one-way delay: 118.322 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 238.69 Mbit/s
95th percentile per-packet one-way delay: 118.389 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 65.81 Mbit/s
95th percentile per-packet one-way delay: 119.747 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 74.173 ms
Loss rate: 1.12%
Run 10: Report of PCC-Allegro — Data Link

Throughput (Mbps/s) vs Time (s)

Flow 1 ingress (mean 238.90 Mbps) — Flow 1 egress (mean 238.69 Mbps)
Flow 2 ingress (mean 65.86 Mbps) — Flow 2 egress (mean 65.81 Mbps)
Flow 3 ingress (mean 33.29 Mbps) — Flow 3 egress (mean 33.26 Mbps)

Packet latency (ms) vs Time (s)

Flow 1 (95th percentile 118.39 ms) — Flow 2 (95th percentile 119.75 ms) — Flow 3 (95th percentile 74.17 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-06-07 16:50:44
End at: 2018-06-07 16:51:14
Local clock offset: -0.082 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-07 21:37:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 360.74 Mbit/s
  95th percentile per-packet one-way delay: 210.401 ms
  Loss rate: 2.21%
-- Flow 1:
  Average throughput: 200.55 Mbit/s
  95th percentile per-packet one-way delay: 209.296 ms
  Loss rate: 1.70%
-- Flow 2:
  Average throughput: 237.66 Mbit/s
  95th percentile per-packet one-way delay: 211.666 ms
  Loss rate: 2.84%
-- Flow 3:
  Average throughput: 7.38 Mbit/s
  95th percentile per-packet one-way delay: 207.074 ms
  Loss rate: 2.39%
Run 2: Statistics of PCC-Expr

Start at: 2018-06-07 17:12:55
End at: 2018-06-07 17:13:25
Local clock offset: -0.018 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2018-06-07 21:37:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 313.70 Mbit/s
95th percentile per-packet one-way delay: 82.675 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 213.44 Mbit/s
95th percentile per-packet one-way delay: 64.758 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 125.27 Mbit/s
95th percentile per-packet one-way delay: 100.165 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: 128.973 ms
Loss rate: 3.78%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-06-07 17:35:13
End at: 2018-06-07 17:35:43
Local clock offset: 0.414 ms
Remote clock offset: -0.035 ms

# Below is generated by plot.py at 2018-06-07 21:39:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 325.78 Mbit/s
  95th percentile per-packet one-way delay: 196.317 ms
  Loss rate: 3.03%
-- Flow 1:
  Average throughput: 217.80 Mbit/s
  95th percentile per-packet one-way delay: 195.884 ms
  Loss rate: 2.37%
-- Flow 2:
  Average throughput: 160.62 Mbit/s
  95th percentile per-packet one-way delay: 197.103 ms
  Loss rate: 4.29%
-- Flow 3:
  Average throughput: 4.10 Mbit/s
  95th percentile per-packet one-way delay: 197.153 ms
  Loss rate: 6.97%
Run 3: Report of PCC-Expr — Data Link

![Graph of throughput and packet delay over time for different flows. The graphs show the throughput and per-packet end-to-end delay for flows 1, 2, and 3. The graphs indicate the mean and 95th percentile values for each flow. ]
Run 4: Statistics of PCC-Expr

Start at: 2018-06-07 17:57:20
End at: 2018-06-07 17:57:50
Local clock offset: 0.039 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-07 21:42:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 358.32 Mbit/s
  95th percentile per-packet one-way delay: 196.335 ms
  Loss rate: 1.89%
-- Flow 1:
  Average throughput: 301.78 Mbit/s
  95th percentile per-packet one-way delay: 195.458 ms
  Loss rate: 1.60%
-- Flow 2:
  Average throughput: 81.01 Mbit/s
  95th percentile per-packet one-way delay: 200.910 ms
  Loss rate: 3.38%
-- Flow 3:
  Average throughput: 8.48 Mbit/s
  95th percentile per-packet one-way delay: 200.615 ms
  Loss rate: 4.16%
Run 4: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 305.67 Mbit/s)
- Flow 1 egress (mean 301.78 Mbit/s)
- Flow 2 ingress (mean 83.42 Mbit/s)
- Flow 2 egress (mean 81.01 Mbit/s)
- Flow 3 ingress (mean 8.76 Mbit/s)
- Flow 3 egress (mean 8.48 Mbit/s)
Run 5: Statistics of PCC-Expr

Start at: 2018-06-07 18:19:29
End at: 2018-06-07 18:19:59
Local clock offset: 0.129 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2018-06-07 21:42:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.37 Mbit/s
95th percentile per-packet one-way delay: 188.621 ms
Loss rate: 1.77%
-- Flow 1:
Average throughput: 218.96 Mbit/s
95th percentile per-packet one-way delay: 180.136 ms
Loss rate: 1.28%
-- Flow 2:
Average throughput: 180.25 Mbit/s
95th percentile per-packet one-way delay: 197.153 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 11.47 Mbit/s
95th percentile per-packet one-way delay: 196.719 ms
Loss rate: 3.90%
Run 5: Report of PCC-Expr — Data Link
Run 6: Statistics of PCC-Expr

Start at: 2018-06-07 18:41:38  
End at: 2018-06-07 18:42:08  
Local clock offset: 0.248 ms  
Remote clock offset: -0.04 ms  

# Below is generated by plot.py at 2018-06-07 21:43:30  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 353.42 Mbit/s  
  95th percentile per-packet one-way delay: 206.780 ms  
  Loss rate: 3.66%  
-- Flow 1:  
  Average throughput: 242.10 Mbit/s  
  95th percentile per-packet one-way delay: 216.035 ms  
  Loss rate: 4.04%  
-- Flow 2:  
  Average throughput: 165.93 Mbit/s  
  95th percentile per-packet one-way delay: 192.885 ms  
  Loss rate: 2.80%  
-- Flow 3:  
  Average throughput: 3.62 Mbit/s  
  95th percentile per-packet one-way delay: 195.748 ms  
  Loss rate: 6.07%
Run 6: Report of PCC-Expr — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 251.44 Mbps)
  - Flow 1 egress (mean 242.10 Mbps)
  - Flow 2 ingress (mean 169.84 Mbps)
  - Flow 2 egress (mean 165.93 Mbps)
  - Flow 3 ingress (mean 1.81 Mbps)
  - Flow 3 egress (mean 1.62 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 216.03 ms)
  - Flow 2 (95th percentile 192.88 ms)
  - Flow 3 (95th percentile 195.75 ms)
Run 7: Statistics of PCC-Expr

Start at: 2018-06-07 19:03:58
End at: 2018-06-07 19:04:28
Local clock offset: 0.669 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2018-06-07 21:43:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 302.23 Mbit/s
  95th percentile per-packet one-way delay: 162.232 ms
  Loss rate: 2.04%
-- Flow 1:
  Average throughput: 188.23 Mbit/s
  95th percentile per-packet one-way delay: 99.306 ms
  Loss rate: 1.49%
-- Flow 2:
  Average throughput: 125.25 Mbit/s
  95th percentile per-packet one-way delay: 199.745 ms
  Loss rate: 2.71%
-- Flow 3:
  Average throughput: 94.24 Mbit/s
  95th percentile per-packet one-way delay: 205.507 ms
  Loss rate: 3.54%
Run 8: Statistics of PCC-Expr

Start at: 2018-06-07 19:26:09
End at: 2018-06-07 19:26:39
Local clock offset: 0.351 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2018-06-07 21:44:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 342.58 Mbit/s
  95th percentile per-packet one-way delay: 57.555 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 294.13 Mbit/s
  95th percentile per-packet one-way delay: 58.209 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 57.00 Mbit/s
  95th percentile per-packet one-way delay: 54.475 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 32.39 Mbit/s
  95th percentile per-packet one-way delay: 53.209 ms
  Loss rate: 2.90%
Run 8: Report of PCC-Expr — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 293.82 Mbps)
- Flow 1 egress (mean 294.13 Mbps)
- Flow 2 ingress (mean 57.32 Mbps)
- Flow 2 egress (mean 57.00 Mbps)
- Flow 3 ingress (mean 33.02 Mbps)
- Flow 3 egress (mean 32.39 Mbps)

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

- Flow 1 (95th percentile 58.21 ms)
- Flow 2 (95th percentile 54.48 ms)
- Flow 3 (95th percentile 53.21 ms)
Run 9: Statistics of PCC-Expr

Local clock offset: -0.223 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-07 21:47:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.66 Mbit/s
95th percentile per-packet one-way delay: 52.919 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 207.86 Mbit/s
95th percentile per-packet one-way delay: 52.393 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 119.71 Mbit/s
95th percentile per-packet one-way delay: 54.056 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 62.12 Mbit/s
95th percentile per-packet one-way delay: 54.194 ms
Loss rate: 1.22%
Run 9: Report of PCC-Expr — Data Link
Run 10: Statistics of PCC-Expr

Start at: 2018-06-07 20:10:22
End at: 2018-06-07 20:10:52
Local clock offset: 0.3 ms
Remote clock offset: -0.081 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 324.37 Mbit/s
95th percentile per-packet one-way delay: 65.616 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 192.35 Mbit/s
95th percentile per-packet one-way delay: 63.797 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 186.21 Mbit/s
95th percentile per-packet one-way delay: 70.288 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 25.96 Mbit/s
95th percentile per-packet one-way delay: 65.884 ms
Loss rate: 1.39%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 192.14 Mb/s)
- Flow 1 egress (mean 192.35 Mb/s)
- Flow 2 ingress (mean 186.18 Mb/s)
- Flow 2 egress (mean 186.21 Mb/s)
- Flow 3 ingress (mean 26.08 Mb/s)
- Flow 3 egress (mean 25.96 Mb/s)

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

- Flow 1 (95th percentile 63.80 ms)
- Flow 2 (95th percentile 70.29 ms)
- Flow 3 (95th percentile 65.88 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-07 16:39:09
End at: 2018-06-07 16:39:39
Local clock offset: 0.315 ms
Remote clock offset: 0.037 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.58 Mbit/s
  95th percentile per-packet one-way delay: 50.561 ms
  Loss rate: 0.54%
-- Flow 1:
  Average throughput: 66.12 Mbit/s
  95th percentile per-packet one-way delay: 50.591 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 66.05 Mbit/s
  95th percentile per-packet one-way delay: 50.276 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 58.75 Mbit/s
  95th percentile per-packet one-way delay: 50.317 ms
  Loss rate: 1.12%
Run 1: Report of QUIC Cubic — Data Link

![Graph](image_url)

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 66.10 Mbps)
  - Flow 1 egress (mean 66.12 Mbps)
  - Flow 2 ingress (mean 66.11 Mbps)
  - Flow 2 egress (mean 66.05 Mbps)
  - Flow 3 ingress (mean 58.81 Mbps)
  - Flow 3 egress (mean 58.75 Mbps)

![Graph](image_url)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 50.59 ms)
  - Flow 2 (95th percentile 50.28 ms)
  - Flow 3 (95th percentile 50.32 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-07 17:01:15
End at: 2018-06-07 17:01:45
Local clock offset: -0.043 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 135.70 Mbit/s
  95th percentile per-packet one-way delay: 50.791 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 72.35 Mbit/s
  95th percentile per-packet one-way delay: 50.816 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 64.69 Mbit/s
  95th percentile per-packet one-way delay: 49.915 ms
  Loss rate: 0.50%
-- Flow 3:
  Average throughput: 62.21 Mbit/s
  95th percentile per-packet one-way delay: 50.552 ms
  Loss rate: 0.24%
Run 2: Report of QUIC Cubic — Data Link

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

![Graph of packet round-trip time over time for different flows.](image)
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-07 17:23:26
End at: 2018-06-07 17:23:56
Local clock offset: -0.397 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.72 Mbit/s
95th percentile per-packet one-way delay: 50.282 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 69.58 Mbit/s
95th percentile per-packet one-way delay: 50.310 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 54.14 Mbit/s
95th percentile per-packet one-way delay: 50.237 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 55.39 Mbit/s
95th percentile per-packet one-way delay: 49.193 ms
Loss rate: 1.32%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-07 17:45:40
End at: 2018-06-07 17:46:10
Local clock offset: 0.012 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 121.61 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 58.83 Mbit/s
95th percentile per-packet one-way delay: 50.978 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 66.95 Mbit/s
95th percentile per-packet one-way delay: 50.869 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 55.88 Mbit/s
95th percentile per-packet one-way delay: 49.736 ms
Loss rate: 1.12%
Run 4: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 58.86 Mbps)
  - Flow 1 egress (mean 58.83 Mbps)
  - Flow 2 ingress (mean 66.97 Mbps)
  - Flow 2 egress (mean 66.95 Mbps)
  - Flow 3 ingress (mean 55.94 Mbps)
  - Flow 3 egress (mean 55.88 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 50.98 ms)
  - Flow 2 (95th percentile 50.87 ms)
  - Flow 3 (95th percentile 49.74 ms)

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Run 5: Statistics of QUIC Cubic

Start at: 2018-06-07 18:07:50
End at: 2018-06-07 18:08:20
Local clock offset: 0.115 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.74 Mbit/s
95th percentile per-packet one-way delay: 50.743 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 77.15 Mbit/s
95th percentile per-packet one-way delay: 50.740 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 61.20 Mbit/s
95th percentile per-packet one-way delay: 50.746 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 21.16 Mbit/s
95th percentile per-packet one-way delay: 50.747 ms
Loss rate: 4.99%
Run 5: Report of QUIC Cubic — Data Link

Graph 1:
Throughput vs Time

Graph 2:
Per-packet one-way delay vs Time

Legend:
- Flow 1 ingress (mean 77.18 Mbit/s)
- Flow 1 egress (mean 77.15 Mbit/s)
- Flow 2 ingress (mean 61.20 Mbit/s)
- Flow 2 egress (mean 61.20 Mbit/s)
- Flow 3 ingress (mean 22.04 Mbit/s)
- Flow 3 egress (mean 21.16 Mbit/s)

* Flow 1 (95th percentile 50.74 ms)
* Flow 2 (95th percentile 50.75 ms)
* Flow 3 (95th percentile 50.75 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-07 18:29:57
End at: 2018-06-07 18:30:27
Local clock offset: -0.159 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.58 Mbit/s
95th percentile per-packet one-way delay: 50.821 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 66.82 Mbit/s
95th percentile per-packet one-way delay: 50.654 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 60.04 Mbit/s
95th percentile per-packet one-way delay: 50.401 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 54.47 Mbit/s
95th percentile per-packet one-way delay: 73.432 ms
Loss rate: 1.74%
Run 6: Report of QUIC Cubic — Data Link

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

Flow 1 ingress (mean 66.89 Mbit/s)  
Flow 1 egress (mean 66.82 Mbit/s)  
Flow 2 ingress (mean 59.80 Mbit/s)  
Flow 2 egress (mean 60.04 Mbit/s)  
Flow 3 ingress (mean 54.87 Mbit/s)  
Flow 3 egress (mean 54.47 Mbit/s)
Run 7: Statistics of QUIC Cubic

Start at: 2018-06-07 18:52:21
End at: 2018-06-07 18:52:51
Local clock offset: 0.235 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 133.39 Mbit/s
  95th percentile per-packet one-way delay: 50.771 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 70.43 Mbit/s
  95th percentile per-packet one-way delay: 50.276 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 64.23 Mbit/s
  95th percentile per-packet one-way delay: 50.807 ms
  Loss rate: 0.65%
-- Flow 3:
  Average throughput: 61.82 Mbit/s
  95th percentile per-packet one-way delay: 50.851 ms
  Loss rate: 0.17%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-07 19:14:27
End at: 2018-06-07 19:14:57
Local clock offset: 0.305 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 123.84 Mbit/s
95th percentile per-packet one-way delay: 50.284 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 58.01 Mbit/s
95th percentile per-packet one-way delay: 50.303 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 69.74 Mbit/s
95th percentile per-packet one-way delay: 50.298 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 59.59 Mbit/s
95th percentile per-packet one-way delay: 49.631 ms
Loss rate: 1.02%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-07 19:36:40
End at: 2018-06-07 19:37:10
Local clock offset: 0.684 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 128.59 Mbit/s
  95th percentile per-packet one-way delay: 51.193 ms
  Loss rate: 0.30%
-- Flow 1:
  Average throughput: 69.30 Mbit/s
  95th percentile per-packet one-way delay: 49.250 ms
  Loss rate: 0.21%
-- Flow 2:
  Average throughput: 64.85 Mbit/s
  95th percentile per-packet one-way delay: 51.264 ms
  Loss rate: 0.29%
-- Flow 3:
  Average throughput: 49.40 Mbit/s
  95th percentile per-packet one-way delay: 50.686 ms
  Loss rate: 0.73%
Run 9: Report of QUIC Cubic — Data Link

---

0
5
10
15
20
25
30

0
20
40
60
80
100

Throughput (Mbps)

Time (s)

---

Flow 1 ingress (mean 69.21 Mbps)
Flow 1 egress (mean 69.30 Mbps)
Flow 2 ingress (mean 64.71 Mbps)
Flow 2 egress (mean 64.85 Mbps)
Flow 3 ingress (mean 49.26 Mbps)
Flow 3 egress (mean 49.40 Mbps)

---

0
5
10
15
20
25
30

0
50
100

Per-packet one-way delay (ms)

Time (s)

---

Flow 1 (95th percentile 49.25 ms)
Flow 2 (95th percentile 51.26 ms)
Flow 3 (95th percentile 50.69 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-07 19:58:42
End at: 2018-06-07 19:59:12
Local clock offset: 0.001 ms
Remote clock offset: -0.055 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.62 Mbit/s
95th percentile per-packet one-way delay: 50.703 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 22.92 Mbit/s
95th percentile per-packet one-way delay: 49.664 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 66.79 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.55%
-- Flow 3:
Average throughput: 61.88 Mbit/s
95th percentile per-packet one-way delay: 50.774 ms
Loss rate: 0.16%
Run 10: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2018-06-07 16:48:12  
End at: 2018-06-07 16:48:42  
Local clock offset: -0.454 ms  
Remote clock offset: 0.005 ms  

# Below is generated by plot.py at 2018-06-07 21:49:21  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 0.43 Mbit/s  
  95th percentile per-packet one-way delay: 49.678 ms  
  Loss rate: 0.58%  
-- Flow 1:  
  Average throughput: 0.22 Mbit/s  
  95th percentile per-packet one-way delay: 49.542 ms  
  Loss rate: 0.38%  
-- Flow 2:  
  Average throughput: 0.22 Mbit/s  
  95th percentile per-packet one-way delay: 50.351 ms  
  Loss rate: 0.61%  
-- Flow 3:  
  Average throughput: 0.22 Mbit/s  
  95th percentile per-packet one-way delay: 50.509 ms  
  Loss rate: 1.09%
Run 1: Report of SCReAM — Data Link
Run 2: Statistics of SCReAM

Start at: 2018-06-07 17:10:22
End at: 2018-06-07 17:10:52
Local clock offset: 0.005 ms
Remote clock offset: -0.004 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.852 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.869 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.825 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.896 ms
  Loss rate: 1.09%
Run 3: Statistics of SCReAM

Start at: 2018-06-07 17:32:40
End at: 2018-06-07 17:33:10
Local clock offset: 0.009 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.821 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.800 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.058 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.888 ms
Loss rate: 1.09%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-06-07 17:54:47
End at: 2018-06-07 17:55:17
Local clock offset: 0.415 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.357 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.346 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.306 ms
Loss rate: 1.09%
Run 5: Statistics of SCReAM

Start at: 2018-06-07 18:16:56
End at: 2018-06-07 18:17:26
Local clock offset: 0.17 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.893 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.890 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.881 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.943 ms
Loss rate: 1.09%
Run 6: Statistics of SCReAM

Start at: 2018-06-07 18:39:05
End at: 2018-06-07 18:39:35
Local clock offset: 0.207 ms
Remote clock offset: -0.082 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.913 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.942 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.784 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.427 ms
Loss rate: 0.74%
Run 6: Report of SCReAM — Data Link

![Graph showing network performance metrics over time]

- **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 one way delay (ms):**
  - Flow 1 (95th percentile 50.94 ms)
  - Flow 2 (95th percentile 49.78 ms)
  - Flow 3 (95th percentile 50.43 ms)
Run 7: Statistics of SCReAM

Start at: 2018-06-07 19:01:26
End at: 2018-06-07 19:01:56
Local clock offset: 0.641 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2018-06-07 21:49:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.327 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.296 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.379 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.291 ms
Loss rate: 1.09%
Run 7: Report of SCReAM — Data Link

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

Graph 2: Per-packet one-way delay (ms) vs Time (s)
Run 8: Statistics of SCReAM

End at: 2018-06-07 19:24:06
Local clock offset: 0.308 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.395 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.405 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.400 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.056 ms
  Loss rate: 1.09%
Run 9: Statistics of SCReAM

Start at: 2018-06-07 19:45:47
End at: 2018-06-07 19:46:17
Local clock offset: 0.22 ms
Remote clock offset: -0.003 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 51.017 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 51.049 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.981 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.139 ms
Loss rate: 1.08%
Run 9: Report of SCReAM — Data Link
Run 10: Statistics of SCReAM

Start at: 2018-06-07 20:07:49
End at: 2018-06-07 20:08:19
Local clock offset: -0.065 ms
Remote clock offset: -0.06 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 50.637 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.844 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 49.916 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.717 ms
Loss rate: 1.09%
Run 10: Report of SCReAM — Data Link

Throughput (Mbit/s) vs Time (s)

- 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)

Per-packet one way delay (ms)

- Flow 1 (95th percentile 49.84 ms)
- Flow 2 (95th percentile 49.92 ms)
- Flow 3 (95th percentile 50.72 ms)
Run 1: Statistics of Sprout

Start at: 2018-06-07 16:40:24
End at: 2018-06-07 16:40:54
Local clock offset: -0.061 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 8.93 Mbit/s
95th percentile per-packet one-way delay: 50.843 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: 50.864 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: 50.802 ms
Loss rate: 0.17%
-- Flow 3:
Average throughput: 0.79 Mbit/s
95th percentile per-packet one-way delay: 50.765 ms
Loss rate: 0.91%
Run 1: Report of Sprout — Data Link

[Graphs showing throughput and per-packet round-trip delay over time for different flows]
Run 2: Statistics of Sprout

Start at: 2018-06-07 17:02:31
End at: 2018-06-07 17:03:01
Local clock offset: 0.003 ms
Remote clock offset: -0.006 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.09 Mbit/s
95th percentile per-packet one-way delay: 51.367 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 51.343 ms
Loss rate: 0.56%
-- Flow 2:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 51.366 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 4.71 Mbit/s
95th percentile per-packet one-way delay: 51.480 ms
Loss rate: 0.64%
Run 2: Report of Sprout — Data Link

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

Start at: 2018-06-07 17:24:40
End at: 2018-06-07 17:25:10
Local clock offset: 0.018 ms
Remote clock offset: 0.013 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.42 Mbit/s
95th percentile per-packet one-way delay: 51.486 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 7.23 Mbit/s
95th percentile per-packet one-way delay: 51.398 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 5.98 Mbit/s
95th percentile per-packet one-way delay: 51.518 ms
Loss rate: 0.90%
-- Flow 3:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 51.707 ms
Loss rate: 1.51%
Run 4: Statistics of Sprout

Start at: 2018-06-07 17:46:55
End at: 2018-06-07 17:47:25
Local clock offset: 0.025 ms
Remote clock offset: -0.036 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.15 Mbit/s
95th percentile per-packet one-way delay: 51.110 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 7.31 Mbit/s
95th percentile per-packet one-way delay: 51.064 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 6.96 Mbit/s
95th percentile per-packet one-way delay: 51.108 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 6.79 Mbit/s
95th percentile per-packet one-way delay: 51.320 ms
Loss rate: 1.23%
Run 4: Report of Sprout — Data Link

![Throughput (Mbps) graph]

- Flow 1 ingress (mean 7.32 Mbps)
- Flow 1 egress (mean 7.31 Mbps)
- Flow 2 ingress (mean 6.96 Mbps)
- Flow 2 egress (mean 6.96 Mbps)
- Flow 3 ingress (mean 6.81 Mbps)
- Flow 3 egress (mean 6.79 Mbps)

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

- Flow 1 (95th percentile 51.06 ms)
- Flow 2 (95th percentile 51.11 ms)
- Flow 3 (95th percentile 51.32 ms)
Run 5: Statistics of Sprout

Start at: 2018-06-07 18:09:05
End at: 2018-06-07 18:09:35
Local clock offset: 0.09 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.88 Mbit/s
95th percentile per-packet one-way delay: 51.125 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 6.46 Mbit/s
95th percentile per-packet one-way delay: 51.045 ms
Loss rate: 0.58%
-- Flow 2:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: 51.183 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 7.51 Mbit/s
95th percentile per-packet one-way delay: 51.238 ms
Loss rate: 0.48%
Run 5: Report of Sprout — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 6.48 Mbit/s)
- Flow 1 egress (mean 6.46 Mbit/s)
- Flow 2 ingress (mean 5.97 Mbit/s)
- Flow 2 egress (mean 5.97 Mbit/s)
- Flow 3 ingress (mean 7.47 Mbit/s)
- Flow 3 egress (mean 7.51 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 51.05 ms)
- Flow 2 (95th percentile 51.18 ms)
- Flow 3 (95th percentile 51.24 ms)
Run 6: Statistics of Sprout

Start at: 2018-06-07 18:31:12
End at: 2018-06-07 18:31:42
Local clock offset: 0.609 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.82 Mbit/s
95th percentile per-packet one-way delay: 51.772 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 7.14 Mbit/s
95th percentile per-packet one-way delay: 51.848 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 7.08 Mbit/s
95th percentile per-packet one-way delay: 51.694 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 6.04 Mbit/s
95th percentile per-packet one-way delay: 51.703 ms
Loss rate: 1.11%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-06-07 18:53:36
End at: 2018-06-07 18:54:06
Local clock offset: -0.12 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.37 Mbit/s
95th percentile per-packet one-way delay: 50.535 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 50.545 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 7.11 Mbit/s
95th percentile per-packet one-way delay: 50.555 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 50.402 ms
Loss rate: 0.51%
Run 7: Report of Sprout — Data Link
Run 8: Statistics of Sprout

Start at: 2018-06-07 19:15:42
End at: 2018-06-07 19:16:12
Local clock offset: 0.231 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.67 Mbit/s
95th percentile per-packet one-way delay: 50.829 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 50.826 ms
Loss rate: 0.67%
-- Flow 2:
Average throughput: 6.08 Mbit/s
95th percentile per-packet one-way delay: 50.928 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 5.78 Mbit/s
95th percentile per-packet one-way delay: 50.611 ms
Loss rate: 1.39%
Run 8: Report of Sprout — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress (mean 6.77 Mbps)**
- **Flow 1 egress (mean 6.75 Mbps)**
- **Flow 2 ingress (mean 6.08 Mbps)**
- **Flow 2 egress (mean 6.06 Mbps)**
- **Flow 3 ingress (mean 5.80 Mbps)**
- **Flow 3 egress (mean 5.76 Mbps)**

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

- **Flow 1 (95th percentile 50.83 ms)**
- **Flow 2 (95th percentile 50.93 ms)**
- **Flow 3 (95th percentile 50.61 ms)**

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Run 9: Statistics of Sprout

End at: 2018-06-07 19:38:26
Local clock offset: 0.338 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.28 Mbit/s
95th percentile per-packet one-way delay: 50.927 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 4.84 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 7.15 Mbit/s
95th percentile per-packet one-way delay: 50.981 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 5.18 Mbit/s
95th percentile per-packet one-way delay: 50.875 ms
Loss rate: 2.21%
Run 9: Report of Sprout — Data Link

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

- **Flow 1 ingress (mean 4.82 Mbit/s)**
- **Flow 1 egress (mean 4.84 Mbit/s)**
- **Flow 2 ingress (mean 7.14 Mbit/s)**
- **Flow 2 egress (mean 7.15 Mbit/s)**
- **Flow 3 ingress (mean 5.24 Mbit/s)**
- **Flow 3 egress (mean 5.18 Mbit/s)**

**Per-packet end-to-end delay (ms):**
- **Flow 1 (95th percentile 50.30 ms)**
- **Flow 2 (95th percentile 50.98 ms)**
- **Flow 3 (95th percentile 50.88 ms)**

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Run 10: Statistics of Sprout

End at: 2018-06-07 20:00:25
Local clock offset: -0.407 ms
Remote clock offset: -0.032 ms

# Below is generated by plot.py at 2018-06-07 21:49:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.78 Mbit/s
95th percentile per-packet one-way delay: 49.996 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 7.69 Mbit/s
95th percentile per-packet one-way delay: 49.898 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 5.63 Mbit/s
95th percentile per-packet one-way delay: 50.096 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 7.16 Mbit/s
95th percentile per-packet one-way delay: 50.010 ms
Loss rate: 1.49%
Run 10: Report of Sprout — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 7.69 Mbit/s)
Flow 2 ingress (mean 5.63 Mbit/s)
Flow 3 ingress (mean 7.20 Mbit/s)
Flow 1 egress (mean 7.69 Mbit/s)
Flow 2 egress (mean 5.63 Mbit/s)
Flow 3 egress (mean 7.16 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 49.90 ms)
Flow 2 (95th percentile 50.10 ms)
Flow 3 (95th percentile 50.01 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-07 16:36:29
End at: 2018-06-07 16:36:59
Local clock offset: -0.036 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-07 21:55:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 281.33 Mbit/s
  95th percentile per-packet one-way delay: 50.833 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 192.79 Mbit/s
  95th percentile per-packet one-way delay: 50.441 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 46.44 Mbit/s
  95th percentile per-packet one-way delay: 53.916 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 174.88 Mbit/s
  95th percentile per-packet one-way delay: 50.993 ms
  Loss rate: 0.26%
Run 1: Report of TaoVA-100x — Data Link

![Graph showing data link performance metrics over time.](image-url)
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-07 16:58:39
End at: 2018-06-07 16:59:09
Local clock offset: -0.024 ms
Remote clock offset: -0.031 ms

# Below is generated by plot.py at 2018-06-07 21:55:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 238.92 Mbit/s
95th percentile per-packet one-way delay: 53.263 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 127.56 Mbit/s
95th percentile per-packet one-way delay: 52.799 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 145.16 Mbit/s
95th percentile per-packet one-way delay: 53.016 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 46.23 Mbit/s
95th percentile per-packet one-way delay: 58.939 ms
Loss rate: 0.00%
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-07 17:20:44
End at: 2018-06-07 17:21:14
Local clock offset: -0.368 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2018-06-07 21:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 294.23 Mbit/s
95th percentile per-packet one-way delay: 51.159 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 172.11 Mbit/s
95th percentile per-packet one-way delay: 50.979 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 93.69 Mbit/s
95th percentile per-packet one-way delay: 51.552 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 181.46 Mbit/s
95th percentile per-packet one-way delay: 51.280 ms
Loss rate: 0.77%
Run 3: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 171.57 Mbps)
  - Flow 1 egress (mean 172.11 Mbps)
  - Flow 2 ingress (mean 93.66 Mbps)
  - Flow 2 egress (mean 93.69 Mbps)
  - Flow 3 ingress (mean 180.99 Mbps)
  - Flow 3 egress (mean 181.46 Mbps)

- **Packet Loss (ms):**
  - Flow 1 (95th percentile 50.98 ms)
  - Flow 2 (95th percentile 51.55 ms)
  - Flow 3 (95th percentile 51.28 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-07 17:43:05
End at: 2018-06-07 17:43:35
Local clock offset: 0.033 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2018-06-07 21:56:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.93 Mbit/s
95th percentile per-packet one-way delay: 52.956 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 121.86 Mbit/s
95th percentile per-packet one-way delay: 51.967 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 117.65 Mbit/s
95th percentile per-packet one-way delay: 53.126 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 88.92 Mbit/s
95th percentile per-packet one-way delay: 56.919 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

Throughput (Mbps)

![Graph showing throughput over time for different flows with labels indicating mean ingress and egress speeds.]

Latency (ms)

![Graph showing latency over time for different flows with labels indicating 95th percentile latency.]
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-07 18:05:12
End at: 2018-06-07 18:05:42
Local clock offset: 0.102 ms
Remote clock offset: -0.041 ms

# Below is generated by plot.py at 2018-06-07 21:56:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 268.10 Mbit/s
  95th percentile per-packet one-way delay: 51.999 ms
  Loss rate: 0.34%
-- Flow 1:
  Average throughput: 118.39 Mbit/s
  95th percentile per-packet one-way delay: 51.689 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 154.80 Mbit/s
  95th percentile per-packet one-way delay: 51.985 ms
  Loss rate: 0.20%
-- Flow 3:
  Average throughput: 141.85 Mbit/s
  95th percentile per-packet one-way delay: 52.575 ms
  Loss rate: 1.09%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

End at: 2018-06-07 18:27:52
Local clock offset: 0.178 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-07 21:56:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 218.64 Mbit/s
  95th percentile per-packet one-way delay: 51.539 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 85.48 Mbit/s
  95th percentile per-packet one-way delay: 51.068 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 151.49 Mbit/s
  95th percentile per-packet one-way delay: 51.466 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 117.73 Mbit/s
  95th percentile per-packet one-way delay: 53.865 ms
  Loss rate: 2.22%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-07 18:49:38
End at: 2018-06-07 18:50:08
Local clock offset: 0.231 ms
Remote clock offset: -0.001 ms

# Below is generated by plot.py at 2018-06-07 21:57:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 307.07 Mbit/s
95th percentile per-packet one-way delay: 51.067 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 143.80 Mbit/s
95th percentile per-packet one-way delay: 50.561 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 129.56 Mbit/s
95th percentile per-packet one-way delay: 51.272 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 233.85 Mbit/s
95th percentile per-packet one-way delay: 51.276 ms
Loss rate: 1.09%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-07 19:11:50
End at: 2018-06-07 19:12:20
Local clock offset: -0.071 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2018-06-07 21:57:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 243.70 Mbit/s
  95th percentile per-packet one-way delay: 51.706 ms
  Loss rate: 0.31%

-- Flow 1:
  Average throughput: 100.57 Mbit/s
  95th percentile per-packet one-way delay: 50.423 ms
  Loss rate: 0.00%

-- Flow 2:
  Average throughput: 147.71 Mbit/s
  95th percentile per-packet one-way delay: 51.423 ms
  Loss rate: 0.04%

-- Flow 3:
  Average throughput: 137.35 Mbit/s
  95th percentile per-packet one-way delay: 54.390 ms
  Loss rate: 1.54%
Run 8: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 100.62 Mbps)
- Flow 1 egress (mean 100.57 Mbps)
- Flow 2 ingress (mean 147.03 Mbps)
- Flow 2 egress (mean 147.71 Mbps)
- Flow 3 ingress (mean 136.08 Mbps)
- Flow 3 egress (mean 137.35 Mbps)

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

- Flow 1 (95th percentile 50.42 ms)
- Flow 2 (95th percentile 51.42 ms)
- Flow 3 (95th percentile 54.39 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-07 19:34:02
End at: 2018-06-07 19:34:32
Local clock offset: 0.713 ms
Remote clock offset: -0.02 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.42 Mbit/s
95th percentile per-packet one-way delay: 53.323 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 128.24 Mbit/s
95th percentile per-packet one-way delay: 52.397 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 122.05 Mbit/s
95th percentile per-packet one-way delay: 54.396 ms
Loss rate: 1.07%
-- Flow 3:
Average throughput: 153.46 Mbit/s
95th percentile per-packet one-way delay: 54.095 ms
Loss rate: 0.09%
Run 9: Report of TaoVA-100x — Data Link
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-07 19:56:05  
End at: 2018-06-07 19:56:35  
Local clock offset: 0.028 ms  
Remote clock offset: -0.087 ms

# Below is generated by plot.py at 2018-06-07 22:02:14  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 241.46 Mbit/s  
95th percentile per-packet one-way delay: 50.689 ms  
Loss rate: 0.34%  
-- Flow 1:  
Average throughput: 103.49 Mbit/s  
95th percentile per-packet one-way delay: 49.732 ms  
Loss rate: 0.51%  
-- Flow 2:  
Average throughput: 119.01 Mbit/s  
95th percentile per-packet one-way delay: 50.877 ms  
Loss rate: 0.37%  
-- Flow 3:  
Average throughput: 221.47 Mbit/s  
95th percentile per-packet one-way delay: 50.387 ms  
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2018-06-07 16:30:11
End at: 2018-06-07 16:30:41
Local clock offset: -0.061 ms
Remote clock offset: -0.057 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.76 Mbit/s
95th percentile per-packet one-way delay: 53.024 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 108.80 Mbit/s
95th percentile per-packet one-way delay: 52.448 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 105.32 Mbit/s
95th percentile per-packet one-way delay: 53.592 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 90.67 Mbit/s
95th percentile per-packet one-way delay: 53.289 ms
Loss rate: 1.12%
Run 1: Report of TCP Vegas — Data Link

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

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Run 2: Statistics of TCP Vegas

Start at: 2018-06-07 16:52:17
End at: 2018-06-07 16:52:47
Local clock offset: -0.445 ms
Remote clock offset: 0.019 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.30 Mbit/s
95th percentile per-packet one-way delay: 52.293 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 104.25 Mbit/s
95th percentile per-packet one-way delay: 52.129 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 41.35 Mbit/s
95th percentile per-packet one-way delay: 52.523 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 144.05 Mbit/s
95th percentile per-packet one-way delay: 52.449 ms
Loss rate: 1.12%
Run 2: Report of TCP Vegas — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows.]
Run 3: Statistics of TCP Vegas

Start at: 2018-06-07 17:14:29
End at: 2018-06-07 17:14:59
Local clock offset: -0.003 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 127.55 Mbit/s
  95th percentile per-packet one-way delay: 51.874 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 58.34 Mbit/s
  95th percentile per-packet one-way delay: 52.015 ms
  Loss rate: 0.39%
-- Flow 2:
  Average throughput: 101.01 Mbit/s
  95th percentile per-packet one-way delay: 51.739 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 6.30 Mbit/s
  95th percentile per-packet one-way delay: 51.731 ms
  Loss rate: 1.97%
Run 3: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 58.37 Mbit/s)
- Flow 1 egress (mean 58.34 Mbit/s)
- Flow 2 ingress (mean 101.03 Mbit/s)
- Flow 2 egress (mean 101.01 Mbit/s)
- Flow 3 ingress (mean 6.36 Mbit/s)
- Flow 3 egress (mean 6.30 Mbit/s)

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

- Flow 1 (95th percentile 52.02 ms)
- Flow 2 (95th percentile 51.74 ms)
- Flow 3 (95th percentile 51.73 ms)
Run 4: Statistics of TCP Vegas

Start at: 2018-06-07 17:36:46
End at: 2018-06-07 17:37:16
Local clock offset: 0.011 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.92 Mbit/s
95th percentile per-packet one-way delay: 53.021 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 98.40 Mbit/s
95th percentile per-packet one-way delay: 52.909 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 34.86 Mbit/s
95th percentile per-packet one-way delay: 53.065 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 167.59 Mbit/s
95th percentile per-packet one-way delay: 53.306 ms
Loss rate: 1.06%
Run 4: Report of TCP Vegas — Data Link

![Graph showing throughput and round-trip time for different flows]
Run 5: Statistics of TCP Vegas

Start at: 2018-06-07 17:58:52
End at: 2018-06-07 17:59:22
Local clock offset: -0.335 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.31 Mbit/s
95th percentile per-packet one-way delay: 53.590 ms
Loss rate: 0.31%
-- Flow 1:
Average throughput: 193.00 Mbit/s
95th percentile per-packet one-way delay: 52.688 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 10.83 Mbit/s
95th percentile per-packet one-way delay: 55.231 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 142.74 Mbit/s
95th percentile per-packet one-way delay: 55.251 ms
Loss rate: 1.12%
Run 5: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 192.72 Mbit/s)
- Flow 1 egress (mean 193.00 Mbit/s)
- Flow 2 ingress (mean 10.88 Mbit/s)
- Flow 2 egress (mean 10.83 Mbit/s)
- Flow 3 ingress (mean 142.90 Mbit/s)
- Flow 3 egress (mean 142.74 Mbit/s)

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

- Flow 1 (95th percentile 52.69 ms)
- Flow 2 (95th percentile 55.23 ms)
- Flow 3 (95th percentile 55.25 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-06-07 18:21:03
End at: 2018-06-07 18:21:33
Local clock offset: 0.183 ms
Remote clock offset: -0.065 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 144.57 Mbit/s
95th percentile per-packet one-way delay: 53.169 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 47.93 Mbit/s
95th percentile per-packet one-way delay: 52.073 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 106.75 Mbit/s
95th percentile per-packet one-way delay: 53.010 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 77.87 Mbit/s
95th percentile per-packet one-way delay: 56.226 ms
Loss rate: 1.06%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

End at: 2018-06-07 18:43:43
Local clock offset: 0.216 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 156.99 Mbit/s
95th percentile per-packet one-way delay: 56.600 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 77.20 Mbit/s
95th percentile per-packet one-way delay: 58.605 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 52.952 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 137.13 Mbit/s
95th percentile per-packet one-way delay: 52.658 ms
Loss rate: 1.12%
Run 7: Report of TCP Vegas — Data Link

[Two graphs showing throughput and per-packet round trip time for different flows.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 77.17 Mbps)
  - Flow 1 egress (mean 77.20 Mbps)
  - Flow 2 ingress (mean 51.94 Mbps)
  - Flow 2 egress (mean 51.97 Mbps)
  - Flow 3 ingress (mean 137.27 Mbps)
  - Flow 3 egress (mean 137.13 Mbps)

- **Per-packet round trip time (ms):**
  - Flow 1 (95th percentile 58.60 ms)
  - Flow 2 (95th percentile 52.95 ms)
  - Flow 3 (95th percentile 52.66 ms)
Run 8: Statistics of TCP Vegas

Start at: 2018-06-07 19:05:31
End at: 2018-06-07 19:06:01
Local clock offset: 0.301 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 158.92 Mbit/s
  95th percentile per-packet one-way delay: 51.600 ms
  Loss rate: 0.44%
-- Flow 1:
  Average throughput: 94.28 Mbit/s
  95th percentile per-packet one-way delay: 51.370 ms
  Loss rate: 0.31%
-- Flow 2:
  Average throughput: 64.55 Mbit/s
  95th percentile per-packet one-way delay: 52.589 ms
  Loss rate: 0.42%
-- Flow 3:
  Average throughput: 65.95 Mbit/s
  95th percentile per-packet one-way delay: 51.438 ms
  Loss rate: 1.01%
Run 8: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 94.26 Mbit/s)
- Flow 1 egress (mean 94.28 Mbit/s)
- Flow 2 ingress (mean 64.49 Mbit/s)
- Flow 2 egress (mean 64.55 Mbit/s)
- Flow 3 ingress (mean 65.95 Mbit/s)
- Flow 3 egress (mean 65.95 Mbit/s)

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

- Flow 1 (95th percentile 51.37 ms)
- Flow 2 (95th percentile 52.59 ms)
- Flow 3 (95th percentile 51.44 ms)
Run 9: Statistics of TCP Vegas

End at: 2018-06-07 19:28:14
Local clock offset: 0.697 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.65 Mbit/s
95th percentile per-packet one-way delay: 52.328 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 90.09 Mbit/s
95th percentile per-packet one-way delay: 52.454 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 12.07 Mbit/s
95th percentile per-packet one-way delay: 51.581 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 68.40 Mbit/s
95th percentile per-packet one-way delay: 52.131 ms
Loss rate: 1.03%
Run 9: Report of TCP Vegas — Data Link

![Graph 1: Throughput (Mbps)]

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

Start at: 2018-06-07 19:49:54
End at: 2018-06-07 19:50:24
Local clock offset: 0.112 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-07 22:02:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 129.37 Mbit/s
  95th percentile per-packet one-way delay: 51.252 ms
  Loss rate: 0.42%
-- Flow 1:
  Average throughput: 87.11 Mbit/s
  95th percentile per-packet one-way delay: 51.140 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 60.39 Mbit/s
  95th percentile per-packet one-way delay: 51.688 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 6.57 Mbit/s
  95th percentile per-packet one-way delay: 50.542 ms
  Loss rate: 1.95%
Run 10: Report of TCP Vegas — Data Link

![Graph showing throughput and per-packet one-way delays for Flow 1, Flow 2, and Flow 3.](image)

- **Flow 1 ingress (mean 87.10 Mbps)**
- **Flow 1 egress (mean 87.11 Mbps)**
- **Flow 2 ingress (mean 60.49 Mbps)**
- **Flow 2 egress (mean 60.39 Mbps)**
- **Flow 3 ingress (mean 6.63 Mbps)**
- **Flow 3 egress (mean 6.57 Mbps)**
Run 1: Statistics of Verus

Start at: 2018-06-07 16:35:03
End at: 2018-06-07 16:35:33
Local clock offset: 0.306 ms
Remote clock offset: -0.008 ms

# Below is generated by plot.py at 2018-06-07 22:04:36
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 278.25 Mbit/s
 95th percentile per-packet one-way delay: 137.591 ms
 Loss rate: 1.03%
-- Flow 1:
 Average throughput: 137.11 Mbit/s
 95th percentile per-packet one-way delay: 122.842 ms
 Loss rate: 0.56%
-- Flow 2:
 Average throughput: 136.17 Mbit/s
 95th percentile per-packet one-way delay: 148.392 ms
 Loss rate: 1.09%
-- Flow 3:
 Average throughput: 153.41 Mbit/s
 95th percentile per-packet one-way delay: 153.922 ms
 Loss rate: 2.18%
Run 1: Report of Verus — Data Link

![Graph of Throughput and Packet Delay](image)

- **Throughput:**
  - Flow 1 ingress (mean 137.40 Mbit/s)
  - Flow 1 egress (mean 137.11 Mbit/s)
  - Flow 2 ingress (mean 137.76 Mbit/s)
  - Flow 2 egress (mean 136.17 Mbit/s)
  - Flow 3 ingress (mean 155.08 Mbit/s)
  - Flow 3 egress (mean 153.41 Mbit/s)

- **Packet Delay:**
  - Flow 1 (95th percentile 122.94 ms)
  - Flow 2 (95th percentile 148.39 ms)
  - Flow 3 (95th percentile 153.92 ms)
Run 2: Statistics of Verus

Start at: 2018-06-07 16:57:11
End at: 2018-06-07 16:57:41
Local clock offset: 0.345 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2018-06-07 22:05:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 314.11 Mbit/s
  95th percentile per-packet one-way delay: 154.516 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 217.18 Mbit/s
  95th percentile per-packet one-way delay: 142.480 ms
  Loss rate: 0.62%
-- Flow 2:
  Average throughput: 91.68 Mbit/s
  95th percentile per-packet one-way delay: 171.115 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 110.20 Mbit/s
  95th percentile per-packet one-way delay: 158.820 ms
  Loss rate: 0.16%
Run 2: Report of Verus — Data Link

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

- Flow 1 ingress (mean 217.80 Mbit/s)
- Flow 1 egress (mean 217.18 Mbit/s)
- Flow 2 ingress (mean 91.79 Mbit/s)
- Flow 2 egress (mean 91.65 Mbit/s)
- Flow 3 ingress (mean 109.08 Mbit/s)
- Flow 3 egress (mean 110.20 Mbit/s)

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

- Flow 1 (95th percentile 142.48 ms)
- Flow 2 (95th percentile 171.12 ms)
- Flow 3 (95th percentile 158.82 ms)
Run 3: Statistics of Verus

Start at: 2018-06-07 17:19:16
End at: 2018-06-07 17:19:46
Local clock offset: 0.408 ms
Remote clock offset: 0.025 ms

# Below is generated by plot.py at 2018-06-07 22:05:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 303.66 Mbit/s
  95th percentile per-packet one-way delay: 144.756 ms
  Loss rate: 1.11%
-- Flow 1:
  Average throughput: 173.41 Mbit/s
  95th percentile per-packet one-way delay: 140.296 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 162.10 Mbit/s
  95th percentile per-packet one-way delay: 125.686 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 69.07 Mbit/s
  95th percentile per-packet one-way delay: 184.520 ms
  Loss rate: 4.49%
Run 3: Report of Verus — Data Link

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

- Flow 1 ingress (mean 174.49 Mbit/s)
- Flow 1 egress (mean 173.41 Mbit/s)
- Flow 2 ingress (mean 162.72 Mbit/s)
- Flow 2 egress (mean 162.10 Mbit/s)
- Flow 3 ingress (mean 71.12 Mbit/s)
- Flow 3 egress (mean 69.07 Mbit/s)

- Flow 1 (95th percentile 140.30 ms)
- Flow 2 (95th percentile 125.69 ms)
- Flow 3 (95th percentile 184.52 ms)
Run 4: Statistics of Verus

Start at: 2018-06-07 17:41:36
End at: 2018-06-07 17:42:06
Local clock offset: 0.021 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2018-06-07 22:06:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 314.15 Mbit/s
  95th percentile per-packet one-way delay: 172.661 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 209.58 Mbit/s
  95th percentile per-packet one-way delay: 161.745 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 117.84 Mbit/s
  95th percentile per-packet one-way delay: 182.019 ms
  Loss rate: 0.37%
-- Flow 3:
  Average throughput: 80.36 Mbit/s
  95th percentile per-packet one-way delay: 184.132 ms
  Loss rate: 2.00%
Run 4: Report of Verus — Data Link

![Throughput (Mbps) vs Time (s)](image)

- **Flow 1 ingress (mean 210.74 Mbps)**
- **Flow 1 egress (mean 209.58 Mbps)**
- **Flow 2 ingress (mean 117.67 Mbps)**
- **Flow 2 egress (mean 117.84 Mbps)**
- **Flow 3 ingress (mean 81.57 Mbps)**
- **Flow 3 egress (mean 80.36 Mbps)**

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

- **Flow 1 (95th percentile 161.75 ms)**
- **Flow 2 (95th percentile 182.02 ms)**
- **Flow 3 (95th percentile 184.13 ms)**

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Run 5: Statistics of Verus

Start at: 2018-06-07 18:03:43
End at: 2018-06-07 18:04:13
Local clock offset: 0.12 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2018-06-07 22:06:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 310.64 Mbit/s
95th percentile per-packet one-way delay: 166.421 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 164.13 Mbit/s
95th percentile per-packet one-way delay: 155.785 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 196.31 Mbit/s
95th percentile per-packet one-way delay: 167.040 ms
Loss rate: 0.85%
-- Flow 3:
Average throughput: 69.35 Mbit/s
95th percentile per-packet one-way delay: 188.981 ms
Loss rate: 3.30%
Run 5: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 164.40 Mbit/s)
- Flow 1 egress (mean 164.33 Mbit/s)
- Flow 2 ingress (mean 187.47 Mbit/s)
- Flow 2 egress (mean 196.31 Mbit/s)
- Flow 3 ingress (mean 70.32 Mbit/s)
- Flow 3 egress (mean 69.35 Mbit/s)

![Graph showing packet error rate over time for different flows.](image)

Legend:
- Flow 1 (95th percentile 155.78 ms)
- Flow 2 (95th percentile 167.04 ms)
- Flow 3 (95th percentile 180.90 ms)
Run 6: Statistics of Verus

Start at: 2018-06-07 18:25:52
End at: 2018-06-07 18:26:22
Local clock offset: -0.199 ms
Remote clock offset: -0.076 ms

# Below is generated by plot.py at 2018-06-07 22:07:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 337.63 Mbit/s
  95th percentile per-packet one-way delay: 154.339 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 198.21 Mbit/s
  95th percentile per-packet one-way delay: 143.438 ms
  Loss rate: 0.18%
-- Flow 2:
  Average throughput: 169.28 Mbit/s
  95th percentile per-packet one-way delay: 157.084 ms
  Loss rate: 0.78%
-- Flow 3:
  Average throughput: 82.96 Mbit/s
  95th percentile per-packet one-way delay: 219.506 ms
  Loss rate: 4.76%
Run 6: Report of Verus — Data Link
Run 7: Statistics of Verus

Start at: 2018-06-07 18:48:09
Local clock offset: 0.623 ms
Remote clock offset: -0.027 ms

# Below is generated by plot.py at 2018-06-07 22:07:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 314.39 Mbit/s
95th percentile per-packet one-way delay: 182.808 ms
Loss rate: 0.73%
-- Flow 1:
Average throughput: 198.99 Mbit/s
95th percentile per-packet one-way delay: 176.989 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 124.84 Mbit/s
95th percentile per-packet one-way delay: 185.333 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 100.87 Mbit/s
95th percentile per-packet one-way delay: 207.409 ms
Loss rate: 2.72%
Run 7: Report of Verus — Data Link

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

Flow 1 ingress (mean 199.49 Mbit/s) | Flow 1 egress (mean 198.99 Mbit/s)
Flow 2 ingress (mean 126.02 Mbit/s) | Flow 2 egress (mean 124.84 Mbit/s)
Flow 3 ingress (mean 101.69 Mbit/s) | Flow 3 egress (mean 100.87 Mbit/s)

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

Flow 1 (95th percentile 176.99 ms) | Flow 2 (95th percentile 185.33 ms) | Flow 3 (95th percentile 207.41 ms)
Run 8: Statistics of Verus

Start at: 2018-06-07 19:10:23
End at: 2018-06-07 19:10:53
Local clock offset: 0.279 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-07 22:07:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 300.30 Mbit/s
  95th percentile per-packet one-way delay: 147.564 ms
  Loss rate: 0.74%
-- Flow 1:
  Average throughput: 204.75 Mbit/s
  95th percentile per-packet one-way delay: 129.870 ms
  Loss rate: 0.45%
-- Flow 2:
  Average throughput: 91.12 Mbit/s
  95th percentile per-packet one-way delay: 187.916 ms
  Loss rate: 1.16%
-- Flow 3:
  Average throughput: 129.81 Mbit/s
  95th percentile per-packet one-way delay: 175.956 ms
  Loss rate: 1.66%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-06-07 19:32:33
End at: 2018-06-07 19:33:03
Local clock offset: 0.32 ms
Remote clock offset: -0.018 ms

# Below is generated by plot.py at 2018-06-07 22:10:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 329.54 Mbit/s
95th percentile per-packet one-way delay: 168.754 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 212.99 Mbit/s
95th percentile per-packet one-way delay: 163.079 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 128.89 Mbit/s
95th percentile per-packet one-way delay: 175.824 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 96.33 Mbit/s
95th percentile per-packet one-way delay: 173.281 ms
Loss rate: 2.69%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 212.60 Mbps)
- Flow 1 egress (mean 212.99 Mbps)
- Flow 2 ingress (mean 129.48 Mbps)
- Flow 2 egress (mean 128.89 Mbps)
- Flow 3 ingress (mean 96.93 Mbps)
- Flow 3 egress (mean 96.33 Mbps)

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

- Flow 1 (95th percentile 163.08 ms)
- Flow 2 (95th percentile 175.82 ms)
- Flow 3 (95th percentile 173.28 ms)
Run 10: Statistics of Verus

Start at: 2018-06-07 19:54:38
End at: 2018-06-07 19:55:08
Local clock offset: 0.054 ms
Remote clock offset: -0.009 ms

# Below is generated by plot.py at 2018-06-07 22:10:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 292.02 Mbit/s
  95th percentile per-packet one-way delay: 130.001 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 188.49 Mbit/s
  95th percentile per-packet one-way delay: 121.801 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 118.83 Mbit/s
  95th percentile per-packet one-way delay: 127.788 ms
  Loss rate: 0.95%
-- Flow 3:
  Average throughput: 74.80 Mbit/s
  95th percentile per-packet one-way delay: 157.448 ms
  Loss rate: 1.75%
Run 10: Report of Verus — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 188.37 Mbps)
- Flow 1 egress (mean 188.49 Mbps)
- Flow 2 ingress (mean 119.30 Mbps)
- Flow 2 egress (mean 118.83 Mbps)
- Flow 3 ingress (mean 75.37 Mbps)
- Flow 3 egress (mean 74.80 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 121.80 ms)
- Flow 2 (95th percentile 127.79 ms)
- Flow 3 (95th percentile 157.45 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-07 16:31:29
End at: 2018-06-07 16:31:59
Local clock offset: -0.049 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2018-06-07 22:15:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 545.63 Mbit/s
  95th percentile per-packet one-way delay: 51.139 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 325.79 Mbit/s
  95th percentile per-packet one-way delay: 52.374 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 236.31 Mbit/s
  95th percentile per-packet one-way delay: 50.165 ms
  Loss rate: 0.51%
-- Flow 3:
  Average throughput: 191.74 Mbit/s
  95th percentile per-packet one-way delay: 51.000 ms
  Loss rate: 1.48%
Run 1: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 325.85 Mbit/s)
- Flow 1 egress (mean 325.79 Mbit/s)
- Flow 2 ingress (mean 236.32 Mbit/s)
- Flow 2 egress (mean 236.31 Mbit/s)
- Flow 3 ingress (mean 192.82 Mbit/s)
- Flow 3 egress (mean 191.74 Mbit/s)
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-07 16:53:34
End at: 2018-06-07 16:54:04
Local clock offset: -0.046 ms
Remote clock offset: 0.008 ms

# Below is generated by plot.py at 2018-06-07 22:15:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 499.26 Mbit/s
  95th percentile per-packet one-way delay: 51.245 ms
  Loss rate: 0.44%
-- Flow 1: 
  Average throughput: 293.81 Mbit/s
  95th percentile per-packet one-way delay: 51.193 ms
  Loss rate: 0.21%
-- Flow 2: 
  Average throughput: 240.88 Mbit/s
  95th percentile per-packet one-way delay: 50.923 ms
  Loss rate: 0.66%
-- Flow 3: 
  Average throughput: 139.15 Mbit/s
  95th percentile per-packet one-way delay: 56.916 ms
  Loss rate: 1.16%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-07 17:15:43
End at: 2018-06-07 17:16:13
Local clock offset: 0.002 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2018-06-07 22:15:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 415.33 Mbit/s
95th percentile per-packet one-way delay: 50.999 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 260.16 Mbit/s
95th percentile per-packet one-way delay: 51.083 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 201.79 Mbit/s
95th percentile per-packet one-way delay: 50.860 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 64.69 Mbit/s
95th percentile per-packet one-way delay: 50.139 ms
Loss rate: 2.07%
Run 3: Report of PCC-Vivace — Data Link

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

Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 260.14 Mbps)
- Flow 1 egress (mean 260.16 Mbps)
- Flow 2 ingress (mean 202.03 Mbps)
- Flow 2 egress (mean 201.79 Mbps)
- Flow 3 ingress (mean 65.38 Mbps)
- Flow 3 egress (mean 64.69 Mbps)

Per-packet one-way delay (ms)
- Flow 1 (95th percentile 51.08 ms)
- Flow 2 (95th percentile 50.86 ms)
- Flow 3 (95th percentile 50.14 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-07 17:38:02
End at: 2018-06-07 17:38:32
Local clock offset: -0.007 ms
Remote clock offset: -0.044 ms

# Below is generated by plot.py at 2018-06-07 22:15:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 491.54 Mbit/s
95th percentile per-packet one-way delay: 51.158 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 268.51 Mbit/s
95th percentile per-packet one-way delay: 50.194 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 263.93 Mbit/s
95th percentile per-packet one-way delay: 51.799 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 146.07 Mbit/s
95th percentile per-packet one-way delay: 51.126 ms
Loss rate: 1.20%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2018-06-07 18:00:11
End at: 2018-06-07 18:00:41
Local clock offset: 0.022 ms
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2018-06-07 22:15:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 444.88 Mbit/s
95th percentile per-packet one-way delay: 50.810 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 250.87 Mbit/s
95th percentile per-packet one-way delay: 49.983 ms
Loss rate: 0.27%
-- Flow 2:
Average throughput: 244.99 Mbit/s
95th percentile per-packet one-way delay: 50.729 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 95.59 Mbit/s
95th percentile per-packet one-way delay: 51.059 ms
Loss rate: 1.58%
Run 5: Report of PCC-Vivace — Data Link

[Data Link Diagram]

- Flow 1 ingress (mean 250.72 Mbit/s)
- Flow 1 egress (mean 250.87 Mbit/s)
- Flow 2 ingress (mean 215.33 Mbit/s)
- Flow 2 egress (mean 214.99 Mbit/s)
- Flow 3 ingress (mean 96.12 Mbit/s)
- Flow 3 egress (mean 95.59 Mbit/s)

[Per Packet One Way Delay Diagram]

- Flow 1 (95th percentile 49.98 ms)
- Flow 2 (95th percentile 50.73 ms)
- Flow 3 (95th percentile 51.06 ms)
Run 6: Statistics of PCC-Vivace

Local clock offset: 0.167 ms
Remote clock offset: -0.077 ms

# Below is generated by plot.py at 2018-06-07 22:15:48
# Datalink statistics

-- Total of 3 flows:
Average throughput: 440.04 Mbit/s
95th percentile per-packet one-way delay: 50.939 ms
Loss rate: 0.55%

-- Flow 1:
Average throughput: 231.74 Mbit/s
95th percentile per-packet one-way delay: 50.722 ms
Loss rate: 0.38%

-- Flow 2:
Average throughput: 230.65 Mbit/s
95th percentile per-packet one-way delay: 49.576 ms
Loss rate: 0.53%

-- Flow 3:
Average throughput: 168.05 Mbit/s
95th percentile per-packet one-way delay: 51.612 ms
Loss rate: 1.32%
Run 6: Report of PCC-Vivace — Data Link

![Graph showing network performance metrics over time.](image-url)
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-07 18:44:29
End at: 2018-06-07 18:44:59
Local clock offset: 0.228 ms
Remote clock offset: -0.07 ms

# Below is generated by plot.py at 2018-06-07 22:17:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 561.75 Mbit/s
95th percentile per-packet one-way delay: 51.328 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 323.45 Mbit/s
95th percentile per-packet one-way delay: 51.249 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 268.24 Mbit/s
95th percentile per-packet one-way delay: 51.570 ms
Loss rate: 0.36%
-- Flow 3:
Average throughput: 184.45 Mbit/s
95th percentile per-packet one-way delay: 50.560 ms
Loss rate: 0.86%
Run 7: Report of PCC-Vivace — Data Link
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-07 19:06:47
End at: 2018-06-07 19:07:17
Local clock offset: 0.268 ms
Remote clock offset: -0.078 ms

# Below is generated by plot.py at 2018-06-07 22:17:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 468.97 Mbit/s
  95th percentile per-packet one-way delay: 51.141 ms
  Loss rate: 0.59%
-- Flow 1:
  Average throughput: 256.12 Mbit/s
  95th percentile per-packet one-way delay: 52.259 ms
  Loss rate: 0.51%
-- Flow 2:
  Average throughput: 226.15 Mbit/s
  95th percentile per-packet one-way delay: 51.125 ms
  Loss rate: 0.38%
-- Flow 3:
  Average throughput: 191.50 Mbit/s
  95th percentile per-packet one-way delay: 50.355 ms
  Loss rate: 1.46%
Run 9: Statistics of PCC-Vivace

Local clock offset: 0.303 ms
Remote clock offset: 0.005 ms

# Below is generated by plot.py at 2018-06-07 22:18:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 461.28 Mbit/s
  95th percentile per-packet one-way delay: 50.538 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 285.25 Mbit/s
  95th percentile per-packet one-way delay: 50.783 ms
  Loss rate: 0.36%
-- Flow 2:
  Average throughput: 241.02 Mbit/s
  95th percentile per-packet one-way delay: 49.936 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 48.85 Mbit/s
  95th percentile per-packet one-way delay: 50.146 ms
  Loss rate: 1.38%

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Run 9: Report of PCC-Vivace — Data Link

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

Key:
- Flow 1 ingress (mean 285.32 Mbit/s)
- Flow 1 egress (mean 285.25 Mbit/s)
- Flow 2 ingress (mean 241.16 Mbit/s)
- Flow 2 egress (mean 241.02 Mbit/s)
- Flow 3 ingress (mean 49.03 Mbit/s)
- Flow 3 egress (mean 48.85 Mbit/s)
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-07 19:51:09
End at: 2018-06-07 19:51:39
Local clock offset: 0.109 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-07 22:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.83 Mbit/s
95th percentile per-packet one-way delay: 51.203 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 223.36 Mbit/s
95th percentile per-packet one-way delay: 54.234 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 246.77 Mbit/s
95th percentile per-packet one-way delay: 50.992 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 75.27 Mbit/s
95th percentile per-packet one-way delay: 50.987 ms
Loss rate: 1.09%
Run 10: Report of PCC-Vivace — Data Link

- Flow 1 ingress (mean 223.14 Mbit/s)
- Flow 1 egress (mean 223.36 Mbit/s)
- Flow 2 ingress (mean 246.91 Mbit/s)
- Flow 2 egress (mean 246.77 Mbit/s)
- Flow 3 ingress (mean 75.32 Mbit/s)
- Flow 3 egress (mean 75.27 Mbit/s)

- Flow 1 (95th percentile 54.23 ms)
- Flow 2 (95th percentile 50.99 ms)
- Flow 3 (95th percentile 50.99 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-07 16:38:01
End at: 2018-06-07 16:38:31
Local clock offset: 0.306 ms
Remote clock offset: -0.04 ms

# Below is generated by plot.py at 2018-06-07 22:18:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.54 Mbit/s
95th percentile per-packet one-way delay: 50.734 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 1.73 Mbit/s
95th percentile per-packet one-way delay: 50.763 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 50.232 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 50.197 ms
Loss rate: 1.14%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2018-06-07 17:00:07
End at: 2018-06-07 17:00:37
Local clock offset: -0.007 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2018-06-07 22:18:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.92 Mbit/s
  95th percentile per-packet one-way delay: 50.904 ms
  Loss rate: 0.48%
  -- Flow 1:
  Average throughput: 2.09 Mbit/s
  95th percentile per-packet one-way delay: 50.930 ms
  Loss rate: 0.28%
  -- Flow 2:
  Average throughput: 1.32 Mbit/s
  95th percentile per-packet one-way delay: 50.438 ms
  Loss rate: 0.53%
  -- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 50.666 ms
  Loss rate: 1.16%
Run 2: Report of WebRTC media — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 2.09 Mbit/s)
- Flow 1 egress (mean 2.09 Mbit/s)
- Flow 2 ingress (mean 1.32 Mbit/s)
- Flow 2 egress (mean 1.32 Mbit/s)
- Flow 3 ingress (mean 0.54 Mbit/s)
- Flow 3 egress (mean 0.54 Mbit/s)

![Packet Delay Graph](image)

- Flow 1 (95th percentile 50.93 ms)
- Flow 2 (95th percentile 50.44 ms)
- Flow 3 (95th percentile 50.67 ms)
Run 3: Statistics of WebRTC media

Start at: 2018-06-07 17:22:18
End at: 2018-06-07 17:22:48
Local clock offset: -0.357 ms
Remote clock offset: 0.001 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.83 Mbit/s
  95th percentile per-packet one-way delay: 50.543 ms
  Loss rate: 0.60%
-- Flow 1:
  Average throughput: 2.00 Mbit/s
  95th percentile per-packet one-way delay: 50.568 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 49.887 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 50.011 ms
  Loss rate: 1.51%
Run 3: Report of WebRTC media — Data Link

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

For more details on the throughput and delay, please refer to the graphs above.
Run 4: Statistics of WebRTC media

Start at: 2018-06-07 17:44:32
End at: 2018-06-07 17:45:02
Local clock offset: 0.046 ms
Remote clock offset: -0.047 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.88 Mbit/s
  95th percentile per-packet one-way delay: 50.949 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 2.05 Mbit/s
  95th percentile per-packet one-way delay: 49.972 ms
  Loss rate: 0.37%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 51.029 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 0.54 Mbit/s
  95th percentile per-packet one-way delay: 50.853 ms
  Loss rate: 1.87%
Run 4: Report of WebRTC media — Data Link

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**Throughput**

![Throughput graph](image)

**Per-packet one-way delay**

![Per-packet one-way delay graph](image)

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Run 5: Statistics of WebRTC media

Start at: 2018-06-07 18:06:42
End at: 2018-06-07 18:07:12
Local clock offset: 0.092 ms
Remote clock offset: -0.059 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.81 Mbit/s
  95th percentile per-packet one-way delay: 50.915 ms
  Loss rate: 0.56%
-- Flow 1:
  Average throughput: 2.00 Mbit/s
  95th percentile per-packet one-way delay: 50.879 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 1.31 Mbit/s
  95th percentile per-packet one-way delay: 49.991 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 0.52 Mbit/s
  95th percentile per-packet one-way delay: 51.066 ms
  Loss rate: 1.41%
Run 5: Report of WebRTC media — Data Link

![Graph of network throughput over time for different flows with various mean rates and 95th percentile values for packet round-trip delay.](image-url)
Run 6: Statistics of WebRTC media

Start at: 2018-06-07 18:28:49
End at: 2018-06-07 18:29:19
Local clock offset: 0.21 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 3.85 Mbit/s
  95th percentile per-packet one-way delay: 50.882 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 2.03 Mbit/s
  95th percentile per-packet one-way delay: 49.741 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 1.30 Mbit/s
  95th percentile per-packet one-way delay: 50.952 ms
  Loss rate: 0.49%
-- Flow 3:
  Average throughput: 0.53 Mbit/s
  95th percentile per-packet one-way delay: 50.429 ms
  Loss rate: 1.69%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

End at: 2018-06-07 18:51:43
Local clock offset: 0.246 ms
Remote clock offset: -0.046 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.87 Mbit/s
95th percentile per-packet one-way delay: 50.856 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 2.04 Mbit/s
95th percentile per-packet one-way delay: 50.890 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 50.207 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.55 Mbit/s
95th percentile per-packet one-way delay: 50.471 ms
Loss rate: 1.15%
Run 7: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 2.04 Mbit/s)
Flow 1 egress (mean 2.04 Mbit/s)
Flow 2 ingress (mean 1.31 Mbit/s)
Flow 2 egress (mean 1.30 Mbit/s)
Flow 3 ingress (mean 0.55 Mbit/s)
Flow 3 egress (mean 0.55 Mbit/s)

Per-packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 50.89 ms)
Flow 2 (95th percentile 50.21 ms)
Flow 3 (95th percentile 50.47 ms)
Run 8: Statistics of WebRTC media

Local clock offset: 0.282 ms
Remote clock offset: -0.048 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.26 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 1.60 Mbit/s
95th percentile per-packet one-way delay: 50.394 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 1.28 Mbit/s
95th percentile per-packet one-way delay: 50.047 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: 51.026 ms
Loss rate: 1.46%
Run 8: Report of WebRTC media — Data Link
Run 9: Statistics of WebRTC media

Start at: 2018-06-07 19:35:32
End at: 2018-06-07 19:36:02
Local clock offset: 0.315 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.83 Mbit/s
95th percentile per-packet one-way delay: 50.957 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 2.01 Mbit/s
95th percentile per-packet one-way delay: 50.965 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 50.971 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 0.53 Mbit/s
95th percentile per-packet one-way delay: 50.727 ms
Loss rate: 1.76%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-06-07 19:57:34
End at: 2018-06-07 19:58:04
Local clock offset: 0.019 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2018-06-07 22:18:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 3.88 Mbit/s
95th percentile per-packet one-way delay: 50.827 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 2.05 Mbit/s
95th percentile per-packet one-way delay: 49.855 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 1.30 Mbit/s
95th percentile per-packet one-way delay: 50.887 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 0.54 Mbit/s
95th percentile per-packet one-way delay: 49.604 ms
Loss rate: 1.27%
Run 10: Report of WebRTC media — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 2.06 Mbps)
  - Flow 1 egress (mean 2.05 Mbps)
  - Flow 2 ingress (mean 1.11 Mbps)
  - Flow 2 egress (mean 1.30 Mbps)
  - Flow 3 ingress (mean 0.55 Mbps)
  - Flow 3 egress (mean 0.54 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 49.85 ms)
  - Flow 2 (95th percentile 50.89 ms)
  - Flow 3 (95th percentile 49.60 ms)