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).
test from GCE Sydney Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)

---

test from GCE Sydney Ethernet to GCE Tokyo Ethernet, 10 runs of 30s each per scheme
3 flows with 10s interval between flows
<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></td>
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<td>210.06</td>
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<td>N/A</td>
<td>N/A</td>
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</table>
Run 1: Statistics of TCP BBR

End at: 2018-04-18 12:49:41

# Below is generated by plot.py at 2018-04-18 17:21:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.48 Mbit/s
95th percentile per-packet one-way delay: 65.309 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 209.44 Mbit/s
95th percentile per-packet one-way delay: 64.756 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 204.13 Mbit/s
95th percentile per-packet one-way delay: 65.243 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 205.46 Mbit/s
95th percentile per-packet one-way delay: 66.088 ms
Loss rate: 0.00%
Run 1: Report of TCP BBR — Data Link
Run 2: Statistics of TCP BBR

End at: 2018-04-18 13:05:23

# Below is generated by plot.py at 2018-04-18 17:21:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 420.38 Mbit/s
  95th percentile per-packet one-way delay: 64.767 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 214.48 Mbit/s
  95th percentile per-packet one-way delay: 62.705 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 209.63 Mbit/s
  95th percentile per-packet one-way delay: 63.820 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 199.03 Mbit/s
  95th percentile per-packet one-way delay: 68.225 ms
  Loss rate: 0.00%
Run 2: Report of TCP BBR — Data Link

![Graph of Throughput and Per-packet one-way delay]

- Flow 1 ingress (mean 214.50 Mbit/s)
- Flow 1 egress (mean 214.48 Mbit/s)
- Flow 2 ingress (mean 209.65 Mbit/s)
- Flow 2 egress (mean 209.63 Mbit/s)
- Flow 3 ingress (mean 199.08 Mbit/s)
- Flow 3 egress (mean 199.03 Mbit/s)
Run 3: Statistics of TCP BBR

Start at: 2018-04-18 13:20:07
End at: 2018-04-18 13:20:37

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 424.35 Mbit/s
  95th percentile per-packet one-way delay: 66.282 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 216.87 Mbit/s
  95th percentile per-packet one-way delay: 63.988 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 212.98 Mbit/s
  95th percentile per-packet one-way delay: 65.266 ms
  Loss rate: 0.04%
-- Flow 3:
  Average throughput: 197.98 Mbit/s
  95th percentile per-packet one-way delay: 71.565 ms
  Loss rate: 0.06%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Start at: 2018-04-18 13:35:20
End at: 2018-04-18 13:35:50

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 416.05 Mbit/s
95th percentile per-packet one-way delay: 62.473 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 208.48 Mbit/s
95th percentile per-packet one-way delay: 60.901 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 213.41 Mbit/s
95th percentile per-packet one-way delay: 63.362 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 197.09 Mbit/s
95th percentile per-packet one-way delay: 62.994 ms
Loss rate: 0.00%
Run 5: Statistics of TCP BBR

End at: 2018-04-18 13:51:17

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 410.95 Mbit/s
  95th percentile per-packet one-way delay: 66.320 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 209.23 Mbit/s
  95th percentile per-packet one-way delay: 64.977 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 203.49 Mbit/s
  95th percentile per-packet one-way delay: 66.469 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 199.42 Mbit/s
  95th percentile per-packet one-way delay: 68.687 ms
  Loss rate: 0.11%
Run 6: Statistics of TCP BBR

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

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 414.66 Mbit/s
95th percentile per-packet one-way delay: 63.687 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 207.51 Mbit/s
95th percentile per-packet one-way delay: 63.816 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 207.32 Mbit/s
95th percentile per-packet one-way delay: 62.847 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 208.58 Mbit/s
95th percentile per-packet one-way delay: 64.223 ms
Loss rate: 0.06%
Run 6: Report of TCP BBR — Data Link

![Graph showing network throughput and packet delay over time for three flows.](Image)

Legend:
- Flow 1 ingress (mean 207.56 Mbit/s)
- Flow 1 egress (mean 207.51 Mbit/s)
- Flow 2 ingress (mean 207.42 Mbit/s)
- Flow 2 egress (mean 207.32 Mbit/s)
- Flow 3 ingress (mean 208.85 Mbit/s)
- Flow 3 egress (mean 208.58 Mbit/s)

Legend for packet delay:
- Flow 1 (95th percentile 63.82 ms)
- Flow 2 (95th percentile 62.85 ms)
- Flow 3 (95th percentile 64.22 ms)
Run 7: Statistics of TCP BBR

Start at: 2018-04-18 14:21:45
End at: 2018-04-18 14:22:15

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 415.03 Mbit/s
  95th percentile per-packet one-way delay: 64.539 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 209.87 Mbit/s
  95th percentile per-packet one-way delay: 63.710 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 203.34 Mbit/s
  95th percentile per-packet one-way delay: 65.025 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 210.42 Mbit/s
  95th percentile per-packet one-way delay: 64.922 ms
  Loss rate: 0.00%
Run 7: Report of TCP BBR — Data Link

**Throughput (Mbps) vs Time (s)**

- **Flow 1 Ingress** (mean 209.87 Mbps)
- **Flow 1 Egress** (mean 209.87 Mbps)
- **Flow 2 Ingress** (mean 203.47 Mbps)
- **Flow 2 Egress** (mean 201.34 Mbps)
- **Flow 3 Ingress** (mean 210.60 Mbps)
- **Flow 3 Egress** (mean 210.42 Mbps)

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

- **Flow 1** (95th percentile 63.71 ms)
- **Flow 2** (95th percentile 65.03 ms)
- **Flow 3** (95th percentile 64.92 ms)
Run 8: Statistics of TCP BBR

Start at: 2018-04-18 14:37:16
End at: 2018-04-18 14:37:46

# Below is generated by plot.py at 2018-04-18 17:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 417.64 Mbit/s
  95th percentile per-packet one-way delay: 63.940 ms
  Loss rate: 0.01%
  -- Flow 1:
  Average throughput: 210.36 Mbit/s
  95th percentile per-packet one-way delay: 63.106 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 211.18 Mbit/s
  95th percentile per-packet one-way delay: 64.255 ms
  Loss rate: 0.01%
  -- Flow 3:
  Average throughput: 200.93 Mbit/s
  95th percentile per-packet one-way delay: 64.552 ms
  Loss rate: 0.06%
Run 8: Report of TCP BBR — Data Link
Run 9: Statistics of TCP BBR

Start at: 2018-04-18 14:53:03
End at: 2018-04-18 14:53:33

# Below is generated by plot.py at 2018-04-18 17:28:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 403.05 Mbit/s
95th percentile per-packet one-way delay: 70.723 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 204.90 Mbit/s
95th percentile per-packet one-way delay: 69.629 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 205.42 Mbit/s
95th percentile per-packet one-way delay: 69.960 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 184.78 Mbit/s
95th percentile per-packet one-way delay: 73.071 ms
Loss rate: 0.00%
Run 9: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 204.91 Mbit/s)
- Flow 1 egress (mean 204.90 Mbit/s)
- Flow 2 ingress (mean 205.69 Mbit/s)
- Flow 2 egress (mean 205.42 Mbit/s)
- Flow 3 ingress (mean 185.11 Mbit/s)
- Flow 3 egress (mean 184.78 Mbit/s)

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

- Flow 1 (95th percentile 69.63 ms)
- Flow 2 (95th percentile 69.96 ms)
- Flow 3 (95th percentile 73.07 ms)
Run 10: Statistics of TCP BBR

Start at: 2018-04-18 15:08:16
End at: 2018-04-18 15:08:46

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 418.67 Mbit/s
  95th percentile per-packet one-way delay: 62.311 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 209.44 Mbit/s
  95th percentile per-packet one-way delay: 60.667 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 211.50 Mbit/s
  95th percentile per-packet one-way delay: 62.603 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 206.40 Mbit/s
  95th percentile per-packet one-way delay: 64.049 ms
  Loss rate: 0.00%
Run 10: Report of TCP BBR — Data Link

\[\text{Throughput (Mbit/s)}\]

\[\text{Time (s)}\]

- Flow 1 ingress (mean 209.51 Mbit/s)
- Flow 1 egress (mean 209.44 Mbit/s)
- Flow 2 ingress (mean 211.52 Mbit/s)
- Flow 2 egress (mean 211.50 Mbit/s)
- Flow 3 ingress (mean 206.15 Mbit/s)
- Flow 3 egress (mean 206.40 Mbit/s)

\[\text{Per packet one way delay (ms)}\]

\[\text{Time (s)}\]

- Flow 1 (95th percentile 60.67 ms)
- Flow 2 (95th percentile 62.60 ms)
- Flow 3 (95th percentile 64.05 ms)
Run 1: Statistics of TCP Cubic

Start at: 2018-04-18 12:53:56
End at: 2018-04-18 12:54:26

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.97 Mbit/s
95th percentile per-packet one-way delay: 65.361 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 213.60 Mbit/s
95th percentile per-packet one-way delay: 65.076 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 211.56 Mbit/s
95th percentile per-packet one-way delay: 66.004 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 4.53 Mbit/s
95th percentile per-packet one-way delay: 60.060 ms
Loss rate: 0.27%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-04-18 13:09:10
End at: 2018-04-18 13:09:40

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 378.33 Mbit/s
95th percentile per-packet one-way delay: 64.617 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 189.58 Mbit/s
95th percentile per-packet one-way delay: 65.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 201.26 Mbit/s
95th percentile per-packet one-way delay: 64.571 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 165.13 Mbit/s
95th percentile per-packet one-way delay: 61.173 ms
Loss rate: 0.00%
Run 2: Report of TCP Cubic — Data Link

![Graph showing throughput and per packet one way delay for flows 1, 2, and 3.]

- Flow 1 ingress (mean 189.58 Mbit/s)
- Flow 1 egress (mean 189.58 Mbit/s)
- Flow 2 ingress (mean 201.26 Mbit/s)
- Flow 2 egress (mean 201.26 Mbit/s)
- Flow 3 ingress (mean 165.13 Mbit/s)
- Flow 3 egress (mean 165.13 Mbit/s)
Run 3: Statistics of TCP Cubic

End at: 2018-04-18 13:25:05

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 247.83 Mbit/s
95th percentile per-packet one-way delay: 60.796 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 173.44 Mbit/s
95th percentile per-packet one-way delay: 61.363 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 51.34 Mbit/s
95th percentile per-packet one-way delay: 51.755 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 121.19 Mbit/s
95th percentile per-packet one-way delay: 56.313 ms
Loss rate: 0.00%
Run 3: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 173.45 Mbps)
  - Flow 1 egress (mean 173.44 Mbps)
  - Flow 2 ingress (mean 51.34 Mbps)
  - Flow 2 egress (mean 51.34 Mbps)
  - Flow 3 ingress (mean 121.39 Mbps)
  - Flow 3 egress (mean 121.39 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 61.36 ms)
  - Flow 2 (95th percentile 51.76 ms)
  - Flow 3 (95th percentile 56.31 ms)
Run 4: Statistics of TCP Cubic

End at: 2018-04-18 13:40:03

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 303.87 Mbit/s
95th percentile per-packet one-way delay: 63.981 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 165.22 Mbit/s
95th percentile per-packet one-way delay: 63.575 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 108.25 Mbit/s
95th percentile per-packet one-way delay: 61.756 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 201.01 Mbit/s
95th percentile per-packet one-way delay: 66.421 ms
Loss rate: 0.15%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic


# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 333.22 Mbit/s
95th percentile per-packet one-way delay: 61.338 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 206.57 Mbit/s
95th percentile per-packet one-way delay: 62.227 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 140.93 Mbit/s
95th percentile per-packet one-way delay: 57.522 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 99.14 Mbit/s
95th percentile per-packet one-way delay: 57.844 ms
Loss rate: 0.00%
Run 5: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 206.56 Mbit/s)
- Flow 1 egress (mean 206.57 Mbit/s)
- Flow 2 ingress (mean 140.94 Mbit/s)
- Flow 2 egress (mean 140.93 Mbit/s)
- Flow 3 ingress (mean 99.13 Mbit/s)
- Flow 3 egress (mean 99.14 Mbit/s)

Throughput (Mbit/s)

Time (s)

Per packet one way delay (ms)

Time (s)
Run 6: Statistics of TCP Cubic

Start at: 2018-04-18 14:10:47
End at: 2018-04-18 14:11:17

# Below is generated by plot.py at 2018-04-18 17:28:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 306.62 Mbit/s
95th percentile per-packet one-way delay: 62.097 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 183.45 Mbit/s
95th percentile per-packet one-way delay: 62.990 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 120.07 Mbit/s
95th percentile per-packet one-way delay: 57.485 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 130.49 Mbit/s
95th percentile per-packet one-way delay: 54.624 ms
Loss rate: 0.00%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-04-18 14:26:16
End at: 2018-04-18 14:26:46

# Below is generated by plot.py at 2018-04-18 17:32:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 342.71 Mbit/s
95th percentile per-packet one-way delay: 62.739 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 218.59 Mbit/s
95th percentile per-packet one-way delay: 62.733 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 183.79 Mbit/s
95th percentile per-packet one-way delay: 62.792 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 5.27 Mbit/s
95th percentile per-packet one-way delay: 57.078 ms
Loss rate: 0.11%
Run 7: Report of TCP Cubic — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 218.64 Mb/s)  Flow 1 egress (mean 218.59 Mb/s)
Flow 2 ingress (mean 183.83 Mb/s)  Flow 2 egress (mean 183.79 Mb/s)
Flow 3 ingress (mean 5.27 Mb/s)  Flow 3 egress (mean 5.27 Mb/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 62.73 ms)  Flow 2 (95th percentile 62.79 ms)  Flow 3 (95th percentile 57.08 ms)
Run 8: Statistics of TCP Cubic

Start at: 2018-04-18 14:41:54
End at: 2018-04-18 14:42:24

# Below is generated by plot.py at 2018-04-18 17:32:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 352.44 Mbit/s
95th percentile per-packet one-way delay: 62.434 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 223.95 Mbit/s
95th percentile per-packet one-way delay: 63.131 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 139.85 Mbit/s
95th percentile per-packet one-way delay: 57.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 106.77 Mbit/s
95th percentile per-packet one-way delay: 57.432 ms
Loss rate: 0.00%
Run 8: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 223.93 Mbit/s)
- Flow 1 egress (mean 223.95 Mbit/s)
- Flow 2 ingress (mean 139.82 Mbit/s)
- Flow 2 egress (mean 139.85 Mbit/s)
- Flow 3 ingress (mean 106.79 Mbit/s)
- Flow 3 egress (mean 106.77 Mbit/s)

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

- Flow 1 (95th percentile 63.13 ms)
- Flow 2 (95th percentile 57.75 ms)
- Flow 3 (95th percentile 57.43 ms)
Run 9: Statistics of TCP Cubic

Start at: 2018-04-18 14:57:31
End at: 2018-04-18 14:58:01

# Below is generated by plot.py at 2018-04-18 17:32:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 289.75 Mbit/s
95th percentile per-packet one-way delay: 62.774 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 188.11 Mbit/s
95th percentile per-packet one-way delay: 62.038 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 50.07 Mbit/s
95th percentile per-packet one-way delay: 59.641 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 207.01 Mbit/s
95th percentile per-packet one-way delay: 67.471 ms
Loss rate: 0.17%
Run 9: Report of TCP Cubic — Data Link

![Graph 1: Throughput](image)

- Flow 1 ingress (mean 188.08 Mbit/s)
- Flow 1 egress (mean 188.11 Mbit/s)
- Flow 2 ingress (mean 50.07 Mbit/s)
- Flow 2 egress (mean 50.07 Mbit/s)
- Flow 3 ingress (mean 296.92 Mbit/s)
- Flow 3 egress (mean 207.01 Mbit/s)

![Graph 2: Delay](image)

- Flow 1 (95th percentile 62.04 ms)
- Flow 2 (95th percentile 59.64 ms)
- Flow 3 (95th percentile 67.47 ms)
Run 10: Statistics of TCP Cubic

Start at: 2018-04-18 15:12:49
End at: 2018-04-18 15:13:19

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 351.48 Mbit/s
  95th percentile per-packet one-way delay: 65.038 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 205.47 Mbit/s
  95th percentile per-packet one-way delay: 65.037 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 216.95 Mbit/s
  95th percentile per-packet one-way delay: 65.062 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 5.27 Mbit/s
  95th percentile per-packet one-way delay: 60.893 ms
  Loss rate: 0.05%
Run 10: Report of TCP Cubic — Data Link
Run 1: Statistics of LEDBAT

Start at: 2018-04-18 12:58:42
End at: 2018-04-18 12:59:12

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 42.40 Mbit/s
95th percentile per-packet one-way delay: 54.543 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 26.50 Mbit/s
95th percentile per-packet one-way delay: 54.721 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 18.77 Mbit/s
95th percentile per-packet one-way delay: 54.401 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.38 Mbit/s
95th percentile per-packet one-way delay: 53.889 ms
Loss rate: 0.00%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

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

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 52.02 Mbit/s
  95th percentile per-packet one-way delay: 53.383 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 33.67 Mbit/s
  95th percentile per-packet one-way delay: 53.553 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 21.99 Mbit/s
  95th percentile per-packet one-way delay: 51.796 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 11.29 Mbit/s
  95th percentile per-packet one-way delay: 51.147 ms
  Loss rate: 0.00%
Run 2: Report of LEDBAT — Data Link

![Graph of throughput vs time]

![Graph of per-packet one-way delay vs time]

Legend:
- Flow 1 (ingress mean 33.66 Mbit/s)
- Flow 1 (egress mean 33.67 Mbit/s)
- Flow 2 (ingress mean 21.99 Mbit/s)
- Flow 2 (egress mean 21.99 Mbit/s)
- Flow 3 (ingress mean 11.28 Mbit/s)
- Flow 3 (egress mean 11.29 Mbit/s)

Legend for per-packet one-way delay:
- Flow 1 (95th percentile 53.55 ms)
- Flow 2 (95th percentile 51.80 ms)
- Flow 3 (95th percentile 51.15 ms)
Run 3: Statistics of LEDBAT

End at: 2018-04-18 13:29:36

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.40 Mbit/s
95th percentile per-packet one-way delay: 54.159 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.01 Mbit/s
95th percentile per-packet one-way delay: 54.304 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.12 Mbit/s
95th percentile per-packet one-way delay: 53.926 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 11.14 Mbit/s
95th percentile per-packet one-way delay: 52.524 ms
Loss rate: 0.00%
Run 3: Report of LEDBAT — Data Link

![Graph of Throughput vs Time for Run 3](image1)

![Graph of Per-packet one-way delay vs Time for Run 3](image2)
Run 4: Statistics of LEDBAT

Start at: 2018-04-18 13:44:16
End at: 2018-04-18 13:44:46

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 39.88 Mbit/s
95th percentile per-packet one-way delay: 54.552 ms
Loss rate: 0.10%
-- Flow 1:
Average throughput: 22.17 Mbit/s
95th percentile per-packet one-way delay: 54.596 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.31 Mbit/s
95th percentile per-packet one-way delay: 54.462 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.85 Mbit/s
95th percentile per-packet one-way delay: 54.557 ms
Loss rate: 1.05%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2018-04-18 14:00:04
End at: 2018-04-18 14:00:34

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.22 Mbit/s
95th percentile per-packet one-way delay: 54.948 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 31.70 Mbit/s
95th percentile per-packet one-way delay: 54.945 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 21.24 Mbit/s
95th percentile per-packet one-way delay: 55.016 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.40 Mbit/s
95th percentile per-packet one-way delay: 54.580 ms
Loss rate: 0.00%
Run 6: Statistics of LEDBAT

Start at: 2018-04-18 14:15:30
End at: 2018-04-18 14:16:00

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 44.23 Mbit/s
  95th percentile per-packet one-way delay: 54.924 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 27.02 Mbit/s
  95th percentile per-packet one-way delay: 54.974 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 20.87 Mbit/s
  95th percentile per-packet one-way delay: 54.959 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.06 Mbit/s
  95th percentile per-packet one-way delay: 54.300 ms
  Loss rate: 0.00%
Run 6: Report of LEDBAT — Data Link

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

- **Flow 1**: Ingress (mean 27.02 Mbit/s), Egress (mean 27.02 Mbit/s)
- **Flow 2**: Ingress (mean 20.87 Mbit/s), Egress (mean 20.87 Mbit/s)
- **Flow 3**: Ingress (mean 10.06 Mbit/s), Egress (mean 10.06 Mbit/s)

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

- **Flow 1**: 95th percentile 54.97 ms
- **Flow 2**: 95th percentile 54.96 ms
- **Flow 3**: 95th percentile 54.30 ms
Run 7: Statistics of LEDBAT

Start at: 2018-04-18 14:30:57
End at: 2018-04-18 14:31:27

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.16 Mbit/s
95th percentile per-packet one-way delay: 54.849 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 32.00 Mbit/s
95th percentile per-packet one-way delay: 54.966 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 20.46 Mbit/s
95th percentile per-packet one-way delay: 54.654 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.80 Mbit/s
95th percentile per-packet one-way delay: 54.691 ms
Loss rate: 0.38%
Run 7: Report of LEDBAT — Data Link
Run 8: Statistics of LEDBAT

Start at: 2018-04-18 14:46:38
End at: 2018-04-18 14:47:08

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 47.67 Mbit/s
  95th percentile per-packet one-way delay: 55.219 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 31.13 Mbit/s
  95th percentile per-packet one-way delay: 55.146 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 19.61 Mbit/s
  95th percentile per-packet one-way delay: 55.466 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.64 Mbit/s
  95th percentile per-packet one-way delay: 55.082 ms
  Loss rate: 0.00%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

Start at: 2018-04-18 15:02:06
End at: 2018-04-18 15:02:36

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 50.63 Mbit/s
  95th percentile per-packet one-way delay: 54.311 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 32.01 Mbit/s
  95th percentile per-packet one-way delay: 54.324 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 22.55 Mbit/s
  95th percentile per-packet one-way delay: 54.327 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 10.97 Mbit/s
  95th percentile per-packet one-way delay: 51.463 ms
  Loss rate: 0.00%
Run 9: Report of LEDBAT — Data Link
Run 10: Statistics of LEDBAT

Start at: 2018-04-18 15:17:33
End at: 2018-04-18 15:18:03

# Below is generated by plot.py at 2018-04-18 17:33:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 20.23 Mbit/s
95th percentile per-packet one-way delay: 55.116 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 2.19 Mbit/s
95th percentile per-packet one-way delay: 54.587 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.05 Mbit/s
95th percentile per-packet one-way delay: 55.262 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 10.35 Mbit/s
95th percentile per-packet one-way delay: 55.049 ms
Loss rate: 0.00%
Run 10: Report of LEDBAT — Data Link

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

![Graph 2: Packet Delay vs Time](image2)
Run 1: Statistics of PCC-Allegro

Start at: 2018-04-18 12:59:24
End at: 2018-04-18 12:59:54

# Below is generated by plot.py at 2018-04-18 17:39:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 557.15 Mbit/s
95th percentile per-packet one-way delay: 210.685 ms
Loss rate: 3.55%
-- Flow 1:
Average throughput: 474.88 Mbit/s
95th percentile per-packet one-way delay: 212.901 ms
Loss rate: 3.96%
-- Flow 2:
Average throughput: 122.89 Mbit/s
95th percentile per-packet one-way delay: 205.835 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 2.12 Mbit/s
95th percentile per-packet one-way delay: 206.548 ms
Loss rate: 3.20%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

End at: 2018-04-18 13:15:09

# Below is generated by plot.py at 2018-04-18 17:39:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 565.74 Mbit/s
  95th percentile per-packet one-way delay: 237.159 ms
  Loss rate: 1.42%
-- Flow 1:
  Average throughput: 471.37 Mbit/s
  95th percentile per-packet one-way delay: 238.601 ms
  Loss rate: 1.68%
-- Flow 2:
  Average throughput: 139.96 Mbit/s
  95th percentile per-packet one-way delay: 162.211 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 3.66 Mbit/s
  95th percentile per-packet one-way delay: 140.079 ms
  Loss rate: 0.00%
Run 2: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 479.43 Mbps)
- Flow 1 egress (mean 471.37 Mbps)
- Flow 2 ingress (mean 140.13 Mbps)
- Flow 2 egress (mean 139.96 Mbps)
- Flow 3 ingress (mean 3.66 Mbps)
- Flow 3 egress (mean 3.66 Mbps)

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

- Flow 1 (95th percentile 238.60 ms)
- Flow 2 (95th percentile 162.21 ms)
- Flow 3 (95th percentile 140.08 ms)
Run 3: Statistics of PCC-Allegro

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

# Below is generated by plot.py at 2018-04-18 17:40:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 572.57 Mbit/s
  95th percentile per-packet one-way delay: 223.226 ms
  Loss rate: 4.81%
-- Flow 1:
  Average throughput: 471.75 Mbit/s
  95th percentile per-packet one-way delay: 233.450 ms
  Loss rate: 5.53%
-- Flow 2:
  Average throughput: 136.37 Mbit/s
  95th percentile per-packet one-way delay: 167.507 ms
  Loss rate: 1.17%
-- Flow 3:
  Average throughput: 30.96 Mbit/s
  95th percentile per-packet one-way delay: 169.848 ms
  Loss rate: 2.28%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

End at: 2018-04-18 13:45:28

# Below is generated by plot.py at 2018-04-18 17:40:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 575.75 Mbit/s
95th percentile per-packet one-way delay: 176.535 ms
Loss rate: 2.21%
-- Flow 1:
Average throughput: 499.09 Mbit/s
95th percentile per-packet one-way delay: 180.466 ms
Loss rate: 2.50%
-- Flow 2:
Average throughput: 113.41 Mbit/s
95th percentile per-packet one-way delay: 165.038 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 4.21 Mbit/s
95th percentile per-packet one-way delay: 165.758 ms
Loss rate: 0.75%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 511.84 Mbps)
- Flow 1 egress (mean 499.09 Mbps)
- Flow 2 ingress (mean 113.80 Mbps)
- Flow 2 egress (mean 113.41 Mbps)
- Flow 3 ingress (mean 4.24 Mbps)
- Flow 3 egress (mean 4.21 Mbps)

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

- Flow 1 (95th percentile 180.47 ms)
- Flow 2 (95th percentile 165.04 ms)
- Flow 3 (95th percentile 165.76 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2018-04-18 14:00:46
End at: 2018-04-18 14:01:16

# Below is generated by plot.py at 2018-04-18 17:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.97 Mbit/s
95th percentile per-packet one-way delay: 233.337 ms
Loss rate: 5.80%
-- Flow 1:
Average throughput: 434.59 Mbit/s
95th percentile per-packet one-way delay: 251.491 ms
Loss rate: 5.92%
-- Flow 2:
Average throughput: 222.59 Mbit/s
95th percentile per-packet one-way delay: 167.520 ms
Loss rate: 5.55%
-- Flow 3:
Average throughput: 16.39 Mbit/s
95th percentile per-packet one-way delay: 167.416 ms
Loss rate: 2.91%
Run 5: Report of PCC-Allegro — Data Link

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

- **Throughput**:
  - Flow 1 ingress (mean 461.82 Mbit/s)
  - Flow 1 egress (mean 434.59 Mbit/s)
  - Flow 2 ingress (mean 235.59 Mbit/s)
  - Flow 2 egress (mean 222.59 Mbit/s)
  - Flow 3 ingress (mean 16.67 Mbit/s)
  - Flow 3 egress (mean 16.39 Mbit/s)

- **Packet Delay**:
  - Flow 1 (95th percentile 251.49 ms)
  - Flow 2 (95th percentile 167.52 ms)
  - Flow 3 (95th percentile 167.42 ms)
Run 6: Statistics of PCC-Allegro

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

# Below is generated by plot.py at 2018-04-18 17:42:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 551.81 Mbit/s
95th percentile per-packet one-way delay: 252.173 ms
Loss rate: 9.12%
-- Flow 1:
Average throughput: 447.02 Mbit/s
95th percentile per-packet one-way delay: 266.616 ms
Loss rate: 10.84%
-- Flow 2:
Average throughput: 126.87 Mbit/s
95th percentile per-packet one-way delay: 161.381 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 62.36 Mbit/s
95th percentile per-packet one-way delay: 162.383 ms
Loss rate: 1.60%
Run 6: Report of PCC-Allegro — Data Link

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 591.38 Mbps)
  - Flow 1 egress (mean 447.02 Mbps)
  - Flow 2 ingress (mean 127.96 Mbps)
  - Flow 2 egress (mean 126.87 Mbps)
  - Flow 3 ingress (mean 63.43 Mbps)
  - Flow 3 egress (mean 62.36 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 266.62 ms)
  - Flow 2 (95th percentile 161.38 ms)
  - Flow 3 (95th percentile 162.38 ms)
Run 7: Statistics of PCC-Allegro

Start at: 2018-04-18 14:31:40
End at: 2018-04-18 14:32:10

# Below is generated by plot.py at 2018-04-18 17:43:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.62 Mbit/s
95th percentile per-packet one-way delay: 278.403 ms
Loss rate: 5.03%
-- Flow 1:
Average throughput: 461.73 Mbit/s
95th percentile per-packet one-way delay: 298.505 ms
Loss rate: 5.44%
-- Flow 2:
Average throughput: 142.66 Mbit/s
95th percentile per-packet one-way delay: 168.956 ms
Loss rate: 2.94%
-- Flow 3:
Average throughput: 61.01 Mbit/s
95th percentile per-packet one-way delay: 170.303 ms
Loss rate: 5.10%
Run 7: Report of PCC-Allegro — Data Link

Throughput (Mb/s)

Time (s)

Flow 1 ingress (mean 488.37 Mb/s) — Flow 1 egress (mean 461.73 Mb/s)
Flow 2 ingress (mean 146.98 Mb/s) — Flow 2 egress (mean 142.66 Mb/s)
Flow 3 ingress (mean 64.31 Mb/s) — Flow 3 egress (mean 61.01 Mb/s)

Per-packet one-way delay (ms)

Flow 1 (95th percentile 298.50 ms) — Flow 2 (95th percentile 168.96 ms) — Flow 3 (95th percentile 170.30 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-04-18 14:47:21
End at: 2018-04-18 14:47:51

# Below is generated by plot.py at 2018-04-18 17:44:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 593.98 Mbit/s
  95th percentile per-packet one-way delay: 193.751 ms
  Loss rate: 2.56%
-- Flow 1:
  Average throughput: 516.25 Mbit/s
  95th percentile per-packet one-way delay: 197.699 ms
  Loss rate: 2.70%
-- Flow 2:
  Average throughput: 115.91 Mbit/s
  95th percentile per-packet one-way delay: 170.435 ms
  Loss rate: 1.57%
-- Flow 3:
  Average throughput: 2.05 Mbit/s
  95th percentile per-packet one-way delay: 171.261 ms
  Loss rate: 4.34%
Run 8: Report of PCC-Allegro — Data Link
Run 9: Statistics of PCC-Allegro

Start at: 2018-04-18 15:02:49  
End at: 2018-04-18 15:03:19

# Below is generated by plot.py at 2018-04-18 17:50:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 557.21 Mbit/s  
95th percentile per-packet one-way delay: 191.489 ms  
Loss rate: 5.52%  
-- Flow 1:  
Average throughput: 476.61 Mbit/s  
95th percentile per-packet one-way delay: 192.216 ms  
Loss rate: 5.51%  
-- Flow 2:  
Average throughput: 117.50 Mbit/s  
95th percentile per-packet one-way delay: 188.412 ms  
Loss rate: 5.55%  
-- Flow 3:  
Average throughput: 7.54 Mbit/s  
95th percentile per-packet one-way delay: 185.695 ms  
Loss rate: 7.18%
Run 9: Report of PCC-Allegro — Data Link

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

- **Flow 1** (ingress: 594.40 Mbit/s, egress: 476.61 Mbit/s)
- **Flow 2** (ingress: 124.43 Mbit/s, egress: 117.50 Mbit/s)
- **Flow 3** (ingress: 8.13 Mbit/s, egress: 7.54 Mbit/s)

- **Per-packet one-way delay:**
  - Flow 1 (95th percentile: 192.22 ms)
  - Flow 2 (95th percentile: 188.41 ms)
  - Flow 3 (95th percentile: 185.69 ms)
Run 10: Statistics of PCC-Allegro

End at: 2018-04-18 15:18:44

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 557.79 Mbit/s
  95th percentile per-packet one-way delay: 271.488 ms
  Loss rate: 2.93%
-- Flow 1:
  Average throughput: 439.29 Mbit/s
  95th percentile per-packet one-way delay: 285.962 ms
  Loss rate: 3.64%
-- Flow 2:
  Average throughput: 162.42 Mbit/s
  95th percentile per-packet one-way delay: 167.679 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 32.10 Mbit/s
  95th percentile per-packet one-way delay: 168.152 ms
  Loss rate: 0.19%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2018-04-18 13:02:26
End at: 2018-04-18 13:02:56

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.37 Mbit/s
95th percentile per-packet one-way delay: 53.545 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 54.94 Mbit/s
95th percentile per-packet one-way delay: 53.565 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 36.19 Mbit/s
95th percentile per-packet one-way delay: 50.254 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 19.59 Mbit/s
95th percentile per-packet one-way delay: 53.309 ms
Loss rate: 0.05%
Run 1: Report of QUIC Cubic — Data Link

![Graph of throughput vs. time showing three flows with different ingress and egress speeds.]

- Flow 1 ingress (mean 54.95 Mbit/s)
- Flow 1 egress (mean 54.94 Mbit/s)
- Flow 2 ingress (mean 36.19 Mbit/s)
- Flow 2 egress (mean 36.19 Mbit/s)
- Flow 3 ingress (mean 19.60 Mbit/s)
- Flow 3 egress (mean 19.59 Mbit/s)

![Graph of per-packet one-way delay vs. time showing three flows with different delay values.]

- Flow 1 (95th percentile 53.56 ms)
- Flow 2 (95th percentile 50.25 ms)
- Flow 3 (95th percentile 53.31 ms)
Run 2: Statistics of QUIC Cubic

Start at: 2018-04-18 13:17:41
End at: 2018-04-18 13:18:11

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 74.05 Mbit/s
  95th percentile per-packet one-way delay: 53.425 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 43.77 Mbit/s
  95th percentile per-packet one-way delay: 53.215 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 35.80 Mbit/s
  95th percentile per-packet one-way delay: 53.483 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 20.27 Mbit/s
  95th percentile per-packet one-way delay: 53.089 ms
  Loss rate: 0.00%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

Start at: 2018-04-18 13:32:54

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics

-- Total of 3 flows:
Average throughput: 76.25 Mbit/s
95th percentile per-packet one-way delay: 53.131 ms
Loss rate: 0.01%

-- Flow 1:
Average throughput: 49.43 Mbit/s
95th percentile per-packet one-way delay: 50.645 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 23.29 Mbit/s
95th percentile per-packet one-way delay: 53.166 ms
Loss rate: 0.03%

-- Flow 3:
Average throughput: 34.88 Mbit/s
95th percentile per-packet one-way delay: 53.197 ms
Loss rate: 0.01%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.40 Mbit/s
  95th percentile per-packet one-way delay: 53.483 ms
  Loss rate: 0.01%
  --- Flow 1:
  Average throughput: 51.68 Mbit/s
  95th percentile per-packet one-way delay: 53.538 ms
  Loss rate: 0.01%
  --- Flow 2:
  Average throughput: 43.60 Mbit/s
  95th percentile per-packet one-way delay: 50.651 ms
  Loss rate: 0.00%
  --- Flow 3:
  Average throughput: 20.83 Mbit/s
  95th percentile per-packet one-way delay: 53.464 ms
  Loss rate: 0.00%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-04-18 14:03:52
End at: 2018-04-18 14:04:22

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.47 Mbit/s
95th percentile per-packet one-way delay: 53.198 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 50.641 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.43 Mbit/s
95th percentile per-packet one-way delay: 53.188 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 15.83 Mbit/s
95th percentile per-packet one-way delay: 53.464 ms
Loss rate: 0.01%
Run 5: Report of QUIC Cubic — Data Link
Run 6: Statistics of QUIC Cubic

Start at: 2018-04-18 14:19:17
End at: 2018-04-18 14:19:47

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.42 Mbit/s
  95th percentile per-packet one-way delay: 53.432 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 49.46 Mbit/s
  95th percentile per-packet one-way delay: 53.360 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 36.98 Mbit/s
  95th percentile per-packet one-way delay: 53.487 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 19.71 Mbit/s
  95th percentile per-packet one-way delay: 50.580 ms
  Loss rate: 0.00%
Run 6: Report of QUIC Cubic — Data Link
Run 7: Statistics of QUIC Cubic

Start at: 2018-04-18 14:34:50
End at: 2018-04-18 14:35:20

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.14 Mbit/s
  95th percentile per-packet one-way delay: 53.515 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 55.54 Mbit/s
  95th percentile per-packet one-way delay: 53.206 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 29.43 Mbit/s
  95th percentile per-packet one-way delay: 53.569 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 15.55 Mbit/s
  95th percentile per-packet one-way delay: 53.508 ms
  Loss rate: 0.00%
Run 7: Report of QUIC Cubic — Data Link

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

Start at: 2018-04-18 14:50:37
End at: 2018-04-18 14:51:07

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.97 Mbit/s
95th percentile per-packet one-way delay: 53.705 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 52.58 Mbit/s
95th percentile per-packet one-way delay: 53.720 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 53.179 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 14.62 Mbit/s
95th percentile per-packet one-way delay: 50.439 ms
Loss rate: 0.00%
Run 8: Report of QUIC Cubic — Data Link
Run 9: Statistics of QUIC Cubic

Start at: 2018-04-18 15:05:47
End at: 2018-04-18 15:06:17

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 113.60 Mbit/s
95th percentile per-packet one-way delay: 53.107 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 77.58 Mbit/s
95th percentile per-packet one-way delay: 50.294 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 45.73 Mbit/s
95th percentile per-packet one-way delay: 53.153 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 17.41 Mbit/s
95th percentile per-packet one-way delay: 50.932 ms
Loss rate: 0.01%
Run 9: Report of QUIC Cubic — Data Link

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Run 10: Statistics of QUIC Cubic

Start at: 2018-04-18 15:21:16
End at: 2018-04-18 15:21:46

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.84 Mbit/s
  95th percentile per-packet one-way delay: 53.310 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 57.21 Mbit/s
  95th percentile per-packet one-way delay: 53.203 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 36.16 Mbit/s
  95th percentile per-packet one-way delay: 53.360 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 17.31 Mbit/s
  95th percentile per-packet one-way delay: 53.330 ms
  Loss rate: 0.01%
Run 10: Report of QUIC Cubic — Data Link

![Graphs showing throughput and packet one-way delay over time for multiple flows.](https://example.com/graphs)

**Throughput (Mbps):**
- Flow 1 ingress (mean 57.21 Mbps)
- Flow 1 egress (mean 57.21 Mbps)
- Flow 2 ingress (mean 36.17 Mbps)
- Flow 2 egress (mean 36.16 Mbps)
- Flow 3 ingress (mean 17.32 Mbps)
- Flow 3 egress (mean 17.31 Mbps)

**Per packet one-way delay (ms):**
- Flow 1 (95th percentile 53.20 ms)
- Flow 2 (95th percentile 53.36 ms)
- Flow 3 (95th percentile 53.33 ms)
Run 1: Statistics of SCReAM

Start at: 2018-04-18 12:56:35
End at: 2018-04-18 12:57:05

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.391 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.398 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.205 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.584 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

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

Flow 1 ingress (mean 0.21 Mbps) — Flow 1 egress (mean 0.21 Mbps)
Flow 2 ingress (mean 0.21 Mbps) — Flow 2 egress (mean 0.21 Mbps)
Flow 3 ingress (mean 0.22 Mbps) — Flow 3 egress (mean 0.22 Mbps)

Flow 1 (95th percentile 53.40 ms) — Flow 2 (95th percentile 53.20 ms) — Flow 3 (95th percentile 53.58 ms)
Run 2: Statistics of SCReAM

Start at: 2018-04-18 13:11:50
End at: 2018-04-18 13:12:20

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.367 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.371 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 53.369 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.607 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.739 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.758 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 50.409 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.583 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.600 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.619 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.263 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.855 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link

Graph 1: 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)

Graph 2: Per packet one way delay (ms)
- Flow 1 (95th percentile 53.62 ms)
- Flow 2 (95th percentile 53.26 ms)
- Flow 3 (95th percentile 50.85 ms)
Run 5: Statistics of SCReAM


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.689 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.706 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.818 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.667 ms
  Loss rate: 0.00%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

End at: 2018-04-18 14:13:52

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.630 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.765 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.658 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.374 ms
  Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.22 Mbit/s)
- Flow 1 egress (mean 0.22 Mbit/s)
- Flow 2 ingress (mean 0.21 Mbit/s)
- Flow 2 egress (mean 0.21 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)
Run 7: Statistics of SCReAM

Start at: 2018-04-18 14:28:54
End at: 2018-04-18 14:29:24

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 53.607 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.627 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.21 Mbit/s
95th percentile per-packet one-way delay: 53.558 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 50.859 ms
Loss rate: 0.00%
Run 7: Report of SCReAM — Data Link

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

- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)
- Flow 2 ingress (mean 0.21 Mbit/s)
- Flow 2 egress (mean 0.21 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

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

- Flow 1 (95th percentile 53.63 ms)
- Flow 2 (95th percentile 53.56 ms)
- Flow 3 (95th percentile 50.86 ms)
Run 8: Statistics of SCReAM

Start at: 2018-04-18 14:44:32
End at: 2018-04-18 14:45:02

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 54.058 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.371 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 54.098 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 54.038 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-04-18 15:00:05
End at: 2018-04-18 15:00:35

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.990 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.907 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 54.031 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 50.581 ms
  Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Throughput Graph]

![Delay Graph]

- Flow 1 ingress (mean 0.21 Mbit/s)
- Flow 1 egress (mean 0.21 Mbit/s)
- Flow 2 ingress (mean 0.21 Mbit/s)
- Flow 2 egress (mean 0.21 Mbit/s)
- Flow 3 ingress (mean 0.22 Mbit/s)
- Flow 3 egress (mean 0.22 Mbit/s)

- Flow 1 (95th percentile 53.91 ms)
- Flow 2 (95th percentile 54.03 ms)
- Flow 3 (95th percentile 50.58 ms)
Run 10: Statistics of SCReAM

Start at: 2018-04-18 15:15:27
End at: 2018-04-18 15:15:57

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 53.852 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.495 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.21 Mbit/s
  95th percentile per-packet one-way delay: 53.739 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 53.916 ms
  Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link
Run 1: Statistics of WebRTC media

Start at: 2018-04-18 13:03:10
End at: 2018-04-18 13:03:40

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 53.788 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.781 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.807 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.400 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

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

- Flow 1 (95th percentile 53.78 ms)
- Flow 2 (95th percentile 53.81 ms)
- Flow 3 (95th percentile 53.40 ms)

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Run 2: Statistics of WebRTC media

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

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 53.471 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.448 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.496 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.296 ms
  Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

End at: 2018-04-18 13:34:07

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 53.859 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.747 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 54.123 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.860 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.17 Mbit/s
95th percentile per-packet one-way delay: 53.584 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 53.601 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 53.442 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 53.603 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Diagram 1: Throughput (Mbps)]

- **Flow 1 ingress** (mean 0.06 Mbps)
- **Flow 1 egress** (mean 0.06 Mbps)
- **Flow 2 ingress** (mean 0.06 Mbps)
- **Flow 2 egress** (mean 0.06 Mbps)
- **Flow 3 ingress** (mean 0.05 Mbps)
- **Flow 3 egress** (mean 0.05 Mbps)

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

- **Flow 1** (95th percentile 53.60 ms)
- **Flow 2** (93rd percentile 53.44 ms)
- **Flow 3** (95th percentile 53.60 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-04-18 14:04:36
End at: 2018-04-18 14:05:06

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 53.570 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.340 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.468 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.665 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

![Graph 2: Packet Delivery Ratio vs. Time](image)
Run 6: Statistics of WebRTC media

Start at: 2018-04-18 14:20:01
End at: 2018-04-18 14:20:31

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 53.763 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.828 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.777 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.700 ms
  Loss rate: 0.00%
Run 6: Report of WebRTC media — Data Link
Run 7: Statistics of WebRTC media

Start at: 2018-04-18 14:35:34
End at: 2018-04-18 14:36:04

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 54.193 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 54.535 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 54.183 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.105 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

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)

Per packet one way delay [ms]

Time (s)

Flow 1 (95th percentile 54.53 ms)  Flow 2 (95th percentile 54.18 ms)  Flow 3 (95th percentile 54.10 ms)
Run 8: Statistics of WebRTC media

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

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 54.154 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.882 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 54.435 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.155 ms
  Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

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

- **Flow 1**: Ingress (mean 0.06 Mbit/s), Egress (mean 0.06 Mbit/s)
- **Flow 2**: Ingress (mean 0.06 Mbit/s), Egress (mean 0.06 Mbit/s)
- **Flow 3**: Ingress (mean 0.05 Mbit/s), Egress (mean 0.05 Mbit/s)
Run 9: Statistics of WebRTC media

Start at: 2018-04-18 15:06:32
End at: 2018-04-18 15:07:02

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 54.194 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 54.253 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.302 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 54.217 ms
  Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

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

![Graph 2: Packet Delivery Ratio vs Time](image2)
Run 10: Statistics of WebRTC media

Start at: 2018-04-18 15:22:00
End at: 2018-04-18 15:22:30

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.17 Mbit/s
  95th percentile per-packet one-way delay: 53.876 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.905 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 53.631 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 53.820 ms
  Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

![Throughput Graph]

- 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)

![Delay Graph]

- Flow 1 (95th percentile 53.91 ms)
- Flow 2 (95th percentile 53.63 ms)
- Flow 3 (95th percentile 53.82 ms)
Run 1: Statistics of Sprout

End at: 2018-04-18 12:56:25

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.49 Mbit/s
  95th percentile per-packet one-way delay: 53.159 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.84 Mbit/s
  95th percentile per-packet one-way delay: 53.276 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.81 Mbit/s
  95th percentile per-packet one-way delay: 51.961 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.47 Mbit/s
  95th percentile per-packet one-way delay: 51.491 ms
  Loss rate: 0.00%
Run 1: Report of Sprout — Data Link

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

![Graph 2: Packet One Way Delay (ms)](image2)
Run 2: Statistics of Sprout

End at: 2018-04-18 13:11:41

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.23 Mbit/s
  95th percentile per-packet one-way delay: 54.249 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.70 Mbit/s
  95th percentile per-packet one-way delay: 54.180 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.59 Mbit/s
  95th percentile per-packet one-way delay: 54.273 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.50 Mbit/s
  95th percentile per-packet one-way delay: 54.360 ms
  Loss rate: 0.00%
Run 2: Report of Sprout — Data Link

![Graph 1: Throughput vs Time](image1)
- Flow 1 ingress (mean 7.70 Mbit/s)
- Flow 1 egress (mean 7.70 Mbit/s)
- Flow 2 ingress (mean 7.59 Mbit/s)
- Flow 2 egress (mean 7.59 Mbit/s)
- Flow 3 ingress (mean 7.50 Mbit/s)
- Flow 3 egress (mean 7.50 Mbit/s)

![Graph 2: Packet Delay vs Time](image2)
- Flow 1 (95th percentile 54.18 ms)
- Flow 2 (95th percentile 54.27 ms)
- Flow 3 (95th percentile 54.36 ms)
Run 3: Statistics of Sprout

End at: 2018-04-18 13:26:58

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.41 Mbit/s
95th percentile per-packet one-way delay: 53.885 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.70 Mbit/s
95th percentile per-packet one-way delay: 53.908 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 53.892 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.64 Mbit/s
95th percentile per-packet one-way delay: 51.599 ms
Loss rate: 0.00%
Run 4: Statistics of Sprout


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.52 Mbit/s
95th percentile per-packet one-way delay: 54.349 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.90 Mbit/s
95th percentile per-packet one-way delay: 54.321 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 54.378 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.49 Mbit/s
95th percentile per-packet one-way delay: 54.342 ms
Loss rate: 0.00%
Run 4: Report of Sprout — Data Link

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

Flow 1 ingress (mean 7.90 Mbit/s), Flow 1 egress (mean 7.90 Mbit/s), Flow 2 ingress (mean 7.76 Mbit/s), Flow 2 egress (mean 7.76 Mbit/s), Flow 3 ingress (mean 7.49 Mbit/s), Flow 3 egress (mean 7.49 Mbit/s)

Per packet one-way delay (ms)

Flow 1 (95th percentile 54.32 ms), Flow 2 (95th percentile 54.38 ms), Flow 3 (95th percentile 54.34 ms)
Run 5: Statistics of Sprout


# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.41 Mbit/s
95th percentile per-packet one-way delay: 54.364 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 54.382 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 54.407 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 54.226 ms
Loss rate: 0.00%
Run 5: Report of Sprout — Data Link

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

Legend:
- Flow 1 ingress (mean 7.87 Mbit/s)
- Flow 1 egress (mean 7.87 Mbit/s)
- Flow 2 ingress (mean 7.81 Mbit/s)
- Flow 2 egress (mean 7.81 Mbit/s)
- Flow 3 ingress (mean 7.09 Mbit/s)
- Flow 3 egress (mean 7.09 Mbit/s)
Run 6: Statistics of Sprout

Start at: 2018-04-18 14:12:42
End at: 2018-04-18 14:13:12

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.57 Mbit/s
95th percentile per-packet one-way delay: 54.124 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.94 Mbit/s
95th percentile per-packet one-way delay: 54.098 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.76 Mbit/s
95th percentile per-packet one-way delay: 54.135 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 54.158 ms
Loss rate: 0.00%
Run 6: Report of Sprout — Data Link
Run 7: Statistics of Sprout

Start at: 2018-04-18 14:28:14
End at: 2018-04-18 14:28:44

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 15.39 Mbit/s
  95th percentile per-packet one-way delay: 54.316 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 7.75 Mbit/s
  95th percentile per-packet one-way delay: 54.344 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 7.74 Mbit/s
  95th percentile per-packet one-way delay: 54.246 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 7.55 Mbit/s
  95th percentile per-packet one-way delay: 54.284 ms
  Loss rate: 0.00%
Run 7: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.75 Mbps)
- Flow 1 egress (mean 7.75 Mbps)
- Flow 2 ingress (mean 7.74 Mbps)
- Flow 2 egress (mean 7.74 Mbps)
- Flow 3 ingress (mean 7.55 Mbps)
- Flow 3 egress (mean 7.55 Mbps)

![Graph 2: Per packet round trip delay (ms)](image)

- Flow 1 (95th percentile 54.34 ms)
- Flow 2 (95th percentile 54.25 ms)
- Flow 3 (95th percentile 54.28 ms)
Run 8: Statistics of Sprout

Start at: 2018-04-18 14:43:52
End at: 2018-04-18 14:44:22

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.61 Mbit/s
95th percentile per-packet one-way delay: 54.561 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.92 Mbit/s
95th percentile per-packet one-way delay: 54.545 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.87 Mbit/s
95th percentile per-packet one-way delay: 54.603 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.47 Mbit/s
95th percentile per-packet one-way delay: 54.535 ms
Loss rate: 0.00%
Run 8: Report of Sprout — Data Link

![Graphs showing throughput and packet latency for different flows](image-url)

- Flow 1 ingress (mean 7.92 Mbit/s)
- Flow 1 egress (mean 7.92 Mbit/s)
- Flow 2 ingress (mean 7.87 Mbit/s)
- Flow 2 egress (mean 7.87 Mbit/s)
- Flow 3 ingress (mean 7.47 Mbit/s)
- Flow 3 egress (mean 7.47 Mbit/s)

![Graphs showing packet latency for different flows](image-url)

- Flow 1 (95th percentile 54.55 ms)
- Flow 2 (95th percentile 54.60 ms)
- Flow 3 (95th percentile 54.53 ms)
Run 9: Statistics of Sprout

Start at: 2018-04-18 14:59:25
End at: 2018-04-18 14:59:55

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.48 Mbit/s
95th percentile per-packet one-way delay: 54.692 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 54.677 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.81 Mbit/s
95th percentile per-packet one-way delay: 54.608 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: 54.932 ms
Loss rate: 0.00%
Run 9: Report of Sprout — Data Link

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

- **Throughput (Mbps)**
  - **Flow 1 ingress**: mean 7.81 Mbps
  - **Flow 1 egress**: mean 7.81 Mbps
  - **Flow 2 ingress**: mean 7.81 Mbps
  - **Flow 2 egress**: mean 7.81 Mbps
  - **Flow 3 ingress**: mean 7.52 Mbps
  - **Flow 3 egress**: mean 7.52 Mbps

- **Per-packet one-way delay (ms)**
  - **Flow 1**: 95th percentile 54.68 ms
  - **Flow 2**: 95th percentile 54.61 ms
  - **Flow 3**: 95th percentile 54.93 ms
Run 10: Statistics of Sprout

Start at: 2018-04-18 15:14:47
End at: 2018-04-18 15:15:17

# Below is generated by plot.py at 2018-04-18 17:50:15
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 15.26 Mbit/s
   95th percentile per-packet one-way delay: 54.286 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 7.68 Mbit/s
   95th percentile per-packet one-way delay: 54.443 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 7.74 Mbit/s
   95th percentile per-packet one-way delay: 54.043 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 7.41 Mbit/s
   95th percentile per-packet one-way delay: 54.001 ms
   Loss rate: 0.00%
Run 10: 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 7.66 Mbps)**
  - **Flow 1 egress (mean 7.66 Mbps)**
  - **Flow 2 ingress (mean 7.74 Mbps)**
  - **Flow 2 egress (mean 7.74 Mbps)**
  - **Flow 3 ingress (mean 7.41 Mbps)**
  - **Flow 3 egress (mean 7.41 Mbps)**

- **Per-packet one-way delay (ms)**
  - **Flow 1 (95th percentile 54.44 ms)**
  - **Flow 2 (95th percentile 54.04 ms)**
  - **Flow 3 (95th percentile 54.00 ms)**
Run 1: Statistics of TaoVA-100x

Start at: 2018-04-18 12:50:12
End at: 2018-04-18 12:50:42

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.74 Mbit/s
95th percentile per-packet one-way delay: 62.777 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 209.32 Mbit/s
95th percentile per-packet one-way delay: 61.596 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 91.01 Mbit/s
95th percentile per-packet one-way delay: 63.302 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 117.07 Mbit/s
95th percentile per-packet one-way delay: 68.440 ms
Loss rate: 0.02%
Run 1: Report of TaoVA-100x — Data Link

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

Flow 1 (95th percentile 61.60 ms)  Flow 2 (95th percentile 63.30 ms)  Flow 3 (95th percentile 68.44 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2018-04-18 13:05:53
End at: 2018-04-18 13:06:23

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.46 Mbit/s
  95th percentile per-packet one-way delay: 56.221 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 14.87 Mbit/s
  95th percentile per-packet one-way delay: 53.189 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 72.33 Mbit/s
  95th percentile per-packet one-way delay: 56.477 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 67.56 Mbit/s
  95th percentile per-packet one-way delay: 56.646 ms
  Loss rate: 0.00%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x


# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.01 Mbit/s
95th percentile per-packet one-way delay: 55.618 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.10 Mbit/s
95th percentile per-packet one-way delay: 55.885 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 143.23 Mbit/s
95th percentile per-packet one-way delay: 55.212 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 53.313 ms
Loss rate: 0.00%
Run 4: Statistics of TaoVA-100x

End at: 2018-04-18 13:36:50

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 26.02 Mbit/s
  95th percentile per-packet one-way delay: 53.273 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 13.00 Mbit/s
  95th percentile per-packet one-way delay: 53.265 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 12.39 Mbit/s
  95th percentile per-packet one-way delay: 53.266 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 14.39 Mbit/s
  95th percentile per-packet one-way delay: 53.299 ms
  Loss rate: 0.00%
Run 5: Statistics of TaoVA-100x

End at: 2018-04-18 13:52:17

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 170.13 Mbit/s
  95th percentile per-packet one-way delay: 62.232 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 156.06 Mbit/s
  95th percentile per-packet one-way delay: 63.101 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 14.15 Mbit/s
  95th percentile per-packet one-way delay: 53.323 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 13.98 Mbit/s
  95th percentile per-packet one-way delay: 53.188 ms
  Loss rate: 0.00%
Run 5: Report of TaoVA-100x — Data Link

![Graph of throughput vs time showing variations in bandwidth and delay.

Legend:
- Flow 1 ingress (mean 156.06 Mbit/s)
- Flow 1 egress (mean 156.06 Mbit/s)
- Flow 2 ingress (mean 14.15 Mbit/s)
- Flow 2 egress (mean 14.15 Mbit/s)
- Flow 3 ingress (mean 13.99 Mbit/s)
- Flow 3 egress (mean 13.98 Mbit/s)

Legend for packet delay:
- Flow 1 (99th percentile 63.10 ms)
- Flow 2 (99th percentile 53.32 ms)
- Flow 3 (99th percentile 53.19 ms)
Run 6: Statistics of TaoVA-100x

Start at: 2018-04-18 14:07:20
End at: 2018-04-18 14:07:50

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.22 Mbit/s
95th percentile per-packet one-way delay: 61.207 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 68.04 Mbit/s
95th percentile per-packet one-way delay: 63.586 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 18.93 Mbit/s
95th percentile per-packet one-way delay: 53.606 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 13.85 Mbit/s
95th percentile per-packet one-way delay: 53.159 ms
Loss rate: 0.03%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

End at: 2018-04-18 14:23:16

# Below is generated by plot.py at 2018-04-18 17:55:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 189.37 Mbit/s
95th percentile per-packet one-way delay: 61.123 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 105.00 Mbit/s
95th percentile per-packet one-way delay: 59.778 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 22.78 Mbit/s
95th percentile per-packet one-way delay: 53.572 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 209.00 Mbit/s
95th percentile per-packet one-way delay: 63.547 ms
Loss rate: 0.06%
Run 7: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 105.01 Mbit/s)
- Flow 1 egress (mean 105.00 Mbit/s)
- Flow 2 ingress (mean 22.78 Mbit/s)
- Flow 2 egress (mean 22.78 Mbit/s)
- Flow 3 ingress (mean 209.13 Mbit/s)
- Flow 3 egress (mean 209.00 Mbit/s)

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

- Flow 1 (95th percentile 59.78 ms)
- Flow 2 (95th percentile 53.57 ms)
- Flow 3 (95th percentile 63.55 ms)
Run 8: Statistics of TaoVA-100x

Start at: 2018-04-18 14:38:17
End at: 2018-04-18 14:38:47

# Below is generated by plot.py at 2018-04-18 17:56:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 268.35 Mbit/s
  95th percentile per-packet one-way delay: 60.536 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 204.23 Mbit/s
  95th percentile per-packet one-way delay: 55.945 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 14.33 Mbit/s
  95th percentile per-packet one-way delay: 53.750 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 164.79 Mbit/s
  95th percentile per-packet one-way delay: 72.129 ms
  Loss rate: 0.00%
Run 8: Report of TaoVA-100x — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 204.26 Mbps)
  - Flow 1 egress (mean 204.23 Mbps)
  - Flow 2 ingress (mean 14.33 Mbps)
  - Flow 2 egress (mean 14.33 Mbps)
  - Flow 3 ingress (mean 164.85 Mbps)
  - Flow 3 egress (mean 164.79 Mbps)

- **Per-packet round-trip delay (ms):**
  - Flow 1 (95th percentile 55.95 ms)
  - Flow 2 (95th percentile 53.75 ms)
  - Flow 3 (95th percentile 72.13 ms)
Run 9: Statistics of TaoVA-100x

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

# Below is generated by plot.py at 2018-04-18 17:56:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 163.79 Mbit/s
95th percentile per-packet one-way delay: 61.039 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 12.98 Mbit/s
95th percentile per-packet one-way delay: 53.885 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 224.67 Mbit/s
95th percentile per-packet one-way delay: 61.743 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 38.30 Mbit/s
95th percentile per-packet one-way delay: 58.529 ms
Loss rate: 0.00%
Run 9: Report of TaoVA-100x — Data Link

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

*Legend:*
- Flow 1 ingress (mean 12.98 Mbit/s)
- Flow 1 egress (mean 12.98 Mbit/s)
- Flow 2 ingress (mean 224.67 Mbit/s)
- Flow 2 egress (mean 224.67 Mbit/s)
- Flow 3 ingress (mean 38.43 Mbit/s)
- Flow 3 egress (mean 38.30 Mbit/s)

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

*Legend:*
- Flow 1 (95th percentile 53.88 ms)
- Flow 2 (95th percentile 61.74 ms)
- Flow 3 (95th percentile 58.53 ms)

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Run 10: Statistics of TaoVA-100x

Start at: 2018-04-18 15:09:16
End at: 2018-04-18 15:09:46

# Below is generated by plot.py at 2018-04-18 17:59:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.30 Mbit/s
95th percentile per-packet one-way delay: 59.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 160.40 Mbit/s
95th percentile per-packet one-way delay: 56.533 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 86.68 Mbit/s
95th percentile per-packet one-way delay: 53.758 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 191.12 Mbit/s
95th percentile per-packet one-way delay: 77.687 ms
Loss rate: 0.00%
Run 10: Report of TaoVA-100x — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 160.42 Mbit/s)
Flow 1 egress (mean 160.40 Mbit/s)
Flow 2 ingress (mean 86.68 Mbit/s)
Flow 2 egress (mean 86.66 Mbit/s)
Flow 3 ingress (mean 191.17 Mbit/s)
Flow 3 egress (mean 191.12 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 56.53 ms)
Flow 2 (95th percentile 53.76 ms)
Flow 3 (95th percentile 77.69 ms)
Run 1: Statistics of TCP Vegas

Start at: 2018-04-18 12:51:23
End at: 2018-04-18 12:51:53

# Below is generated by plot.py at 2018-04-18 17:59:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 207.71 Mbit/s
  95th percentile per-packet one-way delay: 54.041 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 99.14 Mbit/s
  95th percentile per-packet one-way delay: 54.123 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 134.21 Mbit/s
  95th percentile per-packet one-way delay: 53.908 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 58.21 Mbit/s
  95th percentile per-packet one-way delay: 54.686 ms
  Loss rate: 0.00%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-04-18 13:06:43

# Below is generated by plot.py at 2018-04-18 17:59:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 152.89 Mbit/s
  95th percentile per-packet one-way delay: 53.359 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 70.03 Mbit/s
  95th percentile per-packet one-way delay: 53.356 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 62.62 Mbit/s
  95th percentile per-packet one-way delay: 53.356 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 124.34 Mbit/s
  95th percentile per-packet one-way delay: 53.364 ms
  Loss rate: 0.00%
Run 2: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 70.03 Mbit/s)
- Flow 1 egress (mean 70.03 Mbit/s)
- Flow 2 ingress (mean 62.62 Mbit/s)
- Flow 2 egress (mean 62.62 Mbit/s)
- Flow 3 ingress (mean 124.37 Mbit/s)
- Flow 3 egress (mean 124.34 Mbit/s)

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

- Flow 1 (95th percentile 53.36 ms)
- Flow 2 (95th percentile 53.36 ms)
- Flow 3 (95th percentile 53.36 ms)
Run 3: Statistics of TCP Vegas


# Below is generated by plot.py at 2018-04-18 17:59:18
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 236.08 Mbit/s
    95th percentile per-packet one-way delay: 53.987 ms
    Loss rate: 0.01%
-- Flow 1:
    Average throughput: 209.94 Mbit/s
    95th percentile per-packet one-way delay: 54.000 ms
    Loss rate: 0.00%
-- Flow 2:
    Average throughput: 10.62 Mbit/s
    95th percentile per-packet one-way delay: 53.541 ms
    Loss rate: 0.02%
-- Flow 3:
    Average throughput: 57.46 Mbit/s
    95th percentile per-packet one-way delay: 54.058 ms
    Loss rate: 0.08%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-04-18 13:37:02
End at: 2018-04-18 13:37:32

# Below is generated by plot.py at 2018-04-18 17:59:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 176.52 Mbit/s
95th percentile per-packet one-way delay: 62.450 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 76.60 Mbit/s
95th percentile per-packet one-way delay: 59.143 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 56.35 Mbit/s
95th percentile per-packet one-way delay: 59.651 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 187.88 Mbit/s
95th percentile per-packet one-way delay: 64.554 ms
Loss rate: 0.00%
Run 4: Report of TCP Vegas — Data Link
Run 5: Statistics of TCP Vegas


# Below is generated by plot.py at 2018-04-18 18:00:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 368.99 Mbit/s
  95th percentile per-packet one-way delay: 63.637 ms
  Loss rate: 0.03%
  -- Flow 1:
    Average throughput: 225.26 Mbit/s
    95th percentile per-packet one-way delay: 64.868 ms
    Loss rate: 0.05%
  -- Flow 2:
    Average throughput: 182.27 Mbit/s
    95th percentile per-packet one-way delay: 59.273 ms
    Loss rate: 0.01%
  -- Flow 3:
    Average throughput: 67.37 Mbit/s
    95th percentile per-packet one-way delay: 57.932 ms
    Loss rate: 0.04%
Run 5: Report of TCP Vegas — Data Link

Graph 1: Throughput (Mbps)
- Flow 1 ingress (mean 225.35 Mbps)
- Flow 1 egress (mean 225.26 Mbps)
- Flow 2 ingress (mean 182.24 Mbps)
- Flow 2 egress (mean 182.27 Mbps)
- Flow 3 ingress (mean 67.37 Mbps)
- Flow 3 egress (mean 67.37 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 64.87 ms)
- Flow 2 (95th percentile 59.27 ms)
- Flow 3 (95th percentile 57.93 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-04-18 14:08:09
End at: 2018-04-18 14:08:39

# Below is generated by plot.py at 2018-04-18 18:00:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 308.95 Mbit/s
95th percentile per-packet one-way delay: 62.065 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 133.97 Mbit/s
95th percentile per-packet one-way delay: 61.462 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 155.03 Mbit/s
95th percentile per-packet one-way delay: 61.905 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 216.50 Mbit/s
95th percentile per-packet one-way delay: 63.123 ms
Loss rate: 0.07%
Run 7: Statistics of TCP Vegas

Start at: 2018-04-18 14:23:44
End at: 2018-04-18 14:24:14

# Below is generated by plot.py at 2018-04-18 18:00:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 199.87 Mbit/s
  95th percentile per-packet one-way delay: 62.400 ms
  Loss rate: 0.00%
  -- Flow 1:
  Average throughput: 136.15 Mbit/s
  95th percentile per-packet one-way delay: 63.221 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 64.01 Mbit/s
  95th percentile per-packet one-way delay: 55.018 ms
  Loss rate: 0.00%
  -- Flow 3:
  Average throughput: 63.45 Mbit/s
  95th percentile per-packet one-way delay: 53.754 ms
  Loss rate: 0.00%
Run 7: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)** vs Time (s)
  - Flow 1 ingress (mean 136.16 Mbps)
  - Flow 1 egress (mean 136.15 Mbps)
  - Flow 2 ingress (mean 64.01 Mbps)
  - Flow 2 egress (mean 64.01 Mbps)
  - Flow 3 ingress (mean 63.47 Mbps)
  - Flow 3 egress (mean 63.45 Mbps)

- **Per-packet one way delay (ms)** vs Time (s)
  - Flow 1 (95th percentile 63.22 ms)
  - Flow 2 (95th percentile 55.02 ms)
  - Flow 3 (95th percentile 53.75 ms)
Run 8: Statistics of TCP Vegas

End at: 2018-04-18 14:39:53

# Below is generated by plot.py at 2018-04-18 18:00:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 242.34 Mbit/s
  95th percentile per-packet one-way delay: 63.021 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 157.01 Mbit/s
  95th percentile per-packet one-way delay: 63.533 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 93.93 Mbit/s
  95th percentile per-packet one-way delay: 62.104 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 68.90 Mbit/s
  95th percentile per-packet one-way delay: 57.020 ms
  Loss rate: 0.00%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-04-18 14:54:58

# Below is generated by plot.py at 2018-04-18 18:00:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 273.07 Mbit/s
  95th percentile per-packet one-way delay: 61.764 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 124.98 Mbit/s
  95th percentile per-packet one-way delay: 56.761 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 219.50 Mbit/s
  95th percentile per-packet one-way delay: 63.379 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 5.77 Mbit/s
  95th percentile per-packet one-way delay: 54.924 ms
  Loss rate: 0.17%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-04-18 15:10:22
End at: 2018-04-18 15:10:52

# Below is generated by plot.py at 2018-04-18 18:00:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 160.49 Mbit/s
95th percentile per-packet one-way delay: 62.312 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 23.39 Mbit/s
95th percentile per-packet one-way delay: 56.851 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 103.80 Mbit/s
95th percentile per-packet one-way delay: 60.296 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 205.41 Mbit/s
95th percentile per-packet one-way delay: 63.810 ms
Loss rate: 0.00%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus


# Below is generated by plot.py at 2018-04-18 18:03:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 352.33 Mbit/s
  95th percentile per-packet one-way delay: 134.056 ms
  Loss rate: 0.03%
  -- Flow 1:
    Average throughput: 228.91 Mbit/s
    95th percentile per-packet one-way delay: 128.991 ms
    Loss rate: 0.05%
  -- Flow 2:
    Average throughput: 123.72 Mbit/s
    95th percentile per-packet one-way delay: 133.721 ms
    Loss rate: 0.00%
  -- Flow 3:
    Average throughput: 125.97 Mbit/s
    95th percentile per-packet one-way delay: 144.915 ms
    Loss rate: 0.00%
Run 1: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 229.11 Mbit/s)
Flow 1 egress (mean 228.91 Mbit/s)
Flow 2 ingress (mean 123.96 Mbit/s)
Flow 2 egress (mean 123.72 Mbit/s)
Flow 3 ingress (mean 126.64 Mbit/s)
Flow 3 egress (mean 126.97 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 128.99 ms)
Flow 2 (95th percentile 133.72 ms)
Flow 3 (95th percentile 144.91 ms)
Run 2: Statistics of Verus

Start at: 2018-04-18 13:08:10
End at: 2018-04-18 13:08:40

# Below is generated by plot.py at 2018-04-18 18:03:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 300.73 Mbit/s
  95th percentile per-packet one-way delay: 208.969 ms
  Loss rate: 2.68%
-- Flow 1:
  Average throughput: 185.06 Mbit/s
  95th percentile per-packet one-way delay: 177.197 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 127.77 Mbit/s
  95th percentile per-packet one-way delay: 274.973 ms
  Loss rate: 8.15%
-- Flow 3:
  Average throughput: 95.01 Mbit/s
  95th percentile per-packet one-way delay: 107.742 ms
  Loss rate: 0.13%
Run 2: Report of Verus — Data Link

---

**Graph 1:**
- **Throughput (Mbps):**
  - Flow 1 ingress (mean 186.03 Mbps)
  - Flow 1 egress (mean 185.06 Mbps)
  - Flow 2 ingress (mean 139.48 Mbps)
  - Flow 2 egress (mean 127.77 Mbps)
  - Flow 3 ingress (mean 95.66 Mbps)
  - Flow 3 egress (mean 95.00 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 177.20 ms)
  - Flow 2 (95th percentile 274.97 ms)
  - Flow 3 (95th percentile 107.74 ms)

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Run 3: Statistics of Verus

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

# Below is generated by plot.py at 2018-04-18 18:04:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 320.98 Mbit/s
  95th percentile per-packet one-way delay: 123.111 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 194.27 Mbit/s
  95th percentile per-packet one-way delay: 118.729 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 140.89 Mbit/s
  95th percentile per-packet one-way delay: 133.242 ms
  Loss rate: 0.84%
-- Flow 3:
  Average throughput: 101.48 Mbit/s
  95th percentile per-packet one-way delay: 125.499 ms
  Loss rate: 0.00%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

End at: 2018-04-18 13:39:01

# Below is generated by plot.py at 2018-04-18 18:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 341.10 Mbit/s
95th percentile per-packet one-way delay: 232.950 ms
Loss rate: 1.36%
-- Flow 1:
Average throughput: 169.00 Mbit/s
95th percentile per-packet one-way delay: 128.300 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 207.20 Mbit/s
95th percentile per-packet one-way delay: 278.775 ms
Loss rate: 3.19%
-- Flow 3:
Average throughput: 106.92 Mbit/s
95th percentile per-packet one-way delay: 154.392 ms
Loss rate: 0.26%
Run 4: Report of Verus — Data Link
Run 5: Statistics of Verus

End at: 2018-04-18 13:54:50

# Below is generated by plot.py at 2018-04-18 18:05:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 323.82 Mbit/s
95th percentile per-packet one-way delay: 137.245 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 195.37 Mbit/s
95th percentile per-packet one-way delay: 102.359 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 135.01 Mbit/s
95th percentile per-packet one-way delay: 192.945 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 118.30 Mbit/s
95th percentile per-packet one-way delay: 205.392 ms
Loss rate: 0.93%
Run 5: Report of Verus — Data Link
Run 6: Statistics of Verus

Start at: 2018-04-18 14:09:44
End at: 2018-04-18 14:10:14

# Below is generated by plot.py at 2018-04-18 18:05:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 352.16 Mbit/s
  95th percentile per-packet one-way delay: 141.990 ms
  Loss rate: 1.70%

-- Flow 1:
  Average throughput: 199.46 Mbit/s
  95th percentile per-packet one-way delay: 117.480 ms
  Loss rate: 0.36%

-- Flow 2:
  Average throughput: 170.10 Mbit/s
  95th percentile per-packet one-way delay: 111.419 ms
  Loss rate: 0.23%

-- Flow 3:
  Average throughput: 123.92 Mbit/s
  95th percentile per-packet one-way delay: 318.887 ms
  Loss rate: 11.15%
Run 6: Report of Verus — Data Link

![Graphic of network throughput and packet delay over time]

- Flow 1 ingress (mean 200.09 Mbps)
- Flow 1 egress (mean 199.46 Mbps)
- Flow 2 ingress (mean 170.49 Mbps)
- Flow 2 egress (mean 170.10 Mbps)
- Flow 3 ingress (mean 139.45 Mbps)
- Flow 3 egress (mean 123.92 Mbps)

![Graphic of packet delay distribution]

- Flow 1 (95th percentile 117.48 ms)
- Flow 2 (95th percentile 111.42 ms)
- Flow 3 (95th percentile 318.89 ms)
Run 7: Statistics of Verus

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

# Below is generated by plot.py at 2018-04-18 18:06:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.54 Mbit/s
95th percentile per-packet one-way delay: 141.339 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 221.58 Mbit/s
95th percentile per-packet one-way delay: 128.891 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 156.02 Mbit/s
95th percentile per-packet one-way delay: 162.855 ms
Loss rate: 1.25%
-- Flow 3:
Average throughput: 97.20 Mbit/s
95th percentile per-packet one-way delay: 317.102 ms
Loss rate: 4.74%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 221.63 Mbit/s)
- Flow 1 egress (mean 221.58 Mbit/s)
- Flow 2 ingress (mean 157.95 Mbit/s)
- Flow 2 egress (mean 156.02 Mbit/s)
- Flow 3 ingress (mean 102.04 Mbit/s)
- Flow 3 egress (mean 97.20 Mbit/s)
Run 8: Statistics of Verus

Start at: 2018-04-18 14:40:55
End at: 2018-04-18 14:41:25

# Below is generated by plot.py at 2018-04-18 18:06:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 289.70 Mbit/s
  95th percentile per-packet one-way delay: 245.205 ms
  Loss rate: 2.28%
-- Flow 1:
  Average throughput: 190.47 Mbit/s
  95th percentile per-packet one-way delay: 234.751 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 101.47 Mbit/s
  95th percentile per-packet one-way delay: 301.452 ms
  Loss rate: 6.71%
-- Flow 3:
  Average throughput: 97.07 Mbit/s
  95th percentile per-packet one-way delay: 126.312 ms
  Loss rate: 0.01%
Run 8: Report of Verus — Data Link

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

- Flow 1 ingress (mean 192.41 Mbit/s)
- Flow 1 egress (mean 190.47 Mbit/s)
- Flow 2 ingress (mean 108.52 Mbit/s)
- Flow 2 egress (mean 101.47 Mbit/s)
- Flow 3 ingress (mean 97.03 Mbit/s)
- Flow 3 egress (mean 97.07 Mbit/s)
Run 9: Statistics of Verus

Start at: 2018-04-18 14:56:30
End at: 2018-04-18 14:57:00

# Below is generated by plot.py at 2018-04-18 18:08:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 330.05 Mbit/s
95th percentile per-packet one-way delay: 123.290 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 184.00 Mbit/s
95th percentile per-packet one-way delay: 119.691 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 167.54 Mbit/s
95th percentile per-packet one-way delay: 129.693 ms
Loss rate: 0.26%
-- Flow 3:
Average throughput: 105.39 Mbit/s
95th percentile per-packet one-way delay: 115.250 ms
Loss rate: 0.00%
Run 9: Report of Verus — Data Link
Run 10: Statistics of Verus

Start at: 2018-04-18 15:11:49
End at: 2018-04-18 15:12:19

# Below is generated by plot.py at 2018-04-18 18:08:46
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 313.70 Mbit/s
  95th percentile per-packet one-way delay: 169.455 ms
  Loss rate: 1.62%
-- Flow 1:
  Average throughput: 207.04 Mbit/s
  95th percentile per-packet one-way delay: 136.638 ms
  Loss rate: 1.95%
-- Flow 2:
  Average throughput: 93.04 Mbit/s
  95th percentile per-packet one-way delay: 176.998 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 136.00 Mbit/s
  95th percentile per-packet one-way delay: 191.344 ms
  Loss rate: 2.28%
Run 10: Report of Verus — Data Link

![Graph showing throughput and latency over time for different flows.](image-url)
Run 1: Statistics of Copa

Start at: 2018-04-18 13:01:31
End at: 2018-04-18 13:02:01

# Below is generated by plot.py at 2018-04-18 18:09:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 169.95 Mbit/s
95th percentile per-packet one-way delay: 53.295 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 97.88 Mbit/s
95th percentile per-packet one-way delay: 53.020 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 84.33 Mbit/s
95th percentile per-packet one-way delay: 53.320 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 47.75 Mbit/s
95th percentile per-packet one-way delay: 53.593 ms
Loss rate: 0.03%
Run 1: Report of Copa — Data Link

---

**Graph 1:**
- X-axis: Time (s)
- Y-axis: Throughput (Mbps)
- Legend:
  - Flow 1 ingress (mean 97.89 Mbps)
  - Flow 1 egress (mean 97.88 Mbps)
  - Flow 2 ingress (mean 84.34 Mbps)
  - Flow 2 egress (mean 84.33 Mbps)
  - Flow 3 ingress (mean 47.74 Mbps)
  - Flow 3 egress (mean 47.75 Mbps)

**Graph 2:**
- X-axis: Time (s)
- Y-axis: Per packet one way delay (ms)
- Legend:
  - Flow 1 (95th percentile 53.02 ms)
  - Flow 2 (95th percentile 53.32 ms)
  - Flow 3 (95th percentile 53.59 ms)
Run 2: Statistics of Copa

Start at: 2018-04-18 13:16:46
End at: 2018-04-18 13:17:16

# Below is generated by plot.py at 2018-04-18 18:10:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 166.54 Mbit/s
  95th percentile per-packet one-way delay: 53.264 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 91.60 Mbit/s
  95th percentile per-packet one-way delay: 53.275 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 85.53 Mbit/s
  95th percentile per-packet one-way delay: 53.172 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 54.32 Mbit/s
  95th percentile per-packet one-way delay: 53.364 ms
  Loss rate: 0.00%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 91.59 Mbit/s)
- Flow 1 egress (mean 91.60 Mbit/s)
- Flow 2 ingress (mean 85.52 Mbit/s)
- Flow 2 egress (mean 85.53 Mbit/s)
- Flow 3 ingress (mean 54.33 Mbit/s)
- Flow 3 egress (mean 54.32 Mbit/s)

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

- Flow 1 (95th percentile 53.27 ms)
- Flow 2 (95th percentile 53.17 ms)
- Flow 3 (95th percentile 53.36 ms)
Run 3: Statistics of Copa

End at: 2018-04-18 13:32:29

# Below is generated by plot.py at 2018-04-18 18:10:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 175.41 Mbit/s
  95th percentile per-packet one-way delay: 53.559 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 83.08 Mbit/s
  95th percentile per-packet one-way delay: 53.524 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 94.25 Mbit/s
  95th percentile per-packet one-way delay: 53.629 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 89.16 Mbit/s
  95th percentile per-packet one-way delay: 53.129 ms
  Loss rate: 0.00%
Run 3: Report of Copa — Data Link

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

Throughput (Mbps)

Time (s)

Per packet one way delay (ms)

Time (s)
Run 4: Statistics of Copa

End at: 2018-04-18 13:47:42

# Below is generated by plot.py at 2018-04-18 18:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 319.69 Mbit/s
95th percentile per-packet one-way delay: 249.820 ms
Loss rate: 40.22%
-- Flow 1:
Average throughput: 59.74 Mbit/s
95th percentile per-packet one-way delay: 161.097 ms
Loss rate: 1.42%
-- Flow 2:
Average throughput: 319.17 Mbit/s
95th percentile per-packet one-way delay: 253.433 ms
Loss rate: 48.45%
-- Flow 3:
Average throughput: 144.81 Mbit/s
95th percentile per-packet one-way delay: 244.873 ms
Loss rate: 23.29%
Run 5: Statistics of Copa

Start at: 2018-04-18 14:02:56
End at: 2018-04-18 14:03:26

# Below is generated by plot.py at 2018-04-18 18:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.61 Mbit/s
95th percentile per-packet one-way delay: 53.364 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 100.11 Mbit/s
95th percentile per-packet one-way delay: 53.393 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 115.94 Mbit/s
95th percentile per-packet one-way delay: 53.299 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 97.74 Mbit/s
95th percentile per-packet one-way delay: 50.369 ms
Loss rate: 0.00%
Run 5: Report of Copa — Data Link

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

- Flow 1 ingress (mean 100.10 Mbps)
- Flow 1 egress (mean 100.11 Mbps)
- Flow 2 ingress (mean 115.88 Mbps)
- Flow 2 egress (mean 115.94 Mbps)
- Flow 3 ingress (mean 97.74 Mbps)
- Flow 3 egress (mean 97.74 Mbps)

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

- Flow 1 (95th percentile 53.39 ms)
- Flow 2 (95th percentile 53.30 ms)
- Flow 3 (95th percentile 50.37 ms)
Run 6: Statistics of Copa

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

# Below is generated by plot.py at 2018-04-18 18:17:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 200.15 Mbit/s
  95th percentile per-packet one-way delay: 53.371 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 98.01 Mbit/s
  95th percentile per-packet one-way delay: 53.366 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 110.41 Mbit/s
  95th percentile per-packet one-way delay: 53.402 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 86.41 Mbit/s
  95th percentile per-packet one-way delay: 53.219 ms
  Loss rate: 0.03%
Run 6: Report of Copa — Data Link

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

- Flow 1 ingress (mean 98.01 Mbit/s)
- Flow 1 egress (mean 98.01 Mbit/s)
- Flow 2 ingress (mean 110.42 Mbit/s)
- Flow 2 egress (mean 110.41 Mbit/s)
- Flow 3 ingress (mean 86.43 Mbit/s)
- Flow 3 egress (mean 96.41 Mbit/s)

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

- Flow 1 (95th percentile 53.37 ms)
- Flow 2 (95th percentile 53.40 ms)
- Flow 3 (95th percentile 53.22 ms)
Run 7: Statistics of Copa

Start at: 2018-04-18 14:33:51
End at: 2018-04-18 14:34:21

# Below is generated by plot.py at 2018-04-18 18:17:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 235.18 Mbit/s
95th percentile per-packet one-way delay: 134.310 ms
Loss rate: 10.02%
-- Flow 1:
Average throughput: 109.32 Mbit/s
95th percentile per-packet one-way delay: 53.326 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 87.43 Mbit/s
95th percentile per-packet one-way delay: 53.117 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 203.99 Mbit/s
95th percentile per-packet one-way delay: 143.218 ms
Loss rate: 27.90%
Run 7: Report of Copa — Data Link

![Graph of throughput and delay over time for different flows.](image-url)
Run 8: Statistics of Copa

Start at: 2018-04-18 14:49:31
End at: 2018-04-18 14:50:01

# Below is generated by plot.py at 2018-04-18 18:20:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 338.72 Mbit/s
  95th percentile per-packet one-way delay: 246.344 ms
  Loss rate: 34.83%
-- Flow 1:
  Average throughput: 140.37 Mbit/s
  95th percentile per-packet one-way delay: 194.039 ms
  Loss rate: 17.02%
-- Flow 2:
  Average throughput: 297.70 Mbit/s
  95th percentile per-packet one-way delay: 250.154 ms
  Loss rate: 43.43%
-- Flow 3:
  Average throughput: 0.36 Mbit/s
  95th percentile per-packet one-way delay: 178.701 ms
  Loss rate: 13.21%
Run 8: Report of Copa — Data Link

![Graph showing throughput (Mbps) over time for different flows with mean values.

![Graph showing per-packet one-way delay (ms) over time for different flows with 95th percentile values.]}
Run 9: Statistics of Copa

Start at: 2018-04-18 15:04:54
End at: 2018-04-18 15:05:25

# Below is generated by plot.py at 2018-04-18 18:20:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 142.36 Mbit/s
  95th percentile per-packet one-way delay: 53.589 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 78.47 Mbit/s
  95th percentile per-packet one-way delay: 53.607 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 64.85 Mbit/s
  95th percentile per-packet one-way delay: 53.409 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 62.35 Mbit/s
  95th percentile per-packet one-way delay: 51.091 ms
  Loss rate: 0.00%
Run 9: Report of Copa — Data Link

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

**Throughput (Mbit/s)**
- Flow 1 ingress (mean 78.46 Mbit/s)
- Flow 1 egress (mean 78.47 Mbit/s)
- Flow 2 ingress (mean 64.85 Mbit/s)
- Flow 2 egress (mean 64.85 Mbit/s)
- Flow 3 ingress (mean 62.34 Mbit/s)
- Flow 3 egress (mean 62.35 Mbit/s)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 53.61 ms)
- Flow 2 (95th percentile 53.41 ms)
- Flow 3 (95th percentile 51.09 ms)
Run 10: Statistics of Copa

Start at: 2018-04-18 15:20:22
End at: 2018-04-18 15:20:52

# Below is generated by plot.py at 2018-04-18 18:20:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 179.73 Mbit/s
95th percentile per-packet one-way delay: 53.634 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 103.80 Mbit/s
95th percentile per-packet one-way delay: 53.598 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 94.07 Mbit/s
95th percentile per-packet one-way delay: 53.607 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 40.04 Mbit/s
95th percentile per-packet one-way delay: 54.113 ms
Loss rate: 0.00%
Run 10: Report of Copa — Data Link
Run 1: Statistics of FillP

End at: 2018-04-18 12:57:44

# Below is generated by plot.py at 2018-04-18 18:34:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1308.96 Mbit/s
95th percentile per-packet one-way delay: 161.761 ms
Loss rate: 9.15%
-- Flow 1:
Average throughput: 692.32 Mbit/s
95th percentile per-packet one-way delay: 160.158 ms
Loss rate: 7.99%
-- Flow 2:
Average throughput: 632.77 Mbit/s
95th percentile per-packet one-way delay: 159.325 ms
Loss rate: 9.20%
-- Flow 3:
Average throughput: 592.42 Mbit/s
95th percentile per-packet one-way delay: 193.989 ms
Loss rate: 12.97%
Run 1: Report of FillP — Data Link

![Data Link Throughput Graph]

![Data Link Packet Delay Graph]
Run 2: Statistics of FillIP

Start at: 2018-04-18 13:12:30
End at: 2018-04-18 13:13:00

# Below is generated by plot.py at 2018-04-18 18:34:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1259.47 Mbit/s
  95th percentile per-packet one-way delay: 167.599 ms
  Loss rate: 9.20%
-- Flow 1:
  Average throughput: 658.22 Mbit/s
  95th percentile per-packet one-way delay: 158.001 ms
  Loss rate: 5.50%
-- Flow 2:
  Average throughput: 651.58 Mbit/s
  95th percentile per-packet one-way delay: 170.773 ms
  Loss rate: 13.25%
-- Flow 3:
  Average throughput: 504.31 Mbit/s
  95th percentile per-packet one-way delay: 217.720 ms
  Loss rate: 12.08%
Run 2: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 696.45 Mbps/s)
- Flow 1 Egress (mean 658.22 Mbps/s)
- Flow 2 Ingress (mean 750.95 Mbps/s)
- Flow 2 Egress (mean 651.58 Mbps/s)
- Flow 3 Ingress (mean 573.45 Mbps/s)
- Flow 3 Egress (mean 504.31 Mbps/s)

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

- Flow 1 (95th percentile 158.00 ms)
- Flow 2 (95th percentile 170.77 ms)
- Flow 3 (95th percentile 217.72 ms)
Run 3: Statistics of FillP


# Below is generated by plot.py at 2018-04-18 18:34:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1070.57 Mbit/s
95th percentile per-packet one-way delay: 187.464 ms
Loss rate: 8.82%
-- Flow 1:
Average throughput: 573.56 Mbit/s
95th percentile per-packet one-way delay: 192.724 ms
Loss rate: 8.50%
-- Flow 2:
Average throughput: 639.85 Mbit/s
95th percentile per-packet one-way delay: 152.318 ms
Loss rate: 5.63%
-- Flow 3:
Average throughput: 215.04 Mbit/s
95th percentile per-packet one-way delay: 245.243 ms
Loss rate: 25.91%
Run 3: Report of FillP — Data Link

![Throughput Graph](image)

- Flow 1 ingress (mean 626.87 Mbit/s)
- Flow 1 egress (mean 573.56 Mbit/s)
- Flow 2 ingress (mean 677.89 Mbit/s)
- Flow 2 egress (mean 639.85 Mbit/s)
- Flow 3 ingress (mean 290.24 Mbit/s)
- Flow 3 egress (mean 215.04 Mbit/s)

![Delay Graph](image)

- Flow 1 (95th percentile 192.72 ms)
- Flow 2 (95th percentile 152.32 ms)
- Flow 3 (95th percentile 245.24 ms)
Run 4: Statistics of FillP


# Below is generated by plot.py at 2018-04-18 18:38:15
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1356.63 Mbit/s
  95th percentile per-packet one-way delay: 165.926 ms
  Loss rate: 10.19%
-- Flow 1:
  Average throughput: 730.70 Mbit/s
  95th percentile per-packet one-way delay: 153.328 ms
  Loss rate: 7.77%
-- Flow 2:
  Average throughput: 652.78 Mbit/s
  95th percentile per-packet one-way delay: 185.124 ms
  Loss rate: 14.39%
-- Flow 3:
  Average throughput: 578.36 Mbit/s
  95th percentile per-packet one-way delay: 161.084 ms
  Loss rate: 9.20%
Run 4: Report of FillP — Data Link

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

Legend:
- Flow 1 ingress (mean 792.34 Mb/s)
- Flow 1 egress (mean 730.70 Mb/s)
- Flow 2 ingress (mean 762.53 Mb/s)
- Flow 2 egress (mean 652.78 Mb/s)
- Flow 3 ingress (mean 637.18 Mb/s)
- Flow 3 egress (mean 578.36 Mb/s)

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

Legend:
- Flow 1 (95th percentile 153.33 ms)
- Flow 2 (95th percentile 185.12 ms)
- Flow 3 (95th percentile 161.08 ms)
Run 5: Statistics of FillP

End at: 2018-04-18 13:59:07

# Below is generated by plot.py at 2018-04-18 18:39:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1293.81 Mbit/s
95th percentile per-packet one-way delay: 181.384 ms
Loss rate: 9.85%
-- Flow 1:
Average throughput: 690.56 Mbit/s
95th percentile per-packet one-way delay: 157.039 ms
Loss rate: 8.36%
-- Flow 2:
Average throughput: 612.60 Mbit/s
95th percentile per-packet one-way delay: 189.242 ms
Loss rate: 11.52%
-- Flow 3:
Average throughput: 591.08 Mbit/s
95th percentile per-packet one-way delay: 197.750 ms
Loss rate: 11.47%
Run 5: Report of FillP — Data Link

Throughput (Mbps):
- Flow 1 Ingress (mean 753.52 Mbps)
- Flow 1 Egress (mean 690.56 Mbps)
- Flow 2 Ingress (mean 692.35 Mbps)
- Flow 2 Egress (mean 612.60 Mbps)
- Flow 3 Ingress (mean 667.63 Mbps)
- Flow 3 Egress (mean 591.08 Mbps)

Packet per 10 ms delay (ms):
- Flow 1 (95th percentile 157.04 ms)
- Flow 2 (95th percentile 189.24 ms)
- Flow 3 (95th percentile 197.75 ms)
Run 6: Statistics of FillP

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

# Below is generated by plot.py at 2018-04-18 18:40:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1344.72 Mbit/s
95th percentile per-packet one-way delay: 154.977 ms
Loss rate: 9.42%
-- Flow 1:
Average throughput: 703.38 Mbit/s
95th percentile per-packet one-way delay: 151.602 ms
Loss rate: 8.93%
-- Flow 2:
Average throughput: 662.81 Mbit/s
95th percentile per-packet one-way delay: 155.122 ms
Loss rate: 9.07%
-- Flow 3:
Average throughput: 604.07 Mbit/s
95th percentile per-packet one-way delay: 170.922 ms
Loss rate: 11.85%
Run 6: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 772.36 Mbps/s)
- Flow 1 Egress (mean 703.38 Mbps/s)
- Flow 2 Ingress (mean 728.92 Mbps/s)
- Flow 2 Egress (mean 662.81 Mbps/s)
- Flow 3 Ingress (mean 685.31 Mbps/s)
- Flow 3 Egress (mean 604.07 Mbps/s)

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

- Flow 1 (95th percentile 151.60 ms)
- Flow 2 (95th percentile 155.12 ms)
- Flow 3 (95th percentile 170.92 ms)
Run 7: Statistics of FillP

Start at: 2018-04-18 14:29:33  
End at: 2018-04-18 14:30:03  

# Below is generated by plot.py at 2018-04-18 18:40:48  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 1238.97 Mbit/s  
95th percentile per-packet one-way delay: 158.273 ms  
Loss rate: 8.52%  
-- Flow 1:  
Average throughput: 703.67 Mbit/s  
95th percentile per-packet one-way delay: 153.390 ms  
Loss rate: 8.39%  
-- Flow 2:  
Average throughput: 681.44 Mbit/s  
95th percentile per-packet one-way delay: 158.259 ms  
Loss rate: 6.46%  
-- Flow 3:  
Average throughput: 246.15 Mbit/s  
95th percentile per-packet one-way delay: 191.268 ms  
Loss rate: 19.35%
Run 7: Report of FillP — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 788.13 Mbps) — Flow 1 egress (mean 703.67 Mbps)
Flow 2 ingress (mean 728.50 Mbps) — Flow 2 egress (mean 681.44 Mbps)
Flow 3 ingress (mean 305.28 Mbps) — Flow 3 egress (mean 246.15 Mbps)

Delay (ms)

Time (s)

Flow 1 (95th percentile 153.39 ms) — Flow 2 (95th percentile 158.26 ms) — Flow 3 (95th percentile 191.27 ms)
Run 8: Statistics of FillP

Start at: 2018-04-18 14:45:12
End at: 2018-04-18 14:45:42

# Below is generated by plot.py at 2018-04-18 18:46:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1286.17 Mbit/s
95th percentile per-packet one-way delay: 250.833 ms
Loss rate: 7.41%
-- Flow 1:
Average throughput: 607.22 Mbit/s
95th percentile per-packet one-way delay: 252.018 ms
Loss rate: 5.38%
-- Flow 2:
Average throughput: 710.97 Mbit/s
95th percentile per-packet one-way delay: 150.724 ms
Loss rate: 7.32%
-- Flow 3:
Average throughput: 621.66 Mbit/s
95th percentile per-packet one-way delay: 320.597 ms
Loss rate: 13.11%
Run 8: Report of FillP — Data Link

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

- Flow 1 Ingress (mean 641.80 Mbps)
- Flow 1 Egress (mean 607.72 Mbps)
- Flow 2 Ingress (mean 767.16 Mbps)
- Flow 2 Egress (mean 710.97 Mbps)
- Flow 3 Ingress (mean 715.46 Mbps)
- Flow 3 Egress (mean 623.66 Mbps)

![Graph 2: Percent packet latency (ms) vs Time (s)]

- Flow 1 (95th percentile 252.02 ms)
- Flow 2 (95th percentile 150.72 ms)
- Flow 3 (95th percentile 320.60 ms)
Run 9: Statistics of FillP

Start at: 2018-04-18 15:00:44
End at: 2018-04-18 15:01:14

# Below is generated by plot.py at 2018-04-18 18:55:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 1173.94 Mbit/s
  95th percentile per-packet one-way delay: 185.960 ms
  Loss rate: 9.97%
-- Flow 1:
  Average throughput: 624.87 Mbit/s
  95th percentile per-packet one-way delay: 174.615 ms
  Loss rate: 8.62%
-- Flow 2:
  Average throughput: 504.49 Mbit/s
  95th percentile per-packet one-way delay: 200.083 ms
  Loss rate: 11.68%
-- Flow 3:
  Average throughput: 644.05 Mbit/s
  95th percentile per-packet one-way delay: 185.740 ms
  Loss rate: 11.11%
Run 9: Report of FillP — Data Link

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

- **Throughput (Mbps)**:
  - Flow 1 ingress (mean 683.92 Mbps)
  - Flow 1 egress (mean 624.87 Mbps)
  - Flow 2 ingress (mean 571.20 Mbps)
  - Flow 2 egress (mean 504.49 Mbps)
  - Flow 3 ingress (mean 724.54 Mbps)
  - Flow 3 egress (mean 644.05 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 174.62 ms)
  - Flow 2 (95th percentile 200.08 ms)
  - Flow 3 (95th percentile 185.74 ms)
Run 10: Statistics of FillP

Start at: 2018-04-18 15:16:06
End at: 2018-04-18 15:16:36

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 1308.09 Mbit/s
95th percentile per-packet one-way delay: 165.171 ms
Loss rate: 9.98%
-- Flow 1:
Average throughput: 698.88 Mbit/s
95th percentile per-packet one-way delay: 158.928 ms
Loss rate: 7.70%
-- Flow 2:
Average throughput: 630.93 Mbit/s
95th percentile per-packet one-way delay: 161.526 ms
Loss rate: 10.28%
-- Flow 3:
Average throughput: 572.01 Mbit/s
95th percentile per-packet one-way delay: 180.950 ms
Loss rate: 16.95%
Run 10: Report of FillIP — Data Link
Run 1: Statistics of Indigo-1-32


# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 350.40 Mbit/s
  95th percentile per-packet one-way delay: 60.950 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 189.12 Mbit/s
  95th percentile per-packet one-way delay: 59.440 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 168.77 Mbit/s
  95th percentile per-packet one-way delay: 57.035 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 153.90 Mbit/s
  95th percentile per-packet one-way delay: 79.975 ms
  Loss rate: 0.00%
Run 1: Report of Indigo-1-32 — Data Link
Run 2: Statistics of Indigo-1-32

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

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 363.14 Mbit/s
  95th percentile per-packet one-way delay: 57.190 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 201.24 Mbit/s
  95th percentile per-packet one-way delay: 56.429 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 177.53 Mbit/s
  95th percentile per-packet one-way delay: 60.830 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 136.32 Mbit/s
  95th percentile per-packet one-way delay: 54.269 ms
  Loss rate: 0.03%
Run 2: Report of Indigo-1-32 — Data Link

[Graphs showing throughput and per-packet one-way delay with legend for flows 1, 2, and 3]
Run 3: Statistics of Indigo-1-32

End at: 2018-04-18 13:19:34

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 372.06 Mbit/s
95th percentile per-packet one-way delay: 56.618 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 202.66 Mbit/s
95th percentile per-packet one-way delay: 54.020 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 176.97 Mbit/s
95th percentile per-packet one-way delay: 66.270 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 160.60 Mbit/s
95th percentile per-packet one-way delay: 54.158 ms
Loss rate: 0.00%
Run 3: Report of Indigo-1-32 — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 202.65 Mbps)
- Flow 1 egress (mean 202.66 Mbps)
- Flow 2 ingress (mean 176.93 Mbps)
- Flow 2 egress (mean 176.97 Mbps)
- Flow 3 ingress (mean 160.59 Mbps)
- Flow 3 egress (mean 160.60 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 54.02 ms)
- Flow 2 (95th percentile 66.27 ms)
- Flow 3 (95th percentile 54.16 ms)
Run 4: Statistics of Indigo-1-32

Start at: 2018-04-18 13:34:16
End at: 2018-04-18 13:34:46

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 354.97 Mbit/s
95th percentile per-packet one-way delay: 57.117 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 186.35 Mbit/s
95th percentile per-packet one-way delay: 54.394 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 183.02 Mbit/s
95th percentile per-packet one-way delay: 67.208 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 147.25 Mbit/s
95th percentile per-packet one-way delay: 51.093 ms
Loss rate: 0.00%
Run 5: Statistics of Indigo-1-32


# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 386.18 Mbit/s
  95th percentile per-packet one-way delay: 58.568 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 210.31 Mbit/s
  95th percentile per-packet one-way delay: 55.391 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 194.31 Mbit/s
  95th percentile per-packet one-way delay: 63.705 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 147.26 Mbit/s
  95th percentile per-packet one-way delay: 54.082 ms
  Loss rate: 0.00%
Run 6: Statistics of Indigo-1-32

Start at: 2018-04-18 14:05:16
End at: 2018-04-18 14:05:46

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 351.48 Mbit/s
95th percentile per-packet one-way delay: 57.248 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 185.37 Mbit/s
95th percentile per-packet one-way delay: 58.629 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 170.12 Mbit/s
95th percentile per-packet one-way delay: 56.378 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 164.82 Mbit/s
95th percentile per-packet one-way delay: 56.476 ms
Loss rate: 0.01%
Run 6: Report of Indigo-1-32 — Data Link

![Graph of Throughput and Per-Packet Round-Trip Delay](image)

- **Throughput Graph**
  - Flow 1 ingress (mean 185.39 Mbit/s)
  - Flow 1 egress (mean 185.37 Mbit/s)
  - Flow 2 ingress (mean 170.12 Mbit/s)
  - Flow 2 egress (mean 170.12 Mbit/s)
  - Flow 3 ingress (mean 164.88 Mbit/s)
  - Flow 3 egress (mean 164.82 Mbit/s)

- **Per-Packet Round-Trip Delay Graph**
  - Flow 1 (95th percentile 58.63 ms)
  - Flow 2 (95th percentile 56.38 ms)
  - Flow 3 (95th percentile 56.48 ms)
Run 7: Statistics of Indigo-1-32

Start at: 2018-04-18 14:20:41
End at: 2018-04-18 14:21:11

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 389.61 Mbit/s
95th percentile per-packet one-way delay: 60.529 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 212.64 Mbit/s
95th percentile per-packet one-way delay: 57.789 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 190.91 Mbit/s
95th percentile per-packet one-way delay: 61.583 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 157.49 Mbit/s
95th percentile per-packet one-way delay: 62.524 ms
Loss rate: 0.00%
Run 7: Report of Indigo-1-32 — Data Link

![Graph of Throughput and Per-packet one way delay over time for different flows.](image-url)
Run 8: Statistics of Indigo-1-32

Start at: 2018-04-18 14:36:14
End at: 2018-04-18 14:36:44

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 356.49 Mbit/s
95th percentile per-packet one-way delay: 59.414 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 182.80 Mbit/s
95th percentile per-packet one-way delay: 56.163 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 188.08 Mbit/s
95th percentile per-packet one-way delay: 72.813 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 152.49 Mbit/s
95th percentile per-packet one-way delay: 54.793 ms
Loss rate: 0.00%
Run 8: Report of Indigo-1-32 — Data Link

![Graph showing network performance metrics over time.](image)
Run 9: Statistics of Indigo-1-32

Start at: 2018-04-18 14:52:00
End at: 2018-04-18 14:52:30

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 357.40 Mbit/s
  95th percentile per-packet one-way delay: 58.818 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 193.89 Mbit/s
  95th percentile per-packet one-way delay: 59.820 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 172.00 Mbit/s
  95th percentile per-packet one-way delay: 60.515 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 154.03 Mbit/s
  95th percentile per-packet one-way delay: 54.933 ms
  Loss rate: 0.01%
Run 9: Report of Indigo-1-32 — Data Link

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Run 10: Statistics of Indigo-1-32

Start at: 2018-04-18 15:07:12
End at: 2018-04-18 15:07:42

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 375.09 Mbit/s
   95th percentile per-packet one-way delay: 56.153 ms
   Loss rate: 0.01%
-- Flow 1:
   Average throughput: 202.31 Mbit/s
   95th percentile per-packet one-way delay: 56.476 ms
   Loss rate: 0.01%
-- Flow 2:
   Average throughput: 181.37 Mbit/s
   95th percentile per-packet one-way delay: 56.924 ms
   Loss rate: 0.01%
-- Flow 3:
   Average throughput: 161.55 Mbit/s
   95th percentile per-packet one-way delay: 54.247 ms
   Loss rate: 0.04%
Run 10: Report of Indigo-1-32 — Data Link
Run 1: Statistics of PCC-Vivace

Start at: 2018-04-18 13:00:24
End at: 2018-04-18 13:00:54

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 384.47 Mbit/s
  95th percentile per-packet one-way delay: 159.384 ms
  Loss rate: 0.95%
-- Flow 1:
  Average throughput: 214.04 Mbit/s
  95th percentile per-packet one-way delay: 111.268 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 172.32 Mbit/s
  95th percentile per-packet one-way delay: 284.266 ms
  Loss rate: 3.12%
-- Flow 3:
  Average throughput: 169.85 Mbit/s
  95th percentile per-packet one-way delay: 118.945 ms
  Loss rate: 0.00%
Run 1: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 214.05 Mbit/s)
- Flow 1 egress (mean 214.04 Mbit/s)
- Flow 2 ingress (mean 177.87 Mbit/s)
- Flow 2 egress (mean 172.32 Mbit/s)
- Flow 3 ingress (mean 169.87 Mbit/s)
- Flow 3 egress (mean 169.85 Mbit/s)

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Run 2: Statistics of PCC-Vivace

End at: 2018-04-18 13:16:08

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 407.02 Mbit/s
  95th percentile per-packet one-way delay: 183.120 ms
  Loss rate: 0.15%
-- Flow 1:
  Average throughput: 249.12 Mbit/s
  95th percentile per-packet one-way delay: 210.997 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 223.12 Mbit/s
  95th percentile per-packet one-way delay: 73.426 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 29.20 Mbit/s
  95th percentile per-packet one-way delay: 53.240 ms
  Loss rate: 0.03%
Run 2: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 249.71 Mbit/s)**
- **Flow 1 egress (mean 249.12 Mbit/s)**
- **Flow 2 ingress (mean 223.09 Mbit/s)**
- **Flow 2 egress (mean 223.12 Mbit/s)**
- **Flow 3 ingress (mean 29.19 Mbit/s)**
- **Flow 3 egress (mean 29.20 Mbit/s)**

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

- **Flow 1 (95th percentile 211.00 ms)**
- **Flow 2 (95th percentile 73.43 ms)**
- **Flow 3 (95th percentile 53.24 ms)**

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Run 3: Statistics of PCC-Vivace

Start at: 2018-04-18 13:30:48
End at: 2018-04-18 13:31:18

# Below is generated by plot.py at 2018-04-18 19:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 464.12 Mbit/s
95th percentile per-packet one-way delay: 110.688 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 244.49 Mbit/s
95th percentile per-packet one-way delay: 155.410 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 228.06 Mbit/s
95th percentile per-packet one-way delay: 79.747 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 206.85 Mbit/s
95th percentile per-packet one-way delay: 106.477 ms
Loss rate: 0.00%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-04-18 13:45:59

# Below is generated by plot.py at 2018-04-18 19:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 498.67 Mbit/s
95th percentile per-packet one-way delay: 192.311 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 277.49 Mbit/s
95th percentile per-packet one-way delay: 148.286 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 230.05 Mbit/s
95th percentile per-packet one-way delay: 253.795 ms
Loss rate: 2.12%
-- Flow 3:
Average throughput: 207.75 Mbit/s
95th percentile per-packet one-way delay: 68.973 ms
Loss rate: 0.00%
Run 4: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 278.34 Mbit/s)
- Flow 1 egress (mean 277.49 Mbit/s)
- Flow 2 ingress (mean 235.02 Mbit/s)
- Flow 2 egress (mean 230.05 Mbit/s)
- Flow 3 ingress (mean 207.69 Mbit/s)
- Flow 3 egress (mean 207.75 Mbit/s)

Flow 1 (95th percentile 148.29 ms)
Flow 2 (95th percentile 253.79 ms)
Flow 3 (95th percentile 68.97 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2018-04-18 14:01:47
End at: 2018-04-18 14:02:17

# Below is generated by plot.py at 2018-04-18 19:01:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 421.80 Mbit/s
95th percentile per-packet one-way delay: 69.626 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 231.97 Mbit/s
95th percentile per-packet one-way delay: 75.782 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 217.71 Mbit/s
95th percentile per-packet one-way delay: 57.515 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 137.00 Mbit/s
95th percentile per-packet one-way delay: 106.633 ms
Loss rate: 0.12%
Run 5: Report of PCC-Vivace — Data Link

![Graph of throughput and packet delay over time for Flows 1, 2, and 3.](image)

- **Flow 1 Ingress (mean 231.97 Mbps)**
- **Flow 1 Egress (mean 231.97 Mbps)**
- **Flow 2 Ingress (mean 217.78 Mbps)**
- **Flow 2 Egress (mean 217.71 Mbps)**
- **Flow 3 Ingress (mean 137.22 Mbps)**
- **Flow 3 Egress (mean 137.00 Mbps)**

![Graph of packet delay over time for Flows 1, 2, and 3.](image)

- **Flow 1 (95th percentile 75.78 ms)**
- **Flow 2 (95th percentile 57.52 ms)**
- **Flow 3 (95th percentile 106.63 ms)**
Run 6: Statistics of PCC-Vivace

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

# Below is generated by plot.py at 2018-04-18 19:01:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 437.51 Mbit/s
  95th percentile per-packet one-way delay: 137.161 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 284.99 Mbit/s
  95th percentile per-packet one-way delay: 150.924 ms
  Loss rate: 0.25%
-- Flow 2:
  Average throughput: 212.83 Mbit/s
  95th percentile per-packet one-way delay: 57.006 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 33.50 Mbit/s
  95th percentile per-packet one-way delay: 53.788 ms
  Loss rate: 0.00%
Run 6: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 285.72 Mbit/s)
- Flow 1 egress (mean 284.99 Mbit/s)
- Flow 2 ingress (mean 212.85 Mbit/s)
- Flow 2 egress (mean 212.83 Mbit/s)
- Flow 3 ingress (mean 33.50 Mbit/s)
- Flow 3 egress (mean 33.50 Mbit/s)

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

- Flow 1 (95th percentile 150.92 ms)
- Flow 2 (95th percentile 57.01 ms)
- Flow 3 (95th percentile 53.79 ms)
Run 7: Statistics of PCC-Vivace

Start at: 2018-04-18 14:32:40
End at: 2018-04-18 14:33:10

# Below is generated by plot.py at 2018-04-18 19:01:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 467.95 Mbit/s
95th percentile per-packet one-way delay: 88.283 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 266.65 Mbit/s
95th percentile per-packet one-way delay: 126.007 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 203.32 Mbit/s
95th percentile per-packet one-way delay: 53.720 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 201.23 Mbit/s
95th percentile per-packet one-way delay: 63.790 ms
Loss rate: 0.00%
Run 7: Report of PCC-Vivace — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 266.69 Mbps)
  - Flow 1 egress (mean 266.65 Mbps)
  - Flow 2 ingress (mean 203.32 Mbps)
  - Flow 2 egress (mean 203.32 Mbps)
  - Flow 3 ingress (mean 201.23 Mbps)
  - Flow 3 egress (mean 201.23 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 126.01 ms)
  - Flow 2 (95th percentile 53.72 ms)
  - Flow 3 (95th percentile 63.79 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-04-18 14:48:21
End at: 2018-04-18 14:48:51

# Below is generated by plot.py at 2018-04-18 19:02:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.66 Mbit/s
95th percentile per-packet one-way delay: 57.020 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 268.33 Mbit/s
95th percentile per-packet one-way delay: 54.839 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 219.86 Mbit/s
95th percentile per-packet one-way delay: 97.827 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 100.79 Mbit/s
95th percentile per-packet one-way delay: 54.381 ms
Loss rate: 0.02%
Run 8: Report of PCC-Vivace — Data Link

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

Throughput (Mbps):
- Flow 1 ingress (mean 268.33 Mbps)
- Flow 1 egress (mean 268.33 Mbps)
- Flow 2 ingress (mean 219.95 Mbps)
- Flow 2 egress (mean 219.86 Mbps)
- Flow 3 ingress (mean 190.78 Mbps)
- Flow 3 egress (mean 100.79 Mbps)

Packet delay (ms):
- Flow 1 (95th percentile 54.84 ms)
- Flow 2 (95th percentile 97.83 ms)
- Flow 3 (95th percentile 54.38 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-04-18 15:03:49
End at: 2018-04-18 15:04:19

# Below is generated by plot.py at 2018-04-18 19:02:05
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 388.40 Mbit/s
   95th percentile per-packet one-way delay: 56.367 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 228.19 Mbit/s
   95th percentile per-packet one-way delay: 62.090 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 225.23 Mbit/s
   95th percentile per-packet one-way delay: 51.016 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 31.86 Mbit/s
   95th percentile per-packet one-way delay: 54.242 ms
   Loss rate: 0.00%
Run 9: Report of PCC-Vivace — Data Link

![Graph of Throughput and Delay for Runs 1 to 3]

**Throughput Graph**
- **Flow 1 Ingress** (mean 228.19 Mb/s)
- **Flow 1 Egress** (mean 228.19 Mb/s)
- **Flow 2 Ingress** (mean 225.23 Mb/s)
- **Flow 2 Egress** (mean 225.23 Mb/s)
- **Flow 3 Ingress** (mean 31.86 Mb/s)
- **Flow 3 Egress** (mean 31.86 Mb/s)

**Delay Graph**
- **Flow 1** (95th percentile 62.09 ms)
- **Flow 2** (95th percentile 51.02 ms)
- **Flow 3** (95th percentile 54.24 ms)
Run 10: Statistics of PCC-Vivace

End at: 2018-04-18 15:19:43

# Below is generated by plot.py at 2018-04-18 19:02:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 427.87 Mbit/s
95th percentile per-packet one-way delay: 177.862 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 272.59 Mbit/s
95th percentile per-packet one-way delay: 229.769 ms
Loss rate: 0.91%
-- Flow 2:
Average throughput: 189.86 Mbit/s
95th percentile per-packet one-way delay: 60.332 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 88.47 Mbit/s
95th percentile per-packet one-way delay: 51.054 ms
Loss rate: 0.00%
Run 10: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 275.08 Mbit/s)
- Flow 1 egress (mean 272.59 Mbit/s)
- Flow 2 ingress (mean 189.86 Mbit/s)
- Flow 2 egress (mean 189.86 Mbit/s)
- Flow 3 ingress (mean 88.39 Mbit/s)
- Flow 3 egress (mean 88.47 Mbit/s)

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

- Flow 1 (95th percentile 229.77 ms)
- Flow 2 (95th percentile 60.33 ms)
- Flow 3 (95th percentile 51.05 ms)
Run 1: Statistics of PCC-Expr

Start at: 2018-04-18 12:52:14
End at: 2018-04-18 12:52:44
Run 1: Report of PCC-Expr — Data Link

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Run 2: Statistics of PCC-Expr

Start at: 2018-04-18 13:07:31
End at: 2018-04-18 13:08:01
Run 2: Report of PCC-Expr — Data Link

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Run 3: Statistics of PCC-Expr

Run 3: Report of PCC-Expr — Data Link

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Run 4: Statistics of PCC-Expr

Start at: 2018-04-18 13:37:52
End at: 2018-04-18 13:38:22
Run 4: Report of PCC-Expr — Data Link

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Run 5: Statistics of PCC-Expr

End at: 2018-04-18 13:54:11
Run 5: Report of PCC-Expr — Data Link

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Figure is missing
Run 6: Statistics of PCC-Expr

Start at: 2018-04-18 14:09:05
End at: 2018-04-18 14:09:35
Run 6: Report of PCC-Expr — Data Link

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Run 7: Statistics of PCC-Expr

Start at: 2018-04-18 14:24:34
End at: 2018-04-18 14:25:04
Run 7: Report of PCC-Expr — Data Link

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Run 8: Statistics of PCC-Expr

Start at: 2018-04-18 14:40:16
End at: 2018-04-18 14:40:46
Run 8: Report of PCC-Expr — Data Link

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Run 9: Statistics of PCC-Expr

End at: 2018-04-18 14:56:21
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 15:11:10
End at: 2018-04-18 15:11:40
Run 10: Report of PCC-Expr — Data Link

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