Pantheon Report

Data path: Saudi Arabia on enp2s0 (remote) → AWS India 2 on ens5 (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 nets.org.sg and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1054-aws
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 @ de42328552b3776a75a932a94dfafdf722537b0ec
third_party/fillp @ d6da1459332fceedee56963885d7e6a17e6a32d4519
third_party/fillp-sheep @ 0e5bb722943babc22b090d2c64fcd45e12e923f9
third_party/genericCC @ d0153f8e594aa89e93b032143cedbbfe58e562f4
third_party/indigo @ 2601c92e4aa9d5838dc4dfe0edcbf90c077e64d
third_party/libutp @ b3456b942e2826f2bb179eeab4a906ce6bb7cf3cf
third_party/muses @ 5ce721187ad823da20955377730c746486ca4966
third_party/muses_dtree @ 11c9498ecb1596b02cc896791a02d03172af7ed
M helpers/__init__.pyc
M helpers/context.pyc
M helpers/utils.pyc
third_party/pantheon-tunnel @ f866d3f58d27af942717625ee3a354cc2e02bd
third_party/pcc @ 1af8958fa0d66d18b623c091e35fe872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3eff4f2
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3db2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d46ad18c74e9415f19a26
M src/examples/cellsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from Saudi Arabia to AWS India 2, 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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Run 1: Statistics of TCP BBR

Start at: 2019-12-11 15:12:32
End at: 2019-12-11 15:13:02
Local clock offset: 6.454 ms
Remote clock offset: -43.079 ms
Run 1: Report of TCP BBR — Data Link

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Run 2: Statistics of TCP BBR

Start at: 2019-12-11 15:47:35
End at: 2019-12-11 15:48:05
Local clock offset: 4.955 ms
Remote clock offset: -49.786 ms
Run 2: Report of TCP BBR — Data Link

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Run 3: Statistics of TCP BBR

Start at: 2019-12-11 16:22:48
End at: 2019-12-11 16:23:18
Local clock offset: 6.527 ms
Remote clock offset: -62.694 ms
Run 3: Report of TCP BBR — Data Link

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Run 4: Statistics of TCP BBR

Start at: 2019-12-11 16:57:30
End at: 2019-12-11 16:58:00
Local clock offset: 6.132 ms
Remote clock offset: -47.313 ms
Run 4: Report of TCP BBR — Data Link

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Run 5: Statistics of TCP BBR

Start at: 2019-12-11 17:32:32
End at: 2019-12-11 17:33:02
Local clock offset: 6.095 ms
Remote clock offset: -47.83 ms
Run 5: Report of TCP BBR — Data Link

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Run 1: Statistics of Copa

Start at: 2019-12-11 15:06:50
End at: 2019-12-11 15:07:20
Local clock offset: 0.949 ms
Remote clock offset: -65.562 ms

# Below is generated by plot.py at 2019-12-11 17:52:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 162.06 Mbit/s
95th percentile per-packet one-way delay: 167.273 ms
Loss rate: 0.86%
-- Flow 1:
Average throughput: 115.40 Mbit/s
95th percentile per-packet one-way delay: 165.232 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 47.65 Mbit/s
95th percentile per-packet one-way delay: 173.913 ms
Loss rate: 1.38%
-- Flow 3:
Average throughput: 46.15 Mbit/s
95th percentile per-packet one-way delay: 164.545 ms
Loss rate: 3.25%
Run 1: Report of Copa — Data Link

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**Graph 1:** Throughput (Mbps) vs. Time (s)
- Flow 1 ingress (mean 115.09 Mbps)
- Flow 1 egress (mean 115.40 Mbps)
- Flow 2 ingress (mean 47.76 Mbps)
- Flow 2 egress (mean 47.65 Mbps)
- Flow 3 ingress (mean 46.71 Mbps)
- Flow 3 egress (mean 46.12 Mbps)

**Graph 2:** Per-packet one-way delay (ms) vs. Time (s)
- Flow 1 (95th percentile 165.23 ms)
- Flow 2 (95th percentile 173.91 ms)
- Flow 3 (95th percentile 164.54 ms)
Run 2: Statistics of Copa

Start at: 2019-12-11 15:41:56
End at: 2019-12-11 15:42:26
Local clock offset: 6.835 ms
Remote clock offset: -48.803 ms

# Below is generated by plot.py at 2019-12-11 17:52:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 142.39 Mbit/s
95th percentile per-packet one-way delay: 158.116 ms
Loss rate: 0.87%
-- Flow 1:
Average throughput: 88.96 Mbit/s
95th percentile per-packet one-way delay: 158.926 ms
Loss rate: 0.41%
-- Flow 2:
Average throughput: 65.58 Mbit/s
95th percentile per-packet one-way delay: 157.019 ms
Loss rate: 1.40%
-- Flow 3:
Average throughput: 31.69 Mbit/s
95th percentile per-packet one-way delay: 154.237 ms
Loss rate: 2.60%
Run 2: Report of Copa — Data Link

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

- Flow 1 ingress (mean 88.73 Mbit/s)
- Flow 1 egress (mean 88.96 Mbit/s)
- Flow 2 ingress (mean 65.83 Mbit/s)
- Flow 2 egress (mean 65.58 Mbit/s)
- Flow 3 ingress (mean 31.87 Mbit/s)
- Flow 3 egress (mean 31.69 Mbit/s)

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

- Flow 1 (95th percentile 158.93 ms)
- Flow 2 (95th percentile 157.02 ms)
- Flow 3 (95th percentile 154.24 ms)
Run 3: Statistics of Copa

Start at: 2019-12-11 16:17:05
End at: 2019-12-11 16:17:35
Local clock offset: 1.47 ms
Remote clock offset: -45.776 ms

# Below is generated by plot.py at 2019-12-11 17:53:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 177.09 Mbit/s
95th percentile per-packet one-way delay: 146.876 ms
Loss rate: 0.72%
-- Flow 1:
Average throughput: 145.78 Mbit/s
95th percentile per-packet one-way delay: 146.680 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 30.96 Mbit/s
95th percentile per-packet one-way delay: 148.073 ms
Loss rate: 3.05%
-- Flow 3:
Average throughput: 33.29 Mbit/s
95th percentile per-packet one-way delay: 147.703 ms
Loss rate: 3.80%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2019-12-11 16:51:53
End at: 2019-12-11 16:52:23
Local clock offset: 0.712 ms
Remote clock offset: -40.456 ms

# Below is generated by plot.py at 2019-12-11 17:53:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 129.11 Mbit/s
95th percentile per-packet one-way delay: 145.404 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 81.76 Mbit/s
95th percentile per-packet one-way delay: 145.365 ms
Loss rate: 0.86%
-- Flow 2:
Average throughput: 49.57 Mbit/s
95th percentile per-packet one-way delay: 142.235 ms
Loss rate: 1.23%
-- Flow 3:
Average throughput: 44.11 Mbit/s
95th percentile per-packet one-way delay: 151.275 ms
Loss rate: 1.30%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2019-12-11 17:26:52
End at: 2019-12-11 17:27:22
Local clock offset: 6.343 ms
Remote clock offset: -43.807 ms

# Below is generated by plot.py at 2019-12-11 17:53:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 152.44 Mbit/s
  95th percentile per-packet one-way delay: 155.549 ms
  Loss rate: 0.92%
-- Flow 1:
  Average throughput: 86.36 Mbit/s
  95th percentile per-packet one-way delay: 154.570 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 82.13 Mbit/s
  95th percentile per-packet one-way delay: 156.983 ms
  Loss rate: 2.07%
-- Flow 3:
  Average throughput: 35.37 Mbit/s
  95th percentile per-packet one-way delay: 150.936 ms
  Loss rate: 2.00%
Run 5: Report of Copa — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 85.81 Mbps)
  - Flow 1 egress (mean 86.36 Mbps)
  - Flow 2 ingress (mean 83.01 Mbps)
  - Flow 2 egress (mean 82.13 Mbps)
  - Flow 3 ingress (mean 35.35 Mbps)
  - Flow 3 egress (mean 35.37 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile 154.57 ms)
  - Flow 2 (95th percentile 156.99 ms)
  - Flow 3 (95th percentile 150.94 ms)
Run 1: Statistics of TCP Cubic

Start at: 2019-12-11 14:51:57
End at: 2019-12-11 14:52:27
Local clock offset: 3.67 ms
Remote clock offset: -81.141 ms

# Below is generated by plot.py at 2019-12-11 17:53:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 339.01 Mbit/s
  95th percentile per-packet one-way delay: 195.894 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 229.74 Mbit/s
  95th percentile per-packet one-way delay: 198.119 ms
  Loss rate: 0.58%
-- Flow 2:
  Average throughput: 162.76 Mbit/s
  95th percentile per-packet one-way delay: 193.932 ms
  Loss rate: 0.98%
-- Flow 3:
  Average throughput: 3.33 Mbit/s
  95th percentile per-packet one-way delay: 183.497 ms
  Loss rate: 6.08%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2019-12-11 15:26:52
End at: 2019-12-11 15:27:22
Local clock offset: 7.063 ms
Remote clock offset: -49.383 ms

# Below is generated by plot.py at 2019-12-11 17:53:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 328.88 Mbit/s
95th percentile per-packet one-way delay: 168.720 ms
Loss rate: 0.77%
-- Flow 1:
Average throughput: 201.74 Mbit/s
95th percentile per-packet one-way delay: 158.380 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 130.96 Mbit/s
95th percentile per-packet one-way delay: 222.156 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 122.55 Mbit/s
95th percentile per-packet one-way delay: 232.297 ms
Loss rate: 2.03%
Run 3: Statistics of TCP Cubic

Start at: 2019-12-11 16:01:43
End at: 2019-12-11 16:02:13
Local clock offset: 4.349 ms
Remote clock offset: -46.482 ms

# Below is generated by plot.py at 2019-12-11 17:53:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 344.73 Mbit/s
  95th percentile per-packet one-way delay: 167.985 ms
  Loss rate: 0.76%
-- Flow 1:
  Average throughput: 209.47 Mbit/s
  95th percentile per-packet one-way delay: 164.069 ms
  Loss rate: 0.35%
-- Flow 2:
  Average throughput: 144.42 Mbit/s
  95th percentile per-packet one-way delay: 159.443 ms
  Loss rate: 1.07%
-- Flow 3:
  Average throughput: 119.73 Mbit/s
  95th percentile per-packet one-way delay: 240.043 ms
  Loss rate: 2.16%
Run 3: Report of TCP Cubic — Data Link

[Graph showing throughput and packet delay over time for different flows with mean values provided]

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Run 4: Statistics of TCP Cubic

Start at: 2019-12-11 16:36:58
End at: 2019-12-11 16:37:28
Local clock offset: 6.619 ms
Remote clock offset: -45.499 ms

# Below is generated by plot.py at 2019-12-11 17:55:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 317.82 Mbit/s
95th percentile per-packet one-way delay: 153.070 ms
Loss rate: 0.80%
-- Flow 1:
Average throughput: 210.41 Mbit/s
95th percentile per-packet one-way delay: 151.892 ms
Loss rate: 0.38%
-- Flow 2:
Average throughput: 101.36 Mbit/s
95th percentile per-packet one-way delay: 152.142 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 122.18 Mbit/s
95th percentile per-packet one-way delay: 186.258 ms
Loss rate: 2.29%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

Start at: 2019-12-11 17:11:39
End at: 2019-12-11 17:12:09
Local clock offset: 1.637 ms
Remote clock offset: -37.135 ms

# Below is generated by plot.py at 2019-12-11 17:56:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 355.30 Mbit/s
95th percentile per-packet one-way delay: 147.532 ms
Loss rate: 0.79%
-- Flow 1:
Average throughput: 207.31 Mbit/s
95th percentile per-packet one-way delay: 147.477 ms
Loss rate: 0.49%
-- Flow 2:
Average throughput: 218.28 Mbit/s
95th percentile per-packet one-way delay: 148.349 ms
Loss rate: 1.11%
-- Flow 3:
Average throughput: 8.76 Mbit/s
95th percentile per-packet one-way delay: 139.069 ms
Loss rate: 5.42%
Run 5: Report of TCP Cubic — Data Link

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

- Flow 1 ingress (mean 206.92 Mbit/s)
- Flow 1 egress (mean 207.31 Mbit/s)
- Flow 2 ingress (mean 218.47 Mbit/s)
- Flow 2 egress (mean 218.28 Mbit/s)
- Flow 3 ingress (mean 9.07 Mbit/s)
- Flow 3 egress (mean 8.76 Mbit/s)

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

- Flow 1 (95th percentile 147.48 ms)
- Flow 2 (95th percentile 148.35 ms)
- Flow 3 (95th percentile 139.07 ms)
Run 1: Statistics of FillP

Start at: 2019-12-11 15:00:45
End at: 2019-12-11 15:01:15
Local clock offset: 1.718 ms
Remote clock offset: -51.207 ms

# Below is generated by plot.py at 2019-12-11 17:58:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 400.47 Mbit/s
95th percentile per-packet one-way delay: 406.932 ms
Loss rate: 2.77%
-- Flow 1:
Average throughput: 262.37 Mbit/s
95th percentile per-packet one-way delay: 418.258 ms
Loss rate: 2.30%
-- Flow 2:
Average throughput: 158.31 Mbit/s
95th percentile per-packet one-way delay: 398.617 ms
Loss rate: 3.37%
-- Flow 3:
Average throughput: 124.49 Mbit/s
95th percentile per-packet one-way delay: 332.007 ms
Loss rate: 4.41%
Run 1: Report of FillP — Data Link

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**Throughput (Mb/s)**

- **Flow 1 ingress (mean 266.75 Mb/s)**
- **Flow 1 egress (mean 262.37 Mb/s)**
- **Flow 2 ingress (mean 192.24 Mb/s)**
- **Flow 2 egress (mean 158.31 Mb/s)**
- **Flow 3 ingress (mean 127.24 Mb/s)**
- **Flow 3 egress (mean 124.49 Mb/s)**

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**Per-packet delivery delay (ms)**

- **Flow 1 (95th percentile 418.26 ms)**
- **Flow 2 (95th percentile 398.62 ms)**
- **Flow 3 (95th percentile 332.01 ms)**
Run 2: Statistics of FillP

Start at: 2019-12-11 15:35:47
End at: 2019-12-11 15:36:17
Local clock offset: 7.365 ms
Remote clock offset: -46.719 ms

# Below is generated by plot.py at 2019-12-11 17:58:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 425.77 Mbit/s
95th percentile per-packet one-way delay: 410.435 ms
Loss rate: 4.35%
-- Flow 1:
Average throughput: 264.92 Mbit/s
95th percentile per-packet one-way delay: 428.999 ms
Loss rate: 1.86%
-- Flow 2:
Average throughput: 179.40 Mbit/s
95th percentile per-packet one-way delay: 369.385 ms
Loss rate: 5.72%
-- Flow 3:
Average throughput: 127.94 Mbit/s
95th percentile per-packet one-way delay: 273.477 ms
Loss rate: 14.54%
Run 2: Report of FillP — Data Link

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

- Flow 1 ingress (mean 267.96 Mbps)
- Flow 1 egress (mean 264.92 Mbps)
- Flow 2 ingress (mean 182.67 Mbps)
- Flow 2 egress (mean 179.40 Mbps)
- Flow 3 ingress (mean 137.86 Mbps)
- Flow 3 egress (mean 127.94 Mbps)

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

- Flow 1 (95th percentile 429.00 ms)
- Flow 2 (95th percentile 369.38 ms)
- Flow 3 (95th percentile 273.48 ms)
Run 3: Statistics of FillP

Start at: 2019-12-11 16:10:46
End at: 2019-12-11 16:11:16
Local clock offset: 5.03 ms
Remote clock offset: -48.12 ms

# Below is generated by plot.py at 2019-12-11 17:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 428.84 Mbit/s
95th percentile per-packet one-way delay: 377.133 ms
Loss rate: 2.47%
-- Flow 1:
Average throughput: 258.41 Mbit/s
95th percentile per-packet one-way delay: 380.299 ms
Loss rate: 1.63%
-- Flow 2:
Average throughput: 193.97 Mbit/s
95th percentile per-packet one-way delay: 356.320 ms
Loss rate: 2.73%
-- Flow 3:
Average throughput: 155.61 Mbit/s
95th percentile per-packet one-way delay: 423.132 ms
Loss rate: 6.56%
Run 3: Report of FillP — Data Link

![Graphs showing data link performance metrics](image)

- **Flow 1** (mean 261.81 Mbit/s)
- **Flow 2** (mean 197.39 Mbit/s)
- **Flow 3** (mean 162.30 Mbit/s)

![Graphs showing one-way delay](image)

- **Flow 1** (95th percentile 380.30 ms)
- **Flow 2** (95th percentile 356.32 ms)
- **Flow 3** (95th percentile 423.13 ms)
Run 4: Statistics of FillP

Start at: 2019-12-11 16:45:44
End at: 2019-12-11 16:46:14
Local clock offset: 3.761 ms
Remote clock offset: -47.405 ms

# Below is generated by plot.py at 2019-12-11 17:58:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 309.52 Mbit/s
95th percentile per-packet one-way delay: 367.929 ms
Loss rate: 2.84%
-- Flow 1:
Average throughput: 131.35 Mbit/s
95th percentile per-packet one-way delay: 353.546 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 208.11 Mbit/s
95th percentile per-packet one-way delay: 385.201 ms
Loss rate: 1.90%
-- Flow 3:
Average throughput: 128.76 Mbit/s
95th percentile per-packet one-way delay: 300.867 ms
Loss rate: 7.49%
Run 4: Report of FillP — Data Link

**Graph 1:**
- **Throughput (Mb/s):**
  - Flow 1 ingress (mean 133.60 Mb/s)
  - Flow 1 egress (mean 131.35 Mb/s)
  - Flow 2 ingress (mean 210.10 Mb/s)
  - Flow 2 egress (mean 208.11 Mb/s)
  - Flow 3 ingress (mean 136.19 Mb/s)
  - Flow 3 egress (mean 128.76 Mb/s)

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 353.55 ms)
  - Flow 2 (95th percentile 385.20 ms)
  - Flow 3 (95th percentile 300.87 ms)
Run 5: Statistics of FillP

Start at: 2019-12-11 17:20:31
End at: 2019-12-11 17:21:01
Local clock offset: 1.404 ms
Remote clock offset: -47.639 ms

# Below is generated by plot.py at 2019-12-11 17:59:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 432.44 Mbit/s
95th percentile per-packet one-way delay: 412.488 ms
Loss rate: 4.30%
-- Flow 1:
Average throughput: 277.00 Mbit/s
95th percentile per-packet one-way delay: 432.277 ms
Loss rate: 2.88%
-- Flow 2:
Average throughput: 177.28 Mbit/s
95th percentile per-packet one-way delay: 379.901 ms
Loss rate: 4.97%
-- Flow 3:
Average throughput: 121.64 Mbit/s
95th percentile per-packet one-way delay: 309.670 ms
Loss rate: 11.74%
Run 5: Report of FillP — Data Link
Run 1: Statistics of FillP-Sheep

Start at: 2019-12-11 14:56:19
End at: 2019-12-11 14:56:49
Local clock offset: 1.854 ms
Remote clock offset: -52.409 ms

# Below is generated by plot.py at 2019-12-11 17:59:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 409.82 Mbit/s
  95th percentile per-packet one-way delay: 420.117 ms
  Loss rate: 3.74%
-- Flow 1:
  Average throughput: 249.68 Mbit/s
  95th percentile per-packet one-way delay: 402.328 ms
  Loss rate: 1.64%
-- Flow 2:
  Average throughput: 177.93 Mbit/s
  95th percentile per-packet one-way delay: 465.109 ms
  Loss rate: 7.97%
-- Flow 3:
  Average throughput: 129.30 Mbit/s
  95th percentile per-packet one-way delay: 273.213 ms
  Loss rate: 3.55%
Run 1: Report of FillP-Sheep — Data Link

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

- **Flow 1 Ingress** (mean 252.14 Mbps)
- **Flow 1 Egress** (mean 249.68 Mbps)
- **Flow 2 Ingress** (mean 191.43 Mbps)
- **Flow 2 Egress** (mean 177.93 Mbps)
- **Flow 3 Ingress** (mean 131.44 Mbps)
- **Flow 3 Egress** (mean 129.30 Mbps)

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

- **Flow 1** (95th percentile 402.33 ms)
- **Flow 2** (95th percentile 465.11 ms)
- **Flow 3** (95th percentile 273.21 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-12-11 15:31:18
End at: 2019-12-11 15:31:48
Local clock offset: 3.09 ms
Remote clock offset: -49.286 ms

# Below is generated by plot.py at 2019-12-11 18:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 429.28 Mbit/s
95th percentile per-packet one-way delay: 377.881 ms
Loss rate: 7.77%
-- Flow 1:
Average throughput: 259.99 Mbit/s
95th percentile per-packet one-way delay: 314.369 ms
Loss rate: 3.16%
-- Flow 2:
Average throughput: 199.19 Mbit/s
95th percentile per-packet one-way delay: 415.814 ms
Loss rate: 12.77%
-- Flow 3:
Average throughput: 114.85 Mbit/s
95th percentile per-packet one-way delay: 415.278 ms
Loss rate: 18.26%
Run 2: Report of FillP-Sheep — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 255.98 Mbit/s)  Flow 1 egress (mean 259.99 Mbit/s)
Flow 2 ingress (mean 208.30 Mbit/s)  Flow 2 egress (mean 199.19 Mbit/s)
Flow 3 ingress (mean 124.69 Mbit/s)  Flow 3 egress (mean 114.85 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 314.37 ms)  Flow 2 (95th percentile 415.81 ms)  Flow 3 (95th percentile 415.28 ms)
Run 3: Statistics of FillP-Sheep

Start at: 2019-12-11 16:06:10
End at: 2019-12-11 16:06:40
Local clock offset: 4.139 ms
Remote clock offset: -56.741 ms

# Below is generated by plot.py at 2019-12-11 18:02:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 390.49 Mbit/s
95th percentile per-packet one-way delay: 396.664 ms
Loss rate: 2.16%
-- Flow 1:
Average throughput: 244.40 Mbit/s
95th percentile per-packet one-way delay: 412.249 ms
Loss rate: 0.94%
-- Flow 2:
Average throughput: 167.25 Mbit/s
95th percentile per-packet one-way delay: 285.951 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 132.11 Mbit/s
95th percentile per-packet one-way delay: 367.671 ms
Loss rate: 10.10%
Run 3: Report of FillP-Sheep — Data Link
Run 4: Statistics of FillP-Sheep

Start at: 2019-12-11 16:41:23
End at: 2019-12-11 16:41:53
Local clock offset: 6.111 ms
Remote clock offset: -46.923 ms

# Below is generated by plot.py at 2019-12-11 18:03:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 406.79 Mbit/s
95th percentile per-packet one-way delay: 453.188 ms
Loss rate: 2.82%
-- Flow 1:
Average throughput: 268.75 Mbit/s
95th percentile per-packet one-way delay: 430.533 ms
Loss rate: 1.82%
-- Flow 2:
Average throughput: 161.94 Mbit/s
95th percentile per-packet one-way delay: 476.114 ms
Loss rate: 3.91%
-- Flow 3:
Average throughput: 101.05 Mbit/s
95th percentile per-packet one-way delay: 422.875 ms
Loss rate: 7.18%
Run 4: Report of FillP-Sheep — Data Link
Run 5: Statistics of FillP-Sheep

Start at: 2019-12-11 17:16:06
End at: 2019-12-11 17:16:36
Local clock offset: 5.993 ms
Remote clock offset: -36.728 ms

# Below is generated by plot.py at 2019-12-11 18:04:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 416.44 Mbit/s
  95th percentile per-packet one-way delay: 368.019 ms
  Loss rate: 3.66%
-- Flow 1:
  Average throughput: 262.76 Mbit/s
  95th percentile per-packet one-way delay: 384.770 ms
  Loss rate: 1.46%
-- Flow 2:
  Average throughput: 178.57 Mbit/s
  95th percentile per-packet one-way delay: 362.563 ms
  Loss rate: 4.77%
-- Flow 3:
  Average throughput: 112.17 Mbit/s
  95th percentile per-packet one-way delay: 235.018 ms
  Loss rate: 14.57%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2019-12-11 14:59:12
End at: 2019-12-11 14:59:42
Local clock offset: 1.406 ms
Remote clock offset: -77.437 ms

# Below is generated by plot.py at 2019-12-11 18:04:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 235.15 Mbit/s
  95th percentile per-packet one-way delay: 189.069 ms
  Loss rate: 1.06%
-- Flow 1:
  Average throughput: 139.63 Mbit/s
  95th percentile per-packet one-way delay: 188.740 ms
  Loss rate: 0.71%
-- Flow 2:
  Average throughput: 91.09 Mbit/s
  95th percentile per-packet one-way delay: 184.120 ms
  Loss rate: 1.11%
-- Flow 3:
  Average throughput: 109.03 Mbit/s
  95th percentile per-packet one-way delay: 205.678 ms
  Loss rate: 2.32%
Run 1: Report of Indigo — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 139.67 Mbps)  Flow 1 egress (mean 139.63 Mbps)
Flow 2 ingress (mean 91.19 Mbps)  Flow 2 egress (mean 91.09 Mbps)
Flow 3 ingress (mean 109.27 Mbps)  Flow 3 egress (mean 109.03 Mbps)

Per packet interarrival delay (ms)

Time (s)

Flow 1 (95th percentile 188.74 ms)  Flow 2 (95th percentile 184.12 ms)  Flow 3 (95th percentile 205.68 ms)
Run 2: Statistics of Indigo

Start at: 2019-12-11 15:34:13
End at: 2019-12-11 15:34:43
Local clock offset: 7.091 ms
Remote clock offset: -40.954 ms

# Below is generated by plot.py at 2019-12-11 18:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.37 Mbit/s
95th percentile per-packet one-way delay: 172.461 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 131.98 Mbit/s
95th percentile per-packet one-way delay: 160.630 ms
Loss rate: 0.72%
-- Flow 2:
Average throughput: 141.11 Mbit/s
95th percentile per-packet one-way delay: 186.442 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 98.87 Mbit/s
95th percentile per-packet one-way delay: 178.109 ms
Loss rate: 2.50%
Run 2: Report of Indigo — Data Link

[Graph showing throughput and packet one-way delay over time for different flows with mean values provided]
Run 3: Statistics of Indigo

Start at: 2019-12-11 16:09:10
End at: 2019-12-11 16:09:40
Local clock offset: 0.755 ms
Remote clock offset: -47.615 ms

# Below is generated by plot.py at 2019-12-11 18:04:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 279.75 Mbit/s
95th percentile per-packet one-way delay: 187.540 ms
Loss rate: 0.98%
-- Flow 1:
Average throughput: 165.35 Mbit/s
95th percentile per-packet one-way delay: 186.265 ms
Loss rate: 0.63%
-- Flow 2:
Average throughput: 135.49 Mbit/s
95th percentile per-packet one-way delay: 185.137 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 76.00 Mbit/s
95th percentile per-packet one-way delay: 202.872 ms
Loss rate: 3.14%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2019-12-11 16:44:16  
End at: 2019-12-11 16:44:46  
Local clock offset: 1.837 ms  
Remote clock offset: -36.639 ms  

# Below is generated by plot.py at 2019-12-11 18:04:32  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 142.70 Mbit/s  
95th percentile per-packet one-way delay: 140.006 ms  
Loss rate: 1.21%  
-- Flow 1:  
Average throughput: 66.98 Mbit/s  
95th percentile per-packet one-way delay: 138.467 ms  
Loss rate: 0.79%  
-- Flow 2:  
Average throughput: 83.10 Mbit/s  
95th percentile per-packet one-way delay: 140.689 ms  
Loss rate: 1.14%  
-- Flow 3:  
Average throughput: 63.84 Mbit/s  
95th percentile per-packet one-way delay: 141.960 ms  
Loss rate: 2.70%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

Start at: 2019-12-11 17:18:59
End at: 2019-12-11 17:19:29
Local clock offset: 5.819 ms
Remote clock offset: -36.338 ms

# Below is generated by plot.py at 2019-12-11 18:04:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 219.89 Mbit/s
  95th percentile per-packet one-way delay: 178.983 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 126.39 Mbit/s
  95th percentile per-packet one-way delay: 167.960 ms
  Loss rate: 0.68%
-- Flow 2:
  Average throughput: 83.12 Mbit/s
  95th percentile per-packet one-way delay: 150.630 ms
  Loss rate: 0.95%
-- Flow 3:
  Average throughput: 118.37 Mbit/s
  95th percentile per-packet one-way delay: 209.238 ms
  Loss rate: 2.68%
Run 5: Report of Indigo — Data Link

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

![Graph 2: Per-packet one-way delay vs Time](image2.png)
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-12-11 15:18:16
End at: 2019-12-11 15:18:46
Local clock offset: 6.743 ms
Remote clock offset: -76.574 ms

# Below is generated by plot.py at 2019-12-11 18:04:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 258.98 Mbit/s
95th percentile per-packet one-way delay: 181.194 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 176.70 Mbit/s
95th percentile per-packet one-way delay: 181.239 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 113.16 Mbit/s
95th percentile per-packet one-way delay: 181.181 ms
Loss rate: 1.02%
-- Flow 3:
Average throughput: 51.15 Mbit/s
95th percentile per-packet one-way delay: 178.449 ms
Loss rate: 6.26%
Run 1: Report of Indigo-MusesC3 — Data Link

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

- **Throughput**:
  - Flow 1 ingress (mean 175.51 Mbit/s)
  - Flow 1 egress (mean 176.70 Mbit/s)
  - Flow 2 ingress (mean 112.94 Mbit/s)
  - Flow 2 egress (mean 113.16 Mbit/s)
  - Flow 3 ingress (mean 53.05 Mbit/s)
  - Flow 3 egress (mean 51.15 Mbit/s)

- **Per-packet one-way delay**:
  - Flow 1 (95th percentile 181.24 ms)
  - Flow 2 (95th percentile 181.11 ms)
  - Flow 3 (95th percentile 178.45 ms)
Run 2: Statistics of Indigo-MusesC3

Start at: 2019-12-11 15:53:17
End at: 2019-12-11 15:53:47
Local clock offset: 5.348 ms
Remote clock offset: -42.51 ms

# Below is generated by plot.py at 2019-12-11 18:05:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 265.44 Mbit/s
95th percentile per-packet one-way delay: 148.287 ms
Loss rate: 0.45%
-- Flow 1:
Average throughput: 193.03 Mbit/s
95th percentile per-packet one-way delay: 148.285 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 108.98 Mbit/s
95th percentile per-packet one-way delay: 148.485 ms
Loss rate: 0.83%
-- Flow 3:
Average throughput: 22.72 Mbit/s
95th percentile per-packet one-way delay: 144.710 ms
Loss rate: 7.48%
Run 2: Report of Indigo-MusesC3 — Data Link

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

Throughput (Mbps)

- Flow 1 ingress (mean 191.86 Mbps)
- Flow 1 egress (mean 193.03 Mbps)
- Flow 2 ingress (mean 108.72 Mbps)
- Flow 2 egress (mean 108.98 Mbps)
- Flow 3 ingress (mean 23.64 Mbps)
- Flow 3 egress (mean 22.72 Mbps)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile 148.28 ms)
- Flow 2 (95th percentile 148.49 ms)
- Flow 3 (95th percentile 144.71 ms)
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-12-11 16:28:33
End at: 2019-12-11 16:29:03
Local clock offset: 6.127 ms
Remote clock offset: -51.779 ms

# Below is generated by plot.py at 2019-12-11 18:05:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 250.85 Mbit/s
95th percentile per-packet one-way delay: 157.478 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 166.83 Mbit/s
95th percentile per-packet one-way delay: 157.449 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 125.87 Mbit/s
95th percentile per-packet one-way delay: 157.646 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 28.80 Mbit/s
95th percentile per-packet one-way delay: 154.403 ms
Loss rate: 8.82%
Run 3: Report of Indigo-MusesC3 — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 165.81 Mbit/s)
Flow 1 egress (mean 166.83 Mbit/s)
Flow 2 ingress (mean 125.65 Mbit/s)
Flow 2 egress (mean 125.87 Mbit/s)
Flow 3 ingress (mean 10.66 Mbit/s)
Flow 3 egress (mean 28.80 Mbit/s)

Per packet one way delay (ms)

Time (s)

Flow 1 (95th percentile 157.45 ms)
Flow 2 (95th percentile 157.65 ms)
Flow 3 (95th percentile 154.40 ms)
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-12-11 17:03:14
End at: 2019-12-11 17:03:44
Local clock offset: 6.574 ms
Remote clock offset: -43.984 ms

# Below is generated by plot.py at 2019-12-11 18:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 267.02 Mbit/s
95th percentile per-packet one-way delay: 150.798 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 163.25 Mbit/s
95th percentile per-packet one-way delay: 150.737 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 148.07 Mbit/s
95th percentile per-packet one-way delay: 151.202 ms
Loss rate: 0.79%
-- Flow 3:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 149.395 ms
Loss rate: 5.38%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Start at: 2019-12-11 17:38:12
End at: 2019-12-11 17:38:42
Local clock offset: 6.692 ms
Remote clock offset: -47.806 ms

# Below is generated by plot.py at 2019-12-11 18:05:25
# Datalink statistics
-- Total of 3 flows:
Average throughput: 260.25 Mbit/s
95th percentile per-packet one-way delay: 154.698 ms
Loss rate: 0.57%
-- Flow 1:
Average throughput: 171.33 Mbit/s
95th percentile per-packet one-way delay: 154.693 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 128.64 Mbit/s
95th percentile per-packet one-way delay: 154.873 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: 152.146 ms
Loss rate: 6.96%
Run 5: Report of Indigo-MusesC3 — Data Link

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

- Flow 1 ingress (mean 170.27 Mbit/s)
- Flow 1 egress (mean 171.33 Mbit/s)
- Flow 2 ingress (mean 128.16 Mbit/s)
- Flow 2 egress (mean 128.64 Mbit/s)
- Flow 3 ingress (mean 40.90 Mbit/s)
- Flow 3 egress (mean 39.00 Mbit/s)

![Graph 2: One-way Delay](image2)

- Flow 1 (95th percentile 154.69 ms)
- Flow 2 (95th percentile 154.87 ms)
- Flow 3 (95th percentile 152.15 ms)
Run 1: Statistics of Indigo-MusesC5

Start at: 2019-12-11 14:50:24
End at: 2019-12-11 14:50:54
Local clock offset: 1.071 ms
Remote clock offset: -79.381 ms

# Below is generated by plot.py at 2019-12-11 18:06:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.82 Mbit/s
95th percentile per-packet one-way delay: 180.027 ms
Loss rate: 0.60%
-- Flow 1:
Average throughput: 229.82 Mbit/s
95th percentile per-packet one-way delay: 180.306 ms
Loss rate: 0.22%
-- Flow 2:
Average throughput: 51.97 Mbit/s
95th percentile per-packet one-way delay: 178.361 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 57.45 Mbit/s
95th percentile per-packet one-way delay: 178.591 ms
Loss rate: 3.85%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-12-11 15:25:20
End at: 2019-12-11 15:25:50
Local clock offset: 4.218 ms 
Remote clock offset: -45.096 ms

# Below is generated by plot.py at 2019-12-11 18:06:56
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 273.42 Mbit/s
  95th percentile per-packet one-way delay: 148.984 ms
  Loss rate: 0.62%
-- Flow 1:
  Average throughput: 215.75 Mbit/s
  95th percentile per-packet one-way delay: 149.417 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 73.32 Mbit/s
  95th percentile per-packet one-way delay: 145.579 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 55.12 Mbit/s
  95th percentile per-packet one-way delay: 145.482 ms
  Loss rate: 4.99%
Run 2: Report of Indigo-MusesC5 — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-12-11 16:00:12
End at: 2019-12-11 16:00:42
Local clock offset: -0.449 ms
Remote clock offset: -48.411 ms

# Below is generated by plot.py at 2019-12-11 18:07:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 256.70 Mbit/s
95th percentile per-packet one-way delay: 149.870 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 206.42 Mbit/s
95th percentile per-packet one-way delay: 150.086 ms
Loss rate: 0.25%
-- Flow 2:
Average throughput: 59.14 Mbit/s
95th percentile per-packet one-way delay: 146.093 ms
Loss rate: 1.78%
-- Flow 3:
Average throughput: 57.40 Mbit/s
95th percentile per-packet one-way delay: 147.217 ms
Loss rate: 4.20%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-12-11 16:35:27
End at: 2019-12-11 16:35:57
Local clock offset: 5.985 ms
Remote clock offset: -40.163 ms

# Below is generated by plot.py at 2019-12-11 18:07:53
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 263.37 Mbit/s
  95th percentile per-packet one-way delay: 146.960 ms
  Loss rate: 0.58%
-- Flow 1:
  Average throughput: 221.14 Mbit/s
  95th percentile per-packet one-way delay: 147.216 ms
  Loss rate: 0.23%
-- Flow 2:
  Average throughput: 47.98 Mbit/s
  95th percentile per-packet one-way delay: 143.967 ms
  Loss rate: 1.72%
-- Flow 3:
  Average throughput: 54.72 Mbit/s
  95th percentile per-packet one-way delay: 143.663 ms
  Loss rate: 3.86%
Run 4: Report of Indigo-MusesC5 — Data Link
Run 5: Statistics of Indigo-MusesC5

Start at: 2019-12-11 17:10:10
End at: 2019-12-11 17:10:40
Local clock offset: 5.797 ms
Remote clock offset: -40.185 ms

# Below is generated by plot.py at 2019-12-11 18:07:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 231.28 Mbit/s
95th percentile per-packet one-way delay: 147.799 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 170.46 Mbit/s
95th percentile per-packet one-way delay: 148.465 ms
Loss rate: 0.48%
-- Flow 2:
Average throughput: 79.30 Mbit/s
95th percentile per-packet one-way delay: 144.532 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 48.53 Mbit/s
95th percentile per-packet one-way delay: 145.792 ms
Loss rate: 4.85%
Run 5: Report of Indigo-MusesC5 — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 170.00 Mbps)
  - Flow 1 egress (mean 170.46 Mbps)
  - Flow 2 ingress (mean 79.30 Mbps)
  - Flow 2 egress (mean 79.30 Mbps)
  - Flow 3 ingress (mean 49.58 Mbps)
  - Flow 3 egress (mean 48.53 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 148.47 ms)
  - Flow 2 (95th percentile 144.53 ms)
  - Flow 3 (95th percentile 145.79 ms)
Run 1: Statistics of Indigo-MusesD

Start at: 2019-12-11 15:16:46
End at: 2019-12-11 15:17:16
Local clock offset: 6.69 ms
Remote clock offset: -50.514 ms

# Below is generated by plot.py at 2019-12-11 18:07:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 237.09 Mbit/s
95th percentile per-packet one-way delay: 154.998 ms
Loss rate: 0.54%
-- Flow 1:
Average throughput: 190.40 Mbit/s
95th percentile per-packet one-way delay: 155.190 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 64.71 Mbit/s
95th percentile per-packet one-way delay: 152.688 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 29.48 Mbit/s
95th percentile per-packet one-way delay: 152.061 ms
Loss rate: 5.20%
Run 1: Report of Indigo-MusesD — Data Link
Run 2: Statistics of Indigo-MusesD

Start at: 2019-12-11 15:51:47
End at: 2019-12-11 15:52:17
Local clock offset: 0.511 ms
Remote clock offset: -41.455 ms

# Below is generated by plot.py at 2019-12-11 18:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 241.70 Mbit/s
95th percentile per-packet one-way delay: 142.122 ms
Loss rate: 0.52%
-- Flow 1:
Average throughput: 192.98 Mbit/s
95th percentile per-packet one-way delay: 142.242 ms
Loss rate: 0.34%
-- Flow 2:
Average throughput: 65.38 Mbit/s
95th percentile per-packet one-way delay: 141.046 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 34.60 Mbit/s
95th percentile per-packet one-way delay: 139.346 ms
Loss rate: 4.95%
Run 2: Report of Indigo-MusesD — Data Link
Run 3: Statistics of Indigo-MusesD

Start at: 2019-12-11 16:27:03
End at: 2019-12-11 16:27:33
Local clock offset: 2.181 ms
Remote clock offset: -44.589 ms

# Below is generated by plot.py at 2019-12-11 18:08:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 228.60 Mbit/s
95th percentile per-packet one-way delay: 146.264 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 181.61 Mbit/s
95th percentile per-packet one-way delay: 146.433 ms
Loss rate: 0.36%
-- Flow 2:
Average throughput: 64.17 Mbit/s
95th percentile per-packet one-way delay: 144.983 ms
Loss rate: 0.40%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 143.539 ms
Loss rate: 5.37%
Run 3: Report of Indigo-MusesD — Data Link

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

Legend:
- Flow 1 ingress (mean 181.00 Mbps) - Blue dashed line
- Flow 1 egress (mean 181.61 Mbps) - Blue solid line
- Flow 2 ingress (mean 63.73 Mbps) - Green dashed line
- Flow 2 egress (mean 64.17 Mbps) - Green solid line
- Flow 3 ingress (mean 32.98 Mbps) - Red dashed line
- Flow 3 egress (mean 32.18 Mbps) - Red solid line

Graphs indicate the performance and latency of data flows over a 25-second interval, showcasing the throughput and mean delay for each flow.
Run 4: Statistics of Indigo-MusesD

Start at: 2019-12-11 17:01:44
End at: 2019-12-11 17:02:14
Local clock offset: 1.667 ms
Remote clock offset: -43.96 ms

# Below is generated by plot.py at 2019-12-11 18:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 248.08 Mbit/s
95th percentile per-packet one-way delay: 146.572 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 161.36 Mbit/s
95th percentile per-packet one-way delay: 146.125 ms
Loss rate: 0.39%
-- Flow 2:
Average throughput: 128.56 Mbit/s
95th percentile per-packet one-way delay: 148.507 ms
Loss rate: 0.76%
-- Flow 3:
Average throughput: 30.52 Mbit/s
95th percentile per-packet one-way delay: 143.950 ms
Loss rate: 4.78%
Run 4: Report of Indigo-MusesD — Data Link

![Graph 1: Throughput (Mbps)]

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

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Run 5: Statistics of Indigo-MusesD

Start at: 2019-12-11 17:36:43
End at: 2019-12-11 17:37:13
Local clock offset: 5.829 ms
Remote clock offset: -39.946 ms

# Below is generated by plot.py at 2019-12-11 18:09:42
# Datalink statistics
-- Total of 3 flows:
Average throughput: 209.41 Mbit/s
95th percentile per-packet one-way delay: 146.564 ms
Loss rate: 0.61%
-- Flow 1:
Average throughput: 159.84 Mbit/s
95th percentile per-packet one-way delay: 146.967 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 68.19 Mbit/s
95th percentile per-packet one-way delay: 143.267 ms
Loss rate: 0.43%
-- Flow 3:
Average throughput: 31.92 Mbit/s
95th percentile per-packet one-way delay: 142.835 ms
Loss rate: 4.92%
Run 5: Report of Indigo-MusesD — Data Link
Run 1: Statistics of Indigo-MusesT

Start at: 2019-12-11 15:11:00
End at: 2019-12-11 15:11:30
Local clock offset: 6.404 ms
Remote clock offset: -43.651 ms

# Below is generated by plot.py at 2019-12-11 18:10:55
# Datalink statistics
-- Total of 3 flows:
Average throughput: 287.95 Mbit/s
95th percentile per-packet one-way delay: 148.061 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 222.36 Mbit/s
95th percentile per-packet one-way delay: 148.119 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 101.84 Mbit/s
95th percentile per-packet one-way delay: 147.223 ms
Loss rate: 1.18%
-- Flow 3:
Average throughput: 21.54 Mbit/s
95th percentile per-packet one-way delay: 148.237 ms
Loss rate: 4.95%
Run 1: Report of Indigo-MusesT — Data Link

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

Flow 1 ingress (mean 221.71 Mbit/s), Flow 1 egress (mean 222.36 Mbit/s), Flow 2 ingress (mean 101.85 Mbit/s), Flow 2 egress (mean 101.84 Mbit/s), Flow 3 ingress (mean 22.01 Mbit/s), Flow 3 egress (mean 21.54 Mbit/s)

![Graph of per-packet delay over time for different flows.]

Flow 1 (95th percentile 148.12 ms), Flow 2 (95th percentile 147.22 ms), Flow 3 (95th percentile 148.24 ms)
Run 2: Statistics of Indigo-MusesT

Start at: 2019-12-11 15:46:03
End at: 2019-12-11 15:46:33
Local clock offset: 6.246 ms
Remote clock offset: -44.783 ms

# Below is generated by plot.py at 2019-12-11 18:11:07
# Datalink statistics
-- Total of 3 flows:
 Average throughput: 288.00 Mbit/s
 95th percentile per-packet one-way delay: 149.958 ms
 Loss rate: 0.70%
-- Flow 1:
 Average throughput: 212.15 Mbit/s
 95th percentile per-packet one-way delay: 149.956 ms
 Loss rate: 0.33%
-- Flow 2:
 Average throughput: 97.67 Mbit/s
 95th percentile per-packet one-way delay: 149.687 ms
 Loss rate: 1.00%
-- Flow 3:
 Average throughput: 66.95 Mbit/s
 95th percentile per-packet one-way delay: 150.710 ms
 Loss rate: 4.20%
Run 2: Report of Indigo-MusesT — Data Link
Run 3: Statistics of Indigo-MusesT

Start at: 2019-12-11 16:21:16
End at: 2019-12-11 16:21:47
Local clock offset: 5.882 ms
Remote clock offset: -55.49 ms

# Below is generated by plot.py at 2019-12-11 18:11:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 276.25 Mbit/s
95th percentile per-packet one-way delay: 161.015 ms
Loss rate: 0.78%
-- Flow 1:
Average throughput: 199.12 Mbit/s
95th percentile per-packet one-way delay: 161.075 ms
Loss rate: 0.37%
-- Flow 2:
Average throughput: 97.43 Mbit/s
95th percentile per-packet one-way delay: 160.509 ms
Loss rate: 1.14%
-- Flow 3:
Average throughput: 71.36 Mbit/s
95th percentile per-packet one-way delay: 161.583 ms
Loss rate: 4.13%
Run 3: Report of Indigo-MusesT — Data Link
Run 4: Statistics of Indigo-MusesT

Start at: 2019-12-11 16:55:59  
End at: 2019-12-11 16:56:29  
Local clock offset: 1.635 ms  
Remote clock offset: -37.51 ms

# Below is generated by plot.py at 2019-12-11 18:11:07  
# Datalink statistics
-- Total of 3 flows:  
  Average throughput: 267.99 Mbit/s  
  95th percentile per-packet one-way delay: 139.113 ms  
  Loss rate: 0.83%  
-- Flow 1:  
  Average throughput: 200.63 Mbit/s  
  95th percentile per-packet one-way delay: 139.115 ms  
  Loss rate: 0.42%  
-- Flow 2:  
  Average throughput: 95.75 Mbit/s  
  95th percentile per-packet one-way delay: 139.160 ms  
  Loss rate: 1.23%  
-- Flow 3:  
  Average throughput: 35.49 Mbit/s  
  95th percentile per-packet one-way delay: 138.736 ms  
  Loss rate: 7.19%
Run 4: Report of Indigo-MusesT — Data Link

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

- **Flow 1 ingress** (mean 199.90 Mbit/s), **Flow 1 egress** (mean 200.63 Mbit/s)
- **Flow 2 ingress** (mean 95.06 Mbit/s), **Flow 2 egress** (mean 95.75 Mbit/s)
- **Flow 3 ingress** (mean 37.22 Mbit/s), **Flow 3 egress** (mean 35.49 Mbit/s)
Run 5: Statistics of Indigo-MusesT

Start at: 2019-12-11 17:31:00
End at: 2019-12-11 17:31:30
Local clock offset: 5.213 ms
Remote clock offset: -39.773 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 282.11 Mbit/s
  95th percentile per-packet one-way delay: 144.528 ms
  Loss rate: 0.73%
-- Flow 1:
  Average throughput: 205.41 Mbit/s
  95th percentile per-packet one-way delay: 144.583 ms
  Loss rate: 0.34%
-- Flow 2:
  Average throughput: 100.45 Mbit/s
  95th percentile per-packet one-way delay: 144.219 ms
  Loss rate: 1.13%
-- Flow 3:
  Average throughput: 66.80 Mbit/s
  95th percentile per-packet one-way delay: 144.772 ms
  Loss rate: 4.17%
Run 5: Report of Indigo-MusesT — Data Link
Run 1: Statistics of LEDBAT

Start at: 2019-12-11 15:08:24
End at: 2019-12-11 15:08:54
Local clock offset: 6.411 ms
Remote clock offset: -52.67 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 13.89 Mbit/s
  95th percentile per-packet one-way delay: 153.147 ms
  Loss rate: 1.71%
-- Flow 1:
  Average throughput: 9.13 Mbit/s
  95th percentile per-packet one-way delay: 153.140 ms
  Loss rate: 1.32%
-- Flow 2:
  Average throughput: 5.86 Mbit/s
  95th percentile per-packet one-way delay: 153.130 ms
  Loss rate: 2.03%
-- Flow 3:
  Average throughput: 2.85 Mbit/s
  95th percentile per-packet one-way delay: 153.201 ms
  Loss rate: 4.03%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Start at: 2019-12-11 15:43:28
End at: 2019-12-11 15:43:58
Local clock offset: 5.858 ms
Remote clock offset: -55.312 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 14.01 Mbit/s
  95th percentile per-packet one-way delay: 155.869 ms
  Loss rate: 1.70%
-- Flow 1:
  Average throughput: 9.10 Mbit/s
  95th percentile per-packet one-way delay: 155.841 ms
  Loss rate: 1.32%
-- Flow 2:
  Average throughput: 5.98 Mbit/s
  95th percentile per-packet one-way delay: 155.901 ms
  Loss rate: 1.99%
-- Flow 3:
  Average throughput: 2.88 Mbit/s
  95th percentile per-packet one-way delay: 155.877 ms
  Loss rate: 4.03%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Start at: 2019-12-11 16:18:41
End at: 2019-12-11 16:19:11
Local clock offset: 5.688 ms
Remote clock offset: -67.69 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.89 Mbit/s
95th percentile per-packet one-way delay: 168.815 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 9.13 Mbit/s
95th percentile per-packet one-way delay: 168.784 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 5.84 Mbit/s
95th percentile per-packet one-way delay: 168.832 ms
Loss rate: 2.03%
-- Flow 3:
Average throughput: 2.83 Mbit/s
95th percentile per-packet one-way delay: 168.876 ms
Loss rate: 4.12%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

Start at: 2019-12-11 16:53:24
End at: 2019-12-11 16:53:54
Local clock offset: 6.156 ms
Remote clock offset: -46.751 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.97 Mbit/s
95th percentile per-packet one-way delay: 148.674 ms
Loss rate: 1.70%
-- Flow 1:
Average throughput: 9.11 Mbit/s
95th percentile per-packet one-way delay: 148.629 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 5.99 Mbit/s
95th percentile per-packet one-way delay: 148.615 ms
Loss rate: 2.01%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 148.777 ms
Loss rate: 4.12%
Run 4: Report of LEDBAT — Data Link

![Graph showing throughput and packet delay over time for different flows.](image-url)
Run 5: Statistics of LEDBAT

Start at: 2019-12-11 17:28:24
End at: 2019-12-11 17:28:54
Local clock offset: 1.444 ms
Remote clock offset: -45.98 ms

# Below is generated by plot.py at 2019-12-11 18:11:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.90 Mbit/s
95th percentile per-packet one-way delay: 143.228 ms
Loss rate: 1.71%
-- Flow 1:
Average throughput: 9.12 Mbit/s
95th percentile per-packet one-way delay: 143.219 ms
Loss rate: 1.32%
-- Flow 2:
Average throughput: 5.86 Mbit/s
95th percentile per-packet one-way delay: 143.247 ms
Loss rate: 2.02%
-- Flow 3:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: 143.082 ms
Loss rate: 4.12%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 15:03:50
End at: 2019-12-11 15:04:21
Local clock offset: 1.469 ms
Remote clock offset: -46.238 ms

# Below is generated by plot.py at 2019-12-11 18:12:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 245.15 Mbit/s
95th percentile per-packet one-way delay: 146.152 ms
Loss rate: 0.47%
-- Flow 1:
Average throughput: 195.92 Mbit/s
95th percentile per-packet one-way delay: 146.632 ms
Loss rate: 0.21%
-- Flow 2:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: 144.966 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 144.810 ms
Loss rate: 2.59%
Run 1: Report of Muses_DecisionTree — Data Link
Run 2: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 15:38:55
End at: 2019-12-11 15:39:25
Local clock offset: 7.949 ms
Remote clock offset: -51.051 ms

# Below is generated by plot.py at 2019-12-11 18:12:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 275.19 Mbit/s
95th percentile per-packet one-way delay: 159.409 ms
Loss rate: 0.64%
-- Flow 1:
Average throughput: 194.53 Mbit/s
95th percentile per-packet one-way delay: 160.652 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 107.38 Mbit/s
95th percentile per-packet one-way delay: 158.076 ms
Loss rate: 0.82%
-- Flow 3:
Average throughput: 34.70 Mbit/s
95th percentile per-packet one-way delay: 157.390 ms
Loss rate: 2.50%
Run 2: Report of Muses | DecisionTree — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 193.81 Mbps) — Flow 1 egress (mean 194.53 Mbps)
Flow 2 ingress (mean 107.16 Mbps) — Flow 2 egress (mean 107.38 Mbps)
Flow 3 ingress (mean 34.83 Mbps) — Flow 3 egress (mean 34.70 Mbps)

Per-packet one-way delay (ms)

0 5 10 15 20 25 30

Flow 1 (95th percentile 160.65 ms) — Flow 2 (95th percentile 158.08 ms) — Flow 3 (95th percentile 157.39 ms)
Run 3: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 16:14:01
End at: 2019-12-11 16:14:31
Local clock offset: 2.991 ms
Remote clock offset: -40.674 ms

# Below is generated by plot.py at 2019-12-11 18:12:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 262.10 Mbit/s
95th percentile per-packet one-way delay: 147.402 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 193.77 Mbit/s
95th percentile per-packet one-way delay: 149.189 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 91.23 Mbit/s
95th percentile per-packet one-way delay: 144.817 ms
Loss rate: 1.00%
-- Flow 3:
Average throughput: 28.59 Mbit/s
95th percentile per-packet one-way delay: 143.035 ms
Loss rate: 2.43%
Run 3: Report of Muses_DecisionTree — Data Link
Run 4: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 16:48:46
End at: 2019-12-11 16:49:16
Local clock offset: 3.599 ms
Remote clock offset: -40.073 ms

# Below is generated by plot.py at 2019-12-11 18:14:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 280.49 Mbit/s
95th percentile per-packet one-way delay: 155.027 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 209.95 Mbit/s
95th percentile per-packet one-way delay: 159.178 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 86.32 Mbit/s
95th percentile per-packet one-way delay: 146.403 ms
Loss rate: 1.29%
-- Flow 3:
Average throughput: 45.83 Mbit/s
95th percentile per-packet one-way delay: 145.797 ms
Loss rate: 2.61%
Run 4: Report of Muses_DecisionTree — Data Link

![Graph showing network throughput and packet delay](image-url)
Run 5: Statistics of Muses\_DecisionTree

Start at: 2019-12-11 17:23:48
End at: 2019-12-11 17:24:18
Local clock offset: 5.764 ms
Remote clock offset: -44.222 ms

# Below is generated by plot.py at 2019-12-11 18:14:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 281.19 Mbit/s
95th percentile per-packet one-way delay: 155.949 ms
Loss rate: 0.56%
-- Flow 1:
Average throughput: 191.92 Mbit/s
95th percentile per-packet one-way delay: 158.657 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 125.67 Mbit/s
95th percentile per-packet one-way delay: 153.240 ms
Loss rate: 0.65%
-- Flow 3:
Average throughput: 22.11 Mbit/s
95th percentile per-packet one-way delay: 149.747 ms
Loss rate: 2.25%
Run 5: Report of Muses_DecisionTree — Data Link

[Graphs showing throughput and packet delay over time for different flows with labels indicating mean throughput and 95th percentile delay]

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Run 1: Statistics of Muses\_DecisionTreeHO

Start at: 2019-12-11 15:09:44
End at: 2019-12-11 15:10:14
Local clock offset: 6.529 ms
Remote clock offset: -70.641 ms
Run 1: Report of Muses.DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 2: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 15:44:48
End at: 2019-12-11 15:45:18
Local clock offset: 2.082 ms
Remote clock offset: -48.955 ms
Run 2: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 3: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 16:20:01
End at: 2019-12-11 16:20:31
Local clock offset: 1.244 ms
Remote clock offset: -43.619 ms
Run 3: Report of Muses_DecisionTreeH0 — Data Link

Figure is missing

Figure is missing
Run 4: Statistics of Muses\_DecisionTreeHO

Start at: 2019-12-11 16:54:43
End at: 2019-12-11 16:55:13
Local clock offset: 5.919 ms
Remote clock offset: -47.277 ms
Run 4: Report of Muses DecisionTreeH0 — Data Link

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Figure is missing
Run 5: Statistics of Muses\_DecisionTreeH0

Start at: 2019-12-11 17:29:44
End at: 2019-12-11 17:30:14
Local clock offset: 5.851 ms
Remote clock offset: -37.261 ms
Run 5: Report of Muses_DecisionTreeH0 — Data Link

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Figure is missing
Run 1: Statistics of Muses\_DecisionTreeRO

Start at: 2019-12-11 15:24:04
End at: 2019-12-11 15:24:35
Local clock offset: 2.07 ms
Remote clock offset: -48.023 ms
Run 1: Report of Muses_DecisionTreeR0 — Data Link

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Figure is missing
Run 2: Statistics of Muses\_DecisionTreeRO

Start at: 2019-12-11 15:58:57
End at: 2019-12-11 15:59:27
Local clock offset: 4.772 ms
Remote clock offset: -37.476 ms
Run 2: Report of Muses_DecisionTreeR0 — Data Link

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Figure is missing
Run 3: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 16:34:12
End at: 2019-12-11 16:34:42
Local clock offset: 5.864 ms
Remote clock offset: -48.856 ms
Run 3: Report of Muses_DecisionTreeR0 — Data Link

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Figure is missing
Run 4: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 17:08:54
End at: 2019-12-11 17:09:24
Local clock offset: 5.297 ms
Remote clock offset: -47.891 ms
Run 4: Report of Muses\_DecisionTreeR0 — Data Link

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Figure is missing
Run 5: Statistics of Muses\_DecisionTreeR0

Start at: 2019-12-11 17:43:51
End at: 2019-12-11 17:44:21
Local clock offset: 5.093 ms
Remote clock offset: -39.347 ms
Run 5: Report of Muses_DecisionTreeR0 — Data Link

Figure is missing

Figure is missing
Run 1: Statistics of PCC-Allegro

Start at: 2019-12-11 15:02:20
End at: 2019-12-11 15:02:50
Local clock offset: 6.701 ms
Remote clock offset: -76.151 ms

# Below is generated by plot.py at 2019-12-11 18:14:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 291.20 Mbit/s
95th percentile per-packet one-way delay: 179.507 ms
Loss rate: 1.06%
-- Flow 1:
Average throughput: 230.87 Mbit/s
95th percentile per-packet one-way delay: 179.462 ms
Loss rate: 1.01%
-- Flow 2:
Average throughput: 75.18 Mbit/s
95th percentile per-packet one-way delay: 179.539 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 32.64 Mbit/s
95th percentile per-packet one-way delay: 179.876 ms
Loss rate: 2.01%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

Start at: 2019-12-11 15:37:24
End at: 2019-12-11 15:37:54
Local clock offset: 7.501 ms
Remote clock offset: -49.22 ms

# Below is generated by plot.py at 2019-12-11 18:14:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 327.88 Mbit/s
95th percentile per-packet one-way delay: 154.095 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 283.83 Mbit/s
95th percentile per-packet one-way delay: 154.188 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 65.42 Mbit/s
95th percentile per-packet one-way delay: 153.896 ms
Loss rate: 1.10%
-- Flow 3:
Average throughput: 2.23 Mbit/s
95th percentile per-packet one-way delay: 153.981 ms
Loss rate: 1.99%
Run 2: Report of PCC-Allegro — Data Link

![Graph showing network performance metrics over time]

**Throughput (Mbit/s)**
- **Flow 1 ingress (mean 284.12 Mbit/s)**
- **Flow 1 egress (mean 283.83 Mbit/s)**
- **Flow 2 ingress (mean 65.47 Mbit/s)**
- **Flow 2 egress (mean 65.42 Mbit/s)**
- **Flow 3 ingress (mean 2.23 Mbit/s)**
- **Flow 3 egress (mean 2.23 Mbit/s)**

**Average Packet Delay (ms)**
- **Flow 1 (95th percentile 154.19 ms)**
- **Flow 2 (95th percentile 153.90 ms)**
- **Flow 3 (95th percentile 153.98 ms)**
Run 3: Statistics of PCC-Allegro

Start at: 2019-12-11 16:12:31
End at: 2019-12-11 16:13:01
Local clock offset: -3.872 ms
Remote clock offset: -47.799 ms

# Below is generated by plot.py at 2019-12-11 18:15:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 305.45 Mbit/s
95th percentile per-packet one-way delay: 143.766 ms
Loss rate: 0.95%
-- Flow 1:
Average throughput: 243.27 Mbit/s
95th percentile per-packet one-way delay: 143.708 ms
Loss rate: 0.84%
-- Flow 2:
Average throughput: 89.79 Mbit/s
95th percentile per-packet one-way delay: 143.825 ms
Loss rate: 1.34%
-- Flow 3:
Average throughput: 8.36 Mbit/s
95th percentile per-packet one-way delay: 144.239 ms
Loss rate: 2.00%
Run 3: Report of PCC-Allegro — Data Link

[Graph showing throughput and packet delay for different flows]
Run 4: Statistics of PCC-Allegro

Start at: 2019-12-11 16:47:16
End at: 2019-12-11 16:47:46
Local clock offset: 5.949 ms
Remote clock offset: -44.853 ms

# Below is generated by plot.py at 2019-12-11 18:16:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 325.41 Mbit/s
95th percentile per-packet one-way delay: 150.203 ms
Loss rate: 1.02%
-- Flow 1:
Average throughput: 270.25 Mbit/s
95th percentile per-packet one-way delay: 150.200 ms
Loss rate: 0.98%
-- Flow 2:
Average throughput: 75.12 Mbit/s
95th percentile per-packet one-way delay: 150.212 ms
Loss rate: 1.13%
-- Flow 3:
Average throughput: 16.72 Mbit/s
95th percentile per-packet one-way delay: 150.206 ms
Loss rate: 2.04%
Run 4: Report of PCC-Allegro — Data Link

![Graph showing throughput over time for different flows]

![Graph showing per-packet one-way delay]
Run 5: Statistics of PCC-Allegro

Start at: 2019-12-11 17:22:17
End at: 2019-12-11 17:22:47
Local clock offset: 6.238 ms
Remote clock offset: -43.782 ms

# Below is generated by plot.py at 2019-12-11 18:16:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 350.05 Mbit/s
95th percentile per-packet one-way delay: 154.273 ms
Loss rate: 0.71%
-- Flow 1:
Average throughput: 335.60 Mbit/s
95th percentile per-packet one-way delay: 155.198 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 17.71 Mbit/s
95th percentile per-packet one-way delay: 150.503 ms
Loss rate: 1.06%
-- Flow 3:
Average throughput: 8.42 Mbit/s
95th percentile per-packet one-way delay: 150.153 ms
Loss rate: 1.96%
Run 5: Report of PCC-Allegro — Data Link

![Graph showing network performance metrics over time]

- Flow 1 ingress (mean 335.63 Mbit/s)
- Flow 1 egress (mean 335.60 Mbit/s)
- Flow 2 ingress (mean 17.71 Mbit/s)
- Flow 2 egress (mean 17.71 Mbit/s)
- Flow 3 ingress (mean 8.42 Mbit/s)
- Flow 3 egress (mean 8.42 Mbit/s)

![Graph showing per-packet one way delay distribution]

- Flow 1 (95th percentile 155.20 ms)
- Flow 2 (95th percentile 150.50 ms)
- Flow 3 (95th percentile 150.15 ms)
Run 1: Statistics of PCC-Expr

Start at: 2019-12-11 14:54:48
End at: 2019-12-11 14:55:18
Local clock offset: 6.174 ms
Remote clock offset: -59.741 ms

# Below is generated by plot.py at 2019-12-11 18:16:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 142.07 Mbit/s
  95th percentile per-packet one-way delay: 163.721 ms
  Loss rate: 0.88%
-- Flow 1:
  Average throughput: 99.26 Mbit/s
  95th percentile per-packet one-way delay: 163.630 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 61.37 Mbit/s
  95th percentile per-packet one-way delay: 163.864 ms
  Loss rate: 1.23%
-- Flow 3:
  Average throughput: 6.53 Mbit/s
  95th percentile per-packet one-way delay: 164.032 ms
  Loss rate: 2.41%
Run 1: Report of PCC-Expr — Data Link

![Graph of Throughput vs Time](image1)

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

Start at: 2019-12-11 15:29:43
End at: 2019-12-11 15:30:13
Local clock offset: 2.824 ms
Remote clock offset: -49.844 ms

# Below is generated by plot.py at 2019-12-11 18:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 186.10 Mbit/s
95th percentile per-packet one-way delay: 248.223 ms
Loss rate: 0.81%
-- Flow 1:
Average throughput: 175.06 Mbit/s
95th percentile per-packet one-way delay: 259.999 ms
Loss rate: 0.77%
-- Flow 2:
Average throughput: 12.92 Mbit/s
95th percentile per-packet one-way delay: 149.893 ms
Loss rate: 1.22%
-- Flow 3:
Average throughput: 7.57 Mbit/s
95th percentile per-packet one-way delay: 150.168 ms
Loss rate: 2.48%
Run 2: Report of PCC-Expr — Data Link

![Data Link Throughput and Delay Graphs](chart.png)
Run 3: Statistics of PCC-Expr

Start at: 2019-12-11 16:04:35
End at: 2019-12-11 16:05:05
Local clock offset: 4.261 ms
Remote clock offset: -59.115 ms

# Below is generated by plot.py at 2019-12-11 18:18:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 184.27 Mbit/s
  95th percentile per-packet one-way delay: 199.957 ms
  Loss rate: 0.68%
-- Flow 1:
  Average throughput: 173.26 Mbit/s
  95th percentile per-packet one-way delay: 210.095 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 13.96 Mbit/s
  95th percentile per-packet one-way delay: 163.773 ms
  Loss rate: 0.82%
-- Flow 3:
  Average throughput: 5.44 Mbit/s
  95th percentile per-packet one-way delay: 164.023 ms
  Loss rate: 1.86%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2019-12-11 16:39:49
End at: 2019-12-11 16:40:19
Local clock offset: 6.293 ms
Remote clock offset: -37.363 ms

# Below is generated by plot.py at 2019-12-11 18:18:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 178.02 Mbit/s
95th percentile per-packet one-way delay: 252.390 ms
Loss rate: 0.74%
-- Flow 1:
Average throughput: 168.65 Mbit/s
95th percentile per-packet one-way delay: 262.563 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 8.91 Mbit/s
95th percentile per-packet one-way delay: 142.836 ms
Loss rate: 1.39%
-- Flow 3:
Average throughput: 10.65 Mbit/s
95th percentile per-packet one-way delay: 142.614 ms
Loss rate: 2.73%
Run 4: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 168.60 Mbps)
- Flow 1 egress (mean 168.65 Mbps)
- Flow 2 ingress (mean 8.94 Mbps)
- Flow 2 egress (mean 8.91 Mbps)
- Flow 3 ingress (mean 10.72 Mbps)
- Flow 3 egress (mean 10.65 Mbps)

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

- Flow 1 (95th percentile 262.56 ms)
- Flow 2 (95th percentile 142.84 ms)
- Flow 3 (95th percentile 142.61 ms)
Run 5: Statistics of PCC-Expr

Start at: 2019-12-11 17:14:31
End at: 2019-12-11 17:15:01
Local clock offset: 5.477 ms
Remote clock offset: -36.815 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 192.28 Mbit/s
  95th percentile per-packet one-way delay: 173.665 ms
  Loss rate: 0.63%
-- Flow 1:
  Average throughput: 182.77 Mbit/s
  95th percentile per-packet one-way delay: 182.360 ms
  Loss rate: 0.59%
-- Flow 2:
  Average throughput: 11.37 Mbit/s
  95th percentile per-packet one-way delay: 142.464 ms
  Loss rate: 1.38%
-- Flow 3:
  Average throughput: 6.04 Mbit/s
  95th percentile per-packet one-way delay: 142.441 ms
  Loss rate: 2.11%
Run 5: Report of PCC-Expr — Data Link

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Run 1: Statistics of QUIC Cubic

Start at: 2019-12-11 15:13:48
End at: 2019-12-11 15:14:18
Local clock offset: 4.083 ms
Remote clock offset: -53.748 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 118.30 Mbit/s
  95th percentile per-packet one-way delay: 151.560 ms
  Loss rate: 1.07%
-- Flow 1:
  Average throughput: 63.33 Mbit/s
  95th percentile per-packet one-way delay: 151.417 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 55.81 Mbit/s
  95th percentile per-packet one-way delay: 151.472 ms
  Loss rate: 1.09%
-- Flow 3:
  Average throughput: 54.91 Mbit/s
  95th percentile per-packet one-way delay: 151.908 ms
  Loss rate: 2.65%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-12-11 15:48:51
End at: 2019-12-11 15:49:21
Local clock offset: 1.103 ms
Remote clock offset: -60.519 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 156.974 ms
Loss rate: 0.66%
-- Flow 1:
Average throughput: 55.01 Mbit/s
95th percentile per-packet one-way delay: 156.875 ms
Loss rate: 0.97%
-- Flow 2:
Average throughput: 61.15 Mbit/s
95th percentile per-packet one-way delay: 157.041 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 3.67 Mbit/s
95th percentile per-packet one-way delay: 157.104 ms
Loss rate: 4.86%
Run 2: Report of QUIC Cubic — Data Link

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

**Throughput (Mbps) vs. Time (s):**
- Flow 1 ingress (mean 55.18 Mbps)
- Flow 1 egress (mean 55.01 Mbps)
- Flow 2 ingress (mean 60.62 Mbps)
- Flow 2 egress (mean 61.15 Mbps)
- Flow 3 ingress (mean 3.78 Mbps)
- Flow 3 egress (mean 3.67 Mbps)

**One-packet one-way delay (ms) vs. Time (s):**
- Flow 1 (95th percentile 156.88 ms)
- Flow 2 (95th percentile 157.04 ms)
- Flow 3 (95th percentile 157.10 ms)
Run 3: Statistics of QUIC Cubic

Start at: 2019-12-11 16:24:05
End at: 2019-12-11 16:24:35
Local clock offset: 1.164 ms
Remote clock offset: -47.725 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 114.39 Mbit/s
95th percentile per-packet one-way delay: 144.447 ms
Loss rate: 1.16%
-- Flow 1:
Average throughput: 59.30 Mbit/s
95th percentile per-packet one-way delay: 144.465 ms
Loss rate: 0.71%
-- Flow 2:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: 144.336 ms
Loss rate: 1.20%
-- Flow 3:
Average throughput: 52.30 Mbit/s
95th percentile per-packet one-way delay: 144.191 ms
Loss rate: 2.63%
Run 3: Report of QUIC Cubic — Data Link

![Throughput Chart]

- Flow 1 ingress (mean 59.33 Mbit/s)
- Flow 1 egress (mean 59.30 Mbit/s)
- Flow 2 ingress (mean 57.45 Mbit/s)
- Flow 2 egress (mean 57.36 Mbit/s)
- Flow 3 ingress (mean 52.57 Mbit/s)
- Flow 3 egress (mean 52.30 Mbit/s)

![Per-packet one-way delay Chart]

- Flow 1 (95th percentile 144.47 ms)
- Flow 2 (95th percentile 144.34 ms)
- Flow 3 (95th percentile 144.19 ms)
Run 4: Statistics of QUIC Cubic

Start at: 2019-12-11 16:58:46
End at: 2019-12-11 16:59:16
Local clock offset: 5.442 ms
Remote clock offset: -47.024 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 109.43 Mbit/s
95th percentile per-packet one-way delay: 148.416 ms
Loss rate: 1.13%
-- Flow 1:
Average throughput: 55.52 Mbit/s
95th percentile per-packet one-way delay: 148.347 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 57.07 Mbit/s
95th percentile per-packet one-way delay: 148.380 ms
Loss rate: 1.08%
-- Flow 3:
Average throughput: 49.28 Mbit/s
95th percentile per-packet one-way delay: 148.630 ms
Loss rate: 2.45%
Run 4: Report of QUIC Cubic — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 55.56 Mbps)
  - Flow 1 egress (mean 55.52 Mbps)
  - Flow 2 ingress (mean 57.12 Mbps)
  - Flow 2 egress (mean 57.07 Mbps)
  - Flow 3 ingress (mean 49.51 Mbps)
  - Flow 3 egress (mean 49.28 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 148.35 ms)
  - Flow 2 (95th percentile 148.38 ms)
  - Flow 3 (95th percentile 148.63 ms)
Run 5: Statistics of QUIC Cubic

Start at: 2019-12-11 17:33:48
End at: 2019-12-11 17:34:18
Local clock offset: 1.43 ms
Remote clock offset: -36.947 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.43 Mbit/s
95th percentile per-packet one-way delay: 134.061 ms
Loss rate: 1.60%
-- Flow 1:
Average throughput: 10.28 Mbit/s
95th percentile per-packet one-way delay: 134.039 ms
Loss rate: 1.19%
-- Flow 2:
Average throughput: 39.34 Mbit/s
95th percentile per-packet one-way delay: 134.074 ms
Loss rate: 1.21%
-- Flow 3:
Average throughput: 61.48 Mbit/s
95th percentile per-packet one-way delay: 134.041 ms
Loss rate: 2.31%
Run 5: Report of QUIC Cubic — Data Link

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

Legend:
- Flow 1 ingress (mean 10.33 Mbit/s)
- Flow 1 egress (mean 10.28 Mbit/s)
- Flow 2 ingress (mean 39.43 Mbit/s)
- Flow 2 egress (mean 39.34 Mbit/s)
- Flow 3 ingress (mean 61.67 Mbit/s)
- Flow 3 egress (mean 61.48 Mbit/s)

Graph shows fluctuations in throughput and packet round trip time over time for different flows.
Run 1: Statistics of SCReAM

Start at: 2019-12-11 14:57:55
End at: 2019-12-11 14:58:25
Local clock offset: -2.547 ms
Remote clock offset: -58.719 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 150.212 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 150.214 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 149.999 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 150.371 ms
  Loss rate: 1.85%
Run 1: Report of SCReAM — Data Link

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

- 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)
Run 2: Statistics of SCReAM

Start at: 2019-12-11 15:32:56
End at: 2019-12-11 15:33:26
Local clock offset: 7.378 ms
Remote clock offset: -41.526 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 142.175 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 142.071 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 142.207 ms
  Loss rate: 1.02%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 142.212 ms
  Loss rate: 1.82%
Run 2: Report of SCReAM — Data Link

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

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

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

- Flow 1 95th percentile 142.07 ms
- Flow 2 95th percentile 142.21 ms
- Flow 3 95th percentile 142.21 ms
Run 3: Statistics of SCReAM

Start at: 2019-12-11 16:07:53
End at: 2019-12-11 16:08:23
Local clock offset: 3.818 ms
Remote clock offset: -39.931 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 140.519 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 140.527 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 140.404 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 140.383 ms
  Loss rate: 1.82%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2019-12-11 16:42:59
End at: 2019-12-11 16:43:29
Local clock offset: 6.063 ms
Remote clock offset: -47.681 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 149.237 ms
Loss rate: 1.03%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 149.226 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 149.178 ms
Loss rate: 1.03%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 149.522 ms
Loss rate: 2.21%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2019-12-11 17:17:42
End at: 2019-12-11 17:18:12
Local clock offset: 5.472 ms
Remote clock offset: -36.829 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 138.188 ms
  Loss rate: 0.97%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.186 ms
  Loss rate: 0.64%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.181 ms
  Loss rate: 1.03%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 138.297 ms
  Loss rate: 1.84%
Run 1: Statistics of Sprout

Start at: 2019-12-11 15:22:46
End at: 2019-12-11 15:23:16
Local clock offset: 2.838 ms
Remote clock offset: -41.395 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.47 Mbit/s
  95th percentile per-packet one-way delay: 137.719 ms
  Loss rate: 1.50%
-- Flow 1:
  Average throughput: 3.52 Mbit/s
  95th percentile per-packet one-way delay: 137.733 ms
  Loss rate: 0.92%
-- Flow 2:
  Average throughput: 3.41 Mbit/s
  95th percentile per-packet one-way delay: 137.659 ms
  Loss rate: 1.44%
-- Flow 3:
  Average throughput: 2.15 Mbit/s
  95th percentile per-packet one-way delay: 137.715 ms
  Loss rate: 4.52%
Run 1: Report of Sprout — Data Link

![Graph of Sprout Data Link](image)

**Throughput (Mbps):**
- Flow 1 ingress (mean 3.53 Mbps)
- Flow 1 egress (mean 3.52 Mbps)
- Flow 2 ingress (mean 3.42 Mbps)
- Flow 2 egress (mean 3.41 Mbps)
- Flow 3 ingress (mean 2.20 Mbps)
- Flow 3 egress (mean 2.15 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 137.73 ms)
- Flow 2 (95th percentile 137.66 ms)
- Flow 3 (95th percentile 137.72 ms)
Run 2: Statistics of Sprout

Start at: 2019-12-11 15:57:39
End at: 2019-12-11 15:58:09
Local clock offset: 2.196 ms
Remote clock offset: -49.04 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.58 Mbit/s
  95th percentile per-packet one-way delay: 147.398 ms
  Loss rate: 1.15%
-- Flow 1:
  Average throughput: 3.42 Mbit/s
  95th percentile per-packet one-way delay: 147.268 ms
  Loss rate: 0.95%
-- Flow 2:
  Average throughput: 3.50 Mbit/s
  95th percentile per-packet one-way delay: 147.357 ms
  Loss rate: 1.20%
-- Flow 3:
  Average throughput: 2.57 Mbit/s
  95th percentile per-packet one-way delay: 147.454 ms
  Loss rate: 1.81%
Run 3: Statistics of Sprout

Start at: 2019-12-11 16:32:54
End at: 2019-12-11 16:33:24
Local clock offset: 4.432 ms
Remote clock offset: ~46.646 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.85 Mbit/s
95th percentile per-packet one-way delay: 146.473 ms
Loss rate: 1.22%
-- Flow 1:
Average throughput: 3.76 Mbit/s
95th percentile per-packet one-way delay: 146.486 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 3.39 Mbit/s
95th percentile per-packet one-way delay: 146.153 ms
Loss rate: 1.46%
-- Flow 3:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 146.337 ms
Loss rate: 3.15%
Run 3: Report of Sprout — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 3.77 Mbps)
- Flow 1 egress (mean 3.76 Mbps)
- Flow 2 ingress (mean 3.41 Mbps)
- Flow 2 egress (mean 3.39 Mbps)
- Flow 3 ingress (mean 2.62 Mbps)
- Flow 3 egress (mean 2.60 Mbps)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 146.49 ms)
- Flow 2 (95th percentile 146.15 ms)
- Flow 3 (95th percentile 146.34 ms)
Run 4: Statistics of Sprout

Start at: 2019-12-11 17:07:36
End at: 2019-12-11 17:08:06
Local clock offset: 6.461 ms
Remote clock offset: -37.338 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
Average throughput: 6.77 Mbit/s
95th percentile per-packet one-way delay: 139.742 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 3.73 Mbit/s
95th percentile per-packet one-way delay: 139.688 ms
Loss rate: 0.78%
-- Flow 2:
Average throughput: 3.33 Mbit/s
95th percentile per-packet one-way delay: 139.770 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 2.60 Mbit/s
95th percentile per-packet one-way delay: 139.727 ms
Loss rate: 3.75%
Run 4: Report of Sprout — Data Link

![Throughput Graph](image1)

![Packet Delay Graph](image2)
Run 5: Statistics of Sprout

Start at: 2019-12-11 17:42:33
End at: 2019-12-11 17:43:03
Local clock offset: 5.296 ms
Remote clock offset: -47.09 ms

# Below is generated by plot.py at 2019-12-11 18:19:30
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 6.54 Mbit/s
  95th percentile per-packet one-way delay: 148.665 ms
  Loss rate: 1.34%
  -- Flow 1:
  Average throughput: 3.69 Mbit/s
  95th percentile per-packet one-way delay: 148.520 ms
  Loss rate: 0.63%
  -- Flow 2:
  Average throughput: 3.27 Mbit/s
  95th percentile per-packet one-way delay: 148.593 ms
  Loss rate: 1.34%
  -- Flow 3:
  Average throughput: 2.11 Mbit/s
  95th percentile per-packet one-way delay: 148.762 ms
  Loss rate: 5.00%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

Start at: 2019-12-11 15:19:56
End at: 2019-12-11 15:20:26
Local clock offset: 6.608 ms
Remote clock offset: -68.231 ms

# Below is generated by plot.py at 2019-12-11 18:21:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 165.00 Mbit/s
95th percentile per-packet one-way delay: 173.323 ms
Loss rate: 0.82%
-- Flow 1:
Average throughput: 93.65 Mbit/s
95th percentile per-packet one-way delay: 172.852 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 76.65 Mbit/s
95th percentile per-packet one-way delay: 173.784 ms
Loss rate: 0.96%
-- Flow 3:
Average throughput: 62.57 Mbit/s
95th percentile per-packet one-way delay: 174.322 ms
Loss rate: 1.93%
Run 2: Statistics of TaoVA-100x

Start at: 2019-12-11 15:54:48
End at: 2019-12-11 15:55:18
Local clock offset: 5.076 ms
Remote clock offset: -50.748 ms

# Below is generated by plot.py at 2019-12-11 18:22:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 174.47 Mbit/s
  95th percentile per-packet one-way delay: 156.669 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 101.02 Mbit/s
  95th percentile per-packet one-way delay: 155.913 ms
  Loss rate: 0.41%
-- Flow 2:
  Average throughput: 83.06 Mbit/s
  95th percentile per-packet one-way delay: 157.392 ms
  Loss rate: 0.72%
-- Flow 3:
  Average throughput: 56.04 Mbit/s
  95th percentile per-packet one-way delay: 157.485 ms
  Loss rate: 2.38%
Run 2: Report of TaoVA-100x — Data Link

![Graph 1: Throughput](image1)

- **Flow 1 ingress**: mean 100.80 Mbit/s
- **Flow 1 egress**: mean 101.02 Mbit/s
- **Flow 2 ingress**: mean 82.81 Mbit/s
- **Flow 2 egress**: mean 83.06 Mbit/s
- **Flow 3 ingress**: mean 56.32 Mbit/s
- **Flow 3 egress**: mean 56.04 Mbit/s

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

- **Flow 1**: 95th percentile 155.91 ms
- **Flow 2**: 95th percentile 157.39 ms
- **Flow 3**: 95th percentile 157.49 ms
Run 3: Statistics of TaoVA-100x

Start at: 2019-12-11 16:30:04
End at: 2019-12-11 16:30:34
Local clock offset: 6.853 ms
Remote clock offset: -44.289 ms

# Below is generated by plot.py at 2019-12-11 18:22:04
# Datalink statistics
-- Total of 3 flows:
    Average throughput: 172.96 Mbit/s
    95th percentile per-packet one-way delay: 150.790 ms
    Loss rate: 0.75%
-- Flow 1:
    Average throughput: 108.24 Mbit/s
    95th percentile per-packet one-way delay: 150.494 ms
    Loss rate: 0.30%
-- Flow 2:
    Average throughput: 68.53 Mbit/s
    95th percentile per-packet one-way delay: 150.718 ms
    Loss rate: 0.89%
-- Flow 3:
    Average throughput: 58.90 Mbit/s
    95th percentile per-packet one-way delay: 152.965 ms
    Loss rate: 2.87%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 107.84 Mbit/s)
- **Flow 1 egress** (mean 108.24 Mbit/s)
- **Flow 2 ingress** (mean 68.47 Mbit/s)
- **Flow 2 egress** (mean 68.53 Mbit/s)
- **Flow 3 ingress** (mean 59.42 Mbit/s)
- **Flow 3 egress** (mean 58.90 Mbit/s)
Run 4: Statistics of TaoVA-100x

Start at: 2019-12-11 17:04:46
End at: 2019-12-11 17:05:16
Local clock offset: 6.041 ms
Remote clock offset: -36.693 ms

# Below is generated by plot.py at 2019-12-11 18:22:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 174.79 Mbit/s
95th percentile per-packet one-way delay: 143.706 ms
Loss rate: 0.83%
-- Flow 1:
Average throughput: 110.02 Mbit/s
95th percentile per-packet one-way delay: 143.308 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 64.86 Mbit/s
95th percentile per-packet one-way delay: 143.804 ms
Loss rate: 1.53%
-- Flow 3:
Average throughput: 66.60 Mbit/s
95th percentile per-packet one-way delay: 145.266 ms
Loss rate: 2.04%
Run 4: Report of TaoVA-100x — Data Link

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

- **Flow 1 ingress** (mean 109.62 Mbit/s)
- **Flow 1 egress** (mean 110.02 Mbit/s)
- **Flow 2 ingress** (mean 65.13 Mbit/s)
- **Flow 2 egress** (mean 64.86 Mbit/s)
- **Flow 3 ingress** (mean 66.63 Mbit/s)
- **Flow 3 egress** (mean 66.60 Mbit/s)

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

- **Flow 1** (95th percentile 143.31 ms)
- **Flow 2** (95th percentile 143.80 ms)
- **Flow 3** (95th percentile 145.7 ms)
Run 5: Statistics of TaoVA-100x

Start at: 2019-12-11 17:39:43
End at: 2019-12-11 17:40:13
Local clock offset: 5.789 ms
Remote clock offset: -36.843 ms

# Below is generated by plot.py at 2019-12-11 18:22:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 169.30 Mbit/s
  95th percentile per-packet one-way delay: 143.914 ms
  Loss rate: 0.72%
-- Flow 1:
  Average throughput: 105.15 Mbit/s
  95th percentile per-packet one-way delay: 143.202 ms
  Loss rate: 0.47%
-- Flow 2:
  Average throughput: 76.28 Mbit/s
  95th percentile per-packet one-way delay: 144.587 ms
  Loss rate: 0.64%
-- Flow 3:
  Average throughput: 41.40 Mbit/s
  95th percentile per-packet one-way delay: 145.447 ms
  Loss rate: 2.90%
Run 5: Report of TaoVA-100x — Data Link
Run 1: Statistics of TCP Vegas

Start at: 2019-12-11 15:21:30
End at: 2019-12-11 15:22:00
Local clock offset: 2.482 ms
Remote clock offset: -70.126 ms
Run 1: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing
Run 2: Statistics of TCP Vegas

Start at: 2019-12-11 15:56:23
End at: 2019-12-11 15:56:53
Local clock offset: 1.745 ms
Remote clock offset: -47.783 ms
Run 2: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing
Run 3: Statistics of TCP Vegas

Start at: 2019-12-11 16:31:38
End at: 2019-12-11 16:32:08
Local clock offset: 6.06 ms
Remote clock offset: -43.422 ms
Run 3: Report of TCP Vegas — Data Link

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Figure is missing
Run 4: Statistics of TCP Vegas

Start at: 2019-12-11 17:06:20
End at: 2019-12-11 17:06:50
Local clock offset: 0.763 ms
Remote clock offset: -36.427 ms
Run 4: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing
Run 5: Statistics of TCP Vegas

Start at: 2019-12-11 17:41:17
End at: 2019-12-11 17:41:47
Local clock offset: 1.407 ms
Remote clock offset: -46.552 ms
Run 5: Report of TCP Vegas — Data Link

Figure is missing

Figure is missing
Run 1: Statistics of Verus

Start at: 2019-12-11 15:05:22
End at: 2019-12-11 15:05:52
Local clock offset: 4.289 ms
Remote clock offset: -48.584 ms

# Below is generated by plot.py at 2019-12-11 18:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 143.70 Mbit/s
95th percentile per-packet one-way delay: 456.534 ms
Loss rate: 6.69%
-- Flow 1:
Average throughput: 63.08 Mbit/s
95th percentile per-packet one-way delay: 464.707 ms
Loss rate: 7.59%
-- Flow 2:
Average throughput: 113.23 Mbit/s
95th percentile per-packet one-way delay: 453.472 ms
Loss rate: 6.44%
-- Flow 3:
Average throughput: 20.77 Mbit/s
95th percentile per-packet one-way delay: 154.397 ms
Loss rate: 0.00%
Run 1: Report of Verus — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 67.12 Mbps) — Flow 1 egress (mean 63.08 Mbps)
Flow 2 ingress (mean 119.79 Mbps) — Flow 2 egress (mean 113.23 Mbps)
Flow 3 ingress (mean 20.75 Mbps) — Flow 3 egress (mean 20.77 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 464.71 ms) — Flow 2 (95th percentile 453.47 ms) — Flow 3 (95th percentile 154.40 ms)
Run 2: Statistics of Verus

Start at: 2019-12-11 15:40:28
End at: 2019-12-11 15:40:58
Local clock offset: 4.386 ms
Remote clock offset: -74.119 ms

# Below is generated by plot.py at 2019-12-11 18:22:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 153.87 Mbit/s
  95th percentile per-packet one-way delay: 382.484 ms
  Loss rate: 0.35%
-- Flow 1:
  Average throughput: 94.93 Mbit/s
  95th percentile per-packet one-way delay: 389.102 ms
  Loss rate: 0.52%
-- Flow 2:
  Average throughput: 75.99 Mbit/s
  95th percentile per-packet one-way delay: 207.941 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 26.29 Mbit/s
  95th percentile per-packet one-way delay: 191.379 ms
  Loss rate: 0.51%
Run 2: Report of Verus — Data Link

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

**Throughput (Mbps):**
- Flow 1 ingress (mean 95.08 Mbit/s)
- Flow 1 egress (mean 94.93 Mbit/s)
- Flow 2 ingress (mean 76.00 Mbit/s)
- Flow 2 egress (mean 75.99 Mbit/s)
- Flow 3 ingress (mean 25.86 Mbit/s)
- Flow 3 egress (mean 26.29 Mbit/s)

**Per-packet one-way delay (ms):**
- Flow 1 (95th percentile 389.10 ms)
- Flow 2 (95th percentile 207.94 ms)
- Flow 3 (95th percentile 191.30 ms)
Run 3: Statistics of Verus

Start at: 2019-12-11 16:15:34
End at: 2019-12-11 16:16:04
Local clock offset: 6.08 ms
Remote clock offset: -42.296 ms

# Below is generated by plot.py at 2019-12-11 18:22:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 215.78 Mbit/s
95th percentile per-packet one-way delay: 361.802 ms
Loss rate: 1.14%
-- Flow 1:
Average throughput: 157.84 Mbit/s
95th percentile per-packet one-way delay: 368.413 ms
Loss rate: 1.09%
-- Flow 2:
Average throughput: 51.66 Mbit/s
95th percentile per-packet one-way delay: 362.100 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 75.26 Mbit/s
95th percentile per-packet one-way delay: 163.938 ms
Loss rate: 2.27%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2019-12-11 16:50:19
End at: 2019-12-11 16:50:49
Local clock offset: 1.119 ms
Remote clock offset: -37.06 ms

# Below is generated by plot.py at 2019-12-11 18:23:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 257.46 Mbit/s
95th percentile per-packet one-way delay: 334.943 ms
Loss rate: 0.50%
-- Flow 1:
Average throughput: 228.35 Mbit/s
95th percentile per-packet one-way delay: 334.886 ms
Loss rate: 0.52%
-- Flow 2:
Average throughput: 10.36 Mbit/s
95th percentile per-packet one-way delay: 167.844 ms
Loss rate: 1.36%
-- Flow 3:
Average throughput: 71.19 Mbit/s
95th percentile per-packet one-way delay: 346.700 ms
Loss rate: 0.03%
Run 4: Report of Verus — Data Link

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

- Flow 1 ingress (mean 227.97 Mbit/s)
- Flow 1 egress (mean 228.35 Mbit/s)
- Flow 2 ingress (mean 10.36 Mbit/s)
- Flow 2 egress (mean 10.36 Mbit/s)
- Flow 3 ingress (mean 68.55 Mbit/s)
- Flow 3 egress (mean 71.19 Mbit/s)

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

- Flow 1 (95th percentile 334.89 ms)
- Flow 2 (95th percentile 167.84 ms)
- Flow 3 (95th percentile 346.70 ms)
Run 5: Statistics of Verus

Start at: 2019-12-11 17:25:20
End at: 2019-12-11 17:25:50
Local clock offset: 1.689 ms
Remote clock offset: -40.328 ms

# Below is generated by plot.py at 2019-12-11 18:23:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 222.87 Mbit/s
95th percentile per-packet one-way delay: 427.963 ms
Loss rate: 1.00%
-- Flow 1:
Average throughput: 146.87 Mbit/s
95th percentile per-packet one-way delay: 442.878 ms
Loss rate: 1.27%
-- Flow 2:
Average throughput: 102.76 Mbit/s
95th percentile per-packet one-way delay: 287.583 ms
Loss rate: 0.53%
-- Flow 3:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: 296.925 ms
Loss rate: 0.04%
Run 5: Report of Verus — Data Link

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

- Flow 1 ingress (mean 148.01 Mbit/s)
- Flow 1 egress (mean 146.87 Mbit/s)
- Flow 2 ingress (mean 192.28 Mbit/s)
- Flow 2 egress (mean 192.76 Mbit/s)
- Flow 3 ingress (mean 36.73 Mbit/s)
- Flow 3 egress (mean 35.70 Mbit/s)

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

- Flow 1 (95th percentile 442.98 ms)
- Flow 2 (95th percentile 287.58 ms)
- Flow 3 (95th percentile 296.93 ms)
Run 1: Statistics of PCC-Vivace

Start at: 2019-12-11 15:15:13
End at: 2019-12-11 15:15:43
Local clock offset: 6.641 ms
Remote clock offset: -73.684 ms

# Below is generated by plot.py at 2019-12-11 18:24:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 208.59 Mbit/s
95th percentile per-packet one-way delay: 177.163 ms
Loss rate: 0.75%
-- Flow 1:
Average throughput: 170.12 Mbit/s
95th percentile per-packet one-way delay: 177.194 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 37.29 Mbit/s
95th percentile per-packet one-way delay: 177.113 ms
Loss rate: 1.43%
-- Flow 3:
Average throughput: 42.32 Mbit/s
95th percentile per-packet one-way delay: 176.447 ms
Loss rate: 3.18%
Run 2: Statistics of PCC-Vivace

Start at: 2019-12-11 15:50:14
End at: 2019-12-11 15:50:44
Local clock offset: 5.819 ms
Remote clock offset: -42.223 ms

# Below is generated by plot.py at 2019-12-11 18:24:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 214.79 Mbit/s
95th percentile per-packet one-way delay: 147.290 ms
Loss rate: 0.85%
-- Flow 1:
Average throughput: 179.52 Mbit/s
95th percentile per-packet one-way delay: 147.269 ms
Loss rate: 0.64%
-- Flow 2:
Average throughput: 51.15 Mbit/s
95th percentile per-packet one-way delay: 147.337 ms
Loss rate: 1.85%
-- Flow 3:
Average throughput: 4.22 Mbit/s
95th percentile per-packet one-way delay: 147.434 ms
Loss rate: 2.27%
Run 2: Report of PCC-Vivace — Data Link

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

*Flow 1 ingress (mean 179.45 Mbit/s)*
*Flow 1 egress (mean 179.52 Mbit/s)*
*Flow 2 ingress (mean 51.58 Mbit/s)*
*Flow 2 egress (mean 51.15 Mbit/s)*
*Flow 3 ingress (mean 4.22 Mbit/s)*
*Flow 3 egress (mean 4.22 Mbit/s)*
Run 3: Statistics of PCC-Vivace

Start at: 2019-12-11 16:25:30
End at: 2019-12-11 16:26:00
Local clock offset: 0.757 ms
Remote clock offset: -50.528 ms

Below is generated by plot.py at 2019-12-11 18:24:16
Datalink statistics
-- Total of 3 flows:
  Average throughput: 208.33 Mbit/s
  95th percentile per-packet one-way delay: 150.189 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 171.32 Mbit/s
  95th percentile per-packet one-way delay: 150.233 ms
  Loss rate: 0.70%
-- Flow 2:
  Average throughput: 48.72 Mbit/s
  95th percentile per-packet one-way delay: 149.970 ms
  Loss rate: 1.69%
-- Flow 3:
  Average throughput: 14.45 Mbit/s
  95th percentile per-packet one-way delay: 150.321 ms
  Loss rate: 2.58%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2019-12-11 17:00:10
End at: 2019-12-11 17:00:40
Local clock offset: 5.569 ms
Remote clock offset: -44.365 ms

# Below is generated by plot.py at 2019-12-11 18:24:17
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 211.29 Mbit/s
  95th percentile per-packet one-way delay: 149.801 ms
  Loss rate: 0.77%
-- Flow 1:
  Average throughput: 189.09 Mbit/s
  95th percentile per-packet one-way delay: 149.822 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 22.16 Mbit/s
  95th percentile per-packet one-way delay: 149.526 ms
  Loss rate: 1.81%
-- Flow 3:
  Average throughput: 23.17 Mbit/s
  95th percentile per-packet one-way delay: 149.578 ms
  Loss rate: 2.64%
Run 4: Report of PCC-Vivace — Data Link

![Graph of Throughput vs Time](image1)

- Flow 1 ingress (mean 188.96 Mbit/s)
- Flow 1 egress (mean 189.09 Mbit/s)
- Flow 2 ingress (mean 22.34 Mbit/s)
- Flow 2 egress (mean 22.16 Mbit/s)
- Flow 3 ingress (mean 23.31 Mbit/s)
- Flow 3 egress (mean 23.17 Mbit/s)

![Graph of Per-Packet One-Way Delay vs Time](image2)

- Flow 1 (95th percentile 149.82 ms)
- Flow 2 (95th percentile 149.53 ms)
- Flow 3 (95th percentile 149.50 ms)
Run 5: Statistics of PCC-Vivace

Start at: 2019-12-11 17:35:10
End at: 2019-12-11 17:35:40
Local clock offset: 6.917 ms
Remote clock offset: -48.671 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 216.84 Mbit/s
  95th percentile per-packet one-way delay: 154.842 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 176.64 Mbit/s
  95th percentile per-packet one-way delay: 154.807 ms
  Loss rate: 0.66%
-- Flow 2:
  Average throughput: 39.47 Mbit/s
  95th percentile per-packet one-way delay: 154.965 ms
  Loss rate: 1.56%
-- Flow 3:
  Average throughput: 43.22 Mbit/s
  95th percentile per-packet one-way delay: 154.872 ms
  Loss rate: 3.17%
Run 5: Report of PCC-Vivace — Data Link

![Graph 1](#)

- **Flow 1 ingress (mean 176.61 Mbit/s)**
- **Flow 1 egress (mean 176.64 Mbit/s)**
- **Flow 2 ingress (mean 39.67 Mbit/s)**
- **Flow 2 egress (mean 39.47 Mbit/s)**
- **Flow 3 ingress (mean 43.69 Mbit/s)**
- **Flow 3 egress (mean 43.22 Mbit/s)**

![Graph 2](#)

- **Flow 1 (95th percentile 154.81 ms)**
- **Flow 2 (95th percentile 154.97 ms)**
- **Flow 3 (95th percentile 154.87 ms)**
Run 1: Statistics of WebRTC media

Start at: 2019-12-11 14:53:32
End at: 2019-12-11 14:54:02
Local clock offset: 6.119 ms
Remote clock offset: -73.998 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.14 Mbit/s
95th percentile per-packet one-way delay: 176.640 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 177.180 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 176.119 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 176.780 ms
Loss rate: 0.05%
Run 1: Report of WebRTC media — Data Link
Run 2: Statistics of WebRTC media

Start at: 2019-12-11 15:28:27
End at: 2019-12-11 15:28:57
Local clock offset: 2.19 ms
Remote clock offset: -54.147 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.16 Mbit/s
  95th percentile per-packet one-way delay: 152.203 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 0.05 Mbit/s
  95th percentile per-packet one-way delay: 153.349 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.07 Mbit/s
  95th percentile per-packet one-way delay: 152.242 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 0.06 Mbit/s
  95th percentile per-packet one-way delay: 152.063 ms
  Loss rate: 0.05%
Run 2: Report of WebRTC media — Data Link

Throughput (Mbps)

Time (s)

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

Packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 153.35 ms)
Flow 2 (95th percentile 152.24 ms)
Flow 3 (95th percentile 152.06 ms)
Run 3: Statistics of WebRTC media

Start at: 2019-12-11 16:03:19
End at: 2019-12-11 16:03:49
Local clock offset: 0.542 ms
Remote clock offset: -44.69 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.16 Mbit/s
95th percentile per-packet one-way delay: 144.335 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 145.398 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.08 Mbit/s
95th percentile per-packet one-way delay: 144.386 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 144.208 ms
Loss rate: 0.05%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2019-12-11 16:38:33
End at: 2019-12-11 16:39:03
Local clock offset: 7.103 ms
Remote clock offset: -47.04 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 152.279 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 152.505 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 152.279 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 152.151 ms
Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

![Graph showing throughput and round-trip time for different flows.](image)

- 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 0.06 Mbit/s)
- Flow 3 egress (mean 0.06 Mbit/s)

![Graph showing per-packet round-trip time for different flows.](image)

- Flow 1 (95th percentile 152.50 ms)
- Flow 2 (95th percentile 152.28 ms)
- Flow 3 (95th percentile 152.15 ms)
Run 5: Statistics of WebRTC media

Start at: 2019-12-11 17:13:14
End at: 2019-12-11 17:13:44
Local clock offset: 2.312 ms
Remote clock offset: -37.226 ms

# Below is generated by plot.py at 2019-12-11 18:24:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.15 Mbit/s
95th percentile per-packet one-way delay: 137.811 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 139.096 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.06 Mbit/s
95th percentile per-packet one-way delay: 137.950 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.05 Mbit/s
95th percentile per-packet one-way delay: 137.521 ms
Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

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