Pantheon Report

Generated at 2019-10-03 17:03:03 (UTC).
Data path: GCE Tokyo on ens4 (remote) -> GCE Iowa 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 4.15.0-1044-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 @ de42328552b3776a75a932a94dfaf7d722537b0ec
third_party/fillp @ d66a1459332fcee56963885d7eba17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babc2d2b090d2c64fd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbdf58e562f4
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0edb9f0c077e64d
third_party/libutp @ b3465b492e28262f2b179eaaab4a906e6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955337730c746486ca4966
third_party/muses_dtree @ 387225f7b5f61d6be92d708a8869fbb84eb3200
third_party/pantheon-tunnel @ f866d3f58d27af9d942717625ee3a354cc2e802bd
third_party/pcc @ 1acf9958fa0d66d18b623c911a95f08c8724981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8ad08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a8273a86b434f7813db9f0c978f3cf42
third_party/scream-reproduce @ f09918d1421aa313b11ff1964974e1da3db2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e356c6178b01e31d4a6ad18c74f9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ db447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webRTC @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from GCE Tokyo to GCE Iowa, 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>
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<td>flow 3</td>
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<td>427.45</td>
<td>388.04</td>
<td>348.56</td>
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<td>Copa</td>
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<td>204.52</td>
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<td>0.07</td>
<td>0.06</td>
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Run 1: Statistics of TCP BBR

Start at: 2019-10-03 10:48:29
End at: 2019-10-03 10:48:59
Local clock offset: -0.071 ms
Remote clock offset: 0.023 ms

# Below is generated by plot.py at 2019-10-03 14:38:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 785.21 Mbit/s
  95th percentile per-packet one-way delay: 155.965 ms
  Loss rate: 1.13%
-- Flow 1:
  Average throughput: 419.82 Mbit/s
  95th percentile per-packet one-way delay: 106.620 ms
  Loss rate: 0.30%
-- Flow 2:
  Average throughput: 386.97 Mbit/s
  95th percentile per-packet one-way delay: 210.644 ms
  Loss rate: 2.17%
-- Flow 3:
  Average throughput: 328.48 Mbit/s
  95th percentile per-packet one-way delay: 106.904 ms
  Loss rate: 1.80%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 419.41 Mbit/s)
- Flow 1 egress (mean 419.82 Mbit/s)
- Flow 2 ingress (mean 393.10 Mbit/s)
- Flow 2 egress (mean 386.97 Mbit/s)
- Flow 3 ingress (mean 330.36 Mbit/s)
- Flow 3 egress (mean 326.48 Mbit/s)
Run 2: Statistics of TCP BBR

Start at: 2019-10-03 11:28:21  
End at: 2019-10-03 11:28:51  
Local clock offset: -0.14 ms  
Remote clock offset: 0.036 ms

# Below is generated by plot.py at 2019-10-03 14:39:11  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 807.47 Mbit/s  
95th percentile per-packet one-way delay: 182.565 ms  
Loss rate: 1.18%  
-- Flow 1:  
Average throughput: 436.30 Mbit/s  
95th percentile per-packet one-way delay: 201.023 ms  
Loss rate: 1.08%  
-- Flow 2:  
Average throughput: 381.79 Mbit/s  
95th percentile per-packet one-way delay: 90.517 ms  
Loss rate: 0.81%  
-- Flow 3:  
Average throughput: 355.70 Mbit/s  
95th percentile per-packet one-way delay: 165.342 ms  
Loss rate: 2.37%
Run 2: Report of TCP BBR — Data Link

![Graph of Throughput](image1)

![Graph of Per-packet one-way delay](image2)
Run 3: Statistics of TCP BBR

Start at: 2019-10-03 12:08:41
End at: 2019-10-03 12:09:11
Local clock offset: -0.099 ms
Remote clock offset: -0.102 ms

# Below is generated by plot.py at 2019-10-03 14:39:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 804.62 Mbit/s
95th percentile per-packet one-way delay: 153.009 ms
Loss rate: 1.09%
-- Flow 1:
Average throughput: 416.65 Mbit/s
95th percentile per-packet one-way delay: 115.950 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 402.47 Mbit/s
95th percentile per-packet one-way delay: 168.105 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 364.61 Mbit/s
95th percentile per-packet one-way delay: 118.752 ms
Loss rate: 1.92%
Run 3: Report of TCP BBR — Data Link

![Graph depicting network performance metrics for Run 3.](image)

- Throughput (Mbps)
- Time (s)
- Per-packet round-trip delay (ms)
- Flow 1 ingress (mean 418.41 Mbps)
- Flow 1 egress (mean 416.65 Mbps)
- Flow 2 ingress (mean 404.64 Mbps)
- Flow 2 egress (mean 402.47 Mbps)
- Flow 3 ingress (mean 367.05 Mbps)
- Flow 3 egress (mean 364.61 Mbps)
Run 4: Statistics of TCP BBR

Start at: 2019-10-03 12:48:12
End at: 2019-10-03 12:48:42
Local clock offset: -0.06 ms
Remote clock offset: -0.011 ms

# Below is generated by plot.py at 2019-10-03 14:39:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 798.43 Mbit/s
  95th percentile per-packet one-way delay: 173.759 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 442.44 Mbit/s
  95th percentile per-packet one-way delay: 141.457 ms
  Loss rate: 0.92%
-- Flow 2:
  Average throughput: 382.36 Mbit/s
  95th percentile per-packet one-way delay: 194.275 ms
  Loss rate: 0.78%
-- Flow 3:
  Average throughput: 309.00 Mbit/s
  95th percentile per-packet one-way delay: 89.198 ms
  Loss rate: 1.72%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2019-10-03 13:28:04
End at: 2019-10-03 13:28:34
Local clock offset: -0.018 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-10-03 14:39:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 805.91 Mbit/s
95th percentile per-packet one-way delay: 170.388 ms
Loss rate: 0.96%
-- Flow 1:
Average throughput: 422.03 Mbit/s
95th percentile per-packet one-way delay: 151.309 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 386.62 Mbit/s
95th percentile per-packet one-way delay: 189.463 ms
Loss rate: 1.47%
-- Flow 3:
Average throughput: 385.01 Mbit/s
95th percentile per-packet one-way delay: 172.606 ms
Loss rate: 1.48%
Run 5: Report of TCP BBR — Data Link
Run 1: Statistics of Copa

Start at: 2019-10-03 11:09:12
End at: 2019-10-03 11:09:42
Local clock offset: -0.076 ms
Remote clock offset: 0.674 ms

# Below is generated by plot.py at 2019-10-03 14:40:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 494.72 Mbit/s
  95th percentile per-packet one-way delay: 79.848 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 264.16 Mbit/s
  95th percentile per-packet one-way delay: 81.154 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 243.89 Mbit/s
  95th percentile per-packet one-way delay: 80.661 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 207.64 Mbit/s
  95th percentile per-packet one-way delay: 74.141 ms
  Loss rate: 1.53%
Run 1: Report of Copa — Data Link

![Graph showing throughput and per-packet end-to-end delay over time for flows 1, 2, and 3.]

Legend:
- **Flow 1 ingress (mean 263.50 Mbit/s)**
- **Flow 1 egress (mean 264.16 Mbit/s)**
- **Flow 2 ingress (mean 244.15 Mbit/s)**
- **Flow 2 egress (mean 243.89 Mbit/s)**
- **Flow 3 ingress (mean 208.26 Mbit/s)**
- **Flow 3 egress (mean 207.64 Mbit/s)**

Per-packet end to end delay (ms):
- **Flow 1 (95th percentile 81.15 ms)**
- **Flow 2 (95th percentile 80.66 ms)**
- **Flow 3 (95th percentile 74.14 ms)**
Run 2: Statistics of Copa

Start at: 2019-10-03 11:49:25
End at: 2019-10-03 11:49:55
Local clock offset: -0.095 ms
Remote clock offset: -0.022 ms

# Below is generated by plot.py at 2019-10-03 14:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 452.81 Mbit/s
95th percentile per-packet one-way delay: 93.036 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 223.51 Mbit/s
95th percentile per-packet one-way delay: 89.616 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 243.12 Mbit/s
95th percentile per-packet one-way delay: 95.240 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 205.57 Mbit/s
95th percentile per-packet one-way delay: 95.618 ms
Loss rate: 1.39%
Run 2: Report of Copa — Data Link

![Graph of data link throughput and packet delay]
Run 3: Statistics of Copa

Start at: 2019-10-03 12:29:30
End at: 2019-10-03 12:30:00
Local clock offset: -0.053 ms
Remote clock offset: -0.697 ms

# Below is generated by plot.py at 2019-10-03 14:40:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 272.86 Mbit/s
95th percentile per-packet one-way delay: 91.663 ms
Loss rate: 0.84%
-- Flow 1:
Average throughput: 23.82 Mbit/s
95th percentile per-packet one-way delay: 115.804 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 258.77 Mbit/s
95th percentile per-packet one-way delay: 90.290 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 234.58 Mbit/s
95th percentile per-packet one-way delay: 93.560 ms
Loss rate: 1.37%
Run 3: Report of Copa — Data Link

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 23.82 Mbit/s)
- Flow 1 egress (mean 23.82 Mbit/s)
- Flow 2 ingress (mean 258.98 Mbit/s)
- Flow 2 egress (mean 258.77 Mbit/s)
- Flow 3 ingress (mean 234.94 Mbit/s)
- Flow 3 egress (mean 234.58 Mbit/s)

Per-packet one way delay (ms)

Time (s)

- Flow 1 (95th percentile 115.80 ms)
- Flow 2 (95th percentile 90.29 ms)
- Flow 3 (95th percentile 93.56 ms)
Run 4: Statistics of Copa

Start at: 2019-10-03 13:08:49
End at: 2019-10-03 13:09:19
Local clock offset: -0.007 ms
Remote clock offset: -0.249 ms

# Below is generated by plot.py at 2019-10-03 14:50:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 463.37 Mbit/s
95th percentile per-packet one-way delay: 100.029 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 251.85 Mbit/s
95th percentile per-packet one-way delay: 103.810 ms
Loss rate: 0.44%
-- Flow 2:
Average throughput: 226.69 Mbit/s
95th percentile per-packet one-way delay: 101.031 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 184.71 Mbit/s
95th percentile per-packet one-way delay: 71.224 ms
Loss rate: 1.49%
Run 5: Statistics of Copa

End at: 2019-10-03 13:49:08
Local clock offset: ~0.053 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 487.68 Mbit/s
  95th percentile per-packet one-way delay: 84.720 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 259.27 Mbit/s
  95th percentile per-packet one-way delay: 80.516 ms
  Loss rate: 0.24%
-- Flow 2:
  Average throughput: 241.45 Mbit/s
  95th percentile per-packet one-way delay: 84.552 ms
  Loss rate: 0.34%
-- Flow 3:
  Average throughput: 206.44 Mbit/s
  95th percentile per-packet one-way delay: 97.686 ms
  Loss rate: 1.53%
Run 5: Report of Copa — Data Link

The upper graph shows the throughput over time for three flows (1, 2, and 3), with dashed lines representing the ingress and solid lines the egress. The throughput is measured in Mbps.

The lower graph displays the packet delay over time for the same flows. The median delays are indicated by the percentile values for each flow.
Run 1: Statistics of TCP Cubic

Start at: 2019-10-03 10:56:32
End at: 2019-10-03 10:57:02
Local clock offset: -0.067 ms
Remote clock offset: -0.013 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 769.64 Mbit/s
95th percentile per-packet one-way delay: 87.491 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 446.58 Mbit/s
95th percentile per-packet one-way delay: 88.087 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 339.59 Mbit/s
95th percentile per-packet one-way delay: 73.432 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 296.51 Mbit/s
95th percentile per-packet one-way delay: 86.365 ms
Loss rate: 1.35%
Run 1: Report of TCP Cubic — Data Link

![Graph showing throughput and packet delay over time]

- **Flow 1 ingress** (mean 446.06 Mbit/s)
- **Flow 1 egress** (mean 446.58 Mbit/s)
- **Flow 2 ingress** (mean 338.58 Mbit/s)
- **Flow 2 egress** (mean 339.59 Mbit/s)
- **Flow 3 ingress** (mean 296.89 Mbit/s)
- **Flow 3 egress** (mean 296.81 Mbit/s)

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

- **Flow 1** (95th percentile 88.09 ms)
- **Flow 2** (95th percentile 73.43 ms)
- **Flow 3** (95th percentile 86.36 ms)
Run 2: Statistics of TCP Cubic

Start at: 2019-10-03 11:36:31
End at: 2019-10-03 11:37:01
Local clock offset: -0.13 ms
Remote clock offset: -0.096 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 794.49 Mbit/s
95th percentile per-packet one-way delay: 94.996 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 411.63 Mbit/s
95th percentile per-packet one-way delay: 99.912 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 399.02 Mbit/s
95th percentile per-packet one-way delay: 89.396 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 356.36 Mbit/s
95th percentile per-packet one-way delay: 96.153 ms
Loss rate: 1.21%
Run 2: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 411.56 Mbps)
- Flow 1 egress (mean 411.63 Mbps)
- Flow 2 ingress (mean 399.45 Mbps)
- Flow 2 egress (mean 399.02 Mbps)
- Flow 3 ingress (mean 353.23 Mbps)
- Flow 3 egress (mean 356.36 Mbps)

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

- Flow 1 (95th percentile 99.91 ms)
- Flow 2 (95th percentile 89.40 ms)
- Flow 3 (95th percentile 96.15 ms)
Run 3: Statistics of TCP Cubic

Start at: 2019-10-03 12:16:46
End at: 2019-10-03 12:17:16
Local clock offset: -0.085 ms
Remote clock offset: -0.058 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 809.68 Mbit/s
  95th percentile per-packet one-way delay: 94.334 ms
  Loss rate: 0.66%
-- Flow 1:
  Average throughput: 438.17 Mbit/s
  95th percentile per-packet one-way delay: 95.395 ms
  Loss rate: 0.40%
-- Flow 2:
  Average throughput: 366.69 Mbit/s
  95th percentile per-packet one-way delay: 97.344 ms
  Loss rate: 0.66%
-- Flow 3:
  Average throughput: 387.59 Mbit/s
  95th percentile per-packet one-way delay: 82.020 ms
  Loss rate: 1.53%
Run 3: Report of TCP Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 438.18 Mbps)
  - Flow 1 egress (mean 438.17 Mbps)
  - Flow 2 ingress (mean 366.86 Mbps)
  - Flow 2 egress (mean 366.69 Mbps)
  - Flow 3 ingress (mean 388.81 Mbps)
  - Flow 3 egress (mean 387.59 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 95.39 ms)
  - Flow 2 (95th percentile 97.34 ms)
  - Flow 3 (95th percentile 82.02 ms)
Run 4: Statistics of TCP Cubic

Start at: 2019-10-03 12:56:09
End at: 2019-10-03 12:56:39
Local clock offset: -0.037 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 717.41 Mbit/s
95th percentile per-packet one-way delay: 85.580 ms
Loss rate: 0.63%
-- Flow 1:
Average throughput: 364.43 Mbit/s
95th percentile per-packet one-way delay: 86.895 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 338.47 Mbit/s
95th percentile per-packet one-way delay: 66.363 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 387.65 Mbit/s
95th percentile per-packet one-way delay: 89.693 ms
Loss rate: 1.29%
Run 4: Report of TCP Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 364.30 Mbit/s)
- Flow 1 egress (mean 364.43 Mbit/s)
- Flow 2 ingress (mean 338.63 Mbit/s)
- Flow 2 egress (mean 338.47 Mbit/s)
- Flow 3 ingress (mean 387.76 Mbit/s)
- Flow 3 egress (mean 387.65 Mbit/s)
Run 5: Statistics of TCP Cubic

Start at: 2019-10-03 13:35:55
End at: 2019-10-03 13:36:25
Local clock offset: -0.007 ms
Remote clock offset: -0.178 ms

# Below is generated by plot.py at 2019-10-03 14:55:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 694.08 Mbit/s
95th percentile per-packet one-way delay: 74.615 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 374.69 Mbit/s
95th percentile per-packet one-way delay: 76.750 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 336.29 Mbit/s
95th percentile per-packet one-way delay: 69.869 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 290.71 Mbit/s
95th percentile per-packet one-way delay: 78.180 ms
Loss rate: 1.05%
Run 1: Statistics of FillP

Start at: 2019-10-03 11:03:10
End at: 2019-10-03 11:03:40
Local clock offset: -0.08 ms
Remote clock offset: 0.094 ms

# Below is generated by plot.py at 2019-10-03 14:58:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 756.59 Mbit/s
95th percentile per-packet one-way delay: 94.945 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 464.16 Mbit/s
95th percentile per-packet one-way delay: 102.157 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 312.25 Mbit/s
95th percentile per-packet one-way delay: 61.514 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 258.71 Mbit/s
95th percentile per-packet one-way delay: 67.560 ms
Loss rate: 1.11%
Run 1: Report of FillP — Data Link

[Graph showing data link performance over time with throughput and per-packet one-way delay metrics for different flows.]
Run 2: Statistics of FillP

Start at: 2019-10-03 11:43:19
End at: 2019-10-03 11:43:49
Local clock offset: -0.134 ms
Remote clock offset: -0.578 ms

# Below is generated by plot.py at 2019-10-03 15:07:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 763.12 Mbit/s
95th percentile per-packet one-way delay: 100.365 ms
Loss rate: 0.68%
-- Flow 1:
Average throughput: 477.78 Mbit/s
95th percentile per-packet one-way delay: 109.787 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 306.46 Mbit/s
95th percentile per-packet one-way delay: 65.112 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 249.92 Mbit/s
95th percentile per-packet one-way delay: 65.803 ms
Loss rate: 1.64%
Run 2: Report of FillP — Data Link

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

Start at: 2019-10-03 12:23:28
End at: 2019-10-03 12:23:58
Local clock offset: -0.039 ms
Remote clock offset: -0.1 ms

# Below is generated by plot.py at 2019-10-03 15:10:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 767.45 Mbit/s
  95th percentile per-packet one-way delay: 99.255 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 467.63 Mbit/s
  95th percentile per-packet one-way delay: 106.646 ms
  Loss rate: 0.60%
-- Flow 2:
  Average throughput: 326.20 Mbit/s
  95th percentile per-packet one-way delay: 68.917 ms
  Loss rate: 0.43%
-- Flow 3:
  Average throughput: 253.88 Mbit/s
  95th percentile per-packet one-way delay: 65.491 ms
  Loss rate: 1.29%
Run 3: Report of FillP — Data Link

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

- **Throughput (Mb/s):**
  - Flow 1 Ingress (mean 468.24 Mb/s)
  - Flow 1 Egress (mean 467.63 Mb/s)
  - Flow 2 Ingress (mean 325.88 Mb/s)
  - Flow 2 Egress (mean 326.66 Mb/s)
  - Flow 3 Ingress (mean 254.21 Mb/s)
  - Flow 3 Egress (mean 253.88 Mb/s)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 106.63 ms)
  - Flow 2 (95th percentile 68.92 ms)
  - Flow 3 (95th percentile 65.49 ms)
Run 4: Statistics of FillP

Start at: 2019-10-03 13:02:46
End at: 2019-10-03 13:03:16
Local clock offset: -0.021 ms
Remote clock offset: -0.103 ms

# Below is generated by plot.py at 2019-10-03 15:10:28
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 752.66 Mbit/s
  95th percentile per-packet one-way delay: 114.627 ms
  Loss rate: 1.00%
-- Flow 1:
  Average throughput: 471.81 Mbit/s
  95th percentile per-packet one-way delay: 121.158 ms
  Loss rate: 1.16%
-- Flow 2:
  Average throughput: 306.13 Mbit/s
  95th percentile per-packet one-way delay: 63.117 ms
  Loss rate: 0.47%
-- Flow 3:
  Average throughput: 237.55 Mbit/s
  95th percentile per-packet one-way delay: 67.720 ms
  Loss rate: 1.39%
Run 4: Report of FillP — Data Link

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**Graph 1:**
Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 475.32 Mbps)
- Flow 1 egress (mean 471.81 Mbps)
- Flow 2 ingress (mean 305.96 Mbps)
- Flow 2 egress (mean 306.13 Mbps)
- Flow 3 ingress (mean 237.89 Mbps)
- Flow 3 egress (mean 237.55 Mbps)

**Graph 2:**
Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 121.16 ms)
- Flow 2 (95th percentile 63.32 ms)
- Flow 3 (95th percentile 67.72 ms)
Run 5: Statistics of FillP

End at: 2019-10-03 13:43:02
Local clock offset: -0.011 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-10-03 15:11:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 774.67 Mbit/s
95th percentile per-packet one-way delay: 94.784 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 484.33 Mbit/s
95th percentile per-packet one-way delay: 99.320 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 314.99 Mbit/s
95th percentile per-packet one-way delay: 66.561 ms
Loss rate: 0.45%
-- Flow 3:
Average throughput: 247.19 Mbit/s
95th percentile per-packet one-way delay: 68.818 ms
Loss rate: 1.45%
Run 5: Report of FillP — Data Link

**Throughput (Mbps)**

- Flow 1 ingress (mean 483.88 Mbps)
- Flow 1 egress (mean 484.33 Mbps)
- Flow 2 ingress (mean 314.70 Mbps)
- Flow 2 egress (mean 314.99 Mbps)
- Flow 3 ingress (mean 247.80 Mbps)
- Flow 3 egress (mean 247.19 Mbps)

**Per-packet rate (max. delay ms)**

- Flow 1 (95th percentile 99.32 ms)
- Flow 2 (95th percentile 66.56 ms)
- Flow 3 (95th percentile 68.82 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2019-10-03 11:19:48
End at: 2019-10-03 11:20:18
Local clock offset: -0.099 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-10-03 15:12:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 794.03 Mbit/s
95th percentile per-packet one-way delay: 83.585 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 504.92 Mbit/s
95th percentile per-packet one-way delay: 88.929 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 318.94 Mbit/s
95th percentile per-packet one-way delay: 66.514 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 236.58 Mbit/s
95th percentile per-packet one-way delay: 70.731 ms
Loss rate: 1.17%
Run 1: Report of FillP-Sheep — Data Link

Graph 1: Throughput (Mb/s) vs Time (s)
- Flow 1 ingress (mean 503.74 Mb/s)
- Flow 1 egress (mean 504.92 Mb/s)
- Flow 2 ingress (mean 318.57 Mb/s)
- Flow 2 egress (mean 318.94 Mb/s)
- Flow 3 ingress (mean 236.74 Mb/s)
- Flow 3 egress (mean 236.58 Mb/s)

Graph 2: Per-packet one-way delay (ms) vs Time (s)
- Flow 1 (95th percentile 88.93 ms)
- Flow 2 (95th percentile 66.51 ms)
- Flow 3 (95th percentile 70.73 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-10-03 12:00:12
End at: 2019-10-03 12:00:42
Local clock offset: -0.091 ms
Remote clock offset: -0.124 ms

# Below is generated by plot.py at 2019-10-03 15:12:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 748.08 Mbit/s
95th percentile per-packet one-way delay: 88.899 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 474.63 Mbit/s
95th percentile per-packet one-way delay: 98.239 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 293.12 Mbit/s
95th percentile per-packet one-way delay: 72.899 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 240.69 Mbit/s
95th percentile per-packet one-way delay: 66.851 ms
Loss rate: 1.09%
Run 2: Report of FillP-Sheep — Data Link
Run 3: Statistics of FillP-Sheep

Start at: 2019-10-03 12:39:52
End at: 2019-10-03 12:40:22
Local clock offset: -0.041 ms
Remote clock offset: -0.089 ms

# Below is generated by plot.py at 2019-10-03 15:12:28
# Datalink statistics
-- Total of 3 flows:
Average throughput: 724.12 Mbit/s
95th percentile per-packet one-way delay: 80.919 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 438.77 Mbit/s
95th percentile per-packet one-way delay: 91.105 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 300.20 Mbit/s
95th percentile per-packet one-way delay: 64.428 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 262.69 Mbit/s
95th percentile per-packet one-way delay: 66.158 ms
Loss rate: 1.40%
Run 3: Report of FillP-Sheep — Data Link

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

Throughput (Mbps):
- Flow 1 Ingress (mean 438.46 Mbps)
- Flow 1 Egress (mean 438.77 Mbps)
- Flow 2 Ingress (mean 299.84 Mbps)
- Flow 2 Egress (mean 300.20 Mbps)
- Flow 3 Ingress (mean 263.46 Mbps)
- Flow 3 Egress (mean 262.69 Mbps)

Delay (ms):
- Flow 1 (95th percentile 91.11 ms)
- Flow 2 (95th percentile 64.43 ms)
- Flow 3 (95th percentile 66.16 ms)
Run 4: Statistics of FillP-Sheep

Start at: 2019-10-03 13:19:36  
End at: 2019-10-03 13:20:06  
Local clock offset: -0.019 ms  
Remote clock offset: 0.035 ms  

# Below is generated by plot.py at 2019-10-03 15:15:31  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 726.84 Mbit/s  
95th percentile per-packet one-way delay: 112.364 ms  
Loss rate: 0.99%  
-- Flow 1:  
Average throughput: 456.24 Mbit/s  
95th percentile per-packet one-way delay: 117.131 ms  
Loss rate: 1.13%  
-- Flow 2:  
Average throughput: 275.38 Mbit/s  
95th percentile per-packet one-way delay: 66.943 ms  
Loss rate: 0.46%  
-- Flow 3:  
Average throughput: 267.43 Mbit/s  
95th percentile per-packet one-way delay: 69.068 ms  
Loss rate: 1.34%
Run 4: Report of FillP-Sheep — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 459.83 Mbps/s)  Flow 1 egress (mean 456.24 Mbps/s)
Flow 2 ingress (mean 274.78 Mbps/s)  Flow 2 egress (mean 275.38 Mbps/s)
Flow 3 ingress (mean 267.87 Mbps/s)  Flow 3 egress (mean 267.43 Mbps/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 117.13 ms)  Flow 2 (95th percentile 66.94 ms)  Flow 3 (95th percentile 69.07 ms)
Run 5: Statistics of FillP-Sheep

Start at: 2019-10-03 13:59:28
End at: 2019-10-03 13:59:58
Local clock offset: -0.016 ms
Remote clock offset: -0.026 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 757.28 Mbit/s
95th percentile per-packet one-way delay: 102.845 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 474.80 Mbit/s
95th percentile per-packet one-way delay: 108.619 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 310.10 Mbit/s
95th percentile per-packet one-way delay: 64.516 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 233.56 Mbit/s
95th percentile per-packet one-way delay: 65.350 ms
Loss rate: 1.35%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2019-10-03 11:16:23
End at: 2019-10-03 11:16:53
Local clock offset: -0.086 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.00 Mbit/s
95th percentile per-packet one-way delay: 66.723 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 220.45 Mbit/s
95th percentile per-packet one-way delay: 66.378 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 22.76 Mbit/s
95th percentile per-packet one-way delay: 73.396 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 159.41 Mbit/s
95th percentile per-packet one-way delay: 66.054 ms
Loss rate: 1.50%
Run 1: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 220.36 Mbps)
- Flow 1 egress (mean 220.45 Mbps)
- Flow 2 ingress (mean 22.76 Mbps)
- Flow 2 egress (mean 22.76 Mbps)
- Flow 3 ingress (mean 159.81 Mbps)
- Flow 3 egress (mean 159.41 Mbps)

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

- Flow 1 (95th percentile 66.38 ms)
- Flow 2 (95th percentile 73.40 ms)
- Flow 3 (95th percentile 66.05 ms)
Run 2: Statistics of Indigo

Start at: 2019-10-03 11:56:41
End at: 2019-10-03 11:57:11
Local clock offset: -0.088 ms
Remote clock offset: -0.592 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 360.90 Mbit/s
95th percentile per-packet one-way delay: 68.148 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 196.66 Mbit/s
95th percentile per-packet one-way delay: 69.739 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 176.54 Mbit/s
95th percentile per-packet one-way delay: 65.095 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 145.19 Mbit/s
95th percentile per-packet one-way delay: 68.381 ms
Loss rate: 1.54%
Run 2: Report of Indigo — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress: mean 196.60 Mbps
  - Flow 1 egress: mean 196.66 Mbps
  - Flow 2 ingress: mean 176.60 Mbps
  - Flow 2 egress: mean 176.54 Mbps
  - Flow 3 ingress: mean 145.56 Mbps
  - Flow 3 egress: mean 145.19 Mbps

- **Packet Loss (Per-packet one-way delay in ms):**
  - Flow 1 (95th percentile: 69.74 ms)
  - Flow 2 (95th percentile: 65.09 ms)
  - Flow 3 (95th percentile: 68.38 ms)
Run 3: Statistics of Indigo

Start at: 2019-10-03 12:36:24
End at: 2019-10-03 12:36:54
Local clock offset: -0.056 ms
Remote clock offset: -0.358 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 353.65 Mbit/s
95th percentile per-packet one-way delay: 64.245 ms
Loss rate: 0.65%

-- Flow 1:
Average throughput: 191.52 Mbit/s
95th percentile per-packet one-way delay: 64.568 ms
Loss rate: 0.42%

-- Flow 2:
Average throughput: 168.08 Mbit/s
95th percentile per-packet one-way delay: 63.902 ms
Loss rate: 0.66%

-- Flow 3:
Average throughput: 157.49 Mbit/s
95th percentile per-packet one-way delay: 63.843 ms
Loss rate: 1.51%
Run 3: Report of Indigo — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 191.55 Mbps)
- Flow 1 egress (mean 191.52 Mbps)
- Flow 2 ingress (mean 168.16 Mbps)
- Flow 2 egress (mean 168.08 Mbps)
- Flow 3 ingress (mean 157.92 Mbps)
- Flow 3 egress (mean 157.49 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 64.57 ms)
- Flow 2 (95th percentile 63.90 ms)
- Flow 3 (95th percentile 63.84 ms)
Run 4: Statistics of Indigo

Start at: 2019-10-03 13:16:01
End at: 2019-10-03 13:16:31
Local clock offset: 0.012 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 365.79 Mbit/s
95th percentile per-packet one-way delay: 67.090 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 202.55 Mbit/s
95th percentile per-packet one-way delay: 67.833 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 171.66 Mbit/s
95th percentile per-packet one-way delay: 65.988 ms
Loss rate: 0.68%
-- Flow 3:
Average throughput: 153.25 Mbit/s
95th percentile per-packet one-way delay: 66.091 ms
Loss rate: 1.57%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2019-10-03 13:55:54
End at: 2019-10-03 13:56:24
Local clock offset: -0.018 ms
Remote clock offset: -0.269 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 367.99 Mbit/s
95th percentile per-packet one-way delay: 70.013 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 202.82 Mbit/s
95th percentile per-packet one-way delay: 71.759 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 175.86 Mbit/s
95th percentile per-packet one-way delay: 68.154 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 151.87 Mbit/s
95th percentile per-packet one-way delay: 62.169 ms
Loss rate: 1.45%
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-10-03 11:18:03
End at: 2019-10-03 11:18:33
Local clock offset: -0.105 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-10-03 15:25:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 676.86 Mbit/s
95th percentile per-packet one-way delay: 83.803 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 397.16 Mbit/s
95th percentile per-packet one-way delay: 80.375 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 342.51 Mbit/s
95th percentile per-packet one-way delay: 90.666 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 245.86 Mbit/s
95th percentile per-packet one-way delay: 68.267 ms
Loss rate: 2.39%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-10-03 11:58:29
End at: 2019-10-03 11:58:59
Local clock offset: -0.098 ms
Remote clock offset: -0.143 ms

# Below is generated by plot.py at 2019-10-03 15:27:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 624.18 Mbit/s
  95th percentile per-packet one-way delay: 78.247 ms
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 381.37 Mbit/s
  95th percentile per-packet one-way delay: 86.706 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 314.03 Mbit/s
  95th percentile per-packet one-way delay: 66.794 ms
  Loss rate: 0.57%
-- Flow 3:
  Average throughput: 172.06 Mbit/s
  95th percentile per-packet one-way delay: 66.327 ms
  Loss rate: 2.84%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-10-03 12:38:11
End at: 2019-10-03 12:38:41
Local clock offset: -0.014 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2019-10-03 15:30:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 576.03 Mbit/s
95th percentile per-packet one-way delay: 91.637 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 337.12 Mbit/s
95th percentile per-packet one-way delay: 86.333 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 292.55 Mbit/s
95th percentile per-packet one-way delay: 107.611 ms
Loss rate: 0.84%
-- Flow 3:
Average throughput: 213.97 Mbit/s
95th percentile per-packet one-way delay: 66.309 ms
Loss rate: 2.46%
Run 3: Report of Indigo-MusesC3 — Data Link

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**Throughput (Mbps):**

- Flow 1 ingress (mean 336.60 Mbps)
- Flow 1 egress (mean 337.12 Mbps)
- Flow 2 ingress (mean 293.00 Mbps)
- Flow 2 egress (mean 292.55 Mbps)
- Flow 3 ingress (mean 215.45 Mbps)
- Flow 3 egress (mean 213.97 Mbps)

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

- Flow 1 (95th percentile 66.31 ms)
- Flow 2 (95th percentile 107.61 ms)
- Flow 3 (95th percentile 66.31 ms)
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-10-03 13:17:50
End at: 2019-10-03 13:18:20
Local clock offset: -0.026 ms
Remote clock offset: -0.049 ms

# Below is generated by plot.py at 2019-10-03 15:35:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 678.04 Mbit/s
95th percentile per-packet one-way delay: 81.221 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 397.90 Mbit/s
95th percentile per-packet one-way delay: 86.782 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 343.79 Mbit/s
95th percentile per-packet one-way delay: 70.723 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 246.82 Mbit/s
95th percentile per-packet one-way delay: 66.117 ms
Loss rate: 2.64%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-10-03 13:57:42
End at: 2019-10-03 13:58:12
Local clock offset: -0.008 ms
Remote clock offset: -0.113 ms

# Below is generated by plot.py at 2019-10-03 15:35:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 677.40 Mbit/s
95th percentile per-packet one-way delay: 92.523 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 402.69 Mbit/s
95th percentile per-packet one-way delay: 97.833 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 340.92 Mbit/s
95th percentile per-packet one-way delay: 83.564 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 228.39 Mbit/s
95th percentile per-packet one-way delay: 69.099 ms
Loss rate: 2.44%
Run 5: Report of Indigo-MusesC3 — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 402.19 Mbps)
Flow 1 egress (mean 402.69 Mbps)
Flow 2 ingress (mean 340.33 Mbps)
Flow 2 egress (mean 340.92 Mbps)
Flow 3 ingress (mean 230.04 Mbps)
Flow 3 egress (mean 228.39 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 97.83 ms)
Flow 2 (95th percentile 83.56 ms)
Flow 3 (95th percentile 69.10 ms)
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-10-03 11:01:26
End at: 2019-10-03 11:01:56
Local clock offset: -0.095 ms
Remote clock offset: 0.255 ms

# Below is generated by plot.py at 2019-10-03 15:36:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 653.11 Mbit/s
95th percentile per-packet one-way delay: 96.755 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 392.72 Mbit/s
95th percentile per-packet one-way delay: 105.927 ms
Loss rate: 0.32%
-- Flow 2:
Average throughput: 285.12 Mbit/s
95th percentile per-packet one-way delay: 77.053 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 330.50 Mbit/s
95th percentile per-packet one-way delay: 66.888 ms
Loss rate: 2.33%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-10-03 11:41:37  
End at: 2019-10-03 11:42:07  
Local clock offset: -0.105 ms  
Remote clock offset: -0.201 ms

# Below is generated by plot.py at 2019-10-03 15:36:10  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 601.40 Mbit/s  
  95th percentile per-packet one-way delay: 105.584 ms  
  Loss rate: 0.52%
-- Flow 1:
  Average throughput: 386.40 Mbit/s  
  95th percentile per-packet one-way delay: 113.900 ms  
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 270.25 Mbit/s  
  95th percentile per-packet one-way delay: 85.356 ms  
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 175.25 Mbit/s  
  95th percentile per-packet one-way delay: 101.879 ms  
  Loss rate: 3.62%
Run 2: Report of Indigo-MusesC5 — Data Link

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

**Throughput (Mbps)**
- Flow 1 ingress (mean 385.05 Mbps)
- Flow 1 egress (mean 386.40 Mbps)
- Flow 2 ingress (mean 269.86 Mbps)
- Flow 2 egress (mean 270.25 Mbps)
- Flow 3 ingress (mean 176.82 Mbps)
- Flow 3 egress (mean 175.25 Mbps)

**Per-packet one-way delay (ms)**
- Flow 1 (95th percentile 113.90 ms)
- Flow 2 (95th percentile 85.36 ms)
- Flow 3 (95th percentile 101.88 ms)
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-10-03 12:21:43
Local clock offset: -0.075 ms
Remote clock offset: -0.08 ms

# Below is generated by plot.py at 2019-10-03 15:36:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 660.31 Mbit/s
95th percentile per-packet one-way delay: 92.436 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 391.17 Mbit/s
95th percentile per-packet one-way delay: 95.198 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 383.04 Mbit/s
95th percentile per-packet one-way delay: 80.841 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 103.09 Mbit/s
95th percentile per-packet one-way delay: 60.581 ms
Loss rate: 2.11%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-10-03 13:01:01
End at: 2019-10-03 13:01:31
Local clock offset: -0.055 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-10-03 15:37:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.54 Mbit/s
95th percentile per-packet one-way delay: 96.658 ms
Loss rate: 0.40%
-- Flow 1:
Average throughput: 395.73 Mbit/s
95th percentile per-packet one-way delay: 110.101 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 360.96 Mbit/s
95th percentile per-packet one-way delay: 76.611 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 86.16 Mbit/s
95th percentile per-packet one-way delay: 62.940 ms
Loss rate: 2.28%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-10-03 13:40:48
End at: 2019-10-03 13:41:18
Local clock offset: -0.054 ms
Remote clock offset: -0.755 ms

# Below is generated by plot.py at 2019-10-03 15:39:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 647.16 Mbit/s
95th percentile per-packet one-way delay: 102.894 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 401.23 Mbit/s
95th percentile per-packet one-way delay: 111.924 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 346.68 Mbit/s
95th percentile per-packet one-way delay: 69.453 ms
Loss rate: 0.92%
-- Flow 3:
Average throughput: 103.39 Mbit/s
95th percentile per-packet one-way delay: 61.548 ms
Loss rate: 1.94%
Run 5: Report of Indigo-MusesC5 — Data Link
Run 1: Statistics of Indigo-MusesD

Start at: 2019-10-03 11:04:55
End at: 2019-10-03 11:05:25
Local clock offset: -0.076 ms
Remote clock offset: -0.066 ms

# Below is generated by plot.py at 2019-10-03 15:41:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 622.80 Mbit/s
95th percentile per-packet one-way delay: 71.059 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 375.66 Mbit/s
95th percentile per-packet one-way delay: 73.078 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 306.79 Mbit/s
95th percentile per-packet one-way delay: 67.971 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 214.45 Mbit/s
95th percentile per-packet one-way delay: 62.831 ms
Loss rate: 2.68%
Run 1: Report of Indigo-MusesD — Data Link

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

- Flow 1 ingress (mean 375.14 Mbps)
- Flow 1 egress (mean 375.66 Mbps)
- Flow 2 ingress (mean 306.62 Mbps)
- Flow 2 egress (mean 306.79 Mbps)
- Flow 3 ingress (mean 216.51 Mbps)
- Flow 3 egress (mean 214.45 Mbps)

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

- Flow 1 (95th percentile 73.08 ms)
- Flow 2 (95th percentile 67.97 ms)
- Flow 3 (95th percentile 62.83 ms)
Run 2: Statistics of Indigo-MusesD

Start at: 2019-10-03 11:45:04
End at: 2019-10-03 11:45:34
Local clock offset: -0.1 ms
Remote clock offset: -0.261 ms

# Below is generated by plot.py at 2019-10-03 15:47:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 675.51 Mbit/s
95th percentile per-packet one-way delay: 82.878 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 409.56 Mbit/s
95th percentile per-packet one-way delay: 89.317 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 330.81 Mbit/s
95th percentile per-packet one-way delay: 71.164 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 219.90 Mbit/s
95th percentile per-packet one-way delay: 65.665 ms
Loss rate: 2.42%
Run 2: Report of Indigo-MusesD — Data Link
Run 3: Statistics of Indigo-MusesD

Start at: 2019-10-03 12:25:13
End at: 2019-10-03 12:25:43
Local clock offset: -0.056 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2019-10-03 15:47:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 620.15 Mbit/s
  95th percentile per-packet one-way delay: 79.718 ms
  Loss rate: 0.61%
-- Flow 1:
  Average throughput: 355.96 Mbit/s
  95th percentile per-packet one-way delay: 83.281 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 342.33 Mbit/s
  95th percentile per-packet one-way delay: 76.457 ms
  Loss rate: 0.60%
-- Flow 3:
  Average throughput: 189.76 Mbit/s
  95th percentile per-packet one-way delay: 62.995 ms
  Loss rate: 2.33%
Run 3: Report of Indigo-MusesD — Data Link

![Graph showing throughput and delay over time]

- **Throughput Chart**
  - Flow 1 ingress (mean 355.71 Mbit/s)
  - Flow 1 egress (mean 355.96 Mbit/s)
  - Flow 2 ingress (mean 342.65 Mbit/s)
  - Flow 2 egress (mean 342.33 Mbit/s)
  - Flow 3 ingress (mean 196.96 Mbit/s)
  - Flow 3 egress (mean 189.76 Mbit/s)

- **Delay Chart**
  - Flow 1 (95th percentile 83.28 ms)
  - Flow 2 (95th percentile 76.46 ms)
  - Flow 3 (95th percentile 62.99 ms)
Run 4: Statistics of Indigo-MusesD

Start at: 2019-10-03 13:04:31
End at: 2019-10-03 13:05:01
Local clock offset: -0.016 ms
Remote clock offset: -0.204 ms

# Below is generated by plot.py at 2019-10-03 15:47:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 604.19 Mbit/s
95th percentile per-packet one-way delay: 86.185 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 406.87 Mbit/s
95th percentile per-packet one-way delay: 83.688 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 208.97 Mbit/s
95th percentile per-packet one-way delay: 99.126 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 253.52 Mbit/s
95th percentile per-packet one-way delay: 68.743 ms
Loss rate: 2.60%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Start at: 2019-10-03 13:44:18
End at: 2019-10-03 13:44:48
Local clock offset: -0.014 ms
Remote clock offset: -0.245 ms

# Below is generated by plot.py at 2019-10-03 15:47:44
# Datalink statistics
-- Total of 3 flows:
Average throughput: 643.64 Mbit/s
95th percentile per-packet one-way delay: 78.987 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 381.77 Mbit/s
95th percentile per-packet one-way delay: 90.881 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 332.13 Mbit/s
95th percentile per-packet one-way delay: 66.051 ms
Loss rate: 0.52%
-- Flow 3:
Average throughput: 215.73 Mbit/s
95th percentile per-packet one-way delay: 62.006 ms
Loss rate: 2.63%
Run 5: Report of Indigo-MusesD — Data Link

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

Start at: 2019-10-03 10:46:42
End at: 2019-10-03 10:47:12
Local clock offset: -0.065 ms
Remote clock offset: -0.079 ms

# Below is generated by plot.py at 2019-10-03 15:50:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 710.01 Mbit/s
95th percentile per-packet one-way delay: 87.465 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 422.75 Mbit/s
95th percentile per-packet one-way delay: 97.496 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 368.41 Mbit/s
95th percentile per-packet one-way delay: 69.591 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 233.56 Mbit/s
95th percentile per-packet one-way delay: 67.300 ms
Loss rate: 2.37%
Run 1: Report of Indigo-MusesT — Data Link

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

- **Flow 1 ingress** (mean 422.30 Mbit/s)
- **Flow 1 egress** (mean 422.75 Mbit/s)
- **Flow 2 ingress** (mean 367.37 Mbit/s)
- **Flow 2 egress** (mean 368.41 Mbit/s)
- **Flow 3 ingress** (mean 234.90 Mbit/s)
- **Flow 3 egress** (mean 233.56 Mbit/s)
Run 2: Statistics of Indigo-MusesT

Start at: 2019-10-03 11:26:34
End at: 2019-10-03 11:27:04
Local clock offset: -0.116 ms
Remote clock offset: -0.083 ms

# Below is generated by plot.py at 2019-10-03 15:50:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 722.58 Mbit/s
95th percentile per-packet one-way delay: 81.781 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 438.15 Mbit/s
95th percentile per-packet one-way delay: 78.686 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 357.07 Mbit/s
95th percentile per-packet one-way delay: 91.540 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 227.96 Mbit/s
95th percentile per-packet one-way delay: 65.524 ms
Loss rate: 2.64%
Run 2: Report of Indigo-MusesT — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 437.73 Mbit/s)
- Flow 1 egress (mean 438.15 Mbit/s)
- Flow 2 ingress (mean 356.60 Mbit/s)
- Flow 2 egress (mean 357.07 Mbit/s)
- Flow 3 ingress (mean 230.10 Mbit/s)
- Flow 3 egress (mean 227.96 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 78.69 ms)
- Flow 2 (95th percentile 91.54 ms)
- Flow 3 (95th percentile 65.52 ms)
Run 3: Statistics of Indigo-MusesT

Start at: 2019-10-03 12:06:54
End at: 2019-10-03 12:07:24
Local clock offset: -0.111 ms
Remote clock offset: -0.19 ms

# Below is generated by plot.py at 2019-10-03 15:53:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 728.85 Mbit/s
95th percentile per-packet one-way delay: 108.065 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 436.32 Mbit/s
95th percentile per-packet one-way delay: 117.023 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 360.82 Mbit/s
95th percentile per-packet one-way delay: 82.794 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 261.83 Mbit/s
95th percentile per-packet one-way delay: 71.664 ms
Loss rate: 1.79%
Run 3: Report of Indigo-MusesT — Data Link
Run 4: Statistics of Indigo-MusesT

Start at: 2019-10-03 12:46:26
End at: 2019-10-03 12:46:56
Local clock offset: -0.035 ms
Remote clock offset: -0.097 ms

# Below is generated by plot.py at 2019-10-03 15:55:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 696.46 Mbit/s
95th percentile per-packet one-way delay: 92.006 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 438.82 Mbit/s
95th percentile per-packet one-way delay: 97.083 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 367.79 Mbit/s
95th percentile per-packet one-way delay: 78.027 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 101.79 Mbit/s
95th percentile per-packet one-way delay: 60.944 ms
Loss rate: 2.09%
Run 4: Report of Indigo-MusesT — Data Link
Run 5: Statistics of Indigo-MusesT

Start at: 2019-10-03 13:26:15
End at: 2019-10-03 13:26:45
Local clock offset: -0.026 ms
Remote clock offset: -0.176 ms

# Below is generated by plot.py at 2019-10-03 16:00:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 747.75 Mbit/s
  95th percentile per-packet one-way delay: 116.591 ms
  Loss rate: 0.51%
-- Flow 1:
  Average throughput: 446.24 Mbit/s
  95th percentile per-packet one-way delay: 122.639 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 370.69 Mbit/s
  95th percentile per-packet one-way delay: 88.418 ms
  Loss rate: 0.54%
-- Flow 3:
  Average throughput: 258.80 Mbit/s
  95th percentile per-packet one-way delay: 67.700 ms
  Loss rate: 1.94%
Run 5: Report of Indigo-MusesT — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 445.51 Mbps)**
- **Flow 1 egress (mean 446.24 Mbps)**
- **Flow 2 ingress (mean 370.15 Mbps)**
- **Flow 2 egress (mean 370.69 Mbps)**
- **Flow 3 ingress (mean 259.55 Mbps)**
- **Flow 3 egress (mean 258.80 Mbps)**

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

- **Flow 1 (95th percentile 122.64 ms)**
- **Flow 2 (95th percentile 88.42 ms)**
- **Flow 3 (95th percentile 67.70 ms)**
Run 1: Statistics of LEDBAT

Start at: 2019-10-03 11:06:38
End at: 2019-10-03 11:07:08
Local clock offset: -0.096 ms
Remote clock offset: 0.16 ms

# Below is generated by plot.py at 2019-10-03 16:00:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.14 Mbit/s
95th percentile per-packet one-way delay: 63.090 ms
Loss rate: 0.88%
-- Flow 1:
Average throughput: 22.65 Mbit/s
95th percentile per-packet one-way delay: 61.292 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 16.41 Mbit/s
95th percentile per-packet one-way delay: 63.593 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 7.98 Mbit/s
95th percentile per-packet one-way delay: 61.273 ms
Loss rate: 2.50%
Run 2: Statistics of LEDBAT

Start at: 2019-10-03 11:46:50
End at: 2019-10-03 11:47:20
Local clock offset: -0.114 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2019-10-03 16:00:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 38.71 Mbit/s
95th percentile per-packet one-way delay: 62.599 ms
Loss rate: 1.04%
-- Flow 1:
Average throughput: 25.62 Mbit/s
95th percentile per-packet one-way delay: 61.369 ms
Loss rate: 0.80%
-- Flow 2:
Average throughput: 15.80 Mbit/s
95th percentile per-packet one-way delay: 63.285 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 7.99 Mbit/s
95th percentile per-packet one-way delay: 60.691 ms
Loss rate: 2.50%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2019-10-03 12:26:56
End at: 2019-10-03 12:27:26
Local clock offset: -0.071 ms
Remote clock offset: -0.101 ms

# Below is generated by plot.py at 2019-10-03 16:00:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.71 Mbit/s
95th percentile per-packet one-way delay: 61.236 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 24.39 Mbit/s
95th percentile per-packet one-way delay: 61.359 ms
Loss rate: 0.82%
-- Flow 2:
Average throughput: 12.93 Mbit/s
95th percentile per-packet one-way delay: 61.062 ms
Loss rate: 0.95%
-- Flow 3:
Average throughput: 8.41 Mbit/s
95th percentile per-packet one-way delay: 60.579 ms
Loss rate: 2.45%
Run 3: Report of LEDBAT — Data Link

![Graph 1: Line graph showing throughput (Mbps) over time (s) for different flows, with legends indicating mean throughput in Mbps.]

![Graph 2: Bar graph showing per-packet end-to-end delay (ms) over time (s) for different flows, with legends indicating 95th percentile delay in ms.]

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Run 4: Statistics of LEDBAT

Start at: 2019-10-03 13:06:13
End at: 2019-10-03 13:06:44
Local clock offset: -0.026 ms
Remote clock offset: -0.546 ms

# Below is generated by plot.py at 2019-10-03 16:00:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 34.15 Mbit/s
95th percentile per-packet one-way delay: 65.153 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 22.27 Mbit/s
95th percentile per-packet one-way delay: 65.554 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 15.64 Mbit/s
95th percentile per-packet one-way delay: 62.099 ms
Loss rate: 1.26%
-- Flow 3:
Average throughput: 4.63 Mbit/s
95th percentile per-packet one-way delay: 63.736 ms
Loss rate: 0.88%
Run 4: Report of LEDBAT — Data Link

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

- Flow 1 ingress (mean 22.36 Mbps)
- Flow 1 egress (mean 22.27 Mbps)
- Flow 2 ingress (mean 15.74 Mbps)
- Flow 2 egress (mean 15.64 Mbps)
- Flow 3 ingress (mean 4.61 Mbps)
- Flow 3 egress (mean 4.63 Mbps)

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

- Flow 1 (95th percentile 65.55 ms)
- Flow 2 (95th percentile 62.10 ms)
- Flow 3 (95th percentile 61.74 ms)
Run 5: Statistics of LEDBAT

Start at: 2019-10-03 13:46:02
End at: 2019-10-03 13:46:32
Local clock offset: -0.021 ms
Remote clock offset: -0.098 ms

# Below is generated by plot.py at 2019-10-03 16:00:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 37.67 Mbit/s
  95th percentile per-packet one-way delay: 61.558 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 24.29 Mbit/s
  95th percentile per-packet one-way delay: 61.603 ms
  Loss rate: 0.82%
-- Flow 2:
  Average throughput: 16.22 Mbit/s
  95th percentile per-packet one-way delay: 61.520 ms
  Loss rate: 1.24%
-- Flow 3:
  Average throughput: 7.98 Mbit/s
  95th percentile per-packet one-way delay: 60.807 ms
  Loss rate: 2.50%
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 10:43:11
End at: 2019-10-03 10:43:41
Local clock offset: ~0.087 ms
Remote clock offset: 0.114 ms

# Below is generated by plot.py at 2019-10-03 16:01:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 637.85 Mbit/s
95th percentile per-packet one-way delay: 72.445 ms
Loss rate: 0.52%

-- Flow 1:
Average throughput: 367.83 Mbit/s
95th percentile per-packet one-way delay: 77.216 ms
Loss rate: 0.24%

-- Flow 2:
Average throughput: 309.01 Mbit/s
95th percentile per-packet one-way delay: 64.446 ms
Loss rate: 0.62%

-- Flow 3:
Average throughput: 214.93 Mbit/s
95th percentile per-packet one-way delay: 63.220 ms
Loss rate: 1.72%
Run 1: Report of Muses_DecisionTree — Data Link
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 11:23:03
End at: 2019-10-03 11:23:33
Local clock offset: -0.086 ms
Remote clock offset: -0.119 ms

# Below is generated by plot.py at 2019-10-03 16:02:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 648.10 Mbit/s
95th percentile per-packet one-way delay: 80.307 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 391.84 Mbit/s
95th percentile per-packet one-way delay: 89.212 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 285.44 Mbit/s
95th percentile per-packet one-way delay: 63.938 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 216.39 Mbit/s
95th percentile per-packet one-way delay: 62.663 ms
Loss rate: 1.58%
Run 2: Report of Muses_DecisionTree — Data Link

![Graphs showing throughput and packet round trip delay](image-url)
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 12:03:26
End at: 2019-10-03 12:03:56
Local clock offset: -0.079 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-10-03 16:02:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 587.19 Mbit/s
95th percentile per-packet one-way delay: 77.736 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 343.77 Mbit/s
95th percentile per-packet one-way delay: 85.504 ms
Loss rate: 0.28%
-- Flow 2:
Average throughput: 290.24 Mbit/s
95th percentile per-packet one-way delay: 61.852 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 165.43 Mbit/s
95th percentile per-packet one-way delay: 61.981 ms
Loss rate: 0.90%
Run 3: Report of Muses _Decision Tree_ — Data Link

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

Graph legend:
- Flow 1 ingress (mean 343.33 Mbit/s)
- Flow 1 egress (mean 343.77 Mbit/s)
- Flow 2 ingress (mean 290.67 Mbit/s)
- Flow 2 egress (mean 290.24 Mbit/s)
- Flow 3 ingress (mean 164.75 Mbit/s)
- Flow 3 egress (mean 165.43 Mbit/s)

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

Graph legend:
- Flow 1 (95th percentile 85.50 ms)
- Flow 2 (95th percentile 61.85 ms)
- Flow 3 (95th percentile 61.98 ms)
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 12:42:57
End at: 2019-10-03 12:43:27
Local clock offset: -0.005 ms
Remote clock offset: -0.107 ms

# Below is generated by plot.py at 2019-10-03 16:03:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 645.49 Mbit/s
95th percentile per-packet one-way delay: 73.678 ms
Loss rate: 0.44%
-- Flow 1:
Average throughput: 366.35 Mbit/s
95th percentile per-packet one-way delay: 78.681 ms
Loss rate: 0.33%
-- Flow 2:
Average throughput: 338.32 Mbit/s
95th percentile per-packet one-way delay: 72.791 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 179.75 Mbit/s
95th percentile per-packet one-way delay: 66.646 ms
Loss rate: 1.17%
Run 4: Report of Muses_DecisionTree — Data Link
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-10-03 13:22:45
End at: 2019-10-03 13:23:15
Local clock offset: -0.006 ms
Remote clock offset: 0.053 ms

# Below is generated by plot.py at 2019-10-03 16:03:04
# Datalink statistics
-- Total of 3 flows:
Average throughput: 604.03 Mbit/s
95th percentile per-packet one-way delay: 82.060 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 360.06 Mbit/s
95th percentile per-packet one-way delay: 94.738 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 268.10 Mbit/s
95th percentile per-packet one-way delay: 62.153 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 213.00 Mbit/s
95th percentile per-packet one-way delay: 62.441 ms
Loss rate: 2.10%
Run 5: Report of Muses_DecimalTree — Data Link

![Graph 1: Throughput Over Time](image1)
- Flow 1 ingress (mean 359.54 Mbit/s)
- Flow 1 egress (mean 360.06 Mbit/s)
- Flow 2 ingress (mean 267.57 Mbit/s)
- Flow 2 egress (mean 268.10 Mbit/s)
- Flow 3 ingress (mean 214.78 Mbit/s)
- Flow 3 egress (mean 213.00 Mbit/s)

![Graph 2: Per-packet End-to-End Delay](image2)
- Flow 1 (95th percentile 94.74 ms)
- Flow 2 (95th percentile 62.15 ms)
- Flow 3 (95th percentile 62.44 ms)
Run 1: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 11:13:01
End at: 2019-10-03 11:13:31
Local clock offset: -0.088 ms
Remote clock offset: -0.132 ms

# Below is generated by plot.py at 2019-10-03 16:04:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 528.27 Mbit/s
95th percentile per-packet one-way delay: 114.868 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 259.20 Mbit/s
95th percentile per-packet one-way delay: 128.408 ms
Loss rate: 0.60%
-- Flow 2:
Average throughput: 295.44 Mbit/s
95th percentile per-packet one-way delay: 88.313 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 238.78 Mbit/s
95th percentile per-packet one-way delay: 72.288 ms
Loss rate: 2.27%
Run 1: Report of Muses_DocumentTreeH0 — Data Link

[Graph showing throughput and per-packet one-way delay for different flows over time]
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 11:53:14
End at: 2019-10-03 11:53:44
Local clock offset: -0.078 ms
Remote clock offset: -0.121 ms

# Below is generated by plot.py at 2019-10-03 16:06:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 548.65 Mbit/s
  95th percentile per-packet one-way delay: 111.954 ms
  Loss rate: 0.53%
-- Flow 1:
  Average throughput: 282.41 Mbit/s
  95th percentile per-packet one-way delay: 126.419 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 291.45 Mbit/s
  95th percentile per-packet one-way delay: 94.416 ms
  Loss rate: 0.28%
-- Flow 3:
  Average throughput: 232.21 Mbit/s
  95th percentile per-packet one-way delay: 66.909 ms
  Loss rate: 1.72%
Run 2: Report of Muses_DecisionTreeH0 — Data Link

![Graph showing network throughput and latency](image)

- Flow 1 ingress (mean 282.30 Mbps) vs. Flow 1 egress (mean 282.41 Mbps)
- Flow 2 ingress (mean 290.42 Mbps) vs. Flow 2 egress (mean 291.45 Mbps)
- Flow 3 ingress (mean 232.98 Mbps) vs. Flow 3 egress (mean 232.21 Mbps)

![Graph showing packet delay](image)

- Flow 1 (95th percentile 126.42 ms)
- Flow 2 (95th percentile 94.42 ms)
- Flow 3 (95th percentile 66.91 ms)
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 12:33:01
End at: 2019-10-03 12:33:31
Local clock offset: -0.065 ms
Remote clock offset: -0.068 ms

# Below is generated by plot.py at 2019-10-03 16:09:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 505.06 Mbit/s
95th percentile per-packet one-way delay: 130.133 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 257.96 Mbit/s
95th percentile per-packet one-way delay: 139.306 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 253.67 Mbit/s
95th percentile per-packet one-way delay: 108.892 ms
Loss rate: 0.59%
-- Flow 3:
Average throughput: 253.69 Mbit/s
95th percentile per-packet one-way delay: 70.686 ms
Loss rate: 1.88%
Run 3: Report of Muses_DecisionTreeH0 — Data Link

![Graphs showing throughput and per-packet one-way delay over time for three different flows with specified mean and 95th percentile values.]
Run 4: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 13:12:38
End at: 2019-10-03 13:13:08
Local clock offset: -0.008 ms
Remote clock offset: -0.709 ms

# Below is generated by plot.py at 2019-10-03 16:11:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 543.22 Mbit/s
  95th percentile per-packet one-way delay: 118.146 ms
  Loss rate: 0.69%
-- Flow 1:
  Average throughput: 278.93 Mbit/s
  95th percentile per-packet one-way delay: 129.563 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 305.10 Mbit/s
  95th percentile per-packet one-way delay: 81.625 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 203.72 Mbit/s
  95th percentile per-packet one-way delay: 103.340 ms
  Loss rate: 1.97%
Run 4: Report of Muses_DecisionTreeH0 — Data Link

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

- Flow 1 ingress (mean 277.43 Mbit/s)
- Flow 1 egress (mean 278.93 Mbit/s)
- Flow 2 ingress (mean 306.33 Mbit/s)
- Flow 2 egress (mean 305.10 Mbit/s)
- Flow 3 ingress (mean 205.54 Mbit/s)
- Flow 3 egress (mean 203.72 Mbit/s)

- Flow 1 (95th percentile 129.56 ms)
- Flow 2 (95th percentile 81.62 ms)
- Flow 3 (95th percentile 103.34 ms)
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-10-03 13:52:27
End at: 2019-10-03 13:52:57
Local clock offset: -0.031 ms
Remote clock offset: -0.134 ms

# Below is generated by plot.py at 2019-10-03 16:13:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 658.61 Mbit/s
  95th percentile per-packet one-way delay: 85.024 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 370.34 Mbit/s
  95th percentile per-packet one-way delay: 85.469 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 325.71 Mbit/s
  95th percentile per-packet one-way delay: 88.822 ms
  Loss rate: 0.48%
-- Flow 3:
  Average throughput: 231.90 Mbit/s
  95th percentile per-packet one-way delay: 68.367 ms
  Loss rate: 2.23%
Run 5: Report of Muses_DecisionTreeH0 — Data Link
Run 1: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 10:44:56
End at: 2019-10-03 10:45:26
Local clock offset: -0.06 ms
Remote clock offset: 0.132 ms

# Below is generated by plot.py at 2019-10-03 16:14:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 666.19 Mbit/s
95th percentile per-packet one-way delay: 77.137 ms
Loss rate: 0.42%
-- Flow 1:
Average throughput: 414.75 Mbit/s
95th percentile per-packet one-way delay: 84.195 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 296.35 Mbit/s
95th percentile per-packet one-way delay: 61.934 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 180.60 Mbit/s
95th percentile per-packet one-way delay: 63.548 ms
Loss rate: 1.56%
Run 1: Report of Muses_DecisionTreeR0 — Data Link

![Graph of throughput and per-packet end-to-end delay](image)

- Flow 1 ingress (mean 414.63 Mbit/s)
- Flow 2 ingress (mean 296.66 Mbit/s)
- Flow 3 ingress (mean 181.41 Mbit/s)
- Flow 1 egress (mean 414.75 Mbit/s)
- Flow 2 egress (mean 296.55 Mbit/s)
- Flow 3 egress (mean 180.60 Mbit/s)

![Graph of per-packet end-to-end delay](image)

- Flow 1 (95th percentile 84.19 ms)
- Flow 2 (95th percentile 61.93 ms)
- Flow 3 (95th percentile 63.55 ms)
Run 2: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 11:24:48
End at: 2019-10-03 11:25:18
Local clock offset: -0.14 ms
Remote clock offset: -0.021 ms

# Below is generated by plot.py at 2019-10-03 16:14:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 658.23 Mbit/s
95th percentile per-packet one-way delay: 85.166 ms
Loss rate: 0.43%
-- Flow 1:
Average throughput: 401.92 Mbit/s
95th percentile per-packet one-way delay: 92.957 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 301.14 Mbit/s
95th percentile per-packet one-way delay: 67.103 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 185.79 Mbit/s
95th percentile per-packet one-way delay: 68.032 ms
Loss rate: 1.22%
Run 2: Report of Muses_DecimalTreeR0 — Data Link
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 12:05:09
End at: 2019-10-03 12:05:39
Local clock offset: -0.098 ms
Remote clock offset: -0.257 ms

# Below is generated by plot.py at 2019-10-03 16:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 635.27 Mbit/s
95th percentile per-packet one-way delay: 71.877 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 363.20 Mbit/s
95th percentile per-packet one-way delay: 77.433 ms
Loss rate: 0.26%
-- Flow 2:
Average throughput: 306.60 Mbit/s
95th percentile per-packet one-way delay: 69.006 ms
Loss rate: 0.46%
-- Flow 3:
Average throughput: 222.93 Mbit/s
95th percentile per-packet one-way delay: 62.328 ms
Loss rate: 1.46%
Run 3: Report of Muses

DecisionTreeR0 — Data Link

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

- Flow 1 ingress (mean 362.36 Mbps)
- Flow 1 egress (mean 363.20 Mbps)
- Flow 2 ingress (mean 306.05 Mbps)
- Flow 2 egress (mean 306.60 Mbps)
- Flow 3 ingress (mean 223.32 Mbps)
- Flow 3 egress (mean 222.93 Mbps)

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

- Flow 1 (95th percentile 77.43 ms)
- Flow 2 (95th percentile 69.01 ms)
- Flow 3 (95th percentile 62.33 ms)
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-10-03 12:44:43
End at: 2019-10-03 12:45:13
Local clock offset: -0.053 ms
Remote clock offset: -0.033 ms

# Below is generated by plot.py at 2019-10-03 16:14:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 574.24 Mbit/s
95th percentile per-packet one-way delay: 69.256 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 302.45 Mbit/s
95th percentile per-packet one-way delay: 64.837 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 295.58 Mbit/s
95th percentile per-packet one-way delay: 74.480 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 243.91 Mbit/s
95th percentile per-packet one-way delay: 66.325 ms
Loss rate: 1.71%
Run 4: Report of Muses_DecisionTreeR0 — Data Link
Run 5: Statistics of Muses\_DecisionTreeR0

End at: 2019-10-03 13:24:58
Local clock offset: -0.016 ms
Remote clock offset: -0.708 ms

# Below is generated by plot.py at 2019-10-03 16:18:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 661.92 Mbit/s
95th percentile per-packet one-way delay: 75.162 ms
Loss rate: 0.49%
-- Flow 1:
Average throughput: 391.90 Mbit/s
95th percentile per-packet one-way delay: 78.778 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 306.90 Mbit/s
95th percentile per-packet one-way delay: 65.944 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 212.91 Mbit/s
95th percentile per-packet one-way delay: 67.069 ms
Loss rate: 1.64%
Run 5: Report of Muses_DecisionTreeR0 — Data Link
Run 1: Statistics of PCC-Allegro

Start at: 2019-10-03 10:59:36
End at: 2019-10-03 11:00:06
Local clock offset: -0.062 ms
Remote clock offset: 0.038 ms

# Below is generated by plot.py at 2019-10-03 16:29:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 554.24 Mbit/s
95th percentile per-packet one-way delay: 108.995 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 281.83 Mbit/s
95th percentile per-packet one-way delay: 105.277 ms
Loss rate: 0.43%
-- Flow 2:
Average throughput: 295.64 Mbit/s
95th percentile per-packet one-way delay: 115.605 ms
Loss rate: 0.77%
-- Flow 3:
Average throughput: 234.99 Mbit/s
95th percentile per-packet one-way delay: 87.882 ms
Loss rate: 1.45%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-10-03 11:39:38
End at: 2019-10-03 11:40:08
Local clock offset: -0.144 ms
Remote clock offset: -0.227 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 671.41 Mbit/s
  95th percentile per-packet one-way delay: 191.112 ms
  Loss rate: 4.17%
-- Flow 1:
  Average throughput: 401.30 Mbit/s
  95th percentile per-packet one-way delay: 198.524 ms
  Loss rate: 6.18%
-- Flow 2:
  Average throughput: 282.75 Mbit/s
  95th percentile per-packet one-way delay: 112.739 ms
  Loss rate: 0.85%
-- Flow 3:
  Average throughput: 253.52 Mbit/s
  95th percentile per-packet one-way delay: 123.773 ms
  Loss rate: 1.43%
Run 3: Statistics of PCC-Allegro

Start at: 2019-10-03 12:19:52
End at: 2019-10-03 12:20:22
Local clock offset: -0.062 ms
Remote clock offset: -0.109 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 572.35 Mbit/s
95th percentile per-packet one-way delay: 108.609 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 315.42 Mbit/s
95th percentile per-packet one-way delay: 109.598 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 269.68 Mbit/s
95th percentile per-packet one-way delay: 86.256 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 239.28 Mbit/s
95th percentile per-packet one-way delay: 135.618 ms
Loss rate: 2.19%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 316.41 Mbit/s)
- Flow 1 egress (mean 315.42 Mbit/s)
- Flow 2 ingress (mean 269.99 Mbit/s)
- Flow 2 egress (mean 269.68 Mbit/s)
- Flow 3 ingress (mean 241.56 Mbit/s)
- Flow 3 egress (mean 239.28 Mbit/s)
Run 4: Statistics of PCC-Allegro

Start at: 2019-10-03 12:59:11
End at: 2019-10-03 12:59:41
Local clock offset: -0.002 ms
Remote clock offset: 0.109 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 552.70 Mbit/s
95th percentile per-packet one-way delay: 159.567 ms
Loss rate: 1.15%
-- Flow 1:
Average throughput: 314.43 Mbit/s
95th percentile per-packet one-way delay: 161.296 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 292.03 Mbit/s
95th percentile per-packet one-way delay: 161.284 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 136.53 Mbit/s
95th percentile per-packet one-way delay: 117.325 ms
Loss rate: 1.56%
Run 4: Report of PCC-Allegro — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 316.24 Mbps)
  - Flow 1 egress (mean 314.43 Mbps)
  - Flow 2 ingress (mean 294.17 Mbps)
  - Flow 2 egress (mean 292.03 Mbps)
  - Flow 3 ingress (mean 136.99 Mbps)
  - Flow 3 egress (mean 136.33 Mbps)

- Packet one-way delay (ms):
  - Flow 1 (95th percentile 161.30 ms)
  - Flow 2 (95th percentile 161.28 ms)
  - Flow 3 (95th percentile 117.33 ms)
Run 5: Statistics of PCC-Allegro

Start at: 2019-10-03 13:38:56
End at: 2019-10-03 13:39:26
Local clock offset: -0.018 ms
Remote clock offset: -0.126 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 562.81 Mbit/s
95th percentile per-packet one-way delay: 164.536 ms
Loss rate: 3.69%
-- Flow 1:
Average throughput: 315.84 Mbit/s
95th percentile per-packet one-way delay: 191.801 ms
Loss rate: 3.95%
-- Flow 2:
Average throughput: 261.38 Mbit/s
95th percentile per-packet one-way delay: 96.888 ms
Loss rate: 3.13%
-- Flow 3:
Average throughput: 225.33 Mbit/s
95th percentile per-packet one-way delay: 160.197 ms
Loss rate: 3.86%
Run 5: Report of PCC-Allegro — Data Link

The first chart shows the throughput over time, with different lines representing different flows. The legend indicates that Flow 1 ingress (mean 327.48 Mbps) and Flow 2 ingress (mean 268.09 Mbps) are shown in blue and green dashed lines, respectively. Flow 1 egress (mean 315.84 Mbps) and Flow 2 egress (mean 261.38 Mbps) are shown in blue and green solid lines, respectively. Flow 3 ingress (mean 231.45 Mbps) and Flow 3 egress (mean 225.33 Mbps) are shown in red and black dashed lines, respectively.

The second chart shows the per-packet one-way delay over time. The legend indicates that Flow 1 (95th percentile 191.80 ms), Flow 2 (95th percentile 96.89 ms), and Flow 3 (95th percentile 160.20 ms) are represented by different markers and lines.
Run 1: Statistics of PCC-Expr

Start at: 2019-10-03 11:11:12
End at: 2019-10-03 11:11:42
Local clock offset: -0.106 ms
Remote clock offset: 0.135 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 407.42 Mbit/s
  95th percentile per-packet one-way delay: 78.792 ms
  Loss rate: 0.81%
-- Flow 1:
  Average throughput: 233.13 Mbit/s
  95th percentile per-packet one-way delay: 79.916 ms
  Loss rate: 0.44%
-- Flow 2:
  Average throughput: 200.56 Mbit/s
  95th percentile per-packet one-way delay: 75.230 ms
  Loss rate: 0.86%
-- Flow 3:
  Average throughput: 125.73 Mbit/s
  95th percentile per-packet one-way delay: 79.949 ms
  Loss rate: 2.69%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 233.20 Mbit/s)
- Flow 1 egress (mean 233.13 Mbit/s)
- Flow 2 ingress (mean 201.06 Mbit/s)
- Flow 2 egress (mean 200.56 Mbit/s)
- Flow 3 ingress (mean 127.58 Mbit/s)
- Flow 3 egress (mean 125.73 Mbit/s)
Run 2: Statistics of PCC-Expr

Start at: 2019-10-03 11:51:21
End at: 2019-10-03 11:51:51
Local clock offset: -0.113 ms
Remote clock offset: -0.162 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 449.03 Mbit/s
  95th percentile per-packet one-way delay: 110.068 ms
  Loss rate: 0.87%
-- Flow 1:
  Average throughput: 256.08 Mbit/s
  95th percentile per-packet one-way delay: 135.362 ms
  Loss rate: 0.74%
-- Flow 2:
  Average throughput: 202.87 Mbit/s
  95th percentile per-packet one-way delay: 95.720 ms
  Loss rate: 0.80%
-- Flow 3:
  Average throughput: 178.30 Mbit/s
  95th percentile per-packet one-way delay: 71.679 ms
  Loss rate: 1.61%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2019-10-03 12:31:10
End at: 2019-10-03 12:31:40
Local clock offset: -0.022 ms
Remote clock offset: -0.317 ms

# Below is generated by plot.py at 2019-10-03 16:35:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 424.06 Mbit/s
95th percentile per-packet one-way delay: 95.958 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 235.19 Mbit/s
95th percentile per-packet one-way delay: 106.513 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 197.21 Mbit/s
95th percentile per-packet one-way delay: 72.031 ms
Loss rate: 0.70%
-- Flow 3:
Average throughput: 177.11 Mbit/s
95th percentile per-packet one-way delay: 73.250 ms
Loss rate: 1.62%
Run 3: Report of PCC-Expr — Data Link

![Graph showing throughput and per-packet one-way delay over time for different flows with mean rates and 95th percentile values.]
Run 4: Statistics of PCC-Expr

Start at: 2019-10-03 13:10:45
End at: 2019-10-03 13:11:15
Local clock offset: -0.022 ms
Remote clock offset: -0.052 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 496.68 Mbit/s
95th percentile per-packet one-way delay: 110.930 ms
Loss rate: 1.35%
-- Flow 1:
Average throughput: 312.08 Mbit/s
95th percentile per-packet one-way delay: 126.092 ms
Loss rate: 1.67%
-- Flow 2:
Average throughput: 191.63 Mbit/s
95th percentile per-packet one-way delay: 85.423 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 175.69 Mbit/s
95th percentile per-packet one-way delay: 86.753 ms
Loss rate: 1.34%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2019-10-03 13:50:37
End at: 2019-10-03 13:51:07
Local clock offset: -0.013 ms
Remote clock offset: -0.108 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 413.70 Mbit/s
95th percentile per-packet one-way delay: 146.302 ms
Loss rate: 1.78%
-- Flow 1:
Average throughput: 246.49 Mbit/s
95th percentile per-packet one-way delay: 153.644 ms
Loss rate: 2.03%
-- Flow 2:
Average throughput: 201.95 Mbit/s
95th percentile per-packet one-way delay: 133.084 ms
Loss rate: 1.33%
-- Flow 3:
Average throughput: 101.39 Mbit/s
95th percentile per-packet one-way delay: 63.388 ms
Loss rate: 1.69%
Run 5: Report of PCC-Expr — Data Link

The graphs illustrate the throughput and per-packet end-to-end delay for three flows over time.

Throughput Graph:
- Flow 1 ingress (mean 250.52 Mbit/s)
- Flow 1 egress (mean 246.49 Mbit/s)
- Flow 2 ingress (mean 203.39 Mbit/s)
- Flow 2 egress (mean 201.95 Mbit/s)
- Flow 3 ingress (mean 101.82 Mbit/s)
- Flow 3 egress (mean 101.39 Mbit/s)

Delay Graph:
- Flow 1 (95th percentile 153.64 ms)
- Flow 2 (95th percentile 133.08 ms)
- Flow 3 (95th percentile 63.39 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2019-10-03 11:07:55
End at: 2019-10-03 11:08:25
Local clock offset: -0.088 ms
Remote clock offset: 0.667 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.10 Mbit/s
  95th percentile per-packet one-way delay: 62.477 ms
  Loss rate: 1.04%
-- Flow 1:
  Average throughput: 47.76 Mbit/s
  95th percentile per-packet one-way delay: 62.464 ms
  Loss rate: 0.62%
-- Flow 2:
  Average throughput: 43.52 Mbit/s
  95th percentile per-packet one-way delay: 62.562 ms
  Loss rate: 1.10%
-- Flow 3:
  Average throughput: 32.21 Mbit/s
  95th percentile per-packet one-way delay: 59.534 ms
  Loss rate: 2.57%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-10-03 11:48:06
End at: 2019-10-03 11:48:36
Local clock offset: -0.09 ms
Remote clock offset: -0.214 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 106.59 Mbit/s
95th percentile per-packet one-way delay: 63.110 ms
Loss rate: 0.65%
-- Flow 1:
Average throughput: 59.72 Mbit/s
95th percentile per-packet one-way delay: 62.577 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 63.196 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 27.46 Mbit/s
95th percentile per-packet one-way delay: 62.010 ms
Loss rate: 0.92%
Run 2: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - **Flow 1 ingress (mean 59.78 Mbps):**
  - **Flow 1 egress (mean 59.72 Mbps):**
  - **Flow 2 ingress (mean 57.18 Mbps):**
  - **Flow 2 egress (mean 57.07 Mbps):**
  - **Flow 3 ingress (mean 27.37 Mbps):**
  - **Flow 3 egress (mean 27.46 Mbps):**

- **Packet loss rate over time:**
  - **Flow 1 (95th percentile 62.58 ms):**
  - **Flow 2 (95th percentile 63.20 ms):**
  - **Flow 3 (95th percentile 62.01 ms):**
Run 3: Statistics of QUIC Cubic

End at: 2019-10-03 12:28:43
Local clock offset: -0.094 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.19 Mbit/s
  95th percentile per-packet one-way delay: 62.334 ms
  Loss rate: 0.48%
-- Flow 1:
  Average throughput: 53.23 Mbit/s
  95th percentile per-packet one-way delay: 62.339 ms
  Loss rate: 0.56%
-- Flow 2:
  Average throughput: 6.80 Mbit/s
  95th percentile per-packet one-way delay: 62.094 ms
  Loss rate: 0.71%
-- Flow 3:
  Average throughput: 62.36 Mbit/s
  95th percentile per-packet one-way delay: 62.316 ms
  Loss rate: 0.22%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Start at: 2019-10-03 13:07:30
End at: 2019-10-03 13:08:00
Local clock offset: -0.037 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 103.35 Mbit/s
95th percentile per-packet one-way delay: 62.834 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 54.65 Mbit/s
95th percentile per-packet one-way delay: 62.559 ms
Loss rate: 0.57%
-- Flow 2:
Average throughput: 41.03 Mbit/s
95th percentile per-packet one-way delay: 62.965 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 65.54 Mbit/s
95th percentile per-packet one-way delay: 62.110 ms
Loss rate: 1.42%
Run 4: Report of QUIC Cubic — Data Link

![Graph 1](image1)

![Graph 2](image2)
Run 5: Statistics of QUIC Cubic

Start at: 2019-10-03 13:47:19
End at: 2019-10-03 13:47:49
Local clock offset: -0.016 ms
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 100.65 Mbit/s
  95th percentile per-packet one-way delay: 63.007 ms
  Loss rate: 0.41%
-- Flow 1:
  Average throughput: 60.40 Mbit/s
  95th percentile per-packet one-way delay: 63.047 ms
  Loss rate: 0.68%
-- Flow 2:
  Average throughput: 30.83 Mbit/s
  95th percentile per-packet one-way delay: 60.042 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 60.68 Mbit/s
  95th percentile per-packet one-way delay: 62.372 ms
  Loss rate: 0.00%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2019-10-03 10:58:24
End at: 2019-10-03 10:58:54
Local clock offset: -0.056 ms
Remote clock offset: -0.685 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 66.285 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 66.307 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.164 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 61.049 ms
Loss rate: 1.08%
Run 1: Report of SCReAM — Data Link

![Graph showing network throughput and packet delay over time for different flows.]
Run 2: Statistics of SCReAM

Start at: 2019-10-03 11:38:26
End at: 2019-10-03 11:38:56
Local clock offset: -0.127 ms
Remote clock offset: 0.048 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 62.610 ms
Loss rate: 0.58%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.932 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.957 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.302 ms
Loss rate: 1.08%
Run 2: Report of SCReAM — Data Link

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

- 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: Packet one-way delay (ms) vs. Time (s)]

- Flow 1 (95th percentile 59.93 ms)
- Flow 2 (95th percentile 62.96 ms)
- Flow 3 (95th percentile 62.30 ms)
Run 3: Statistics of SCReAM

Start at: 2019-10-03 12:18:40
End at: 2019-10-03 12:19:10
Local clock offset: -0.085 ms
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 65.606 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 60.413 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 63.270 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 65.687 ms
Loss rate: 1.45%
Run 3: Report of SCReAM — Data Link

![Throughput Graph](image1)

![Delay Graph](image2)

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

- Flow 1 (95th percentile 60.41 ms)
- Flow 2 (95th percentile 63.27 ms)
- Flow 3 (95th percentile 65.69 ms)
Run 4: Statistics of SCReAM

Start at: 2019-10-03 12:57:59
End at: 2019-10-03 12:58:29
Local clock offset: -0.019 ms
Remote clock offset: 0.592 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 62.541 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.588 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 59.693 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 62.532 ms
Loss rate: 1.08%
Run 4: Report of SCReAM — Data Link

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

Throughput (Mbps)

Delay (ms)

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)

Flow 1 (95th percentile 62.59 ms)  Flow 2 (95th percentile 59.69 ms)  Flow 3 (95th percentile 62.53 ms)
Run 5: Statistics of SCReAM

Start at: 2019-10-03 13:37:44
End at: 2019-10-03 13:38:14
Local clock offset: -0.003 ms
Remote clock offset: -0.167 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 63.042 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 62.540 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 60.249 ms
  Loss rate: 0.61%
-- Flow 3:
  Average throughput: 0.19 Mbit/s
  95th percentile per-packet one-way delay: 63.090 ms
  Loss rate: 1.53%
Run 5: Report of SCReAM — Data Link
Run 1: Statistics of Sprout

Start at: 2019-10-03 10:55:18
Local clock offset: -0.068 ms
Remote clock offset: 0.064 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.60 Mbit/s
95th percentile per-packet one-way delay: 63.890 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 6.95 Mbit/s
95th percentile per-packet one-way delay: 64.105 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 6.81 Mbit/s
95th percentile per-packet one-way delay: 60.908 ms
Loss rate: 0.88%
-- Flow 3:
Average throughput: 6.50 Mbit/s
95th percentile per-packet one-way delay: 61.107 ms
Loss rate: 1.53%
Run 1: Report of Sprout — Data Link

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

Flow 1 ingress (mean 6.93 Mbit/s) - Flow 1 egress (mean 6.95 Mbit/s)
Flow 2 ingress (mean 6.83 Mbit/s) - Flow 2 egress (mean 6.81 Mbit/s)
Flow 3 ingress (mean 6.54 Mbit/s) - Flow 3 egress (mean 6.50 Mbit/s)

[Graph showing packet loss over time for different flows]

Flow 1 (95th percentile 64.11 ms) - Flow 2 (95th percentile 60.91 ms) - Flow 3 (95th percentile 61.11 ms)
Run 2: Statistics of Sprout

Start at: 2019-10-03 11:35:17
End at: 2019-10-03 11:35:47
Local clock offset: -0.13 ms
Remote clock offset: -0.209 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.86 Mbit/s
95th percentile per-packet one-way delay: 63.706 ms
Loss rate: 0.12%
-- Flow 1:
Average throughput: 7.09 Mbit/s
95th percentile per-packet one-way delay: 60.979 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 6.89 Mbit/s
95th percentile per-packet one-way delay: 64.034 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 6.70 Mbit/s
95th percentile per-packet one-way delay: 62.679 ms
Loss rate: 0.21%
Run 2: Report of Sprout — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 7.06 Mbps)
  - Flow 1 egress (mean 7.09 Mbps)
  - Flow 2 ingress (mean 6.88 Mbps)
  - Flow 2 egress (mean 6.89 Mbps)
  - Flow 3 ingress (mean 6.64 Mbps)
  - Flow 3 egress (mean 6.70 Mbps)

- **Per-packet one way delay (ms)**
  - Flow 1 (95th percentile 60.98 ms)
  - Flow 2 (95th percentile 64.03 ms)
  - Flow 3 (95th percentile 62.68 ms)
Run 3: Statistics of Sprout

Start at: 2019-10-03 12:15:32
End at: 2019-10-03 12:16:02
Local clock offset: -0.048 ms
Remote clock offset: -0.749 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.59 Mbit/s
95th percentile per-packet one-way delay: 64.660 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 6.92 Mbit/s
95th percentile per-packet one-way delay: 64.408 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 64.902 ms
Loss rate: 0.72%
-- Flow 3:
Average throughput: 6.51 Mbit/s
95th percentile per-packet one-way delay: 64.262 ms
Loss rate: 0.70%
Run 3: Report of Sprout — Data Link

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

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

Legend:
- Flow 1 ingress (mean 6.94 Mbps)
- Flow 1 egress (mean 6.92 Mbps)
- Flow 2 ingress (mean 6.84 Mbps)
- Flow 2 egress (mean 6.83 Mbps)
- Flow 3 ingress (mean 6.48 Mbps)
- Flow 3 egress (mean 6.51 Mbps)
Run 4: Statistics of Sprout

Start at: 2019-10-03 12:54:55
End at: 2019-10-03 12:55:25
Local clock offset: -0.078 ms
Remote clock offset: -0.2 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.57 Mbit/s
95th percentile per-packet one-way delay: 63.174 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 6.94 Mbit/s
95th percentile per-packet one-way delay: 63.177 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 6.75 Mbit/s
95th percentile per-packet one-way delay: 63.196 ms
Loss rate: 0.75%
-- Flow 3:
Average throughput: 6.58 Mbit/s
95th percentile per-packet one-way delay: 63.093 ms
Loss rate: 1.55%
Run 4: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 6.94 Mbit/s)
- Flow 1 egress (mean 6.94 Mbit/s)
- Flow 2 ingress (mean 6.78 Mbit/s)
- Flow 2 egress (mean 6.75 Mbit/s)
- Flow 3 ingress (mean 6.60 Mbit/s)
- Flow 3 egress (mean 6.58 Mbit/s)

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

- Flow 1 (95th percentile 63.18 ms)
- Flow 2 (95th percentile 63.20 ms)
- Flow 3 (95th percentile 63.09 ms)
Run 5: Statistics of Sprout

Start at: 2019-10-03 13:34:41
End at: 2019-10-03 13:35:11
Local clock offset: -0.002 ms
Remote clock offset: -0.169 ms

# Below is generated by plot.py at 2019-10-03 16:46:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.47 Mbit/s
95th percentile per-packet one-way delay: 63.078 ms
Loss rate: 0.62%
-- Flow 1:
Average throughput: 6.83 Mbit/s
95th percentile per-packet one-way delay: 63.190 ms
Loss rate: 0.54%
-- Flow 2:
Average throughput: 6.78 Mbit/s
95th percentile per-packet one-way delay: 61.407 ms
Loss rate: 0.71%
-- Flow 3:
Average throughput: 6.55 Mbit/s
95th percentile per-packet one-way delay: 63.145 ms
Loss rate: 0.68%
Run 5: Report of Sprout — Data Link

![Graph 1: Throughput (Mbps)]

- **Flow 1 ingress (mean 6.83 Mbit/s)**
- **Flow 1 egress (mean 6.83 Mbit/s)**
- **Flow 2 ingress (mean 6.80 Mbit/s)**
- **Flow 2 egress (mean 6.78 Mbit/s)**
- **Flow 3 ingress (mean 6.52 Mbit/s)**
- **Flow 3 egress (mean 6.55 Mbit/s)**

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

- **Flow 1 (95th percentile 63.19 ms)**
- **Flow 2 (95th percentile 61.41 ms)**
- **Flow 3 (95th percentile 61.15 ms)**
Run 1: Statistics of TaoVA-100x

Start at: 2019-10-03 10:50:27
End at: 2019-10-03 10:50:57
Local clock offset: -0.05 ms
Remote clock offset: -0.072 ms

# Below is generated by plot.py at 2019-10-03 16:50:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 411.32 Mbit/s
95th percentile per-packet one-way delay: 66.920 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 208.80 Mbit/s
95th percentile per-packet one-way delay: 64.990 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 209.47 Mbit/s
95th percentile per-packet one-way delay: 68.216 ms
Loss rate: 0.61%
-- Flow 3:
Average throughput: 192.32 Mbit/s
95th percentile per-packet one-way delay: 67.156 ms
Loss rate: 1.34%
Run 1: Report of TaoVA-100x — Data Link

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

Legend:
- Flow 1 ingress (mean 208.76 Mbit/s)
- Flow 1 egress (mean 208.80 Mbit/s)
- Flow 2 ingress (mean 209.48 Mbit/s)
- Flow 2 egress (mean 209.47 Mbit/s)
- Flow 3 ingress (mean 192.56 Mbit/s)
- Flow 3 egress (mean 192.32 Mbit/s)

- Flow 1 (95th percentile 64.99 ms)
- Flow 2 (95th percentile 68.22 ms)
- Flow 3 (95th percentile 67.16 ms)
Run 2: Statistics of TaoVA-100x

Start at: 2019-10-03 11:30:20
End at: 2019-10-03 11:30:50
Local clock offset: -0.124 ms
Remote clock offset: -0.105 ms

# Below is generated by plot.py at 2019-10-03 16:50:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 417.76 Mbit/s
95th percentile per-packet one-way delay: 67.159 ms
Loss rate: 0.59%
-- Flow 1:
Average throughput: 217.85 Mbit/s
95th percentile per-packet one-way delay: 67.154 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 210.24 Mbit/s
95th percentile per-packet one-way delay: 64.397 ms
Loss rate: 0.60%
-- Flow 3:
Average throughput: 182.26 Mbit/s
95th percentile per-packet one-way delay: 70.302 ms
Loss rate: 1.23%
Run 2: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 217.85 Mbit/s)
- Flow 1 egress (mean 217.85 Mbit/s)
- Flow 2 ingress (mean 210.22 Mbit/s)
- Flow 2 egress (mean 210.24 Mbit/s)
- Flow 3 ingress (mean 182.26 Mbit/s)
- Flow 3 egress (mean 182.26 Mbit/s)

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

- Flow 1 (95th percentile 67.15 ms)
- Flow 2 (95th percentile 64.40 ms)
- Flow 3 (95th percentile 70.30 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2019-10-03 12:10:37
End at: 2019-10-03 12:11:07
Local clock offset: -0.108 ms
Remote clock offset: -0.945 ms

# Below is generated by plot.py at 2019-10-03 16:50:13
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 401.11 Mbit/s
  95th percentile per-packet one-way delay: 70.718 ms
  Loss rate: 0.47%
-- Flow 1:
  Average throughput: 206.74 Mbit/s
  95th percentile per-packet one-way delay: 67.915 ms
  Loss rate: 0.20%
-- Flow 2:
  Average throughput: 198.54 Mbit/s
  95th percentile per-packet one-way delay: 69.765 ms
  Loss rate: 0.59%
-- Flow 3:
  Average throughput: 189.29 Mbit/s
  95th percentile per-packet one-way delay: 77.758 ms
  Loss rate: 1.10%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress (mean 206.32 Mbit/s)**
- **Flow 1 egress (mean 206.74 Mbit/s)**
- **Flow 2 ingress (mean 198.51 Mbit/s)**
- **Flow 2 egress (mean 198.54 Mbit/s)**
- **Flow 3 ingress (mean 188.89 Mbit/s)**
- **Flow 3 egress (mean 189.29 Mbit/s)**

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

- **Flow 1 (95th percentile 67.92 ms)**
- **Flow 2 (95th percentile 69.77 ms)**
- **Flow 3 (95th percentile 77.76 ms)**
Run 4: Statistics of TaoVA-100x

Start at: 2019-10-03 12:50:11
End at: 2019-10-03 12:50:41
Local clock offset: -0.028 ms
Remote clock offset: -0.185 ms

# Below is generated by plot.py at 2019-10-03 16:50:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 348.44 Mbit/s
95th percentile per-packet one-way delay: 69.347 ms
Loss rate: 0.50%

-- Flow 1:
Average throughput: 207.18 Mbit/s
95th percentile per-packet one-way delay: 68.820 ms
Loss rate: 0.42%

-- Flow 2:
Average throughput: 202.09 Mbit/s
95th percentile per-packet one-way delay: 70.187 ms
Loss rate: 0.65%

-- Flow 3:
Average throughput: 24.67 Mbit/s
95th percentile per-packet one-way delay: 68.836 ms
Loss rate: 0.00%
Run 4: Report of TaoVA-100x — Data Link

Graph 1: Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 207.19 Mbps)
- Flow 1 egress (mean 207.18 Mbps)
- Flow 2 ingress (mean 202.15 Mbps)
- Flow 2 egress (mean 202.09 Mbps)
- Flow 3 ingress (mean 24.66 Mbps)
- Flow 3 egress (mean 24.67 Mbps)

Graph 2: Per-packet one-way delay (ms)
- Flow 1 (95th percentile 68.82 ms)
- Flow 2 (95th percentile 70.19 ms)
- Flow 3 (95th percentile 68.84 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-10-03 13:30:04
End at: 2019-10-03 13:30:34
Local clock offset: -0.011 ms
Remote clock offset: -0.16 ms

# Below is generated by plot.py at 2019-10-03 16:50:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 225.31 Mbit/s
95th percentile per-packet one-way delay: 64.871 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 13.81 Mbit/s
95th percentile per-packet one-way delay: 66.907 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 223.63 Mbit/s
95th percentile per-packet one-way delay: 64.908 ms
Loss rate: 0.54%
-- Flow 3:
Average throughput: 191.99 Mbit/s
95th percentile per-packet one-way delay: 63.635 ms
Loss rate: 1.27%
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2019-10-03 10:52:19
End at: 2019-10-03 10:52:49
Local clock offset: -0.078 ms
Remote clock offset: 0.174 ms

# Below is generated by plot.py at 2019-10-03 16:50:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 657.17 Mbit/s
95th percentile per-packet one-way delay: 75.617 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 322.87 Mbit/s
95th percentile per-packet one-way delay: 74.691 ms
Loss rate: 0.30%
-- Flow 2:
Average throughput: 330.14 Mbit/s
95th percentile per-packet one-way delay: 81.742 ms
Loss rate: 0.42%
-- Flow 3:
Average throughput: 348.35 Mbit/s
95th percentile per-packet one-way delay: 77.892 ms
Loss rate: 1.06%
Run 1: Report of TCP Vegas — Data Link

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

Throughput (Mb/s):
- Flow 1 ingress (mean 322.54 Mb/s)
- Flow 2 ingress (mean 329.53 Mb/s)
- Flow 3 ingress (mean 347.84 Mb/s)
- Flow 1 egress (mean 322.87 Mb/s)
- Flow 2 egress (mean 330.14 Mb/s)
- Flow 3 egress (mean 348.35 Mb/s)

Per-packet one-way delay (ms):
- Flow 1 (95th percentile 74.69 ms)
- Flow 2 (95th percentile 81.74 ms)
- Flow 3 (95th percentile 77.89 ms)
Run 2: Statistics of TCP Vegas

Start at: 2019-10-03 11:32:12  
End at: 2019-10-03 11:32:42  
Local clock offset: -0.141 ms  
Remote clock offset: -0.125 ms

# Below is generated by plot.py at 2019-10-03 16:58:55  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 770.94 Mbit/s
  95th percentile per-packet one-way delay: 93.125 ms
  Loss rate: 0.51%  
-- Flow 1:
  Average throughput: 443.03 Mbit/s
  95th percentile per-packet one-way delay: 90.275 ms
  Loss rate: 0.43%  
-- Flow 2:
  Average throughput: 304.88 Mbit/s
  95th percentile per-packet one-way delay: 79.933 ms
  Loss rate: 0.45%  
-- Flow 3:
  Average throughput: 379.86 Mbit/s
  95th percentile per-packet one-way delay: 100.645 ms
  Loss rate: 0.92%
Run 2: Report of TCP Vegas — Data Link

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

- **Flow 1**: Ingress (mean 443.07 Mbit/s), Egress (mean 443.03 Mbit/s)
- **Flow 2**: Ingress (mean 304.36 Mbit/s), Egress (mean 304.88 Mbit/s)
- **Flow 3**: Ingress (mean 378.77 Mbit/s), Egress (mean 379.86 Mbit/s)

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

- **Flow 1**: 99th percentile 90.28 ms
- **Flow 2**: 99th percentile 79.93 ms
- **Flow 3**: 99th percentile 100.64 ms
Run 3: Statistics of TCP Vegas

Start at: 2019-10-03 12:12:29  
End at: 2019-10-03 12:12:59  
Local clock offset: -0.087 ms  
Remote clock offset: -0.254 ms

# Below is generated by plot.py at 2019-10-03 16:58:55  
# Datalink statistics
-- Total of 3 flows: 
  Average throughput: 744.76 Mbit/s  
  95th percentile per-packet one-way delay: 86.090 ms  
  Loss rate: 0.53%  
-- Flow 1:  
  Average throughput: 339.90 Mbit/s  
  95th percentile per-packet one-way delay: 68.520 ms  
  Loss rate: 0.30%  
-- Flow 2:  
  Average throughput: 418.43 Mbit/s  
  95th percentile per-packet one-way delay: 85.989 ms  
  Loss rate: 0.70%  
-- Flow 3:  
  Average throughput: 384.27 Mbit/s  
  95th percentile per-packet one-way delay: 114.728 ms  
  Loss rate: 0.77%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2019-10-03 12:51:57
End at: 2019-10-03 12:52:27
Local clock offset: -0.042 ms
Remote clock offset: -0.084 ms

# Below is generated by plot.py at 2019-10-03 16:58:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 625.91 Mbit/s
95th percentile per-packet one-way delay: 73.026 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 246.12 Mbit/s
95th percentile per-packet one-way delay: 66.099 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 393.32 Mbit/s
95th percentile per-packet one-way delay: 76.151 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 358.99 Mbit/s
95th percentile per-packet one-way delay: 77.289 ms
Loss rate: 1.43%
Run 4: Report of TCP Vegas — Data Link

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

- **Throughput (Mbit/s):**
  - Blue dashed line: Flow 1 ingress (mean 246.01 Mbit/s)
  - Blue solid line: Flow 1 egress (mean 246.12 Mbit/s)
  - Green dashed line: Flow 2 ingress (mean 393.51 Mbit/s)
  - Green solid line: Flow 2 egress (mean 393.32 Mbit/s)
  - Red dashed line: Flow 3 ingress (mean 358.73 Mbit/s)
  - Red solid line: Flow 3 egress (mean 358.99 Mbit/s)

- **Per-packet one-way delay (ms):**
  - Blue line: Flow 1 (95th percentile 66.10 ms)
  - Green line: Flow 2 (95th percentile 76.15 ms)
  - Red line: Flow 3 (95th percentile 77.29 ms)
Run 5: Statistics of TCP Vegas

Start at: 2019-10-03 13:31:39
End at: 2019-10-03 13:32:09
Local clock offset: -0.015 ms
Remote clock offset: 0.113 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 699.07 Mbit/s
95th percentile per-packet one-way delay: 79.533 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 361.01 Mbit/s
95th percentile per-packet one-way delay: 76.745 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 411.77 Mbit/s
95th percentile per-packet one-way delay: 82.328 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 195.36 Mbit/s
95th percentile per-packet one-way delay: 71.340 ms
Loss rate: 1.37%
Run 5: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2019-10-03 11:21:34
End at: 2019-10-03 11:22:04
Local clock offset: -0.106 ms
Remote clock offset: -0.212 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 173.86 Mbit/s
95th percentile per-packet one-way delay: 133.157 ms
Loss rate: 0.23%
-- Flow 1:
Average throughput: 36.15 Mbit/s
95th percentile per-packet one-way delay: 112.680 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 162.28 Mbit/s
95th percentile per-packet one-way delay: 138.718 ms
Loss rate: 0.35%
-- Flow 3:
Average throughput: 92.27 Mbit/s
95th percentile per-packet one-way delay: 75.292 ms
Loss rate: 0.06%
Run 1: Report of Verus — Data Link

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

- Flow 1 ingress (mean 36.15 Mbit/s)
- Flow 1 egress (mean 36.15 Mbit/s)
- Flow 2 ingress (mean 161.18 Mbit/s)
- Flow 2 egress (mean 162.28 Mbit/s)
- Flow 3 ingress (mean 91.16 Mbit/s)
- Flow 3 egress (mean 92.27 Mbit/s)

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

- Flow 1 (95th percentile 112.68 ms)
- Flow 2 (95th percentile 138.72 ms)
- Flow 3 (95th percentile 75.29 ms)
Run 2: Statistics of Verus

Start at: 2019-10-03 12:01:56
End at: 2019-10-03 12:02:26
Local clock offset: -0.1 ms
Remote clock offset: 0.087 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 198.20 Mbit/s
95th percentile per-packet one-way delay: 104.355 ms
Loss rate: 0.90%
-- Flow 1:
Average throughput: 60.63 Mbit/s
95th percentile per-packet one-way delay: 81.598 ms
Loss rate: 1.40%
-- Flow 2:
Average throughput: 171.20 Mbit/s
95th percentile per-packet one-way delay: 114.335 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 73.26 Mbit/s
95th percentile per-packet one-way delay: 86.030 ms
Loss rate: 3.75%
Run 2: Report of Verus — Data Link
Run 3: Statistics of Verus

Start at: 2019-10-03 12:41:35
End at: 2019-10-03 12:42:05
Local clock offset: −0.082 ms
Remote clock offset: −0.233 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.09 Mbit/s
95th percentile per-packet one-way delay: 99.759 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 28.36 Mbit/s
95th percentile per-packet one-way delay: 94.583 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 89.10 Mbit/s
95th percentile per-packet one-way delay: 114.606 ms
Loss rate: 2.24%
-- Flow 3:
Average throughput: 21.67 Mbit/s
95th percentile per-packet one-way delay: 69.497 ms
Loss rate: 0.00%
Run 3: Report of Verus — Data Link

Throughput (Mbps)

Flow 1 ingress (mean 28.36 Mbps)  Flow 1 egress (mean 28.36 Mbps)
Flow 2 ingress (mean 89.68 Mbps)  Flow 2 egress (mean 89.10 Mbps)
Flow 3 ingress (mean 21.67 Mbps)  Flow 3 egress (mean 21.67 Mbps)

Per packet one way delay (ms)

Flow 1 (95th percentile 94.58 ms)  Flow 2 (95th percentile 114.61 ms)  Flow 3 (95th percentile 69.50 ms)
Run 4: Statistics of Verus

Start at: 2019-10-03 13:21:19
End at: 2019-10-03 13:21:49
Local clock offset: -0.026 ms
Remote clock offset: -0.179 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 140.42 Mbit/s
95th percentile per-packet one-way delay: 130.830 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 43.53 Mbit/s
95th percentile per-packet one-way delay: 162.411 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 91.36 Mbit/s
95th percentile per-packet one-way delay: 76.005 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 112.59 Mbit/s
95th percentile per-packet one-way delay: 112.802 ms
Loss rate: 2.21%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 43.53 Mbit/s)
- Flow 1 egress (mean 43.53 Mbit/s)
- Flow 2 ingress (mean 91.50 Mbit/s)
- Flow 2 egress (mean 91.36 Mbit/s)
- Flow 3 ingress (mean 113.39 Mbit/s)
- Flow 3 egress (mean 112.59 Mbit/s)
Run 5: Statistics of Verus

Start at: 2019-10-03 14:01:12
End at: 2019-10-03 14:01:42
Local clock offset: -0.008 ms
Remote clock offset: -0.15 ms

# Below is generated by plot.py at 2019-10-03 17:00:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 118.31 Mbit/s
95th percentile per-packet one-way delay: 121.934 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 35.40 Mbit/s
95th percentile per-packet one-way delay: 111.452 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 82.04 Mbit/s
95th percentile per-packet one-way delay: 104.490 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 131.394 ms
Loss rate: 4.81%
Run 5: Report of Verus — Data Link

![Graph showing data link performance over time with throughput and latency metrics for different flows.](https://example.com/graphics/Run5Graph.png)
Run 1: Statistics of PCC-Vivace

Start at: 2019-10-03 11:14:41  
End at: 2019-10-03 11:15:11  
Local clock offset: -0.082 ms  
Remote clock offset: -0.045 ms

# Below is generated by plot.py at 2019-10-03 17:01:30  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 423.79 Mbit/s
  95th percentile per-packet one-way delay: 64.913 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 217.64 Mbit/s
  95th percentile per-packet one-way delay: 64.340 ms
  Loss rate: 0.48%
-- Flow 2:
  Average throughput: 230.24 Mbit/s
  95th percentile per-packet one-way delay: 65.928 ms
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 163.21 Mbit/s
  95th percentile per-packet one-way delay: 65.294 ms
  Loss rate: 1.24%
Run 1: Report of PCC-Vivace — Data Link
Run 2: Statistics of PCC-Vivace

Start at: 2019-10-03 11:54:55
End at: 2019-10-03 11:55:26
Local clock offset: -0.078 ms
Remote clock offset: -0.733 ms

# Below is generated by plot.py at 2019-10-03 17:02:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 470.71 Mbit/s
95th percentile per-packet one-way delay: 102.772 ms
Loss rate: 0.70%
-- Flow 1:
Average throughput: 273.51 Mbit/s
95th percentile per-packet one-way delay: 141.936 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 211.80 Mbit/s
95th percentile per-packet one-way delay: 66.518 ms
Loss rate: 0.66%
-- Flow 3:
Average throughput: 173.27 Mbit/s
95th percentile per-packet one-way delay: 63.455 ms
Loss rate: 1.68%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2019-10-03 12:34:40
End at: 2019-10-03 12:35:10
Local clock offset: -0.039 ms
Remote clock offset: -0.017 ms

# Below is generated by plot.py at 2019-10-03 17:02:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 456.33 Mbit/s
95th percentile per-packet one-way delay: 67.798 ms
Loss rate: 0.51%
-- Flow 1:
Average throughput: 279.39 Mbit/s
95th percentile per-packet one-way delay: 71.115 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 192.24 Mbit/s
95th percentile per-packet one-way delay: 67.362 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 150.68 Mbit/s
95th percentile per-packet one-way delay: 62.193 ms
Loss rate: 1.47%
Run 3: Report of PCC-Vivace — Data Link

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

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

Legend:
- Flow 1 ingress (mean 279.30 Mbps)
- Flow 1 egress (mean 279.39 Mbps)
- Flow 2 ingress (mean 191.84 Mbps)
- Flow 2 egress (mean 192.24 Mbps)
- Flow 3 ingress (mean 151.08 Mbps)
- Flow 3 egress (mean 150.68 Mbps)
Run 4: Statistics of PCC-Vivace

Start at: 2019-10-03 13:14:18
End at: 2019-10-03 13:14:48
Local clock offset: -0.003 ms
Remote clock offset: -0.353 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 426.32 Mbit/s
95th percentile per-packet one-way delay: 164.361 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 268.91 Mbit/s
95th percentile per-packet one-way delay: 139.282 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 196.84 Mbit/s
95th percentile per-packet one-way delay: 266.442 ms
Loss rate: 0.67%
-- Flow 3:
Average throughput: 81.86 Mbit/s
95th percentile per-packet one-way delay: 67.177 ms
Loss rate: 1.80%
Run 4: Report of PCC-Vivace — Data Link

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

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

Start at: 2019-10-03 13:54:13
End at: 2019-10-03 13:54:43
Local clock offset: -0.005 ms
Remote clock offset: 0.471 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 397.86 Mbit/s
95th percentile per-packet one-way delay: 80.077 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 272.21 Mbit/s
95th percentile per-packet one-way delay: 91.320 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 116.66 Mbit/s
95th percentile per-packet one-way delay: 62.172 ms
Loss rate: 0.62%
-- Flow 3:
Average throughput: 147.46 Mbit/s
95th percentile per-packet one-way delay: 69.155 ms
Loss rate: 1.57%
Run 5: Report of PCC-Vivace — Data Link

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

Flow 1 ingress (mean 272.11 Mbit/s)  |  Flow 1 egress (mean 272.21 Mbit/s)
---|---
Flow 2 ingress (mean 116.63 Mbit/s)  |  Flow 2 egress (mean 116.66 Mbit/s)
Flow 3 ingress (mean 147.94 Mbit/s)  |  Flow 3 egress (mean 147.46 Mbit/s)

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

Flow 1 (95th percentile 91.32 ms)  |  Flow 2 (95th percentile 62.17 ms)  |  Flow 3 (95th percentile 69.16 ms)
Run 1: Statistics of WebRTC media

Start at: 2019-10-03 10:54:06
End at: 2019-10-03 10:54:36
Local clock offset: -0.084 ms
Remote clock offset: -0.095 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.15 Mbit/s
  95th percentile per-packet one-way delay: 63.260 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 0.07 Mbit/s
  95th percentile per-packet one-way delay: 63.547 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 0.07 Mbit/s
  95th percentile per-packet one-way delay: 63.161 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 62.554 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

![Graph showing throughput and packet loss over time for different flows.](image-url)
Run 2: Statistics of WebRTC media

Start at: 2019-10-03 11:34:05
End at: 2019-10-03 11:34:35
Local clock offset: -0.151 ms
Remote clock offset: -0.05 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 62.452 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.511 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 60.093 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 60.018 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

Graph 1: Throughput (Mbps)

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.07 Mbit/s)
- Flow 2 egress (mean 0.07 Mbit/s)
- Flow 3 ingress (mean 0.07 Mbit/s)
- Flow 3 egress (mean 0.07 Mbit/s)

Graph 2: Per packet one way delay (ms)

- Flow 1 (95th percentile 62.51 ms)
- Flow 2 (95th percentile 60.09 ms)
- Flow 3 (95th percentile 60.02 ms)
Run 3: Statistics of WebRTC media

Start at: 2019-10-03 12:14:20
End at: 2019-10-03 12:14:50
Local clock offset: -0.123 ms
Remote clock offset: -0.145 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 65.585 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 59.939 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 60.197 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 65.883 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link

**Throughput (Mbit/s)**

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

**Per-packet one-way delay [ms]**

- **Flow 1 (95th percentile 59.94 ms)**
- **Flow 2 (95th percentile 60.20 ms)**
- **Flow 3 (95th percentile 65.88 ms)**
Run 4: Statistics of WebRTC media

Start at: 2019-10-03 12:53:43
End at: 2019-10-03 12:54:13
Local clock offset: -0.035 ms
Remote clock offset: -0.09 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 63.265 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 63.341 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 60.271 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 63.158 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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![Graph 1: Throughput](image1)

- Flow 1 ingress (mean 0.05 Mbit/s)
- Flow 1 egress (mean 0.05 Mbit/s)
- Flow 2 ingress (mean 0.06 Mbit/s)
- Flow 2 egress (mean 0.06 Mbit/s)
- Flow 3 ingress (mean 0.07 Mbit/s)
- Flow 3 egress (mean 0.07 Mbit/s)

![Graph 2: Packet Delay](image2)

- Flow 1 (95th percentile 63.34 ms)
- Flow 2 (95th percentile 60.27 ms)
- Flow 3 (95th percentile 61.16 ms)

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Run 5: Statistics of WebRTC media

Start at: 2019-10-03 13:33:29
End at: 2019-10-03 13:33:59
Local clock offset: -0.021 ms
Remote clock offset: -0.137 ms

# Below is generated by plot.py at 2019-10-03 17:03:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 62.520 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 62.582 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 62.388 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.07 Mbit/s
95th percentile per-packet one-way delay: 60.239 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Flow 1 ingress (mean 0.05 Mbit/s)  Flow 1 egress (mean 0.05 Mbit/s)
Flow 2 ingress (mean 0.07 Mbit/s)  Flow 2 egress (mean 0.07 Mbit/s)
Flow 3 ingress (mean 0.07 Mbit/s)  Flow 3 egress (mean 0.07 Mbit/s)

Per packet one way delay (ms)

Flow 1 (95th percentile 62.58 ms)  Flow 2 (95th percentile 62.39 ms)  Flow 3 (95th percentile 60.24 ms)