Pantheon Report

Data path: Brazil on p4p1 (remote) → AWS Brazil 1 on ens5 (local).
Repeated the test of 21 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 gps.ntp.br and have been applied to correct the timestamps in logs.

System info:
Linux 4.15.0-1031-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 @ c80a283586bf7b0cc1fe08c69c8f60d56498f81c
third_party/fillp @ d6a1459332fcee56963885d7eba17e6a3d4519
third_party/fillp-sheep @ 0e5bb722943babc2bd20902c64fd45e12e923f9
third_party/genericCC @ d0153f8e5694aa89eb032143cedbde58e562f4
third_party/indigo @ 2601c92e4aa9d5838d4dfe0edbf9c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/muses @ c3eee875824760ec5b2df207fefe166e1afe2170
third_party/pantheon-tunnel @ f866d3f58d27afd942717625ee3a354cc2e802bd
third_party/pcc @ 1af9c958fa0d66d19b623c091a55feca872b4981e1
M receiver/src/buffer.h
M receiver/src/core.cpp
M sender/src/buffer.h
M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f613e8acd08fab92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3c4f42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3dbb2
M src/ScreamClient
M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4a46ad18c74f9415f19a26
M src/examples/qlsim.cc
M src/examples/sproutbt2.cc
M src/network/sproutconn.cc
third_party/verus @ d4b447ea74c6c60a261149af2629562939f9a494
M src/verus.hpp
M tools/plot.py
test from Brazil to AWS Brazil 1, 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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<tbody>
<tr>
<td></td>
<td></td>
<td>flow 1</td>
<td>flow 2</td>
<td>flow 3</td>
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<td>TCP BBR</td>
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<td>59.29</td>
<td>40.89</td>
<td>33.00</td>
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<td>Copa</td>
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<td>54.08</td>
<td>39.73</td>
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<td>40.64</td>
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<td>0.87</td>
<td>0.42</td>
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Run 1: Statistics of TCP BBR

Start at: 2019-01-19 11:45:11
End at: 2019-01-19 11:45:41
Local clock offset: -7.617 ms
Remote clock offset: -0.199 ms

# Below is generated by plot.py at 2019-01-19 13:39:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.44 Mbit/s
95th percentile per-packet one-way delay: 9.080 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 8.055 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.88 Mbit/s
95th percentile per-packet one-way delay: 9.476 ms
Loss rate: 0.13%
-- Flow 3:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: 11.985 ms
Loss rate: 0.71%
Run 1: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 59.26 Mbit/s)  
- Flow 1 egress (mean 59.26 Mbit/s)
- Flow 2 ingress (mean 40.93 Mbit/s)  
- Flow 2 egress (mean 40.83 Mbit/s)
- Flow 3 ingress (mean 33.22 Mbit/s)  
- Flow 3 egress (mean 33.00 Mbit/s)

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

- Flow 1 (95th percentile 8.05 ms)  
- Flow 2 (95th percentile 9.48 ms)  
- Flow 3 (95th percentile 11.98 ms)
Run 2: Statistics of TCP BBR

Start at: 2019-01-19 12:09:19
End at: 2019-01-19 12:09:49
Local clock offset: -7.713 ms
Remote clock offset: 0.346 ms

# Below is generated by plot.py at 2019-01-19 13:39:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 9.242 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: 8.181 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.89 Mbit/s
95th percentile per-packet one-way delay: 9.645 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.99 Mbit/s
95th percentile per-packet one-way delay: 10.021 ms
Loss rate: 0.78%
Run 2: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 59.32 Mbit/s)
- Flow 1 egress (mean 59.31 Mbit/s)
- Flow 2 ingress (mean 40.97 Mbit/s)
- Flow 2 egress (mean 40.89 Mbit/s)
- Flow 3 ingress (mean 33.23 Mbit/s)
- Flow 3 egress (mean 32.99 Mbit/s)
Run 3: Statistics of TCP BBR

Start at: 2019-01-19 12:33:30
End at: 2019-01-19 12:34:00
Local clock offset: -6.621 ms
Remote clock offset: 1.034 ms

# Below is generated by plot.py at 2019-01-19 13:39:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.46 Mbit/s
95th percentile per-packet one-way delay: 10.527 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 59.26 Mbit/s
95th percentile per-packet one-way delay: 10.192 ms
Loss rate: 0.20%
-- Flow 2:
Average throughput: 40.90 Mbit/s
95th percentile per-packet one-way delay: 10.392 ms
Loss rate: 0.23%
-- Flow 3:
Average throughput: 33.03 Mbit/s
95th percentile per-packet one-way delay: 19.415 ms
Loss rate: 1.23%
Run 3: Report of TCP BBR — Data Link
Run 4: Statistics of TCP BBR

Local clock offset: -4.166 ms
Remote clock offset: 1.432 ms

# Below is generated by plot.py at 2019-01-19 13:39:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.50 Mbit/s
  95th percentile per-packet one-way delay: 8.848 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 59.31 Mbit/s
  95th percentile per-packet one-way delay: 7.852 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 40.89 Mbit/s
  95th percentile per-packet one-way delay: 9.392 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 33.00 Mbit/s
  95th percentile per-packet one-way delay: 10.103 ms
  Loss rate: 0.31%
Run 4: Report of TCP BBR — Data Link

![Graph showing throughput and per-packet round-trip time per flow over time.]

- Flow 1: Ingress (mean 59.32 Mbps), Egress (mean 59.31 Mbps)
- Flow 2: Ingress (mean 40.99 Mbps), Egress (mean 40.89 Mbps)
- Flow 3: Ingress (mean 33.09 Mbps), Egress (mean 33.00 Mbps)

![Graph showing per-packet round-trip time distribution per flow over time.]

- Flow 1: 95th percentile 7.85 ms
- Flow 2: 95th percentile 9.39 ms
- Flow 3: 95th percentile 10.10 ms
Run 5: Statistics of TCP BBR

Local clock offset: -1.081 ms
Remote clock offset: 1.551 ms

# Below is generated by plot.py at 2019-01-19 13:39:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.50 Mbit/s
  95th percentile per-packet one-way delay: 10.791 ms
  Loss rate: 0.46%
-- Flow 1:
  Average throughput: 59.31 Mbit/s
  95th percentile per-packet one-way delay: 10.066 ms
  Loss rate: 0.21%
-- Flow 2:
  Average throughput: 40.89 Mbit/s
  95th percentile per-packet one-way delay: 11.809 ms
  Loss rate: 0.87%
-- Flow 3:
  Average throughput: 32.98 Mbit/s
  95th percentile per-packet one-way delay: 10.632 ms
  Loss rate: 0.77%
Run 5: Report of TCP BBR — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 59.43 Mbps)
- Flow 1 egress (mean 59.31 Mbps)
- Flow 2 ingress (mean 41.24 Mbps)
- Flow 2 egress (mean 40.89 Mbps)
- Flow 3 ingress (mean 33.21 Mbps)
- Flow 3 egress (mean 32.98 Mbps)

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

- Flow 1 (95th percentile 10.07 ms)
- Flow 2 (95th percentile 11.81 ms)
- Flow 3 (95th percentile 10.63 ms)
Run 1: Statistics of Copa

Start at: 2019-01-19 11:54:22
End at: 2019-01-19 11:54:52
Local clock offset: -7.716 ms
Remote clock offset: -0.071 ms

# Below is generated by plot.py at 2019-01-19 13:40:26
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.39 Mbit/s
95th percentile per-packet one-way delay: 13.094 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 52.50 Mbit/s
95th percentile per-packet one-way delay: 11.135 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 39.27 Mbit/s
95th percentile per-packet one-way delay: 16.031 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 13.178 ms
Loss rate: 0.17%
Run 1: Report of Copa — Data Link

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

![Graph 2: Per-Packet One-Way Delay vs Time](image2)
Run 2: Statistics of Copa

Start at: 2019-01-19 12:18:30
End at: 2019-01-19 12:19:00
Local clock offset: ~6.915 ms
Remote clock offset: 0.632 ms

# Below is generated by plot.py at 2019-01-19 13:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.76 Mbit/s
95th percentile per-packet one-way delay: 14.781 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 54.60 Mbit/s
95th percentile per-packet one-way delay: 14.702 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 40.17 Mbit/s
95th percentile per-packet one-way delay: 13.075 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 31.34 Mbit/s
95th percentile per-packet one-way delay: 17.155 ms
Loss rate: 0.16%
Run 2: Report of Copa — Data Link

[Graph showing network throughput over time with legends for different flows and their mean throughput rates.]

[Graph showing packet latency over time with legends for different flows and their 95th percentile latency.]
Run 3: Statistics of Copa

End at: 2019-01-19 12:43:12
Local clock offset: -7.355 ms
Remote clock offset: 1.217 ms

# Below is generated by plot.py at 2019-01-19 13:40:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.67 Mbit/s
95th percentile per-packet one-way delay: 12.556 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 55.15 Mbit/s
95th percentile per-packet one-way delay: 11.453 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 38.98 Mbit/s
95th percentile per-packet one-way delay: 11.410 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 31.79 Mbit/s
95th percentile per-packet one-way delay: 17.315 ms
Loss rate: 0.14%
Run 3: Report of Copa — Data Link
Run 4: Statistics of Copa

Start at: 2019-01-19 13:06:54
End at: 2019-01-19 13:07:24
Local clock offset: -2.951 ms
Remote clock offset: 1.401 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.05 Mbit/s
95th percentile per-packet one-way delay: 13.946 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 55.05 Mbit/s
95th percentile per-packet one-way delay: 14.273 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 39.98 Mbit/s
95th percentile per-packet one-way delay: 12.299 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: 15.690 ms
Loss rate: 0.13%
Run 4: Report of Copa — Data Link
Run 5: Statistics of Copa

Start at: 2019-01-19 13:31:05
Local clock offset: -0.517 ms
Remote clock offset: 1.631 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 13.324 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 53.08 Mbit/s
95th percentile per-packet one-way delay: 13.021 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: 12.944 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 32.83 Mbit/s
95th percentile per-packet one-way delay: 14.397 ms
Loss rate: 0.18%
Run 5: Report of Copa — Data Link

- Throughput (Mbps):
  - Flow 1 ingress (mean 53.09 Mbps)
  - Flow 1 egress (mean 53.08 Mbps)
  - Flow 2 ingress (mean 40.27 Mbps)
  - Flow 2 egress (mean 40.24 Mbps)
  - Flow 3 ingress (mean 32.86 Mbps)
  - Flow 3 egress (mean 32.63 Mbps)

- Packet round-trip delay (ms):
  - Flow 1 (95th percentile 13.02 ms)
  - Flow 2 (95th percentile 12.94 ms)
  - Flow 3 (95th percentile 14.40 ms)
Run 1: Statistics of TCP Cubic

Start at: 2019-01-19 11:42:54
End at: 2019-01-19 11:43:24
Local clock offset: -7.61 ms
Remote clock offset: -0.333 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: 9.612 ms
  Loss rate: 0.10%
-- Flow 1:
  Average throughput: 59.62 Mbit/s
  95th percentile per-packet one-way delay: 9.563 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 40.65 Mbit/s
  95th percentile per-packet one-way delay: 9.539 ms
  Loss rate: 0.13%
-- Flow 3:
  Average throughput: 32.49 Mbit/s
  95th percentile per-packet one-way delay: 9.871 ms
  Loss rate: 0.22%
Run 1: Report of TCP Cubic — Data Link

![Graphs showing throughput and round-trip delay over time for different flows.]
Run 2: Statistics of TCP Cubic

Start at: 2019-01-19 12:07:03
End at: 2019-01-19 12:07:33
Local clock offset: -6.945 ms
Remote clock offset: 0.331 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.47 Mbit/s
95th percentile per-packet one-way delay: 10.388 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.61 Mbit/s
95th percentile per-packet one-way delay: 10.499 ms
Loss rate: 0.07%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 10.331 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.49 Mbit/s
95th percentile per-packet one-way delay: 10.597 ms
Loss rate: 0.22%
Run 2: Report of TCP Cubic — Data Link

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**Throughput (Mbps)**

- **Flow 1 ingress** (mean 59.65 Mbps)
- **Flow 1 egress** (mean 59.61 Mbps)
- **Flow 2 ingress** (mean 40.69 Mbps)
- **Flow 2 egress** (mean 40.64 Mbps)
- **Flow 3 ingress** (mean 32.54 Mbps)
- **Flow 3 egress** (mean 32.49 Mbps)

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

- **Flow 1** (95th percentile 10.50 ms)
- **Flow 2** (95th percentile 10.33 ms)
- **Flow 3** (95th percentile 10.60 ms)
Run 3: Statistics of TCP Cubic

End at: 2019-01-19 12:31:43
Local clock offset: -6.699 ms
Remote clock offset: 1.072 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.50 Mbit/s
  95th percentile per-packet one-way delay: 10.553 ms
  Loss rate: 0.12%
-- Flow 1:
  Average throughput: 59.64 Mbit/s
  95th percentile per-packet one-way delay: 10.685 ms
  Loss rate: 0.08%
-- Flow 2:
  Average throughput: 40.64 Mbit/s
  95th percentile per-packet one-way delay: 10.188 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 32.49 Mbit/s
  95th percentile per-packet one-way delay: 10.640 ms
  Loss rate: 0.26%
Run 3: Report of TCP Cubic — Data Link
Run 4: Statistics of TCP Cubic

Local clock offset: -3.786 ms  
Remote clock offset: 1.409 ms

# Below is generated by plot.py at 2019-01-19 13:41:33  
# Datalink statistics

-- Total of 3 flows:  
Average throughput: 97.47 Mbit/s  
95th percentile per-packet one-way delay: 10.141 ms  
Loss rate: 0.12%  
-- Flow 1:  
Average throughput: 59.61 Mbit/s  
95th percentile per-packet one-way delay: 10.049 ms  
Loss rate: 0.09%  
-- Flow 2:  
Average throughput: 40.65 Mbit/s  
95th percentile per-packet one-way delay: 10.299 ms  
Loss rate: 0.16%  
-- Flow 3:  
Average throughput: 32.49 Mbit/s  
95th percentile per-packet one-way delay: 10.353 ms  
Loss rate: 0.21%
Run 4: Report of TCP Cubic — Data Link

![Graph showing data link performance metrics for TCP Cubic]

- **Flow 1 ingress** (mean 59.65 Mbit/s)
- **Flow 1 egress** (mean 59.61 Mbit/s)
- **Flow 2 ingress** (mean 40.71 Mbit/s)
- **Flow 2 egress** (mean 40.65 Mbit/s)
- **Flow 3 ingress** (mean 32.54 Mbit/s)
- **Flow 3 egress** (mean 32.49 Mbit/s)

![Graph showing packet delay distribution]

- **Flow 1 (95th percentile 10.05 ms)**
- **Flow 2 (95th percentile 10.30 ms)**
- **Flow 3 (95th percentile 10.35 ms)**

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Run 5: Statistics of TCP Cubic

End at: 2019-01-19 13:20:06
Local clock offset: -1.968 ms
Remote clock offset: 1.569 ms

# Below is generated by plot.py at 2019-01-19 13:41:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.50 Mbit/s
95th percentile per-packet one-way delay: 9.728 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 9.883 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 40.63 Mbit/s
95th percentile per-packet one-way delay: 9.460 ms
Loss rate: 0.14%
-- Flow 3:
Average throughput: 32.48 Mbit/s
95th percentile per-packet one-way delay: 9.727 ms
Loss rate: 0.21%
Run 5: Report of TCP Cubic — Data Link
Run 1: Statistics of Fillp

Start at: 2019-01-19 11:41:46
End at: 2019-01-19 11:42:16
Local clock offset: -6.832 ms
Remote clock offset: -0.393 ms

# Below is generated by plot.py at 2019-01-19 13:41:50
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.90 Mbit/s
95th percentile per-packet one-way delay: 52.063 ms
Loss rate: 1.41%
-- Flow 1:
Average throughput: 59.88 Mbit/s
95th percentile per-packet one-way delay: 33.514 ms
Loss rate: 0.19%
-- Flow 2:
Average throughput: 46.89 Mbit/s
95th percentile per-packet one-way delay: 59.813 ms
Loss rate: 3.87%
-- Flow 3:
Average throughput: 14.44 Mbit/s
95th percentile per-packet one-way delay: 23.546 ms
Loss rate: 0.02%
Run 1: Report of FillP — Data Link

![Graph showing throughput over time for different flows]

- Flow 1 ingress (mean 60.02 Mbit/s)
- Flow 1 egress (mean 59.88 Mbit/s)
- Flow 2 ingress (mean 48.78 Mbit/s)
- Flow 2 egress (mean 46.89 Mbit/s)
- Flow 3 ingress (mean 14.45 Mbit/s)
- Flow 3 egress (mean 14.44 Mbit/s)

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

- Flow 1 (95th percentile 33.51 ms)
- Flow 2 (95th percentile 58.81 ms)
- Flow 3 (95th percentile 23.55 ms)
Run 2: Statistics of FillP

Start at: 2019-01-19 12:05:54
End at: 2019-01-19 12:06:24
Local clock offset: -6.922 ms
Remote clock offset: 0.273 ms

# Below is generated by plot.py at 2019-01-19 13:42:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.22 Mbit/s
95th percentile per-packet one-way delay: 44.214 ms
Loss rate: 0.67%
-- Flow 1:
Average throughput: 58.41 Mbit/s
95th percentile per-packet one-way delay: 34.580 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 39.80 Mbit/s
95th percentile per-packet one-way delay: 36.009 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 56.567 ms
Loss rate: 4.10%
Run 2: Report of FillP — Data Link

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

![Graph 2: Per-packet round-trip delay vs. Time](image2)
Run 3: Statistics of FillP

Start at: 2019-01-19 12:30:05
End at: 2019-01-19 12:30:35
Local clock offset: -6.651 ms
Remote clock offset: 1.082 ms

# Below is generated by plot.py at 2019-01-19 13:42:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.73 Mbit/s
95th percentile per-packet one-way delay: 40.279 ms
Loss rate: 0.46%
-- Flow 1:
Average throughput: 56.86 Mbit/s
95th percentile per-packet one-way delay: 29.699 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 40.96 Mbit/s
95th percentile per-packet one-way delay: 39.046 ms
Loss rate: 0.56%
-- Flow 3:
Average throughput: 32.03 Mbit/s
95th percentile per-packet one-way delay: 49.006 ms
Loss rate: 2.17%
Run 3: Report of FillP — Data Link

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

- **Flow 1**
  - Ingress: Mean 56.91 Mbit/s
  - Egress: Mean 56.86 Mbit/s
- **Flow 2**
  - Ingress: Mean 41.21 Mbit/s
  - Egress: Mean 40.96 Mbit/s
- **Flow 3**
  - Ingress: Mean 32.73 Mbit/s
  - Egress: Mean 32.03 Mbit/s

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

- **Flow 1**: 95th percentile 29.70 ms
- **Flow 2**: 95th percentile 39.05 ms
- **Flow 3**: 95th percentile 49.01 ms
Run 4: Statistics of FillP

Start at: 2019-01-19 12:54:17
End at: 2019-01-19 12:54:47
Local clock offset: -4.031 ms
Remote clock offset: 1.242 ms

# Below is generated by plot.py at 2019-01-19 13:42:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 95.96 Mbit/s
  95th percentile per-packet one-way delay: 53.836 ms
  Loss rate: 1.77%
-- Flow 1:
  Average throughput: 56.03 Mbit/s
  95th percentile per-packet one-way delay: 29.136 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 51.25 Mbit/s
  95th percentile per-packet one-way delay: 61.033 ms
  Loss rate: 4.67%
-- Flow 3:
  Average throughput: 17.54 Mbit/s
  95th percentile per-packet one-way delay: 22.159 ms
  Loss rate: 0.01%
Run 4: Report of FillP — Data Link

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

Legend:
- Flow 1 ingress (mean 56.09 Mbit/s)
- Flow 1 egress (mean 56.03 Mbit/s)
- Flow 2 ingress (mean 53.76 Mbit/s)
- Flow 2 egress (mean 51.25 Mbit/s)
- Flow 3 ingress (mean 17.54 Mbit/s)
- Flow 3 egress (mean 17.54 Mbit/s)
Run 5: Statistics ofFillP

Local clock offset: -2.131 ms
Remote clock offset: 1.498 ms

# Below is generated by plot.py at 2019-01-19 13:42:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.00 Mbit/s
  95th percentile per-packet one-way delay: 54.327 ms
  Loss rate: 1.16%
-- Flow 1:
  Average throughput: 53.92 Mbit/s
  95th percentile per-packet one-way delay: 29.021 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 47.37 Mbit/s
  95th percentile per-packet one-way delay: 66.672 ms
  Loss rate: 2.89%
-- Flow 3:
  Average throughput: 31.79 Mbit/s
  95th percentile per-packet one-way delay: 37.182 ms
  Loss rate: 0.99%
Run 5: Report of FillP — Data Link

**Throughput (Mbit/s)**

- Flow 1 ingress (mean 54.00 Mbit/s)
- Flow 1 egress (mean 53.92 Mbit/s)
- Flow 2 ingress (mean 48.80 Mbit/s)
- Flow 2 egress (mean 47.37 Mbit/s)
- Flow 3 ingress (mean 32.11 Mbit/s)
- Flow 3 egress (mean 31.79 Mbit/s)

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

- Flow 1 (95th percentile 29.02 ms)
- Flow 2 (95th percentile 66.67 ms)
- Flow 3 (95th percentile 37.18 ms)
Run 1: Statistics of FillP-Sheep

Start at: 2019-01-19 11:37:16
End at: 2019-01-19 11:37:46
Local clock offset: -6.887 ms
Remote clock offset: -0.361 ms

# Below is generated by plot.py at 2019-01-19 13:42:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.56 Mbit/s
95th percentile per-packet one-way delay: 26.288 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.98 Mbit/s
95th percentile per-packet one-way delay: 26.449 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 34.75 Mbit/s
95th percentile per-packet one-way delay: 24.878 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 34.52 Mbit/s
95th percentile per-packet one-way delay: 28.100 ms
Loss rate: 0.20%
Run 1: Report of FillP-Sheep — Data Link

![Graph showing throughput and packet loss over time for different flow ingress and egress rates.]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 60.01 Mbps)
  - Flow 2 ingress (mean 34.77 Mbps)
  - Flow 3 ingress (mean 34.57 Mbps)
  - Flow 1 egress (mean 59.98 Mbps)
  - Flow 2 egress (mean 34.75 Mbps)
  - Flow 3 egress (mean 34.52 Mbps)

- **Packet Loss (ms):**
  - Flow 1 (95th percentile 26.45 ms)
  - Flow 2 (95th percentile 24.88 ms)
  - Flow 3 (95th percentile 28.10 ms)
Run 2: Statistics of FillP-Sheep

Start at: 2019-01-19 12:01:26
End at: 2019-01-19 12:01:56
Local clock offset: -7.674 ms
Remote clock offset: 0.204 ms

# Below is generated by plot.py at 2019-01-19 13:42:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.65 Mbit/s
95th percentile per-packet one-way delay: 24.772 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 64.38 Mbit/s
95th percentile per-packet one-way delay: 25.678 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 31.78 Mbit/s
95th percentile per-packet one-way delay: 20.039 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 24.46 Mbit/s
95th percentile per-packet one-way delay: 44.690 ms
Loss rate: 0.26%
Run 2: Report of FillP-Sheep — Data Link

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

End at: 2019-01-19 12:26:05
Local clock offset: -7.473 ms
Remote clock offset: 0.836 ms

# Below is generated by plot.py at 2019-01-19 13:42:53
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.82 Mbit/s
95th percentile per-packet one-way delay: 25.630 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 63.25 Mbit/s
95th percentile per-packet one-way delay: 26.157 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 36.46 Mbit/s
95th percentile per-packet one-way delay: 21.397 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 18.98 Mbit/s
95th percentile per-packet one-way delay: 120.574 ms
Loss rate: 0.17%
Run 3: Report of FillP-Sheep — Data Link

![Graph of network throughput and packet delay over time for different flows.](image)
Run 4: Statistics of FillP-Sheep

End at: 2019-01-19 12:50:17
Local clock offset: -5.329 ms
Remote clock offset: 1.348 ms

# Below is generated by plot.py at 2019-01-19 13:43:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.69 Mbit/s
  95th percentile per-packet one-way delay: 27.577 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 57.76 Mbit/s
  95th percentile per-packet one-way delay: 24.699 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 38.89 Mbit/s
  95th percentile per-packet one-way delay: 28.680 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 33.29 Mbit/s
  95th percentile per-packet one-way delay: 34.348 ms
  Loss rate: 0.14%
Run 4: Report of FillP-Sheep — Data Link

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

- **Flow 1 ingress (mean 57.79 Mbit/s)**
- **Flow 1 egress (mean 57.76 Mbit/s)**
- **Flow 2 ingress (mean 38.92 Mbit/s)**
- **Flow 2 egress (mean 38.89 Mbit/s)**
- **Flow 3 ingress (mean 33.35 Mbit/s)**
- **Flow 3 egress (mean 33.29 Mbit/s)**
Run 5: Statistics of FillP-Sheep

End at: 2019-01-19 13:14:29
Local clock offset: -1.616 ms
Remote clock offset: 1.524 ms

# Below is generated by plot.py at 2019-01-19 13:43:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.13 Mbit/s
  95th percentile per-packet one-way delay: 27.781 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 60.03 Mbit/s
  95th percentile per-packet one-way delay: 27.820 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 42.99 Mbit/s
  95th percentile per-packet one-way delay: 28.090 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 16.61 Mbit/s
  95th percentile per-packet one-way delay: 21.920 ms
  Loss rate: 0.41%
Run 5: Report of FillP-Sheep — Data Link
Run 1: Statistics of Indigo

Start at: 2019-01-19 11:49:44
End at: 2019-01-19 11:50:14
Local clock offset: -6.877 ms
Remote clock offset: -0.241 ms

# Below is generated by plot.py at 2019-01-19 13:43:20
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.36 Mbit/s
  95th percentile per-packet one-way delay: 11.918 ms
  Loss rate: 0.57%
-- Flow 1:
  Average throughput: 59.71 Mbit/s
  95th percentile per-packet one-way delay: 10.310 ms
  Loss rate: 0.05%
-- Flow 2:
  Average throughput: 40.64 Mbit/s
  95th percentile per-packet one-way delay: 12.309 ms
  Loss rate: 1.89%
-- Flow 3:
  Average throughput: 32.31 Mbit/s
  95th percentile per-packet one-way delay: 8.883 ms
  Loss rate: 0.10%
Run 1: Report of Indigo — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 59.73 Mbit/s)  Flow 1 egress (mean 59.71 Mbit/s)
Flow 2 ingress (mean 41.42 Mbit/s)  Flow 2 egress (mean 40.64 Mbit/s)
Flow 3 ingress (mean 32.33 Mbit/s)  Flow 3 egress (mean 32.31 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 10.31 ms)  Flow 2 (95th percentile 12.31 ms)  Flow 3 (95th percentile 8.88 ms)
Run 2: Statistics of Indigo

End at: 2019-01-19 12:14:23
Local clock offset: -7.744 ms
Remote clock offset: 0.585 ms

# Below is generated by plot.py at 2019-01-19 13:43:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.32 Mbit/s
95th percentile per-packet one-way delay: 9.391 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 59.66 Mbit/s
95th percentile per-packet one-way delay: 9.022 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.65 Mbit/s
95th percentile per-packet one-way delay: 9.660 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 7.990 ms
Loss rate: 0.09%
Run 2: Report of Indigo — Data Link

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 59.66 Mbit/s)
  - Flow 1 egress (mean 59.66 Mbit/s)
  - Flow 2 ingress (mean 40.69 Mbit/s)
  - Flow 2 egress (mean 40.65 Mbit/s)
  - Flow 3 ingress (mean 32.34 Mbit/s)
  - Flow 3 egress (mean 32.32 Mbit/s)

- **Packet Arrival Delay (ms):**
  - Flow 1 (95th percentile 9.02 ms)
  - Flow 2 (95th percentile 9.66 ms)
  - Flow 3 (95th percentile 7.99 ms)
Run 3: Statistics of Indigo

Start at: 2019-01-19 12:38:04
End at: 2019-01-19 12:38:34
Local clock offset: -7.361 ms
Remote clock offset: 1.021 ms

# Below is generated by plot.py at 2019-01-19 13:44:00
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.26 Mbit/s
95th percentile per-packet one-way delay: 9.545 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 59.60 Mbit/s
95th percentile per-packet one-way delay: 9.162 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.64 Mbit/s
95th percentile per-packet one-way delay: 10.143 ms
Loss rate: 0.12%
-- Flow 3:
Average throughput: 32.33 Mbit/s
95th percentile per-packet one-way delay: 8.147 ms
Loss rate: 0.08%
Run 3: Report of Indigo — Data Link
Run 4: Statistics of Indigo

Start at: 2019-01-19 13:02:16
End at: 2019-01-19 13:02:46
Local clock offset: -3.464 ms
Remote clock offset: 1.446 ms

# Below is generated by plot.py at 2019-01-19 13:44:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.33 Mbit/s
95th percentile per-packet one-way delay: 9.260 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 59.67 Mbit/s
95th percentile per-packet one-way delay: 8.892 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 9.685 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 32.36 Mbit/s
95th percentile per-packet one-way delay: 7.476 ms
Loss rate: 0.10%
Run 4: Report of Indigo — Data Link
Run 5: Statistics of Indigo

End at: 2019-01-19 13:26:57
Local clock offset: -0.796 ms
Remote clock offset: 1.635 ms

# Below is generated by plot.py at 2019-01-19 13:44:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.35 Mbit/s
95th percentile per-packet one-way delay: 10.133 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 59.71 Mbit/s
95th percentile per-packet one-way delay: 10.116 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 40.66 Mbit/s
95th percentile per-packet one-way delay: 10.616 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 32.32 Mbit/s
95th percentile per-packet one-way delay: 8.682 ms
Loss rate: 0.11%
Run 5: Report of Indigo — Data Link

[Graph showing throughput and packet loss over time]
Run 1: Statistics of Indigo-MusesC3

Start at: 2019-01-19 11:47:29  
End at: 2019-01-19 11:47:59  
Local clock offset: -7.62 ms  
Remote clock offset: -0.233 ms

# Below is generated by plot.py at 2019-01-19 13:44:01  
# Datalink statistics  
-- Total of 3 flows:  
Average throughput: 54.44 Mbit/s  
95th percentile per-packet one-way delay: 3.833 ms  
Loss rate: 0.01%  
-- Flow 1:  
Average throughput: 36.07 Mbit/s  
95th percentile per-packet one-way delay: 3.169 ms  
Loss rate: 0.01%  
-- Flow 2:  
Average throughput: 20.01 Mbit/s  
95th percentile per-packet one-way delay: 4.450 ms  
Loss rate: 0.00%  
-- Flow 3:  
Average throughput: 21.33 Mbit/s  
95th percentile per-packet one-way delay: 4.978 ms  
Loss rate: 0.08%
Run 1: Report of Indigo-MusesC3 — Data Link
Run 2: Statistics of Indigo-MusesC3

End at: 2019-01-19 12:12:07
Local clock offset: -6.968 ms
Remote clock offset: 0.482 ms

# Below is generated by plot.py at 2019-01-19 13:44:01
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.80 Mbit/s
95th percentile per-packet one-way delay: 5.352 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 49.17 Mbit/s
95th percentile per-packet one-way delay: 5.349 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 27.82 Mbit/s
95th percentile per-packet one-way delay: 5.435 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 14.79 Mbit/s
95th percentile per-packet one-way delay: 4.920 ms
Loss rate: 0.02%
Run 2: Report of Indigo-MusesC3 — Data Link
Run 3: Statistics of Indigo-MusesC3

Start at: 2019-01-19 12:35:49
End at: 2019-01-19 12:36:19
Local clock offset: -6.61 ms
Remote clock offset: 1.167 ms

# Below is generated by plot.py at 2019-01-19 13:44:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.78 Mbit/s
  95th percentile per-packet one-way delay: 5.241 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 52.15 Mbit/s
  95th percentile per-packet one-way delay: 5.339 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 17.61 Mbit/s
  95th percentile per-packet one-way delay: 4.526 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 13.64 Mbit/s
  95th percentile per-packet one-way delay: 5.038 ms
  Loss rate: 0.04%
Run 3: Report of Indigo-MusesC3 — Data Link
Run 4: Statistics of Indigo-MusesC3

Start at: 2019-01-19 13:00:00
End at: 2019-01-19 13:00:30
Local clock offset: -3.813 ms
Remote clock offset: 1.331 ms

# Below is generated by plot.py at 2019-01-19 13:44:01
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.98 Mbit/s
  95th percentile per-packet one-way delay: 4.187 ms
  Loss rate: 0.02%

-- Flow 1:
  Average throughput: 47.26 Mbit/s
  95th percentile per-packet one-way delay: 4.313 ms
  Loss rate: 0.00%

-- Flow 2:
  Average throughput: 15.09 Mbit/s
  95th percentile per-packet one-way delay: 3.379 ms
  Loss rate: 0.02%

-- Flow 3:
  Average throughput: 15.90 Mbit/s
  95th percentile per-packet one-way delay: 3.770 ms
  Loss rate: 0.15%
Run 4: Report of Indigo-MusesC3 — Data Link
Run 5: Statistics of Indigo-MusesC3

Local clock offset: -0.936 ms
Remote clock offset: 1.467 ms

# Below is generated by plot.py at 2019-01-19 13:44:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.33 Mbit/s
95th percentile per-packet one-way delay: 5.236 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 48.71 Mbit/s
95th percentile per-packet one-way delay: 5.211 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 17.29 Mbit/s
95th percentile per-packet one-way delay: 4.606 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 21.47 Mbit/s
95th percentile per-packet one-way delay: 6.179 ms
Loss rate: 0.18%
Run 5: Report of Indigo-MusesC3 — Data Link
Run 1: Statistics of Indigo-MusesC5

End at: 2019-01-19 11:49:07
Local clock offset: -6.866 ms
Remote clock offset: -0.131 ms

# Below is generated by plot.py at 2019-01-19 13:44:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 51.41 Mbit/s
  95th percentile per-packet one-way delay: 14.831 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 25.81 Mbit/s
  95th percentile per-packet one-way delay: 12.868 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 26.56 Mbit/s
  95th percentile per-packet one-way delay: 14.515 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 32.64 Mbit/s
  95th percentile per-packet one-way delay: 17.209 ms
  Loss rate: 0.12%
Run 1: Report of Indigo-MusesC5 — Data Link
Run 2: Statistics of Indigo-MusesC5

Start at: 2019-01-19 12:12:45
Local clock offset: -7.719 ms
Remote clock offset: 0.516 ms

# Below is generated by plot.py at 2019-01-19 13:44:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 55.26 Mbit/s
  95th percentile per-packet one-way delay: 14.769 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 28.17 Mbit/s
  95th percentile per-packet one-way delay: 10.463 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 29.32 Mbit/s
  95th percentile per-packet one-way delay: 16.536 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 32.62 Mbit/s
  95th percentile per-packet one-way delay: 16.722 ms
  Loss rate: 0.15%
Run 2: Report of Indigo-MusesC5 — Data Link

![Graph showing network throughput over time]

- **Throughput (Mbps)**
- **Time (s)**
- **Flow 1 Ingress (mean 28.18 Mbps/s)**
- **Flow 1 Egress (mean 28.17 Mbps/s)**
- **Flow 2 Ingress (mean 29.35 Mbps/s)**
- **Flow 2 Egress (mean 29.32 Mbps/s)**
- **Flow 3 Ingress (mean 32.66 Mbps/s)**
- **Flow 3 Egress (mean 32.62 Mbps/s)**

![Graph showing per packet one-way delay]

- **Per packet one-way delay (ms)**
- **Time (s)**
- **Flow 1 (95th percentile 10.46 ms)**
- **Flow 2 (95th percentile 16.34 ms)**
- **Flow 3 (95th percentile 16.72 ms)**
Run 3: Statistics of Indigo-MusesC5

Start at: 2019-01-19 12:36:57
End at: 2019-01-19 12:37:27
Local clock offset: -6.615 ms
Remote clock offset: 1.153 ms

# Below is generated by plot.py at 2019-01-19 13:44:37
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.66 Mbit/s
95th percentile per-packet one-way delay: 14.402 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 32.07 Mbit/s
95th percentile per-packet one-way delay: 9.976 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 32.70 Mbit/s
95th percentile per-packet one-way delay: 16.208 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 33.26 Mbit/s
95th percentile per-packet one-way delay: 16.717 ms
Loss rate: 0.07%
Run 3: Report of Indigo-MusesC5 — Data Link
Run 4: Statistics of Indigo-MusesC5

Start at: 2019-01-19 13:01:08
End at: 2019-01-19 13:01:38
Local clock offset: -3.599 ms
Remote clock offset: 1.328 ms

# Below is generated by plot.py at 2019-01-19 13:44:39
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.75 Mbit/s
  95th percentile per-packet one-way delay: 15.987 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 38.44 Mbit/s
  95th percentile per-packet one-way delay: 13.879 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 28.50 Mbit/s
  95th percentile per-packet one-way delay: 15.060 ms
  Loss rate: 0.05%
-- Flow 3:
  Average throughput: 31.65 Mbit/s
  95th percentile per-packet one-way delay: 19.243 ms
  Loss rate: 0.13%
Run 4: Report of Indigo-MusesC5 — Data Link

Throughput (Mbps/s)

Time (s)

Flow 1 ingress (mean 38.45 Mbps/s)
Flow 1 egress (mean 38.44 Mbps/s)
Flow 2 ingress (mean 28.51 Mbps/s)
Flow 2 egress (mean 28.50 Mbps/s)
Flow 3 ingress (mean 31.68 Mbps/s)
Flow 3 egress (mean 31.65 Mbps/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 13.88 ms)
Flow 2 (95th percentile 15.06 ms)
Flow 3 (95th percentile 19.24 ms)
Run 5: Statistics of Indigo-MusesC5

Local clock offset: -1.633 ms
Remote clock offset: 1.59 ms

# Below is generated by plot.py at 2019-01-19 13:44:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 63.74 Mbit/s
  95th percentile per-packet one-way delay: 12.976 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 40.59 Mbit/s
  95th percentile per-packet one-way delay: 11.186 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 22.83 Mbit/s
  95th percentile per-packet one-way delay: 11.567 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 32.77 Mbit/s
  95th percentile per-packet one-way delay: 16.335 ms
  Loss rate: 0.06%
Run 5: Report of Indigo-MusesC5 — Data Link

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

- **Throughput** (Mbps/s):
  - Flow 1 ingress (mean 40.61 Mbps/s)
  - Flow 1 egress (mean 40.59 Mbps/s)
  - Flow 2 ingress (mean 22.84 Mbps/s)
  - Flow 2 egress (mean 22.83 Mbps/s)
  - Flow 3 ingress (mean 32.74 Mbps/s)
  - Flow 3 egress (mean 32.77 Mbps/s)

- **Per packet one-way delay (ms)**:
  - Flow 1 (95th percentile 11.19 ms)
  - Flow 2 (95th percentile 11.57 ms)
  - Flow 3 (95th percentile 16.34 ms)
Run 1: Statistics of Indigo-MusesD

Start at: 2019-01-19 11:56:47
End at: 2019-01-19 11:57:17
Local clock offset: -6.89 ms
Remote clock offset: 0.095 ms

# Below is generated by plot.py at 2019-01-19 13:44:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.42 Mbit/s
  95th percentile per-packet one-way delay: 6.221 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 39.23 Mbit/s
  95th percentile per-packet one-way delay: 5.844 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 27.16 Mbit/s
  95th percentile per-packet one-way delay: 7.021 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 7.30 Mbit/s
  95th percentile per-packet one-way delay: 4.790 ms
  Loss rate: 0.09%
Run 1: Report of Indigo-MusesD — Data Link
Run 2: Statistics of Indigo-MusesD

Local clock offset: -7.64 ms
Remote clock offset: 0.695 ms

# Below is generated by plot.py at 2019-01-19 13:44:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 54.98 Mbit/s
95th percentile per-packet one-way delay: 3.961 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 40.25 Mbit/s
95th percentile per-packet one-way delay: 4.046 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 19.09 Mbit/s
95th percentile per-packet one-way delay: 3.790 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 9.53 Mbit/s
95th percentile per-packet one-way delay: 3.289 ms
Loss rate: 0.02%
Run 2: Report of Indigo-MusesD — Data Link

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

Throughput (Mbps)

- **Flow 1 ing**: mean 40.25 Mbps/s
- **Flow 1 egress**: mean 40.25 Mbps/s
- **Flow 2 ing**: mean 19.09 Mbps/s
- **Flow 2 egress**: mean 19.09 Mbps/s
- **Flow 3 ing**: mean 9.52 Mbps/s
- **Flow 3 egress**: mean 9.33 Mbps/s

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

Per-packet one-way delay (ms)

- **Flow 1**: 95th percentile 4.05 ms
- **Flow 2**: 95th percentile 3.79 ms
- **Flow 3**: 95th percentile 3.29 ms
Run 3: Statistics of Indigo-MusesD

Start at: 2019-01-19 12:45:07
End at: 2019-01-19 12:45:37
Local clock offset: -7.354 ms
Remote clock offset: 1.229 ms

# Below is generated by plot.py at 2019-01-19 13:44:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.48 Mbit/s
95th percentile per-packet one-way delay: 5.492 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 39.44 Mbit/s
95th percentile per-packet one-way delay: 5.153 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 26.23 Mbit/s
95th percentile per-packet one-way delay: 6.209 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 9.81 Mbit/s
95th percentile per-packet one-way delay: 3.954 ms
Loss rate: 0.06%
Run 3: Report of Indigo-MusesD — Data Link
Run 4: Statistics of Indigo-MusesD

Start at: 2019-01-19 13:09:18
End at: 2019-01-19 13:09:48
Local clock offset: -2.033 ms
Remote clock offset: 1.361 ms

# Below is generated by plot.py at 2019-01-19 13:44:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.96 Mbit/s
95th percentile per-packet one-way delay: 6.246 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 30.13 Mbit/s
95th percentile per-packet one-way delay: 6.072 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 27.86 Mbit/s
95th percentile per-packet one-way delay: 6.604 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.79 Mbit/s
95th percentile per-packet one-way delay: 4.668 ms
Loss rate: 0.00%
Run 4: Report of Indigo-MusesD — Data Link
Run 5: Statistics of Indigo-MusesD

Local clock offset: -1.21 ms
Remote clock offset: 1.556 ms

# Below is generated by plot.py at 2019-01-19 13:45:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 52.40 Mbit/s
95th percentile per-packet one-way delay: 4.084 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 31.66 Mbit/s
95th percentile per-packet one-way delay: 2.866 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 29.52 Mbit/s
95th percentile per-packet one-way delay: 5.031 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 7.80 Mbit/s
95th percentile per-packet one-way delay: 3.178 ms
Loss rate: 0.02%
Run 1: Statistics of Indigo-MusesT

End at: 2019-01-19 11:51:25
Local clock offset: -7.619 ms
Remote clock offset: -0.153 ms

# Below is generated by plot.py at 2019-01-19 13:45:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.46 Mbit/s
95th percentile per-packet one-way delay: 16.310 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 54.15 Mbit/s
95th percentile per-packet one-way delay: 13.241 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 36.38 Mbit/s
95th percentile per-packet one-way delay: 19.401 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 27.89 Mbit/s
95th percentile per-packet one-way delay: 17.526 ms
Loss rate: 0.21%
Run 1: Report of Indigo-MuseST — Data Link
Run 2: Statistics of Indigo-MusesT

Start at: 2019-01-19 12:15:03
End at: 2019-01-19 12:15:33
Local clock offset: -7.803 ms
Remote clock offset: 0.539 ms

# Below is generated by plot.py at 2019-01-19 13:45:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 84.31 Mbit/s
95th percentile per-packet one-way delay: 10.688 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 55.91 Mbit/s
95th percentile per-packet one-way delay: 9.319 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.19 Mbit/s
95th percentile per-packet one-way delay: 13.205 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 17.88 Mbit/s
95th percentile per-packet one-way delay: 8.404 ms
Loss rate: 0.11%
Run 2: Report of Indigo-MusesT — Data Link
Run 3: Statistics of Indigo-MusesT

End at: 2019-01-19 12:39:45
Local clock offset: -7.354 ms
Remote clock offset: 1.148 ms

# Below is generated by plot.py at 2019-01-19 13:45:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.57 Mbit/s
  95th percentile per-packet one-way delay: 10.759 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 54.93 Mbit/s
  95th percentile per-packet one-way delay: 8.678 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 35.38 Mbit/s
  95th percentile per-packet one-way delay: 14.580 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 17.23 Mbit/s
  95th percentile per-packet one-way delay: 9.550 ms
  Loss rate: 0.15%
Run 3: Report of Indigo-MuseST — Data Link
Run 4: Statistics of Indigo-MusesT

Start at: 2019-01-19 13:03:26
End at: 2019-01-19 13:03:56
Local clock offset: -3.351 ms
Remote clock offset: 1.292 ms

# Below is generated by plot.py at 2019-01-19 13:45:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.16 Mbit/s
  95th percentile per-packet one-way delay: 19.022 ms
  Loss rate: 0.09%
-- Flow 1:
  Average throughput: 54.88 Mbit/s
  95th percentile per-packet one-way delay: 13.629 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 34.32 Mbit/s
  95th percentile per-packet one-way delay: 21.286 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 30.05 Mbit/s
  95th percentile per-packet one-way delay: 26.133 ms
  Loss rate: 0.34%
Run 4: Report of Indigo-MusesT — Data Link

[Graph 1: Throughput over time for different flows shown with various line styles and colors, indicating mean throughputs for ingress and egress.

Graph 2: Per-packet round trip delay with markers for specific 95th percentile delays for each flow.]
Run 5: Statistics of Indigo-MusesT

Local clock offset: -0.738 ms
Remote clock offset: 1.473 ms

# Below is generated by plot.py at 2019-01-19 13:45:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.23 Mbit/s
95th percentile per-packet one-way delay: 16.947 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 55.80 Mbit/s
95th percentile per-packet one-way delay: 14.392 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 37.00 Mbit/s
95th percentile per-packet one-way delay: 19.113 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 27.93 Mbit/s
95th percentile per-packet one-way delay: 18.939 ms
Loss rate: 0.11%
Run 5: Report of Indigo-MusesT — Data Link

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**Figure 1:**

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

- **Flow 1 Ingress** (mean 55.53 Mbit/s)
- **Flow 1 Egress** (mean 55.80 Mbit/s)
- **Flow 2 Ingress** (mean 37.02 Mbit/s)
- **Flow 2 Egress** (mean 37.00 Mbit/s)
- **Flow 3 Ingress** (mean 27.99 Mbit/s)
- **Flow 3 Egress** (mean 27.93 Mbit/s)

**Figure 2:**

![Graph 2: Per-packet round trip delay vs Time](image2)

- **Flow 1 (95th percentile 14.39 ms)**
- **Flow 2 (95th percentile 19.11 ms)**
- **Flow 3 (95th percentile 18.94 ms)**
Run 1: Statistics of LEDBAT

Start at: 2019-01-19 11:59:03
End at: 2019-01-19 11:59:33
Local clock offset: -7.669 ms
Remote clock offset: 0.104 ms

# Below is generated by plot.py at 2019-01-19 13:45:52
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.77 Mbit/s
  95th percentile per-packet one-way delay: 13.726 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 59.17 Mbit/s
  95th percentile per-packet one-way delay: 13.499 ms
  Loss rate: 0.14%
-- Flow 2:
  Average throughput: 40.18 Mbit/s
  95th percentile per-packet one-way delay: 13.949 ms
  Loss rate: 0.21%
-- Flow 3:
  Average throughput: 32.66 Mbit/s
  95th percentile per-packet one-way delay: 13.821 ms
  Loss rate: 0.41%
Run 1: Report of LEDBAT — Data Link
Run 2: Statistics of LEDBAT

Local clock offset: -6.762 ms
Remote clock offset: 0.731 ms

# Below is generated by plot.py at 2019-01-19 13:45:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.40 Mbit/s
95th percentile per-packet one-way delay: 13.401 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 58.74 Mbit/s
95th percentile per-packet one-way delay: 12.580 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 13.245 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 32.83 Mbit/s
95th percentile per-packet one-way delay: 15.113 ms
Loss rate: 0.35%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Local clock offset: -6.449 ms
Remote clock offset: 1.336 ms

# Below is generated by plot.py at 2019-01-19 13:46:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.88 Mbit/s
95th percentile per-packet one-way delay: 13.709 ms
Loss rate: 0.19%
-- Flow 1:
Average throughput: 59.19 Mbit/s
95th percentile per-packet one-way delay: 13.487 ms
Loss rate: 0.13%
-- Flow 2:
Average throughput: 40.61 Mbit/s
95th percentile per-packet one-way delay: 14.235 ms
Loss rate: 0.24%
-- Flow 3:
Average throughput: 32.00 Mbit/s
95th percentile per-packet one-way delay: 12.932 ms
Loss rate: 0.39%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

End at: 2019-01-19 13:12:05
Local clock offset: -2.54 ms
Remote clock offset: 1.507 ms

# Below is generated by plot.py at 2019-01-19 13:46:35
# Datalink statistics
-- Total of 3 flows:
Average throughput: 96.76 Mbit/s
95th percentile per-packet one-way delay: 13.883 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 58.91 Mbit/s
95th percentile per-packet one-way delay: 13.480 ms
Loss rate: 0.12%
-- Flow 2:
Average throughput: 40.46 Mbit/s
95th percentile per-packet one-way delay: 14.072 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 32.80 Mbit/s
95th percentile per-packet one-way delay: 14.141 ms
Loss rate: 0.39%
Run 4: Report of LEDBAT — Data Link
Run 5: Statistics of LEDBAT

Start at: 2019-01-19 13:35:46
End at: 2019-01-19 13:36:16
Local clock offset: -0.273 ms
Remote clock offset: 1.747 ms

# Below is generated by plot.py at 2019-01-19 13:46:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 96.58 Mbit/s
  95th percentile per-packet one-way delay: 14.544 ms
  Loss rate: 0.17%
-- Flow 1:
  Average throughput: 58.81 Mbit/s
  95th percentile per-packet one-way delay: 13.902 ms
  Loss rate: 0.11%
-- Flow 2:
  Average throughput: 40.67 Mbit/s
  95th percentile per-packet one-way delay: 14.994 ms
  Loss rate: 0.23%
-- Flow 3:
  Average throughput: 32.20 Mbit/s
  95th percentile per-packet one-way delay: 13.184 ms
  Loss rate: 0.32%
Run 5: Report of LEDBAT — Data Link
Run 1: Statistics of PCC-Allegro

End at: 2019-01-19 11:46:50
Local clock offset: -6.853 ms
Remote clock offset: -0.269 ms

# Below is generated by plot.py at 2019-01-19 13:46:38
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.04 Mbit/s
  95th percentile per-packet one-way delay: 1841.298 ms
  Loss rate: 14.14%
-- Flow 1:
  Average throughput: 61.06 Mbit/s
  95th percentile per-packet one-way delay: 1856.366 ms
  Loss rate: 17.44%
-- Flow 2:
  Average throughput: 37.41 Mbit/s
  95th percentile per-packet one-way delay: 1058.265 ms
  Loss rate: 9.43%
-- Flow 3:
  Average throughput: 24.58 Mbit/s
  95th percentile per-packet one-way delay: 8.983 ms
  Loss rate: 0.08%
Run 1: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 73.93 Mbit/s)
- Flow 1 egress (mean 61.06 Mbit/s)
- Flow 2 ingress (mean 41.30 Mbit/s)
- Flow 2 egress (mean 37.41 Mbit/s)
- Flow 3 ingress (mean 24.59 Mbit/s)
- Flow 3 egress (mean 24.58 Mbit/s)

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

- Flow 1 (95th percentile 1056.37 ms)
- Flow 2 (95th percentile 1058.27 ms)
- Flow 3 (95th percentile 8.98 ms)
Run 2: Statistics of PCC-Allegro

Start at: 2019-01-19 12:10:29
End at: 2019-01-19 12:10:59
Local clock offset: -6.948 ms
Remote clock offset: 0.491 ms

# Below is generated by plot.py at 2019-01-19 13:46:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.00 Mbit/s
95th percentile per-packet one-way delay: 1990.812 ms
Loss rate: 3.94%
-- Flow 1:
Average throughput: 70.50 Mbit/s
95th percentile per-packet one-way delay: 2043.583 ms
Loss rate: 5.17%
-- Flow 2:
Average throughput: 21.78 Mbit/s
95th percentile per-packet one-way delay: 4.506 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 27.36 Mbit/s
95th percentile per-packet one-way delay: 9.640 ms
Loss rate: 0.05%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2019-01-19 12:34:40
End at: 2019-01-19 12:35:10
Local clock offset: -6.618 ms
Remote clock offset: 1.084 ms

# Below is generated by plot.py at 2019-01-19 13:46:48
# Datalink statistics
-- Total of 3 flows:
Average throughput: 95.15 Mbit/s
95th percentile per-packet one-way delay: 1629.107 ms
Loss rate: 15.91%
-- Flow 1:
Average throughput: 59.84 Mbit/s
95th percentile per-packet one-way delay: 1992.370 ms
Loss rate: 19.92%
-- Flow 2:
Average throughput: 38.29 Mbit/s
95th percentile per-packet one-way delay: 1356.244 ms
Loss rate: 10.87%
-- Flow 3:
Average throughput: 29.95 Mbit/s
95th percentile per-packet one-way delay: 11.352 ms
Loss rate: 0.16%
Run 3: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 74.70 Mbps)
- Flow 1 egress (mean 59.84 Mbps)
- Flow 2 ingress (mean 42.95 Mbps)
- Flow 2 egress (mean 38.29 Mbps)
- Flow 3 ingress (mean 29.97 Mbps)
- Flow 3 egress (mean 29.95 Mbps)

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

- Flow 1 (95th percentile 1992.37 ms)
- Flow 2 (95th percentile 1356.24 ms)
- Flow 3 (95th percentile 11.35 ms)
Run 4: Statistics of PCC-Allegro

Start at: 2019-01-19 12:58:52
End at: 2019-01-19 12:59:22
Local clock offset: -4.019 ms
Remote clock offset: 1.28 ms

# Below is generated by plot.py at 2019-01-19 13:46:59
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.70 Mbit/s
  95th percentile per-packet one-way delay: 954.487 ms
  Loss rate: 3.34%
-- Flow 1:
  Average throughput: 66.38 Mbit/s
  95th percentile per-packet one-way delay: 1190.371 ms
  Loss rate: 4.60%
-- Flow 2:
  Average throughput: 27.88 Mbit/s
  95th percentile per-packet one-way delay: 23.397 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 26.70 Mbit/s
  95th percentile per-packet one-way delay: 7.380 ms
  Loss rate: 0.04%
Run 4: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 69.57 Mbit/s)
- Flow 1 egress (mean 66.38 Mbit/s)
- Flow 2 ingress (mean 27.93 Mbit/s)
- Flow 2 egress (mean 27.85 Mbit/s)
- Flow 3 ingress (mean 26.67 Mbit/s)
- Flow 3 egress (mean 26.70 Mbit/s)
Run 5: Statistics of PCC-Allegro

Start at: 2019-01-19 13:23:02
Local clock offset: -1.775 ms
Remote clock offset: 1.577 ms

# Below is generated by plot.py at 2019-01-19 13:47:06
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.17 Mbit/s
95th percentile per-packet one-way delay: 1306.127 ms
Loss rate: 14.25%
-- Flow 1:
Average throughput: 65.11 Mbit/s
95th percentile per-packet one-way delay: 1017.907 ms
Loss rate: 14.71%
-- Flow 2:
Average throughput: 26.02 Mbit/s
95th percentile per-packet one-way delay: 1335.204 ms
Loss rate: 18.72%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: 136.343 ms
Loss rate: 0.97%
Run 5: Report of PCC-Allegro — Data Link

Throughput (Mbps)

Time (s)

0 5 10 15 20 25 30

Flow 1 ingress (mean 76.33 Mbit/s)
Flow 1 egress (mean 65.11 Mbit/s)
Flow 2 ingress (mean 32.01 Mbit/s)
Flow 2 egress (mean 26.02 Mbit/s)
Flow 3 ingress (mean 29.86 Mbit/s)
Flow 3 egress (mean 29.58 Mbit/s)

Packet delay (ms)

Time (s)

0 5 10 15 20 25 30

Flow 1 (95th percentile 1017.91 ms)
Flow 2 (95th percentile 1335.20 ms)
Flow 3 (95th percentile 136.34 ms)
Run 1: Statistics of PCC-Expr

Start at: 2019-01-19 11:36:03
End at: 2019-01-19 11:36:33
Local clock offset: -7.562 ms
Remote clock offset: -0.546 ms

# Below is generated by plot.py at 2019-01-19 13:48:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.48 Mbit/s
  95th percentile per-packet one-way delay: 803.491 ms
  Loss rate: 22.84%
-- Flow 1:
  Average throughput: 59.70 Mbit/s
  95th percentile per-packet one-way delay: 749.990 ms
  Loss rate: 31.56%
-- Flow 2:
  Average throughput: 38.33 Mbit/s
  95th percentile per-packet one-way delay: 901.921 ms
  Loss rate: 1.62%
-- Flow 3:
  Average throughput: 28.16 Mbit/s
  95th percentile per-packet one-way delay: 12.594 ms
  Loss rate: 0.06%
Run 1: Report of PCC-Expr — Data Link
Run 2: Statistics of PCC-Expr

Start at: 2019-01-19 12:00:14
End at: 2019-01-19 12:00:44
Local clock offset: -7.659 ms
Remote clock offset: 0.167 ms

# Below is generated by plot.py at 2019-01-19 13:48:27
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.19 Mbit/s
95th percentile per-packet one-way delay: 1169.041 ms
Loss rate: 6.89%
-- Flow 1:
Average throughput: 52.54 Mbit/s
95th percentile per-packet one-way delay: 18.893 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: 1189.647 ms
Loss rate: 19.33%
-- Flow 3:
Average throughput: 27.88 Mbit/s
95th percentile per-packet one-way delay: 18.032 ms
Loss rate: 0.08%
Run 2: Report of PCC-Expr — Data Link

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

- **Throughput (Mb/s):**
  - **Flow 1 ingress (mean 52.54 Mb/s)**
  - **Flow 1 egress (mean 52.54 Mb/s)**
  - **Flow 2 ingress (mean 51.15 Mb/s)**
  - **Flow 2 egress (mean 41.26 Mb/s)**
  - **Flow 3 ingress (mean 27.89 Mb/s)**
  - **Flow 3 egress (mean 27.88 Mb/s)**

- **Packet delay (ms):**
  - **Flow 1 (95th percentile 18.89 ms)**
  - **Flow 2 (95th percentile 1189.65 ms)**
  - **Flow 3 (95th percentile 18.03 ms)**
Run 3: Statistics of PCC-Expr

End at: 2019-01-19 12:24:52
Local clock offset: -7.492 ms
Remote clock offset: 0.753 ms

# Below is generated by plot.py at 2019-01-19 13:48:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.51 Mbit/s
95th percentile per-packet one-way delay: 815.280 ms
Loss rate: 22.09%
-- Flow 1:
Average throughput: 57.25 Mbit/s
95th percentile per-packet one-way delay: 805.723 ms
Loss rate: 29.29%
-- Flow 2:
Average throughput: 37.77 Mbit/s
95th percentile per-packet one-way delay: 876.782 ms
Loss rate: 7.96%
-- Flow 3:
Average throughput: 27.70 Mbit/s
95th percentile per-packet one-way delay: 136.081 ms
Loss rate: 0.53%
Run 3: Report of PCC-Expr — Data Link

![Graph 1: Throughput vs Time]

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

Legend:
- Flow 1 ingress (mean 80.97 Mbit/s)
- Flow 1 egress (mean 57.25 Mbit/s)
- Flow 2 ingress (mean 41.03 Mbit/s)
- Flow 2 egress (mean 37.77 Mbit/s)
- Flow 3 ingress (mean 27.84 Mbit/s)
- Flow 3 egress (mean 27.70 Mbit/s)
Run 4: Statistics of PCC-Expr

End at: 2019-01-19 12:49:04
Local clock offset: -6.593 ms
Remote clock offset: 1.267 ms

# Below is generated by plot.py at 2019-01-19 13:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 93.62 Mbit/s
95th percentile per-packet one-way delay: 747.373 ms
Loss rate: 26.42%
-- Flow 1:
Average throughput: 59.27 Mbit/s
95th percentile per-packet one-way delay: 791.464 ms
Loss rate: 35.60%
-- Flow 2:
Average throughput: 36.71 Mbit/s
95th percentile per-packet one-way delay: 515.551 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: 224.711 ms
Loss rate: 0.32%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Start at: 2019-01-19 13:12:45
Local clock offset: -2.439 ms
Remote clock offset: 1.457 ms

# Below is generated by plot.py at 2019-01-19 13:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.76 Mbit/s
95th percentile per-packet one-way delay: 1090.761 ms
Loss rate: 20.25%
-- Flow 1:
Average throughput: 61.15 Mbit/s
95th percentile per-packet one-way delay: 1107.719 ms
Loss rate: 28.05%
-- Flow 2:
Average throughput: 36.76 Mbit/s
95th percentile per-packet one-way delay: 205.076 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 27.71 Mbit/s
95th percentile per-packet one-way delay: 90.111 ms
Loss rate: 1.92%
Run 5: Report of PCC-Expr — Data Link

![Throughput Graph]

- Flow 1 ingress (mean 84.97 Mbit/s)
- Flow 1 egress (mean 61.15 Mbit/s)
- Flow 2 ingress (mean 36.84 Mbit/s)
- Flow 2 egress (mean 36.76 Mbit/s)
- Flow 3 ingress (mean 28.35 Mbit/s)
- Flow 3 egress (mean 27.71 Mbit/s)

![Delay Graph]

- Flow 1 (95th percentile 1107.72 ms)
- Flow 2 (95th percentile 205.08 ms)
- Flow 3 (95th percentile 90.11 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2019-01-19 11:57:54
End at: 2019-01-19 11:58:24
Local clock offset: -6.895 ms
Remote clock offset: 0.029 ms

# Below is generated by plot.py at 2019-01-19 13:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.77 Mbit/s
95th percentile per-packet one-way delay: 13.371 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: 13.369 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 39.96 Mbit/s
95th percentile per-packet one-way delay: 12.754 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.10 Mbit/s
95th percentile per-packet one-way delay: 14.295 ms
Loss rate: 0.44%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2019-01-19 12:22:02
Local clock offset: -7.541 ms
Remote clock offset: 0.763 ms

# Below is generated by plot.py at 2019-01-19 13:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.61 Mbit/s
95th percentile per-packet one-way delay: 12.705 ms
Loss rate: 0.26%
-- Flow 1:
Average throughput: 52.70 Mbit/s
95th percentile per-packet one-way delay: 12.609 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 39.99 Mbit/s
95th percentile per-packet one-way delay: 12.251 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 31.18 Mbit/s
95th percentile per-packet one-way delay: 13.351 ms
Loss rate: 0.53%
Run 2: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress** (mean 52.79 Mbit/s)
- **Flow 1 egress** (mean 52.70 Mbit/s)
- **Flow 2 ingress** (mean 40.12 Mbit/s)
- **Flow 2 egress** (mean 39.99 Mbit/s)
- **Flow 3 ingress** (mean 31.34 Mbit/s)
- **Flow 3 egress** (mean 31.18 Mbit/s)
Run 3: Statistics of QUIC Cubic

End at: 2019-01-19 12:46:44
Local clock offset: -7.424 ms
Remote clock offset: 1.234 ms

# Below is generated by plot.py at 2019-01-19 13:48:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: 12.727 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 54.18 Mbit/s
95th percentile per-packet one-way delay: 12.300 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.07 Mbit/s
95th percentile per-packet one-way delay: 12.573 ms
Loss rate: 0.29%
-- Flow 3:
Average throughput: 31.15 Mbit/s
95th percentile per-packet one-way delay: 13.502 ms
Loss rate: 0.50%
Run 3: Report of QUIC Cubic — Data Link
Run 4: Statistics of QUIC Cubic

Local clock offset: -1.919 ms
Remote clock offset: 1.417 ms

# Below is generated by plot.py at 2019-01-19 13:49:03
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.60 Mbit/s
95th percentile per-packet one-way delay: 13.407 ms
Loss rate: 0.27%
-- Flow 1:
Average throughput: 53.58 Mbit/s
95th percentile per-packet one-way delay: 13.453 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 40.19 Mbit/s
95th percentile per-packet one-way delay: 13.155 ms
Loss rate: 0.38%
-- Flow 3:
Average throughput: 31.11 Mbit/s
95th percentile per-packet one-way delay: 13.950 ms
Loss rate: 0.47%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2019-01-19 13:34:37
End at: 2019-01-19 13:35:07
Local clock offset: -0.328 ms
Remote clock offset: 1.74 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.79 Mbit/s
95th percentile per-packet one-way delay: 13.497 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 53.83 Mbit/s
95th percentile per-packet one-way delay: 12.883 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.16 Mbit/s
95th percentile per-packet one-way delay: 13.251 ms
Loss rate: 0.34%
-- Flow 3:
Average throughput: 31.04 Mbit/s
95th percentile per-packet one-way delay: 14.221 ms
Loss rate: 0.43%
Run 5: Report of QUIC Cubic — Data Link
Run 1: Statistics of SCReAM

Start at: 2019-01-19 11:40:40
End at: 2019-01-19 11:41:10
Local clock offset: -6.83 ms
Remote clock offset: -0.354 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 2.446 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.443 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.441 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 2.455 ms
  Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

![Graph showing throughput and 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: 2019-01-19 12:04:49
End at: 2019-01-19 12:05:19
Local clock offset: -6.92 ms
Remote clock offset: 0.225 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 2.499 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.502 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.488 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.501 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2019-01-19 12:29:00
End at: 2019-01-19 12:29:30
Local clock offset: -7.42 ms
Remote clock offset: 0.997 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: 1.681 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.671 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.684 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: 1.682 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link

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

[Graph 2: 95th percentile round-trip delay (ms) vs. Time (s)]
Run 4: Statistics of SCReAM

End at: 2019-01-19 12:53:42
Local clock offset: -5.065 ms
Remote clock offset: 1.346 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: 1.514 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.523 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.488 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 1.458 ms
Loss rate: 0.00%
Run 5: Statistics of SCReAM

End at: 2019-01-19 13:17:52
Local clock offset: -1.376 ms
Remote clock offset: 1.556 ms

# Below is generated by plot.py at 2019-01-19 13:49:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: 2.343 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.338 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.352 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: 2.326 ms
Loss rate: 0.35%
Run 5: Report of SCReAM — Data Link

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

Start at: 2019-01-19 11:44:04
End at: 2019-01-19 11:44:34
Local clock offset: -6.85 ms
Remote clock offset: -0.235 ms

# Below is generated by plot.py at 2019-01-19 13:49:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.19 Mbit/s
95th percentile per-packet one-way delay: 25.098 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 43.13 Mbit/s
95th percentile per-packet one-way delay: 23.794 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 38.23 Mbit/s
95th percentile per-packet one-way delay: 25.247 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 26.225 ms
Loss rate: 0.28%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2019-01-19 12:08:12
End at: 2019-01-19 12:08:42
Local clock offset: -6.937 ms
Remote clock offset: 0.393 ms

# Below is generated by plot.py at 2019-01-19 13:49:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.05 Mbit/s
95th percentile per-packet one-way delay: 24.157 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 43.32 Mbit/s
95th percentile per-packet one-way delay: 23.239 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 36.16 Mbit/s
95th percentile per-packet one-way delay: 23.464 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: 25.820 ms
Loss rate: 0.11%
Run 2: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 43.36 Mbit/s)
- Flow 1 egress (mean 43.32 Mbit/s)
- Flow 2 ingress (mean 36.20 Mbit/s)
- Flow 2 egress (mean 36.16 Mbit/s)
- Flow 3 ingress (mean 32.30 Mbit/s)
- Flow 3 egress (mean 32.30 Mbit/s)
Run 3: Statistics of Sprout

End at: 2019-01-19 12:32:53  
Local clock offset: -6.627 ms  
Remote clock offset: 1.044 ms

# Below is generated by plot.py at 2019-01-19 13:49:25  
# Datalink statistics
-- Total of 3 flows:  
Average throughput: 81.37 Mbit/s  
95th percentile per-packet one-way delay: 24.873 ms  
Loss rate: 0.19%  
-- Flow 1:  
Average throughput: 43.79 Mbit/s  
95th percentile per-packet one-way delay: 23.779 ms  
Loss rate: 0.17%  
-- Flow 2:  
Average throughput: 40.54 Mbit/s  
95th percentile per-packet one-way delay: 25.369 ms  
Loss rate: 0.22%  
-- Flow 3:  
Average throughput: 32.18 Mbit/s  
95th percentile per-packet one-way delay: 25.503 ms  
Loss rate: 0.20%
Run 3: Report of Sprout — Data Link
Run 4: Statistics of Sprout

Start at: 2019-01-19 12:56:35
End at: 2019-01-19 12:57:05
Local clock offset: -4.361 ms
Remote clock offset: 1.363 ms

# Below is generated by plot.py at 2019-01-19 13:49:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.33 Mbit/s
95th percentile per-packet one-way delay: 24.172 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 43.77 Mbit/s
95th percentile per-packet one-way delay: 22.758 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 40.49 Mbit/s
95th percentile per-packet one-way delay: 24.363 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 32.19 Mbit/s
95th percentile per-packet one-way delay: 25.447 ms
Loss rate: 0.39%
Run 5: Statistics of Sprout

Start at: 2019-01-19 13:20:45
Local clock offset: -1.913 ms
Remote clock offset: 1.501 ms

# Below is generated by plot.py at 2019-01-19 13:49:38
# Datalink statistics
-- Total of 3 flows:
Average throughput: 79.68 Mbit/s
95th percentile per-packet one-way delay: 24.089 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 42.66 Mbit/s
95th percentile per-packet one-way delay: 23.032 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 39.70 Mbit/s
95th percentile per-packet one-way delay: 24.569 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 32.18 Mbit/s
95th percentile per-packet one-way delay: 24.697 ms
Loss rate: 0.08%
Run 5: Report of Sprout — Data Link
Run 1: Statistics of TaoVA-100x

End at: 2019-01-19 11:56:04
Local clock offset: -7.633 ms
Remote clock offset: -0.116 ms

# Below is generated by plot.py at 2019-01-19 13:50:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.18 Mbit/s
95th percentile per-packet one-way delay: 155.472 ms
Loss rate: 0.92%
-- Flow 1:
Average throughput: 55.50 Mbit/s
95th percentile per-packet one-way delay: 155.889 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 39.22 Mbit/s
95th percentile per-packet one-way delay: 154.010 ms
Loss rate: 1.09%
-- Flow 3:
Average throughput: 31.82 Mbit/s
95th percentile per-packet one-way delay: 155.611 ms
Loss rate: 2.59%
Run 2: Statistics of TaoVA-100x

Local clock offset: -6.845 ms
Remote clock offset: 0.785 ms

# Below is generated by plot.py at 2019-01-19 13:51:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.58 Mbit/s
  95th percentile per-packet one-way delay: 156.034 ms
  Loss rate: 0.96%
-- Flow 1:
  Average throughput: 55.60 Mbit/s
  95th percentile per-packet one-way delay: 154.373 ms
  Loss rate: 0.53%
-- Flow 2:
  Average throughput: 39.65 Mbit/s
  95th percentile per-packet one-way delay: 156.140 ms
  Loss rate: 1.21%
-- Flow 3:
  Average throughput: 31.82 Mbit/s
  95th percentile per-packet one-way delay: 157.410 ms
  Loss rate: 2.61%
Run 2: Report of TaoVA-100x — Data Link

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

- **Flow 1 Ingress**: Mean 55.89 Mb/s
- **Flow 1 Egress**: Mean 55.60 Mb/s
- **Flow 2 Ingress**: Mean 40.13 Mb/s
- **Flow 2 Egress**: Mean 39.65 Mb/s
- **Flow 3 Ingress**: Mean 32.66 Mb/s
- **Flow 3 Egress**: Mean 31.62 Mb/s

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

- Flow 1 (95th percentile: 154.37 ms)
- Flow 2 (95th percentile: 156.14 ms)
- Flow 3 (95th percentile: 157.41 ms)
Run 3: Statistics of TaoVA-100x

Start at: 2019-01-19 12:43:54
End at: 2019-01-19 12:44:24
Local clock offset: -7.351 ms
Remote clock offset: 1.119 ms

# Below is generated by plot.py at 2019-01-19 13:51:09
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.07 Mbit/s
95th percentile per-packet one-way delay: 155.847 ms
Loss rate: 0.99%
-- Flow 1:
Average throughput: 55.19 Mbit/s
95th percentile per-packet one-way delay: 155.162 ms
Loss rate: 0.53%
-- Flow 2:
Average throughput: 39.52 Mbit/s
95th percentile per-packet one-way delay: 154.340 ms
Loss rate: 1.27%
-- Flow 3:
Average throughput: 31.81 Mbit/s
95th percentile per-packet one-way delay: 157.014 ms
Loss rate: 2.67%
Run 3: Report of TaoVA-100x — Data Link
Run 4: Statistics of TaoVA-100x

Start at: 2019-01-19 13:08:06
End at: 2019-01-19 13:08:36
Local clock offset: -2.819 ms
Remote clock offset: 1.404 ms

# Below is generated by plot.py at 2019-01-19 13:51:10
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.05 Mbit/s
  95th percentile per-packet one-way delay: 154.566 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 55.35 Mbit/s
  95th percentile per-packet one-way delay: 154.628 ms
  Loss rate: 0.54%
-- Flow 2:
  Average throughput: 39.23 Mbit/s
  95th percentile per-packet one-way delay: 153.834 ms
  Loss rate: 1.18%
-- Flow 3:
  Average throughput: 31.82 Mbit/s
  95th percentile per-packet one-way delay: 155.030 ms
  Loss rate: 2.76%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Local clock offset: -1.219 ms
Remote clock offset: 1.694 ms

# Below is generated by plot.py at 2019-01-19 13:51:14
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.17 Mbit/s
  95th percentile per-packet one-way delay: 155.584 ms
  Loss rate: 0.98%
-- Flow 1:
  Average throughput: 55.37 Mbit/s
  95th percentile per-packet one-way delay: 153.256 ms
  Loss rate: 0.61%
-- Flow 2:
  Average throughput: 39.38 Mbit/s
  95th percentile per-packet one-way delay: 156.268 ms
  Loss rate: 1.08%
-- Flow 3:
  Average throughput: 31.81 Mbit/s
  95th percentile per-packet one-way delay: 156.363 ms
  Loss rate: 2.67%
Run 5: Report of TaoVA-100x — Data Link

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

Start at: 2019-01-19 11:52:03
End at: 2019-01-19 11:52:33
Local clock offset: -7.627 ms
Remote clock offset: -0.037 ms

# Below is generated by plot.py at 2019-01-19 13:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: 3.998 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 51.62 Mbit/s
95th percentile per-packet one-way delay: 3.027 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 51.21 Mbit/s
95th percentile per-packet one-way delay: 3.984 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 35.41 Mbit/s
95th percentile per-packet one-way delay: 4.365 ms
Loss rate: 0.06%
Run 1: Report of TCP Vegas — Data Link

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

![Graph 2: Packet one-way delay (ms)](image)
Run 2: Statistics of TCP Vegas

Start at: 2019-01-19 12:16:12
End at: 2019-01-19 12:16:42
Local clock offset: -7.758 ms
Remote clock offset: 0.643 ms

# Below is generated by plot.py at 2019-01-19 13:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 4.370 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.31 Mbit/s
95th percentile per-packet one-way delay: 3.303 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 49.70 Mbit/s
95th percentile per-packet one-way delay: 4.424 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 33.37 Mbit/s
95th percentile per-packet one-way delay: 4.569 ms
Loss rate: 0.05%
Run 2: Report of TCP Vegas — Data Link
Run 3: Statistics of TCP Vegas

End at: 2019-01-19 12:40:53
Local clock offset: -7.352 ms
Remote clock offset: 1.135 ms

# Below is generated by plot.py at 2019-01-19 13:51:14
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.11 Mbit/s
95th percentile per-packet one-way delay: 4.205 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 47.87 Mbit/s
95th percentile per-packet one-way delay: 3.225 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 55.24 Mbit/s
95th percentile per-packet one-way delay: 3.560 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 37.43 Mbit/s
95th percentile per-packet one-way delay: 4.509 ms
Loss rate: 0.06%
Run 3: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 47.87 Mbit/s)
- Flow 1 egress (mean 47.87 Mbit/s)
- Flow 2 ingress (mean 55.24 Mbit/s)
- Flow 2 egress (mean 55.24 Mbit/s)
- Flow 3 ingress (mean 37.43 Mbit/s)
- Flow 3 egress (mean 37.43 Mbit/s)
Run 4: Statistics of TCP Vegas

End at: 2019-01-19 13:05:05
Local clock offset: -3.174 ms
Remote clock offset: 1.467 ms

# Below is generated by plot.py at 2019-01-19 13:51:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: 4.302 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 53.35 Mbit/s
95th percentile per-packet one-way delay: 3.157 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 49.54 Mbit/s
95th percentile per-packet one-way delay: 4.401 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 33.56 Mbit/s
95th percentile per-packet one-way delay: 4.422 ms
Loss rate: 0.05%
Run 4: Report of TCP Vegas — Data Link

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

- Flow 1 ingress (mean 53.35 Mbit/s)
- Flow 1 egress (mean 53.35 Mbit/s)
- Flow 2 ingress (mean 49.45 Mbit/s)
- Flow 2 egress (mean 49.45 Mbit/s)
- Flow 3 ingress (mean 33.57 Mbit/s)
- Flow 3 egress (mean 33.56 Mbit/s)
Run 5: Statistics of TCP Vegas

End at: 2019-01-19 13:29:16
Local clock offset: -1.429 ms
Remote clock offset: 1.663 ms

# Below is generated by plot.py at 2019-01-19 13:51:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.20 Mbit/s
  95th percentile per-packet one-way delay: 4.248 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 51.69 Mbit/s
  95th percentile per-packet one-way delay: 2.956 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 51.03 Mbit/s
  95th percentile per-packet one-way delay: 3.425 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 34.74 Mbit/s
  95th percentile per-packet one-way delay: 4.618 ms
  Loss rate: 0.06%
Run 5: Report of TCP Vegas — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 51.69 Mbps)
Flow 1 egress (mean 51.69 Mbps)
Flow 2 ingress (mean 51.03 Mbps)
Flow 2 egress (mean 51.03 Mbps)
Flow 3 ingress (mean 34.75 Mbps)
Flow 3 egress (mean 34.74 Mbps)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile 2.96 ms)
Flow 2 (95th percentile 3.42 ms)
Flow 3 (95th percentile 4.62 ms)
Run 1: Statistics of Verus

Start at: 2019-01-19 11:53:12
End at: 2019-01-19 11:53:42
Local clock offset: -7.64 ms
Remote clock offset: -0.129 ms

# Below is generated by plot.py at 2019-01-19 13:51:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.25 Mbit/s
  95th percentile per-packet one-way delay: 24.990 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 49.41 Mbit/s
  95th percentile per-packet one-way delay: 22.017 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 34.43 Mbit/s
  95th percentile per-packet one-way delay: 24.139 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 32.86 Mbit/s
  95th percentile per-packet one-way delay: 117.612 ms
  Loss rate: 0.11%
Run 1: Report of Verus — Data Link

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

Flow 1 entrance (mean 49.42 Mbit/s)  Flow 1 exit (mean 49.41 Mbit/s)
Flow 2 entrance (mean 34.46 Mbit/s)  Flow 2 exit (mean 34.45 Mbit/s)
Flow 3 entrance (mean 32.89 Mbit/s)  Flow 3 exit (mean 32.86 Mbit/s)

Flow 1 (95th percentile 22.02 ms)  Flow 2 (95th percentile 24.14 ms)  Flow 3 (95th percentile 117.61 ms)
Run 2: Statistics of Verus

Start at: 2019-01-19 12:17:21
End at: 2019-01-19 12:17:51
Local clock offset: -6.961 ms
Remote clock offset: 0.705 ms

# Below is generated by plot.py at 2019-01-19 13:51:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 80.43 Mbit/s
  95th percentile per-packet one-way delay: 33.396 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 47.56 Mbit/s
  95th percentile per-packet one-way delay: 24.893 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 34.30 Mbit/s
  95th percentile per-packet one-way delay: 30.859 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 30.19 Mbit/s
  95th percentile per-packet one-way delay: 166.164 ms
  Loss rate: 0.13%
Run 2: Report of Verus — Data Link

![Graph showing network performance metrics]

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 47.58 Mbps)
  - Flow 1 egress (mean 47.56 Mbps)
  - Flow 2 ingress (mean 34.32 Mbps)
  - Flow 2 egress (mean 34.30 Mbps)
  - Flow 3 ingress (mean 30.22 Mbps)
  - Flow 3 egress (mean 30.19 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile 24.89 ms)
  - Flow 2 (95th percentile 30.86 ms)
  - Flow 3 (95th percentile 166.16 ms)
Run 3: Statistics of Verus

End at: 2019-01-19 12:42:02
Local clock offset: -7.338 ms
Remote clock offset: 1.204 ms

# Below is generated by plot.py at 2019-01-19 13:51:56
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.75 Mbit/s
95th percentile per-packet one-way delay: 35.478 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 41.40 Mbit/s
95th percentile per-packet one-way delay: 23.615 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 38.54 Mbit/s
95th percentile per-packet one-way delay: 23.004 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 32.21 Mbit/s
95th percentile per-packet one-way delay: 214.106 ms
Loss rate: 0.20%
Run 3: Report of Verus — Data Link

![Data Link Throughput Graph]

![Data Link Delay Graph]
Run 4: Statistics of Verus

Start at: 2019-01-19 13:05:44
End at: 2019-01-19 13:06:14
Local clock offset: -2.276 ms
Remote clock offset: 1.476 ms

# Below is generated by plot.py at 2019-01-19 13:52:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.80 Mbit/s
95th percentile per-packet one-way delay: 28.522 ms
Loss rate: 0.20%
-- Flow 1:
Average throughput: 49.88 Mbit/s
95th percentile per-packet one-way delay: 27.945 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 36.44 Mbit/s
95th percentile per-packet one-way delay: 24.482 ms
Loss rate: 0.07%
-- Flow 3:
Average throughput: 28.94 Mbit/s
95th percentile per-packet one-way delay: 59.226 ms
Loss rate: 1.49%
Run 4: Report of Verus — Data Link

[Graph showing data link performance over time, with metrics for Flow 1 ingress, Flow 1 egress, Flow 2 ingress, Flow 2 egress, Flow 3 ingress, and Flow 3 egress.]

[Graph showing per-packet one-way delay, with metrics for Flow 1 (95th percentile 27.95 ms), Flow 2 (95th percentile 24.48 ms), and Flow 3 (95th percentile 59.23 ms).]
Run 5: Statistics of Verus

End at: 2019-01-19 13:30:25
Local clock offset: -0.594 ms
Remote clock offset: 1.608 ms

# Below is generated by plot.py at 2019-01-19 13:52:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.98 Mbit/s
95th percentile per-packet one-way delay: 30.084 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 48.61 Mbit/s
95th percentile per-packet one-way delay: 21.080 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: 24.137 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 27.95 Mbit/s
95th percentile per-packet one-way delay: 131.667 ms
Loss rate: 0.14%
Run 5: Report of Verus — Data Link

![Graph showing throughput and packet delay over time for different flows, with annotations for mean ingress and egress bandwidths.](image-url)
Run 1: Statistics of PCC-Vivace

Start at: 2019-01-19 11:38:25
End at: 2019-01-19 11:38:55
Local clock offset: -7.564 ms
Remote clock offset: -0.408 ms

# Below is generated by plot.py at 2019-01-19 13:52:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.06 Mbit/s
  95th percentile per-packet one-way delay: 53.067 ms
  Loss rate: 0.32%
-- Flow 1:
  Average throughput: 58.97 Mbit/s
  95th percentile per-packet one-way delay: 7.014 ms
  Loss rate: 0.06%
-- Flow 2:
  Average throughput: 30.40 Mbit/s
  95th percentile per-packet one-way delay: 5.943 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 23.86 Mbit/s
  95th percentile per-packet one-way delay: 133.558 ms
  Loss rate: 2.95%
Run 1: Report of PCC-Vivace — Data Link

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

Flow 1 ing - mean 59.00 Mbit/s
Flow 1 egress - mean 58.97 Mbit/s
Flow 2 ing - mean 30.40 Mbit/s
Flow 2 egress - mean 30.40 Mbit/s
Flow 3 ing - mean 24.38 Mbit/s
Flow 3 egress - mean 23.86 Mbit/s

[Graph showing packet delay distribution for different flows]

Flow 1 (95th percentile 7.01 ms)
Flow 2 (95th percentile 5.94 ms)
Flow 3 (95th percentile 133.56 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2019-01-19 12:02:35
End at: 2019-01-19 12:03:05
Local clock offset: -6.929 ms
Remote clock offset: 0.257 ms

# Below is generated by plot.py at 2019-01-19 13:52:21
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.71 Mbit/s
95th percentile per-packet one-way delay: 9.997 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 32.26 Mbit/s
95th percentile per-packet one-way delay: 14.183 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 31.99 Mbit/s
95th percentile per-packet one-way delay: 7.676 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 27.73 Mbit/s
95th percentile per-packet one-way delay: 13.820 ms
Loss rate: 0.05%
Run 2: Report of PCC-Vivace — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 32.27 Mbit/s)
- Flow 1 egress (mean 32.26 Mbit/s)
- Flow 2 ingress (mean 31.99 Mbit/s)
- Flow 2 egress (mean 31.99 Mbit/s)
- Flow 3 ingress (mean 27.73 Mbit/s)
- Flow 3 egress (mean 27.73 Mbit/s)

![Graph 2: Round Trip Time vs Time]

- Flow 1 (95th percentile 14.18 ms)
- Flow 2 (95th percentile 7.68 ms)
- Flow 3 (95th percentile 13.82 ms)
Run 3: Statistics of PCC-Vivace

Start at: 2019-01-19 12:26:44  
Local clock offset: -6.769 ms  
Remote clock offset: 0.938 ms

# Below is generated by plot.py at 2019-01-19 13:52:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.53 Mbit/s
95th percentile per-packet one-way delay: 94.843 ms
Loss rate: 2.27%
-- Flow 1:
Average throughput: 53.48 Mbit/s
95th percentile per-packet one-way delay: 54.545 ms
Loss rate: 1.02%
-- Flow 2:
Average throughput: 36.84 Mbit/s
95th percentile per-packet one-way delay: 7.103 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 28.98 Mbit/s
95th percentile per-packet one-way delay: 599.179 ms
Loss rate: 13.33%
Run 3: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 54.01 Mbps/s)
- Flow 1 egress (mean 53.48 Mbps/s)
- Flow 2 ingress (mean 36.84 Mbps/s)
- Flow 2 egress (mean 36.84 Mbps/s)
- Flow 3 ingress (mean 33.42 Mbps/s)
- Flow 3 egress (mean 20.98 Mbps/s)

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

- Flow 1 (95th percentile 54.55 ms)
- Flow 2 (95th percentile 7.10 ms)
- Flow 3 (95th percentile 599.18 ms)
Run 4: Statistics of PCC-Vivace

Start at: 2019-01-19 12:50:56
End at: 2019-01-19 12:51:26
Local clock offset: -5.804 ms
Remote clock offset: 1.355 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.49 Mbit/s
95th percentile per-packet one-way delay: 2022.527 ms
Loss rate: 3.21%
-- Flow 1:
Average throughput: 54.86 Mbit/s
95th percentile per-packet one-way delay: 8.524 ms
Loss rate: 0.68%
-- Flow 2:
Average throughput: 38.60 Mbit/s
95th percentile per-packet one-way delay: 2104.857 ms
Loss rate: 9.13%
-- Flow 3:
Average throughput: 27.19 Mbit/s
95th percentile per-packet one-way delay: 20.722 ms
Loss rate: 0.12%
Run 5: Statistics of PCC-Vivace

Start at: 2019-01-19 13:15:07
End at: 2019-01-19 13:15:37
Local clock offset: -2.278 ms
Remote clock offset: 1.486 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.63 Mbit/s
95th percentile per-packet one-way delay: 447.669 ms
Loss rate: 0.94%
-- Flow 1:
Average throughput: 42.50 Mbit/s
95th percentile per-packet one-way delay: 24.194 ms
Loss rate: 0.55%
-- Flow 2:
Average throughput: 36.91 Mbit/s
95th percentile per-packet one-way delay: 618.386 ms
Loss rate: 1.89%
-- Flow 3:
Average throughput: 25.95 Mbit/s
95th percentile per-packet one-way delay: 8.019 ms
Loss rate: 0.09%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing throughput over time](image1)

- Flow 1 ingress (mean 42.74 Mbit/s)
- Flow 1 egress (mean 42.50 Mbit/s)
- Flow 2 ingress (mean 37.61 Mbit/s)
- Flow 2 egress (mean 36.91 Mbit/s)
- Flow 3 ingress (mean 25.96 Mbit/s)
- Flow 3 egress (mean 25.95 Mbit/s)

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

- Flow 1 (95th percentile 24.19 ms)
- Flow 2 (95th percentile 618.39 ms)
- Flow 3 (95th percentile 8.02 ms)
Run 1: Statistics of WebRTC media

End at: 2019-01-19 11:40:05
Local clock offset: -6.822 ms
Remote clock offset: -0.402 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.75 Mbit/s
  95th percentile per-packet one-way delay: 3.148 ms
  Loss rate: 0.03%
-- Flow 1:
  Average throughput: 1.47 Mbit/s
  95th percentile per-packet one-way delay: 3.050 ms
  Loss rate: 0.02%
-- Flow 2:
  Average throughput: 0.88 Mbit/s
  95th percentile per-packet one-way delay: 3.199 ms
  Loss rate: 0.07%
-- Flow 3:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: 3.347 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

![Graph 2: Packet Loss with Delay (ms)](image2)
Run 2: Statistics of WebRTC media

Start at: 2019-01-19 12:03:44
End at: 2019-01-19 12:04:14
Local clock offset: -7.677 ms
Remote clock offset: 0.121 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.76 Mbit/s
  95th percentile per-packet one-way delay: 2.506 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.49 Mbit/s
  95th percentile per-packet one-way delay: 2.404 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.88 Mbit/s
  95th percentile per-packet one-way delay: 2.573 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.40 Mbit/s
  95th percentile per-packet one-way delay: 2.595 ms
  Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 1.49 Mbit/s)  Flow 1 egress (mean 1.49 Mbit/s)
Flow 2 ingress (mean 0.88 Mbit/s)  Flow 2 egress (mean 0.88 Mbit/s)
Flow 3 ingress (mean 0.40 Mbit/s)  Flow 3 egress (mean 0.40 Mbit/s)

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

Time (s)

Flow 1 (95th percentile 2.40 ms)  Flow 2 (95th percentile 2.57 ms)  Flow 3 (95th percentile 2.60 ms)
Run 3: Statistics of WebRTC media

Start at: 2019-01-19 12:27:54  
Local clock offset: -6.743 ms  
Remote clock offset: 0.864 ms

# Below is generated by plot.py at 2019-01-19 13:52:33  
# Datalink statistics
   -- Total of 3 flows:
   Average throughput: 2.72 Mbit/s
   95th percentile per-packet one-way delay: 3.043 ms
   Loss rate: 0.00%
   -- Flow 1:
   Average throughput: 1.47 Mbit/s
   95th percentile per-packet one-way delay: 3.106 ms
   Loss rate: 0.00%
   -- Flow 2:
   Average throughput: 0.82 Mbit/s
   95th percentile per-packet one-way delay: 2.932 ms
   Loss rate: 0.00%
   -- Flow 3:
   Average throughput: 0.44 Mbit/s
   95th percentile per-packet one-way delay: 3.001 ms
   Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2019-01-19 12:52:07
End at: 2019-01-19 12:52:37
Local clock offset: -4.701 ms
Remote clock offset: 1.303 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.76 Mbit/s
  95th percentile per-packet one-way delay: 2.792 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: 2.764 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.89 Mbit/s
  95th percentile per-packet one-way delay: 2.896 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.39 Mbit/s
  95th percentile per-packet one-way delay: 2.643 ms
  Loss rate: 0.00%
Run 4: Report of WebRTC media — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 1.50 Mbps)
  - Flow 1 egress (mean 1.50 Mbps)
  - Flow 2 ingress (mean 0.89 Mbps)
  - Flow 2 egress (mean 0.89 Mbps)
  - Flow 3 ingress (mean 0.39 Mbps)
  - Flow 3 egress (mean 0.39 Mbps)

- **Packet Delay (ms):**
  - Flow 1 (95th percentile 2.76 ms)
  - Flow 2 (95th percentile 2.90 ms)
  - Flow 3 (95th percentile 2.64 ms)
Run 5: Statistics of WebRTC media

Local clock offset: -2.209 ms
Remote clock offset: 1.483 ms

# Below is generated by plot.py at 2019-01-19 13:52:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.77 Mbit/s
  95th percentile per-packet one-way delay: 2.316 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 1.48 Mbit/s
  95th percentile per-packet one-way delay: 2.213 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.86 Mbit/s
  95th percentile per-packet one-way delay: 2.403 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.45 Mbit/s
  95th percentile per-packet one-way delay: 2.564 ms
  Loss rate: 0.07%
Run 5: Report of WebRTC media — Data Link