Pantheon Report

Generated at 2018-04-18 19:35:11 (UTC).
Data path: GCE Iowa Ethernet (local) → GCE London Ethernet (remote).
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).
Tested BBR with qdisc of Fair Queuing (fq), and other schemes with the default Linux qdisc (pfifo_fast).

Git summary:
branch: master @ b3d6e7098641364fd3a292656a51aa81e316d0b4
third_party/calibrated_koho @ 3cb73c0d1c0322cdfae446eea37a522e53227db50
  M datagrump/sender.cc
third_party/fillp @ 11f8c46a2bfc1dc797253db7e8ca04076272b2aa4
third_party/genericCC @ d223989828276fa83a807da6e0341dc0c7b89aec
third_party/indigo @ a9b2060d39e4da2e8987e893e3eca2a6c7c0dab9
third_party/indigo-1-layer-128-unit @ 3ae9e4e4230db748450f82ce8b377695f266d
third_party/indigo-1-layer-32-unit @ 2601c92e4aa9d58d38dc4dfe0ecdbdf90c77e64d
third_party/indigo-1-layer-32-unit-no-calib @ 1f3a7f75b41135ed5b540c0fd3505939528e2a5f
third_party/indigo-no-calib @ 7224f2202e8a044d8306fa0b983ad84360c53d89
third_party/koho_cc @ f0f2e693303ae82ea080e6928ec4f1083a681
  M datagrump/sender.cc
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cfc3cf
third_party/pantheon-tunnel @ fb1053193c2861da659ba9013db26744ccfcf993
third_party/pcc @ 1afcc958fa0d66d18b623c091a55feca872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ac08f9b2e42b4f974ab
third_party/proto-quick @ 77961f1a82733a86b42f1bc8143ebc978f3f42f
third_party/scream @ c3707fd7bd17265a79ae34e016ad23f5965885
third_party/sourdough @ f1a14bffe7497347376f61b1eaee3b30b267cde681
third_party/sprout @ 6f2e6e6088d91066a9f023df375eee2665089ce
  M src/examples/cellsim.cc
  M src/examples/sproutbt2.cc
  M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af26295629399f9a949
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 7a4ba531e755b4466f5c4580192120401784ce3
third_party/webrtc @ f271183af822e3e5d0031620f4bebf38aedc5581
test from GCE Iowa Ethernet to GCE London Ethernet, 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>
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<td>167.55</td>
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<td>28.70</td>
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<td>62.79</td>
<td>57.20</td>
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<td>160.29</td>
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<td>50.63</td>
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<td>Verus</td>
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<td>Copa</td>
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<td>79.42</td>
<td>72.72</td>
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<td>653.57</td>
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<td>656.87</td>
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<td>Indigo-1-32</td>
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<td>136.86</td>
<td>117.50</td>
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<td>PCC-Vivace</td>
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<td>259.06</td>
<td>225.80</td>
<td>112.27</td>
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<td>PCC-Expr</td>
<td>0</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-04-18 13:05:31
End at: 2018-04-18 13:06:01

# Below is generated by plot.py at 2018-04-18 17:52:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 344.72 Mbit/s
  95th percentile per-packet one-way delay: 115.269 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 187.97 Mbit/s
  95th percentile per-packet one-way delay: 111.106 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 167.36 Mbit/s
  95th percentile per-packet one-way delay: 114.888 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 135.77 Mbit/s
  95th percentile per-packet one-way delay: 121.810 ms
  Loss rate: 0.32%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR


# Below is generated by plot.py at 2018-04-18 17:52:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 345.69 Mbit/s
95th percentile per-packet one-way delay: 115.467 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 188.13 Mbit/s
95th percentile per-packet one-way delay: 112.322 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 171.98 Mbit/s
95th percentile per-packet one-way delay: 115.646 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 129.59 Mbit/s
95th percentile per-packet one-way delay: 121.279 ms
Loss rate: 0.69%
Run 2: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet one-way delay over time.](image-url)
Run 3: Statistics of TCP BBR

Start at: 2018-04-18 13:36:27
End at: 2018-04-18 13:36:57

# Below is generated by plot.py at 2018-04-18 17:52:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 364.54 Mbit/s
  95th percentile per-packet one-way delay: 104.940 ms
  Loss rate: 0.17%
  -- Flow 1:
    Average throughput: 196.77 Mbit/s
    95th percentile per-packet one-way delay: 101.323 ms
    Loss rate: 0.10%
    -- Flow 2:
      Average throughput: 181.16 Mbit/s
      95th percentile per-packet one-way delay: 104.537 ms
      Loss rate: 0.16%
      -- Flow 3:
        Average throughput: 141.86 Mbit/s
        95th percentile per-packet one-way delay: 112.823 ms
        Loss rate: 0.46%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR


# Below is generated by plot.py at 2018-04-18 17:52:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 365.91 Mbit/s
  95th percentile per-packet one-way delay: 102.311 ms
  Loss rate: 0.11%
  -- Flow 1:
  Average throughput: 196.25 Mbit/s
  95th percentile per-packet one-way delay: 99.298 ms
  Loss rate: 0.02%
  -- Flow 2:
  Average throughput: 179.68 Mbit/s
  95th percentile per-packet one-way delay: 102.102 ms
  Loss rate: 0.19%
  -- Flow 3:
  Average throughput: 151.17 Mbit/s
  95th percentile per-packet one-way delay: 106.364 ms
  Loss rate: 0.29%
Run 4: Report of TCP BBR — Data Link

[Graph of Throughput vs Time showing data for different flows]

[Graph of Per-packet one-way delay vs Time showing data for different flows]
Run 5: Statistics of TCP BBR

Start at: 2018-04-18 14:07:18
End at: 2018-04-18 14:07:48

# Below is generated by plot.py at 2018-04-18 17:52:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 360.25 Mbit/s
  95th percentile per-packet one-way delay: 102.668 ms
  Loss rate: 0.17%
-- Flow 1:
  Average throughput: 195.11 Mbit/s
  95th percentile per-packet one-way delay: 100.686 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 178.20 Mbit/s
  95th percentile per-packet one-way delay: 102.400 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 140.15 Mbit/s
  95th percentile per-packet one-way delay: 106.796 ms
  Loss rate: 0.50%
Run 5: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 195.28 Mbps)
- Flow 1 egress (mean 195.11 Mbps)
- Flow 2 ingress (mean 178.53 Mbps)
- Flow 2 egress (mean 178.20 Mbps)
- Flow 3 ingress (mean 140.86 Mbps)
- Flow 3 egress (mean 140.15 Mbps)

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

- Flow 1 (95th percentile 100.69 ms)
- Flow 2 (95th percentile 102.40 ms)
- Flow 3 (95th percentile 106.80 ms)
Run 6: Statistics of TCP BBR

End at: 2018-04-18 14:23:11

# Below is generated by plot.py at 2018-04-18 17:52:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 349.21 Mbit/s
  95th percentile per-packet one-way delay: 113.564 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 190.38 Mbit/s
  95th percentile per-packet one-way delay: 111.312 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 170.60 Mbit/s
  95th percentile per-packet one-way delay: 113.354 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 136.23 Mbit/s
  95th percentile per-packet one-way delay: 117.217 ms
  Loss rate: 0.44%
Run 6: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 190.64 Mbps)
Flow 1 egress (mean 190.38 Mbps)
Flow 2 ingress (mean 170.92 Mbps)
Flow 2 egress (mean 170.60 Mbps)
Flow 3 ingress (mean 136.85 Mbps)
Flow 3 egress (mean 136.23 Mbps)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 111.31 ms)
Flow 2 (95th percentile 113.35 ms)
Flow 3 (95th percentile 117.22 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-04-18 14:37:58
End at: 2018-04-18 14:38:28

# Below is generated by plot.py at 2018-04-18 17:52:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 349.88 Mbit/s
  95th percentile per-packet one-way delay: 113.893 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 189.21 Mbit/s
  95th percentile per-packet one-way delay: 109.470 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 173.33 Mbit/s
  95th percentile per-packet one-way delay: 113.786 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 136.49 Mbit/s
  95th percentile per-packet one-way delay: 119.777 ms
  Loss rate: 0.70%
Run 7: Report of TCP BBR — Data Link

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

Start at: 2018-04-18 14:53:25
End at: 2018-04-18 14:53:55

# Below is generated by plot.py at 2018-04-18 17:52:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.72 Mbit/s
95th percentile per-packet one-way delay: 112.876 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 191.73 Mbit/s
95th percentile per-packet one-way delay: 109.977 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 172.15 Mbit/s
95th percentile per-packet one-way delay: 112.706 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 140.78 Mbit/s
95th percentile per-packet one-way delay: 117.833 ms
Loss rate: 0.04%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 191.75 Mbit/s)
- Flow 1 egress (mean 191.73 Mbit/s)
- Flow 2 ingress (mean 172.29 Mbit/s)
- Flow 2 egress (mean 172.15 Mbit/s)
- Flow 3 ingress (mean 140.84 Mbit/s)
- Flow 3 egress (mean 140.78 Mbit/s)

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

- Flow 1 (95th percentile 109.98 ms)
- Flow 2 (95th percentile 112.71 ms)
- Flow 3 (95th percentile 117.83 ms)
Run 9: Statistics of TCP BBR

Start at: 2018-04-18 15:08:44
End at: 2018-04-18 15:09:14

# Below is generated by plot.py at 2018-04-18 17:58:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 336.56 Mbit/s
95th percentile per-packet one-way delay: 120.773 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 184.57 Mbit/s
95th percentile per-packet one-way delay: 118.185 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 162.39 Mbit/s
95th percentile per-packet one-way delay: 120.995 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 132.15 Mbit/s
95th percentile per-packet one-way delay: 124.643 ms
Loss rate: 0.64%
Run 9: Report of TCP BBR — Data Link
Run 10: Statistics of TCP BBR

End at: 2018-04-18 15:24:23

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 341.62 Mbit/s
  95th percentile per-packet one-way delay: 116.858 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 186.09 Mbit/s
  95th percentile per-packet one-way delay: 112.584 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 166.34 Mbit/s
  95th percentile per-packet one-way delay: 116.808 ms
  Loss rate: 0.22%
-- Flow 3:
  Average throughput: 134.97 Mbit/s
  95th percentile per-packet one-way delay: 123.237 ms
  Loss rate: 0.54%
Run 10: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 186.42 Mbit/s)
- Flow 1 egress (mean 186.09 Mbit/s)
- Flow 2 ingress (mean 166.72 Mbit/s)
- Flow 2 egress (mean 166.54 Mbit/s)
- Flow 3 ingress (mean 135.70 Mbit/s)
- Flow 3 egress (mean 134.97 Mbit/s)

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

- Flow 1 (95th percentile 112.58 ms)
- Flow 2 (95th percentile 116.81 ms)
- Flow 3 (95th percentile 123.24 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-04-18 12:58:43

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 269.34 Mbit/s
95th percentile per-packet one-way delay: 100.620 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 140.75 Mbit/s
95th percentile per-packet one-way delay: 100.013 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 112.51 Mbit/s
95th percentile per-packet one-way delay: 99.753 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 162.67 Mbit/s
95th percentile per-packet one-way delay: 102.755 ms
Loss rate: 0.28%
Run 1: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 140.80 Mbit/s)
- Flow 1 egress (mean 140.75 Mbit/s)
- Flow 2 ingress (mean 112.64 Mbit/s)
- Flow 2 egress (mean 112.51 Mbit/s)
- Flow 3 ingress (mean 161.54 Mbit/s)
- Flow 3 egress (mean 162.67 Mbit/s)

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

- Flow 1 (95th percentile 100.01 ms)
- Flow 2 (95th percentile 99.75 ms)
- Flow 3 (95th percentile 102.75 ms)
Run 2: Statistics of TCP Cubic

Start at: 2018-04-18 13:14:10
end at: 2018-04-18 13:14:40

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
平均吞吐量: 249.86 Mbit/s
95th percentile per-packet one-way delay: 85.372 ms
Loss rate: 0.13%
-- Flow 1:
平均吞吐量: 190.20 Mbit/s
95th percentile per-packet one-way delay: 79.850 ms
Loss rate: 0.00%
-- Flow 2:
平均吞吐量: 45.70 Mbit/s
95th percentile per-packet one-way delay: 88.779 ms
Loss rate: 0.37%
-- Flow 3:
平均吞吐量: 88.30 Mbit/s
95th percentile per-packet one-way delay: 88.244 ms
Loss rate: 0.68%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

End at: 2018-04-18 13:30:03

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 295.25 Mbit/s
  95th percentile per-packet one-way delay: 60.654 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 183.29 Mbit/s
  95th percentile per-packet one-way delay: 60.601 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 165.90 Mbit/s
  95th percentile per-packet one-way delay: 60.822 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 5.64 Mbit/s
  95th percentile per-packet one-way delay: 58.510 ms
  Loss rate: 0.02%
Run 3: Report of TCP Cubic — Data Link

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

- **Flow 1**: Ingress (mean 183.31 Mbit/s), Egress (mean 183.29 Mbit/s)
- **Flow 2**: Ingress (mean 165.90 Mbit/s), Egress (mean 165.90 Mbit/s)
- **Flow 3**: Ingress (mean 5.64 Mbit/s), Egress (mean 5.64 Mbit/s)
Run 4: Statistics of TCP Cubic

Start at: 2018-04-18 13:45:07
End at: 2018-04-18 13:45:37

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 274.18 Mbit/s
95th percentile per-packet one-way delay: 70.710 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 166.01 Mbit/s
95th percentile per-packet one-way delay: 70.658 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 89.73 Mbit/s
95th percentile per-packet one-way delay: 68.751 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 146.03 Mbit/s
95th percentile per-packet one-way delay: 71.430 ms
Loss rate: 0.03%
Run 4: Report of TCP Cubic — Data Link

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

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

- Flow 1 (ingress: mean 166.03 Mbit/s, egress: mean 166.01 Mbit/s)
- Flow 2 (ingress: mean 89.74 Mbit/s, egress: mean 89.73 Mbit/s)
- Flow 3 (ingress: mean 146.08 Mbit/s, egress: mean 146.03 Mbit/s)

- Flow 1 (95th percentile 70.66 ms)
- Flow 2 (95th percentile 68.75 ms)
- Flow 3 (95th percentile 71.43 ms)
Run 5: Statistics of TCP Cubic

Start at: 2018-04-18 14:00:28
End at: 2018-04-18 14:00:58

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 301.16 Mbit/s
  95th percentile per-packet one-way delay: 67.026 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 176.30 Mbit/s
  95th percentile per-packet one-way delay: 65.058 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 138.24 Mbit/s
  95th percentile per-packet one-way delay: 67.954 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 99.07 Mbit/s
  95th percentile per-packet one-way delay: 69.236 ms
  Loss rate: 0.40%
Run 5: Report of TCP Cubic — Data Link

![Graph showing network performance](image)

![Graph showing packet delay](image)
Run 6: Statistics of TCP Cubic

Start at: 2018-04-18 14:15:53
End at: 2018-04-18 14:16:23

# Below is generated by plot.py at 2018-04-18 17:58:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 189.13 Mbit/s
  95th percentile per-packet one-way delay: 54.109 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 151.76 Mbit/s
  95th percentile per-packet one-way delay: 53.727 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 53.52 Mbit/s
  95th percentile per-packet one-way delay: 55.587 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 5.16 Mbit/s
  95th percentile per-packet one-way delay: 57.722 ms
  Loss rate: 0.56%
Run 6: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

![Throughput Graph]

Legend:
- Flow 1 ingress (mean 151.79 Mbps)
- Flow 1 egress (mean 151.76 Mbps)
- Flow 2 ingress (mean 53.56 Mbps)
- Flow 2 egress (mean 53.52 Mbps)
- Flow 3 ingress (mean 5.18 Mbps)
- Flow 3 egress (mean 5.16 Mbps)

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

![Per Packet Delay Graph]

Legend:
- Flow 1 (95th percentile 53.73 ms)
- Flow 2 (95th percentile 55.59 ms)
- Flow 3 (95th percentile 57.72 ms)

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Run 7: Statistics of TCP Cubic

Start at: 2018-04-18 14:31:18
End at: 2018-04-18 14:31:48

# Below is generated by plot.py at 2018-04-18 18:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 315.22 Mbit/s
95th percentile per-packet one-way delay: 63.529 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 219.44 Mbit/s
95th percentile per-packet one-way delay: 62.361 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.77 Mbit/s
95th percentile per-packet one-way delay: 67.317 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.90 Mbit/s
95th percentile per-packet one-way delay: 58.330 ms
Loss rate: 0.22%
Run 7: Report of TCP Cubic — Data Link
Run 8: Statistics of TCP Cubic

Start at: 2018-04-18 14:46:30
End at: 2018-04-18 14:47:00

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 308.33 Mbit/s
  95th percentile per-packet one-way delay: 103.969 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 145.49 Mbit/s
  95th percentile per-packet one-way delay: 97.352 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 198.67 Mbit/s
  95th percentile per-packet one-way delay: 104.000 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 92.81 Mbit/s
  95th percentile per-packet one-way delay: 106.986 ms
  Loss rate: 0.18%
Run 9: Statistics of TCP Cubic

Start at: 2018-04-18 15:01:48
End at: 2018-04-18 15:02:18

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 285.69 Mbit/s
  95th percentile per-packet one-way delay: 110.609 ms
  Loss rate: 0.27%
  -- Flow 1:
  Average throughput: 150.18 Mbit/s
  95th percentile per-packet one-way delay: 108.887 ms
  Loss rate: 0.14%
  -- Flow 2:
  Average throughput: 135.03 Mbit/s
  95th percentile per-packet one-way delay: 110.113 ms
  Loss rate: 0.18%
  -- Flow 3:
  Average throughput: 137.57 Mbit/s
  95th percentile per-packet one-way delay: 112.683 ms
  Loss rate: 0.84%
Run 10: Statistics of TCP Cubic

Start at: 2018-04-18 15:17:17
End at: 2018-04-18 15:17:47

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 273.75 Mbit/s
95th percentile per-packet one-way delay: 62.208 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 152.12 Mbit/s
95th percentile per-packet one-way delay: 60.697 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 133.25 Mbit/s
95th percentile per-packet one-way delay: 62.745 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 99.17 Mbit/s
95th percentile per-packet one-way delay: 63.734 ms
Loss rate: 0.06%
Run 10: Report of TCP Cubic — Data Link

![Graph depicting throughput and packet delay over time for different flows.](image_url)
Run 1: Statistics of LEDBAT

Start at: 2018-04-18 13:08:18
End at: 2018-04-18 13:08:48

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.19 Mbit/s
  95th percentile per-packet one-way delay: 51.984 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 35.11 Mbit/s
  95th percentile per-packet one-way delay: 52.100 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.39 Mbit/s
  95th percentile per-packet one-way delay: 51.778 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.70 Mbit/s
  95th percentile per-packet one-way delay: 51.779 ms
  Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

End at: 2018-04-18 13:24:16

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 51.716 ms
Loss rate: 0.00%
  -- Flow 1:
Average throughput: 23.60 Mbit/s
95th percentile per-packet one-way delay: 51.672 ms
Loss rate: 0.00%
  -- Flow 2:
Average throughput: 20.12 Mbit/s
95th percentile per-packet one-way delay: 51.750 ms
Loss rate: 0.00%
  -- Flow 3:
Average throughput: 11.68 Mbit/s
95th percentile per-packet one-way delay: 51.788 ms
Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

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

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

End at: 2018-04-18 13:39:45

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.83 Mbit/s
95th percentile per-packet one-way delay: 51.823 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.45 Mbit/s
95th percentile per-packet one-way delay: 51.792 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.84 Mbit/s
95th percentile per-packet one-way delay: 51.894 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.77 Mbit/s
95th percentile per-packet one-way delay: 51.829 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2018-04-18 13:54:43

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 54.76 Mbit/s
  95th percentile per-packet one-way delay: 52.052 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 35.24 Mbit/s
  95th percentile per-packet one-way delay: 52.032 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.57 Mbit/s
  95th percentile per-packet one-way delay: 52.107 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.57 Mbit/s
  95th percentile per-packet one-way delay: 52.254 ms
  Loss rate: 0.00%
Run 4: Report of LEDBAT — Data Link

![Graph showing throughput over time with different flow rates and delays for different flows.]

- Flow 1 ingress (mean 35.24 Mbit/s)
- Flow 1 egress (mean 35.24 Mbit/s)
- Flow 2 ingress (mean 23.57 Mbit/s)
- Flow 2 egress (mean 23.57 Mbit/s)
- Flow 3 ingress (mean 11.57 Mbit/s)
- Flow 3 egress (mean 11.57 Mbit/s)

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

- Flow 1 (95th percentile 52.03 ms)
- Flow 2 (95th percentile 52.11 ms)
- Flow 3 (95th percentile 52.25 ms)
Run 5: Statistics of LEDBAT

Start at: 2018-04-18 14:10:07
End at: 2018-04-18 14:10:37

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 55.00 Mbit/s
  95th percentile per-packet one-way delay: 52.709 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 35.68 Mbit/s
  95th percentile per-packet one-way delay: 52.952 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.38 Mbit/s
  95th percentile per-packet one-way delay: 52.521 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.46 Mbit/s
  95th percentile per-packet one-way delay: 52.358 ms
  Loss rate: 0.00%
Run 5: Report of LEDBAT — Data Link
Run 6: Statistics of LEDBAT

Start at: 2018-04-18 14:25:30
End at: 2018-04-18 14:26:00

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: 52.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 35.17 Mbit/s
95th percentile per-packet one-way delay: 52.176 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.50 Mbit/s
95th percentile per-packet one-way delay: 52.357 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.38 Mbit/s
95th percentile per-packet one-way delay: 52.147 ms
Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

![Graph of throughput vs time showing data for different flows with mean rates and 95th percentile delays.](image-url)
Run 7: Statistics of LEDBAT

Start at: 2018-04-18 14:40:46
End at: 2018-04-18 14:41:16

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.84 Mbit/s
95th percentile per-packet one-way delay: 51.708 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 34.72 Mbit/s
95th percentile per-packet one-way delay: 51.893 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 23.64 Mbit/s
95th percentile per-packet one-way delay: 51.503 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.14 Mbit/s
95th percentile per-packet one-way delay: 51.491 ms
Loss rate: 0.00%
Run 7: Report of LEDBAT — Data Link

Graph showing throughput (Mbps) over time (s) for different flows with their respective ingress and egress data rates.

Graph showing per-packet one-way delay (ms) over time (s) for different flows with their respective 95th percentile delays.

Legend:
- Flow 1 ingress (mean 34.72 Mbps)
- Flow 1 egress (mean 34.72 Mbps)
- Flow 2 ingress (mean 23.64 Mbps)
- Flow 2 egress (mean 23.64 Mbps)
- Flow 3 ingress (mean 10.14 Mbps)
- Flow 3 egress (mean 10.14 Mbps)

Flow 1 (95th percentile 51.89 ms)
Flow 2 (95th percentile 51.50 ms)
Flow 3 (95th percentile 51.49 ms)
Run 8: Statistics of LEDBAT

Start at: 2018-04-18 14:56:09
End at: 2018-04-18 14:56:39

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.77 Mbit/s
  95th percentile per-packet one-way delay: 51.954 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.13 Mbit/s
  95th percentile per-packet one-way delay: 51.864 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.84 Mbit/s
  95th percentile per-packet one-way delay: 52.153 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.32 Mbit/s
  95th percentile per-packet one-way delay: 52.034 ms
  Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link

[Graph showing throughput vs. time for different flows with legend indicating mean throughput for each flow.]
Run 9: Statistics of LEDBAT

Start at: 2018-04-18 15:11:32
End at: 2018-04-18 15:12:02

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 50.24 Mbit/s
  95th percentile per-packet one-way delay: 52.230 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 31.08 Mbit/s
  95th percentile per-packet one-way delay: 52.398 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.12 Mbit/s
  95th percentile per-packet one-way delay: 52.094 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.60 Mbit/s
  95th percentile per-packet one-way delay: 51.981 ms
  Loss rate: 0.00%
Run 10: Statistics of LEDBAT

Start at: 2018-04-18 15:26:38
End at: 2018-04-18 15:27:08

# Below is generated by plot.py at 2018-04-18 18:02:48
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 53.81 Mbit/s
  95th percentile per-packet one-way delay: 52.760 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 34.45 Mbit/s
  95th percentile per-packet one-way delay: 52.472 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 23.43 Mbit/s
  95th percentile per-packet one-way delay: 53.188 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.52 Mbit/s
  95th percentile per-packet one-way delay: 53.056 ms
  Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

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

- Blue dashed line: Flow 1 ingress (mean 34.45 Mbit/s)
- Blue solid line: Flow 1 egress (mean 34.45 Mbit/s)
- Green dashed line: Flow 2 ingress (mean 23.43 Mbit/s)
- Green solid line: Flow 2 egress (mean 23.43 Mbit/s)
- Red dashed line: Flow 3 ingress (mean 11.52 Mbit/s)
- Red solid line: Flow 3 egress (mean 11.52 Mbit/s)

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

- Blue circles: Flow 1 (95th percentile 52.47 ms)
- Green circles: Flow 2 (95th percentile 53.19 ms)
- Red circles: Flow 3 (95th percentile 53.06 ms)
Run 1: Statistics of PCC-Allegro

Start at: 2018-04-18 12:57:51
End at: 2018-04-18 12:58:21

# Below is generated by plot.py at 2018-04-18 18:07:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.65 Mbit/s
95th percentile per-packet one-way delay: 146.824 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 309.11 Mbit/s
95th percentile per-packet one-way delay: 147.065 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: 150.151 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.92 Mbit/s
95th percentile per-packet one-way delay: 93.920 ms
Loss rate: 0.01%
Run 1: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 309.17 Mbit/s)
- Flow 1 egress (mean 309.11 Mbit/s)
- Flow 2 ingress (mean 56.04 Mbit/s)
- Flow 2 egress (mean 56.04 Mbit/s)
- Flow 3 ingress (mean 30.92 Mbit/s)
- Flow 3 egress (mean 30.92 Mbit/s)

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

- Flow 1 (95th percentile 147.06 ms)
- Flow 2 (95th percentile 150.15 ms)
- Flow 3 (95th percentile 93.92 ms)
Run 2: Statistics of PCC-Allegro


# Below is generated by plot.py at 2018-04-18 18:08:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.03 Mbit/s
95th percentile per-packet one-way delay: 124.200 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 342.96 Mbit/s
95th percentile per-packet one-way delay: 123.128 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 9.74 Mbit/s
95th percentile per-packet one-way delay: 125.185 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 32.16 Mbit/s
95th percentile per-packet one-way delay: 133.936 ms
Loss rate: 0.05%
Run 2: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 343.01 Mbit/s)
- Flow 1 egress (mean 342.96 Mbit/s)
- Flow 2 ingress (mean 32.17 Mbit/s)
- Flow 2 egress (mean 32.16 Mbit/s)
- Flow 3 ingress (mean 9.75 Mbit/s)
- Flow 3 egress (mean 9.74 Mbit/s)

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

- Flow 1 (95th percentile 123.13 ms)
- Flow 2 (95th percentile 125.19 ms)
- Flow 3 (95th percentile 133.94 ms)
Run 3: Statistics of PCC-Allegro

End at: 2018-04-18 13:29:10

# Below is generated by plot.py at 2018-04-18 18:08:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 370.87 Mbit/s
  95th percentile per-packet one-way delay: 195.154 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 349.56 Mbit/s
  95th percentile per-packet one-way delay: 194.218 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 30.97 Mbit/s
  95th percentile per-packet one-way delay: 219.046 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 2.29 Mbit/s
  95th percentile per-packet one-way delay: 221.512 ms
  Loss rate: 0.37%
Run 3: Report of PCC-Allegro — Data Link

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

Throughput (Mbps):

- Flow 1 ingress (mean 350.06 Mbps)
- Flow 1 egress (mean 349.56 Mbps)
- Flow 2 ingress (mean 31.05 Mbps)
- Flow 2 egress (mean 30.97 Mbps)
- Flow 3 ingress (mean 2.30 Mbps)
- Flow 3 egress (mean 2.29 Mbps)

Packet delay (ms):

- Flow 1 (95th percentile 194.22 ms)
- Flow 2 (95th percentile 219.05 ms)
- Flow 3 (95th percentile 221.51 ms)
Run 4: Statistics of PCC-Allegro

End at: 2018-04-18 13:44:43

# Below is generated by plot.py at 2018-04-18 18:08:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 384.78 Mbit/s
  95th percentile per-packet one-way delay: 180.061 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 338.14 Mbit/s
  95th percentile per-packet one-way delay: 179.383 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 62.00 Mbit/s
  95th percentile per-packet one-way delay: 186.500 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 16.67 Mbit/s
  95th percentile per-packet one-way delay: 200.525 ms
  Loss rate: 0.05%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

End at: 2018-04-18 14:00:08

# Below is generated by plot.py at 2018-04-18 18:08:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 277.28 Mbit/s
  95th percentile per-packet one-way delay: 107.837 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 245.77 Mbit/s
  95th percentile per-packet one-way delay: 107.150 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 32.59 Mbit/s
  95th percentile per-packet one-way delay: 106.890 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 30.12 Mbit/s
  95th percentile per-packet one-way delay: 116.566 ms
  Loss rate: 0.02%
Run 5: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 245.79 Mbit/s)
- Flow 1 egress (mean 245.77 Mbit/s)
- Flow 2 ingress (mean 32.56 Mbit/s)
- Flow 2 egress (mean 32.59 Mbit/s)
- Flow 3 ingress (mean 30.15 Mbit/s)
- Flow 3 egress (mean 30.12 Mbit/s)
Run 6: Statistics of PCC-Allegro

Start at: 2018-04-18 14:15:00
End at: 2018-04-18 14:15:30

# Below is generated by plot.py at 2018-04-18 18:09:44
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 371.66 Mbit/s
  95th percentile per-packet one-way delay: 217.286 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 348.60 Mbit/s
  95th percentile per-packet one-way delay: 216.988 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 4.34 Mbit/s
  95th percentile per-packet one-way delay: 217.569 ms
  Loss rate: 0.62%
-- Flow 3:
  Average throughput: 61.26 Mbit/s
  95th percentile per-packet one-way delay: 218.561 ms
  Loss rate: 1.11%
Run 6: Report of PCC-Allegro — Data Link
Run 7: Statistics of PCC-Allegro

Start at: 2018-04-18 14:30:25
End at: 2018-04-18 14:30:55

# Below is generated by plot.py at 2018-04-18 18:10:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 377.43 Mbit/s
95th percentile per-packet one-way delay: 184.748 ms
Loss rate: 0.18%
-- Flow 1:
Average throughput: 361.34 Mbit/s
95th percentile per-packet one-way delay: 184.405 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 185.018 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: 194.555 ms
Loss rate: 0.52%
Run 7: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 361.95 Mbps)
- Flow 1 egress (mean 361.34 Mbps)
- Flow 2 ingress (mean 8.01 Mbps)
- Flow 2 egress (mean 7.99 Mbps)
- Flow 3 ingress (mean 33.02 Mbps)
- Flow 3 egress (mean 32.86 Mbps)

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

- Flow 1 (95th percentile 184.41 ms)
- Flow 2 (95th percentile 185.02 ms)
- Flow 3 (95th percentile 194.56 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-04-18 14:45:37
End at: 2018-04-18 14:46:07

# Below is generated by plot.py at 2018-04-18 18:10:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 354.75 Mbit/s
  95th percentile per-packet one-way delay: 80.572 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 340.63 Mbit/s
  95th percentile per-packet one-way delay: 80.559 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 17.11 Mbit/s
  95th percentile per-packet one-way delay: 80.161 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 8.35 Mbit/s
  95th percentile per-packet one-way delay: 84.051 ms
  Loss rate: 0.03%
Run 8: Report of PCC-Allegro — Data Link

- Flow 1 ingress (mean 340.71 Mbit/s)
- Flow 1 egress (mean 340.63 Mbit/s)
- Flow 2 ingress (mean 17.12 Mbit/s)
- Flow 2 egress (mean 17.11 Mbit/s)
- Flow 3 ingress (mean 8.35 Mbit/s)
- Flow 3 egress (mean 8.35 Mbit/s)

- Flow 1 (95th percentile 80.56 ms)
- Flow 2 (95th percentile 80.16 ms)
- Flow 3 (95th percentile 84.05 ms)
Run 9: Statistics of PCC-Allegro

Start at: 2018-04-18 15:00:55  
End at: 2018-04-18 15:01:25

# Below is generated by plot.py at 2018-04-18 18:15:13  
# Datalink statistics
--- Total of 3 flows:
Average throughput: 365.96 Mbit/s
95th percentile per-packet one-way delay: 96.533 ms
Loss rate: 0.00%
--- Flow 1:
Average throughput: 337.21 Mbit/s
95th percentile per-packet one-way delay: 96.900 ms
Loss rate: 0.00%
--- Flow 2:
Average throughput: 35.23 Mbit/s
95th percentile per-packet one-way delay: 95.197 ms
Loss rate: 0.00%
--- Flow 3:
Average throughput: 16.27 Mbit/s
95th percentile per-packet one-way delay: 80.841 ms
Loss rate: 0.00%
Run 9: Report of PCC-Allegro — Data Link

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

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 337.22 Mbit/s)  
Flow 1 egress (mean 337.21 Mbit/s)  
Flow 2 ingress (mean 35.24 Mbit/s)  
Flow 2 egress (mean 35.23 Mbit/s)  
Flow 3 ingress (mean 16.27 Mbit/s)  
Flow 3 egress (mean 16.27 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 96.90 ms)  
Flow 2 (95th percentile 95.20 ms)  
Flow 3 (95th percentile 80.84 ms)
Run 10: Statistics of PCC-Allegro

Start at: 2018-04-18 15:16:24
End at: 2018-04-18 15:16:54

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 342.75 Mbit/s
  95th percentile per-packet one-way delay: 79.908 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 312.22 Mbit/s
  95th percentile per-packet one-way delay: 79.049 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 31.03 Mbit/s
  95th percentile per-packet one-way delay: 81.000 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 30.23 Mbit/s
  95th percentile per-packet one-way delay: 86.331 ms
  Loss rate: 0.07%
Run 10: Report of PCC-Allegro — Data Link

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

- **Throughput Chart**:
  - Flow 1 ingress (mean 312.29 Mbit/s)
  - Flow 1 egress (mean 312.22 Mbit/s)
  - Flow 2 ingress (mean 31.04 Mbit/s)
  - Flow 2 egress (mean 31.03 Mbit/s)
  - Flow 3 ingress (mean 30.27 Mbit/s)
  - Flow 3 egress (mean 30.23 Mbit/s)

- **Packet Loss Chart**:
  - Flow 1 (95th percentile 79.05 ms)
  - Flow 2 (95th percentile 81.00 ms)
  - Flow 3 (95th percentile 86.33 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-18 13:01:19
End at: 2018-04-18 13:01:49

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 21.71 Mbit/s
95th percentile per-packet one-way delay: 50.783 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.903 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.861 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 66.32 Mbit/s
95th percentile per-packet one-way delay: 50.783 ms
Loss rate: 0.00%
Run 1: Report of QUIC Cubic — Data Link

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

![Graph of per-packet round-trip delay vs. time for different flows.](image)
Run 2: Statistics of QUIC Cubic

End at: 2018-04-18 13:17:14

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 134.06 Mbit/s
95th percentile per-packet one-way delay: 50.337 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 71.24 Mbit/s
95th percentile per-packet one-way delay: 50.329 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.18 Mbit/s
95th percentile per-packet one-way delay: 50.280 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 57.72 Mbit/s
95th percentile per-packet one-way delay: 50.416 ms
Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link

![Graph 1](chart1.png)

![Graph 2](chart2.png)
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-18 13:32:10
End at: 2018-04-18 13:32:40

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 124.12 Mbit/s
95th percentile per-packet one-way delay: 50.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 66.59 Mbit/s
95th percentile per-packet one-way delay: 50.436 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.86 Mbit/s
95th percentile per-packet one-way delay: 50.455 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.42 Mbit/s
95th percentile per-packet one-way delay: 49.793 ms
Loss rate: 0.00%
Run 3: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 66.58 Mbit/s)
- Flow 1 egress (mean 66.59 Mbit/s)
- Flow 2 ingress (mean 59.86 Mbit/s)
- Flow 2 egress (mean 59.86 Mbit/s)
- Flow 3 ingress (mean 55.42 Mbit/s)
- Flow 3 egress (mean 55.42 Mbit/s)
Run 4: Statistics of QUIC Cubic


# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 128.81 Mbit/s
95th percentile per-packet one-way delay: 49.804 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 67.06 Mbit/s
95th percentile per-packet one-way delay: 49.814 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 66.02 Mbit/s
95th percentile per-packet one-way delay: 49.797 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 55.26 Mbit/s
95th percentile per-packet one-way delay: 49.394 ms
Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-18 14:03:04
End at: 2018-04-18 14:03:34

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
   -- Total of 3 flows:
   Average throughput: 127.38 Mbit/s
   95th percentile per-packet one-way delay: 50.738 ms
   Loss rate: 0.00%
   -- Flow 1:
   Average throughput: 70.72 Mbit/s
   95th percentile per-packet one-way delay: 50.007 ms
   Loss rate: 0.00%
   -- Flow 2:
   Average throughput: 67.50 Mbit/s
   95th percentile per-packet one-way delay: 51.538 ms
   Loss rate: 0.00%
   -- Flow 3:
   Average throughput: 36.92 Mbit/s
   95th percentile per-packet one-way delay: 50.451 ms
   Loss rate: 0.01%
Run 5: Report of QUIC Cubic — Data Link

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

Throughput (Mb/s)

Time (s)

- **Flow 1 ingress (mean 70.72 Mb/s)**
- **Flow 1 egress (mean 70.72 Mb/s)**
- **Flow 2 ingress (mean 67.50 Mb/s)**
- **Flow 2 egress (mean 67.50 Mb/s)**
- **Flow 3 ingress (mean 36.92 Mb/s)**
- **Flow 3 egress (mean 36.92 Mb/s)**

Per packet one way delay (ms)

Time (s)

- **Flow 1 (95th percentile 50.01 ms)**
- **Flow 2 (95th percentile 51.54 ms)**
- **Flow 3 (95th percentile 56.45 ms)**
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-18 14:18:23
End at: 2018-04-18 14:18:53

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 128.44 Mbit/s
  95th percentile per-packet one-way delay: 50.891 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 66.24 Mbit/s
  95th percentile per-packet one-way delay: 50.817 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 66.39 Mbit/s
  95th percentile per-packet one-way delay: 50.901 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 55.77 Mbit/s
  95th percentile per-packet one-way delay: 50.964 ms
  Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-18 14:33:54
End at: 2018-04-18 14:34:24

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 130.17 Mbit/s
  95th percentile per-packet one-way delay: 50.878 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 71.25 Mbit/s
  95th percentile per-packet one-way delay: 50.875 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 64.62 Mbit/s
  95th percentile per-packet one-way delay: 51.080 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 49.26 Mbit/s
  95th percentile per-packet one-way delay: 50.045 ms
  Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link
Run 8: Statistics of QUIC Cubic

Start at: 2018-04-18 14:49:06
End at: 2018-04-18 14:49:36

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 127.35 Mbit/s
95th percentile per-packet one-way delay: 50.773 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 70.73 Mbit/s
95th percentile per-packet one-way delay: 50.779 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 59.63 Mbit/s
95th percentile per-packet one-way delay: 50.785 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 52.48 Mbit/s
95th percentile per-packet one-way delay: 50.595 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-18 15:04:24
End at: 2018-04-18 15:04:54

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 132.45 Mbit/s
  95th percentile per-packet one-way delay: 50.699 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 69.73 Mbit/s
  95th percentile per-packet one-way delay: 50.732 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 62.40 Mbit/s
  95th percentile per-packet one-way delay: 50.600 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 65.52 Mbit/s
  95th percentile per-packet one-way delay: 50.510 ms
  Loss rate: 0.00%
Run 9: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 69.70 Mbps/s)
- Flow 1 egress (mean 69.73 Mbps/s)
- Flow 2 ingress (mean 62.40 Mbps/s)
- Flow 2 egress (mean 62.40 Mbps/s)
- Flow 3 ingress (mean 65.30 Mbps/s)
- Flow 3 egress (mean 65.52 Mbps/s)

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

- Flow 1 (95th percentile 50.73 ms)
- Flow 2 (95th percentile 50.60 ms)
- Flow 3 (95th percentile 50.51 ms)
Run 10: Statistics of QUIC Cubic

Start at: 2018-04-18 15:19:51
End at: 2018-04-18 15:20:21

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 131.65 Mbit/s
  95th percentile per-packet one-way delay: 50.612 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 74.25 Mbit/s
  95th percentile per-packet one-way delay: 50.641 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 59.30 Mbit/s
  95th percentile per-packet one-way delay: 50.434 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 55.67 Mbit/s
  95th percentile per-packet one-way delay: 50.515 ms
  Loss rate: 0.00%
Run 10: Report of QUIC Cubic — Data Link

![Graph 1: Throughput vs Time]

- **Flow 1 ingress (mean 74.25 Mbit/s)**
- **Flow 1 egress (mean 74.25 Mbit/s)**
- **Flow 2 ingress (mean 59.31 Mbit/s)**
- **Flow 2 egress (mean 59.30 Mbit/s)**
- **Flow 3 ingress (mean 55.64 Mbit/s)**
- **Flow 3 egress (mean 55.67 Mbit/s)**

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

- **Flow 1 (95th percentile 50.64 ms)**
- **Flow 2 (95th percentile 50.43 ms)**
- **Flow 3 (95th percentile 50.52 ms)**
Run 1: Statistics of SCReAM

Start at: 2018-04-18 13:02:39
End at: 2018-04-18 13:03:09

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 51.085 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.126 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.467 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.034 ms
  Loss rate: 0.00%
Run 2: Statistics of SCReAM

Start at: 2018-04-18 13:18:10
End at: 2018-04-18 13:18:40

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.867 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.896 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.398 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.835 ms
  Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link

![Graph showing network performance metrics over time]

- Throughput (Mbps): Various flows plotted over time, showing fluctuating data rates.
- Packet delay (ms): Flows 1, 2, and 3 demonstrate different delay characteristics, with Flow 1 having a higher 95th percentile delay compared to Flows 2 and 3.

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Run 3: Statistics of SCReAM

End at: 2018-04-18 13:34:05

# Below is generated by plot.py at 2018-04-18 18:15:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.528 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.554 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.845 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.558 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

![Graph](image)

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

![Graph](image)

- **Flow 1 (95th percentile 50.55 ms)**
- **Flow 2 (95th percentile 49.84 ms)**
- **Flow 3 (95th percentile 50.56 ms)**
Run 4: Statistics of SCReAM

Start at: 2018-04-18 13:49:05

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.901 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.521 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.943 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.811 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-04-18 14:04:30
End at: 2018-04-18 14:05:00

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.592 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.588 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.605 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.962 ms
  Loss rate: 0.00%
Run 6: Statistics of SCReAM

Start at: 2018-04-18 14:19:49
End at: 2018-04-18 14:20:19

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 51.140 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.150 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.130 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 51.168 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

![Graph of throughput over time for different flows.]
Run 7: Statistics of SCReAM

Start at: 2018-04-18 14:35:20
End at: 2018-04-18 14:35:50

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 50.849 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.864 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.015 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 60.224 ms
  Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

[Graphs showing throughput and packet round-trip delay over time for different flows]

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Run 8: Statistics of SCReAM

Start at: 2018-04-18 14:50:31
End at: 2018-04-18 14:51:01

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 50.810 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.833 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.612 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.686 ms
Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link

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

- **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)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 50.83 ms)
  - Flow 2 (95th percentile 50.61 ms)
  - Flow 3 (95th percentile 50.69 ms)
Run 9: Statistics of SCReAM

Start at: 2018-04-18 15:05:50
End at: 2018-04-18 15:06:20

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.753 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.247 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.792 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 49.606 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Graph of Throughput (Mbps) vs Time (s) with different flow characteristics.](image1)

![Graph of Per packet one-way delay (ms) vs Time (s) with different flow characteristics.](image2)
Run 10: Statistics of SCReAM

End at: 2018-04-18 15:21:47

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 50.720 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.737 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.594 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.749 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-04-18 13:03:19
End at: 2018-04-18 13:03:49

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 51.318 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.425 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 51.276 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.707 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

End at: 2018-04-18 13:19:19

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.18 Mbit/s
95th percentile per-packet one-way delay: 50.955 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 50.661 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 58.836 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.423 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-04-18 13:34:14
End at: 2018-04-18 13:34:44

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 50.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.463 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.382 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 50.870 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

End at: 2018-04-18 13:50:14

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 50.576 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.535 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.589 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 50.525 ms
  Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link
Run 5: Statistics of WebRTC media

Start at: 2018-04-18 14:05:09
End at: 2018-04-18 14:05:39

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 51.255 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 51.423 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 51.051 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.237 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link
Run 6: Statistics of WebRTC media

Start at: 2018-04-18 14:20:28
End at: 2018-04-18 14:20:58

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 51.229 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 51.124 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 51.262 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 51.224 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link

![Graph showing WebRTC media data](image-url)
Run 7: Statistics of WebRTC media

Start at: 2018-04-18 14:35:59
End at: 2018-04-18 14:36:29

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 50.986 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.744 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.990 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 51.155 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link
Run 8: Statistics of WebRTC media

Start at: 2018-04-18 14:51:11
End at: 2018-04-18 14:51:41

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 51.182 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 51.153 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 50.961 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 51.529 ms
Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.06 Mbit/s)
- Flow 1 egress (mean 0.06 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)

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

- Flow 1 (95th percentile 51.15 ms)
- Flow 2 (95th percentile 50.96 ms)
- Flow 3 (95th percentile 51.53 ms)
Run 9: Statistics of WebRTC media

Start at: 2018-04-18 15:06:30
End at: 2018-04-18 15:07:00

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 50.918 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.856 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 51.016 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 50.631 ms
  Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link
Run 10: Statistics of WebRTC media

Start at: 2018-04-18 15:21:56

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 50.846 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.863 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 50.882 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 50.584 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link
Run 1: Statistics of Sprout

Start at: 2018-04-18 12:59:38
End at: 2018-04-18 13:00:08

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.60 Mbit/s
  95th percentile per-packet one-way delay: 52.139 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.92 Mbit/s
  95th percentile per-packet one-way delay: 52.095 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.84 Mbit/s
  95th percentile per-packet one-way delay: 52.180 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.50 Mbit/s
  95th percentile per-packet one-way delay: 52.166 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.92 Mbit/s)
- Flow 1 egress (mean 7.92 Mbit/s)
- Flow 2 ingress (mean 7.84 Mbit/s)
- Flow 2 egress (mean 7.84 Mbit/s)
- Flow 3 ingress (mean 7.50 Mbit/s)
- Flow 3 egress (mean 7.50 Mbit/s)
Run 2: Statistics of Sprout

Start at: 2018-04-18 13:15:03
End at: 2018-04-18 13:15:33

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.55 Mbit/s
95th percentile per-packet one-way delay: 51.818 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.89 Mbit/s
95th percentile per-packet one-way delay: 51.781 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 51.869 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 51.721 ms
Loss rate: 0.00%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

Start at: 2018-04-18 13:30:28
End at: 2018-04-18 13:30:58

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.70 Mbit/s
  95th percentile per-packet one-way delay: 51.468 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 7.95 Mbit/s
  95th percentile per-packet one-way delay: 51.413 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 7.90 Mbit/s
  95th percentile per-packet one-way delay: 51.509 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 7.56 Mbit/s
  95th percentile per-packet one-way delay: 51.573 ms
  Loss rate: 0.00%
Run 3: Report of Sprout — Data Link

[Graph showing network performance metrics over time, including throughput and per-packet one-way delay for different flows.]
Run 4: Statistics of Sprout

Start at: 2018-04-18 13:46:01

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 51.665 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 51.735 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 51.522 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 7.36 Mbit/s
95th percentile per-packet one-way delay: 51.452 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.94 Mbit/s)
- Flow 1 egress (mean 7.94 Mbit/s)
- Flow 2 ingress (mean 7.86 Mbit/s)
- Flow 2 egress (mean 7.84 Mbit/s)
- Flow 3 ingress (mean 7.36 Mbit/s)
- Flow 3 egress (mean 7.36 Mbit/s)
Run 5: Statistics of Sprout

Start at: 2018-04-18 14:01:24
End at: 2018-04-18 14:01:54

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.46 Mbit/s
95th percentile per-packet one-way delay: 51.912 ms
Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.76 Mbit/s
  95th percentile per-packet one-way delay: 51.942 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.78 Mbit/s
  95th percentile per-packet one-way delay: 51.864 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.67 Mbit/s
  95th percentile per-packet one-way delay: 51.942 ms
  Loss rate: 0.00%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-04-18 14:16:42
End at: 2018-04-18 14:17:12

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.23 Mbit/s
  95th percentile per-packet one-way delay: 51.965 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.75 Mbit/s
  95th percentile per-packet one-way delay: 51.895 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.71 Mbit/s
  95th percentile per-packet one-way delay: 52.081 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.15 Mbit/s
  95th percentile per-packet one-way delay: 51.929 ms
  Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-04-18 14:32:15
End at: 2018-04-18 14:32:45

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.57 Mbit/s
  95th percentile per-packet one-way delay: 51.860 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.88 Mbit/s
  95th percentile per-packet one-way delay: 51.850 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.80 Mbit/s
  95th percentile per-packet one-way delay: 51.791 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.59 Mbit/s
  95th percentile per-packet one-way delay: 52.022 ms
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.88 Mbit/s)
- Flow 1 egress (mean 7.88 Mbit/s)
- Flow 2 ingress (mean 7.80 Mbit/s)
- Flow 2 egress (mean 7.80 Mbit/s)
- Flow 3 ingress (mean 7.59 Mbit/s)
- Flow 3 egress (mean 7.59 Mbit/s)
Run 8: Statistics of Sprout

Start at: 2018-04-18 14:47:27
End at: 2018-04-18 14:47:57

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.61 Mbit/s
  95th percentile per-packet one-way delay: 51.633 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.93 Mbit/s
  95th percentile per-packet one-way delay: 51.625 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.78 Mbit/s
  95th percentile per-packet one-way delay: 51.608 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.61 Mbit/s
  95th percentile per-packet one-way delay: 51.715 ms
  Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 7.93 Mbps)
  - Flow 1 egress (mean 7.93 Mbps)
  - Flow 2 ingress (mean 7.76 Mbps)
  - Flow 2 egress (mean 7.76 Mbps)
  - Flow 3 ingress (mean 7.61 Mbps)
  - Flow 3 egress (mean 7.61 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 51.62 ms)
  - Flow 2 (95th percentile 51.61 ms)
  - Flow 3 (95th percentile 51.72 ms)
Run 9: Statistics of Sprout

Start at: 2018-04-18 15:02:44
End at: 2018-04-18 15:03:14

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.57 Mbit/s
  95th percentile per-packet one-way delay: 51.684 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.93 Mbit/s
  95th percentile per-packet one-way delay: 51.691 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.88 Mbit/s
  95th percentile per-packet one-way delay: 51.716 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.28 Mbit/s
  95th percentile per-packet one-way delay: 51.631 ms
  Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

Throughput (Mbit/s) vs Time (s)

- Flow 1 ingress (mean 7.93 Mbit/s)
- Flow 1 egress (mean 7.93 Mbit/s)
- Flow 2 ingress (mean 7.86 Mbit/s)
- Flow 2 egress (mean 7.86 Mbit/s)
- Flow 3 ingress (mean 7.26 Mbit/s)
- Flow 3 egress (mean 7.26 Mbit/s)

Packet round-trip delay (ms) vs Time (s)

- Flow 1 (95th percentile 51.69 ms)
- Flow 2 (95th percentile 51.72 ms)
- Flow 3 (95th percentile 51.63 ms)
Run 10: Statistics of Sprout

Start at: 2018-04-18 15:18:12
End at: 2018-04-18 15:18:42

# Below is generated by plot.py at 2018-04-18 18:15:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.54 Mbit/s
  95th percentile per-packet one-way delay: 52.136 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.92 Mbit/s
  95th percentile per-packet one-way delay: 52.053 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.66 Mbit/s
  95th percentile per-packet one-way delay: 52.305 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.64 Mbit/s
  95th percentile per-packet one-way delay: 52.093 ms
  Loss rate: 0.00%
Run 10: Report of Sprout — Data Link

![Graphs showing throughput and per-packet one-way delay for different flows. The graphs display time in seconds on the x-axis and throughput or delay in appropriate units on the y-axis.]

Legend:
- Flow 1 ingress (mean 7.92 Mbit/s)
- Flow 1 egress (mean 7.92 Mbit/s)
- Flow 2 ingress (mean 7.66 Mbit/s)
- Flow 2 egress (mean 7.66 Mbit/s)
- Flow 3 ingress (mean 7.64 Mbit/s)
- Flow 3 egress (mean 7.64 Mbit/s)
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-18 12:54:45

# Below is generated by plot.py at 2018-04-18 18:24:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.78 Mbit/s
95th percentile per-packet one-way delay: 52.969 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 149.69 Mbit/s
95th percentile per-packet one-way delay: 51.793 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 168.61 Mbit/s
95th percentile per-packet one-way delay: 53.552 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 92.35 Mbit/s
95th percentile per-packet one-way delay: 55.110 ms
Loss rate: 0.00%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-18 13:09:56
End at: 2018-04-18 13:10:26

# Below is generated by plot.py at 2018-04-18 18:24:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 296.95 Mbit/s
  95th percentile per-packet one-way delay: 55.844 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 157.76 Mbit/s
  95th percentile per-packet one-way delay: 52.333 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 117.96 Mbit/s
  95th percentile per-packet one-way delay: 57.929 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 182.91 Mbit/s
  95th percentile per-packet one-way delay: 61.713 ms
  Loss rate: 0.08%
Run 2: Report of TaoVA-100x — Data Link

![Graph of throughput over time for different flows and their ingress and egress speeds, with annotations for mean speeds.]

![Graph of per-packet one-way delay over time for different flows, with annotations for 95th percentile delays.]

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Run 3: Statistics of TaoVA-100x


# Below is generated by plot.py at 2018-04-18 18:24:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 262.50 Mbit/s
  95th percentile per-packet one-way delay: 53.527 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 144.22 Mbit/s
  95th percentile per-packet one-way delay: 53.452 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 107.21 Mbit/s
  95th percentile per-packet one-way delay: 54.127 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 141.46 Mbit/s
  95th percentile per-packet one-way delay: 52.113 ms
  Loss rate: 0.00%
Run 3: Report of TaoVA-100x — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows with specified mean values for ingress and egress.]
Run 4: Statistics of TaoVA-100x


# Below is generated by plot.py at 2018-04-18 18:24:40
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 297.48 Mbit/s
  95th percentile per-packet one-way delay: 54.057 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 162.67 Mbit/s
  95th percentile per-packet one-way delay: 52.133 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 106.95 Mbit/s
  95th percentile per-packet one-way delay: 58.740 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 191.69 Mbit/s
  95th percentile per-packet one-way delay: 52.129 ms
  Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

End at: 2018-04-18 13:56:51

# Below is generated by plot.py at 2018-04-18 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 288.14 Mbit/s
95th percentile per-packet one-way delay: 53.957 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 202.74 Mbit/s
95th percentile per-packet one-way delay: 53.662 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 110.52 Mbit/s
95th percentile per-packet one-way delay: 54.116 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 35.64 Mbit/s
95th percentile per-packet one-way delay: 57.162 ms
Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-18 14:11:46
End at: 2018-04-18 14:12:16

# Below is generated by plot.py at 2018-04-18 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.45 Mbit/s
95th percentile per-packet one-way delay: 57.177 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 167.20 Mbit/s
95th percentile per-packet one-way delay: 53.248 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 104.91 Mbit/s
95th percentile per-packet one-way delay: 60.397 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 103.30 Mbit/s
95th percentile per-packet one-way delay: 63.722 ms
Loss rate: 0.00%
Run 6: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps)
- Blue dashed line: Flow 1 ingress (mean 167.29 Mbps)
- Blue solid line: Flow 1 egress (mean 167.20 Mbps)
- Green dashed line: Flow 2 ingress (mean 104.90 Mbps)
- Green solid line: Flow 2 egress (mean 104.91 Mbps)
- Red dashed line: Flow 3 ingress (mean 103.56 Mbps)
- Red solid line: Flow 3 egress (mean 103.30 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Blue line: Flow 1 (95th percentile 53.25 ms)
- Green line: Flow 2 (95th percentile 60.40 ms)
- Red line: Flow 3 (95th percentile 63.72 ms)
Run 7: Statistics of TaoVA-100x

Start at: 2018-04-18 14:27:09
End at: 2018-04-18 14:27:39

# Below is generated by plot.py at 2018-04-18 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 254.05 Mbit/s
95th percentile per-packet one-way delay: 54.210 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 133.39 Mbit/s
95th percentile per-packet one-way delay: 53.414 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 105.35 Mbit/s
95th percentile per-packet one-way delay: 56.166 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 152.48 Mbit/s
95th percentile per-packet one-way delay: 53.482 ms
Loss rate: 0.00%
Run 7: Report of TaoVA-100x — Data Link

![Data Link Throughput Graph](image1)

- **Flow 1 ingress (mean 133.40 Mbit/s)**
- **Flow 1 egress (mean 133.39 Mbit/s)**
- **Flow 2 ingress (mean 105.37 Mbit/s)**
- **Flow 2 egress (mean 105.35 Mbit/s)**
- **Flow 3 ingress (mean 152.49 Mbit/s)**
- **Flow 3 egress (mean 152.48 Mbit/s)**

![Data Link Delay Graph](image2)

- **Flow 1 (95th percentile 53.41 ms)**
- **Flow 2 (95th percentile 56.17 ms)**
- **Flow 3 (95th percentile 53.48 ms)**
Run 8: Statistics of TaoVA-100x

End at: 2018-04-18 14:42:53

# Below is generated by plot.py at 2018-04-18 18:24:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 246.59 Mbit/s
95th percentile per-packet one-way delay: 56.478 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 158.09 Mbit/s
95th percentile per-packet one-way delay: 52.823 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 36.23 Mbit/s
95th percentile per-packet one-way delay: 55.672 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 211.18 Mbit/s
95th percentile per-packet one-way delay: 60.058 ms
Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link
Run 9: Statistics of TaoVA-100x

Start at: 2018-04-18 14:57:46
End at: 2018-04-18 14:58:16

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.14 Mbit/s
95th percentile per-packet one-way delay: 52.750 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 167.41 Mbit/s
95th percentile per-packet one-way delay: 52.549 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 143.83 Mbit/s
95th percentile per-packet one-way delay: 52.199 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 150.05 Mbit/s
95th percentile per-packet one-way delay: 53.608 ms
Loss rate: 0.02%
Run 9: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 167.42 Mbit/s)
- Flow 1 egress (mean 167.41 Mbit/s)
- Flow 2 ingress (mean 143.83 Mbit/s)
- Flow 2 egress (mean 143.83 Mbit/s)
- Flow 3 ingress (mean 150.08 Mbit/s)
- Flow 3 egress (mean 150.05 Mbit/s)

- Flow 1 (95th percentile 52.55 ms)
- Flow 2 (95th percentile 52.20 ms)
- Flow 3 (95th percentile 53.61 ms)
Run 10: Statistics of TaoVA-100x

Start at: 2018-04-18 15:13:10
End at: 2018-04-18 15:13:40

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 259.06 Mbit/s
95th percentile per-packet one-way delay: 52.593 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.75 Mbit/s
95th percentile per-packet one-way delay: 52.253 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 141.24 Mbit/s
95th percentile per-packet one-way delay: 53.150 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 15.91 Mbit/s
95th percentile per-packet one-way delay: 53.160 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 159.75 Mbit/s)
- Flow 1 egress (mean 159.75 Mbit/s)
- Flow 2 ingress (mean 141.24 Mbit/s)
- Flow 2 egress (mean 141.24 Mbit/s)
- Flow 3 ingress (mean 15.91 Mbit/s)
- Flow 3 egress (mean 15.91 Mbit/s)
Run 1: Statistics of TCP Vegas

Start at: 2018-04-18 13:06:30
End at: 2018-04-18 13:07:00

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 146.85 Mbit/s
95th percentile per-packet one-way delay: 52.756 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 76.32 Mbit/s
95th percentile per-packet one-way delay: 52.026 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 67.31 Mbit/s
95th percentile per-packet one-way delay: 55.527 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 77.59 Mbit/s
95th percentile per-packet one-way delay: 52.361 ms
Loss rate: 0.02%
Run 1: Report of TCP Vegas — Data Link

![Network Performance Graphs](image-url)
Run 2: Statistics of TCP Vegas


# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 160.23 Mbit/s
  95th percentile per-packet one-way delay: 52.044 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 55.79 Mbit/s
  95th percentile per-packet one-way delay: 52.003 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 153.65 Mbit/s
  95th percentile per-packet one-way delay: 52.089 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.40 Mbit/s
  95th percentile per-packet one-way delay: 51.011 ms
  Loss rate: 0.04%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 55.79 Mbit/s)
- Flow 1 egress (mean 55.79 Mbit/s)
- Flow 2 ingress (mean 133.65 Mbit/s)
- Flow 2 egress (mean 133.65 Mbit/s)
- Flow 3 ingress (mean 6.38 Mbit/s)
- Flow 3 egress (mean 6.40 Mbit/s)
Run 3: Statistics of TCP Vegas

End at: 2018-04-18 13:37:56

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 184.30 Mbit/s
95th percentile per-packet one-way delay: 51.600 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 79.03 Mbit/s
95th percentile per-packet one-way delay: 51.757 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 155.26 Mbit/s
95th percentile per-packet one-way delay: 51.511 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.66 Mbit/s
95th percentile per-packet one-way delay: 50.713 ms
Loss rate: 0.21%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-04-18 13:52:54

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 190.00 Mbit/s
95th percentile per-packet one-way delay: 60.059 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 75.17 Mbit/s
95th percentile per-packet one-way delay: 59.843 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 85.09 Mbit/s
95th percentile per-packet one-way delay: 56.023 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 175.48 Mbit/s
95th percentile per-packet one-way delay: 61.310 ms
Loss rate: 0.01%
Run 4: Report of TCP Vegas — Data Link

![Graph 1](image1.png)

![Graph 2](image2.png)
Run 5: Statistics of TCP Vegas

Start at: 2018-04-18 14:08:18
End at: 2018-04-18 14:08:48

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.08 Mbit/s
95th percentile per-packet one-way delay: 59.467 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 132.97 Mbit/s
95th percentile per-packet one-way delay: 59.750 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 10.17 Mbit/s
95th percentile per-packet one-way delay: 51.662 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 76.44 Mbit/s
95th percentile per-packet one-way delay: 55.976 ms
Loss rate: 0.00%
Run 5: Report of TCP Vegas — Data Link

![Graph showing throughput and packet delay for different flows.](image-url)
Run 6: Statistics of TCP Vegas

End at: 2018-04-18 14:24:09

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 202.44 Mbit/s
  95th percentile per-packet one-way delay: 57.203 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 95.13 Mbit/s
  95th percentile per-packet one-way delay: 55.002 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 121.05 Mbit/s
  95th percentile per-packet one-way delay: 54.339 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 81.27 Mbit/s
  95th percentile per-packet one-way delay: 61.754 ms
  Loss rate: 0.00%
Run 6: Report of TCP Vegas — Data Link
Run 7: Statistics of TCP Vegas

Start at: 2018-04-18 14:38:57
End at: 2018-04-18 14:39:27

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 200.46 Mbit/s
95th percentile per-packet one-way delay: 59.010 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 149.91 Mbit/s
95th percentile per-packet one-way delay: 59.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 73.17 Mbit/s
95th percentile per-packet one-way delay: 52.877 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 5.43 Mbit/s
95th percentile per-packet one-way delay: 51.631 ms
Loss rate: 0.22%
Run 7: Report of TCP Vegas — Data Link
Run 8: Statistics of TCP Vegas

Start at: 2018-04-18 14:54:24
End at: 2018-04-18 14:54:54

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 120.50 Mbit/s
95th percentile per-packet one-way delay: 52.997 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 90.81 Mbit/s
95th percentile per-packet one-way delay: 52.230 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 11.70 Mbit/s
95th percentile per-packet one-way delay: 51.882 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 66.21 Mbit/s
95th percentile per-packet one-way delay: 59.171 ms
Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 90.81 Mbps)
  - Flow 1 egress (mean 90.81 Mbps)
  - Flow 2 ingress (mean 11.70 Mbps)
  - Flow 2 egress (mean 11.70 Mbps)
  - Flow 3 ingress (mean 66.21 Mbps)
  - Flow 3 egress (mean 66.21 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 52.23 ms)
  - Flow 2 (95th percentile 51.88 ms)
  - Flow 3 (95th percentile 59.17 ms)
Run 9: Statistics of TCP Vegas

Start at: 2018-04-18 15:09:42
End at: 2018-04-18 15:10:13

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 121.50 Mbit/s
  95th percentile per-packet one-way delay: 51.775 ms
  Loss rate: 0.01%
  -- Flow 1:
  Average throughput: 75.51 Mbit/s
  95th percentile per-packet one-way delay: 51.996 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 66.40 Mbit/s
  95th percentile per-packet one-way delay: 51.532 ms
  Loss rate: 0.01%
  -- Flow 3:
  Average throughput: 5.46 Mbit/s
  95th percentile per-packet one-way delay: 51.202 ms
  Loss rate: 0.24%
Run 9: Report of TCP Vegas — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 10: Statistics of TCP Vegas

Start at: 2018-04-18 15:24:51
End at: 2018-04-18 15:25:21

# Below is generated by plot.py at 2018-04-18 18:32:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 139.11 Mbit/s
  95th percentile per-packet one-way delay: 53.070 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 89.14 Mbit/s
  95th percentile per-packet one-way delay: 53.053 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 71.89 Mbit/s
  95th percentile per-packet one-way delay: 53.196 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 6.40 Mbit/s
  95th percentile per-packet one-way delay: 51.532 ms
  Loss rate: 0.04%
Run 10: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 89.14 Mbit/s)
- Flow 1 egress (mean 89.14 Mbit/s)
- Flow 2 ingress (mean 71.89 Mbit/s)
- Flow 2 egress (mean 71.89 Mbit/s)
- Flow 3 ingress (mean 6.40 Mbit/s)
- Flow 3 egress (mean 6.40 Mbit/s)

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

- Flow 1 (95th percentile 53.05 ms)
- Flow 2 (95th percentile 53.20 ms)
- Flow 3 (95th percentile 51.53 ms)
Run 1: Statistics of Verus

Start at: 2018-04-18 13:00:18
End at: 2018-04-18 13:00:48

# Below is generated by plot.py at 2018-04-18 18:33:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.27 Mbit/s
95th percentile per-packet one-way delay: 157.540 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 182.54 Mbit/s
95th percentile per-packet one-way delay: 149.428 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 137.65 Mbit/s
95th percentile per-packet one-way delay: 174.107 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 98.08 Mbit/s
95th percentile per-packet one-way delay: 161.007 ms
Loss rate: 0.22%
Run 1: Report of Verus — Data Link

[Graph showing throughputs and delays over time for different flows]

Flow 1 ingress (mean 182.62 Mbit/s)  
Flow 1 egress (mean 182.54 Mbit/s)  
Flow 2 ingress (mean 137.91 Mbit/s)  
Flow 2 egress (mean 137.65 Mbit/s)  
Flow 3 ingress (mean 97.82 Mbit/s)  
Flow 3 egress (mean 98.08 Mbit/s)

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

Flow 1 (95th percentile 149.43 ms)  
Flow 2 (95th percentile 174.11 ms)  
Flow 3 (95th percentile 161.01 ms)
Run 2: Statistics of Verus

Start at: 2018-04-18 13:15:42
End at: 2018-04-18 13:16:12

# Below is generated by plot.py at 2018-04-18 18:34:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.46 Mbit/s
95th percentile per-packet one-way delay: 149.524 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 191.17 Mbit/s
95th percentile per-packet one-way delay: 136.170 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 159.02 Mbit/s
95th percentile per-packet one-way delay: 150.989 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 81.44 Mbit/s
95th percentile per-packet one-way delay: 183.202 ms
Loss rate: 0.00%
Run 3: Statistics of Verus

Start at: 2018-04-18 13:31:08

# Below is generated by plot.py at 2018-04-18 18:35:26
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 329.66 Mbit/s
  95th percentile per-packet one-way delay: 184.142 ms
  Loss rate: 1.20%
-- Flow 1:
  Average throughput: 176.85 Mbit/s
  95th percentile per-packet one-way delay: 162.554 ms
  Loss rate: 0.42%
-- Flow 2:
  Average throughput: 145.36 Mbit/s
  95th percentile per-packet one-way delay: 172.744 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 171.24 Mbit/s
  95th percentile per-packet one-way delay: 210.876 ms
  Loss rate: 4.79%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus


# Below is generated by plot.py at 2018-04-18 18:35:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.01 Mbit/s
95th percentile per-packet one-way delay: 154.564 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 153.65 Mbit/s
95th percentile per-packet one-way delay: 120.430 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 124.93 Mbit/s
95th percentile per-packet one-way delay: 259.753 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 103.12 Mbit/s
95th percentile per-packet one-way delay: 153.252 ms
Loss rate: 0.80%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

Start at: 2018-04-18 14:02:04
End at: 2018-04-18 14:02:34

# Below is generated by plot.py at 2018-04-18 18:35:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.12 Mbit/s
95th percentile per-packet one-way delay: 127.739 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 191.63 Mbit/s
95th percentile per-packet one-way delay: 134.003 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 139.08 Mbit/s
95th percentile per-packet one-way delay: 121.545 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 64.21 Mbit/s
95th percentile per-packet one-way delay: 130.970 ms
Loss rate: 0.08%
Run 5: Report of Verus — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 6: Statistics of Verus

Start at: 2018-04-18 14:17:22
End at: 2018-04-18 14:17:52

# Below is generated by plot.py at 2018-04-18 18:36:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 322.65 Mbit/s
  95th percentile per-packet one-way delay: 178.869 ms
  Loss rate: 0.39%
-- Flow 1:
  Average throughput: 191.62 Mbit/s
  95th percentile per-packet one-way delay: 174.759 ms
  Loss rate: 0.17%
-- Flow 2:
  Average throughput: 158.67 Mbit/s
  95th percentile per-packet one-way delay: 183.361 ms
  Loss rate: 0.36%
-- Flow 3:
  Average throughput: 78.70 Mbit/s
  95th percentile per-packet one-way delay: 187.934 ms
  Loss rate: 2.16%
Run 6: Report of Verus — Data Link

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

Legend:
- Flow 1 ingress (mean 191.94 Mbit/s)
- Flow 1 egress (mean 191.62 Mbit/s)
- Flow 2 ingress (mean 159.45 Mbit/s)
- Flow 2 egress (mean 158.67 Mbit/s)
- Flow 3 ingress (mean 80.45 Mbit/s)
- Flow 3 egress (mean 78.70 Mbit/s)

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

Legend:
- Flow 1 (95th percentile 174.76 ms)
- Flow 2 (95th percentile 183.36 ms)
- Flow 3 (95th percentile 187.93 ms)
Run 7: Statistics of Verus

Start at: 2018-04-18 14:32:55
End at: 2018-04-18 14:33:25

# Below is generated by plot.py at 2018-04-18 18:37:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 284.65 Mbit/s
95th percentile per-packet one-way delay: 116.918 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 170.57 Mbit/s
95th percentile per-packet one-way delay: 113.904 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 113.20 Mbit/s
95th percentile per-packet one-way delay: 113.542 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 119.63 Mbit/s
95th percentile per-packet one-way delay: 130.021 ms
Loss rate: 0.00%
Run 7: Report of Verus — Data Link

![Graph showing network throughput and packet delay over time for Flow 1, Flow 2, and Flow 3.](image1)

![Graph showing network throughput and packet delay over time for Flow 1, Flow 2, and Flow 3.](image2)
Run 8: Statistics of Verus

Start at: 2018-04-18 14:48:07
End at: 2018-04-18 14:48:37

# Below is generated by plot.py at 2018-04-18 18:38:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 283.48 Mbit/s
  95th percentile per-packet one-way delay: 183.862 ms
  Loss rate: 1.29%
-- Flow 1:
  Average throughput: 142.79 Mbit/s
  95th percentile per-packet one-way delay: 134.893 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 154.09 Mbit/s
  95th percentile per-packet one-way delay: 145.654 ms
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 117.10 Mbit/s
  95th percentile per-packet one-way delay: 219.001 ms
  Loss rate: 5.01%
Run 8: Report of Verus — Data Link

Graph 1: Throughput (Mbps)

Graph 2: One-way delay (ms)
Run 9: Statistics of Verus

Start at: 2018-04-18 15:03:24
End at: 2018-04-18 15:03:54

# Below is generated by plot.py at 2018-04-18 18:39:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 299.28 Mbit/s
95th percentile per-packet one-way delay: 139.455 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 203.50 Mbit/s
95th percentile per-packet one-way delay: 132.551 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 110.19 Mbit/s
95th percentile per-packet one-way delay: 152.493 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 70.60 Mbit/s
95th percentile per-packet one-way delay: 139.012 ms
Loss rate: 0.54%
Run 9: Report of Verus — Data Link

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

Graph 2: Per-packet one-way delay (ms) vs. Time (s)
Run 10: Statistics of Verus

Start at: 2018-04-18 15:18:52
End at: 2018-04-18 15:19:22

# Below is generated by plot.py at 2018-04-18 18:40:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 282.31 Mbit/s
  95th percentile per-packet one-way delay: 138.061 ms
  Loss rate: 0.28%
-- Flow 1:
  Average throughput: 170.75 Mbit/s
  95th percentile per-packet one-way delay: 120.180 ms
  Loss rate: 0.12%
-- Flow 2:
  Average throughput: 113.17 Mbit/s
  95th percentile per-packet one-way delay: 143.884 ms
  Loss rate: 0.22%
-- Flow 3:
  Average throughput: 111.13 Mbit/s
  95th percentile per-packet one-way delay: 205.012 ms
  Loss rate: 1.16%
Run 10: Report of Verus — Data Link

![Graph 1: Throughput](image)

- **Flow 1 ingress** (mean 171.10 Mbit/s)
- **Flow 1 egress** (mean 170.75 Mbit/s)
- **Flow 2 ingress** (mean 113.72 Mbit/s)
- **Flow 2 egress** (mean 113.17 Mbit/s)
- **Flow 3 ingress** (mean 112.28 Mbit/s)
- **Flow 3 egress** (mean 111.13 Mbit/s)

![Graph 2: Packet Delay](image)

- **Flow 1 (95th percentile 120.18 ms)**
- **Flow 2 (95th percentile 143.88 ms)**
- **Flow 3 (95th percentile 205.01 ms)**
Run 1: Statistics of Copa

Start at: 2018-04-18 12:53:50
End at: 2018-04-18 12:54:20

# Below is generated by plot.py at 2018-04-18 18:40:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 152.79 Mbit/s
95th percentile per-packet one-way delay: 50.849 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.14 Mbit/s
95th percentile per-packet one-way delay: 50.898 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.25 Mbit/s
95th percentile per-packet one-way delay: 50.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 71.70 Mbit/s
95th percentile per-packet one-way delay: 50.407 ms
Loss rate: 0.00%
Run 1: Report of Copa — Data Link

[Graph showing throughput and per-packet end-to-end delay over time for different flows and their ingress and egress throughputs.]
Run 2: Statistics of Copa

Start at: 2018-04-18 13:09:02
End at: 2018-04-18 13:09:32

# Below is generated by plot.py at 2018-04-18 18:40:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 149.14 Mbit/s
95th percentile per-packet one-way delay: 50.998 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.03 Mbit/s
95th percentile per-packet one-way delay: 50.994 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 74.99 Mbit/s
95th percentile per-packet one-way delay: 51.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 51.74 Mbit/s
95th percentile per-packet one-way delay: 50.954 ms
Loss rate: 0.02%
Run 2: Report of Copa — Data Link

![Graph of Throughput (Mbps)](image1)

- Flow 1 ingress (mean 82.03 Mbps)
- Flow 1 egress (mean 82.03 Mbps)
- Flow 2 ingress (mean 75.60 Mbps)
- Flow 2 egress (mean 74.99 Mbps)
- Flow 3 ingress (mean 51.75 Mbps)
- Flow 3 egress (mean 51.74 Mbps)

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

- Flow 1 (95th percentile 50.99 ms)
- Flow 2 (95th percentile 51.02 ms)
- Flow 3 (95th percentile 50.95 ms)
Run 3: Statistics of Copa


# Below is generated by plot.py at 2018-04-18 18:41:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 150.38 Mbit/s
95th percentile per-packet one-way delay: 50.433 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 78.57 Mbit/s
95th percentile per-packet one-way delay: 50.488 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 68.32 Mbit/s
95th percentile per-packet one-way delay: 50.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 79.19 Mbit/s
95th percentile per-packet one-way delay: 49.753 ms
Loss rate: 0.00%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

End at: 2018-04-18 13:40:29

# Below is generated by plot.py at 2018-04-18 18:42:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 151.89 Mbit/s
  95th percentile per-packet one-way delay: 50.496 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 77.91 Mbit/s
  95th percentile per-packet one-way delay: 50.447 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 73.08 Mbit/s
  95th percentile per-packet one-way delay: 50.456 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 76.42 Mbit/s
  95th percentile per-packet one-way delay: 50.732 ms
  Loss rate: 0.00%
Run 4: Report of Copa — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 77.91 Mbps)
- Flow 1 egress (mean 77.91 Mbps)
- Flow 2 ingress (mean 73.68 Mbps)
- Flow 2 egress (mean 73.68 Mbps)
- Flow 3 ingress (mean 76.43 Mbps)
- Flow 3 egress (mean 76.42 Mbps)

Packet delay (ms):
- Flow 1 (95th percentile 50.45 ms)
- Flow 2 (95th percentile 50.46 ms)
- Flow 3 (95th percentile 50.73 ms)
Run 5: Statistics of Copa


# Below is generated by plot.py at 2018-04-18 18:43:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 154.42 Mbit/s
95th percentile per-packet one-way delay: 50.845 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 86.95 Mbit/s
95th percentile per-packet one-way delay: 50.747 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 71.90 Mbit/s
95th percentile per-packet one-way delay: 50.958 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 59.15 Mbit/s
95th percentile per-packet one-way delay: 50.732 ms
Loss rate: 0.00%
Run 6: Statistics of Copa

Start at: 2018-04-18 14:10:51
End at: 2018-04-18 14:11:21

# Below is generated by plot.py at 2018-04-18 18:44:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.75 Mbit/s
95th percentile per-packet one-way delay: 50.842 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 82.14 Mbit/s
95th percentile per-packet one-way delay: 50.775 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 79.02 Mbit/s
95th percentile per-packet one-way delay: 50.890 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 78.37 Mbit/s
95th percentile per-packet one-way delay: 50.835 ms
Loss rate: 0.00%
Run 6: Report of Copa — Data Link

![Graph of throughput and packet delay over time, showing data for different flows with their mean rates and 95th percentile delays.]
Run 7: Statistics of Copa

Start at: 2018-04-18 14:26:13
End at: 2018-04-18 14:26:43

# Below is generated by plot.py at 2018-04-18 18:45:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 157.90 Mbit/s
95th percentile per-packet one-way delay: 51.056 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 83.19 Mbit/s
95th percentile per-packet one-way delay: 51.034 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 75.69 Mbit/s
95th percentile per-packet one-way delay: 51.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.62 Mbit/s
95th percentile per-packet one-way delay: 51.275 ms
Loss rate: 0.00%
Run 7: Report of Copa — Data Link
Run 8: Statistics of Copa

Start at: 2018-04-18 14:41:29
End at: 2018-04-18 14:41:59

# Below is generated by plot.py at 2018-04-18 18:45:24
# Datalink statistics
-- Total of 3 flows:
Average throughput: 147.75 Mbit/s
95th percentile per-packet one-way delay: 50.767 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 69.06 Mbit/s
95th percentile per-packet one-way delay: 50.767 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 78.98 Mbit/s
95th percentile per-packet one-way delay: 50.343 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 78.81 Mbit/s
95th percentile per-packet one-way delay: 50.844 ms
Loss rate: 0.00%
Run 8: Report of Copa — Data Link

![Graph showing throughput and per-packet one-way delay over time for Flow 1 and Flow 2 ingress and egress with mean rates and 95th percentile delays.]

- Flow 1 ingress (mean 69.05 Mbit/s)
- Flow 1 egress (mean 69.06 Mbit/s)
- Flow 2 ingress (mean 78.99 Mbit/s)
- Flow 2 egress (mean 78.95 Mbit/s)
- Flow 3 ingress (mean 78.80 Mbit/s)
- Flow 3 egress (mean 78.81 Mbit/s)
Run 9: Statistics of Copa

Start at: 2018-04-18 14:56:53
End at: 2018-04-18 14:57:23

# Below is generated by plot.py at 2018-04-18 18:45:24
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 140.36 Mbit/s
  95th percentile per-packet one-way delay: 50.617 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 72.33 Mbit/s
  95th percentile per-packet one-way delay: 50.604 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 68.84 Mbit/s
  95th percentile per-packet one-way delay: 50.615 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 66.98 Mbit/s
  95th percentile per-packet one-way delay: 50.647 ms
  Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

Throughput (Mbps)

- Blue line: Flow 1 ingress (mean 72.32 Mbps)
- Blue line: Flow 1 egress (mean 72.33 Mbps)
- Green line: Flow 2 ingress (mean 68.84 Mbps)
- Green line: Flow 2 egress (mean 68.84 Mbps)
- Red line: Flow 3 ingress (mean 66.98 Mbps)
- Red line: Flow 3 egress (mean 66.98 Mbps)

Packet loss

- Blue symbol: Flow 1 (95th percentile 50.60 ms)
- Red symbol: Flow 2 (95th percentile 50.62 ms)
- Red symbol: Flow 3 (95th percentile 50.65 ms)
Run 10: Statistics of Copa

Start at: 2018-04-18 15:12:15
End at: 2018-04-18 15:12:45

# Below is generated by plot.py at 2018-04-18 18:45:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 153.92 Mbit/s
  95th percentile per-packet one-way delay: 50.859 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 85.83 Mbit/s
  95th percentile per-packet one-way delay: 50.845 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 57.18 Mbit/s
  95th percentile per-packet one-way delay: 50.956 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 90.54 Mbit/s
  95th percentile per-packet one-way delay: 50.794 ms
  Loss rate: 0.00%
Run 1: Statistics of FillP

Start at: 2018-04-18 13:03:58
End at: 2018-04-18 13:04:28

# Below is generated by plot.py at 2018-04-18 19:09:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1399.94 Mbit/s
  95th percentile per-packet one-way delay: 288.760 ms
  Loss rate: 4.78%
-- Flow 1:
  Average throughput: 724.70 Mbit/s
  95th percentile per-packet one-way delay: 292.504 ms
  Loss rate: 5.45%
-- Flow 2:
  Average throughput: 684.26 Mbit/s
  95th percentile per-packet one-way delay: 284.004 ms
  Loss rate: 4.20%
-- Flow 3:
  Average throughput: 653.19 Mbit/s
  95th percentile per-packet one-way delay: 279.321 ms
  Loss rate: 3.76%
Run 1: Report of FillP — Data Link

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

Throughput (Mbit/s)

Time (s)

Flow 1 Ingress (mean 766.49 Mbit/s)
Flow 1 Egress (mean 724.70 Mbit/s)
Flow 2 Ingress (mean 714.34 Mbit/s)
Flow 2 Egress (mean 654.26 Mbit/s)
Flow 3 Ingress (mean 678.77 Mbit/s)
Flow 3 Egress (mean 653.19 Mbit/s)

Packet delay (ms)

Time (s)

Flow 1 (95th percentile 292.50 ms)
Flow 2 (95th percentile 284.00 ms)
Flow 3 (95th percentile 279.32 ms)

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Run 2: Statistics of FillP


# Below is generated by plot.py at 2018-04-18 19:09:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1298.53 Mbit/s
95th percentile per-packet one-way delay: 288.565 ms
Loss rate: 5.43%
-- Flow 1:
Average throughput: 639.88 Mbit/s
95th percentile per-packet one-way delay: 290.124 ms
Loss rate: 5.04%
-- Flow 2:
Average throughput: 662.07 Mbit/s
95th percentile per-packet one-way delay: 294.642 ms
Loss rate: 6.16%
-- Flow 3:
Average throughput: 657.72 Mbit/s
95th percentile per-packet one-way delay: 214.180 ms
Loss rate: 5.11%
Run 2: Report of FillP — Data Link

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

**Throughput (Mbps)**
- Flow 1 Ingress (mean 673.83 Mbps)
- Flow 1 Egress (mean 639.88 Mbps)
- Flow 2 Ingress (mean 705.54 Mbps)
- Flow 2 Egress (mean 662.07 Mbps)
- Flow 3 Ingress (mean 693.19 Mbps)
- Flow 3 Egress (mean 657.72 Mbps)

**Per-packet delay (ms)**
- Flow 1 (95th percentile 290.12 ms)
- Flow 2 (95th percentile 294.64 ms)
- Flow 3 (95th percentile 214.18 ms)
Run 3: Statistics of FillP

Start at: 2018-04-18 13:34:53
End at: 2018-04-18 13:35:23

# Below is generated by plot.py at 2018-04-18 19:11:18
# Datalink statistics
# Total of 3 flows:
# Average throughput: 1370.95 Mbit/s
95th percentile per-packet one-way delay: 268.544 ms
Loss rate: 4.25%
-- Flow 1:
Average throughput: 710.85 Mbit/s
95th percentile per-packet one-way delay: 285.873 ms
Loss rate: 5.78%
-- Flow 2:
Average throughput: 676.92 Mbit/s
95th percentile per-packet one-way delay: 167.561 ms
Loss rate: 3.30%
-- Flow 3:
Average throughput: 632.41 Mbit/s
95th percentile per-packet one-way delay: 272.182 ms
Loss rate: 0.84%
Run 3: Report of FillP — Data Link

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

- Flow 1 ingress (mean 754.49 Mbps)
- Flow 1 egress (mean 710.85 Mbps)
- Flow 2 ingress (mean 700.04 Mbps)
- Flow 2 egress (mean 676.92 Mbps)
- Flow 3 ingress (mean 637.92 Mbps)
- Flow 3 egress (mean 632.41 Mbps)

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

- Flow 1 (95th percentile 285.87 ms)
- Flow 2 (95th percentile 167.56 ms)
- Flow 3 (95th percentile 272.18 ms)
Run 4: Statistics of FillP


# Below is generated by plot.py at 2018-04-18 19:12:06  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 1378.48 Mbit/s  
  95th percentile per-packet one-way delay: 264.111 ms  
  Loss rate: 4.77%  
-- Flow 1:  
  Average throughput: 732.72 Mbit/s  
  95th percentile per-packet one-way delay: 276.170 ms  
  Loss rate: 4.14%  
-- Flow 2:  
  Average throughput: 678.88 Mbit/s  
  95th percentile per-packet one-way delay: 171.224 ms  
  Loss rate: 4.32%  
-- Flow 3:  
  Average throughput: 585.83 Mbit/s  
  95th percentile per-packet one-way delay: 259.697 ms  
  Loss rate: 8.06%
Run 4: Report of FillP — Data Link
Run 5: Statistics of FillP

Start at: 2018-04-18 14:05:48
End at: 2018-04-18 14:06:18

# Below is generated by plot.py at 2018-04-18 19:12:06
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1292.41 Mbit/s
  95th percentile per-packet one-way delay: 293.406 ms
  Loss rate: 4.94%
  -- Flow 1:
    Average throughput: 733.29 Mbit/s
    95th percentile per-packet one-way delay: 293.774 ms
    Loss rate: 5.35%
  -- Flow 2:
    Average throughput: 518.98 Mbit/s
    95th percentile per-packet one-way delay: 297.571 ms
    Loss rate: 3.94%
  -- Flow 3:
    Average throughput: 645.68 Mbit/s
    95th percentile per-packet one-way delay: 281.213 ms
    Loss rate: 5.16%
Run 5: Report of FillP — Data Link

Graph 1: Throughput (Mbps/s)
- Flow 1 ingress (mean 774.74 Mbps/s)
- Flow 1 egress (mean 733.29 Mbps/s)
- Flow 2 ingress (mean 540.23 Mbps/s)
- Flow 2 egress (mean 518.98 Mbps/s)
- Flow 3 ingress (mean 680.75 Mbps/s)
- Flow 3 egress (mean 645.68 Mbps/s)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 293.77 ms)
- Flow 2 (95th percentile 297.57 ms)
- Flow 3 (95th percentile 281.21 ms)
Run 6: Statistics of FillP

Start at: 2018-04-18 14:21:07
End at: 2018-04-18 14:21:37

# Below is generated by plot.py at 2018-04-18 19:13:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1366.87 Mbit/s
  95th percentile per-packet one-way delay: 295.447 ms
  Loss rate: 6.90%
-- Flow 1:
  Average throughput: 697.86 Mbit/s
  95th percentile per-packet one-way delay: 303.973 ms
  Loss rate: 7.48%
-- Flow 2:
  Average throughput: 664.17 Mbit/s
  95th percentile per-packet one-way delay: 280.451 ms
  Loss rate: 6.57%
-- Flow 3:
  Average throughput: 685.20 Mbit/s
  95th percentile per-packet one-way delay: 252.837 ms
  Loss rate: 5.76%
Run 6: Report of FillP — Data Link

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Graph 1: Throughput (Mbps/s)
- Flow 1 Ingress (mean 754.27 Mbps/s)
- Flow 1 Egress (mean 697.86 Mbps/s)
- Flow 2 Ingress (mean 710.81 Mbps/s)
- Flow 2 Egress (mean 664.13 Mbps/s)
- Flow 3 Ingress (mean 727.00 Mbps/s)
- Flow 3 Egress (mean 685.20 Mbps/s)

Graph 2: Packet delay (ms)
- Flow 1 (95th percentile 303.97 ms)
- Flow 2 (95th percentile 280.45 ms)
- Flow 3 (95th percentile 252.84 ms)

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Run 7: Statistics of FillP

Start at: 2018-04-18 14:36:38
End at: 2018-04-18 14:37:08

# Below is generated by plot.py at 2018-04-18 19:13:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1022.30 Mbit/s
95th percentile per-packet one-way delay: 291.103 ms
Loss rate: 5.97%
-- Flow 1:
Average throughput: 594.28 Mbit/s
95th percentile per-packet one-way delay: 287.827 ms
Loss rate: 5.98%
-- Flow 2:
Average throughput: 281.01 Mbit/s
95th percentile per-packet one-way delay: 292.033 ms
Loss rate: 2.91%
-- Flow 3:
Average throughput: 727.67 Mbit/s
95th percentile per-packet one-way delay: 299.392 ms
Loss rate: 8.18%
Run 7: Report of FillP — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows. The graphs display data for Flow 1, Flow 2, and Flow 3. The labels for the graphs indicate the mean throughput and 95th percentile delay for each flow.]

- Flow 1 Ingress (mean 652.04 Mbps) - Flow 1 Egress (mean 594.28 Mbps)
- Flow 2 Ingress (mean 289.41 Mbps) - Flow 2 Egress (mean 283.01 Mbps)
- Flow 3 Ingress (mean 792.50 Mbps) - Flow 3 Egress (mean 727.67 Mbps)
Run 8: Statistics of FillP

Start at: 2018-04-18 14:51:50
End at: 2018-04-18 14:52:20

# Below is generated by plot.py at 2018-04-18 19:15:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1433.82 Mbit/s
95th percentile per-packet one-way delay: 282.406 ms
Loss rate: 3.95%
-- Flow 1:
Average throughput: 740.17 Mbit/s
95th percentile per-packet one-way delay: 291.774 ms
Loss rate: 4.46%
-- Flow 2:
Average throughput: 705.11 Mbit/s
95th percentile per-packet one-way delay: 185.446 ms
Loss rate: 2.80%
-- Flow 3:
Average throughput: 677.27 Mbit/s
95th percentile per-packet one-way delay: 152.829 ms
Loss rate: 4.63%
Run 8: Report of FillP — Data Link

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

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Run 9: Statistics of FillP

Start at: 2018-04-18 15:07:09
End at: 2018-04-18 15:07:39

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1422.09 Mbit/s
95th percentile per-packet one-way delay: 290.526 ms
Loss rate: 6.47%
-- Flow 1:
Average throughput: 727.57 Mbit/s
95th percentile per-packet one-way delay: 285.775 ms
Loss rate: 7.62%
-- Flow 2:
Average throughput: 703.21 Mbit/s
95th percentile per-packet one-way delay: 298.931 ms
Loss rate: 5.19%
-- Flow 3:
Average throughput: 683.46 Mbit/s
95th percentile per-packet one-way delay: 256.299 ms
Loss rate: 5.34%
Run 9: Report of FillP — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 787.62 Mbps)
  - Flow 1 egress (mean 727.57 Mbps)
  - Flow 2 ingress (mean 741.79 Mbps)
  - Flow 2 egress (mean 703.23 Mbps)
  - Flow 3 ingress (mean 726.23 Mbps)
  - Flow 3 egress (mean 683.46 Mbps)

- **Packet delay (ms)**
  - Flow 1 (95th percentile 285.77 ms)
  - Flow 2 (95th percentile 298.93 ms)
  - Flow 3 (95th percentile 256.30 ms)
Run 10: Statistics of FillP

End at: 2018-04-18 15:23:05

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 947.80 Mbit/s
  95th percentile per-packet one-way delay: 293.908 ms
  Loss rate: 5.19%
-- Flow 1:
  Average throughput: 234.36 Mbit/s
  95th percentile per-packet one-way delay: 295.974 ms
  Loss rate: 5.37%
-- Flow 2:
  Average throughput: 763.42 Mbit/s
  95th percentile per-packet one-way delay: 280.302 ms
  Loss rate: 2.54%
-- Flow 3:
  Average throughput: 620.22 Mbit/s
  95th percentile per-packet one-way delay: 311.179 ms
  Loss rate: 10.98%
Run 10: Report of FillIP — Data Link

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

Flow 1 ingress (mean 247.66 Mbps/s) — Flow 1 egress (mean 234.36 Mbps/s)
Flow 2 ingress (mean 783.31 Mbps/s) — Flow 2 egress (mean 763.42 Mbps/s)
Flow 3 ingress (mean 696.75 Mbps/s) — Flow 3 egress (mean 620.22 Mbps/s)

![Graph 2: Percentile Latency (ms) vs Time (s)]

Flow 1 (95th percentile 295.97 ms) — Flow 2 (95th percentile 280.30 ms) — Flow 3 (95th percentile 311.10 ms)
Run 1: Statistics of Indigo-1-32

Start at: 2018-04-18 13:07:17
End at: 2018-04-18 13:07:47

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 270.96 Mbit/s
95th percentile per-packet one-way delay: 60.309 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 146.03 Mbit/s
95th percentile per-packet one-way delay: 57.945 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 129.32 Mbit/s
95th percentile per-packet one-way delay: 60.515 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 123.08 Mbit/s
95th percentile per-packet one-way delay: 63.800 ms
Loss rate: 0.19%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32


# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 275.08 Mbit/s
  95th percentile per-packet one-way delay: 55.869 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 147.86 Mbit/s
  95th percentile per-packet one-way delay: 54.276 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 137.03 Mbit/s
  95th percentile per-packet one-way delay: 56.376 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 112.30 Mbit/s
  95th percentile per-packet one-way delay: 60.056 ms
  Loss rate: 0.00%
Run 2: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 147.85 Mbit/s)
- Flow 1 egress (mean 147.86 Mbit/s)
- Flow 2 ingress (mean 137.02 Mbit/s)
- Flow 2 egress (mean 137.03 Mbit/s)
- Flow 3 ingress (mean 122.24 Mbit/s)
- Flow 3 egress (mean 122.30 Mbit/s)
Run 3: Statistics of Indigo-1-32

Start at: 2018-04-18 13:38:16
End at: 2018-04-18 13:38:46

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 247.86 Mbit/s
  95th percentile per-packet one-way delay: 52.252 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 135.16 Mbit/s
  95th percentile per-packet one-way delay: 51.672 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 122.05 Mbit/s
  95th percentile per-packet one-way delay: 52.423 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 98.49 Mbit/s
  95th percentile per-packet one-way delay: 53.436 ms
  Loss rate: 0.00%
Run 3: Report of Indigo-1-32 — Data Link

![Graph showing network throughput and packet delay over time for flows 1, 2, and 3.]
Run 4: Statistics of Indigo-1-32

End at: 2018-04-18 13:54:14

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 293.86 Mbit/s
95th percentile per-packet one-way delay: 65.682 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 155.77 Mbit/s
95th percentile per-packet one-way delay: 62.172 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 147.33 Mbit/s
95th percentile per-packet one-way delay: 65.371 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 126.67 Mbit/s
95th percentile per-packet one-way delay: 82.446 ms
Loss rate: 0.01%
Run 4: Report of Indigo-1-32 — Data Link

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

- **Flow 1 ingress (mean 155.79 Mbit/s)**
- **Flow 1 egress (mean 155.77 Mbit/s)**
- **Flow 2 ingress (mean 147.37 Mbit/s)**
- **Flow 2 egress (mean 147.33 Mbit/s)**
- **Flow 3 ingress (mean 126.76 Mbit/s)**
- **Flow 3 egress (mean 126.67 Mbit/s)**

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

- **Flow 1 (95th percentile 62.17 ms)**
- **Flow 2 (95th percentile 65.37 ms)**
- **Flow 3 (95th percentile 82.45 ms)**
Run 5: Statistics of Indigo-1-32

Start at: 2018-04-18 14:09:07
End at: 2018-04-18 14:09:37

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 283.61 Mbit/s
  95th percentile per-packet one-way delay: 54.545 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 153.53 Mbit/s
  95th percentile per-packet one-way delay: 53.649 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 138.89 Mbit/s
  95th percentile per-packet one-way delay: 54.789 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 119.35 Mbit/s
  95th percentile per-packet one-way delay: 56.389 ms
  Loss rate: 0.00%
Run 5: Report of Indigo-1-32 — Data Link

![Data Link Diagram]

Throughput (Mbps):
- Flow 1 ingress (mean 153.53 Mbps)
- Flow 1 egress (mean 153.53 Mbps)
- Flow 2 ingress (mean 138.89 Mbps)
- Flow 2 egress (mean 138.89 Mbps)
- Flow 3 ingress (mean 119.35 Mbps)
- Flow 3 egress (mean 119.35 Mbps)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 53.65 ms)
- Flow 2 (95th percentile 54.79 ms)
- Flow 3 (95th percentile 56.39 ms)

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Run 6: Statistics of Indigo-1-32

Start at: 2018-04-18 14:24:29
End at: 2018-04-18 14:24:59

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 298.42 Mbit/s
95th percentile per-packet one-way delay: 65.889 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 163.56 Mbit/s
95th percentile per-packet one-way delay: 64.140 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 143.05 Mbit/s
95th percentile per-packet one-way delay: 66.030 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 124.99 Mbit/s
95th percentile per-packet one-way delay: 68.116 ms
Loss rate: 0.01%
Run 6: Report of Indigo-1-32 — Data Link
Run 7: Statistics of Indigo-1-32

End at: 2018-04-18 14:40:17

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 279.20 Mbit/s
  95th percentile per-packet one-way delay: 53.439 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 149.19 Mbit/s
  95th percentile per-packet one-way delay: 52.713 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 136.86 Mbit/s
  95th percentile per-packet one-way delay: 53.916 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 122.53 Mbit/s
  95th percentile per-packet one-way delay: 54.291 ms
  Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 149.16 Mbps)
- Flow 1 egress (mean 149.19 Mbps)
- Flow 2 ingress (mean 136.86 Mbps)
- Flow 2 egress (mean 136.86 Mbps)
- Flow 3 ingress (mean 122.53 Mbps)
- Flow 3 egress (mean 122.53 Mbps)

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

- Flow 1 (95th percentile 52.71 ms)
- Flow 2 (95th percentile 53.92 ms)
- Flow 3 (95th percentile 54.29 ms)
Run 8: Statistics of Indigo-1-32


# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 271.57 Mbit/s
  95th percentile per-packet one-way delay: 54.927 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 144.23 Mbit/s
  95th percentile per-packet one-way delay: 53.728 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 134.66 Mbit/s
  95th percentile per-packet one-way delay: 55.448 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 118.58 Mbit/s
  95th percentile per-packet one-way delay: 57.037 ms
  Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 144.24 Mbit/s)
- Flow 1 egress (mean 144.23 Mbit/s)
- Flow 2 ingress (mean 134.67 Mbit/s)
- Flow 2 egress (mean 134.66 Mbit/s)
- Flow 3 ingress (mean 118.60 Mbit/s)
- Flow 3 egress (mean 118.58 Mbit/s)

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

- Flow 1 (95th percentile 53.73 ms)
- Flow 2 (95th percentile 55.45 ms)
- Flow 3 (95th percentile 57.04 ms)
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-18 15:10:29
End at: 2018-04-18 15:10:59

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 286.39 Mbit/s
95th percentile per-packet one-way delay: 60.569 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 159.80 Mbit/s
95th percentile per-packet one-way delay: 58.089 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 135.06 Mbit/s
95th percentile per-packet one-way delay: 61.107 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 115.47 Mbit/s
95th percentile per-packet one-way delay: 65.343 ms
Loss rate: 0.01%
Run 9: Report of Indigo-1-32 — Data Link

[Graph showing throughput and packet delay over time]
Run 10: Statistics of Indigo-1-32

Start at: 2018-04-18 15:25:38
End at: 2018-04-18 15:26:08

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 290.61 Mbit/s
95th percentile per-packet one-way delay: 67.033 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 158.00 Mbit/s
95th percentile per-packet one-way delay: 65.940 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 144.37 Mbit/s
95th percentile per-packet one-way delay: 67.946 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 113.52 Mbit/s
95th percentile per-packet one-way delay: 69.324 ms
Loss rate: 0.01%
Run 10: Report of Indigo-1-32 — Data Link

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

- Flow 1 ingress (mean 158.03 Mbit/s)
- Flow 1 egress (mean 158.00 Mbit/s)
- Flow 2 ingress (mean 144.40 Mbit/s)
- Flow 2 egress (mean 144.37 Mbit/s)
- Flow 3 ingress (mean 113.59 Mbit/s)
- Flow 3 egress (mean 113.52 Mbit/s)

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

- Flow 1 (95th percentile 65.94 ms)
- Flow 2 (95th percentile 67.95 ms)
- Flow 3 (95th percentile 69.32 ms)
Run 1: Statistics of PCC-Vivace

End at: 2018-04-18 12:56:20

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 437.38 Mbit/s
  95th percentile per-packet one-way delay: 54.337 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 260.33 Mbit/s
  95th percentile per-packet one-way delay: 58.256 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 222.25 Mbit/s
  95th percentile per-packet one-way delay: 53.556 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 86.57 Mbit/s
  95th percentile per-packet one-way delay: 50.692 ms
  Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 260.33 Mbit/s)**
- **Flow 1 egress (mean 260.33 Mbit/s)**
- **Flow 2 ingress (mean 222.24 Mbit/s)**
- **Flow 2 egress (mean 222.25 Mbit/s)**
- **Flow 3 ingress (mean 86.56 Mbit/s)**
- **Flow 3 egress (mean 86.57 Mbit/s)**

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

- **Flow 1 (95th percentile 58.26 ms)**
- **Flow 2 (95th percentile 53.56 ms)**
- **Flow 3 (95th percentile 50.69 ms)**
Run 2: Statistics of PCC-Vivace

Start at: 2018-04-18 13:11:03
End at: 2018-04-18 13:11:33

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 481.38 Mbit/s
  95th percentile per-packet one-way delay: 54.793 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 288.52 Mbit/s
  95th percentile per-packet one-way delay: 59.556 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 244.23 Mbit/s
  95th percentile per-packet one-way delay: 53.876 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 93.11 Mbit/s
  95th percentile per-packet one-way delay: 51.269 ms
  Loss rate: 0.00%
Run 2: Report of PCC-Vivace — Data Link

Graph 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 288.53 Mbps)
- Flow 1 egress (mean 288.52 Mbps)
- Flow 2 ingress (mean 244.25 Mbps)
- Flow 2 egress (mean 244.23 Mbps)
- Flow 3 ingress (mean 93.12 Mbps)
- Flow 3 egress (mean 93.11 Mbps)

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Run 3: Statistics of PCC-Vivace

Start at: 2018-04-18 13:26:27
End at: 2018-04-18 13:26:57

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 472.46 Mbit/s
  95th percentile per-packet one-way delay: 56.595 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 235.72 Mbit/s
  95th percentile per-packet one-way delay: 54.799 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 266.06 Mbit/s
  95th percentile per-packet one-way delay: 76.301 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 182.71 Mbit/s
  95th percentile per-packet one-way delay: 50.759 ms
  Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 235.66 Mbit/s)
- Flow 1 egress (mean 235.72 Mbit/s)
- Flow 2 ingress (mean 266.05 Mbit/s)
- Flow 2 egress (mean 266.06 Mbit/s)
- Flow 3 ingress (mean 182.70 Mbit/s)
- Flow 3 egress (mean 182.71 Mbit/s)

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

- Flow 1 (95th percentile 54.80 ms)
- Flow 2 (95th percentile 76.30 ms)
- Flow 3 (95th percentile 50.76 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2018-04-18 13:42:00
End at: 2018-04-18 13:42:30

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 474.88 Mbit/s
  95th percentile per-packet one-way delay: 55.664 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 244.46 Mbit/s
  95th percentile per-packet one-way delay: 62.600 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 259.02 Mbit/s
  95th percentile per-packet one-way delay: 51.117 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 177.27 Mbit/s
  95th percentile per-packet one-way delay: 51.867 ms
  Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace


# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 442.22 Mbit/s
95th percentile per-packet one-way delay: 70.642 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 283.63 Mbit/s
95th percentile per-packet one-way delay: 72.878 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 223.37 Mbit/s
95th percentile per-packet one-way delay: 52.013 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 30.66 Mbit/s
95th percentile per-packet one-way delay: 50.341 ms
Loss rate: 0.00%
Run 5: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 283.62 Mbps)
  - Flow 1 egress (mean 283.63 Mbps)
  - Flow 2 ingress (mean 223.36 Mbps)
  - Flow 2 egress (mean 223.37 Mbps)
  - Flow 3 ingress (mean 30.66 Mbps)
  - Flow 3 egress (mean 30.66 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 72.88 ms)
  - Flow 2 (95th percentile 52.01 ms)
  - Flow 3 (95th percentile 50.34 ms)
Run 6: Statistics of PCC-Vivace

Start at: 2018-04-18 14:12:48
End at: 2018-04-18 14:13:18

# Below is generated by plot.py at 2018-04-18 19:34:16
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 448.16 Mbit/s
  95th percentile per-packet one-way delay: 54.157 ms
  Loss rate: 0.00%
  -- Flow 1:
     Average throughput: 254.77 Mbit/s
     95th percentile per-packet one-way delay: 55.235 ms
     Loss rate: 0.00%
  -- Flow 2:
     Average throughput: 250.16 Mbit/s
     95th percentile per-packet one-way delay: 53.316 ms
     Loss rate: 0.00%
  -- Flow 3:
     Average throughput: 82.43 Mbit/s
     95th percentile per-packet one-way delay: 50.745 ms
     Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 254.77 Mbit/s)
- Flow 1 egress (mean 254.77 Mbit/s)
- Flow 2 ingress (mean 250.15 Mbit/s)
- Flow 2 egress (mean 250.16 Mbit/s)
- Flow 3 ingress (mean 82.42 Mbit/s)
- Flow 3 egress (mean 82.43 Mbit/s)
Run 7: Statistics of PCC-Vivace

Start at: 2018-04-18 14:28:11
End at: 2018-04-18 14:28:41

# Below is generated by plot.py at 2018-04-18 19:34:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 470.64 Mbit/s
  95th percentile per-packet one-way delay: 234.117 ms
  Loss rate: 1.22%
-- Flow 1:
  Average throughput: 278.63 Mbit/s
  95th percentile per-packet one-way delay: 239.381 ms
  Loss rate: 2.04%
-- Flow 2:
  Average throughput: 204.05 Mbit/s
  95th percentile per-packet one-way delay: 50.968 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 172.26 Mbit/s
  95th percentile per-packet one-way delay: 51.843 ms
  Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 284.45 Mbps)
- Flow 1 egress (mean 278.63 Mbps)
- Flow 2 ingress (mean 204.04 Mbps)
- Flow 2 egress (mean 204.05 Mbps)
- Flow 3 ingress (mean 172.27 Mbps)
- Flow 3 egress (mean 172.26 Mbps)

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

- Flow 1 (95th percentile 239.38 ms)
- Flow 2 (95th percentile 50.97 ms)
- Flow 3 (95th percentile 51.84 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-04-18 14:43:25
End at: 2018-04-18 14:43:55

# Below is generated by plot.py at 2018-04-18 19:35:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.20 Mbit/s
95th percentile per-packet one-way delay: 53.133 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 252.94 Mbit/s
95th percentile per-packet one-way delay: 51.262 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 241.41 Mbit/s
95th percentile per-packet one-way delay: 68.232 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 102.89 Mbit/s
95th percentile per-packet one-way delay: 50.307 ms
Loss rate: 0.00%
Run 8: Report of PCC-Vivace — Data Link
Run 9: Statistics of PCC-Vivace

Start at: 2018-04-18 14:58:51
End at: 2018-04-18 14:59:21

# Below is generated by plot.py at 2018-04-18 19:35:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 351.24 Mbit/s
  95th percentile per-packet one-way delay: 51.709 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 240.93 Mbit/s
  95th percentile per-packet one-way delay: 51.444 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 121.76 Mbit/s
  95th percentile per-packet one-way delay: 52.532 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 89.49 Mbit/s
  95th percentile per-packet one-way delay: 51.067 ms
  Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link
Run 10: Statistics of PCC-Vivace

End at: 2018-04-18 15:14:43

# Below is generated by plot.py at 2018-04-18 19:35:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 435.26 Mbit/s
95th percentile per-packet one-way delay: 51.229 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 250.68 Mbit/s
95th percentile per-packet one-way delay: 51.229 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 225.71 Mbit/s
95th percentile per-packet one-way delay: 51.243 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 105.28 Mbit/s
95th percentile per-packet one-way delay: 51.201 ms
Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 250.68 Mbit/s)
- Flow 1 egress (mean 250.68 Mbit/s)
- Flow 2 ingress (mean 225.71 Mbit/s)
- Flow 2 egress (mean 225.71 Mbit/s)
- Flow 3 ingress (mean 105.28 Mbit/s)
- Flow 3 egress (mean 105.28 Mbit/s)
Run 1: Statistics of PCC-Expr

Start at: 2018-04-18 13:02:00
End at: 2018-04-18 13:02:30
Run 1: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 2: Statistics of PCC-Expr

Start at: 2018-04-18 13:17:31
End at: 2018-04-18 13:18:01
Run 2: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 3: Statistics of PCC-Expr

End at: 2018-04-18 13:33:26
Run 3: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 4: Statistics of PCC-Expr

Run 4: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing

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Run 5: Statistics of PCC-Expr

Start at: 2018-04-18 14:03:51
End at: 2018-04-18 14:04:21
Run 5: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 6: Statistics of PCC-Expr

Start at: 2018-04-18 14:19:10
End at: 2018-04-18 14:19:40
Run 6: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 7: Statistics of PCC-Expr

Start at: 2018-04-18 14:34:40
End at: 2018-04-18 14:35:10
Run 7: Report of PCC-Expr — Data Link

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Run 8: Statistics of PCC-Expr

Start at: 2018-04-18 14:49:52
End at: 2018-04-18 14:50:22
Run 8: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 9: Statistics of PCC-Expr

Start at: 2018-04-18 15:05:11
End at: 2018-04-18 15:05:41
Run 9: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing
Run 10: Statistics of PCC-Expr

Start at: 2018-04-18 15:20:38
End at: 2018-04-18 15:21:08
Run 10: Report of PCC-Expr — Data Link

Figure is missing

Figure is missing