Pantheon Report

Generated at 2019-08-28 02:14:44 (UTC).
Data path: GCE Tokyo on ens4 (remote) → GCE Sydney on ens4 (local).
Repeated the test of 24 congestion control schemes 5 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
NTP offsets were measured against time.google.com and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1036-gcp
net.core.default_qdisc = fq
net.core.rmem_default = 16777216
net.core.rmem_max = 536870912
net.core.wmem_default = 16777216
net.core.wmem_max = 536870912
net.ipv4.tcp_rmem = 4096 16777216 536870912
net.ipv4.tcp_wmem = 4096 16777216 536870912

Git summary:
branch: muses @ de42328552b3776a75a932a94dfaf722537b0ec
third_party/fillp @ d6da1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-shel @ 0e5bb722943babc2b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbde58e562f4
third_party/indigo @ 2601c92e4aa9d58d3834d4dfe9e0ecbdf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb77cf3cf
third_party/muses @ 5ce721187ad8230a2095537730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61ddbe92d708a8669f6bb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27af94277287b5724e2a54cc2e802bd
third_party/pcc @ laf9c958fa0b6d18b623c091a55fecn872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e343f5f61e8ac08fab92c2eb4ebf974ab
third_party/proto-quic @ 77961fa1a82733a85b42f1bc8143ebc978f3c4f2
third_party/scream-reproduce @ f09918d1421aa3131bf11ff1964974e10a3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9d5e4735770d143a1fa2851
test from GCE Tokyo to GCE Sydney, 5 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
<thead>
<tr>
<th>scheme</th>
<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
<th>mean 95th-%ile delay (ms)</th>
<th>mean loss rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
</tr>
<tr>
<td>TCP BBR</td>
<td>5</td>
<td>450.60</td>
<td>436.07</td>
<td>387.30</td>
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<td>Copa</td>
<td>5</td>
<td>303.78</td>
<td>273.15</td>
<td>223.77</td>
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<td>TCP Cubic</td>
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<td>451.72</td>
<td>430.05</td>
<td>380.59</td>
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<td>355.71</td>
<td>263.11</td>
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<td>323.59</td>
<td>315.07</td>
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<td>Verus</td>
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<td>157.11</td>
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<td>PCC-Vivace</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2019-08-27 20:47:45  
End at: 2019-08-27 20:48:15  
Local clock offset: -0.564 ms  
Remote clock offset: -0.655 ms

# Below is generated by plot.py at 2019-08-28 00:07:01
# Datalink statistics
  -- Total of 3 flows:
    Average throughput: 904.40 Mbit/s  
    95th percentile per-packet one-way delay: 121.101 ms  
    Loss rate: 0.61%
  -- Flow 1:
    Average throughput: 487.85 Mbit/s  
    95th percentile per-packet one-way delay: 141.768 ms  
    Loss rate: 0.50%
  -- Flow 2:
    Average throughput: 446.14 Mbit/s  
    95th percentile per-packet one-way delay: 80.810 ms  
    Loss rate: 0.53%
  -- Flow 3:
    Average throughput: 363.23 Mbit/s  
    95th percentile per-packet one-way delay: 62.197 ms  
    Loss rate: 1.23%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 488.40 Mbit/s)
- Flow 1 egress (mean 487.85 Mbit/s)
- Flow 2 ingress (mean 445.95 Mbit/s)
- Flow 2 egress (mean 446.14 Mbit/s)
- Flow 3 ingress (mean 363.48 Mbit/s)
- Flow 3 egress (mean 363.23 Mbit/s)

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

- Flow 1 (95th percentile 141.77 ms)
- Flow 2 (95th percentile 80.81 ms)
- Flow 3 (95th percentile 62.20 ms)
Run 2: Statistics of TCP BBR

Start at: 2019-08-27 21:26:52
Local clock offset: -0.182 ms
Remote clock offset: -0.785 ms

# Below is generated by plot.py at 2019-08-28 00:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 866.64 Mbit/s
95th percentile per-packet one-way delay: 125.020 ms
Loss rate: 0.76%
-- Flow 1:
Average throughput: 439.02 Mbit/s
95th percentile per-packet one-way delay: 100.029 ms
Loss rate: 0.90%
-- Flow 2:
Average throughput: 443.06 Mbit/s
95th percentile per-packet one-way delay: 177.226 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 403.51 Mbit/s
95th percentile per-packet one-way delay: 132.199 ms
Loss rate: 0.81%
Run 2: Report of TCP BBR — Data Link

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

**Throughput (Mbps):**
- **Flow 1 ingress** (mean 441.28 Mbps)
- **Flow 1 egress** (mean 439.02 Mbps)
- **Flow 2 ingress** (mean 441.95 Mbps)
- **Flow 2 egress** (mean 443.06 Mbps)
- **Flow 3 ingress** (mean 402.10 Mbps)
- **Flow 3 egress** (mean 403.51 Mbps)

**Packet Round-Trip Time (ms):**
- **Flow 1** (95th percentile 100.03 ms)
- **Flow 2** (95th percentile 177.23 ms)
- **Flow 3** (95th percentile 132.20 ms)
Run 3: Statistics of TCP BBR

Start at: 2019-08-27 22:06:05
End at: 2019-08-27 22:06:35
Local clock offset: 0.257 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2019-08-28 00:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 854.88 Mbit/s
95th percentile per-packet one-way delay: 77.078 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 448.06 Mbit/s
95th percentile per-packet one-way delay: 79.285 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 430.74 Mbit/s
95th percentile per-packet one-way delay: 75.821 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 365.03 Mbit/s
95th percentile per-packet one-way delay: 68.514 ms
Loss rate: 1.17%
Run 3: Report of TCP BBR — Data Link

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

**Throughput (Mbps)**

- **Flow 1:** Ingress (mean 447.32 Mbps), Egress (mean 448.06 Mbps)
- **Flow 2:** Ingress (mean 430.75 Mbps), Egress (mean 430.76 Mbps)
- **Flow 3:** Ingress (mean 365.08 Mbps), Egress (mean 365.03 Mbps)

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

- **Flow 1:** 95th percentile 79.28 ms
- **Flow 2:** 95th percentile 75.82 ms
- **Flow 3:** 95th percentile 68.51 ms
Run 4: Statistics of TCP BBR

Start at: 2019-08-27 22:45:16
End at: 2019-08-27 22:45:46
Local clock offset: -0.025 ms
Remote clock offset: -0.642 ms

# Below is generated by plot.py at 2019-08-28 00:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 833.43 Mbit/s
95th percentile per-packet one-way delay: 87.826 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 431.01 Mbit/s
95th percentile per-packet one-way delay: 92.195 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 393.66 Mbit/s
95th percentile per-packet one-way delay: 77.588 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 426.92 Mbit/s
95th percentile per-packet one-way delay: 74.666 ms
Loss rate: 1.71%
Run 4: Report of TCP BBR — Data Link

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

- **Throughput** (Mbps):
  - Flow 1 ingress (mean 431.82 Mbps)
  - Flow 1 egress (mean 431.01 Mbps)
  - Flow 2 ingress (mean 393.47 Mbps)
  - Flow 2 egress (mean 393.68 Mbps)
  - Flow 3 ingress (mean 429.32 Mbps)
  - Flow 3 egress (mean 426.92 Mbps)

- **Per-packet one-way delay (ms)**:
  - Flow 1 (95th percentile 92.19 ms)
  - Flow 2 (95th percentile 77.59 ms)
  - Flow 3 (95th percentile 74.67 ms)
Run 5: Statistics of TCP BBR

End at: 2019-08-27 23:24:54
Local clock offset: -0.535 ms
Remote clock offset: 0.011 ms

# Below is generated by plot.py at 2019-08-28 00:07:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 881.94 Mbit/s
95th percentile per-packet one-way delay: 82.187 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 447.07 Mbit/s
95th percentile per-packet one-way delay: 71.692 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 466.73 Mbit/s
95th percentile per-packet one-way delay: 111.802 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 377.80 Mbit/s
95th percentile per-packet one-way delay: 62.368 ms
Loss rate: 0.97%
Run 5: Report of TCP BBR — Data Link

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

- **Flow 1 ing</p>ess (mean 446.91 Mbit/s)**
- **Flow 1 egress (mean 447.07 Mbit/s)**
- **Flow 2 ing</p>ess (mean 487.51 Mbit/s)**
- **Flow 2 egress (mean 486.73 Mbit/s)**
- **Flow 3 ing</p>ess (mean 376.97 Mbit/s)**
- **Flow 3 egress (mean 377.90 Mbit/s)**

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

- • **Flow 1 (95th percentile 71.69 ms)**
- • **Flow 2 (95th percentile 111.80 ms)**
- • **Flow 3 (95th percentile 62.37 ms)**
Run 1: Statistics of Copa

End at: 2019-08-27 20:56:26
Local clock offset: -0.252 ms
Remote clock offset: -0.155 ms

# Below is generated by plot.py at 2019-08-28 00:08:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 541.10 Mbit/s
95th percentile per-packet one-way delay: 73.288 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 287.42 Mbit/s
95th percentile per-packet one-way delay: 83.775 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 262.70 Mbit/s
95th percentile per-packet one-way delay: 63.416 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 239.75 Mbit/s
95th percentile per-packet one-way delay: 68.771 ms
Loss rate: 1.41%
Run 1: Report of Copa — Data Link
Run 2: Statistics of Copa

Start at: 2019-08-27 21:35:00
End at: 2019-08-27 21:35:30
Local clock offset: -0.075 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2019-08-28 00:09:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 581.72 Mbit/s
95th percentile per-packet one-way delay: 74.663 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 319.56 Mbit/s
95th percentile per-packet one-way delay: 67.351 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 282.39 Mbit/s
95th percentile per-packet one-way delay: 76.857 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 227.23 Mbit/s
95th percentile per-packet one-way delay: 92.258 ms
Loss rate: 1.55%
Run 3: Statistics of Copa

Start at: 2019-08-27 22:14:10
End at: 2019-08-27 22:14:40
Local clock offset: -0.093 ms
Remote clock offset: -0.123 ms

# Below is generated by plot.py at 2019-08-28 00:09:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 551.05 Mbit/s
  95th percentile per-packet one-way delay: 61.631 ms
  Loss rate: 0.50%
-- Flow 1:
  Average throughput: 310.67 Mbit/s
  95th percentile per-packet one-way delay: 62.596 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 273.65 Mbit/s
  95th percentile per-packet one-way delay: 60.378 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 177.83 Mbit/s
  95th percentile per-packet one-way delay: 57.318 ms
  Loss rate: 1.19%
Run 3: Report of Copa — Data Link

[Graphs showing data link performance metrics including throughput and packet delay for three different flows.]
Run 4: Statistics of Copa

End at: 2019-08-27 22:53:52
Local clock offset: -0.061 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2019-08-28 00:20:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 540.20 Mbit/s
95th percentile per-packet one-way delay: 59.901 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 303.35 Mbit/s
95th percentile per-packet one-way delay: 60.591 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 243.37 Mbit/s
95th percentile per-packet one-way delay: 59.618 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 228.25 Mbit/s
95th percentile per-packet one-way delay: 57.167 ms
Loss rate: 1.28%
Run 4: Report of Copa — Data Link

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

- Flow 1 ingress (mean 302.99 Mbit/s)
- Flow 1 egress (mean 303.35 Mbit/s)
- Flow 2 ingress (mean 243.60 Mbit/s)
- Flow 2 egress (mean 243.37 Mbit/s)
- Flow 3 ingress (mean 228.55 Mbit/s)
- Flow 3 egress (mean 228.25 Mbit/s)
Run 5: Statistics of Copa

Start at: 2019-08-27 23:32:30
End at: 2019-08-27 23:33:00
Local clock offset: -0.111 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 580.84 Mbit/s
95th percentile per-packet one-way delay: 65.749 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 297.92 Mbit/s
95th percentile per-packet one-way delay: 63.462 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 303.66 Mbit/s
95th percentile per-packet one-way delay: 67.987 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 245.80 Mbit/s
95th percentile per-packet one-way delay: 57.524 ms
Loss rate: 1.24%
Run 5: Report of Copa — Data Link

- Flow 1 ingress (mean 297.88 Mbit/s)
- Flow 1 egress (mean 297.92 Mbit/s)
- Flow 2 ingress (mean 303.60 Mbit/s)
- Flow 2 egress (mean 303.66 Mbit/s)
- Flow 3 ingress (mean 246.00 Mbit/s)
- Flow 3 egress (mean 245.80 Mbit/s)

- Flow 1 (95th percentile 63.46 ms)
- Flow 2 (95th percentile 67.99 ms)
- Flow 3 (95th percentile 57.52 ms)
Run 1: Statistics of TCP Cubic

Start at: 2019-08-27 20:20:29
End at: 2019-08-27 20:20:59
Local clock offset: -0.432 ms
Remote clock offset: 0.152 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 873.54 Mbit/s
95th percentile per-packet one-way delay: 80.812 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 450.07 Mbit/s
95th percentile per-packet one-way delay: 74.362 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 450.82 Mbit/s
95th percentile per-packet one-way delay: 86.464 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 376.22 Mbit/s
95th percentile per-packet one-way delay: 61.408 ms
Loss rate: 0.83%
Run 1: Report of TCP Cubic — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 449.88 Mbit/s)  Flow 1 egress (mean 450.07 Mbit/s)
Flow 2 ingress (mean 450.77 Mbit/s)  Flow 2 egress (mean 450.82 Mbit/s)
Flow 3 ingress (mean 375.65 Mbit/s)  Flow 3 egress (mean 376.22 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 74.36 ms)  Flow 2 (95th percentile 86.46 ms)  Flow 3 (95th percentile 61.41 ms)
Run 2: Statistics of TCP Cubic

Start at: 2019-08-27 20:59:35
End at: 2019-08-27 21:00:05
Local clock offset: -0.291 ms
Remote clock offset: -0.277 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 897.30 Mbit/s
95th percentile per-packet one-way delay: 61.552 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 467.58 Mbit/s
95th percentile per-packet one-way delay: 63.001 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 446.69 Mbit/s
95th percentile per-packet one-way delay: 59.637 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 402.07 Mbit/s
95th percentile per-packet one-way delay: 60.527 ms
Loss rate: 1.37%
Run 2: Report of TCP Cubic — Data Link

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

*Flow 1 ingress (mean 467.57 Mbit/s)*  *Flow 1 egress (mean 467.58 Mbit/s)*
*Flow 2 ingress (mean 446.99 Mbit/s)*  *Flow 2 egress (mean 446.69 Mbit/s)*
*Flow 3 ingress (mean 403.00 Mbit/s)*  *Flow 3 egress (mean 402.07 Mbit/s)*

![Graph of per-packet one-way delay vs time for different flows.]

*Flow 1 (95th percentile 63.00 ms)*  *Flow 2 (95th percentile 59.64 ms)*  *Flow 3 (95th percentile 60.53 ms)*
Run 3: Statistics of TCP Cubic

Start at: 2019-08-27 21:38:41
End at: 2019-08-27 21:39:11
Local clock offset: 0.175 ms
Remote clock offset: -0.289 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 815.96 Mbit/s
95th percentile per-packet one-way delay: 65.027 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 406.54 Mbit/s
95th percentile per-packet one-way delay: 61.140 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 441.30 Mbit/s
95th percentile per-packet one-way delay: 72.640 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 351.53 Mbit/s
95th percentile per-packet one-way delay: 62.428 ms
Loss rate: 1.21%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Start at: 2019-08-27 22:17:50
End at: 2019-08-27 22:18:20
Local clock offset: -0.073 ms
Remote clock offset: 0.031 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 890.83 Mbit/s
95th percentile per-packet one-way delay: 69.701 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 473.43 Mbit/s
95th percentile per-packet one-way delay: 64.815 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 433.06 Mbit/s
95th percentile per-packet one-way delay: 71.131 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 392.24 Mbit/s
95th percentile per-packet one-way delay: 66.946 ms
Loss rate: 1.21%
Run 4: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 473.57 Mbit/s), Flow 1 egress (mean 473.43 Mbit/s)
- Flow 2 ingress (mean 432.79 Mbit/s), Flow 2 egress (mean 433.06 Mbit/s)
- Flow 3 ingress (mean 392.48 Mbit/s), Flow 3 egress (mean 392.24 Mbit/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 64.81 ms)
- Flow 2 (95th percentile 71.13 ms)
- Flow 3 (95th percentile 66.95 ms)
Run 5: Statistics of TCP Cubic

Start at: 2019-08-27 22:57:00
End at: 2019-08-27 22:57:30
Local clock offset: -0.122 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2019-08-28 00:22:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 838.19 Mbit/s
95th percentile per-packet one-way delay: 62.317 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 460.97 Mbit/s
95th percentile per-packet one-way delay: 61.673 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 378.39 Mbit/s
95th percentile per-packet one-way delay: 58.924 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 380.89 Mbit/s
95th percentile per-packet one-way delay: 73.373 ms
Loss rate: 1.29%
Run 5: Report of TCP Cubic — Data Link

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

---

Flow 1 ingress (mean 460.79 Mbit/s)  Flow 1 egress (mean 460.97 Mbit/s)
Flow 2 ingress (mean 378.45 Mbit/s)  Flow 2 egress (mean 378.39 Mbit/s)
Flow 3 ingress (mean 381.46 Mbit/s)  Flow 3 egress (mean 380.89 Mbit/s)

---

Flow 1 (95th percentile 61.67 ms)  Flow 2 (95th percentile 58.92 ms)  Flow 3 (95th percentile 73.37 ms)
Run 1: Statistics of FillP

Start at: 2019-08-27 20:26:39
End at: 2019-08-27 20:27:09
Local clock offset: 0.003 ms
Remote clock offset: 0.402 ms

# Below is generated by plot.py at 2019-08-28 00:25:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 849.77 Mbit/s
95th percentile per-packet one-way delay: 61.257 ms
Loss rate: 0.41%
-- Flow 1:
Average throughput: 535.08 Mbit/s
95th percentile per-packet one-way delay: 62.409 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 350.44 Mbit/s
95th percentile per-packet one-way delay: 59.640 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 249.87 Mbit/s
95th percentile per-packet one-way delay: 60.583 ms
Loss rate: 1.68%
Run 1: Report of FillP — Data Link

![Graph of throughput over time](image1)

![Graph of packet delay over time](image2)
Run 2: Statistics of FillP

Start at: 2019-08-27 21:05:45  
End at: 2019-08-27 21:06:15  
Local clock offset: -0.029 ms  
Remote clock offset: -0.142 ms

# Below is generated by plot.py at 2019-08-28 00:34:12  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 874.76 Mbit/s  
95th percentile per-packet one-way delay: 67.489 ms  
Loss rate: 0.37%  
-- Flow 1:  
Average throughput: 552.25 Mbit/s  
95th percentile per-packet one-way delay: 71.138 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 356.00 Mbit/s  
95th percentile per-packet one-way delay: 58.011 ms  
Loss rate: 0.51%  
-- Flow 3:  
Average throughput: 261.74 Mbit/s  
95th percentile per-packet one-way delay: 62.779 ms  
Loss rate: 1.19%
Run 2: Report of FillP — Data Link

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

- **Flow 1 Ingress (mean 551.26 Mb/s)**
- **Flow 1 Egress (mean 552.25 Mb/s)**
- **Flow 2 Ingress (mean 355.76 Mb/s)**
- **Flow 2 Egress (mean 356.00 Mb/s)**
- **Flow 3 Ingress (mean 261.91 Mb/s)**
- **Flow 3 Egress (mean 261.74 Mb/s)**
Run 3: Statistics of FillP

Start at: 2019-08-27 21:45:04
End at: 2019-08-27 21:45:34
Local clock offset: -0.135 ms
Remote clock offset: -0.488 ms

# Below is generated by plot.py at 2019-08-28 00:34:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 852.27 Mbit/s
95th percentile per-packet one-way delay: 71.120 ms
Loss rate: 0.37%
-- Flow 1:
Average throughput: 530.01 Mbit/s
95th percentile per-packet one-way delay: 80.536 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 348.58 Mbit/s
95th percentile per-packet one-way delay: 59.209 ms
Loss rate: 0.51%
-- Flow 3:
Average throughput: 276.15 Mbit/s
95th percentile per-packet one-way delay: 59.050 ms
Loss rate: 1.12%
Run 3: Report of FillP — Data Link

Throughput (Mbps/t):

- Flow 1 ingress (mean 529.13 Mbps)
- Flow 1 egress (mean 530.01 Mbps)
- Flow 2 ingress (mean 348.34 Mbps)
- Flow 2 egress (mean 348.58 Mbps)
- Flow 3 ingress (mean 275.88 Mbps)
- Flow 3 egress (mean 276.15 Mbps)

Per-packet one-way delay (ms):

- Flow 1 (95th percentile 80.54 ms)
- Flow 2 (95th percentile 59.21 ms)
- Flow 3 (95th percentile 59.05 ms)
Run 4: Statistics of FillP

End at: 2019-08-27 22:24:47
Local clock offset: 0.249 ms
Remote clock offset: 0.251 ms

# Below is generated by plot.py at 2019-08-28 00:35:43
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 883.43 Mbit/s
  95th percentile per-packet one-way delay: 74.161 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 548.59 Mbit/s
  95th percentile per-packet one-way delay: 78.521 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 371.35 Mbit/s
  95th percentile per-packet one-way delay: 61.949 ms
  Loss rate: 0.58%
-- Flow 3:
  Average throughput: 268.78 Mbit/s
  95th percentile per-packet one-way delay: 59.859 ms
  Loss rate: 1.14%
Run 4: Report of FillP — Data Link

Graph 1: Throughput over Time (Mbps/s)

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

Legend:
- Flow 1 ingress (mean 547.50 Mbps/s)
- Flow 1 egress (mean 548.59 Mbps/s)
- Flow 2 ingress (mean 371.32 Mbps/s)
- Flow 2 egress (mean 371.35 Mbps/s)
- Flow 3 ingress (mean 268.88 Mbps/s)
- Flow 3 egress (mean 268.78 Mbps/s)
Run 5: Statistics of FillP

Start at: 2019-08-27 23:03:25
End at: 2019-08-27 23:03:55
Local clock offset: 0.227 ms
Remote clock offset: -0.304 ms

# Below is generated by plot.py at 2019-08-28 00:35:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 719.83 Mbit/s
95th percentile per-packet one-way delay: 61.542 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 400.85 Mbit/s
95th percentile per-packet one-way delay: 61.323 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 352.16 Mbit/s
95th percentile per-packet one-way delay: 60.760 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 259.00 Mbit/s
95th percentile per-packet one-way delay: 62.391 ms
Loss rate: 1.13%
Run 5: Report of FillP — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 400.79 Mbit/s)  Flow 1 egress (mean 400.85 Mbit/s)
Flow 2 ingress (mean 351.91 Mbit/s)  Flow 2 egress (mean 352.16 Mbit/s)
Flow 3 ingress (mean 258.40 Mbit/s)  Flow 3 egress (mean 259.00 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 61.32 ms)  Flow 2 (95th percentile 60.76 ms)  Flow 3 (95th percentile 62.39 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2019-08-27 20:25:14
End at: 2019-08-27 20:25:44
Local clock offset: -0.964 ms
Remote clock offset: 0.515 ms

# Below is generated by plot.py at 2019-08-28 00:35:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 359.11 Mbit/s
95th percentile per-packet one-way delay: 61.327 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 76.97 Mbit/s
95th percentile per-packet one-way delay: 60.769 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 308.21 Mbit/s
95th percentile per-packet one-way delay: 61.625 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 235.07 Mbit/s
95th percentile per-packet one-way delay: 56.692 ms
Loss rate: 1.27%
Run 1: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 76.67 Mbit/s)**
- **Flow 1 egress (mean 76.97 Mbit/s)**
- **Flow 2 ingress (mean 307.97 Mbit/s)**
- **Flow 2 egress (mean 308.21 Mbit/s)**
- **Flow 3 ingress (mean 235.46 Mbit/s)**
- **Flow 3 egress (mean 235.07 Mbit/s)**

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

- **Flow 1 (95th percentile 60.77 ms)**
- **Flow 2 (95th percentile 61.62 ms)**
- **Flow 3 (95th percentile 56.69 ms)**

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Run 2: Statistics of FillP-Sheep

Start at: 2019-08-27 21:04:21
End at: 2019-08-27 21:04:51
Local clock offset: -0.351 ms
Remote clock offset: -0.166 ms

# Below is generated by plot.py at 2019-08-28 00:35:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 320.96 Mbit/s
95th percentile per-packet one-way delay: 57.669 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 34.57 Mbit/s
95th percentile per-packet one-way delay: 62.146 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 315.98 Mbit/s
95th percentile per-packet one-way delay: 57.472 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 232.55 Mbit/s
95th percentile per-packet one-way delay: 57.597 ms
Loss rate: 1.49%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

Local clock offset: -0.123 ms  
Remote clock offset: -0.213 ms

# Below is generated by plot.py at 2019-08-28 00:36:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 796.45 Mbit/s
95th percentile per-packet one-way delay: 61.126 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 519.56 Mbit/s
95th percentile per-packet one-way delay: 59.764 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 309.50 Mbit/s
95th percentile per-packet one-way delay: 61.695 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 216.96 Mbit/s
95th percentile per-packet one-way delay: 57.874 ms
Loss rate: 1.29%
Run 3: Report of FillP-Sheep — Data Link

![Graph of Throughput and Per-packet one-way delay](image-url)

- **Throughput (Mbps)**
  - Flow 1 Ingress (mean 518.74 Mbps)
  - Flow 1 Egress (mean 519.56 Mbps)
  - Flow 2 Ingress (mean 308.96 Mbps)
  - Flow 2 Egress (mean 309.50 Mbps)
  - Flow 3 Ingress (mean 216.92 Mbps)
  - Flow 3 Egress (mean 216.96 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 59.76 ms)
  - Flow 2 (95th percentile 61.70 ms)
  - Flow 3 (95th percentile 57.87 ms)
Run 4: Statistics of FillP-Sheep

Local clock offset: 0.212 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-08-28 00:39:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 780.99 Mbit/s
95th percentile per-packet one-way delay: 61.850 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 484.64 Mbit/s
95th percentile per-packet one-way delay: 62.497 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 317.25 Mbit/s
95th percentile per-packet one-way delay: 58.957 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 260.06 Mbit/s
95th percentile per-packet one-way delay: 61.948 ms
Loss rate: 1.27%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2019-08-27 23:01:44
End at: 2019-08-27 23:02:14
Local clock offset: -0.413 ms
Remote clock offset: 0.018 ms

# Below is generated by plot.py at 2019-08-28 00:42:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 790.66 Mbit/s
  95th percentile per-packet one-way delay: 61.196 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 502.20 Mbit/s
  95th percentile per-packet one-way delay: 62.045 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 324.42 Mbit/s
  95th percentile per-packet one-way delay: 60.784 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 222.13 Mbit/s
  95th percentile per-packet one-way delay: 59.938 ms
  Loss rate: 1.30%
Run 5: Report of FillP-Sheep — Data Link

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

- Flow 1 Ingress (mean 301.58 Mbit/s)
- Flow 1 Egress (mean 302.20 Mbit/s)
- Flow 2 Ingress (mean 323.97 Mbit/s)
- Flow 2 Egress (mean 324.42 Mbit/s)
- Flow 3 Ingress (mean 222.57 Mbit/s)
- Flow 3 Egress (mean 222.13 Mbit/s)

![Graph 2: Per-Packet Delays vs Time](image)

- Flow 1 (95th percentile 62.05 ms)
- Flow 2 (95th percentile 60.78 ms)
- Flow 3 (95th percentile 59.94 ms)
Run 1: Statistics of Indigo

Start at: 2019-08-27 20:57:52
End at: 2019-08-27 20:58:22
Local clock offset: ~0.418 ms
Remote clock offset: ~0.406 ms

# Below is generated by plot.py at 2019-08-28 00:42:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.90 Mbit/s
95th percentile per-packet one-way delay: 58.222 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 203.13 Mbit/s
95th percentile per-packet one-way delay: 58.455 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 207.42 Mbit/s
95th percentile per-packet one-way delay: 58.078 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 158.67 Mbit/s
95th percentile per-packet one-way delay: 57.681 ms
Loss rate: 1.34%
Run 1: Report of Indigo — Data Link
Run 2: Statistics of Indigo

Start at: 2019-08-27 21:36:58  
End at: 2019-08-27 21:37:28  
Local clock offset: -0.079 ms  
Remote clock offset: -0.273 ms

# Below is generated by plot.py at 2019-08-28 00:44:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 367.21 Mbit/s  
95th percentile per-packet one-way delay: 58.430 ms  
Loss rate: 0.59%  
-- Flow 1:  
Average throughput: 201.83 Mbit/s  
95th percentile per-packet one-way delay: 58.612 ms  
Loss rate: 0.38%  
-- Flow 2:  
Average throughput: 177.11 Mbit/s  
95th percentile per-packet one-way delay: 58.376 ms  
Loss rate: 0.65%  
-- Flow 3:  
Average throughput: 147.23 Mbit/s  
95th percentile per-packet one-way delay: 57.529 ms  
Loss rate: 1.26%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2019-08-27 22:16:07
End at: 2019-08-27 22:16:37
Local clock offset: -0.087 ms
Remote clock offset: -0.025 ms

# Below is generated by plot.py at 2019-08-28 00:45:05
# Datalink statistics
--- Total of 3 flows:
Average throughput: 376.07 Mbit/s
95th percentile per-packet one-way delay: 58.323 ms
Loss rate: 0.58%
--- Flow 1:
Average throughput: 198.97 Mbit/s
95th percentile per-packet one-way delay: 57.969 ms
Loss rate: 0.36%
--- Flow 2:
Average throughput: 189.08 Mbit/s
95th percentile per-packet one-way delay: 58.746 ms
Loss rate: 0.60%
--- Flow 3:
Average throughput: 158.58 Mbit/s
95th percentile per-packet one-way delay: 58.148 ms
Loss rate: 1.34%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Local clock offset: -0.37 ms
Remote clock offset: -0.283 ms

# Below is generated by plot.py at 2019-08-28 00:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 343.55 Mbit/s
95th percentile per-packet one-way delay: 58.071 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 179.33 Mbit/s
95th percentile per-packet one-way delay: 57.949 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 169.41 Mbit/s
95th percentile per-packet one-way delay: 58.179 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 160.60 Mbit/s
95th percentile per-packet one-way delay: 58.242 ms
Loss rate: 1.23%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2019-08-27 23:34:29
End at: 2019-08-27 23:34:59
Local clock offset: -0.434 ms
Remote clock offset: 0.214 ms

# Below is generated by plot.py at 2019-08-28 00:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 334.93 Mbit/s
95th percentile per-packet one-way delay: 57.216 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 175.97 Mbit/s
95th percentile per-packet one-way delay: 57.171 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 185.78 Mbit/s
95th percentile per-packet one-way delay: 57.276 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 102.38 Mbit/s
95th percentile per-packet one-way delay: 57.355 ms
Loss rate: 1.31%
Run 5: Report of Indigo — Data Link

![Graph showing network performance metrics over time.](image-url)
Run 1: Statistics of Indigo-MusesC3

End at: 2019-08-27 20:24:05
Local clock offset: -0.06 ms
Remote clock offset: -0.87 ms

# Below is generated by plot.py at 2019-08-28 00:45:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 670.11 Mbit/s
  95th percentile per-packet one-way delay: 62.084 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 405.32 Mbit/s
  95th percentile per-packet one-way delay: 61.556 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 337.41 Mbit/s
  95th percentile per-packet one-way delay: 59.755 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 214.47 Mbit/s
  95th percentile per-packet one-way delay: 62.945 ms
  Loss rate: 2.54%
Run 1: Report of Indigo-MusesC3 — Data Link

The graphs depict the throughput and per-packet one-way delay for three different flows (Flow 1, Flow 2, Flow 3) over time (s). The throughput graphs show the variation in data rate (in Mbps) over time, while the per-packet delay graphs show the distribution of one-way delay (in ms) at each time point.
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-08-27 21:02:41
End at: 2019-08-27 21:03:11
Local clock offset: -0.165 ms
Remote clock offset: -0.815 ms

# Below is generated by plot.py at 2019-08-28 00:48:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 690.10 Mbit/s
95th percentile per-packet one-way delay: 61.973 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 406.96 Mbit/s
95th percentile per-packet one-way delay: 69.600 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 352.89 Mbit/s
95th percentile per-packet one-way delay: 58.624 ms
Loss rate: 0.50%
-- Flow 3:
Average throughput: 228.76 Mbit/s
95th percentile per-packet one-way delay: 58.868 ms
Loss rate: 2.55%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-08-27 21:41:44
Local clock offset: 0.038 ms
Remote clock offset: -0.795 ms

# Below is generated by plot.py at 2019-08-28 00:49:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 660.18 Mbit/s
95th percentile per-packet one-way delay: 62.207 ms
Loss rate: 0.56%

-- Flow 1:
Average throughput: 401.11 Mbit/s
95th percentile per-packet one-way delay: 61.658 ms
Loss rate: 0.21%

-- Flow 2:
Average throughput: 327.27 Mbit/s
95th percentile per-packet one-way delay: 62.416 ms
Loss rate: 0.53%

-- Flow 3:
Average throughput: 217.92 Mbit/s
95th percentile per-packet one-way delay: 59.380 ms
Loss rate: 3.26%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

Local clock offset: 0.147 ms
Remote clock offset: 0.01 ms

# Below is generated by plot.py at 2019-08-28 00:51:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 682.32 Mbit/s
  95th percentile per-packet one-way delay: 60.912 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 403.94 Mbit/s
  95th percentile per-packet one-way delay: 61.008 ms
  Loss rate: 0.28%
-- Flow 2:
  Average throughput: 349.94 Mbit/s
  95th percentile per-packet one-way delay: 58.769 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 227.22 Mbit/s
  95th percentile per-packet one-way delay: 61.935 ms
  Loss rate: 1.83%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-08-27 23:00:05
End at: 2019-08-27 23:00:35
Local clock offset: 0.377 ms
Remote clock offset: 0.816 ms

# Below is generated by plot.py at 2019-08-28 00:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 666.06 Mbit/s
95th percentile per-packet one-way delay: 60.036 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 390.82 Mbit/s
95th percentile per-packet one-way delay: 59.214 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 336.33 Mbit/s
95th percentile per-packet one-way delay: 57.857 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 241.04 Mbit/s
95th percentile per-packet one-way delay: 60.862 ms
Loss rate: 2.43%
Run 5: Report of Indigo-MusesC3 — Data Link
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-08-27 20:51:24
End at: 2019-08-27 20:51:54
Local clock offset: -0.606 ms
Remote clock offset: -0.117 ms

# Below is generated by plot.py at 2019-08-28 00:54:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 744.98 Mbit/s
95th percentile per-packet one-way delay: 72.935 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 442.59 Mbit/s
95th percentile per-packet one-way delay: 86.874 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 363.50 Mbit/s
95th percentile per-packet one-way delay: 62.679 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 299.66 Mbit/s
95th percentile per-packet one-way delay: 58.754 ms
Loss rate: 2.42%
Run 1: Report of Indigo-MusesC5 — Data Link

![Graph showing data link performance](image1)

- **Flow 1 ingress** (mean 441.27 Mbit/s)
- **Flow 1 egress** (mean 442.59 Mbit/s)
- **Flow 2 ingress** (mean 362.95 Mbit/s)
- **Flow 2 egress** (mean 363.50 Mbit/s)
- **Flow 3 ingress** (mean 301.91 Mbit/s)
- **Flow 3 egress** (mean 299.66 Mbit/s)

![Graph showing packet delay](image2)

- **Flow 1 (95th percentile 86.87 ms)**
- **Flow 2 (95th percentile 62.68 ms)**
- **Flow 3 (95th percentile 58.75 ms)**

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Run 2: Statistics of Indigo-MusesC5

Start at: 2019-08-27 21:30:29
End at: 2019-08-27 21:30:59
Local clock offset: -0.311 ms
Remote clock offset: -0.238 ms

# Below is generated by plot.py at 2019-08-28 00:54:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 709.70 Mbit/s
95th percentile per-packet one-way delay: 61.258 ms
Loss rate: 0.48%
-- Flow 1:
Average throughput: 442.04 Mbit/s
95th percentile per-packet one-way delay: 62.765 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 377.49 Mbit/s
95th percentile per-packet one-way delay: 60.061 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 93.21 Mbit/s
95th percentile per-packet one-way delay: 57.336 ms
Loss rate: 1.93%
Run 2: Report of Indigo-MusesC5 — Data Link

![Data Link Throughput and Delay Graphs]

- **Throughput Graph**
  - Flow 1 ingress (mean 441.64 Mbit/s)
  - Flow 1 egress (mean 442.04 Mbit/s)
  - Flow 2 ingress (mean 377.37 Mbit/s)
  - Flow 2 egress (mean 377.49 Mbit/s)
  - Flow 3 ingress (mean 93.35 Mbit/s)
  - Flow 3 egress (mean 93.21 Mbit/s)

- **Delay Graph**
  - Flow 1 (95th percentile 62.77 ms)
  - Flow 2 (95th percentile 60.06 ms)
  - Flow 3 (95th percentile 57.34 ms)
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-08-27 22:09:41
End at: 2019-08-27 22:10:11
Local clock offset: -0.67 ms
Remote clock offset: -0.251 ms

# Below is generated by plot.py at 2019-08-28 00:55:05
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 704.87 Mbit/s
  95th percentile per-packet one-way delay: 90.959 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 450.27 Mbit/s
  95th percentile per-packet one-way delay: 102.968 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 362.77 Mbit/s
  95th percentile per-packet one-way delay: 67.479 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 92.19 Mbit/s
  95th percentile per-packet one-way delay: 56.836 ms
  Loss rate: 1.63%
Run 3: Report of Indigo-MusesC5 — Data Link

- Flow 1 ingress (mean 449.41 Mbit/s)
- Flow 1 egress (mean 450.27 Mbit/s)
- Flow 2 ingress (mean 365.55 Mbit/s)
- Flow 2 egress (mean 362.77 Mbit/s)
- Flow 3 ingress (mean 92.18 Mbit/s)
- Flow 3 egress (mean 92.19 Mbit/s)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 102.97 ms)
- Flow 2 (95th percentile 67.48 ms)
- Flow 3 (95th percentile 56.84 ms)
Run 4: Statistics of Indigo-MusesC5

Local clock offset: 0.391 ms
Remote clock offset: 0.065 ms

# Below is generated by plot.py at 2019-08-28 00:56:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 736.70 Mbit/s
95th percentile per-packet one-way delay: 71.695 ms
Loss rate: 0.39%
-- Flow 1:
Average throughput: 429.11 Mbit/s
95th percentile per-packet one-way delay: 77.040 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 368.66 Mbit/s
95th percentile per-packet one-way delay: 68.635 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 308.19 Mbit/s
95th percentile per-packet one-way delay: 60.520 ms
Loss rate: 0.91%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-08-27 23:27:56
End at: 2019-08-27 23:28:26
Local clock offset: -0.154 ms
Remote clock offset: -0.016 ms

# Below is generated by plot.py at 2019-08-28 00:59:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 729.61 Mbit/s
95th percentile per-packet one-way delay: 67.294 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 448.72 Mbit/s
95th percentile per-packet one-way delay: 68.619 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 374.34 Mbit/s
95th percentile per-packet one-way delay: 66.740 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 160.95 Mbit/s
95th percentile per-packet one-way delay: 58.509 ms
Loss rate: 3.28%
Run 5: Report of Indigo-MusesC5 — Data Link
Run 1: Statistics of Indigo-MusesD

Start at: 2019-08-27 20:54:19
End at: 2019-08-27 20:54:49
Local clock offset: -0.592 ms
Remote clock offset: -0.278 ms

# Below is generated by plot.py at 2019-08-28 00:59:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 610.96 Mbit/s
95th percentile per-packet one-way delay: 60.010 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 359.44 Mbit/s
95th percentile per-packet one-way delay: 60.093 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 313.71 Mbit/s
95th percentile per-packet one-way delay: 60.719 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 215.51 Mbit/s
95th percentile per-packet one-way delay: 57.700 ms
Loss rate: 2.24%
Run 1: Report of Indigo-MusesD — Data Link

![Graph of throughput over time for different flows with mean and 95th percentile delay]

**Throughput (Mbps):**
- Flow 1 ingress (mean 359.01 Mbps)
- Flow 1 egress (mean 359.44 Mbps)
- Flow 2 ingress (mean 313.46 Mbps)
- Flow 2 egress (mean 313.71 Mbps)
- Flow 3 ingress (mean 216.86 Mbps)
- Flow 3 egress (mean 215.51 Mbps)

**Per-packet one way delay (ms):**
- Flow 1 (95th percentile 60.09 ms)
- Flow 2 (95th percentile 60.72 ms)
- Flow 3 (95th percentile 57.70 ms)
Run 2: Statistics of Indigo-MusesD

End at: 2019-08-27 21:33:52
Local clock offset: -0.091 ms
Remote clock offset: -0.14 ms

# Below is generated by plot.py at 2019-08-28 01:00:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 636.95 Mbit/s
95th percentile per-packet one-way delay: 58.592 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 374.70 Mbit/s
95th percentile per-packet one-way delay: 58.783 ms
Loss rate: 0.24%
-- Flow 2:
Average throughput: 323.02 Mbit/s
95th percentile per-packet one-way delay: 58.279 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 226.61 Mbit/s
95th percentile per-packet one-way delay: 58.055 ms
Loss rate: 2.53%
Run 2: Report of Indigo-MusesD — Data Link
Run 3: Statistics of Indigo-MusesD

Start at: 2019-08-27 22:12:35  
End at: 2019-08-27 22:13:05  
Local clock offset: 0.32 ms  
Remote clock offset: -0.184 ms  

# Below is generated by plot.py at 2019-08-28 01:01:15  
# Datalink statistics  
-- Total of 3 flows:  
  Average throughput: 550.69 Mbit/s  
  95th percentile per-packet one-way delay: 59.014 ms  
  Loss rate: 0.56%  
-- Flow 1:  
  Average throughput: 315.22 Mbit/s  
  95th percentile per-packet one-way delay: 59.315 ms  
  Loss rate: 0.31%  
-- Flow 2:  
  Average throughput: 284.26 Mbit/s  
  95th percentile per-packet one-way delay: 58.533 ms  
  Loss rate: 0.54%  
-- Flow 3:  
  Average throughput: 222.72 Mbit/s  
  95th percentile per-packet one-way delay: 58.575 ms  
  Loss rate: 1.99%
Run 3: Report of Indigo-MusesD — Data Link
Run 4: Statistics of Indigo-MusesD

End at: 2019-08-27 22:52:18
Local clock offset: -0.051 ms
Remote clock offset: 0.024 ms

# Below is generated by plot.py at 2019-08-28 01:02:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 549.71 Mbit/s
95th percentile per-packet one-way delay: 62.114 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 413.94 Mbit/s
95th percentile per-packet one-way delay: 62.518 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 114.62 Mbit/s
95th percentile per-packet one-way delay: 57.203 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 247.22 Mbit/s
95th percentile per-packet one-way delay: 58.816 ms
Loss rate: 1.79%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Start at: 2019-08-27 23:30:51
End at: 2019-08-27 23:31:21
Local clock offset: -0.54 ms
Remote clock offset: 0.051 ms

# Below is generated by plot.py at 2019-08-28 01:04:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 648.05 Mbit/s
95th percentile per-packet one-way delay: 61.986 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 397.41 Mbit/s
95th percentile per-packet one-way delay: 60.160 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 313.87 Mbit/s
95th percentile per-packet one-way delay: 62.789 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 202.50 Mbit/s
95th percentile per-packet one-way delay: 61.324 ms
Loss rate: 1.72%
Run 5: Report of Indigo-MusesD — Data Link
Run 1: Statistics of Indigo-MusesT

End at: 2019-08-27 20:31:53  
Local clock offset: -0.719 ms  
Remote clock offset: 0.127 ms

# Below is generated by plot.py at 2019-08-28 01:05:27  
# Datalink statistics  
--- Total of 3 flows:  
Average throughput: 730.18 Mbit/s  
95th percentile per-packet one-way delay: 61.344 ms  
Loss rate: 0.46%  
--- Flow 1:  
Average throughput: 455.97 Mbit/s  
95th percentile per-packet one-way delay: 65.168 ms  
Loss rate: 0.30%  
--- Flow 2:  
Average throughput: 388.70 Mbit/s  
95th percentile per-packet one-way delay: 58.194 ms  
Loss rate: 0.59%  
--- Flow 3:  
Average throughput: 106.92 Mbit/s  
95th percentile per-packet one-way delay: 57.087 ms  
Loss rate: 1.98%
Run 1: Report of Indigo-MusesT — Data Link
Run 2: Statistics of Indigo-MusesT

Start at: 2019-08-27 21:10:32
End at: 2019-08-27 21:11:02
Local clock offset: -0.082 ms
Remote clock offset: -0.111 ms

# Below is generated by plot.py at 2019-08-28 01:07:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 726.98 Mbit/s
95th percentile per-packet one-way delay: 63.497 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 463.26 Mbit/s
95th percentile per-packet one-way delay: 66.586 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 376.22 Mbit/s
95th percentile per-packet one-way delay: 59.111 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 96.65 Mbit/s
95th percentile per-packet one-way delay: 57.314 ms
Loss rate: 1.92%
Run 2: Report of Indigo-MusesT — Data Link

![Graph showing data link performance with throughput and packet delay metrics for different flows.]

Legend:
- Flow 1 ingress (mean 462.61 Mbit/s)
- Flow 1 egress (mean 463.26 Mbit/s)
- Flow 2 ingress (mean 376.13 Mbit/s)
- Flow 2 egress (mean 376.22 Mbit/s)
- Flow 3 ingress (mean 96.78 Mbit/s)
- Flow 3 egress (mean 96.65 Mbit/s)
Run 3: Statistics of Indigo-MusesT

Start at: 2019-08-27 21:49:49
End at: 2019-08-27 21:50:19
Local clock offset: -0.171 ms
Remote clock offset: -0.252 ms

# Below is generated by plot.py at 2019-08-28 01:09:19
# Datalink statistics

-- Total of 3 flows:
Average throughput: 770.01 Mbit/s
95th percentile per-packet one-way delay: 62.683 ms
Loss rate: 0.49%

-- Flow 1:
Average throughput: 464.67 Mbit/s
95th percentile per-packet one-way delay: 64.296 ms
Loss rate: 0.29%

-- Flow 2:
Average throughput: 378.81 Mbit/s
95th percentile per-packet one-way delay: 60.333 ms
Loss rate: 0.51%

-- Flow 3:
Average throughput: 250.86 Mbit/s
95th percentile per-packet one-way delay: 62.265 ms
Loss rate: 1.85%
Run 3: Report of Indigo-MusesT — Data Link

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

Flow 1 ingress (mean 464.10 Mbit/s)  
Flow 1 egress (mean 464.67 Mbit/s)  
Flow 2 ingress (mean 378.21 Mbit/s)  
Flow 2 egress (mean 378.81 Mbit/s)  
Flow 3 ingress (mean 251.18 Mbit/s)  
Flow 3 egress (mean 250.86 Mbit/s)

Flow 1 (95th percentile 64.30 ms)  
Flow 2 (95th percentile 60.33 ms)  
Flow 3 (95th percentile 62.27 ms)
Run 4: Statistics of Indigo-MusesT

Start at: 2019-08-27 22:29:02
End at: 2019-08-27 22:29:32
Local clock offset: -0.256 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-08-28 01:09:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 738.99 Mbit/s
  95th percentile per-packet one-way delay: 64.504 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 438.13 Mbit/s
  95th percentile per-packet one-way delay: 72.209 ms
  Loss rate: 0.29%
-- Flow 2:
  Average throughput: 374.98 Mbit/s
  95th percentile per-packet one-way delay: 59.517 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 257.35 Mbit/s
  95th percentile per-packet one-way delay: 58.174 ms
  Loss rate: 1.78%
Run 5: Statistics of Indigo-MusesT

Start at: 2019-08-27 23:08:07
End at: 2019-08-27 23:08:37
Local clock offset: 0.368 ms
Remote clock offset: 0.112 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 731.19 Mbit/s
95th percentile per-packet one-way delay: 68.034 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 439.92 Mbit/s
95th percentile per-packet one-way delay: 77.491 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 349.22 Mbit/s
95th percentile per-packet one-way delay: 61.058 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 254.90 Mbit/s
95th percentile per-packet one-way delay: 58.492 ms
Loss rate: 1.96%
Run 5: Report of Indigo-MusesT — Data Link

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

Legend:
- Flow 1 ingress (mean 439.49 Mbit/s)
- Flow 1 egress (mean 439.92 Mbit/s)
- Flow 2 ingress (mean 349.29 Mbit/s)
- Flow 2 egress (mean 349.22 Mbit/s)
- Flow 3 ingress (mean 255.91 Mbit/s)
- Flow 3 egress (mean 254.90 Mbit/s)

Legend for delay:
- Flow 1 (95th percentile 77.49 ms)
- Flow 2 (95th percentile 61.06 ms)
- Flow 3 (95th percentile 58.49 ms)
Run 1: Statistics of LEDBAT

End at: 2019-08-27 20:22:49
Local clock offset: -0.161 ms
Remote clock offset: 0.384 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.65 Mbit/s
95th percentile per-packet one-way delay: 58.129 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 28.20 Mbit/s
95th percentile per-packet one-way delay: 58.304 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 18.94 Mbit/s
95th percentile per-packet one-way delay: 57.815 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 8.83 Mbit/s
95th percentile per-packet one-way delay: 57.562 ms
Loss rate: 2.38%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2019-08-27 21:01:26
End at: 2019-08-27 21:01:56
Local clock offset: -0.029 ms
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.46 Mbit/s
95th percentile per-packet one-way delay: 57.949 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 28.07 Mbit/s
95th percentile per-packet one-way delay: 57.824 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 18.73 Mbit/s
95th percentile per-packet one-way delay: 58.090 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 9.22 Mbit/s
95th percentile per-packet one-way delay: 57.937 ms
Loss rate: 2.33%
Run 2: Report of LEDBAT — Data Link

![Throughput Graph]

![Delay Graph]

Flow 1 ingress (mean 28.18 Mbit/s)  Flow 1 egress (mean 28.07 Mbit/s)
Flow 2 ingress (mean 18.84 Mbit/s)  Flow 2 egress (mean 18.73 Mbit/s)
Flow 3 ingress (mean 9.33 Mbit/s)  Flow 3 egress (mean 9.22 Mbit/s)

Flow 1 (95th percentile 57.82 ms)  Flow 2 (95th percentile 58.09 ms)  Flow 3 (95th percentile 57.94 ms)
Run 3: Statistics of LEDBAT

Start at: 2019-08-27 21:40:29
End at: 2019-08-27 21:40:59
Local clock offset: -0.303 ms
Remote clock offset: -0.234 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 43.89 Mbit/s
  95th percentile per-packet one-way delay: 57.534 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 28.38 Mbit/s
  95th percentile per-packet one-way delay: 57.466 ms
  Loss rate: 0.76%
-- Flow 2:
  Average throughput: 18.81 Mbit/s
  95th percentile per-packet one-way delay: 57.547 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 9.25 Mbit/s
  95th percentile per-packet one-way delay: 57.729 ms
  Loss rate: 2.33%
Run 3: Report of LEDBAT — Data Link

![Graph showing throughput and packet loss over time with multiple flow lines and statistics for each flow.]

- **Throughput (Mbps)**
  - **Flow 1 ingress** (mean 28.49 Mbps)
  - **Flow 1 egress** (mean 28.38 Mbps)
  - **Flow 2 ingress** (mean 18.91 Mbps)
  - **Flow 2 egress** (mean 18.81 Mbps)
  - **Flow 3 ingress** (mean 9.36 Mbps)
  - **Flow 3 egress** (mean 9.25 Mbps)

- **Per packet one way delay (ms)**
  - **Flow 1** (95th percentile 57.47 ms)
  - **Flow 2** (95th percentile 57.55 ms)
  - **Flow 3** (95th percentile 57.73 ms)
Run 4: Statistics of LEDBAT

End at: 2019-08-27 22:20:11
Local clock offset: 0.369 ms
Remote clock offset: 0.463 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.85 Mbit/s
95th percentile per-packet one-way delay: 57.605 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 28.28 Mbit/s
95th percentile per-packet one-way delay: 57.516 ms
Loss rate: 0.75%
-- Flow 2:
Average throughput: 18.81 Mbit/s
95th percentile per-packet one-way delay: 57.713 ms
Loss rate: 1.15%
-- Flow 3:
Average throughput: 9.40 Mbit/s
95th percentile per-packet one-way delay: 57.219 ms
Loss rate: 2.30%
Run 4: Report of LEDBAT — Data Link

![Graph showing network performance metrics over time]

**Legend:**
- Flow 1 ingress (mean 28.39 Mbit/s)
- Flow 1 egress (mean 28.28 Mbit/s)
- Flow 2 ingress (mean 18.92 Mbit/s)
- Flow 2 egress (mean 18.81 Mbit/s)
- Flow 3 ingress (mean 9.51 Mbit/s)
- Flow 3 egress (mean 9.40 Mbit/s)

![Graph showing packet delay statistics over time]

**Legend:**
- Flow 1 (95th percentile 57.52 ms)
- Flow 2 (95th percentile 57.71 ms)
- Flow 3 (95th percentile 57.22 ms)
Run 5: Statistics of LEDBAT

Start at: 2019-08-27 22:58:49
End at: 2019-08-27 22:59:19
Local clock offset: -0.029 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-08-28 01:11:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 43.97 Mbit/s
95th percentile per-packet one-way delay: 57.653 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 28.38 Mbit/s
95th percentile per-packet one-way delay: 57.708 ms
Loss rate: 0.76%
-- Flow 2:
Average throughput: 18.87 Mbit/s
95th percentile per-packet one-way delay: 57.595 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: 57.311 ms
Loss rate: 2.31%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 20:41:01
End at: 2019-08-27 20:41:31
Local clock offset: 0.063 ms
Remote clock offset: -0.023 ms

# Below is generated by plot.py at 2019-08-28 01:14:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.16 Mbit/s
95th percentile per-packet one-way delay: 64.499 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 399.50 Mbit/s
95th percentile per-packet one-way delay: 65.028 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 335.65 Mbit/s
95th percentile per-packet one-way delay: 62.806 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 207.82 Mbit/s
95th percentile per-packet one-way delay: 63.817 ms
Loss rate: 1.81%
Run 1: Report of Muses_DecisionTree — Data Link

![Graphs showing network performance metrics over time]

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Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 21:20:18  
End at: 2019-08-27 21:20:48  
Local clock offset: 0.19 ms  
Remote clock offset: -0.128 ms  

# Below is generated by plot.py at 2019-08-28 01:14:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 586.85 Mbit/s  
95th percentile per-packet one-way delay: 57.876 ms  
Loss rate: 0.47%  
-- Flow 1:  
Average throughput: 328.32 Mbit/s  
95th percentile per-packet one-way delay: 58.055 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 299.80 Mbit/s  
95th percentile per-packet one-way delay: 57.713 ms  
Loss rate: 0.63%  
-- Flow 3:  
Average throughput: 191.50 Mbit/s  
95th percentile per-packet one-way delay: 57.440 ms  
Loss rate: 1.56%
Run 2: Report of Muses, DecisionTree — Data Link

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

- Flow 1 ingress (mean 327.56 Mbit/s)
- Flow 1 egress (mean 328.32 Mbit/s)
- Flow 2 ingress (mean 299.90 Mbit/s)
- Flow 2 egress (mean 299.80 Mbit/s)
- Flow 3 ingress (mean 192.05 Mbit/s)
- Flow 3 egress (mean 191.50 Mbit/s)

- Flow 1 (95th percentile 58.05 ms)
- Flow 2 (95th percentile 57.71 ms)
- Flow 3 (95th percentile 57.44 ms)
Run 3: Statistics of Muses\_DecisionTree

End at: 2019-08-27 21:59:58
Local clock offset: 0.182 ms
Remote clock offset: -0.227 ms

# Below is generated by plot.py at 2019-08-28 01:15:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.20 Mbit/s
95th percentile per-packet one-way delay: 61.054 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 392.06 Mbit/s
95th percentile per-packet one-way delay: 61.962 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 314.94 Mbit/s
95th percentile per-packet one-way delay: 61.038 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 246.15 Mbit/s
95th percentile per-packet one-way delay: 59.186 ms
Loss rate: 1.23%
Run 3: Report of Muses_DecimalTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 22:38:38  
End at: 2019-08-27 22:39:08  
Local clock offset: 0.407 ms  
Remote clock offset: -0.184 ms

# Below is generated by plot.py at 2019-08-28 01:16:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 705.92 Mbit/s  
95th percentile per-packet one-way delay: 63.428 ms  
Loss rate: 0.43%
-- Flow 1:  
Average throughput: 439.91 Mbit/s  
95th percentile per-packet one-way delay: 64.709 ms  
Loss rate: 0.15%
-- Flow 2:  
Average throughput: 307.57 Mbit/s  
95th percentile per-packet one-way delay: 62.865 ms  
Loss rate: 0.45%
-- Flow 3:  
Average throughput: 200.68 Mbit/s  
95th percentile per-packet one-way delay: 58.764 ms  
Loss rate: 2.27%
Run 4: Report of Muses, Decision Tree — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 438.82 Mbps)
- Flow 1 egress (mean 439.91 Mbps)
- Flow 2 ingress (mean 307.12 Mbps)
- Flow 2 egress (mean 307.57 Mbps)
- Flow 3 ingress (mean 202.88 Mbps)
- Flow 3 egress (mean 200.68 Mbps)

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

- Flow 1 (95th percentile 64.71 ms)
- Flow 2 (95th percentile 62.87 ms)
- Flow 3 (95th percentile 58.76 ms)
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-08-27 23:17:44
End at: 2019-08-27 23:18:14
Local clock offset: 0.074 ms
Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2019-08-28 01:16:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 647.68 Mbit/s
  95th percentile per-packet one-way delay: 61.823 ms
  Loss rate: 0.45%
-- Flow 1:
  Average throughput: 366.98 Mbit/s
  95th percentile per-packet one-way delay: 65.972 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 332.95 Mbit/s
  95th percentile per-packet one-way delay: 58.371 ms
  Loss rate: 0.52%
-- Flow 3:
  Average throughput: 196.26 Mbit/s
  95th percentile per-packet one-way delay: 58.441 ms
  Loss rate: 1.46%
Run 5: Report of Muses_DecisionTree — Data Link
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-27 20:46:02
End at: 2019-08-27 20:46:32
Local clock offset: -0.141 ms
Remote clock offset: -0.88 ms

# Below is generated by plot.py at 2019-08-28 01:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 701.77 Mbit/s
95th percentile per-packet one-way delay: 82.206 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 412.32 Mbit/s
95th percentile per-packet one-way delay: 94.258 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 320.95 Mbit/s
95th percentile per-packet one-way delay: 70.824 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 249.36 Mbit/s
95th percentile per-packet one-way delay: 59.690 ms
Loss rate: 1.32%
Run 1: Report of Muses_DocumentH0 — Data Link
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-08-27 21:25:12
End at: 2019-08-27 21:25:42
Local clock offset: -0.081 ms
Remote clock offset: -0.039 ms

# Below is generated by plot.py at 2019-08-28 01:19:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 649.40 Mbit/s
95th percentile per-packet one-way delay: 85.620 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 362.78 Mbit/s
95th percentile per-packet one-way delay: 99.270 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 315.04 Mbit/s
95th percentile per-packet one-way delay: 64.020 ms
Loss rate: 0.74%
-- Flow 3:
Average throughput: 249.67 Mbit/s
95th percentile per-packet one-way delay: 58.029 ms
Loss rate: 1.16%
Run 3: Statistics of Muses\_DecisionTreeH0

End at: 2019-08-27 22:04:53
Local clock offset: -0.596 ms
Remote clock offset: -0.295 ms

# Below is generated by plot.py at 2019-08-28 01:21:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 686.27 Mbit/s
95th percentile per-packet one-way delay: 66.025 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 394.41 Mbit/s
95th percentile per-packet one-way delay: 67.845 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 330.93 Mbit/s
95th percentile per-packet one-way delay: 65.006 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 232.89 Mbit/s
95th percentile per-packet one-way delay: 58.419 ms
Loss rate: 1.60%
Run 3: Report of Muses

---

**Figure:**

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 393.71 Mbps)
  - Flow 1 egress (mean 394.41 Mbps)
  - Flow 2 ingress (mean 331.76 Mbps)
  - Flow 2 egress (mean 330.93 Mbps)
  - Flow 3 ingress (mean 233.77 Mbps)
  - Flow 3 egress (mean 232.89 Mbps)

- **Latency (ms):**
  - Flow 1 (95th percentile 67.84 ms)
  - Flow 2 (95th percentile 65.01 ms)
  - Flow 3 (95th percentile 58.42 ms)
Run 4: Statistics of Muses\_DecisionTreeH0

End at: 2019-08-27 22:44:07
Local clock offset: -0.294 ms
Remote clock offset: 0.22 ms

# Below is generated by plot.py at 2019-08-28 01:23:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 639.06 Mbit/s
  95th percentile per-packet one-way delay: 96.383 ms
  Loss rate: 0.55%
-- Flow 1:
  Average throughput: 322.68 Mbit/s
  95th percentile per-packet one-way delay: 108.151 ms
  Loss rate: 0.65%
-- Flow 2:
  Average throughput: 369.71 Mbit/s
  95th percentile per-packet one-way delay: 60.512 ms
  Loss rate: 0.40%
-- Flow 3:
  Average throughput: 232.00 Mbit/s
  95th percentile per-packet one-way delay: 59.749 ms
  Loss rate: 0.60%
Run 4: Report of Muses_DecisionTree0 — Data Link

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

- Flow 1 ingress (mean 323.51 Mbit/s)
- Flow 1 egress (mean 322.68 Mbit/s)
- Flow 2 ingress (mean 368.74 Mbit/s)
- Flow 2 egress (mean 369.71 Mbit/s)
- Flow 3 ingress (mean 230.55 Mbit/s)
- Flow 3 egress (mean 232.00 Mbit/s)

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

- Flow 1 (95th percentile 108.15 ms)
- Flow 2 (95th percentile 60.51 ms)
- Flow 3 (95th percentile 59.75 ms)
Run 5: Statistics of Muses\_DecisionTreeH0

Local clock offset: -0.352 ms
Remote clock offset: -0.211 ms

# Below is generated by plot.py at 2019-08-28 01:24:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 644.29 Mbit/s
  95th percentile per-packet one-way delay: 93.215 ms
  Loss rate: 0.43%
-- Flow 1:
  Average throughput: 334.84 Mbit/s
  95th percentile per-packet one-way delay: 105.941 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 350.85 Mbit/s
  95th percentile per-packet one-way delay: 63.868 ms
  Loss rate: 0.46%
-- Flow 3:
  Average throughput: 248.62 Mbit/s
  95th percentile per-packet one-way delay: 58.776 ms
  Loss rate: 1.95%
Run 5: Report of Muses_DecimalTreeH0 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 333.72 Mbps)
  - Flow 1 egress (mean 334.84 Mbps)
  - Flow 2 ingress (mean 350.40 Mbps)
  - Flow 2 egress (mean 350.65 Mbps)
  - Flow 3 ingress (mean 250.43 Mbps)
  - Flow 3 egress (mean 248.62 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 105.94 ms)
  - Flow 2 (95th percentile 63.87 ms)
  - Flow 3 (95th percentile 58.78 ms)
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 20:44:18
End at: 2019-08-27 20:44:48
Local clock offset: 0.221 ms
Remote clock offset: -0.694 ms

# Below is generated by plot.py at 2019-08-28 01:26:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 749.41 Mbit/s
95th percentile per-packet one-way delay: 61.719 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 390.58 Mbit/s
95th percentile per-packet one-way delay: 63.324 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 422.79 Mbit/s
95th percentile per-packet one-way delay: 59.139 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 253.27 Mbit/s
95th percentile per-packet one-way delay: 61.817 ms
Loss rate: 1.63%
Run 1: Report of Muses

DecisionTreeR0 — Data Link

![Graph showing network traffic and delay](image)

- Flow 1 ingress (mean 389.72 Mb/s)
- Flow 1 egress (mean 390.58 Mb/s)
- Flow 2 ingress (mean 422.40 Mb/s)
- Flow 2 egress (mean 422.79 Mb/s)
- Flow 3 ingress (mean 254.12 Mb/s)
- Flow 3 egress (mean 253.27 Mb/s)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 63.32 ms)
- Flow 2 (95th percentile 59.14 ms)
- Flow 3 (95th percentile 61.82 ms)
Run 2: Statistics of Muses\_DecisionTreeR0

End at: 2019-08-27 21:24:01
Local clock offset: -0.134 ms
Remote clock offset: -0.453 ms

# Below is generated by plot.py at 2019-08-28 01:26:33
# Datalink statistics
  -- Total of 3 flows:
  Average throughput: 673.21 Mbit/s
  95th percentile per-packet one-way delay: 60.894 ms
  Loss rate: 0.49%
  -- Flow 1:
  Average throughput: 433.50 Mbit/s
  95th percentile per-packet one-way delay: 59.046 ms
  Loss rate: 0.30%
  -- Flow 2:
  Average throughput: 284.36 Mbit/s
  95th percentile per-packet one-way delay: 61.108 ms
  Loss rate: 0.77%
  -- Flow 3:
  Average throughput: 163.86 Mbit/s
  95th percentile per-packet one-way delay: 58.183 ms
  Loss rate: 1.01%
Run 2: Report of Muses_DecisionTreeR0 — Data Link

![Graph showing network performance metrics over time.]

Throughput graph:
- Flow 1 ingress (mean 433.12 Mbit/s)
- Flow 1 egress (mean 433.50 Mbit/s)
- Flow 2 ingress (mean 284.87 Mbit/s)
- Flow 2 egress (mean 284.36 Mbit/s)
- Flow 3 ingress (mean 163.47 Mbit/s)
- Flow 3 egress (mean 163.66 Mbit/s)

Delay graph:
- Flow 1 (95th percentile 59.05 ms)
- Flow 2 (95th percentile 61.11 ms)
- Flow 3 (95th percentile 58.18 ms)
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 22:02:42
End at: 2019-08-27 22:03:12
Local clock offset: -0.077 ms
Remote clock offset: -0.263 ms

# Below is generated by plot.py at 2019-08-28 01:27:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 690.94 Mbit/s
95th percentile per-packet one-way delay: 63.043 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 395.80 Mbit/s
95th percentile per-packet one-way delay: 64.084 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 355.05 Mbit/s
95th percentile per-packet one-way delay: 63.545 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 195.70 Mbit/s
95th percentile per-packet one-way delay: 58.993 ms
Loss rate: 1.23%
Run 3: Report of Muses_DecisionTreeR0 — Data Link
Run 4: Statistics of Muses\_DecisionTreeRO

Start at: 2019-08-27 22:41:54  
Local clock offset: -0.267 ms  
Remote clock offset: -0.568 ms

# Below is generated by plot.py at 2019-08-28 01:30:29  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 720.14 Mbit/s  
95th percentile per-packet one-way delay: 71.011 ms  
Loss rate: 0.36%  
-- Flow 1:  
Average throughput: 417.80 Mbit/s  
95th percentile per-packet one-way delay: 73.685 ms  
Loss rate: 0.25%  
-- Flow 2:  
Average throughput: 358.63 Mbit/s  
95th percentile per-packet one-way delay: 71.306 ms  
Loss rate: 0.33%  
-- Flow 3:  
Average throughput: 211.01 Mbit/s  
95th percentile per-packet one-way delay: 58.052 ms  
Loss rate: 1.11%
Run 4: Report of Muses_DecimalTreeR0 — Data Link

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

- **Flow 1 ingress (mean 417.32 Mbit/s)**
- **Flow 1 egress (mean 417.80 Mbit/s)**
- **Flow 2 ingress (mean 357.64 Mbit/s)**
- **Flow 2 egress (mean 358.63 Mbit/s)**
- **Flow 3 ingress (mean 210.75 Mbit/s)**
- **Flow 3 egress (mean 211.01 Mbit/s)**

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

- **Flow 1 (95th percentile 73.69 ms)**
- **Flow 2 (95th percentile 71.31 ms)**
- **Flow 3 (95th percentile 58.05 ms)**
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-08-27 23:21:03
End at: 2019-08-27 23:21:33
Local clock offset: 0.084 ms
Remote clock offset: 0.026 ms

# Below is generated by plot.py at 2019-08-28 01:30:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 654.62 Mbit/s
95th percentile per-packet one-way delay: 63.598 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 390.18 Mbit/s
95th percentile per-packet one-way delay: 70.052 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 291.02 Mbit/s
95th percentile per-packet one-way delay: 58.305 ms
Loss rate: 0.39%
-- Flow 3:
Average throughput: 229.35 Mbit/s
95th percentile per-packet one-way delay: 57.637 ms
Loss rate: 1.80%
Run 5: Report of Muses_DecisionTreeR0 — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2019-08-27 20:37:58
End at: 2019-08-27 20:38:28
Local clock offset: -0.607 ms
Remote clock offset: 0.047 ms

# Below is generated by plot.py at 2019-08-28 01:42:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 702.76 Mbit/s
95th percentile per-packet one-way delay: 161.263 ms
Loss rate: 1.49%
-- Flow 1:
Average throughput: 397.88 Mbit/s
95th percentile per-packet one-way delay: 116.360 ms
Loss rate: 0.62%
-- Flow 2:
Average throughput: 339.66 Mbit/s
95th percentile per-packet one-way delay: 181.293 ms
Loss rate: 3.01%
-- Flow 3:
Average throughput: 243.94 Mbit/s
95th percentile per-packet one-way delay: 63.799 ms
Loss rate: 1.45%
Run 1: Report of PCC-Allegro — Data Link

![Throughput vs Time Graph]

- **Flow 1 ingress (mean 398.78 Mbit/s)**
- **Flow 1 egress (mean 397.88 Mbit/s)**
- **Flow 2 ingress (mean 348.17 Mbit/s)**
- **Flow 2 egress (mean 339.66 Mbit/s)**
- **Flow 3 ingress (mean 244.63 Mbit/s)**
- **Flow 3 egress (mean 243.94 Mbit/s)**

![Packet Round-trip Time vs Time Graph]

- **Flow 1 (95th percentile 116.36 ms)**
- **Flow 2 (95th percentile 181.29 ms)**
- **Flow 3 (95th percentile 63.80 ms)**
Run 2: Statistics of PCC-Allegro

Start at: 2019-08-27 21:17:11
End at: 2019-08-27 21:17:41
Local clock offset: -0.058 ms
Remote clock offset: -0.5 ms

# Below is generated by plot.py at 2019-08-28 01:45:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.30 Mbit/s
95th percentile per-packet one-way delay: 162.699 ms
Loss rate: 2.12%
-- Flow 1:
Average throughput: 435.48 Mbit/s
95th percentile per-packet one-way delay: 167.022 ms
Loss rate: 3.06%
-- Flow 2:
Average throughput: 367.46 Mbit/s
95th percentile per-packet one-way delay: 65.376 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 255.16 Mbit/s
95th percentile per-packet one-way delay: 58.133 ms
Loss rate: 1.43%
Run 3: Statistics of PCC-Allegro

Start at: 2019-08-27 21:56:21
End at: 2019-08-27 21:56:51
Local clock offset: -0.267 ms
Remote clock offset: -0.164 ms

# Below is generated by plot.py at 2019-08-28 01:46:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 762.61 Mbit/s
95th percentile per-packet one-way delay: 169.389 ms
Loss rate: 1.80%
-- Flow 1:
Average throughput: 441.96 Mbit/s
95th percentile per-packet one-way delay: 164.359 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 364.30 Mbit/s
95th percentile per-packet one-way delay: 171.462 ms
Loss rate: 2.09%
-- Flow 3:
Average throughput: 241.97 Mbit/s
95th percentile per-packet one-way delay: 58.180 ms
Loss rate: 1.41%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1: Ingress (mean 447.94 Mbit/s), Egress (mean 441.96 Mbit/s)
- Flow 2: Ingress (mean 399.96 Mbit/s), Egress (mean 364.96 Mbit/s)
- Flow 3: Ingress (mean 242.60 Mbit/s), Egress (mean 241.97 Mbit/s)

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

- Flow 1: 95th percentile 164.36 ms
- Flow 2: 95th percentile 171.46 ms
- Flow 3: 95th percentile 58.18 ms
Run 4: Statistics of PCC-Allegro

Start at: 2019-08-27 22:35:32
End at: 2019-08-27 22:36:02
Local clock offset: -0.544 ms
Remote clock offset: 0.0 ms

# Below is generated by plot.py at 2019-08-28 01:47:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 739.01 Mbit/s
95th percentile per-packet one-way delay: 105.856 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 444.38 Mbit/s
95th percentile per-packet one-way delay: 107.325 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 325.82 Mbit/s
95th percentile per-packet one-way delay: 76.782 ms
Loss rate: 0.73%
-- Flow 3:
Average throughput: 240.47 Mbit/s
95th percentile per-packet one-way delay: 98.648 ms
Loss rate: 1.40%
Run 5: Statistics of PCC-Allegro

Start at: 2019-08-27 23:14:38
End at: 2019-08-27 23:15:08
Local clock offset: -0.122 ms
Remote clock offset: 0.074 ms

# Below is generated by plot.py at 2019-08-28 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 740.25 Mbit/s
95th percentile per-packet one-way delay: 168.643 ms
Loss rate: 1.32%
-- Flow 1:
Average throughput: 434.00 Mbit/s
95th percentile per-packet one-way delay: 165.312 ms
Loss rate: 0.99%
-- Flow 2:
Average throughput: 341.32 Mbit/s
95th percentile per-packet one-way delay: 186.751 ms
Loss rate: 1.96%
-- Flow 3:
Average throughput: 244.84 Mbit/s
95th percentile per-packet one-way delay: 75.249 ms
Loss rate: 1.31%
Run 5: Report of PCC-Allegro — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 436.64 Mbit/s)
Flow 1 egress (mean 434.00 Mbit/s)
Flow 2 ingress (mean 346.10 Mbit/s)
Flow 2 egress (mean 341.32 Mbit/s)
Flow 3 ingress (mean 245.17 Mbit/s)
Flow 3 egress (mean 244.54 Mbit/s)

Round-trip time (ms)

Time (s)

Flow 1 (95th percentile 165.31 ms)
Flow 2 (95th percentile 186.75 ms)
Flow 3 (95th percentile 75.25 ms)
Run 1: Statistics of PCC-Expr

Start at: 2019-08-27 20:29:33
End at: 2019-08-27 20:30:03
Local clock offset: -0.398 ms
Remote clock offset: 0.261 ms

# Below is generated by plot.py at 2019-08-28 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 484.89 Mbit/s
95th percentile per-packet one-way delay: 132.918 ms
Loss rate: 1.38%
-- Flow 1:
Average throughput: 286.44 Mbit/s
95th percentile per-packet one-way delay: 92.967 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 249.61 Mbit/s
95th percentile per-packet one-way delay: 174.324 ms
Loss rate: 2.85%
-- Flow 3:
Average throughput: 100.19 Mbit/s
95th percentile per-packet one-way delay: 56.985 ms
Loss rate: 1.53%
Run 1: Report of PCC-Expr — Data Link

![Graph of Throughput and Delay](image-url)
Run 2: Statistics of PCC-Expr

Start at: 2019-08-27 21:08:40
End at: 2019-08-27 21:09:10
Local clock offset: 0.43 ms
Remote clock offset: -0.232 ms

# Below is generated by plot.py at 2019-08-28 01:48:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 502.71 Mbit/s
95th percentile per-packet one-way delay: 72.587 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 275.36 Mbit/s
95th percentile per-packet one-way delay: 83.066 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 255.10 Mbit/s
95th percentile per-packet one-way delay: 61.244 ms
Loss rate: 0.32%
-- Flow 3:
Average throughput: 177.60 Mbit/s
95th percentile per-packet one-way delay: 58.957 ms
Loss rate: 1.55%
Run 2: Report of PCC-Expr — Data Link

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

- **Flow 1 ingress (mean 276.44 Mbps)**
- **Flow 1 egress (mean 275.36 Mbps)**
- **Flow 2 ingress (mean 254.43 Mbps)**
- **Flow 2 egress (mean 255.10 Mbps)**
- **Flow 3 ingress (mean 178.32 Mbps)**
- **Flow 3 egress (mean 177.69 Mbps)**

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

- **Flow 1 (95th percentile 83.07 ms)**
- **Flow 2 (95th percentile 61.24 ms)**
- **Flow 3 (95th percentile 58.96 ms)**
Run 3: Statistics of PCC-Expr

Local clock offset: -0.407 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-08-28 01:48:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 473.88 Mbit/s
  95th percentile per-packet one-way delay: 99.415 ms
  Loss rate: 0.69%
  -- Flow 1:
    Average throughput: 277.14 Mbit/s
    95th percentile per-packet one-way delay: 115.308 ms
    Loss rate: 0.57%
  -- Flow 2:
    Average throughput: 210.60 Mbit/s
    95th percentile per-packet one-way delay: 57.998 ms
    Loss rate: 0.64%
  -- Flow 3:
    Average throughput: 174.20 Mbit/s
    95th percentile per-packet one-way delay: 57.118 ms
    Loss rate: 1.38%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Local clock offset: 0.411 ms
Remote clock offset: -0.122 ms

# Below is generated by plot.py at 2019-08-28 01:53:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 465.19 Mbit/s
95th percentile per-packet one-way delay: 81.167 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 260.04 Mbit/s
95th percentile per-packet one-way delay: 98.893 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 282.60 Mbit/s
95th percentile per-packet one-way delay: 62.660 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 53.58 Mbit/s
95th percentile per-packet one-way delay: 57.755 ms
Loss rate: 3.45%
Run 4: Report of PCC-Expr — Data Link

![Graph showing throughput and per-packet round trip delay over time with distinct lines for each flow and their respective means.](image)

- **Flow 1 Ingress** (mean 259.96 Mbit/s)
- **Flow 1 Egress** (mean 260.04 Mbit/s)
- **Flow 2 Ingress** (mean 282.70 Mbit/s)
- **Flow 2 Egress** (mean 282.66 Mbit/s)
- **Flow 3 Ingress** (mean 54.65 Mbit/s)
- **Flow 3 Egress** (mean 53.58 Mbit/s)

![Graph showing per-packet round trip delay over time with distinct markers for each flow and their respective 95th percentiles.](image)

- **Flow 1** (95th percentile 98.89 ms)
- **Flow 2** (95th percentile 62.66 ms)
- **Flow 3** (95th percentile 57.76 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-08-27 23:06:15
End at: 2019-08-27 23:06:45
Local clock offset: 0.336 ms
Remote clock offset: 0.015 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 510.64 Mbit/s
  95th percentile per-packet one-way delay: 88.928 ms
  Loss rate: 0.70%
-- Flow 1:
  Average throughput: 300.05 Mbit/s
  95th percentile per-packet one-way delay: 98.071 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 231.21 Mbit/s
  95th percentile per-packet one-way delay: 62.033 ms
  Loss rate: 0.56%
-- Flow 3:
  Average throughput: 174.35 Mbit/s
  95th percentile per-packet one-way delay: 69.283 ms
  Loss rate: 1.68%
Run 5: Report of PCC-Expr — Data Link
Run 1: Statistics of QUIC Cubic

Start at: 2019-08-27 20:34:52
End at: 2019-08-27 20:35:22
Local clock offset: -0.187 ms
Remote clock offset: 0.079 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
   -- Total of 3 flows:
      Average throughput: 121.44 Mbit/s
      95th percentile per-packet one-way delay: 57.311 ms
      Loss rate: 0.69%
   -- Flow 1:
      Average throughput: 63.21 Mbit/s
      95th percentile per-packet one-way delay: 57.339 ms
      Loss rate: 0.58%
   -- Flow 2:
      Average throughput: 51.51 Mbit/s
      95th percentile per-packet one-way delay: 57.101 ms
      Loss rate: 0.80%
   -- Flow 3:
      Average throughput: 65.63 Mbit/s
      95th percentile per-packet one-way delay: 57.227 ms
      Loss rate: 0.84%
Run 2: Statistics of QUIC Cubic

Start at: 2019-08-27 21:14:04
End at: 2019-08-27 21:14:34
Local clock offset: -0.431 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 126.45 Mbit/s
95th percentile per-packet one-way delay: 56.849 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 63.57 Mbit/s
95th percentile per-packet one-way delay: 56.583 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 63.78 Mbit/s
95th percentile per-packet one-way delay: 56.606 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 62.52 Mbit/s
95th percentile per-packet one-way delay: 56.927 ms
Loss rate: 0.19%
Run 2: Report of QUIC Cubic — Data Link
Run 3: Statistics of QUIC Cubic

End at: 2019-08-27 21:53:44
Local clock offset: 0.248 ms
Remote clock offset: -0.892 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 100.67 Mbit/s
95th percentile per-packet one-way delay: 58.074 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 54.13 Mbit/s
95th percentile per-packet one-way delay: 58.060 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 61.29 Mbit/s
95th percentile per-packet one-way delay: 58.091 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 17.62 Mbit/s
95th percentile per-packet one-way delay: 58.041 ms
Loss rate: 0.99%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

End at: 2019-08-27 22:32:57
Local clock offset: 0.342 ms
Remote clock offset: -0.01 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 117.95 Mbit/s
95th percentile per-packet one-way delay: 57.372 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 70.25 Mbit/s
95th percentile per-packet one-way delay: 57.394 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: 57.252 ms
Loss rate: 0.49%
-- Flow 3:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: 57.256 ms
Loss rate: 0.36%
Run 4: Report of QUIC Cubic — Data Link

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

- Flow 1 ingress (mean 70.23 Mbit/s)
- Flow 1 egress (mean 70.25 Mbit/s)
- Flow 2 ingress (mean 55.26 Mbit/s)
- Flow 2 egress (mean 55.31 Mbit/s)
- Flow 3 ingress (mean 33.09 Mbit/s)
- Flow 3 egress (mean 33.35 Mbit/s)
Run 5: Statistics of QUIC Cubic

Start at: 2019-08-27 23:11:32
End at: 2019-08-27 23:12:02
Local clock offset: -0.348 ms
Remote clock offset: -0.007 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 110.50 Mbit/s
95th percentile per-packet one-way delay: 60.021 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 57.44 Mbit/s
95th percentile per-packet one-way delay: 60.064 ms
Loss rate: 0.70%
-- Flow 2:
Average throughput: 63.42 Mbit/s
95th percentile per-packet one-way delay: 56.596 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 33.23 Mbit/s
95th percentile per-packet one-way delay: 57.018 ms
Loss rate: 0.40%
Run 5: Report of QUIC Cubic — Data Link

![Graph showing throughput over time with different flow ingress and egress rates, and per-packet one way delay for each flow.]

- Flow 1 ingress (mean 57.62 Mbit/s)
- Flow 1 egress (mean 57.44 Mbit/s)
- Flow 2 ingress (mean 63.49 Mbit/s)
- Flow 2 egress (mean 63.42 Mbit/s)
- Flow 3 ingress (mean 32.98 Mbit/s)
- Flow 3 egress (mean 33.23 Mbit/s)
Run 1: Statistics of SCReAM

Start at: 2019-08-27 20:39:50
End at: 2019-08-27 20:40:20
Local clock offset: -0.255 ms
Remote clock offset: 0.027 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 57.291 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.114 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.320 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.243 ms
Loss rate: 1.08%
Run 1: Report of SCReAM — Data Link

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

- 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)
Run 2: Statistics of SCReAM

Start at: 2019-08-27 21:19:06
End at: 2019-08-27 21:19:36
Local clock offset: -0.03 ms
Remote clock offset: -0.091 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 57.188 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.143 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.229 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.149 ms
  Loss rate: 1.09%
Run 2: Report of SCReAM — Data Link

![Throughput (Mbps)](image1)

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

![Ping delay (ms)](image2)

- **Flow 1 (95th percentile 57.14 ms)**
- **Flow 2 (95th percentile 57.23 ms)**
- **Flow 3 (95th percentile 57.15 ms)**
Run 3: Statistics of SCReAM

Start at: 2019-08-27 21:58:16
End at: 2019-08-27 21:58:46
Local clock offset: 0.196 ms
Remote clock offset: -0.202 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 60.786 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.579 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.654 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.883 ms
Loss rate: 1.08%
Run 3: Report of SCReAM — Data Link

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

- 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-cwmr/delay (ms)](image2)

- Flow 1 (95th percentile 57.58 ms)
- Flow 2 (95th percentile 57.65 ms)
- Flow 3 (95th percentile 60.88 ms)
Run 4: Statistics of SCReAM

Start at: 2019-08-27 22:37:26
End at: 2019-08-27 22:37:56
Local clock offset: -0.057 ms
Remote clock offset: -0.13 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 57.675 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.662 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.706 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 57.292 ms
Loss rate: 1.08%
Run 5: Statistics of SCReAM

Start at: 2019-08-27 23:16:32
End at: 2019-08-27 23:17:02
Local clock offset: -0.053 ms
Remote clock offset: -0.029 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: 60.879 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.346 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 57.339 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 61.032 ms
  Loss rate: 1.08%
Run 5: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2019-08-27 20:53:06
End at: 2019-08-27 20:53:36
Local clock offset: -0.474 ms
Remote clock offset: -0.196 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.19 Mbit/s
95th percentile per-packet one-way delay: 60.251 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 57.305 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 57.210 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 6.67 Mbit/s
95th percentile per-packet one-way delay: 60.641 ms
Loss rate: 1.53%
Run 2: Statistics of Sprout

Start at: 2019-08-27 21:32:09
End at: 2019-08-27 21:32:39
Local clock offset: -0.014 ms
Remote clock offset: -0.285 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.30 Mbit/s
95th percentile per-packet one-way delay: 57.582 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 7.88 Mbit/s
95th percentile per-packet one-way delay: 57.369 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 7.74 Mbit/s
95th percentile per-packet one-way delay: 57.332 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 57.724 ms
Loss rate: 1.34%
Run 2: Report of Sprout — Data Link
Run 3: Statistics of Sprout

End at: 2019-08-27 22:11:52
Local clock offset: 0.29 ms
Remote clock offset: -0.239 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.35 Mbit/s
95th percentile per-packet one-way delay: 61.066 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 6.82 Mbit/s
95th percentile per-packet one-way delay: 61.141 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: 57.785 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 7.32 Mbit/s
95th percentile per-packet one-way delay: 57.817 ms
Loss rate: 1.40%
Run 3: Report of Sprout — Data Link

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

Legend:
- Flow 1 ingress (mean 6.80 Mbit/s)
- Flow 1 egress (mean 6.82 Mbit/s)
- Flow 2 ingress (mean 7.74 Mbit/s)
- Flow 2 egress (mean 7.75 Mbit/s)
- Flow 3 ingress (mean 7.34 Mbit/s)
- Flow 3 egress (mean 7.32 Mbit/s)
Run 4: Statistics of Sprout

End at: 2019-08-27 22:51:05
Local clock offset: 0.1 ms
Remote clock offset: 0.08 ms

# Below is generated by plot.py at 2019-08-28 01:57:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 15.42 Mbit/s
95th percentile per-packet one-way delay: 57.639 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 7.86 Mbit/s
95th percentile per-packet one-way delay: 57.396 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 57.655 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 7.17 Mbit/s
95th percentile per-packet one-way delay: 57.780 ms
Loss rate: 1.26%
Run 4: Report of Sprout — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time.]
Run 5: Statistics of Sprout

Start at: 2019-08-27 23:29:38
End at: 2019-08-27 23:30:08
Local clock offset: -0.103 ms
Remote clock offset: 0.041 ms

# Below is generated by plot.py at 2019-08-28 01:57:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 14.85 Mbit/s
95th percentile per-packet one-way delay: 60.480 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 7.84 Mbit/s
95th percentile per-packet one-way delay: 57.614 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 7.00 Mbit/s
95th percentile per-packet one-way delay: 60.595 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 7.20 Mbit/s
95th percentile per-packet one-way delay: 57.509 ms
Loss rate: 1.03%
Run 5: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 7.85 Mbit/s)
- Flow 1 egress (mean 7.84 Mbit/s)
- Flow 2 ingress (mean 7.02 Mbit/s)
- Flow 2 egress (mean 7.00 Mbit/s)
- Flow 3 ingress (mean 7.19 Mbit/s)
- Flow 3 egress (mean 7.20 Mbit/s)

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

- Flow 1 (95th percentile 57.61 ms)
- Flow 2 (95th percentile 60.59 ms)
- Flow 3 (95th percentile 57.51 ms)
Run 1: Statistics of TaoVA-100x

Start at: 2019-08-27 20:36:09
End at: 2019-08-27 20:36:39
Local clock offset: -0.68 ms
Remote clock offset: 0.145 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 460.24 Mbit/s
  95th percentile per-packet one-way delay: 59.779 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 232.46 Mbit/s
  95th percentile per-packet one-way delay: 56.809 ms
  Loss rate: 0.13%
-- Flow 2:
  Average throughput: 232.13 Mbit/s
  95th percentile per-packet one-way delay: 56.584 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 222.96 Mbit/s
  95th percentile per-packet one-way delay: 60.167 ms
  Loss rate: 0.29%
Run 1: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 231.87 Mbit/s)
- Flow 1 egress (mean 232.46 Mbit/s)
- Flow 2 ingress (mean 231.43 Mbit/s)
- Flow 2 egress (mean 232.13 Mbit/s)
- Flow 3 ingress (mean 220.91 Mbit/s)
- Flow 3 egress (mean 222.06 Mbit/s)
Run 2: Statistics of TaoVA-100x

Start at: 2019-08-27 21:15:22
End at: 2019-08-27 21:15:52
Local clock offset: ~0.136 ms
Remote clock offset: ~0.222 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 455.40 Mbit/s
95th percentile per-packet one-way delay: 60.660 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 233.00 Mbit/s
95th percentile per-packet one-way delay: 60.746 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 221.59 Mbit/s
95th percentile per-packet one-way delay: 57.255 ms
Loss rate: 0.64%
-- Flow 3:
Average throughput: 227.74 Mbit/s
95th percentile per-packet one-way delay: 57.437 ms
Loss rate: 1.35%
Run 2: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 233.05 Mbit/s)
- Flow 1 egress (mean 233.00 Mbit/s)
- Flow 2 ingress (mean 221.76 Mbit/s)
- Flow 2 egress (mean 221.59 Mbit/s)
- Flow 3 ingress (mean 226.17 Mbit/s)
- Flow 3 egress (mean 227.74 Mbit/s)
Run 3: Statistics of TaoVA-100x

Start at: 2019-08-27 21:54:31
End at: 2019-08-27 21:55:01
Local clock offset: 0.011 ms
Remote clock offset: -0.865 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 449.07 Mbit/s
95th percentile per-packet one-way delay: 58.252 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 226.10 Mbit/s
95th percentile per-packet one-way delay: 58.185 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 222.26 Mbit/s
95th percentile per-packet one-way delay: 58.367 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 228.25 Mbit/s
95th percentile per-packet one-way delay: 58.182 ms
Loss rate: 1.27%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2019-08-27 22:33:45
End at: 2019-08-27 22:34:15
Local clock offset: 0.209 ms
Remote clock offset: 0.06 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 437.54 Mbit/s
  95th percentile per-packet one-way delay: 60.862 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 223.95 Mbit/s
  95th percentile per-packet one-way delay: 61.067 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 216.34 Mbit/s
  95th percentile per-packet one-way delay: 59.170 ms
  Loss rate: 0.70%
-- Flow 3:
  Average throughput: 211.70 Mbit/s
  95th percentile per-packet one-way delay: 58.622 ms
  Loss rate: 1.35%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2019-08-27 23:12:50
Local clock offset: -0.059 ms
Remote clock offset: -0.014 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 447.09 Mbit/s
95th percentile per-packet one-way delay: 57.508 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 228.80 Mbit/s
95th percentile per-packet one-way delay: 57.313 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 219.81 Mbit/s
95th percentile per-packet one-way delay: 57.635 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 218.84 Mbit/s
95th percentile per-packet one-way delay: 57.594 ms
Loss rate: 1.20%
Run 5: Report of TaoVA-100x — Data Link

![Graph showing throughput and per-packet one-way delay for different flows over time.](image-url)
Run 1: Statistics of TCP Vegas

Start at: 2019-08-27 20:33:05
End at: 2019-08-27 20:33:35
Local clock offset: -0.69 ms
Remote clock offset: 0.102 ms

# Below is generated by plot.py at 2019-08-28 02:00:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 800.13 Mbit/s
95th percentile per-packet one-way delay: 73.564 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 468.89 Mbit/s
95th percentile per-packet one-way delay: 76.196 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 283.34 Mbit/s
95th percentile per-packet one-way delay: 60.148 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 433.44 Mbit/s
95th percentile per-packet one-way delay: 68.155 ms
Loss rate: 1.33%
Run 1: Report of TCP Vegas — Data Link

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

Flow 1 ingress (mean 469.02 Mbit/s), Flow 1 egress (mean 468.89 Mbit/s), Flow 2 ingress (mean 283.39 Mbit/s), Flow 2 egress (mean 283.34 Mbit/s), Flow 3 ingress (mean 434.30 Mbit/s), Flow 3 egress (mean 433.44 Mbit/s).

Flow 1 (95th percentile 76.20 ms), Flow 2 (95th percentile 60.15 ms), Flow 3 (95th percentile 68.16 ms).
Run 2: Statistics of TCP Vegas

End at: 2019-08-27 21:12:43
Local clock offset: -0.287 ms
Remote clock offset: -0.256 ms

# Below is generated by plot.py at 2019-08-28 02:08:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 907.78 Mbit/s
95th percentile per-packet one-way delay: 63.208 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 455.86 Mbit/s
95th percentile per-packet one-way delay: 63.645 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 469.80 Mbit/s
95th percentile per-packet one-way delay: 61.326 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 422.48 Mbit/s
95th percentile per-packet one-way delay: 65.815 ms
Loss rate: 0.36%
Run 2: Report of TCP Vegas — Data Link

[Graph showing throughput and per-packet round-trip delay over time]

Legend:
- Flow 1 ingress (mean 454.98 Mbit/s)
- Flow 1 egress (mean 455.86 Mbit/s)
- Flow 2 ingress (mean 468.00 Mbit/s)
- Flow 2 egress (mean 469.80 Mbit/s)
- Flow 3 ingress (mean 419.13 Mbit/s)
- Flow 3 egress (mean 422.48 Mbit/s)
Run 3: Statistics of TCP Vegas

Start at: 2019-08-27 21:51:32
End at: 2019-08-27 21:52:02
Local clock offset: -0.125 ms
Remote clock offset: -0.24 ms

# Below is generated by plot.py at 2019-08-28 02:08:29
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 690.69 Mbit/s
  95th percentile per-packet one-way delay: 61.631 ms
  Loss rate: 0.49%
-- Flow 1:
  Average throughput: 385.89 Mbit/s
  95th percentile per-packet one-way delay: 57.781 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 453.36 Mbit/s
  95th percentile per-packet one-way delay: 63.747 ms
  Loss rate: 0.63%
-- Flow 3:
  Average throughput: 10.45 Mbit/s
  95th percentile per-packet one-way delay: 57.031 ms
  Loss rate: 1.26%
Run 3: Report of TCP Vegas — Data Link

The diagrams show the throughput and per-packet round-trip time for three flows over a 30-second period. The throughput is measured in Megabits per second (Mbps), and the per-packet round-trip time is measured in milliseconds (ms).

For Flow 1, the throughput ranges from 0 to 600 Mbps with a peak at around 10 seconds. The 95th percentile per-packet round-trip time is 57.78 ms.

For Flow 2, the throughput ranges from 0 to 500 Mbps with a peak at around 15 seconds. The 95th percentile per-packet round-trip time is 63.75 ms.

For Flow 3, the throughput ranges from 0 to 400 Mbps with a peak at around 20 seconds. The 95th percentile per-packet round-trip time is 57.03 ms.
Run 4: Statistics of TCP Vegas

Start at: 2019-08-27 22:30:45
End at: 2019-08-27 22:31:15
Local clock offset: -0.06 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-08-28 02:10:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 683.09 Mbit/s
95th percentile per-packet one-way delay: 64.053 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 279.55 Mbit/s
95th percentile per-packet one-way delay: 57.560 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 387.61 Mbit/s
95th percentile per-packet one-way delay: 66.395 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 442.53 Mbit/s
95th percentile per-packet one-way delay: 67.678 ms
Loss rate: 1.32%
Run 4: Report of TCP Vegas — Data Link

![Graph of Throughput vs Time]

- **Flow 1 ingress (mean 279.52 Mbit/s)**
- **Flow 1 egress (mean 279.55 Mbit/s)**
- **Flow 2 ingress (mean 387.55 Mbit/s)**
- **Flow 2 egress (mean 387.61 Mbit/s)**
- **Flow 3 ingress (mean 443.32 Mbit/s)**
- **Flow 3 egress (mean 442.53 Mbit/s)**

![Graph of Packet Delay vs Time]

- **Flow 1 (95th percentile 57.56 ms)**
- **Flow 2 (95th percentile 66.39 ms)**
- **Flow 3 (95th percentile 67.68 ms)**

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Run 5: Statistics of TCP Vegas

Start at: 2019-08-27 23:09:49
End at: 2019-08-27 23:10:19
Local clock offset: 0.133 ms
Remote clock offset: 0.11 ms

# Below is generated by plot.py at 2019-08-28 02:10:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 697.84 Mbit/s
95th percentile per-packet one-way delay: 76.992 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 420.57 Mbit/s
95th percentile per-packet one-way delay: 69.733 ms
Loss rate: 0.23%
-- Flow 2:
Average throughput: 264.67 Mbit/s
95th percentile per-packet one-way delay: 59.156 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 307.23 Mbit/s
95th percentile per-packet one-way delay: 135.002 ms
Loss rate: 0.93%
Run 5: Report of TCP Vegas — Data Link

![Graph showing throughput and packet loss over time for three flows.][1]

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[1]: #graph-image
Run 1: Statistics of Verus

Start at: 2019-08-27 20:42:43
End at: 2019-08-27 20:43:13
Local clock offset: -0.483 ms
Remote clock offset: -0.264 ms

# Below is generated by plot.py at 2019-08-28 02:10:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 285.78 Mbit/s
  95th percentile per-packet one-way delay: 102.278 ms
  Loss rate: 0.86%
-- Flow 1:
  Average throughput: 155.40 Mbit/s
  95th percentile per-packet one-way delay: 102.475 ms
  Loss rate: 0.63%
-- Flow 2:
  Average throughput: 156.81 Mbit/s
  95th percentile per-packet one-way delay: 104.040 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 78.45 Mbit/s
  95th percentile per-packet one-way delay: 72.816 ms
  Loss rate: 2.82%
Run 1: Report of Verus — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 155.97 Mbit/s)
Flow 1 egress (mean 155.40 Mbit/s)
Flow 2 ingress (mean 157.03 Mbit/s)
Flow 2 egress (mean 156.81 Mbit/s)
Flow 3 ingress (mean 79.96 Mbit/s)
Flow 3 egress (mean 78.45 Mbit/s)

Round-trip one-way delay (ms)

Time (s)

Flow 1 (95th percentile 102.47 ms)
Flow 2 (95th percentile 104.04 ms)
Flow 3 (95th percentile 72.82 ms)
Run 2: Statistics of Verus

Local clock offset: ~0.049 ms
Remote clock offset: ~0.283 ms

# Below is generated by plot.py at 2019-08-28 02:10:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 283.39 Mbit/s
  95th percentile per-packet one-way delay: 135.451 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 180.71 Mbit/s
  95th percentile per-packet one-way delay: 142.171 ms
  Loss rate: 1.00%
-- Flow 2:
  Average throughput: 101.10 Mbit/s
  95th percentile per-packet one-way delay: 78.314 ms
  Loss rate: 0.53%
-- Flow 3:
  Average throughput: 109.04 Mbit/s
  95th percentile per-packet one-way delay: 73.754 ms
  Loss rate: 0.00%
Run 2: Report of Verus — Data Link

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

Throughput (Mbps):
- Flow 1 ingress: 181.87 Mbps
- Flow 1 egress: 180.71 Mbps
- Flow 2 ingress: 131.01 Mbps
- Flow 2 egress: 101.13 Mbps
- Flow 3 ingress: 107.74 Mbps
- Flow 3 egress: 109.04 Mbps

Packet delay (ms):
- Flow 1 (95th percentile: 142.17 ms)
- Flow 2 (95th percentile: 78.31 ms)
- Flow 3 (95th percentile: 73.75 ms)
Run 3: Statistics of Verus

Start at: 2019-08-27 22:01:08
End at: 2019-08-27 22:01:38
Local clock offset: -0.213 ms
Remote clock offset: -0.264 ms

# Below is generated by plot.py at 2019-08-28 02:10:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 244.67 Mbit/s
95th percentile per-packet one-way delay: 104.345 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 149.85 Mbit/s
95th percentile per-packet one-way delay: 109.158 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 95.90 Mbit/s
95th percentile per-packet one-way delay: 73.633 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 96.19 Mbit/s
95th percentile per-packet one-way delay: 59.412 ms
Loss rate: 0.05%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2019-08-27 22:40:21
End at: 2019-08-27 22:40:51
Local clock offset: 0.02 ms
Remote clock offset: -0.062 ms

# Below is generated by plot.py at 2019-08-28 02:10:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 242.20 Mbit/s
95th percentile per-packet one-way delay: 90.403 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 126.78 Mbit/s
95th percentile per-packet one-way delay: 74.314 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 105.55 Mbit/s
95th percentile per-packet one-way delay: 68.463 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 142.16 Mbit/s
95th percentile per-packet one-way delay: 130.662 ms
Loss rate: 3.35%
Run 4: Report of Verus — Data Link

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**Throughput**: The graphs in the upper portion of the image represent the throughput over time for different data flows. Each line corresponds to a different flow, indicated by different colors and line styles.

- **Flow 1 ingress (mean 126.20 Mbit/s)**
- **Flow 1 egress (mean 126.78 Mbit/s)**
- **Flow 2 ingress (mean 104.95 Mbit/s)**
- **Flow 2 egress (mean 105.55 Mbit/s)**
- **Flow 3 ingress (mean 141.22 Mbit/s)**
- **Flow 3 egress (mean 142.16 Mbit/s)**

**Per-packet one-way delay**: The lower portion of the image shows the per-packet one-way delay over time for different data flows.

- **Flow 1 (95th percentile 74.31 ms)**
- **Flow 2 (95th percentile 68.46 ms)**
- **Flow 3 (95th percentile 130.66 ms)**

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Run 5: Statistics of Verus

Start at: 2019-08-27 23:19:24
End at: 2019-08-27 23:19:54
Local clock offset: -0.401 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.82 Mbit/s
95th percentile per-packet one-way delay: 115.934 ms
Loss rate: 0.89%
-- Flow 1:
Average throughput: 172.83 Mbit/s
95th percentile per-packet one-way delay: 127.476 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 163.02 Mbit/s
95th percentile per-packet one-way delay: 105.690 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 136.76 Mbit/s
95th percentile per-packet one-way delay: 111.972 ms
Loss rate: 4.50%
Run 5: Report of Verus — Data Link

- Throughput: Flow 1 ingress (mean 172.94 Mbit/s), Flow 1 egress (mean 172.83 Mbit/s), Flow 2 ingress (mean 163.06 Mbit/s), Flow 2 egress (mean 163.02 Mbit/s), Flow 3 ingress (mean 141.54 Mbit/s), Flow 3 egress (mean 138.76 Mbit/s)

- Per-packet one-way delay: Flow 1 (95th percentile 127.48 ms), Flow 2 (95th percentile 105.69 ms), Flow 3 (95th percentile 111.97 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2019-08-27 20:49:41
End at: 2019-08-27 20:50:11
Local clock offset: -0.298 ms
Remote clock offset: -0.034 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 511.07 Mbit/s
95th percentile per-packet one-way delay: 57.222 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 323.24 Mbit/s
95th percentile per-packet one-way delay: 57.320 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 235.07 Mbit/s
95th percentile per-packet one-way delay: 57.155 ms
Loss rate: 0.86%
-- Flow 3:
Average throughput: 97.67 Mbit/s
95th percentile per-packet one-way delay: 57.006 ms
Loss rate: 1.71%
Run 1: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 323.15 Mbit/s)
- Flow 1 egress (mean 323.24 Mbit/s)
- Flow 2 ingress (mean 235.81 Mbit/s)
- Flow 2 egress (mean 235.07 Mbit/s)
- Flow 3 ingress (mean 98.21 Mbit/s)
- Flow 3 egress (mean 97.67 Mbit/s)

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

- Flow 1 (95th percentile 57.32 ms)
- Flow 2 (95th percentile 57.16 ms)
- Flow 3 (95th percentile 57.01 ms)
Run 2: Statistics of PCC-Vivace

End at: 2019-08-27 21:29:17
Local clock offset: 0.081 ms
Remote clock offset: -0.174 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 493.19 Mbit/s
95th percentile per-packet one-way delay: 58.001 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 296.17 Mbit/s
95th percentile per-packet one-way delay: 58.276 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 213.29 Mbit/s
95th percentile per-packet one-way delay: 57.387 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 169.72 Mbit/s
95th percentile per-packet one-way delay: 58.185 ms
Loss rate: 1.93%
Run 2: Report of PCC-Vivace — Data Link

![Throughput vs Time Graph](image1)

- **Flow 1 ingress** (mean 296.11 Mbit/s)
- **Flow 1 egress** (mean 296.17 Mbit/s)
- **Flow 2 ingress** (mean 213.54 Mbit/s)
- **Flow 2 egress** (mean 213.29 Mbit/s)
- **Flow 3 ingress** (mean 171.22 Mbit/s)
- **Flow 3 egress** (mean 169.72 Mbit/s)

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

- **Flow 1** (95th percentile 58.28 ms)
- **Flow 2** (95th percentile 57.39 ms)
- **Flow 3** (95th percentile 58.19 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-08-27 22:08:01
End at: 2019-08-27 22:08:31
Local clock offset: 0.168 ms
Remote clock offset: -0.225 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 460.75 Mbit/s
95th percentile per-packet one-way delay: 57.831 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 301.12 Mbit/s
95th percentile per-packet one-way delay: 57.591 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 190.10 Mbit/s
95th percentile per-packet one-way delay: 57.991 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 102.12 Mbit/s
95th percentile per-packet one-way delay: 58.083 ms
Loss rate: 1.71%
Run 3: Report of PCC-Vivace — Data Link

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

- **Flow 1 ingress (mean 301.15 Mbit/s)**
- **Flow 1 egress (mean 301.12 Mbit/s)**
- **Flow 2 ingress (mean 190.34 Mbit/s)**
- **Flow 2 egress (mean 190.10 Mbit/s)**
- **Flow 3 ingress (mean 102.68 Mbit/s)**
- **Flow 3 egress (mean 102.12 Mbit/s)**

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

- **Flow 1 (95th percentile 57.59 ms)**
- **Flow 2 (95th percentile 57.99 ms)**
- **Flow 3 (95th percentile 58.08 ms)**
Run 4: Statistics of PCC-Vivace

Start at: 2019-08-27 22:47:10
End at: 2019-08-27 22:47:40
Local clock offset: -0.022 ms
Remote clock offset: -0.288 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 519.65 Mbit/s
95th percentile per-packet one-way delay: 61.346 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 303.70 Mbit/s
95th percentile per-packet one-way delay: 61.814 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 241.04 Mbit/s
95th percentile per-packet one-way delay: 58.266 ms
Loss rate: 0.97%
-- Flow 3:
Average throughput: 170.89 Mbit/s
95th percentile per-packet one-way delay: 58.664 ms
Loss rate: 1.45%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

Start at: 2019-08-27 23:26:20
End at: 2019-08-27 23:26:50
Local clock offset: -0.168 ms
Remote clock offset: 0.003 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 398.40 Mbit/s
95th percentile per-packet one-way delay: 57.560 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 260.46 Mbit/s
95th percentile per-packet one-way delay: 57.727 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 181.65 Mbit/s
95th percentile per-packet one-way delay: 57.461 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 53.19 Mbit/s
95th percentile per-packet one-way delay: 57.313 ms
Loss rate: 2.86%
Run 5: Report of PCC-Vivace — Data Link

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

Throughput (Mbps): 0 to 400
Time (s): 0 to 30

- Flow 1 ingress (mean 261.06 Mbps)
- Flow 1 egress (mean 260.46 Mbps)
- Flow 2 ingress (mean 181.39 Mbps)
- Flow 2 egress (mean 181.65 Mbps)
- Flow 3 ingress (mean 54.11 Mbps)
- Flow 3 egress (mean 53.19 Mbps)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 57.73 ms)
- Flow 2 (95th percentile 57.46 ms)
- Flow 3 (95th percentile 57.31 ms)
Run 1: Statistics of WebRTC media

Start at: 2019-08-27 20:28:22
End at: 2019-08-27 20:28:52
Local clock offset: -0.383 ms
Remote clock offset: -0.405 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 58.142 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 58.169 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.833 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.888 ms
Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2019-08-27 21:07:28
End at: 2019-08-27 21:07:58
Local clock offset: -0.046 ms
Remote clock offset: -0.191 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 57.608 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.557 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.673 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.279 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

End at: 2019-08-27 21:47:18
Local clock offset: 0.247 ms
Remote clock offset: -0.242 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 57.852 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 57.641 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 57.565 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 57.940 ms
  Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

Throughput: Mbit/s

Time (s)

Flow 1 ingress (mean 0.05 Mbit/s)
Flow 1 egress (mean 0.05 Mbit/s)
Flow 2 ingress (mean 0.05 Mbit/s)
Flow 2 egress (mean 0.05 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 57.64 ms)
Flow 2 (95th percentile 57.56 ms)
Flow 3 (95th percentile 57.94 ms)
Run 4: Statistics of WebRTC media

Start at: 2019-08-27 22:26:02
End at: 2019-08-27 22:26:32
Local clock offset: 0.026 ms
Remote clock offset: -0.753 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 61.400 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 58.399 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 57.959 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 61.446 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.05 Mbit/s)
- Flow 2 egress (mean 0.05 Mbit/s)
- Flow 3 ingress (mean 0.05 Mbit/s)
- Flow 3 egress (mean 0.05 Mbit/s)
Run 5: Statistics of WebRTC media

Start at: 2019-08-27 23:05:04
End at: 2019-08-27 23:05:34
Local clock offset: 0.094 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2019-08-28 02:14:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.14 Mbit/s
  95th percentile per-packet one-way delay: 60.685 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 60.766 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 57.756 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 57.829 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link