Pantheon Report

Data path: Brazil Ethernet (remote) → AWS Brazil 1 Ethernet (local).
Repeated the test of 16 congestion control schemes 10 times.
Each test lasted for 30 seconds running 3 flows with 10-second interval between two flows.
Increased UDP receive buffer to 16 MB (default) and 32 MB (max).
NTP offsets were measured against gps.ntp.br and have been applied to correct the timestamps in logs.

Git summary:
branch: master @ 9141c5f9450c85ea5ea2ea755a8e946998d3abf3
third_party/fillp @ d47f4fa1b454a5e3c0537115c5a28436dbd4b834
third_party/genericCC @ c7966e494a929986eaa5a9c169a7f381fe1bbbe5
third_party/indigo @ 2601c92e4aa9d58d38dc4dfe0ecdbf90c077e64d
third_party/libutp @ b3465b942e2826f2b179eaab4a906ce6bb7cf3cf
third_party/pantheon-tunnel @ 6f038e3d1259d366f9840f65b82cbe8f464b1b39
third_party/pcc @ 1afc958fa0d66d18b623c091a55fec872b4981e1
  M receiver/src/buffer.h
  M receiver/src/core.cpp
  M sender/src/buffer.h
  M sender/src/core.cpp
third_party/pcc-experimental @ cd43e34e3f5f5613e8adc08f92c4eb24f974ab
third_party/proto-quic @ 77961f1a82733a86b42f1bc8143ebc978f3cfff42
third_party/scream-reproduce @ f099118d1421aa3131bf11ff1964974e1da3bdb2
  M src/ScreamClient
  M src/ScreamServer
third_party/sprout @ 366e35c6178b01e31d4ab46ad18c74f9415f19a26
third_party/verus @ d4b447ea74c6c60a266149af2629562939f9a494
  M src/verus.hpp
  M tools/plot.py
third_party/vivace @ 2baf86211435ae071a32f96b7d8c504587f5d7f4
third_party/webrtc @ 3f0cc2a9061a41b6f9dde4735770d143a1fa2851
test from Brazil to AWS Brazil 1, 10 runs of 30s each per scheme
3 flows with 10s interval between flows (mean of all runs by scheme)
<table>
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<th># runs</th>
<th>mean avg tput (Mbit/s)</th>
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<td>QUIC Cubic</td>
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<td>Verus</td>
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<td>31.27</td>
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<td>PCC-Vivace</td>
<td>10</td>
<td>29.26</td>
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<tr>
<td>WebRTC media</td>
<td>10</td>
<td>1.52</td>
<td>0.88</td>
<td>0.42</td>
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</table>
Run 1: Statistics of TCP BBR

Start at: 2018-06-19 09:08:23
End at: 2018-06-19 09:08:53
Local clock offset: -4.845 ms
Remote clock offset: 52.48 ms

# Below is generated by plot.py at 2018-06-19 12:05:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.14 Mbit/s
  95th percentile per-packet one-way delay: -47.211 ms
  Loss rate: 0.93%
-- Flow 1:
  Average throughput: 53.07 Mbit/s
  95th percentile per-packet one-way delay: -48.246 ms
  Loss rate: 1.54%
-- Flow 2:
  Average throughput: 39.71 Mbit/s
  95th percentile per-packet one-way delay: -46.769 ms
  Loss rate: 0.03%
-- Flow 3:
  Average throughput: 32.01 Mbit/s
  95th percentile per-packet one-way delay: -46.620 ms
  Loss rate: 0.06%
Run 1: Report of TCP BBR — Data Link

Throughput (Mbit/s)

Time (s)

Flow 1 ingress (mean 53.89 Mbit/s)  Flow 1 egress (mean 53.07 Mbit/s)
Flow 2 ingress (mean 39.72 Mbit/s)  Flow 2 egress (mean 39.71 Mbit/s)
Flow 3 ingress (mean 32.03 Mbit/s)  Flow 3 egress (mean 32.01 Mbit/s)

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile -48.25 ms)  Flow 2 (95th percentile -46.77 ms)  Flow 3 (95th percentile -46.62 ms)
Run 2: Statistics of TCP BBR

Start at: 2018-06-19 09:26:18
End at: 2018-06-19 09:26:48
Local clock offset: -8.274 ms
Remote clock offset: 51.114 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.42 Mbit/s
95th percentile per-packet one-way delay: -46.862 ms
Loss rate: 0.17%
-- Flow 1:
Average throughput: 57.62 Mbit/s
95th percentile per-packet one-way delay: -47.047 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 39.33 Mbit/s
95th percentile per-packet one-way delay: -45.677 ms
Loss rate: 0.37%
-- Flow 3:
Average throughput: 31.94 Mbit/s
95th percentile per-packet one-way delay: -47.166 ms
Loss rate: 0.53%
Run 2: Report of TCP BBR — Data Link
Run 3: Statistics of TCP BBR

Start at: 2018-06-19 09:44:12
End at: 2018-06-19 09:44:42
Local clock offset: -4.633 ms
Remote clock offset: 49.328 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 71.01 Mbit/s
  95th percentile per-packet one-way delay: -41.782 ms
  Loss rate: 5.39%
-- Flow 1:
  Average throughput: 44.12 Mbit/s
  95th percentile per-packet one-way delay: -43.267 ms
  Loss rate: 4.68%
-- Flow 2:
  Average throughput: 29.95 Mbit/s
  95th percentile per-packet one-way delay: -40.905 ms
  Loss rate: 5.59%
-- Flow 3:
  Average throughput: 20.87 Mbit/s
  95th percentile per-packet one-way delay: -35.642 ms
  Loss rate: 9.17%
Run 3: Report of TCP BBR — Data Link

**Graph 1:**
- **Throughput (Mbps):**
  - Flow 1 ingress (mean 46.29 Mbps)
  - Flow 1 egress (mean 44.12 Mbps)
  - Flow 2 ingress (mean 31.72 Mbps)
  - Flow 2 egress (mean 29.95 Mbps)
  - Flow 3 ingress (mean 22.97 Mbps)
  - Flow 3 egress (mean 20.67 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile -43.27 ms)
  - Flow 2 (95th percentile -40.91 ms)
  - Flow 3 (95th percentile -35.64 ms)
Run 4: Statistics of TCP BBR

Start at: 2018-06-19 10:02:07
End at: 2018-06-19 10:02:37
Local clock offset: -2.612 ms
Remote clock offset: 51.176 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.14 Mbit/s
95th percentile per-packet one-way delay: -40.076 ms
Loss rate: 0.33%
-- Flow 1:
Average throughput: 54.05 Mbit/s
95th percentile per-packet one-way delay: -39.933 ms
Loss rate: 0.47%
-- Flow 2:
Average throughput: 37.80 Mbit/s
95th percentile per-packet one-way delay: -41.547 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 29.87 Mbit/s
95th percentile per-packet one-way delay: -36.463 ms
Loss rate: 0.36%
Run 4: Report of TCP BBR — Data Link
Run 5: Statistics of TCP BBR

Start at: 2018-06-19 10:19:57
End at: 2018-06-19 10:20:27
Local clock offset: -1.015 ms
Remote clock offset: 52.603 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.66 Mbit/s
95th percentile per-packet one-way delay: -42.176 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 54.62 Mbit/s
95th percentile per-packet one-way delay: -44.566 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 37.62 Mbit/s
95th percentile per-packet one-way delay: -41.498 ms
Loss rate: 0.41%
-- Flow 3:
Average throughput: 29.98 Mbit/s
95th percentile per-packet one-way delay: -36.877 ms
Loss rate: 0.71%
Run 5: Report of TCP BBR — Data Link
Run 6: Statistics of TCP BBR

Start at: 2018-06-19 10:37:51
End at: 2018-06-19 10:38:21
Local clock offset: -3.149 ms
Remote clock offset: 48.015 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.02 Mbit/s
95th percentile per-packet one-way delay: -47.627 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 56.03 Mbit/s
95th percentile per-packet one-way delay: -47.931 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.70 Mbit/s
95th percentile per-packet one-way delay: -47.024 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 30.77 Mbit/s
95th percentile per-packet one-way delay: -45.178 ms
Loss rate: 0.06%
Run 6: Report of TCP BBR — Data Link
Run 7: Statistics of TCP BBR

End at: 2018-06-19 10:56:06
Local clock offset: -7.777 ms
Remote clock offset: 45.066 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.78 Mbit/s
95th percentile per-packet one-way delay: -44.598 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 55.31 Mbit/s
95th percentile per-packet one-way delay: -46.718 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 38.07 Mbit/s
95th percentile per-packet one-way delay: -42.561 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 30.46 Mbit/s
95th percentile per-packet one-way delay: -42.323 ms
Loss rate: 0.08%
Run 7: Report of TCP BBR — Data Link

![Graph showing throughput and delays for Run 7]
Run 8: Statistics of TCP BBR

Local clock offset: -3.809 ms
Remote clock offset: 45.859 ms

# Below is generated by plot.py at 2018-06-19 12:05:22
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 92.40 Mbit/s
  95th percentile per-packet one-way delay: -46.459 ms
  Loss rate: 0.04%
-- Flow 1:
  Average throughput: 56.22 Mbit/s
  95th percentile per-packet one-way delay: -48.998 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 38.75 Mbit/s
  95th percentile per-packet one-way delay: -42.827 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 31.24 Mbit/s
  95th percentile per-packet one-way delay: -46.154 ms
  Loss rate: 0.07%
Run 8: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 56.23 Mbit/s)
- Flow 1 egress (mean 56.22 Mbit/s)
- Flow 2 ingress (mean 38.79 Mbit/s)
- Flow 2 egress (mean 38.75 Mbit/s)
- Flow 3 ingress (mean 31.25 Mbit/s)
- Flow 3 egress (mean 31.24 Mbit/s)

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

- Flow 1 (95th percentile -49.00 ms)
- Flow 2 (95th percentile -42.83 ms)
- Flow 3 (95th percentile -46.15 ms)
Run 9: Statistics of TCP BBR

End at: 2018-06-19 11:31:54
Local clock offset: -1.338 ms
Remote clock offset: 45.309 ms

# Below is generated by plot.py at 2018-06-19 12:06:07
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.52 Mbit/s
95th percentile per-packet one-way delay: -46.457 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 59.42 Mbit/s
95th percentile per-packet one-way delay: -47.723 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 40.80 Mbit/s
95th percentile per-packet one-way delay: -46.239 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 32.86 Mbit/s
95th percentile per-packet one-way delay: -45.663 ms
Loss rate: 0.54%
Run 9: Report of TCP BBR — Data Link

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

- Flow 1 ingress (mean 59.43 Mbit/s)
- Flow 1 egress (mean 59.42 Mbit/s)
- Flow 2 ingress (mean 40.66 Mbit/s)
- Flow 2 egress (mean 40.80 Mbit/s)
- Flow 3 ingress (mean 33.03 Mbit/s)
- Flow 3 egress (mean 32.86 Mbit/s)
Run 10: Statistics of TCP BBR

Start at: 2018-06-19 11:49:21
End at: 2018-06-19 11:49:51
Local clock offset: -1.832 ms
Remote clock offset: 51.629 ms

# Below is generated by plot.py at 2018-06-19 12:06:13
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.51 Mbit/s
95th percentile per-packet one-way delay: -47.101 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 59.31 Mbit/s
95th percentile per-packet one-way delay: -47.108 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 40.92 Mbit/s
95th percentile per-packet one-way delay: -46.929 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: -49.044 ms
Loss rate: 0.05%
Run 10: Report of TCP BBR — Data Link

**Graph 1:**
- **Throughput** (Mbps) vs. **Time (s)**
- Legend:
  - Flow 1 ingress (mean 59.31 Mbps)
  - Flow 1 egress (mean 59.31 Mbps)
  - Flow 2 ingress (mean 40.93 Mbps)
  - Flow 2 egress (mean 40.92 Mbps)
  - Flow 3 ingress (mean 32.98 Mbps)
  - Flow 3 egress (mean 32.97 Mbps)

**Graph 2:**
- **Per-packet one-way delay (ms)** vs. **Time (s)**
- Legend:
  - Flow 1 (95th percentile -47.11 ms)
  - Flow 2 (95th percentile -46.93 ms)
  - Flow 3 (95th percentile -49.04 ms)
Run 1: Statistics of Copa

Start at: 2018-06-19 09:09:30
End at: 2018-06-19 09:10:00
Local clock offset: -5.209 ms
Remote clock offset: 52.297 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.51 Mbit/s
  95th percentile per-packet one-way delay: -42.753 ms
  Loss rate: 0.19%
-- Flow 1:
  Average throughput: 55.72 Mbit/s
  95th percentile per-packet one-way delay: -44.451 ms
  Loss rate: 0.26%
-- Flow 2:
  Average throughput: 39.01 Mbit/s
  95th percentile per-packet one-way delay: -41.768 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 29.55 Mbit/s
  95th percentile per-packet one-way delay: -41.081 ms
  Loss rate: 0.15%
Run 1: Report of Copa — Data Link

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**Graph 1:**

- **Time (s):** 0 to 30
- **Throughput (Mbps):** 0 to 80

Legend:
- Flow 1 ingress (mean 55.86 Mbps)
- Flow 1 egress (mean 55.72 Mbps)
- Flow 2 ingress (mean 39.03 Mbps)
- Flow 2 egress (mean 39.01 Mbps)
- Flow 3 ingress (mean 29.38 Mbps)
- Flow 3 egress (mean 29.55 Mbps)

**Graph 2:**

- **Time (s):** 0 to 30
- **Per packet one-way delay (ms):** -50 to 0

Legend:
- Flow 1 (95th percentile -44.45 ms)
- Flow 2 (95th percentile -41.77 ms)
- Flow 3 (95th percentile -41.08 ms)
Run 2: Statistics of Copa

Start at: 2018-06-19 09:27:26
End at: 2018-06-19 09:27:56
Local clock offset: -8.424 ms
Remote clock offset: 50.553 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.63 Mbit/s
  95th percentile per-packet one-way delay: -42.615 ms
  Loss rate: 0.07%
-- Flow 1:
  Average throughput: 53.76 Mbit/s
  95th percentile per-packet one-way delay: -43.164 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 39.12 Mbit/s
  95th percentile per-packet one-way delay: -41.814 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 29.48 Mbit/s
  95th percentile per-packet one-way delay: -42.213 ms
  Loss rate: 0.33%
Run 2: Report of Copa — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 53.78 Mbps)  Flow 1 egress (mean 53.76 Mbps)
Flow 2 ingress (mean 39.14 Mbps)  Flow 2 egress (mean 39.12 Mbps)
Flow 3 ingress (mean 29.57 Mbps)  Flow 3 egress (mean 29.48 Mbps)

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

Time (s)

Flow 1 (95th percentile 43.16 ms)  Flow 2 (95th percentile 41.81 ms)  Flow 3 (95th percentile 42.21 ms)
Run 3: Statistics of Copa

Start at: 2018-06-19 09:45:19
End at: 2018-06-19 09:45:49
Local clock offset: -4.356 ms
Remote clock offset: 49.641 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 83.88 Mbit/s
  95th percentile per-packet one-way delay: -42.747 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 49.86 Mbit/s
  95th percentile per-packet one-way delay: -43.692 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 36.70 Mbit/s
  95th percentile per-packet one-way delay: -40.882 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: -38.357 ms
  Loss rate: 0.17%
Run 3: Report of Copa — Data Link

![Graph](Image)

**Throughput (Mbps)**

- **Flow 1 ingress** (mean 49.88 Mbps)
- **Flow 1 egress** (mean 49.86 Mbps)
- **Flow 2 ingress** (mean 36.72 Mbps)
- **Flow 2 egress** (mean 36.70 Mbps)
- **Flow 3 ingress** (mean 28.84 Mbps)
- **Flow 3 egress** (mean 20.80 Mbps)

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

- **Flow 1** (95th percentile -43.69 ms)
- **Flow 2** (95th percentile -40.88 ms)
- **Flow 3** (95th percentile -38.36 ms)
Run 4: Statistics of Copa

Start at: 2018-06-19 10:03:14
End at: 2018-06-19 10:03:44
Local clock offset: -2.562 ms
Remote clock offset: 51.328 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.79 Mbit/s
95th percentile per-packet one-way delay: -39.030 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 53.46 Mbit/s
95th percentile per-packet one-way delay: -38.739 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.96 Mbit/s
95th percentile per-packet one-way delay: -39.705 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 26.18 Mbit/s
95th percentile per-packet one-way delay: -38.741 ms
Loss rate: 0.07%
Run 4: Report of Copa — Data Link

[Graph showing throughput and per-packet one-way delay over time for different flows.
Legend:
- Flow 1 ingress (mean 53.47 Mbps)
- Flow 1 egress (mean 53.46 Mbps)
- Flow 2 ingress (mean 36.97 Mbps)
- Flow 2 egress (mean 36.96 Mbps)
- Flow 3 ingress (mean 26.19 Mbps)
- Flow 3 egress (mean 26.18 Mbps)
]
Run 5: Statistics of Copa

End at: 2018-06-19 10:21:34
Local clock offset: -0.937 ms
Remote clock offset: 52.97 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 83.96 Mbit/s
95th percentile per-packet one-way delay: -41.794 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 49.73 Mbit/s
95th percentile per-packet one-way delay: -43.747 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 36.63 Mbit/s
95th percentile per-packet one-way delay: -39.794 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 29.57 Mbit/s
95th percentile per-packet one-way delay: -38.491 ms
Loss rate: 0.11%
Run 5: Report of Copa — Data Link

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

Legend:
- Flow 1 ingress (mean 49.74 Mbit/s)
- Flow 1 egress (mean 49.73 Mbit/s)
- Flow 2 ingress (mean 36.65 Mbit/s)
- Flow 2 egress (mean 36.63 Mbit/s)
- Flow 3 ingress (mean 29.60 Mbit/s)
- Flow 3 egress (mean 29.57 Mbit/s)
Run 6: Statistics of Copa

Start at: 2018-06-19 10:38:58
Local clock offset: -3.616 ms
Remote clock offset: 47.736 ms

# Below is generated by plot.py at 2018-06-19 12:07:11
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.88 Mbit/s
95th percentile per-packet one-way delay: -39.976 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: -42.207 ms
Loss rate: 0.04%
-- Flow 2:
Average throughput: 37.93 Mbit/s
95th percentile per-packet one-way delay: -40.176 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 30.14 Mbit/s
95th percentile per-packet one-way delay: -36.108 ms
Loss rate: 0.14%
Run 6: Report of Copa — Data Link

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

- **Flow 1 Ingress (mean 50.62 Mbps)**
- **Flow 1 Egress (mean 50.61 Mbps)**
- **Flow 2 Ingress (mean 37.96 Mbps)**
- **Flow 2 Egress (mean 37.93 Mbps)**
- **Flow 3 Ingress (mean 30.17 Mbps)**
- **Flow 3 Egress (mean 30.14 Mbps)**

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

- **Flow 1 (95th percentile -42.21 ms)**
- **Flow 2 (95th percentile -40.18 ms)**
- **Flow 3 (95th percentile -36.11 ms)**
Run 7: Statistics of Copa

Start at: 2018-06-19 10:56:43
End at: 2018-06-19 10:57:13
Local clock offset: -7.843 ms
Remote clock offset: 44.661 ms

# Below is generated by plot.py at 2018-06-19 12:08:07
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 85.02 Mbit/s
  95th percentile per-packet one-way delay: -39.530 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 50.05 Mbit/s
  95th percentile per-packet one-way delay: -40.807 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 37.82 Mbit/s
  95th percentile per-packet one-way delay: -39.929 ms
  Loss rate: 0.06%
-- Flow 3:
  Average throughput: 29.46 Mbit/s
  95th percentile per-packet one-way delay: -37.060 ms
  Loss rate: 0.12%
Run 7: Report of Copa — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 50.07 Mbps)
  - Flow 1 egress (mean 50.65 Mbps)
  - Flow 2 ingress (mean 37.84 Mbps)
  - Flow 2 egress (mean 37.82 Mbps)
  - Flow 3 ingress (mean 29.49 Mbps)
  - Flow 3 egress (mean 29.46 Mbps)

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile -40.81 ms)
  - Flow 2 (95th percentile -39.93 ms)
  - Flow 3 (95th percentile -37.06 ms)
Run 8: Statistics of Copa

Start at: 2018-06-19 11:14:36
End at: 2018-06-19 11:15:06
Local clock offset: -3.528 ms
Remote clock offset: 45.889 ms

# Below is generated by plot.py at 2018-06-19 12:08:18
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.04 Mbit/s
95th percentile per-packet one-way delay: -41.312 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 52.41 Mbit/s
95th percentile per-packet one-way delay: -40.880 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 38.12 Mbit/s
95th percentile per-packet one-way delay: -41.842 ms
Loss rate: 0.06%
-- Flow 3:
Average throughput: 30.75 Mbit/s
95th percentile per-packet one-way delay: -41.659 ms
Loss rate: 0.16%
Run 8: Report of Copa — Data Link

![Graph](image1)

![Graph](image2)
Run 9: Statistics of Copa

End at: 2018-06-19 11:33:02
Local clock offset: -1.337 ms
Remote clock offset: 45.192 ms

# Below is generated by plot.py at 2018-06-19 12:09:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.24 Mbit/s
  95th percentile per-packet one-way delay: -42.316 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 58.10 Mbit/s
  95th percentile per-packet one-way delay: -43.251 ms
  Loss rate: 0.04%
-- Flow 2:
  Average throughput: 38.79 Mbit/s
  95th percentile per-packet one-way delay: -40.311 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 31.02 Mbit/s
  95th percentile per-packet one-way delay: -42.139 ms
  Loss rate: 0.16%
Run 9: Report of Copa — Data Link

![Graph 1: Throughput (Mbps)]

- Flow 1 ingress (mean 58.12 Mbit/s)
- Flow 1 egress (mean 58.10 Mbit/s)
- Flow 2 ingress (mean 58.01 Mbit/s)
- Flow 2 egress (mean 57.79 Mbit/s)
- Flow 3 ingress (mean 31.06 Mbit/s)
- Flow 3 egress (mean 31.02 Mbit/s)

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

- Flow 1 (95th percentile -43.25 ms)
- Flow 2 (95th percentile -40.31 ms)
- Flow 3 (95th percentile -42.14 ms)
Run 10: Statistics of Copa

Start at: 2018-06-19 11:50:29  
End at: 2018-06-19 11:50:59  
Local clock offset: -1.841 ms  
Remote clock offset: 51.863 ms

# Below is generated by plot.py at 2018-06-19 12:09:08  
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.39 Mbit/s
  95th percentile per-packet one-way delay: -41.730 ms
  Loss rate: 0.05%
-- Flow 1:
  Average throughput: 54.36 Mbit/s
  95th percentile per-packet one-way delay: -43.994 ms
  Loss rate: 0.03%
-- Flow 2:
  Average throughput: 39.68 Mbit/s
  95th percentile per-packet one-way delay: -38.126 ms
  Loss rate: 0.08%
-- Flow 3:
  Average throughput: 31.92 Mbit/s
  95th percentile per-packet one-way delay: -42.138 ms
  Loss rate: 0.12%
Run 10: Report of Copa — Data Link
Run 1: Statistics of TCP Cubic

Start at: 2018-06-19 09:17:23  
End at: 2018-06-19 09:17:53  
Local clock offset: -7.082 ms  
Remote clock offset: 52.755 ms

# Below is generated by plot.py at 2018-06-19 12:09:08

# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.62 Mbit/s
95th percentile per-packet one-way delay: -44.670 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 57.94 Mbit/s
95th percentile per-packet one-way delay: -45.036 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 39.17 Mbit/s
95th percentile per-packet one-way delay: -44.352 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 31.85 Mbit/s
95th percentile per-packet one-way delay: -44.334 ms
Loss rate: 0.28%
Run 1: Report of TCP Cubic — Data Link
Run 2: Statistics of TCP Cubic

Start at: 2018-06-19 09:35:18
End at: 2018-06-19 09:35:48
Local clock offset: -8.022 ms
Remote clock offset: 49.723 ms

# Below is generated by plot.py at 2018-06-19 12:09:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.56 Mbit/s
95th percentile per-packet one-way delay: -41.608 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 55.87 Mbit/s
95th percentile per-packet one-way delay: -43.498 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 37.02 Mbit/s
95th percentile per-packet one-way delay: -39.391 ms
Loss rate: 0.20%
-- Flow 3:
Average throughput: 30.18 Mbit/s
95th percentile per-packet one-way delay: -40.575 ms
Loss rate: 0.28%
Run 2: Report of TCP Cubic — Data Link
Run 3: Statistics of TCP Cubic

End at: 2018-06-19 09:53:43
Local clock offset: -3.274 ms
Remote clock offset: 49.233 ms

# Below is generated by plot.py at 2018-06-19 12:09:08
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.19 Mbit/s
95th percentile per-packet one-way delay: -44.303 ms
Loss rate: 0.30%
-- Flow 1:
Average throughput: 52.03 Mbit/s
95th percentile per-packet one-way delay: -45.517 ms
Loss rate: 0.35%
-- Flow 2:
Average throughput: 37.98 Mbit/s
95th percentile per-packet one-way delay: -41.349 ms
Loss rate: 0.18%
-- Flow 3:
Average throughput: 29.70 Mbit/s
95th percentile per-packet one-way delay: -38.621 ms
Loss rate: 0.30%
Run 3: Report of TCP Cubic — Data Link

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

- **Flow 1** (Ingress: 52.21 Mbit/s, Egress: 52.03 Mbit/s)
- **Flow 2** (Ingress: 38.05 Mbit/s, Egress: 37.98 Mbit/s)
- **Flow 3** (Ingress: 29.79 Mbit/s, Egress: 29.70 Mbit/s)
Run 4: Statistics of TCP Cubic

Start at: 2018-06-19 10:11:05
End at: 2018-06-19 10:11:35
Local clock offset: -1.637 ms
Remote clock offset: 52.346 ms

# Below is generated by plot.py at 2018-06-19 12:09:08
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.14 Mbit/s
  95th percentile per-packet one-way delay: -42.224 ms
  Loss rate: 0.16%
-- Flow 1:
  Average throughput: 55.15 Mbit/s
  95th percentile per-packet one-way delay: -42.390 ms
  Loss rate: 0.10%
-- Flow 2:
  Average throughput: 37.52 Mbit/s
  95th percentile per-packet one-way delay: -40.545 ms
  Loss rate: 0.16%
-- Flow 3:
  Average throughput: 30.15 Mbit/s
  95th percentile per-packet one-way delay: -44.466 ms
  Loss rate: 0.46%
Run 4: Report of TCP Cubic — Data Link
Run 5: Statistics of TCP Cubic

End at: 2018-06-19 10:29:25
Local clock offset: -0.552 ms
Remote clock offset: 52.318 ms

# Below is generated by plot.py at 2018-06-19 12:09:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.05 Mbit/s
95th percentile per-packet one-way delay: -43.298 ms
Loss rate: 0.14%
-- Flow 1:
Average throughput: 56.04 Mbit/s
95th percentile per-packet one-way delay: -44.483 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 37.91 Mbit/s
95th percentile per-packet one-way delay: -42.616 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 29.38 Mbit/s
95th percentile per-packet one-way delay: -39.136 ms
Loss rate: 0.29%
Run 5: Report of TCP Cubic — Data Link
Run 6: Statistics of TCP Cubic

End at: 2018-06-19 10:47:11
Local clock offset: -6.225 ms
Remote clock offset: 46.138 ms

# Below is generated by plot.py at 2018-06-19 12:09:16
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.13 Mbit/s
95th percentile per-packet one-way delay: -40.076 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 52.85 Mbit/s
95th percentile per-packet one-way delay: -39.154 ms
Loss rate: 0.11%
-- Flow 2:
Average throughput: 37.81 Mbit/s
95th percentile per-packet one-way delay: -41.397 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 30.45 Mbit/s
95th percentile per-packet one-way delay: -40.993 ms
Loss rate: 0.29%
Run 6: Report of TCP Cubic — Data Link
Run 7: Statistics of TCP Cubic

Start at: 2018-06-19 11:04:34
End at: 2018-06-19 11:05:04
Local clock offset: -7.974 ms
Remote clock offset: 45.064 ms

# Below is generated by plot.py at 2018-06-19 12:09:17
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.97 Mbit/s
95th percentile per-packet one-way delay: -43.334 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 55.70 Mbit/s
95th percentile per-packet one-way delay: -44.427 ms
Loss rate: 0.10%
-- Flow 2:
Average throughput: 37.93 Mbit/s
95th percentile per-packet one-way delay: -42.779 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 30.10 Mbit/s
95th percentile per-packet one-way delay: -39.329 ms
Loss rate: 0.28%
Run 7: Report of TCP Cubic — Data Link

![Graph](image)

- Flow 1 ingress (mean 55.76 Mbit/s)
- Flow 1 egress (mean 55.70 Mbit/s)
- Flow 2 ingress (mean 38.60 Mbit/s)
- Flow 2 egress (mean 37.93 Mbit/s)
- Flow 3 ingress (mean 30.18 Mbit/s)
- Flow 3 egress (mean 30.10 Mbit/s)

![Graph](image)

- Flow 1 (95th percentile 44.43 ms)
- Flow 2 (95th percentile 42.78 ms)
- Flow 3 (95th percentile 39.33 ms)
Run 8: Statistics of TCP Cubic

Local clock offset: -2.139 ms
Remote clock offset: 45.808 ms

# Below is generated by plot.py at 2018-06-19 12:09:21
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.06 Mbit/s
  95th percentile per-packet one-way delay: -44.766 ms
  Loss rate: 0.13%
-- Flow 1:
  Average throughput: 56.75 Mbit/s
  95th percentile per-packet one-way delay: -45.012 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 38.98 Mbit/s
  95th percentile per-packet one-way delay: -44.721 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 31.10 Mbit/s
  95th percentile per-packet one-way delay: -44.629 ms
  Loss rate: 0.28%
Run 8: Report of TCP Cubic — Data Link
Run 9: Statistics of TCP Cubic

End at: 2018-06-19 11:40:53
Local clock offset: -1.659 ms
Remote clock offset: 48.2 ms

# Below is generated by plot.py at 2018-06-19 12:09:25
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.47 Mbit/s
  95th percentile per-packet one-way delay: -44.693 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 59.60 Mbit/s
  95th percentile per-packet one-way delay: -44.907 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 40.65 Mbit/s
  95th percentile per-packet one-way delay: -44.587 ms
  Loss rate: 0.18%
-- Flow 3:
  Average throughput: 32.50 Mbit/s
  95th percentile per-packet one-way delay: -44.577 ms
  Loss rate: 0.26%
Run 9: Report of TCP Cubic — Data Link
Run 10: Statistics of TCP Cubic

Start at: 2018-06-19 11:58:18
End at: 2018-06-19 11:58:48
Local clock offset: -1.776 ms
Remote clock offset: 52.746 ms

# Below is generated by plot.py at 2018-06-19 12:09:33
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.46 Mbit/s
  95th percentile per-packet one-way delay: -44.987 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 59.57 Mbit/s
  95th percentile per-packet one-way delay: -45.253 ms
  Loss rate: 0.09%
-- Flow 2:
  Average throughput: 40.66 Mbit/s
  95th percentile per-packet one-way delay: -44.813 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 32.50 Mbit/s
  95th percentile per-packet one-way delay: -44.722 ms
  Loss rate: 0.28%
Run 10: Report of TCP Cubic — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 59.62 Mbps)  Flow 1 egress (mean 59.57 Mbps)
Flow 2 ingress (mean 40.74 Mbps)  Flow 2 egress (mean 40.66 Mbps)
Flow 3 ingress (mean 32.58 Mbps)  Flow 3 egress (mean 32.50 Mbps)

One-way delay (ms)

Time (s)

Flow 1 (95th percentile - 45.25 ms)  Flow 2 (95th percentile - 44.81 ms)  Flow 3 (95th percentile - 44.72 ms)
Run 1: Statistics of FillP

Start at: 2018-06-19 09:14:04
End at: 2018-06-19 09:14:34
Local clock offset: -6.437 ms
Remote clock offset: 52.84 ms

# Below is generated by plot.py at 2018-06-19 12:10:31
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.60 Mbit/s
95th percentile per-packet one-way delay: -24.382 ms
Loss rate: 2.46%
-- Flow 1:
Average throughput: 57.36 Mbit/s
95th percentile per-packet one-way delay: -25.479 ms
Loss rate: 1.71%
-- Flow 2:
Average throughput: 37.92 Mbit/s
95th percentile per-packet one-way delay: -23.990 ms
Loss rate: 3.62%
-- Flow 3:
Average throughput: 30.20 Mbit/s
95th percentile per-packet one-way delay: -14.724 ms
Loss rate: 3.72%
Run 1: Report of FillP — Data Link

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

- Flow 1 ingress (mean 58.33 Mbit/s)
- Flow 1 egress (mean 57.36 Mbit/s)
- Flow 2 ingress (mean 39.32 Mbit/s)
- Flow 2 egress (mean 37.92 Mbit/s)
- Flow 3 ingress (mean 31.33 Mbit/s)
- Flow 3 egress (mean 30.20 Mbit/s)

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

- Flow 1 (95th percentile - 25.48 ms)
- Flow 2 (95th percentile - 23.99 ms)
- Flow 3 (95th percentile - 14.72 ms)
Run 2: Statistics of FillP

Start at: 2018-06-19 09:31:58
End at: 2018-06-19 09:32:28
Local clock offset: -8.779 ms
Remote clock offset: 49.91 ms

# Below is generated by plot.py at 2018-06-19 12:10:31
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 90.29 Mbit/s
  95th percentile per-packet one-way delay: -23.376 ms
  Loss rate: 3.01%
-- Flow 1:
  Average throughput: 56.19 Mbit/s
  95th percentile per-packet one-way delay: -24.747 ms
  Loss rate: 2.02%
-- Flow 2:
  Average throughput: 36.60 Mbit/s
  95th percentile per-packet one-way delay: -19.360 ms
  Loss rate: 4.28%
-- Flow 3:
  Average throughput: 29.45 Mbit/s
  95th percentile per-packet one-way delay: -9.824 ms
  Loss rate: 5.35%
Run 2: Report of FillP — Data Link

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

- **Flow 1** ingress (mean 57.34 Mbit/s)
- **Flow 1** egress (mean 56.19 Mbit/s)
- **Flow 2** ingress (mean 38.21 Mbit/s)
- **Flow 2** egress (mean 36.60 Mbit/s)
- **Flow 3** ingress (mean 31.07 Mbit/s)
- **Flow 3** egress (mean 29.45 Mbit/s)

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

- **Flow 1** (95th percentile -24.75 ms)
- **Flow 2** (95th percentile -19.36 ms)
- **Flow 3** (95th percentile -9.82 ms)
Run 3: Statistics of FillP

Start at: 2018-06-19 09:49:53
End at: 2018-06-19 09:50:23
Local clock offset: -3.576 ms
Remote clock offset: 49.595 ms

# Below is generated by plot.py at 2018-06-19 12:10:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.13 Mbit/s
95th percentile per-packet one-way delay: -22.349 ms
Loss rate: 3.23%
-- Flow 1:
Average throughput: 55.23 Mbit/s
95th percentile per-packet one-way delay: -24.939 ms
Loss rate: 2.37%
-- Flow 2:
Average throughput: 36.63 Mbit/s
95th percentile per-packet one-way delay: -18.178 ms
Loss rate: 4.78%
-- Flow 3:
Average throughput: 28.70 Mbit/s
95th percentile per-packet one-way delay: -12.685 ms
Loss rate: 4.11%
Run 3: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 56.55 Mbps)
- **Flow 1 egress** (mean 55.23 Mbps)
- **Flow 2 ingress** (mean 38.48 Mbps)
- **Flow 2 egress** (mean 36.63 Mbps)
- **Flow 3 ingress** (mean 29.91 Mbps)
- **Flow 3 egress** (mean 28.70 Mbps)

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

- **Flow 1** (99th percentile: 24.94 ms)
- **Flow 2** (99th percentile: 18.18 ms)
- **Flow 3** (99th percentile: 12.69 ms)
Run 4: Statistics of FillP

Start at: 2018-06-19 10:07:45
End at: 2018-06-19 10:08:15
Local clock offset: -1.996 ms
Remote clock offset: 51.831 ms

# Below is generated by plot.py at 2018-06-19 12:10:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 84.24 Mbit/s
  95th percentile per-packet one-way delay: -17.823 ms
  Loss rate: 7.01%
-- Flow 1:
  Average throughput: 50.90 Mbit/s
  95th percentile per-packet one-way delay: -24.067 ms
  Loss rate: 8.18%
-- Flow 2:
  Average throughput: 36.33 Mbit/s
  95th percentile per-packet one-way delay: -15.323 ms
  Loss rate: 4.96%
-- Flow 3:
  Average throughput: 27.53 Mbit/s
  95th percentile per-packet one-way delay: -7.224 ms
  Loss rate: 5.69%
Run 4: Report of FillP — Data Link

![Graphs showing network performance metrics such as throughput and per-packet one-way delay.](image-url)

Legend:
- Flow 1 ingress (mean 55.41 Mbit/s)
- Flow 1 egress (mean 50.90 Mbit/s)
- Flow 2 ingress (mean 38.20 Mbit/s)
- Flow 2 egress (mean 36.33 Mbit/s)
- Flow 3 ingress (mean 29.14 Mbit/s)
- Flow 3 egress (mean 27.53 Mbit/s)
Run 5: Statistics of FillP

End at: 2018-06-19 10:26:05
Local clock offset: -0.727 ms
Remote clock offset: 53.098 ms

# Below is generated by plot.py at 2018-06-19 12:10:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 85.66 Mbit/s
95th percentile per-packet one-way delay: -17.208 ms
Loss rate: 3.50%
-- Flow 1:
Average throughput: 52.46 Mbit/s
95th percentile per-packet one-way delay: -23.296 ms
Loss rate: 2.48%
-- Flow 2:
Average throughput: 35.65 Mbit/s
95th percentile per-packet one-way delay: -13.836 ms
Loss rate: 4.08%
-- Flow 3:
Average throughput: 28.62 Mbit/s
95th percentile per-packet one-way delay: -7.647 ms
Loss rate: 7.49%
Run 5: Report of FillP — Data Link

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

- Flow 1 ingress (mean 53.77 Mbit/s)
- Flow 2 ingress (mean 37.13 Mbit/s)
- Flow 3 ingress (mean 36.93 Mbit/s)
- Flow 1 egress (mean 52.46 Mbit/s)
- Flow 2 egress (mean 35.65 Mbit/s)
- Flow 3 egress (mean 28.62 Mbit/s)

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

- Flow 1 (95th percentile -23.30 ms)
- Flow 2 (95th percentile -13.84 ms)
- Flow 3 (95th percentile -7.65 ms)
Run 6: Statistics of FillP

Start at: 2018-06-19 10:43:26
End at: 2018-06-19 10:43:56
Local clock offset: -5.331 ms
Remote clock offset: 46.973 ms

# Below is generated by plot.py at 2018-06-19 12:10:34
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 72.93 Mbit/s
  95th percentile per-packet one-way delay: -23.134 ms
  Loss rate: 19.26%
-- Flow 1:
  Average throughput: 45.55 Mbit/s
  95th percentile per-packet one-way delay: -24.530 ms
  Loss rate: 18.32%
-- Flow 2:
  Average throughput: 29.82 Mbit/s
  95th percentile per-packet one-way delay: -19.898 ms
  Loss rate: 20.80%
-- Flow 3:
  Average throughput: 23.31 Mbit/s
  95th percentile per-packet one-way delay: -12.954 ms
  Loss rate: 20.75%
Run 6: Report of FillP — Data Link

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

- **Flow 1 ingress** (mean 55.74 Mbit/s)
- **Flow 1 egress** (mean 45.55 Mbit/s)
- **Flow 2 ingress** (mean 37.25 Mbit/s)
- **Flow 2 egress** (mean 29.82 Mbit/s)
- **Flow 3 ingress** (mean 29.36 Mbit/s)
- **Flow 3 egress** (mean 23.31 Mbit/s)

- **Flow 1** (95th percentile -24.53 ms)
- **Flow 2** (95th percentile -19.90 ms)
- **Flow 3** (95th percentile -12.95 ms)
Run 7: Statistics of FillP

Start at: 2018-06-19 11:01:19
End at: 2018-06-19 11:01:49
Local clock offset: -8.303 ms
Remote clock offset: 44.453 ms

# Below is generated by plot.py at 2018-06-19 12:10:45
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 89.30 Mbit/s
  95th percentile per-packet one-way delay: -22.007 ms
  Loss rate: 3.81%
-- Flow 1:
  Average throughput: 55.85 Mbit/s
  95th percentile per-packet one-way delay: -24.908 ms
  Loss rate: 2.83%
-- Flow 2:
  Average throughput: 35.81 Mbit/s
  95th percentile per-packet one-way delay: -16.528 ms
  Loss rate: 5.50%
-- Flow 3:
  Average throughput: 28.99 Mbit/s
  95th percentile per-packet one-way delay: -14.254 ms
  Loss rate: 5.18%
Run 7: Report of FillP — Data Link
Run 8: Statistics of FillP

Start at: 2018-06-19 11:19:10
End at: 2018-06-19 11:19:40
Local clock offset: -2.604 ms
Remote clock offset: 45.868 ms

# Below is generated by plot.py at 2018-06-19 12:10:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 75.08 Mbit/s
95th percentile per-packet one-way delay: -24.461 ms
Loss rate: 19.70%
-- Flow 1:
Average throughput: 45.94 Mbit/s
95th percentile per-packet one-way delay: -25.370 ms
Loss rate: 18.74%
-- Flow 2:
Average throughput: 31.42 Mbit/s
95th percentile per-packet one-way delay: -23.828 ms
Loss rate: 21.13%
-- Flow 3:
Average throughput: 24.76 Mbit/s
95th percentile per-packet one-way delay: -17.174 ms
Loss rate: 21.25%
Run 8: Report of FillP — Data Link

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

- **Flow 1** ingress (mean 56.53 Mbit/s) and egress (mean 45.94 Mbit/s)
- **Flow 2** ingress (mean 39.85 Mbit/s) and egress (mean 31.42 Mbit/s)
- **Flow 3** ingress (mean 31.40 Mbit/s) and egress (mean 24.76 Mbit/s)
Run 9: Statistics of FillP

Start at: 2018-06-19 11:37:06
End at: 2018-06-19 11:37:36
Local clock offset: -1.475 ms
Remote clock offset: 46.3 ms

# Below is generated by plot.py at 2018-06-19 12:11:43
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.99 Mbit/s
95th percentile per-packet one-way delay: -25.616 ms
Loss rate: 19.45%
-- Flow 1:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: -28.833 ms
Loss rate: 18.92%
-- Flow 2:
Average throughput: 34.68 Mbit/s
95th percentile per-packet one-way delay: -25.203 ms
Loss rate: 20.32%
-- Flow 3:
Average throughput: 18.54 Mbit/s
95th percentile per-packet one-way delay: -23.698 ms
Loss rate: 20.35%
Run 9: Report of FillP — Data Link

---

**Throughput (Mbps):**

- Flow 1 ingress (mean 61.33 Mbps)
- Flow 1 egress (mean 49.75 Mbps)
- Flow 2 ingress (mean 43.51 Mbps)
- Flow 2 egress (mean 34.68 Mbps)
- Flow 3 ingress (mean 23.24 Mbps)
- Flow 3 egress (mean 18.54 Mbps)

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

- Flow 1 (95th percentile -28.83 ms)
- Flow 2 (95th percentile -25.20 ms)
- Flow 3 (95th percentile -23.70 ms)
Run 10: Statistics of FillP

Local clock offset: -1.82 ms
Remote clock offset: 52.656 ms

# Below is generated by plot.py at 2018-06-19 12:11:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.93 Mbit/s
95th percentile per-packet one-way delay: -25.353 ms
Loss rate: 19.38%
-- Flow 1:
Average throughput: 48.37 Mbit/s
95th percentile per-packet one-way delay: -26.408 ms
Loss rate: 18.65%
-- Flow 2:
Average throughput: 33.00 Mbit/s
95th percentile per-packet one-way delay: -25.203 ms
Loss rate: 20.49%
-- Flow 3:
Average throughput: 26.00 Mbit/s
95th percentile per-packet one-way delay: -24.262 ms
Loss rate: 20.59%
Run 10: Report of FillIP — Data Link

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

- Flow 1 ingress (mean 59.45 Mb/s)
- Flow 1 egress (mean 48.37 Mb/s)
- Flow 2 ingress (mean 41.47 Mb/s)
- Flow 2 egress (mean 33.00 Mb/s)
- Flow 3 ingress (mean 32.71 Mb/s)
- Flow 3 egress (mean 26.00 Mb/s)

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

- Flow 1 (95th percentile -26.41 ms)
- Flow 2 (95th percentile -25.20 ms)
- Flow 3 (95th percentile -24.26 ms)
Run 1: Statistics of Indigo

Start at: 2018-06-19 09:16:15
End at: 2018-06-19 09:16:45
Local clock offset: -6.838 ms
Remote clock offset: 52.784 ms

# Below is generated by plot.py at 2018-06-19 12:11:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.37 Mbit/s
95th percentile per-packet one-way delay: -45.918 ms
Loss rate: 0.04%
-- Flow 1:
Average throughput: 55.88 Mbit/s
95th percentile per-packet one-way delay: -46.552 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 39.62 Mbit/s
95th percentile per-packet one-way delay: -45.381 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 30.84 Mbit/s
95th percentile per-packet one-way delay: -42.898 ms
Loss rate: 0.09%
Run 1: Report of Indigo — Data Link

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

- **Flow 1 Ingress** (mean 55.89 Mbps)
- **Flow 1 Egress** (mean 55.88 Mbps)
- **Flow 2 Ingress** (mean 39.64 Mbps)
- **Flow 2 Egress** (mean 39.62 Mbps)
- **Flow 3 Ingress** (mean 30.87 Mbps)
- **Flow 3 Egress** (mean 30.64 Mbps)
Run 2: Statistics of Indigo

Start at: 2018-06-19 09:34:09
End at: 2018-06-19 09:34:39
Local clock offset: -8.82 ms
Remote clock offset: 49.786 ms

# Below is generated by plot.py at 2018-06-19 12:11:47
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 91.67 Mbit/s
  95th percentile per-packet one-way delay: -44.478 ms
  Loss rate: 0.25%
-- Flow 1:
  Average throughput: 56.54 Mbit/s
  95th percentile per-packet one-way delay: -46.839 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 37.29 Mbit/s
  95th percentile per-packet one-way delay: -44.152 ms
  Loss rate: 0.14%
-- Flow 3:
  Average throughput: 31.41 Mbit/s
  95th percentile per-packet one-way delay: -44.232 ms
  Loss rate: 1.82%
Run 2: Report of Indigo — Data Link
Run 3: Statistics of Indigo

Start at: 2018-06-19 09:52:04
End at: 2018-06-19 09:52:34
Local clock offset: -3.321 ms
Remote clock offset: 49.518 ms

# Below is generated by plot.py at 2018-06-19 12:11:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.30 Mbit/s
95th percentile per-packet one-way delay: -45.349 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 50.61 Mbit/s
95th percentile per-packet one-way delay: -47.892 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.44 Mbit/s
95th percentile per-packet one-way delay: -44.705 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 30.71 Mbit/s
95th percentile per-packet one-way delay: -40.778 ms
Loss rate: 0.07%
Run 3: Report of Indigo — Data Link

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

- Flow 1 ingress (mean 50.61 Mbit/s)
- Flow 1 egress (mean 50.61 Mbit/s)
- Flow 2 ingress (mean 38.44 Mbit/s)
- Flow 2 egress (mean 38.44 Mbit/s)
- Flow 3 ingress (mean 30.72 Mbit/s)
- Flow 3 egress (mean 30.71 Mbit/s)

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

- Flow 1 (95th percentile -47.89 ms)
- Flow 2 (95th percentile -44.70 ms)
- Flow 3 (95th percentile -40.78 ms)
Run 4: Statistics of Indigo

Start at: 2018-06-19 10:09:56
End at: 2018-06-19 10:10:26
Local clock offset: -1.812 ms
Remote clock offset: 52.396 ms

# Below is generated by plot.py at 2018-06-19 12:11:47
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.33 Mbit/s
95th percentile per-packet one-way delay: -45.133 ms
Loss rate: 0.16%
-- Flow 1:
Average throughput: 53.36 Mbit/s
95th percentile per-packet one-way delay: -45.875 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 37.70 Mbit/s
95th percentile per-packet one-way delay: -44.452 ms
Loss rate: 0.47%
-- Flow 3:
Average throughput: 30.03 Mbit/s
95th percentile per-packet one-way delay: -42.701 ms
Loss rate: 0.10%
Run 4: Report of Indigo — Data Link

![Graph 1: Throughput (Mbps)]

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

Legend:
- Flow 1 ingress (mean 53.36 Mbps)
- Flow 1 egress (mean 53.36 Mbps)
- Flow 2 ingress (mean 37.88 Mbps)
- Flow 2 egress (mean 37.70 Mbps)
- Flow 3 ingress (mean 30.06 Mbps)
- Flow 3 egress (mean 30.03 Mbps)

Legend:
- Flow 1 (95th percentile -45.88 ms)
- Flow 2 (95th percentile -44.45 ms)
- Flow 3 (95th percentile -42.70 ms)
Run 5: Statistics of Indigo

Start at: 2018-06-19 10:27:46
End at: 2018-06-19 10:28:16
Local clock offset: -0.608 ms
Remote clock offset: 52.902 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 90.70 Mbit/s
   95th percentile per-packet one-way delay: -44.419 ms
   Loss rate: 0.22%
-- Flow 1:
   Average throughput: 55.47 Mbit/s
   95th percentile per-packet one-way delay: -45.966 ms
   Loss rate: 0.05%
-- Flow 2:
   Average throughput: 38.67 Mbit/s
   95th percentile per-packet one-way delay: -42.823 ms
   Loss rate: 0.58%
-- Flow 3:
   Average throughput: 28.97 Mbit/s
   95th percentile per-packet one-way delay: -41.838 ms
   Loss rate: 0.28%
Run 5: Report of Indigo — Data Link

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

Legend:
- Flow 1 ingress (mean 55.49 Mbit/s)
- Flow 1 egress (mean 55.47 Mbit/s)
- Flow 2 ingress (mean 38.90 Mbit/s)
- Flow 2 egress (mean 38.67 Mbit/s)
- Flow 3 ingress (mean 29.84 Mbit/s)
- Flow 3 egress (mean 28.97 Mbit/s)
Run 6: Statistics of Indigo

Start at: 2018-06-19 10:45:37
End at: 2018-06-19 10:46:07
Local clock offset: -5.97 ms
Remote clock offset: 46.322 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 12.63 Mbit/s
95th percentile per-packet one-way delay: -41.522 ms
Loss rate: 8.49%
-- Flow 1:
Average throughput: 6.19 Mbit/s
95th percentile per-packet one-way delay: -44.977 ms
Loss rate: 7.65%
-- Flow 2:
Average throughput: 5.51 Mbit/s
95th percentile per-packet one-way delay: -42.024 ms
Loss rate: 8.24%
-- Flow 3:
Average throughput: 9.15 Mbit/s
95th percentile per-packet one-way delay: -41.334 ms
Loss rate: 10.65%
Run 6: Report of Indigo — Data Link

![Graph of data link performance over time]

- **Flow 1 ingress (mean 6.71 Mbit/s)**
- **Flow 1 egress (mean 6.19 Mbit/s)**
- **Flow 2 ingress (mean 6.00 Mbit/s)**
- **Flow 2 egress (mean 5.51 Mbit/s)**
- **Flow 3 ingress (mean 10.24 Mbit/s)**
- **Flow 3 egress (mean 9.15 Mbit/s)**

![Graph of packet one-way delay over time]

- **Flow 1 (95th percentile -44.98 ms)**
- **Flow 2 (95th percentile -42.02 ms)**
- **Flow 3 (95th percentile -41.33 ms)**
Run 7: Statistics of Indigo

Start at: 2018-06-19 11:03:30
End at: 2018-06-19 11:04:00
Local clock offset: -8.482 ms
Remote clock offset: 44.592 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 9.01 Mbit/s
95th percentile per-packet one-way delay: -40.107 ms
Loss rate: 8.69%
-- Flow 1:
Average throughput: 5.32 Mbit/s
95th percentile per-packet one-way delay: -41.376 ms
Loss rate: 7.76%
-- Flow 2:
Average throughput: 3.97 Mbit/s
95th percentile per-packet one-way delay: -37.719 ms
Loss rate: 9.00%
-- Flow 3:
Average throughput: 3.16 Mbit/s
95th percentile per-packet one-way delay: -26.303 ms
Loss rate: 12.47%
Run 7: Report of Indigo — Data Link

![Throughput Graph]

Throughput (Mbps/s) vs Time (s)

- Flow 1 ingress (mean 5.77 Mbps/s)
- Flow 1 egress (mean 5.32 Mbps/s)
- Flow 2 ingress (mean 4.37 Mbps/s)
- Flow 2 egress (mean 3.97 Mbps/s)
- Flow 3 ingress (mean 3.61 Mbps/s)
- Flow 3 egress (mean 3.16 Mbps/s)

![Delay Graph]

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

- Flow 1 (95th percentile -41.38 ms)
- Flow 2 (95th percentile -37.72 ms)
- Flow 3 (95th percentile -26.30 ms)
Run 8: Statistics of Indigo

End at: 2018-06-19 11:21:51
Local clock offset: -2.269 ms
Remote clock offset: 45.571 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 13.39 Mbit/s
95th percentile per-packet one-way delay: -41.916 ms
Loss rate: 7.49%
-- Flow 1:
Average throughput: 7.75 Mbit/s
95th percentile per-packet one-way delay: -41.874 ms
Loss rate: 7.73%
-- Flow 2:
Average throughput: 6.53 Mbit/s
95th percentile per-packet one-way delay: -45.440 ms
Loss rate: 7.56%
-- Flow 3:
Average throughput: 4.96 Mbit/s
95th percentile per-packet one-way delay: -43.517 ms
Loss rate: 5.97%
Run 8: Report of Indigo — Data Link
Run 9: Statistics of Indigo

Local clock offset: -1.674 ms
Remote clock offset: 47.704 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 44.72 Mbit/s
  95th percentile per-packet one-way delay: -43.363 ms
  Loss rate: 3.58%
-- Flow 1:
  Average throughput: 18.53 Mbit/s
  95th percentile per-packet one-way delay: -41.411 ms
  Loss rate: 7.05%
-- Flow 2:
  Average throughput: 23.31 Mbit/s
  95th percentile per-packet one-way delay: -45.044 ms
  Loss rate: 1.32%
-- Flow 3:
  Average throughput: 32.47 Mbit/s
  95th percentile per-packet one-way delay: -45.128 ms
  Loss rate: 0.44%
Run 9: Report of Indigo — Data Link
Run 10: Statistics of Indigo

End at: 2018-06-19 11:57:44
Local clock offset: -1.797 ms
Remote clock offset: 52.917 ms

# Below is generated by plot.py at 2018-06-19 12:11:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 11.49 Mbit/s
95th percentile per-packet one-way delay: -41.686 ms
Loss rate: 9.83%
-- Flow 1:
Average throughput: 6.03 Mbit/s
95th percentile per-packet one-way delay: -41.721 ms
Loss rate: 8.78%
-- Flow 2:
Average throughput: 4.04 Mbit/s
95th percentile per-packet one-way delay: -44.072 ms
Loss rate: 10.08%
-- Flow 3:
Average throughput: 9.24 Mbit/s
95th percentile per-packet one-way delay: -41.635 ms
Loss rate: 11.80%
Run 10: Report of Indigo — Data Link

![Graph of throughput and packet delay over time for different data flows. The graph shows the throughput in Mbps for flows 1, 2, and 3, with each flow having a different ingress and egress mean Mbps. Similarly, the packet delay is shown in milliseconds for each flow.](image-url)
Run 1: Statistics of LEDBAT

Start at: 2018-06-19 09:19:38
End at: 2018-06-19 09:20:08
Local clock offset: -7.491 ms
Remote clock offset: 52.647 ms

# Below is generated by plot.py at 2018-06-19 12:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.98 Mbit/s
95th percentile per-packet one-way delay: -41.360 ms
Loss rate: 0.38%
-- Flow 1:
Average throughput: 54.46 Mbit/s
95th percentile per-packet one-way delay: -41.188 ms
Loss rate: 0.45%
-- Flow 2:
Average throughput: 41.13 Mbit/s
95th percentile per-packet one-way delay: -41.847 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 33.49 Mbit/s
95th percentile per-packet one-way delay: -40.870 ms
Loss rate: 0.33%
Run 1: Report of LEDBAT — Data Link

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

- **Flow 1 ingress** (mean 54.71 Mbps)
- **Flow 1 egress** (mean 54.46 Mbps)
- **Flow 2 ingress** (mean 41.22 Mbps)
- **Flow 2 egress** (mean 41.13 Mbps)
- **Flow 3 ingress** (mean 33.59 Mbps)
- **Flow 3 egress** (mean 33.49 Mbps)

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

- **Flow 1 (95th percentile - 41.19 ms)**
- **Flow 2 (95th percentile - 41.85 ms)**
- **Flow 3 (95th percentile - 40.87 ms)**

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Run 2: Statistics of LEDBAT

Start at: 2018-06-19 09:37:33
End at: 2018-06-19 09:38:03
Local clock offset: -6.841 ms
Remote clock offset: 49.829 ms

# Below is generated by plot.py at 2018-06-19 12:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.66 Mbit/s
95th percentile per-packet one-way delay: -38.142 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 53.44 Mbit/s
95th percentile per-packet one-way delay: -39.011 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 36.67 Mbit/s
95th percentile per-packet one-way delay: -37.273 ms
Loss rate: 0.28%
-- Flow 3:
Average throughput: 29.49 Mbit/s
95th percentile per-packet one-way delay: -36.819 ms
Loss rate: 0.40%
Run 2: Report of LEDBAT — Data Link
Run 3: Statistics of LEDBAT

Local clock offset: -3.015 ms
Remote clock offset: 50.2 ms

# Below is generated by plot.py at 2018-06-19 12:12:46
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.91 Mbit/s
95th percentile per-packet one-way delay: -37.814 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 54.50 Mbit/s
95th percentile per-packet one-way delay: -40.101 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 36.93 Mbit/s
95th percentile per-packet one-way delay: -35.903 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 29.58 Mbit/s
95th percentile per-packet one-way delay: -34.295 ms
Loss rate: 0.48%
Run 3: Report of LEDBAT — Data Link
Run 4: Statistics of LEDBAT

End at: 2018-06-19 10:13:49
Local clock offset: -1.509 ms
Remote clock offset: 52.557 ms

# Below is generated by plot.py at 2018-06-19 12:12:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.37 Mbit/s
95th percentile per-packet one-way delay: -39.756 ms
Loss rate: 0.28%
-- Flow 1:
Average throughput: 56.23 Mbit/s
95th percentile per-packet one-way delay: -41.499 ms
Loss rate: 0.14%
-- Flow 2:
Average throughput: 34.64 Mbit/s
95th percentile per-packet one-way delay: -38.539 ms
Loss rate: 0.57%
-- Flow 3:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: -36.253 ms
Loss rate: 0.36%
Run 4: Report of LEDBAT — Data Link

![Graph of throughput and per-packet round-trip delay over time for three flows.](image)

Flow 1 ingress (mean 56.30 Mbit/s)
Flow 1 egress (mean 56.23 Mbit/s)
Flow 2 ingress (mean 34.83 Mbit/s)
Flow 2 egress (mean 34.64 Mbit/s)
Flow 3 ingress (mean 33.52 Mbit/s)
Flow 3 egress (mean 33.38 Mbit/s)
Run 5: Statistics of LEDBAT

Start at: 2018-06-19 10:31:10
End at: 2018-06-19 10:31:40
Local clock offset: -0.461 ms
Remote clock offset: 50.599 ms

# Below is generated by plot.py at 2018-06-19 12:12:52
# Datalink statistics
-- Total of 3 flows:
Average throughput: 88.67 Mbit/s
95th percentile per-packet one-way delay: -36.883 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 55.07 Mbit/s
95th percentile per-packet one-way delay: -39.414 ms
Loss rate: 0.16%
-- Flow 2:
Average throughput: 36.31 Mbit/s
95th percentile per-packet one-way delay: -35.829 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 28.33 Mbit/s
95th percentile per-packet one-way delay: -31.292 ms
Loss rate: 0.47%
Run 5: Report of LEDBAT — Data Link

![Graph 1: Throughput vs Time]

- Flow 1 ingress (mean 55.16 Mbit/s)
- Flow 1 egress (mean 55.07 Mbit/s)
- Flow 2 ingress (mean 36.40 Mbit/s)
- Flow 2 egress (mean 36.31 Mbit/s)
- Flow 3 ingress (mean 28.50 Mbit/s)
- Flow 3 egress (mean 28.33 Mbit/s)

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

- Flow 1 (95th percentile -39.41 ms)
- Flow 2 (95th percentile -35.83 ms)
- Flow 3 (95th percentile -31.29 ms)
Run 6: Statistics of LEDBAT

Start at: 2018-06-19 10:48:56
End at: 2018-06-19 10:49:26
Local clock offset: -6.701 ms
Remote clock offset: 46.027 ms

# Below is generated by plot.py at 2018-06-19 12:12:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.00 Mbit/s
95th percentile per-packet one-way delay: -37.348 ms
Loss rate: 0.24%
-- Flow 1:
Average throughput: 54.59 Mbit/s
95th percentile per-packet one-way delay: -39.448 ms
Loss rate: 0.18%
-- Flow 2:
Average throughput: 36.80 Mbit/s
95th percentile per-packet one-way delay: -35.057 ms
Loss rate: 0.30%
-- Flow 3:
Average throughput: 29.84 Mbit/s
95th percentile per-packet one-way delay: -35.597 ms
Loss rate: 0.41%
Run 6: Report of LEDBAT — Data Link

Throughput (Mbit/s) vs Time (s)

Flow 1 ingress (mean 54.68 Mbit/s)
Flow 1 egress (mean 54.59 Mbit/s)
Flow 2 ingress (mean 36.91 Mbit/s)
Flow 2 egress (mean 36.80 Mbit/s)
Flow 3 ingress (mean 29.96 Mbit/s)
Flow 3 egress (mean 29.84 Mbit/s)

Per-packet one way delay (ms)

Flow 1 (95th percentile: 39.45 ms)
Flow 2 (95th percentile: 35.06 ms)
Flow 3 (95th percentile: 35.60 ms)
Run 7: Statistics of LEDBAT

Start at: 2018-06-19 11:06:49
End at: 2018-06-19 11:07:19
Local clock offset: -6.631 ms
Remote clock offset: 45.462 ms

# Below is generated by plot.py at 2018-06-19 12:13:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.68 Mbit/s
95th percentile per-packet one-way delay: -41.663 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 55.40 Mbit/s
95th percentile per-packet one-way delay: -42.126 ms
Loss rate: 0.15%
-- Flow 2:
Average throughput: 37.71 Mbit/s
95th percentile per-packet one-way delay: -39.628 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 30.58 Mbit/s
95th percentile per-packet one-way delay: -41.837 ms
Loss rate: 0.43%
Run 7: Report of LEDBAT — Data Link

![Graph showing throughput over time for different flows]

- Flow 1 ingress (mean 55.48 Mbit/s)
- Flow 1 egress (mean 55.40 Mbit/s)
- Flow 2 ingress (mean 37.80 Mbit/s)
- Flow 2 egress (mean 37.71 Mbit/s)
- Flow 3 ingress (mean 30.70 Mbit/s)
- Flow 3 egress (mean 30.58 Mbit/s)

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

- Flow 1 (95th percentile -42.13 ms)
- Flow 2 (95th percentile -39.63 ms)
- Flow 3 (95th percentile -41.84 ms)
Run 8: Statistics of LEDEBAT

End at: 2018-06-19 11:25:11
Local clock offset: -1.883 ms
Remote clock offset: 45.601 ms

# Below is generated by plot.py at 2018-06-19 12:13:09
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 94.23 Mbit/s
  95th percentile per-packet one-way delay: -41.201 ms
  Loss rate: 0.22%
-- Flow 1:
  Average throughput: 58.03 Mbit/s
  95th percentile per-packet one-way delay: -40.991 ms
  Loss rate: 0.16%
-- Flow 2:
  Average throughput: 38.65 Mbit/s
  95th percentile per-packet one-way delay: -41.627 ms
  Loss rate: 0.25%
-- Flow 3:
  Average throughput: 31.47 Mbit/s
  95th percentile per-packet one-way delay: -41.574 ms
  Loss rate: 0.43%
Run 8: Report of LEDBAT — Data Link
Run 9: Statistics of LEDBAT

End at: 2018-06-19 11:43:09
Local clock offset: -1.744 ms
Remote clock offset: 49.494 ms

# Below is generated by plot.py at 2018-06-19 12:13:55
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 97.22 Mbit/s
  95th percentile per-packet one-way delay: -40.758 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 59.61 Mbit/s
  95th percentile per-packet one-way delay: -40.948 ms
  Loss rate: 0.15%
-- Flow 2:
  Average throughput: 40.26 Mbit/s
  95th percentile per-packet one-way delay: -41.654 ms
  Loss rate: 0.26%
-- Flow 3:
  Average throughput: 32.52 Mbit/s
  95th percentile per-packet one-way delay: -40.169 ms
  Loss rate: 0.42%
Run 10: Statistics of LEDBAT

Start at: 2018-06-19 12:00:34
End at: 2018-06-19 12:01:04
Local clock offset: -1.748 ms
Remote clock offset: 53.37 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.25 Mbit/s
95th percentile per-packet one-way delay: -41.166 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 59.51 Mbit/s
95th percentile per-packet one-way delay: -41.437 ms
Loss rate: 0.17%
-- Flow 2:
Average throughput: 40.57 Mbit/s
95th percentile per-packet one-way delay: -40.785 ms
Loss rate: 0.27%
-- Flow 3:
Average throughput: 32.30 Mbit/s
95th percentile per-packet one-way delay: -41.813 ms
Loss rate: 0.42%
Run 10: Report of LEDBAT — Data Link

[Graph showing throughput and delay over time for different flows, with specific statistics for mean throughput and 95th percentile delay.]
Run 1: Statistics of PCC-Allegro

Start at: 2018-06-19 09:05:03
End at: 2018-06-19 09:05:33
Local clock offset: -3.361 ms
Remote clock offset: 52.206 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 86.87 Mbit/s
  95th percentile per-packet one-way delay: -21.596 ms
  Loss rate: 3.72%
-- Flow 1:
  Average throughput: 52.61 Mbit/s
  95th percentile per-packet one-way delay: -24.045 ms
  Loss rate: 5.05%
-- Flow 2:
  Average throughput: 36.50 Mbit/s
  95th percentile per-packet one-way delay: -20.709 ms
  Loss rate: 1.55%
-- Flow 3:
  Average throughput: 30.38 Mbit/s
  95th percentile per-packet one-way delay: -19.806 ms
  Loss rate: 1.73%
Run 1: Report of PCC-Allegro — Data Link
Run 2: Statistics of PCC-Allegro

End at: 2018-06-19 09:23:29
Local clock offset: -7.872 ms
Remote clock offset: 51.749 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 62.76 Mbit/s
  95th percentile per-packet one-way delay: -41.043 ms
  Loss rate: 14.70%
-- Flow 1:
  Average throughput: 59.41 Mbit/s
  95th percentile per-packet one-way delay: -41.011 ms
  Loss rate: 14.60%
-- Flow 2:
  Average throughput: 4.24 Mbit/s
  95th percentile per-packet one-way delay: -52.532 ms
  Loss rate: 16.08%
-- Flow 3:
  Average throughput: 1.60 Mbit/s
  95th percentile per-packet one-way delay: -52.577 ms
  Loss rate: 17.68%
Run 2: Report of PCC-Allegro — Data Link
Run 3: Statistics of PCC-Allegro

Start at: 2018-06-19 09:40:51
End at: 2018-06-19 09:41:21
Local clock offset: -5.501 ms
Remote clock offset: 49.504 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 67.22 Mbit/s
95th percentile per-packet one-way delay: -39.610 ms
Loss rate: 17.19%
-- Flow 1:
Average throughput: 64.86 Mbit/s
95th percentile per-packet one-way delay: -38.769 ms
Loss rate: 17.17%
-- Flow 2:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: -52.855 ms
Loss rate: 17.58%
-- Flow 3:
Average throughput: 4.13 Mbit/s
95th percentile per-packet one-way delay: -52.756 ms
Loss rate: 17.73%
Run 3: Report of PCC-Allegro — Data Link
Run 4: Statistics of PCC-Allegro

Start at: 2018-06-19 09:58:47
End at: 2018-06-19 09:59:17
Local clock offset: -2.84 ms
Remote clock offset: 50.925 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.83 Mbit/s
95th percentile per-packet one-way delay: -40.264 ms
Loss rate: 19.48%
-- Flow 1:
Average throughput: 66.07 Mbit/s
95th percentile per-packet one-way delay: -39.112 ms
Loss rate: 19.57%
-- Flow 2:
Average throughput: 3.94 Mbit/s
95th percentile per-packet one-way delay: -52.597 ms
Loss rate: 17.64%
-- Flow 3:
Average throughput: 3.56 Mbit/s
95th percentile per-packet one-way delay: -52.818 ms
Loss rate: 18.23%
Run 4: Report of PCC-Allegro — Data Link
Run 5: Statistics of PCC-Allegro

Start at: 2018-06-19 10:16:37
End at: 2018-06-19 10:17:07
Local clock offset: -1.216 ms
Remote clock offset: 52.513 ms

# Below is generated by plot.py at 2018-06-19 12:13:58
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.60 Mbit/s
95th percentile per-packet one-way delay: -40.510 ms
Loss rate: 18.47%
-- Flow 1:
Average throughput: 66.68 Mbit/s
95th percentile per-packet one-way delay: -39.617 ms
Loss rate: 18.50%
-- Flow 2:
Average throughput: 1.02 Mbit/s
95th percentile per-packet one-way delay: -52.324 ms
Loss rate: 17.52%
-- Flow 3:
Average throughput: 3.78 Mbit/s
95th percentile per-packet one-way delay: -52.447 ms
Loss rate: 17.84%
Run 5: Report of PCC-Allegro — Data Link
Run 6: Statistics of PCC-Allegro

Start at: 2018-06-19 10:34:30
End at: 2018-06-19 10:35:00
Local clock offset: -0.795 ms
Remote clock offset: 49.473 ms

# Below is generated by plot.py at 2018-06-19 12:14:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 87.47 Mbit/s
95th percentile per-packet one-way delay: -30.149 ms
Loss rate: 2.76%
-- Flow 1:
Average throughput: 73.01 Mbit/s
95th percentile per-packet one-way delay: -31.970 ms
Loss rate: 3.08%
-- Flow 2:
Average throughput: 5.08 Mbit/s
95th percentile per-packet one-way delay: -52.321 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: -28.786 ms
Loss rate: 1.47%
Run 6: Report of PCC-Allegro — Data Link

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

Legend:
- Flow 1 ingress (mean 75.30 Mbit/s)
- Flow 1 egress (mean 73.01 Mbit/s)
- Flow 2 ingress (mean 5.08 Mbit/s)
- Flow 2 egress (mean 5.08 Mbit/s)
- Flow 3 ingress (mean 34.16 Mbit/s)
- Flow 3 egress (mean 33.67 Mbit/s)
Run 7: Statistics of PCC-Allegro

Start at: 2018-06-19 10:52:16
End at: 2018-06-19 10:52:46
Local clock offset: -7.348 ms
Remote clock offset: 45.284 ms

# Below is generated by plot.py at 2018-06-19 12:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: -25.787 ms
Loss rate: 6.27%
-- Flow 1:
Average throughput: 56.94 Mbit/s
95th percentile per-packet one-way delay: -28.454 ms
Loss rate: 9.00%
-- Flow 2:
Average throughput: 32.97 Mbit/s
95th percentile per-packet one-way delay: -28.172 ms
Loss rate: 0.33%
-- Flow 3:
Average throughput: 23.93 Mbit/s
95th percentile per-packet one-way delay: -20.361 ms
Loss rate: 1.19%
Run 7: Report of PCC-Allegro — Data Link

![Graph of Throughput vs Time](image1)

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 62.54 Mbit/s)
Flow 1 egress (mean 56.94 Mbit/s)
Flow 2 ingress (mean 33.07 Mbit/s)
Flow 2 egress (mean 32.97 Mbit/s)
Flow 3 ingress (mean 24.18 Mbit/s)
Flow 3 egress (mean 23.93 Mbit/s)

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

Per-packet one-way delay (ms)

Time (s)

Flow 1 (95th percentile - 28.45 ms)
Flow 2 (95th percentile - 28.17 ms)
Flow 3 (95th percentile - 20.36 ms)
Run 8: Statistics of PCC-Allegro

Start at: 2018-06-19 11:10:09
End at: 2018-06-19 11:10:39
Local clock offset: -4.963 ms
Remote clock offset: 45.414 ms

# Below is generated by plot.py at 2018-06-19 12:14:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 78.76 Mbit/s
  95th percentile per-packet one-way delay: -23.659 ms
  Loss rate: 1.10%
-- Flow 1:
  Average throughput: 64.57 Mbit/s
  95th percentile per-packet one-way delay: -29.147 ms
  Loss rate: 1.08%
-- Flow 2:
  Average throughput: 16.05 Mbit/s
  95th percentile per-packet one-way delay: -22.126 ms
  Loss rate: 1.14%
-- Flow 3:
  Average throughput: 10.72 Mbit/s
  95th percentile per-packet one-way delay: -14.730 ms
  Loss rate: 1.41%
Run 8: Report of PCC-Allegro — Data Link

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

- Flow 1 ingress (mean 65.24 Mbps)
- Flow 1 egress (mean 64.57 Mbps)
- Flow 2 ingress (mean 16.22 Mbps)
- Flow 2 egress (mean 16.05 Mbps)
- Flow 3 ingress (mean 10.87 Mbps)
- Flow 3 egress (mean 10.72 Mbps)

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

- Flow 1 (95th percentile: 29.15 ms)
- Flow 2 (95th percentile: 22.13 ms)
- Flow 3 (95th percentile: 14.73 ms)
Run 9: Statistics of PCC-Allegro

End at: 2018-06-19 11:28:34
Local clock offset: -1.579 ms
Remote clock offset: 45.701 ms

# Below is generated by plot.py at 2018-06-19 12:14:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 73.40 Mbit/s
95th percentile per-packet one-way delay: -48.710 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 67.88 Mbit/s
95th percentile per-packet one-way delay: -47.988 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 5.37 Mbit/s
95th percentile per-packet one-way delay: -52.393 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 5.93 Mbit/s
95th percentile per-packet one-way delay: -52.351 ms
Loss rate: 0.04%
Run 9: Report of PCC-Allegro — Data Link
Run 10: Statistics of PCC-Allegro

Start at: 2018-06-19 11:46:01
End at: 2018-06-19 11:46:31
Local clock offset: -1.799 ms
Remote clock offset: 50.694 ms

# Below is generated by plot.py at 2018-06-19 12:14:51
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.11 Mbit/s
  95th percentile per-packet one-way delay: -22.777 ms
  Loss rate: 3.19%
-- Flow 1:
  Average throughput: 53.79 Mbit/s
  95th percentile per-packet one-way delay: -23.356 ms
  Loss rate: 4.24%
-- Flow 2:
  Average throughput: 32.62 Mbit/s
  95th percentile per-packet one-way delay: -21.930 ms
  Loss rate: 1.40%
-- Flow 3:
  Average throughput: 20.15 Mbit/s
  95th percentile per-packet one-way delay: -47.505 ms
  Loss rate: 0.18%
Run 10: Report of PCC-Allegro — Data Link
Run 1: Statistics of PCC-Expr

Start at: 2018-06-19 09:10:41
End at: 2018-06-19 09:11:11
Local clock offset: -5.527 ms
Remote clock offset: 52.753 ms

# Below is generated by plot.py at 2018-06-19 12:15:10
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.77 Mbit/s
95th percentile per-packet one-way delay: -42.796 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 34.31 Mbit/s
95th percentile per-packet one-way delay: -43.151 ms
Loss rate: 0.09%
-- Flow 2:
Average throughput: 4.91 Mbit/s
95th percentile per-packet one-way delay: -52.395 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 64.22 Mbit/s
95th percentile per-packet one-way delay: -42.694 ms
Loss rate: 0.08%
Run 1: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 34.34 Mbit/s)
- Flow 1 egress (mean 34.31 Mbit/s)
- Flow 2 ingress (mean 4.91 Mbit/s)
- Flow 2 egress (mean 4.91 Mbit/s)
- Flow 3 ingress (mean 64.25 Mbit/s)
- Flow 3 egress (mean 64.22 Mbit/s)

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

- Flow 1 (95th percentile -43.15 ms)
- Flow 2 (95th percentile -52.40 ms)
- Flow 3 (95th percentile -42.69 ms)
Run 2: Statistics of PCC-Expr

Start at: 2018-06-19 09:28:36
End at: 2018-06-19 09:29:06
Local clock offset: -8.555 ms
Remote clock offset: 50.696 ms

# Below is generated by plot.py at 2018-06-19 12:15:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.55 Mbit/s
95th percentile per-packet one-way delay: -34.164 ms
Loss rate: 0.25%
-- Flow 1:
Average throughput: 7.52 Mbit/s
95th percentile per-packet one-way delay: -52.718 ms
Loss rate: 0.42%
-- Flow 2:
Average throughput: 64.69 Mbit/s
95th percentile per-packet one-way delay: -34.148 ms
Loss rate: 0.21%
-- Flow 3:
Average throughput: 33.35 Mbit/s
95th percentile per-packet one-way delay: -34.099 ms
Loss rate: 0.30%
Run 2: Report of PCC-Expr — Data Link
Run 3: Statistics of PCC-Expr

Start at: 2018-06-19 09:46:29
End at: 2018-06-19 09:46:59
Local clock offset: -4.098 ms
Remote clock offset: 49.58 ms

# Below is generated by plot.py at 2018-06-19 12:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 80.29 Mbit/s
95th percentile per-packet one-way delay: -33.330 ms
Loss rate: 0.53%
-- Flow 1:
Average throughput: 68.51 Mbit/s
95th percentile per-packet one-way delay: -33.704 ms
Loss rate: 0.61%
-- Flow 2:
Average throughput: 14.48 Mbit/s
95th percentile per-packet one-way delay: -33.028 ms
Loss rate: 0.05%
-- Flow 3:
Average throughput: 6.54 Mbit/s
95th percentile per-packet one-way delay: -52.582 ms
Loss rate: 0.02%
Run 3: Report of PCC-Expr — Data Link
Run 4: Statistics of PCC-Expr

Start at: 2018-06-19 10:04:24
End at: 2018-06-19 10:04:54
Local clock offset: -2.515 ms
Remote clock offset: 51.813 ms

# Below is generated by plot.py at 2018-06-19 12:15:41
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 51.47 Mbit/s
   95th percentile per-packet one-way delay: -25.982 ms
   Loss rate: 8.31%
-- Flow 1:
   Average throughput: 13.88 Mbit/s
   95th percentile per-packet one-way delay: -31.809 ms
   Loss rate: 7.50%
-- Flow 2:
   Average throughput: 44.21 Mbit/s
   95th percentile per-packet one-way delay: -26.018 ms
   Loss rate: 6.25%
-- Flow 3:
   Average throughput: 24.78 Mbit/s
   95th percentile per-packet one-way delay: -20.241 ms
   Loss rate: 16.20%
Run 4: Report of PCC-Expr — Data Link
Run 5: Statistics of PCC-Expr

Local clock offset: -0.88 ms
Remote clock offset: 52.686 ms

# Below is generated by plot.py at 2018-06-19 12:15:41
# Datalink statistics
-- Total of 3 flows:
Average throughput: 35.26 Mbit/s
95th percentile per-packet one-way delay: -42.969 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 20.32 Mbit/s
95th percentile per-packet one-way delay: -42.923 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 6.30 Mbit/s
95th percentile per-packet one-way delay: -52.300 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 32.57 Mbit/s
95th percentile per-packet one-way delay: -42.930 ms
Loss rate: 0.02%
Run 5: Report of PCC-Expr — Data Link

---

**Graph 1:**

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 20.32 Mbps)
  - Flow 1 egress (mean 20.32 Mbps)
  - Flow 2 ingress (mean 6.30 Mbps)
  - Flow 2 egress (mean 6.30 Mbps)
  - Flow 3 ingress (mean 32.57 Mbps)
  - Flow 3 egress (mean 32.57 Mbps)

**Graph 2:**

- **Per-packet one-way delay (ms):**
  - Flow 1 (95th percentile -42.92 ms)
  - Flow 2 (95th percentile -52.30 ms)
  - Flow 3 (95th percentile -42.93 ms)
Run 6: Statistics of PCC-Expr

Start at: 2018-06-19 10:40:08
End at: 2018-06-19 10:40:38
Local clock offset: -4.254 ms
Remote clock offset: 47.736 ms

# Below is generated by plot.py at 2018-06-19 12:15:41
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 10.74 Mbit/s
  95th percentile per-packet one-way delay: -52.719 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 4.86 Mbit/s
  95th percentile per-packet one-way delay: -52.800 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 3.38 Mbit/s
  95th percentile per-packet one-way delay: -52.597 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 11.01 Mbit/s
  95th percentile per-packet one-way delay: -52.710 ms
  Loss rate: 0.01%
Run 6: Report of PCC-Expr — Data Link

![Graph showing data link performance with throughput and packet loss metrics.]

- **Throughput:**
  - Flow 1 Ingress (mean 4.86 Mbit/s)
  - Flow 1 Egress (mean 4.86 Mbit/s)
  - Flow 2 Ingress (mean 3.38 Mbit/s)
  - Flow 2 Egress (mean 3.38 Mbit/s)
  - Flow 3 Ingress (mean 11.00 Mbit/s)
  - Flow 3 Egress (mean 11.01 Mbit/s)

- **Packet Loss:**
  - Flow 1 (95th percentile -52.80 ms)
  - Flow 2 (95th percentile -52.60 ms)
  - Flow 3 (95th percentile -52.71 ms)
Run 7: Statistics of PCC-Expr

End at: 2018-06-19 10:58:24
Local clock offset: -7.956 ms
Remote clock offset: 44.884 ms

# Below is generated by plot.py at 2018-06-19 12:16:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 81.62 Mbit/s
95th percentile per-packet one-way delay: -30.694 ms
Loss rate: 0.36%
-- Flow 1:
Average throughput: 52.89 Mbit/s
95th percentile per-packet one-way delay: -33.453 ms
Loss rate: 0.31%
-- Flow 2:
Average throughput: 41.73 Mbit/s
95th percentile per-packet one-way delay: -24.137 ms
Loss rate: 0.48%
-- Flow 3:
Average throughput: 2.99 Mbit/s
95th percentile per-packet one-way delay: -52.541 ms
Loss rate: 0.04%
Run 7: Report of PCC-Expr — Data Link

![Graph of Throughput over Time](image1)

![Graph of Packet Delay over Time](image2)
Run 8: Statistics of PCC-Expr

Start at: 2018-06-19 11:15:47
End at: 2018-06-19 11:16:17
Local clock offset: -3.31 ms
Remote clock offset: 46.011 ms

# Below is generated by plot.py at 2018-06-19 12:16:49
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 81.91 Mbit/s
  95th percentile per-packet one-way delay: -34.419 ms
  Loss rate: 0.18%
  -- Flow 1:
  Average throughput: 65.51 Mbit/s
  95th percentile per-packet one-way delay: -34.548 ms
  Loss rate: 0.18%
  -- Flow 2:
  Average throughput: 2.96 Mbit/s
  95th percentile per-packet one-way delay: -52.760 ms
  Loss rate: 0.02%
  -- Flow 3:
  Average throughput: 43.73 Mbit/s
  95th percentile per-packet one-way delay: -34.253 ms
  Loss rate: 0.20%
Run 8: Report of PCC-Expr — Data Link

![Graph of Throughput (Mbps)]

- Flow 1 ingress (mean 65.62 Mbps)
- Flow 1 egress (mean 65.51 Mbps)
- Flow 2 ingress (mean 2.96 Mbps)
- Flow 2 egress (mean 2.96 Mbps)
- Flow 3 ingress (mean 43.81 Mbps)
- Flow 3 egress (mean 43.73 Mbps)

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

- Flow 1 (95th percentile -34.55 ms)
- Flow 2 (95th percentile -52.76 ms)
- Flow 3 (95th percentile -34.25 ms)
Run 9: Statistics of PCC-Expr

Start at: 2018-06-19 11:33:42
End at: 2018-06-19 11:34:12
Local clock offset: -1.255 ms
Remote clock offset: 45.562 ms

# Below is generated by plot.py at 2018-06-19 12:16:49
# Datalink statistics
-- Total of 3 flows:
Average throughput: 76.38 Mbit/s
95th percentile per-packet one-way delay: -42.964 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 68.37 Mbit/s
95th percentile per-packet one-way delay: -42.481 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: -52.648 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 8.06 Mbit/s
95th percentile per-packet one-way delay: -52.649 ms
Loss rate: 0.00%
Run 9: Report of PCC-Expr — Data Link

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

- Flow 1 ingrep (mean 68.38 Mbit/s)
- Flow 1 egress (mean 68.37 Mbit/s)
- Flow 2 ingrep (mean 8.06 Mbit/s)
- Flow 2 egress (mean 8.06 Mbit/s)
- Flow 3 ingrep (mean 8.06 Mbit/s)
- Flow 3 egress (mean 8.06 Mbit/s)
Run 10: Statistics of PCC-Expr

End at: 2018-06-19 11:52:09
Local clock offset: -1.824 ms
Remote clock offset: 52.193 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 82.27 Mbit/s
  95th percentile per-packet one-way delay: -33.621 ms
  Loss rate: 0.24%
-- Flow 1:
  Average throughput: 55.35 Mbit/s
  95th percentile per-packet one-way delay: -33.559 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 36.87 Mbit/s
  95th percentile per-packet one-way delay: -33.515 ms
  Loss rate: 0.09%
-- Flow 3:
  Average throughput: 7.28 Mbit/s
  95th percentile per-packet one-way delay: -52.469 ms
  Loss rate: 0.02%
Run 10: Report of PCC-Expr — Data Link

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

- Flow 1 ingress (mean 55.52 Mbit/s)
- Flow 1 egress (mean 55.35 Mbit/s)
- Flow 2 ingress (mean 36.89 Mbit/s)
- Flow 2 egress (mean 36.87 Mbit/s)
- Flow 3 ingress (mean 7.27 Mbit/s)
- Flow 3 egress (mean 7.28 Mbit/s)

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

- Flow 1 (95th percentile: 33.56 ms)
- Flow 2 (95th percentile: 33.52 ms)
- Flow 3 (95th percentile: 52.47 ms)
Run 1: Statistics of QUIC Cubic

Start at: 2018-06-19 09:06:09
End at: 2018-06-19 09:06:39
Local clock offset: -3.799 ms
Remote clock offset: 52.288 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 51.26 Mbit/s
  95th percentile per-packet one-way delay: -45.060 ms
  Loss rate: 7.53%
  -- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: -52.869 ms
  Loss rate: 0.00%
  -- Flow 2:
  Average throughput: 57.94 Mbit/s
  95th percentile per-packet one-way delay: -44.962 ms
  Loss rate: 7.51%
  -- Flow 3:
  Average throughput: 38.45 Mbit/s
  95th percentile per-packet one-way delay: -45.919 ms
  Loss rate: 7.60%
Run 1: Report of QUIC Cubic — Data Link
Run 2: Statistics of QUIC Cubic

Start at: 2018-06-19 09:24:05
End at: 2018-06-19 09:24:35
Local clock offset: -8.005 ms
Remote clock offset: 51.537 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 49.21 Mbit/s
95th percentile per-packet one-way delay: -45.839 ms
Loss rate: 7.44%
-- Flow 1:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: -53.465 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 55.70 Mbit/s
95th percentile per-packet one-way delay: -45.820 ms
Loss rate: 7.28%
-- Flow 3:
Average throughput: 36.73 Mbit/s
95th percentile per-packet one-way delay: -45.988 ms
Loss rate: 7.94%
Run 2: Report of QUIC Cubic — Data Link

Diagram 1: Throughput (Mbps)

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

Legend:
- Flow 1 ingress (mean 1.48 Mbps)
- Flow 1 egress (mean 1.56 Mbps)
- Flow 2 ingress (mean 60.07 Mbps)
- Flow 2 egress (mean 55.70 Mbps)
- Flow 3 ingress (mean 39.89 Mbps)
- Flow 3 egress (mean 36.73 Mbps)
Run 3: Statistics of QUIC Cubic

Start at: 2018-06-19 09:41:58
End at: 2018-06-19 09:42:28
Local clock offset: -5.222 ms
Remote clock offset: 49.773 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.68 Mbit/s
95th percentile per-packet one-way delay: -40.989 ms
Loss rate: 8.76%
-- Flow 1:
Average throughput: 42.26 Mbit/s
95th percentile per-packet one-way delay: -41.685 ms
Loss rate: 7.31%
-- Flow 2:
Average throughput: 29.45 Mbit/s
95th percentile per-packet one-way delay: -40.969 ms
Loss rate: 10.71%
-- Flow 3:
Average throughput: 23.66 Mbit/s
95th percentile per-packet one-way delay: -38.503 ms
Loss rate: 11.43%
Run 3: Report of QUIC Cubic — Data Link

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

- **Flow 1 ingress (mean 45.60 Mbit/s)**
- **Flow 1 egress (mean 42.26 Mbit/s)**
- **Flow 2 ingress (mean 32.97 Mbit/s)**
- **Flow 2 egress (mean 29.45 Mbit/s)**
- **Flow 3 ingress (mean 26.71 Mbit/s)**
- **Flow 3 egress (mean 23.66 Mbit/s)**

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

- **Flow 1 (95th percentile -41.69 ms)**
- **Flow 2 (95th percentile -40.97 ms)**
- **Flow 3 (95th percentile -38.50 ms)**
Run 4: Statistics of QUIC Cubic

Start at: 2018-06-19 09:59:53
End at: 2018-06-19 10:00:23
Local clock offset: -2.802 ms
Remote clock offset: 50.869 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.21 Mbit/s
  95th percentile per-packet one-way delay: -36.655 ms
  Loss rate: 0.21%
-- Flow 1:
  Average throughput: 1.91 Mbit/s
  95th percentile per-packet one-way delay: -52.272 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 64.13 Mbit/s
  95th percentile per-packet one-way delay: -36.367 ms
  Loss rate: 0.15%
-- Flow 3:
  Average throughput: 43.96 Mbit/s
  95th percentile per-packet one-way delay: -37.214 ms
  Loss rate: 0.37%
Run 4: Report of QUIC Cubic — Data Link
Run 5: Statistics of QUIC Cubic

Start at: 2018-06-19 10:17:43
End at: 2018-06-19 10:18:13
Local clock offset: -1.129 ms
Remote clock offset: 52.563 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 47.28 Mbit/s
95th percentile per-packet one-way delay: -42.877 ms
Loss rate: 8.64%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: -53.290 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 53.91 Mbit/s
95th percentile per-packet one-way delay: -42.389 ms
Loss rate: 7.95%
-- Flow 3:
Average throughput: 34.99 Mbit/s
95th percentile per-packet one-way delay: -44.543 ms
Loss rate: 10.74%
Run 5: Report of QUIC Cubic — Data Link

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

Time (s)

Throughput (Mbps)

- Flow 1 ingress (mean 1.51 Mbps)
- Flow 2 ingress (mean 58.35 Mbps)
- Flow 3 ingress (mean 38.52 Mbps)
- Flow 1 egress (mean 1.58 Mbps)
- Flow 2 egress (mean 53.91 Mbps)
- Flow 3 egress (mean 34.99 Mbps)

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

Time (s)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile -53.29 ms)
- Flow 2 (95th percentile -42.39 ms)
- Flow 3 (95th percentile -44.54 ms)
Run 6: Statistics of QUIC Cubic

Start at: 2018-06-19 10:35:37
End at: 2018-06-19 10:36:07
Local clock offset: -1.72 ms
Remote clock offset: 48.709 ms

# Below is generated by plot.py at 2018-06-19 12:17:12
# Datalink statistics
-- Total of 3 flows:
Average throughput: 57.35 Mbit/s
95th percentile per-packet one-way delay: -39.232 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: -53.011 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 63.53 Mbit/s
95th percentile per-packet one-way delay: -38.662 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 45.52 Mbit/s
95th percentile per-packet one-way delay: -40.444 ms
Loss rate: 0.40%
Run 7: Statistics of QUIC Cubic

End at: 2018-06-19 10:53:52
Local clock offset: -7.421 ms
Remote clock offset: 45.43 ms

# Below is generated by plot.py at 2018-06-19 12:17:18
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 57.65 Mbit/s
  95th percentile per-packet one-way delay: -37.948 ms
  Loss rate: 0.20%
-- Flow 1:
  Average throughput: 1.54 Mbit/s
  95th percentile per-packet one-way delay: -53.403 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 64.89 Mbit/s
  95th percentile per-packet one-way delay: -37.852 ms
  Loss rate: 0.16%
-- Flow 3:
  Average throughput: 43.74 Mbit/s
  95th percentile per-packet one-way delay: -38.216 ms
  Loss rate: 0.35%
Run 7: Report of QUIC Cubic — Data Link

![Graph](image1.png)

![Graph](image2.png)
Run 8: Statistics of QUIC Cubic

Start at: 2018-06-19 11:11:15
End at: 2018-06-19 11:11:45
Local clock offset: -4.61 ms
Remote clock offset: 45.498 ms

# Below is generated by plot.py at 2018-06-19 12:17:25
# Datalink statistics

-- Total of 3 flows:
Average throughput: 57.68 Mbit/s
95th percentile per-packet one-way delay: -39.968 ms
Loss rate: 0.20%

-- Flow 1:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: -52.953 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 64.23 Mbit/s
95th percentile per-packet one-way delay: -40.943 ms
Loss rate: 0.13%

-- Flow 3:
Average throughput: 45.11 Mbit/s
95th percentile per-packet one-way delay: -39.544 ms
Loss rate: 0.39%
Run 8: Report of QUIC Cubic — Data Link

Throughput (Mbps)

- Flow 1 ingress (mean 2.13 Mbps)
- Flow 1 egress (mean 2.86 Mbps)
- Flow 2 ingress (mean 64.29 Mbps)
- Flow 2 egress (mean 64.23 Mbps)
- Flow 3 ingress (mean 45.28 Mbps)
- Flow 3 egress (mean 45.11 Mbps)

Per-packet one-way delay (ms)

- Flow 1 (95th percentile: 52.95 ms)
- Flow 2 (95th percentile: 40.94 ms)
- Flow 3 (95th percentile: 39.54 ms)
Run 9: Statistics of QUIC Cubic

Start at: 2018-06-19 11:29:10
End at: 2018-06-19 11:29:40
Local clock offset: -1.497 ms
Remote clock offset: 45.761 ms

# Below is generated by plot.py at 2018-06-19 12:17:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.17 Mbit/s
95th percentile per-packet one-way delay: -44.087 ms
Loss rate: 0.21%
-- Flow 1:
Average throughput: 1.62 Mbit/s
95th percentile per-packet one-way delay: -53.797 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 69.81 Mbit/s
95th percentile per-packet one-way delay: -44.051 ms
Loss rate: 0.16%
-- Flow 3:
Average throughput: 47.53 Mbit/s
95th percentile per-packet one-way delay: -44.325 ms
Loss rate: 0.34%
Run 9: Report of QUIC Cubic — Data Link

![Graph showing throughput and end-to-end delay over time for different flows.](image)
Run 10: Statistics of QUIC Cubic

Start at: 2018-06-19 11:47:07
End at: 2018-06-19 11:47:37
Local clock offset: -1.821 ms
Remote clock offset: 51.061 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.62 Mbit/s
95th percentile per-packet one-way delay: -43.611 ms
Loss rate: 0.22%

-- Flow 1:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: -53.360 ms
Loss rate: 0.00%

-- Flow 2:
Average throughput: 70.40 Mbit/s
95th percentile per-packet one-way delay: -43.559 ms
Loss rate: 0.17%

-- Flow 3:
Average throughput: 47.70 Mbit/s
95th percentile per-packet one-way delay: -43.845 ms
Loss rate: 0.36%
Run 10: Report of QUIC Cubic — Data Link

![Graph of Throughput vs Time](image1)
![Graph of Per-packet one-way delay vs Time](image2)
Run 1: Statistics of SCReAM

Start at: 2018-06-19 09:02:49
End at: 2018-06-19 09:03:19
Local clock offset: -2.659 ms
Remote clock offset: 52.292 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.38 Mbit/s
95th percentile per-packet one-way delay: -53.387 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.384 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.13 Mbit/s
95th percentile per-packet one-way delay: -53.552 ms
Loss rate: 0.58%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.517 ms
Loss rate: 0.00%
Run 1: Report of SCReAM — Data Link

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

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

Flow 1 ingress (mean 0.22 Mbit/s)  
Flow 1 egress (mean 0.22 Mbit/s)  
Flow 2 ingress (mean 0.13 Mbit/s)  
Flow 2 egress (mean 0.13 Mbit/s)  
Flow 3 ingress (mean 0.22 Mbit/s)  
Flow 3 egress (mean 0.22 Mbit/s)  

Flow 1 (95th percentile -53.38 ms)  
Flow 2 (95th percentile -53.55 ms)  
Flow 3 (95th percentile -53.52 ms)  

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Run 2: Statistics of SCReAM

Start at: 2018-06-19 09:20:47
End at: 2018-06-19 09:21:17
Local clock offset: -7.651 ms
Remote clock offset: 52.263 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.43 Mbit/s
95th percentile per-packet one-way delay: -53.492 ms
Loss rate: 0.06%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.645 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.521 ms
Loss rate: 0.19%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.472 ms
Loss rate: 0.00%
Run 2: Report of SCReAM — Data Link
Run 3: Statistics of SCReAM

Start at: 2018-06-19 09:38:41
End at: 2018-06-19 09:39:11
Local clock offset: -6.247 ms
Remote clock offset: 49.658 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: -52.606 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.557 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.669 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.651 ms
  Loss rate: 0.00%
Run 3: Report of SCReAM — Data Link
Run 4: Statistics of SCReAM

Start at: 2018-06-19 09:56:36
End at: 2018-06-19 09:57:06
Local clock offset: -2.985 ms
Remote clock offset: 50.157 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -52.343 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.360 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.347 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.193 ms
  Loss rate: 0.00%
Run 4: Report of SCReAM — Data Link
Run 5: Statistics of SCReAM

Start at: 2018-06-19 10:14:28
End at: 2018-06-19 10:14:58
Local clock offset: -1.355 ms
Remote clock offset: 52.304 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -52.228 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.140 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.304 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.159 ms
  Loss rate: 0.35%
Run 5: Report of SCReAM — Data Link
Run 6: Statistics of SCReAM

Start at: 2018-06-19 10:32:18
End at: 2018-06-19 10:32:48
Local clock offset: -0.401 ms
Remote clock offset: 50.141 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 0.44 Mbit/s
   95th percentile per-packet one-way delay: -52.608 ms
   Loss rate: 0.00%
-- Flow 1:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: -52.677 ms
   Loss rate: 0.00%
-- Flow 2:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: -52.555 ms
   Loss rate: 0.00%
-- Flow 3:
   Average throughput: 0.22 Mbit/s
   95th percentile per-packet one-way delay: -52.574 ms
   Loss rate: 0.00%
Run 6: Report of SCReAM — Data Link

Throughput (Mbps)

Time (s)

Flow 1 ingress (mean 0.22 Mbps)  Flow 2 ingress (mean 0.22 Mbps)  Flow 3 ingress (mean 0.22 Mbps)

Flow 1 egress (mean 0.22 Mbps)  Flow 2 egress (mean 0.22 Mbps)  Flow 3 egress (mean 0.22 Mbps)

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

Time (s)

Flow 1 (95th percentile -52.68 ms)  Flow 2 (95th percentile -52.55 ms)  Flow 3 (95th percentile -52.57 ms)
Run 7: Statistics of SCReAM

Start at: 2018-06-19 10:50:04
End at: 2018-06-19 10:50:34
Local clock offset: -6.96 ms
Remote clock offset: 45.929 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -53.042 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.791 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -53.042 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -53.808 ms
  Loss rate: 0.35%
Run 8: Statistics of SCReAM

Start at: 2018-06-19 11:07:58
End at: 2018-06-19 11:08:28
Local clock offset: -5.899 ms
Remote clock offset: 45.501 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -52.888 ms
  Loss rate: 0.00%

-- Flow 1:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.755 ms
  Loss rate: 0.00%

-- Flow 2:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.964 ms
  Loss rate: 0.00%

-- Flow 3:
  Average throughput: 0.22 Mbit/s
  95th percentile per-packet one-way delay: -52.816 ms
  Loss rate: 0.00%
Run 8: Report of SCReAM — Data Link
Run 9: Statistics of SCReAM

Start at: 2018-06-19 11:25:50
End at: 2018-06-19 11:26:20
Local clock offset: -1.828 ms
Remote clock offset: 45.811 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -53.715 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.888 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.768 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.695 ms
Loss rate: 0.00%
Run 9: Report of SCReAM — Data Link

![Data Link Graph]

![Packet Loss Graph]

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

- Flow 1 (95th percentile -53.89 ms)
- Flow 2 (95th percentile -53.77 ms)
- Flow 3 (95th percentile -53.70 ms)
Run 10: Statistics of SCReAM

End at: 2018-06-19 11:44:18
Local clock offset: -1.764 ms
Remote clock offset: 50.171 ms

# Below is generated by plot.py at 2018-06-19 12:17:36
# Datalink statistics
-- Total of 3 flows:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -53.383 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.374 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.601 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.22 Mbit/s
95th percentile per-packet one-way delay: -53.584 ms
Loss rate: 0.00%
Run 10: Report of SCReAM — Data Link

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

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

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

- Flow 1 (95th percentile -53.37 ms)
- Flow 2 (95th percentile -53.60 ms)
- Flow 3 (95th percentile -53.58 ms)
Run 1: Statistics of Sprout

Start at: 2018-06-19 09:07:15
End at: 2018-06-19 09:07:45
Local clock offset: -4.292 ms
Remote clock offset: 52.546 ms

# Below is generated by plot.py at 2018-06-19 12:17:42
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 64.57 Mbit/s
  95th percentile per-packet one-way delay: -38.048 ms
  Loss rate: 5.92%
-- Flow 1:
  Average throughput: 34.99 Mbit/s
  95th percentile per-packet one-way delay: -40.936 ms
  Loss rate: 3.70%
-- Flow 2:
  Average throughput: 31.81 Mbit/s
  95th percentile per-packet one-way delay: -38.111 ms
  Loss rate: 5.93%
-- Flow 3:
  Average throughput: 25.57 Mbit/s
  95th percentile per-packet one-way delay: -32.147 ms
  Loss rate: 14.11%
Run 1: Report of Sprout — Data Link
Run 2: Statistics of Sprout

Start at: 2018-06-19 09:25:11
End at: 2018-06-19 09:25:41
Local clock offset: -8.15 ms
Remote clock offset: 50.952 ms

# Below is generated by plot.py at 2018-06-19 12:17:45
# Datalink statistics
-- Total of 3 flows:
Average throughput: 68.09 Mbit/s
95th percentile per-packet one-way delay: -34.370 ms
Loss rate: 0.34%
-- Flow 1:
Average throughput: 35.39 Mbit/s
95th percentile per-packet one-way delay: -36.637 ms
Loss rate: 0.50%
-- Flow 2:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: -34.846 ms
Loss rate: 0.10%
-- Flow 3:
Average throughput: 30.17 Mbit/s
95th percentile per-packet one-way delay: -28.070 ms
Loss rate: 0.34%
Run 2: Report of Sprout — Data Link

![Graph](image1)

![Graph](image2)
Run 3: Statistics of Sprout

Start at: 2018-06-19 09:43:05
End at: 2018-06-19 09:43:35
Local clock offset: -4.84 ms
Remote clock offset: 49.418 ms

# Below is generated by plot.py at 2018-06-19 12:17:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.79 Mbit/s
95th percentile per-packet one-way delay: -29.341 ms
Loss rate: 6.98%
-- Flow 1:
Average throughput: 34.29 Mbit/s
95th percentile per-packet one-way delay: -32.124 ms
Loss rate: 4.77%
-- Flow 2:
Average throughput: 29.53 Mbit/s
95th percentile per-packet one-way delay: -28.597 ms
Loss rate: 7.39%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: -21.112 ms
Loss rate: 14.68%
Run 3: Report of Sprout — Data Link

![Graph: Throughput (Mbps)]

![Graph: Packet end-to-end delay (ms)]
Run 4: Statistics of Sprout

Start at: 2018-06-19 10:00:59
End at: 2018-06-19 10:01:29
Local clock offset: -2.654 ms
Remote clock offset: 51.308 ms

# Below is generated by plot.py at 2018-06-19 12:18:05
# Datalink statistics
-- Total of 3 flows:
Average throughput: 66.91 Mbit/s
95th percentile per-packet one-way delay: -28.709 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 35.05 Mbit/s
95th percentile per-packet one-way delay: -31.088 ms
Loss rate: 0.08%
-- Flow 2:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: -27.644 ms
Loss rate: 0.15%
-- Flow 3:
Average throughput: 29.30 Mbit/s
95th percentile per-packet one-way delay: -24.103 ms
Loss rate: 0.26%
Run 4: Report of Sprout — Data Link

![Graph showing throughput over time for different flows with annotations for mean throughput rates.]

![Graph showing per-packet one-way delay over time for different flows with annotations for 95th percentile delays.]
Run 5: Statistics of Sprout

Start at: 2018-06-19 10:18:49
End at: 2018-06-19 10:19:19
Local clock offset: -1.083 ms
Remote clock offset: 52.543 ms

# Below is generated by plot.py at 2018-06-19 12:18:07
# Datalink statistics
-- Total of 3 flows:
   Average throughput: 64.51 Mbit/s
   95th percentile per-packet one-way delay: -30.068 ms
   Loss rate: 2.59%
-- Flow 1:
   Average throughput: 34.23 Mbit/s
   95th percentile per-packet one-way delay: -32.896 ms
   Loss rate: 2.19%
-- Flow 2:
   Average throughput: 31.29 Mbit/s
   95th percentile per-packet one-way delay: -28.803 ms
   Loss rate: 2.93%
-- Flow 3:
   Average throughput: 28.75 Mbit/s
   95th percentile per-packet one-way delay: -24.692 ms
   Loss rate: 3.33%
Run 5: Report of Sprout — Data Link
Run 6: Statistics of Sprout

Start at: 2018-06-19 10:36:43
End at: 2018-06-19 10:37:13
Local clock offset: -2.388 ms
Remote clock offset: 48.396 ms

# Below is generated by plot.py at 2018-06-19 12:18:19
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.40 Mbit/s
95th percentile per-packet one-way delay: -31.699 ms
Loss rate: 0.07%
-- Flow 1:
Average throughput: 37.69 Mbit/s
95th percentile per-packet one-way delay: -33.623 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 34.09 Mbit/s
95th percentile per-packet one-way delay: -30.960 ms
Loss rate: 0.09%
-- Flow 3:
Average throughput: 30.40 Mbit/s
95th percentile per-packet one-way delay: -28.454 ms
Loss rate: 0.06%
Run 6: Report of Sprout — Data Link

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

- Flow 1 ingress (mean 37.71 Mbit/s)
- Flow 1 egress (mean 37.69 Mbit/s)
- Flow 2 ingress (mean 34.13 Mbit/s)
- Flow 2 egress (mean 34.09 Mbit/s)
- Flow 3 ingress (mean 30.40 Mbit/s)
- Flow 3 egress (mean 30.40 Mbit/s)

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

- Flow 1 (95th percentile -33.62 ms)
- Flow 2 (95th percentile -30.96 ms)
- Flow 3 (95th percentile -28.45 ms)
Run 7: Statistics of Sprout

Start at: 2018-06-19 10:54:29
End at: 2018-06-19 10:54:59
Local clock offset: -7.548 ms
Remote clock offset: 45.339 ms

# Below is generated by plot.py at 2018-06-19 12:18:19
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 66.29 Mbit/s
  95th percentile per-packet one-way delay: -30.132 ms
  Loss rate: 0.11%
-- Flow 1:
  Average throughput: 34.98 Mbit/s
  95th percentile per-packet one-way delay: -32.806 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 32.78 Mbit/s
  95th percentile per-packet one-way delay: -28.924 ms
  Loss rate: 0.11%
-- Flow 3:
  Average throughput: 28.80 Mbit/s
  95th percentile per-packet one-way delay: -24.194 ms
  Loss rate: 0.26%
Run 7: Report of Sprout — Data Link

![Graph showing throughput over time](image1)

![Graph showing per-packet end-to-end delay over time](image2)
Run 8: Statistics of Sprout

Start at: 2018-06-19 11:12:21
End at: 2018-06-19 11:12:51
Local clock offset: -4.171 ms
Remote clock offset: 45.824 ms

# Below is generated by plot.py at 2018-06-19 12:18:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.25 Mbit/s
95th percentile per-packet one-way delay: -31.828 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 37.57 Mbit/s
95th percentile per-packet one-way delay: -34.119 ms
Loss rate: 0.05%
-- Flow 2:
Average throughput: 34.97 Mbit/s
95th percentile per-packet one-way delay: -30.791 ms
Loss rate: 0.11%
-- Flow 3:
Average throughput: 28.53 Mbit/s
95th percentile per-packet one-way delay: -26.596 ms
Loss rate: 0.34%
Run 8: Report of Sprout — Data Link
Run 9: Statistics of Sprout

Start at: 2018-06-19 11:30:16
End at: 2018-06-19 11:30:46
Local clock offset: -1.483 ms
Remote clock offset: 45.68 ms

# Below is generated by plot.py at 2018-06-19 12:18:35
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 70.45 Mbit/s
  95th percentile per-packet one-way delay: -39.519 ms
  Loss rate: 0.08%
-- Flow 1:
  Average throughput: 36.36 Mbit/s
  95th percentile per-packet one-way delay: -42.363 ms
  Loss rate: 0.07%
-- Flow 2:
  Average throughput: 35.82 Mbit/s
  95th percentile per-packet one-way delay: -39.246 ms
  Loss rate: 0.02%
-- Flow 3:
  Average throughput: 31.11 Mbit/s
  95th percentile per-packet one-way delay: -36.484 ms
  Loss rate: 0.28%
Run 9: Report of Sprout — Data Link
Run 10: Statistics of Sprout

Local clock offset: -1.875 ms
Remote clock offset: 51.472 ms

# Below is generated by plot.py at 2018-06-19 12:18:39
# Datalink statistics
-- Total of 3 flows:
Average throughput: 70.73 Mbit/s
95th percentile per-packet one-way delay: -38.960 ms
Loss rate: 0.08%
-- Flow 1:
Average throughput: 36.81 Mbit/s
95th percentile per-packet one-way delay: -41.102 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 35.45 Mbit/s
95th percentile per-packet one-way delay: -38.505 ms
Loss rate: 0.03%
-- Flow 3:
Average throughput: 31.30 Mbit/s
95th percentile per-packet one-way delay: -36.501 ms
Loss rate: 0.29%
Run 10: Report of Sprout — Data Link

Diagram 1: Throughput (Mbit/s) over Time (s)

Diagram 2: Per packet one-way delay (ms) over Time (s)

Legend:
- Flow 1 Ingress (mean 36.84 Mbit/s)
- Flow 1 Egress (mean 36.81 Mbit/s)
- Flow 2 Ingress (mean 35.45 Mbit/s)
- Flow 2 Egress (mean 35.45 Mbit/s)
- Flow 3 Ingress (mean 31.37 Mbit/s)
- Flow 3 Egress (mean 31.30 Mbit/s)
Run 1: Statistics of TaoVA-100x

Start at: 2018-06-19 09:03:53
End at: 2018-06-19 09:04:23
Local clock offset: -2.732 ms
Remote clock offset: 52.206 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.42 Mbit/s
  95th percentile per-packet one-way delay: -24.335 ms
  Loss rate: 0.64%
-- Flow 1:
  Average throughput: 56.36 Mbit/s
  95th percentile per-packet one-way delay: -24.341 ms
  Loss rate: 0.32%
-- Flow 2:
  Average throughput: 39.72 Mbit/s
  95th percentile per-packet one-way delay: -24.517 ms
  Loss rate: 0.89%
-- Flow 3:
  Average throughput: 31.90 Mbit/s
  95th percentile per-packet one-way delay: -24.190 ms
  Loss rate: 1.68%
Run 1: Report of TaoVA-100x — Data Link
Run 2: Statistics of TaoVA-100x

Start at: 2018-06-19 09:21:51
End at: 2018-06-19 09:22:21
Local clock offset: -7.744 ms
Remote clock offset: 52.106 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 58.07 Mbit/s
95th percentile per-packet one-way delay: -51.130 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 39.05 Mbit/s
95th percentile per-packet one-way delay: -51.255 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 13.41 Mbit/s
95th percentile per-packet one-way delay: -49.220 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 30.36 Mbit/s
95th percentile per-packet one-way delay: -51.634 ms
Loss rate: 0.01%
Run 2: Report of TaoVA-100x — Data Link
Run 3: Statistics of TaoVA-100x

Start at: 2018-06-19 09:39:45
End at: 2018-06-19 09:40:15
Local clock offset: -5.936 ms
Remote clock offset: 49.855 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 36.35 Mbit/s
95th percentile per-packet one-way delay: -51.376 ms
Loss rate: 1.28%
-- Flow 1:
Average throughput: 9.32 Mbit/s
95th percentile per-packet one-way delay: -53.019 ms
Loss rate: 2.32%
-- Flow 2:
Average throughput: 33.09 Mbit/s
95th percentile per-packet one-way delay: -51.237 ms
Loss rate: 1.01%
-- Flow 3:
Average throughput: 15.06 Mbit/s
95th percentile per-packet one-way delay: -53.117 ms
Loss rate: 0.51%
Run 3: Report of TaoVA-100x — Data Link

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

- **Flow 1**: Ingress (mean 9.54 Mbit/s), Egress (mean 9.32 Mbit/s)
- **Flow 2**: Ingress (mean 33.42 Mbit/s), Egress (mean 33.09 Mbit/s)
- **Flow 3**: Ingress (mean 15.13 Mbit/s), Egress (mean 15.06 Mbit/s)

- **Per-packet end-to-end delay**:
  - Flow 1 (95th percentile -53.02 ms)
  - Flow 2 (95th percentile -51.24 ms)
  - Flow 3 (95th percentile -53.12 ms)
Run 4: Statistics of TaoVA-100x

Start at: 2018-06-19 09:57:40
End at: 2018-06-19 09:58:10
Local clock offset: -2.873 ms
Remote clock offset: 50.436 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.01 Mbit/s
95th percentile per-packet one-way delay: -50.194 ms
Loss rate: 0.55%
-- Flow 1:
Average throughput: 21.74 Mbit/s
95th percentile per-packet one-way delay: -48.718 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 6.86 Mbit/s
95th percentile per-packet one-way delay: -52.354 ms
Loss rate: 0.22%
-- Flow 3:
Average throughput: 41.26 Mbit/s
95th percentile per-packet one-way delay: -50.023 ms
Loss rate: 1.43%
Run 4: Report of TaoVA-100x — Data Link
Run 5: Statistics of TaoVA-100x

Start at: 2018-06-19 10:15:32
End at: 2018-06-19 10:16:02
Local clock offset: -1.341 ms
Remote clock offset: 52.745 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 19.94 Mbit/s
95th percentile per-packet one-way delay: -52.357 ms
Loss rate: 1.37%
-- Flow 1:
Average throughput: 12.20 Mbit/s
95th percentile per-packet one-way delay: -51.855 ms
Loss rate: 1.84%
-- Flow 2:
Average throughput: 5.97 Mbit/s
95th percentile per-packet one-way delay: -52.754 ms
Loss rate: 0.81%
-- Flow 3:
Average throughput: 11.33 Mbit/s
95th percentile per-packet one-way delay: -52.516 ms
Loss rate: 0.44%
Run 5: Report of TaoVA-100x — Data Link
Run 6: Statistics of TaoVA-100x

Start at: 2018-06-19 10:33:22
End at: 2018-06-19 10:33:52
Local clock offset: -0.378 ms
Remote clock offset: 49.577 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.41 Mbit/s
95th percentile per-packet one-way delay: -47.374 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 32.39 Mbit/s
95th percentile per-packet one-way delay: -47.216 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 35.82 Mbit/s
95th percentile per-packet one-way delay: -48.265 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 12.47 Mbit/s
95th percentile per-packet one-way delay: -45.282 ms
Loss rate: 0.03%
Run 6: Report of TaoVA-100x — Data Link
Run 7: Statistics of TaoVA-100x

Start at: 2018-06-19 10:51:08
End at: 2018-06-19 10:51:38
Local clock offset: -7.148 ms
Remote clock offset: 45.404 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 52.80 Mbit/s
  95th percentile per-packet one-way delay: -48.944 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 20.12 Mbit/s
  95th percentile per-packet one-way delay: -48.421 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 44.37 Mbit/s
  95th percentile per-packet one-way delay: -49.092 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 9.41 Mbit/s
  95th percentile per-packet one-way delay: -48.762 ms
  Loss rate: 0.01%
Run 7: Report of TaoVA-100x — Data Link
Run 8: Statistics of TaoVA-100x

Start at: 2018-06-19 11:09:01
End at: 2018-06-19 11:09:31
Local clock offset: -5.433 ms
Remote clock offset: 45.402 ms

# Below is generated by plot.py at 2018-06-19 12:19:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.46 Mbit/s
95th percentile per-packet one-way delay: -50.674 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 33.67 Mbit/s
95th percentile per-packet one-way delay: -50.702 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 7.53 Mbit/s
95th percentile per-packet one-way delay: -52.477 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 23.41 Mbit/s
95th percentile per-packet one-way delay: -50.477 ms
Loss rate: 0.02%
Run 8: Report of TaoVA-100x — Data Link

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

**Legend:**
- Flow 1 ingress (mean 33.67 Mbit/s)
- Flow 1 egress (mean 33.67 Mbit/s)
- Flow 2 ingress (mean 7.53 Mbit/s)
- Flow 2 egress (mean 7.53 Mbit/s)
- Flow 3 ingress (mean 23.40 Mbit/s)
- Flow 3 egress (mean 23.41 Mbit/s)

**Per packet one-way delay (ms):**
- Flow 1 (95th percentile -50.70 ms)
- Flow 2 (95th percentile -52.48 ms)
- Flow 3 (95th percentile -50.48 ms)
Run 9: Statistics of TaoVA-100x

Start at: 2018-06-19 11:26:54
Local clock offset: -1.683 ms
Remote clock offset: 45.653 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 93.36 Mbit/s
  95th percentile per-packet one-way delay: -24.937 ms
  Loss rate: 0.67%
-- Flow 1:
  Average throughput: 56.33 Mbit/s
  95th percentile per-packet one-way delay: -25.217 ms
  Loss rate: 0.38%
-- Flow 2:
  Average throughput: 39.70 Mbit/s
  95th percentile per-packet one-way delay: -24.815 ms
  Loss rate: 0.76%
-- Flow 3:
  Average throughput: 31.86 Mbit/s
  95th percentile per-packet one-way delay: -24.722 ms
  Loss rate: 1.91%
Run 9: Report of TaoVA-100x — Data Link

![Graph showing network performance metrics](image1)

![Graph showing packet delay](image2)
Run 10: Statistics of TaoVA-100x

Start at: 2018-06-19 11:44:51
End at: 2018-06-19 11:45:21
Local clock offset: -1.86 ms
Remote clock offset: 50.111 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 78.90 Mbit/s
95th percentile per-packet one-way delay: -24.385 ms
Loss rate: 0.69%
-- Flow 1:
Average throughput: 39.94 Mbit/s
95th percentile per-packet one-way delay: -24.470 ms
Loss rate: 0.46%
-- Flow 2:
Average throughput: 42.60 Mbit/s
95th percentile per-packet one-way delay: -24.549 ms
Loss rate: 0.63%
-- Flow 3:
Average throughput: 31.88 Mbit/s
95th percentile per-packet one-way delay: -24.156 ms
Loss rate: 1.69%
Run 10: Report of TaoVA-100x — Data Link

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

- Flow 1 ingress (mean 40.11 Mbit/s)
- Flow 1 egress (mean 39.94 Mbit/s)
- Flow 2 ingress (mean 42.84 Mbit/s)
- Flow 2 egress (mean 42.60 Mbit/s)
- Flow 3 ingress (mean 32.37 Mbit/s)
- Flow 3 egress (mean 31.88 Mbit/s)
Run 1: Statistics of TCP Vegas

Start at: 2018-06-19 09:18:31
End at: 2018-06-19 09:19:01
Local clock offset: -7.316 ms
Remote clock offset: 53.011 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 94.61 Mbit/s
95th percentile per-packet one-way delay: -51.312 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 58.57 Mbit/s
95th percentile per-packet one-way delay: -52.110 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 30.41 Mbit/s
95th percentile per-packet one-way delay: -52.035 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 47.50 Mbit/s
95th percentile per-packet one-way delay: -50.354 ms
Loss rate: 0.04%
Run 1: Report of TCP Vegas — Data Link
Run 2: Statistics of TCP Vegas

Start at: 2018-06-19 09:36:25
End at: 2018-06-19 09:36:55
Local clock offset: -7.523 ms
Remote clock offset: 49.998 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 86.74 Mbit/s
95th percentile per-packet one-way delay: -52.727 ms
Loss rate: 0.22%
-- Flow 1:
Average throughput: 44.94 Mbit/s
95th percentile per-packet one-way delay: -52.998 ms
Loss rate: 0.40%
-- Flow 2:
Average throughput: 48.08 Mbit/s
95th percentile per-packet one-way delay: -52.588 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 29.45 Mbit/s
95th percentile per-packet one-way delay: -52.080 ms
Loss rate: 0.02%
Run 2: Report of TCP Vegas — Data Link

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

![Graph 2: Per packet one-way delay (ms)](image)
Run 3: Statistics of TCP Vegas

Start at: 2018-06-19 09:54:20
End at: 2018-06-19 09:54:50
Local clock offset: -3.169 ms
Remote clock offset: 49.571 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.64 Mbit/s
95th percentile per-packet one-way delay: -52.053 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 56.13 Mbit/s
95th percentile per-packet one-way delay: -52.194 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 31.76 Mbit/s
95th percentile per-packet one-way delay: -51.813 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 37.19 Mbit/s
95th percentile per-packet one-way delay: -51.821 ms
Loss rate: 0.01%
Run 3: Report of TCP Vegas — Data Link
Run 4: Statistics of TCP Vegas

Start at: 2018-06-19 10:12:12
End at: 2018-06-19 10:12:42
Local clock offset: -1.546 ms
Remote clock offset: 52.261 ms

# Below is generated by plot.py at 2018-06-19 12:20:54
# Datalink statistics
-- Total of 3 flows:
Average throughput: 89.63 Mbit/s
95th percentile per-packet one-way delay: -52.003 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 51.26 Mbit/s
95th percentile per-packet one-way delay: -52.311 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.13 Mbit/s
95th percentile per-packet one-way delay: -52.022 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 39.06 Mbit/s
95th percentile per-packet one-way delay: -51.468 ms
Loss rate: 0.02%
Run 4: Report of TCP Vegas — Data Link

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

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

- Flow 1 ingress (mean 51.27 Mbps)
- Flow 1 egress (mean 51.26 Mbps)
- Flow 2 ingress (mean 38.13 Mbps)
- Flow 2 egress (mean 38.13 Mbps)
- Flow 3 ingress (mean 39.06 Mbps)
- Flow 3 egress (mean 39.06 Mbps)
Run 5: Statistics of TCP Vegas

Start at: 2018-06-19 10:30:02
End at: 2018-06-19 10:30:32
Local clock offset: -0.576 ms
Remote clock offset: 51.641 ms

# Below is generated by plot.py at 2018-06-19 12:20:57
# Datalink statistics
-- Total of 3 flows:
Average throughput: 91.14 Mbit/s
95th percentile per-packet one-way delay: -51.929 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 61.78 Mbit/s
95th percentile per-packet one-way delay: -52.285 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 24.02 Mbit/s
95th percentile per-packet one-way delay: -52.238 ms
Loss rate: 0.44%
-- Flow 3:
Average throughput: 40.24 Mbit/s
95th percentile per-packet one-way delay: -50.784 ms
Loss rate: 0.04%
Run 5: Report of TCP Vegas — Data Link

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

- **Throughput (Mbps)**
  - Flow 1 ingress (mean 61.78 Mbps)
  - Flow 1 egress (mean 61.78 Mbps)
  - Flow 2 ingress (mean 24.12 Mbps)
  - Flow 2 egress (mean 24.02 Mbps)
  - Flow 3 ingress (mean 40.23 Mbps)
  - Flow 3 egress (mean 40.24 Mbps)

- **Per-packet one-way delay (ms)**
  - Flow 1 (95th percentile -52.28 ms)
  - Flow 2 (95th percentile -52.24 ms)
  - Flow 3 (95th percentile -50.78 ms)
Run 6: Statistics of TCP Vegas

Start at: 2018-06-19 10:47:49
End at: 2018-06-19 10:48:19
Local clock offset: -6.482 ms
Remote clock offset: 45.89 ms

# Below is generated by plot.py at 2018-06-19 12:21:04
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 87.23 Mbit/s
  95th percentile per-packet one-way delay: -50.203 ms
  Loss rate: 0.01%
-- Flow 1:
  Average throughput: 57.21 Mbit/s
  95th percentile per-packet one-way delay: -49.017 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 29.32 Mbit/s
  95th percentile per-packet one-way delay: -50.931 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 31.61 Mbit/s
  95th percentile per-packet one-way delay: -50.327 ms
  Loss rate: 0.02%
Run 6: Report of TCP Vegas — Data Link

![Graph showing network performance metrics for different flows over time.](image-url)
Run 7: Statistics of TCP Vegas

Start at: 2018-06-19 11:05:42
End at: 2018-06-19 11:06:12
Local clock offset: -7.275 ms
Remote clock offset: 44.97 ms

# Below is generated by plot.py at 2018-06-19 12:21:34
# Datalink statistics
-- Total of 3 flows:
Average throughput: 90.53 Mbit/s
95th percentile per-packet one-way delay: -52.008 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 56.80 Mbit/s
95th percentile per-packet one-way delay: -52.603 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: -52.287 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 40.14 Mbit/s
95th percentile per-packet one-way delay: -47.242 ms
Loss rate: 0.04%
Run 7: Report of TCP Vegas — Data Link

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**Throughput (Mbps):**

- **Flow 1 ingress (mean 56.80 Mbps):** Blue dashed line
- **Flow 1 egress (mean 56.80 Mbps):** Blue solid line
- **Flow 2 ingress (mean 30.64 Mbps):** Green dashed line
- **Flow 2 egress (mean 30.64 Mbps):** Green solid line
- **Flow 3 ingress (mean 40.14 Mbps):** Red dashed line
- **Flow 3 egress (mean 40.14 Mbps):** Red solid line

**Delay (ms):**

- **Flow 1 (95th percentile - 52.60 ms):** Blue dots
- **Flow 2 (95th percentile - 52.29 ms):** Green dots
- **Flow 3 (95th percentile - 47.24 ms):** Red dots

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Run 8: Statistics of TCP Vegas

End at: 2018-06-19 11:24:03
Local clock offset: -1.998 ms
Remote clock offset: 45.524 ms

# Below is generated by plot.py at 2018-06-19 12:21:40
# Datalink statistics
-- Total of 3 flows:
Average throughput: 92.73 Mbit/s
95th percentile per-packet one-way delay: -51.994 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 49.75 Mbit/s
95th percentile per-packet one-way delay: -52.232 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 47.24 Mbit/s
95th percentile per-packet one-way delay: -52.072 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 34.67 Mbit/s
95th percentile per-packet one-way delay: -51.149 ms
Loss rate: 0.02%
Run 8: Report of TCP Vegas — Data Link
Run 9: Statistics of TCP Vegas

Start at: 2018-06-19 11:41:31
End at: 2018-06-19 11:42:01
Local clock offset: -1.705 ms
Remote clock offset: 48.997 ms

# Below is generated by plot.py at 2018-06-19 12:21:59
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.42 Mbit/s
95th percentile per-packet one-way delay: -51.699 ms
Loss rate: 0.01%
-- Flow 1:
Average throughput: 50.53 Mbit/s
95th percentile per-packet one-way delay: -51.965 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 49.26 Mbit/s
95th percentile per-packet one-way delay: -51.867 ms
Loss rate: 0.01%
-- Flow 3:
Average throughput: 42.38 Mbit/s
95th percentile per-packet one-way delay: -51.142 ms
Loss rate: 0.01%
Run 9: Report of TCP Vegas — Data Link
Run 10: Statistics of TCP Vegas

Start at: 2018-06-19 11:59:26
End at: 2018-06-19 11:59:56
Local clock offset: -1.766 ms
Remote clock offset: 53.376 ms

# Below is generated by plot.py at 2018-06-19 12:22:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 97.49 Mbit/s
95th percentile per-packet one-way delay: -51.080 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 52.03 Mbit/s
95th percentile per-packet one-way delay: -52.319 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 50.94 Mbit/s
95th percentile per-packet one-way delay: -51.029 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 34.74 Mbit/s
95th percentile per-packet one-way delay: -50.919 ms
Loss rate: 0.06%
Run 10: Report of TCP Vegas — Data Link
Run 1: Statistics of Verus

Start at: 2018-06-19 09:12:56
End at: 2018-06-19 09:13:26
Local clock offset: -6.146 ms
Remote clock offset: 52.785 ms

# Below is generated by plot.py at 2018-06-19 12:22:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 69.39 Mbit/s
95th percentile per-packet one-way delay: -39.879 ms
Loss rate: 0.02%
-- Flow 1:
Average throughput: 35.70 Mbit/s
95th percentile per-packet one-way delay: -43.450 ms
Loss rate: 0.01%
-- Flow 2:
Average throughput: 38.70 Mbit/s
95th percentile per-packet one-way delay: -38.499 ms
Loss rate: 0.02%
-- Flow 3:
Average throughput: 23.86 Mbit/s
95th percentile per-packet one-way delay: -28.220 ms
Loss rate: 0.07%
Run 1: Report of Verus — Data Link

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

- **Throughput (Mbps):**
  - Flow 1 ingress (mean 35.71 Mbps)
  - Flow 1 egress (mean 35.70 Mbps)
  - Flow 2 ingress (mean 38.70 Mbps)
  - Flow 2 egress (mean 38.70 Mbps)
  - Flow 3 ingress (mean 23.88 Mbps)
  - Flow 3 egress (mean 23.86 Mbps)

- **Per packet one-way delay (ms):**
  - Flow 1 (95th percentile -43.45 ms)
  - Flow 2 (95th percentile -38.50 ms)
  - Flow 3 (95th percentile -28.22 ms)
Run 2: Statistics of Verus

Start at: 2018-06-19 09:30:51
End at: 2018-06-19 09:31:21
Local clock offset: -8.708 ms
Remote clock offset: 50.303 ms

# Below is generated by plot.py at 2018-06-19 12:22:02
# Datalink statistics
-- Total of 3 flows:
Average throughput: 62.42 Mbit/s
95th percentile per-packet one-way delay: -36.322 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 34.23 Mbit/s
95th percentile per-packet one-way delay: -37.705 ms
Loss rate: 0.06%
-- Flow 2:
Average throughput: 28.50 Mbit/s
95th percentile per-packet one-way delay: -34.507 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 27.69 Mbit/s
95th percentile per-packet one-way delay: -34.289 ms
Loss rate: 0.03%
Run 2: Report of Verus — Data Link

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

![Graph 2: Per-packet one-way delay vs. Time](image)
Run 3: Statistics of Verus

Start at: 2018-06-19 09:48:46
End at: 2018-06-19 09:49:16
Local clock offset: -3.712 ms
Remote clock offset: 49.233 ms

# Below is generated by plot.py at 2018-06-19 12:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 60.13 Mbit/s
  95th percentile per-packet one-way delay: -38.028 ms
  Loss rate: 0.02%
-- Flow 1:
  Average throughput: 32.16 Mbit/s
  95th percentile per-packet one-way delay: -38.136 ms
  Loss rate: 0.01%
-- Flow 2:
  Average throughput: 29.11 Mbit/s
  95th percentile per-packet one-way delay: -40.323 ms
  Loss rate: 0.01%
-- Flow 3:
  Average throughput: 25.84 Mbit/s
  95th percentile per-packet one-way delay: -32.441 ms
  Loss rate: 0.06%
Run 3: Report of Verus — Data Link
Run 4: Statistics of Verus

Start at: 2018-06-19 10:06:39
End at: 2018-06-19 10:07:09
Local clock offset: -2.126 ms
Remote clock offset: 51.792 ms

# Below is generated by plot.py at 2018-06-19 12:22:02
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 47.70 Mbit/s
  95th percentile per-packet one-way delay: -33.807 ms
  Loss rate: 3.53%
-- Flow 1:
  Average throughput: 25.72 Mbit/s
  95th percentile per-packet one-way delay: -37.086 ms
  Loss rate: 2.51%
-- Flow 2:
  Average throughput: 21.95 Mbit/s
  95th percentile per-packet one-way delay: -31.970 ms
  Loss rate: 4.13%
-- Flow 3:
  Average throughput: 22.19 Mbit/s
  95th percentile per-packet one-way delay: -32.088 ms
  Loss rate: 5.83%
Run 4: Report of Verus — Data Link

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

- **Flow 1 Ingress** (mean 26.39 Mbit/s)
- **Flow 1 Egress** (mean 25.72 Mbit/s)
- **Flow 2 Ingress** (mean 22.89 Mbit/s)
- **Flow 2 Egress** (mean 21.95 Mbit/s)
- **Flow 3 Ingress** (mean 23.35 Mbit/s)
- **Flow 3 Egress** (mean 22.19 Mbit/s)

![Graph showing packet delay](image-url)

- **Flow 1 (95th percentile -37.09 ms)**
- **Flow 2 (95th percentile -31.97 ms)**
- **Flow 3 (95th percentile -32.09 ms)**
Run 5: Statistics of Verus

End at: 2018-06-19 10:24:58
Local clock offset: -0.757 ms
Remote clock offset: 53.152 ms

# Below is generated by plot.py at 2018-06-19 12:22:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.57 Mbit/s
95th percentile per-packet one-way delay: -41.851 ms
Loss rate: 2.10%
-- Flow 1:
Average throughput: 31.19 Mbit/s
95th percentile per-packet one-way delay: -42.201 ms
Loss rate: 0.93%
-- Flow 2:
Average throughput: 20.23 Mbit/s
95th percentile per-packet one-way delay: -41.138 ms
Loss rate: 2.92%
-- Flow 3:
Average throughput: 26.83 Mbit/s
95th percentile per-packet one-way delay: -36.012 ms
Loss rate: 4.83%
Run 5: Report of Verus — Data Link

![Graph of network throughput and delay over time]

- **Flow 1 ingress** (mean 31.48 Mbit/s)
- **Flow 1 egress** (mean 31.19 Mbit/s)
- **Flow 2 ingress** (mean 20.84 Mbit/s)
- **Flow 2 egress** (mean 20.23 Mbit/s)
- **Flow 3 ingress** (mean 28.17 Mbit/s)
- **Flow 3 egress** (mean 26.83 Mbit/s)

![Graph of packet one-way delay over time]

- **Flow 1 (95th percentile -42.20 ms)**
- **Flow 2 (95th percentile -41.14 ms)**
- **Flow 3 (95th percentile -36.01 ms)**

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Run 6: Statistics of Verus

Start at: 2018-06-19 10:42:19
End at: 2018-06-19 10:42:49
Local clock offset: -5.022 ms
Remote clock offset: 47.143 ms

# Below is generated by plot.py at 2018-06-19 12:22:20
# Datalink statistics
-- Total of 3 flows:
Average throughput: 48.28 Mbit/s
95th percentile per-packet one-way delay: -38.941 ms
Loss rate: 2.95%
-- Flow 1:
Average throughput: 29.00 Mbit/s
95th percentile per-packet one-way delay: -39.052 ms
Loss rate: 2.60%
-- Flow 2:
Average throughput: 20.29 Mbit/s
95th percentile per-packet one-way delay: -41.763 ms
Loss rate: 2.90%
-- Flow 3:
Average throughput: 17.36 Mbit/s
95th percentile per-packet one-way delay: -34.201 ms
Loss rate: 4.81%
Run 7: Statistics of Verus

Start at: 2018-06-19 11:00:12
End at: 2018-06-19 11:00:42
Local clock offset: -8.185 ms
Remote clock offset: 44.332 ms

# Below is generated by plot.py at 2018-06-19 12:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 60.53 Mbit/s
95th percentile per-packet one-way delay: -37.340 ms
Loss rate: 0.05%
-- Flow 1:
Average throughput: 30.67 Mbit/s
95th percentile per-packet one-way delay: -36.793 ms
Loss rate: 0.03%
-- Flow 2:
Average throughput: 29.77 Mbit/s
95th percentile per-packet one-way delay: -40.481 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 30.22 Mbit/s
95th percentile per-packet one-way delay: -31.571 ms
Loss rate: 0.15%
Run 7: Report of Verus — Data Link

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

- Flow 1 ingress (mean 30.68 Mbit/s)
- Flow 1 egress (mean 30.67 Mbit/s)
- Flow 2 ingress (mean 29.77 Mbit/s)
- Flow 2 egress (mean 29.77 Mbit/s)
- Flow 3 ingress (mean 30.26 Mbit/s)
- Flow 3 egress (mean 30.22 Mbit/s)

- Flow 1 (95th percentile -36.79 ms)
- Flow 2 (95th percentile -40.48 ms)
- Flow 3 (95th percentile -31.57 ms)
Run 8: Statistics of Verus

Start at: 2018-06-19 11:18:03
End at: 2018-06-19 11:18:33
Local clock offset: -2.766 ms
Remote clock offset: 45.603 ms

# Below is generated by plot.py at 2018-06-19 12:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 55.20 Mbit/s
95th percentile per-packet one-way delay: -38.470 ms
Loss rate: 3.57%
-- Flow 1:
Average throughput: 34.11 Mbit/s
95th percentile per-packet one-way delay: -41.516 ms
Loss rate: 2.87%
-- Flow 2:
Average throughput: 20.36 Mbit/s
95th percentile per-packet one-way delay: -39.079 ms
Loss rate: 3.67%
-- Flow 3:
Average throughput: 22.69 Mbit/s
95th percentile per-packet one-way delay: -32.663 ms
Loss rate: 6.47%
Run 8: Report of Verus — Data Link
Run 9: Statistics of Verus

Start at: 2018-06-19 11:35:59
End at: 2018-06-19 11:36:29
Local clock offset: -1.384 ms
Remote clock offset: 45.305 ms

# Below is generated by plot.py at 2018-06-19 12:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 53.72 Mbit/s
95th percentile per-packet one-way delay: -40.748 ms
Loss rate: 3.10%
-- Flow 1:
Average throughput: 30.64 Mbit/s
95th percentile per-packet one-way delay: -41.472 ms
Loss rate: 2.44%
-- Flow 2:
Average throughput: 22.54 Mbit/s
95th percentile per-packet one-way delay: -41.213 ms
Loss rate: 2.93%
-- Flow 3:
Average throughput: 24.32 Mbit/s
95th percentile per-packet one-way delay: -33.926 ms
Loss rate: 5.79%
Run 9: Report of Verus — Data Link

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

- Flow 1 ingress (mean 31.41 Mbit/s)
- Flow 1 egress (mean 30.64 Mbit/s)
- Flow 2 ingress (mean 23.22 Mbit/s)
- Flow 2 egress (mean 22.54 Mbit/s)
- Flow 3 ingress (mean 25.81 Mbit/s)
- Flow 3 egress (mean 24.32 Mbit/s)

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

- Flow 1 (95th percentile -41.47 ms)
- Flow 2 (95th percentile -41.21 ms)
- Flow 3 (95th percentile -33.93 ms)
Run 10: Statistics of Verus

Start at: 2018-06-19 11:53:56
End at: 2018-06-19 11:54:26
Local clock offset: -1.83 ms
Remote clock offset: 52.296 ms

# Below is generated by plot.py at 2018-06-19 12:22:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 51.80 Mbit/s
95th percentile per-packet one-way delay: -38.434 ms
Loss rate: 3.88%
-- Flow 1:
Average throughput: 29.33 Mbit/s
95th percentile per-packet one-way delay: -39.863 ms
Loss rate: 3.00%
-- Flow 2:
Average throughput: 24.28 Mbit/s
95th percentile per-packet one-way delay: -36.470 ms
Loss rate: 4.92%
-- Flow 3:
Average throughput: 19.00 Mbit/s
95th percentile per-packet one-way delay: -39.358 ms
Loss rate: 5.20%
Run 10: Report of Verus — Data Link

![Graph of throughput and packet delay over time for different flows with mean data rates.](image-url)
Run 1: Statistics of PCC-Vivace

Start at: 2018-06-19 09:11:49
End at: 2018-06-19 09:12:19
Local clock offset: -5.841 ms
Remote clock offset: 52.647 ms

# Below is generated by plot.py at 2018-06-19 12:22:50
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 59.71 Mbit/s
  95th percentile per-packet one-way delay: -26.650 ms
  Loss rate: 0.40%
-- Flow 1:
  Average throughput: 32.15 Mbit/s
  95th percentile per-packet one-way delay: -27.490 ms
  Loss rate: 0.65%
-- Flow 2:
  Average throughput: 28.98 Mbit/s
  95th percentile per-packet one-way delay: -30.813 ms
  Loss rate: 0.10%
-- Flow 3:
  Average throughput: 25.04 Mbit/s
  95th percentile per-packet one-way delay: -25.275 ms
  Loss rate: 0.15%
Run 1: Report of PCC-Vivace — Data Link

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

Legend:
- Flow 1 ingress (mean 32.36 Mbit/s)
- Flow 1 egress (mean 32.15 Mbit/s)
- Flow 2 ingress (mean 29.01 Mbit/s)
- Flow 2 egress (mean 29.08 Mbit/s)
- Flow 3 ingress (mean 25.06 Mbit/s)
- Flow 3 egress (mean 25.04 Mbit/s)

Legend for packet one-way delay:
- Flow 1 (95th percentile -27.49 ms)
- Flow 2 (95th percentile -30.81 ms)
- Flow 3 (95th percentile -25.27 ms)
Run 2: Statistics of PCC-Vivace

Start at: 2018-06-19 09:29:44
End at: 2018-06-19 09:30:14
Local clock offset: -8.59 ms
Remote clock offset: 50.269 ms

# Below is generated by plot.py at 2018-06-19 12:22:51
# Datalink statistics
-- Total of 3 flows:
Average throughput: 56.66 Mbit/s
95th percentile per-packet one-way delay: -36.789 ms
Loss rate: 0.03%
-- Flow 1:
Average throughput: 27.74 Mbit/s
95th percentile per-packet one-way delay: -39.941 ms
Loss rate: 0.02%
-- Flow 2:
Average throughput: 31.13 Mbit/s
95th percentile per-packet one-way delay: -31.889 ms
Loss rate: 0.04%
-- Flow 3:
Average throughput: 24.91 Mbit/s
95th percentile per-packet one-way delay: -40.427 ms
Loss rate: 0.03%
Run 2: Report of PCC-Vivace — Data Link
Run 3: Statistics of PCC-Vivace

Start at: 2018-06-19 09:47:39
End at: 2018-06-19 09:48:09
Local clock offset: -3.915 ms
Remote clock offset: 49.232 ms

# Below is generated by plot.py at 2018-06-19 12:23:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 63.09 Mbit/s
95th percentile per-packet one-way delay: -20.437 ms
Loss rate: 2.07%
-- Flow 1:
Average throughput: 25.00 Mbit/s
95th percentile per-packet one-way delay: -20.754 ms
Loss rate: 0.69%
-- Flow 2:
Average throughput: 44.53 Mbit/s
95th percentile per-packet one-way delay: -19.682 ms
Loss rate: 3.26%
-- Flow 3:
Average throughput: 25.68 Mbit/s
95th percentile per-packet one-way delay: -16.234 ms
Loss rate: 1.89%
Run 3: Report of PCC-Vivace — Data Link
Run 4: Statistics of PCC-Vivace

Start at: 2018-06-19 10:05:32
End at: 2018-06-19 10:06:02
Local clock offset: -2.269 ms
Remote clock offset: 51.952 ms

# Below is generated by plot.py at 2018-06-19 12:23:15
# Datalink statistics
-- Total of 3 flows:
Average throughput: 40.03 Mbit/s
95th percentile per-packet one-way delay: -40.104 ms
Loss rate: 1.88%
-- Flow 1:
Average throughput: 22.10 Mbit/s
95th percentile per-packet one-way delay: -43.261 ms
Loss rate: 1.44%
-- Flow 2:
Average throughput: 20.38 Mbit/s
95th percentile per-packet one-way delay: -38.743 ms
Loss rate: 2.15%
-- Flow 3:
Average throughput: 13.26 Mbit/s
95th percentile per-packet one-way delay: -27.783 ms
Loss rate: 3.22%
Run 4: Report of PCC-Vivace — Data Link
Run 5: Statistics of PCC-Vivace

End at: 2018-06-19 10:23:51
Local clock offset: -0.809 ms
Remote clock offset: 52.829 ms

# Below is generated by plot.py at 2018-06-19 12:23:23
# Datalink statistics
-- Total of 3 flows:
Average throughput: 65.11 Mbit/s
95th percentile per-packet one-way delay: -19.710 ms
Loss rate: 1.81%
-- Flow 1:
Average throughput: 32.05 Mbit/s
95th percentile per-packet one-way delay: -22.129 ms
Loss rate: 1.51%
-- Flow 2:
Average throughput: 37.52 Mbit/s
95th percentile per-packet one-way delay: -18.840 ms
Loss rate: 2.59%
-- Flow 3:
Average throughput: 24.57 Mbit/s
95th percentile per-packet one-way delay: -11.346 ms
Loss rate: 0.58%
Run 5: Report of PCC-Vivace — Data Link

![Graph showing network performance metrics over time. The graphs display the throughput and per-packet one-way delay for different flows. Each flow is indicated by a different line color and legend entry.]

Legend:
- Blue dashed line: Flow 1 (ingress mean 32.54 Mbit/s)
- Blue solid line: Flow 1 (egress mean 32.65 Mbit/s)
- Green dashed line: Flow 2 (ingress mean 38.31 Mbit/s)
- Green solid line: Flow 2 (egress mean 37.52 Mbit/s)
- Red dashed line: Flow 3 (ingress mean 24.70 Mbit/s)
- Red solid line: Flow 3 (egress mean 24.57 Mbit/s)

Throughput (Mbps) vs. Time (s) graph:
- The x-axis represents time in seconds, ranging from 0 to 30.
- The y-axis represents throughput in Mbps, ranging from 0 to 70.
- The graph shows fluctuations in throughput for each flow over time.

Per-packet one-way delay (ms) vs. Time (s) graph:
- The x-axis represents time in seconds, ranging from 0 to 30.
- The y-axis represents per-packet one-way delay in ms, ranging from -40 to 40.
- The graph shows fluctuations in delay for each flow over time.
Run 6: Statistics of PCC-Vivace

End at: 2018-06-19 10:41:43
Local clock offset: -4.559 ms
Remote clock offset: 47.189 ms

# Below is generated by plot.py at 2018-06-19 12:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 41.16 Mbit/s
  95th percentile per-packet one-way delay: -42.976 ms
  Loss rate: 1.52%
-- Flow 1:
  Average throughput: 21.94 Mbit/s
  95th percentile per-packet one-way delay: -43.090 ms
  Loss rate: 1.36%
-- Flow 2:
  Average throughput: 20.98 Mbit/s
  95th percentile per-packet one-way delay: -42.459 ms
  Loss rate: 1.54%
-- Flow 3:
  Average throughput: 15.94 Mbit/s
  95th percentile per-packet one-way delay: -44.006 ms
  Loss rate: 2.13%
Run 6: Report of PCC-Vivace — Data Link
Run 7: Statistics of PCC-Vivace

Start at: 2018-06-19 10:59:03
End at: 2018-06-19 10:59:33
Local clock offset: -8.106 ms
Remote clock offset: 44.467 ms

# Below is generated by plot.py at 2018-06-19 12:23:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 77.46 Mbit/s
95th percentile per-packet one-way delay: -20.617 ms
Loss rate: 1.47%
-- Flow 1:
Average throughput: 43.79 Mbit/s
95th percentile per-packet one-way delay: -21.128 ms
Loss rate: 0.51%
-- Flow 2:
Average throughput: 40.15 Mbit/s
95th percentile per-packet one-way delay: -20.415 ms
Loss rate: 2.67%
-- Flow 3:
Average throughput: 21.12 Mbit/s
95th percentile per-packet one-way delay: -7.169 ms
Loss rate: 2.80%
Run 7: Report of PCC-Vivace — Data Link

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

- Flow 1 ingress (mean 43.99 Mbps/s)
- Flow 1 egress (mean 43.79 Mbps/s)
- Flow 2 ingress (mean 41.25 Mbps/s)
- Flow 2 egress (mean 40.15 Mbps/s)
- Flow 3 ingress (mean 21.70 Mbps/s)
- Flow 3 egress (mean 21.12 Mbps/s)

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

- Flow 1 (95th percentile -21.13 ms)
- Flow 2 (95th percentile -20.41 ms)
- Flow 3 (95th percentile -7.17 ms)
Run 8: Statistics of PCC-Vivace

Start at: 2018-06-19 11:16:57
End at: 2018-06-19 11:17:27
Local clock offset: -2.975 ms
Remote clock offset: 45.605 ms

# Below is generated by plot.py at 2018-06-19 12:23:29
# Datalink statistics
-- Total of 3 flows:
Average throughput: 46.73 Mbit/s
95th percentile per-packet one-way delay: -47.660 ms
Loss rate: 1.42%
-- Flow 1:
Average throughput: 25.24 Mbit/s
95th percentile per-packet one-way delay: -48.218 ms
Loss rate: 1.06%
-- Flow 2:
Average throughput: 23.63 Mbit/s
95th percentile per-packet one-way delay: -46.085 ms
Loss rate: 1.93%
-- Flow 3:
Average throughput: 17.50 Mbit/s
95th percentile per-packet one-way delay: -49.736 ms
Loss rate: 1.61%
Run 8: Report of PCC-Vivace — Data Link

Throughput (Mbit/s) vs Time (s):
- Flow 1 ingress (mean 25.51 Mbit/s)
- Flow 1 egress (mean 25.24 Mbit/s)
- Flow 2 ingress (mean 24.09 Mbit/s)
- Flow 2 egress (mean 23.63 Mbit/s)
- Flow 3 ingress (mean 17.77 Mbit/s)
- Flow 3 egress (mean 17.50 Mbit/s)

Packet one-way delay (ms) vs Time (s):
- Flow 1 (95th percentile -48.22 ms)
- Flow 2 (95th percentile -46.09 ms)
- Flow 3 (95th percentile -49.74 ms)
Run 9: Statistics of PCC-Vivace

Start at: 2018-06-19 11:34:52
End at: 2018-06-19 11:35:22
Local clock offset: -1.291 ms
Remote clock offset: 45.356 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 58.38 Mbit/s
  95th percentile per-packet one-way delay: -25.136 ms
  Loss rate: 0.90%
-- Flow 1:
  Average throughput: 29.21 Mbit/s
  95th percentile per-packet one-way delay: -44.589 ms
  Loss rate: 0.33%
-- Flow 2:
  Average throughput: 28.24 Mbit/s
  95th percentile per-packet one-way delay: -52.070 ms
  Loss rate: 0.22%
-- Flow 3:
  Average throughput: 31.45 Mbit/s
  95th percentile per-packet one-way delay: -22.488 ms
  Loss rate: 3.62%
Run 10: Statistics of PCC-Vivace

Start at: 2018-06-19 11:52:49
End at: 2018-06-19 11:53:19
Local clock offset: -1.817 ms
Remote clock offset: 52.371 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 61.51 Mbit/s
95th percentile per-packet one-way delay: -27.953 ms
Loss rate: 0.35%
-- Flow 1:
Average throughput: 33.38 Mbit/s
95th percentile per-packet one-way delay: -25.536 ms
Loss rate: 0.59%
-- Flow 2:
Average throughput: 29.37 Mbit/s
95th percentile per-packet one-way delay: -50.321 ms
Loss rate: 0.08%
-- Flow 3:
Average throughput: 26.04 Mbit/s
95th percentile per-packet one-way delay: -46.839 ms
Loss rate: 0.04%
Run 10: Report of PCC-Vivace — Data Link

![Graph showing data link performance metrics for different flows]

**Graph Legend**
- Flow 1 ingress (mean 33.58 Mbit/s)
- Flow 1 egress (mean 33.38 Mbit/s)
- Flow 2 ingress (mean 29.36 Mbit/s)
- Flow 2 egress (mean 29.37 Mbit/s)
- Flow 3 ingress (mean 26.05 Mbit/s)
- Flow 3 egress (mean 26.04 Mbit/s)

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

**Graph Legend**
- Flow 1 (95th percentile -25.54 ms)
- Flow 2 (95th percentile -50.32 ms)
- Flow 3 (95th percentile -46.84 ms)
Run 1: Statistics of WebRTC media

Start at: 2018-06-19 09:15:11
End at: 2018-06-19 09:15:41
Local clock offset: -6.728 ms
Remote clock offset: 52.896 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.88 Mbit/s
  95th percentile per-packet one-way delay: -52.506 ms
  Loss rate: 0.14%
-- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: -52.688 ms
  Loss rate: 0.27%
-- Flow 2:
  Average throughput: 0.93 Mbit/s
  95th percentile per-packet one-way delay: -52.438 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.46 Mbit/s
  95th percentile per-packet one-way delay: -52.254 ms
  Loss rate: 0.00%
Run 1: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.50 Mbit/s) vs. Flow 1 egress (mean 1.50 Mbit/s)
- Flow 2 ingress (mean 0.93 Mbit/s) vs. Flow 2 egress (mean 0.93 Mbit/s)
- Flow 3 ingress (mean 0.46 Mbit/s) vs. Flow 3 egress (mean 0.46 Mbit/s)

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

- Flow 1 (95th percentile -52.69 ms)
- Flow 2 (95th percentile -52.44 ms)
- Flow 3 (95th percentile -52.25 ms)
Run 2: Statistics of WebRTC media

Start at: 2018-06-19 09:33:06
End at: 2018-06-19 09:33:36
Local clock offset: -8.873 ms
Remote clock offset: 50.22 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.88 Mbit/s
95th percentile per-packet one-way delay: -52.208 ms
Loss rate: 0.15%
-- Flow 1:
Average throughput: 1.52 Mbit/s
95th percentile per-packet one-way delay: -52.369 ms
Loss rate: 0.29%
-- Flow 2:
Average throughput: 0.91 Mbit/s
95th percentile per-packet one-way delay: -52.075 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.46 Mbit/s
95th percentile per-packet one-way delay: -52.104 ms
Loss rate: 0.00%
Run 2: Report of WebRTC media — Data Link
Run 3: Statistics of WebRTC media

Start at: 2018-06-19 09:51:01
End at: 2018-06-19 09:51:31
Local clock offset: -3.433 ms
Remote clock offset: 49.526 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.63 Mbit/s
95th percentile per-packet one-way delay: -51.945 ms
Loss rate: 0.09%
-- Flow 1:
Average throughput: 1.58 Mbit/s
95th percentile per-packet one-way delay: -51.920 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.80 Mbit/s
95th percentile per-packet one-way delay: -52.365 ms
Loss rate: 0.31%
-- Flow 3:
Average throughput: 0.26 Mbit/s
95th percentile per-packet one-way delay: -51.217 ms
Loss rate: 0.00%
Run 3: Report of WebRTC media — Data Link
Run 4: Statistics of WebRTC media

Start at: 2018-06-19 10:08:52
End at: 2018-06-19 10:09:22
Local clock offset: -1.877 ms
Remote clock offset: 51.982 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.80 Mbit/s
95th percentile per-packet one-way delay: -51.726 ms
Loss rate: 0.13%
-- Flow 1:
Average throughput: 1.56 Mbit/s
95th percentile per-packet one-way delay: -51.753 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.86 Mbit/s
95th percentile per-packet one-way delay: -51.211 ms
Loss rate: 0.25%
-- Flow 3:
Average throughput: 0.39 Mbit/s
95th percentile per-packet one-way delay: -52.162 ms
Loss rate: 0.39%
Run 4: Report of WebRTC media — Data Link

Throughput (Mbit/s)

Time (s)

- Flow 1 ingress (mean 1.56 Mbit/s)
- Flow 1 egress (mean 1.56 Mbit/s)
- Flow 2 ingress (mean 0.85 Mbit/s)
- Flow 2 egress (mean 0.86 Mbit/s)
- Flow 3 ingress (mean 0.39 Mbit/s)
- Flow 3 egress (mean 0.39 Mbit/s)

Per packet one-way delay (ms)

Time (s)

- Flow 1 (95th percentile -51.75 ms)
- Flow 2 (95th percentile -51.21 ms)
- Flow 3 (95th percentile -52.16 ms)
Run 5: Statistics of WebRTC media

Start at: 2018-06-19 10:26:42
End at: 2018-06-19 10:27:12
Local clock offset: -0.726 ms
Remote clock offset: 52.865 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.82 Mbit/s
  95th percentile per-packet one-way delay: -51.324 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: -51.323 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.91 Mbit/s
  95th percentile per-packet one-way delay: -51.134 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.42 Mbit/s
  95th percentile per-packet one-way delay: -52.012 ms
  Loss rate: 0.00%
Run 5: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.50 Mbit/s)
- Flow 1 egress (mean 1.50 Mbit/s)
- Flow 2 ingress (mean 0.91 Mbit/s)
- Flow 2 egress (mean 0.91 Mbit/s)
- Flow 3 ingress (mean 0.42 Mbit/s)
- Flow 3 egress (mean 0.42 Mbit/s)

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

- Flow 1 (95th percentile - 51.32 ms)
- Flow 2 (95th percentile - 51.13 ms)
- Flow 3 (95th percentile - 52.01 ms)
Run 6: Statistics of WebRTC media

Start at: 2018-06-19 10:44:33
End at: 2018-06-19 10:45:03
Local clock offset: -5.701 ms
Remote clock offset: 46.48 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.86 Mbit/s
95th percentile per-packet one-way delay: -51.625 ms
Loss rate: 0.11%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: -51.640 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.89 Mbit/s
95th percentile per-packet one-way delay: -51.451 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.47 Mbit/s
95th percentile per-packet one-way delay: -51.840 ms
Loss rate: 0.65%
Run 6: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.51 Mbps)
- Flow 1 egress (mean 1.51 Mbps)
- Flow 2 ingress (mean 0.89 Mbps)
- Flow 2 egress (mean 0.89 Mbps)
- Flow 3 ingress (mean 0.48 Mbps)
- Flow 3 egress (mean 0.47 Mbps)

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

- Flow 1 (95th percentile -51.64 ms)
- Flow 2 (95th percentile -51.45 ms)
- Flow 3 (95th percentile -51.84 ms)
Run 7: Statistics of WebRTC media

Start at: 2018-06-19 11:02:26
End at: 2018-06-19 11:02:56
Local clock offset: -8.412 ms
Remote clock offset: 44.625 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.79 Mbit/s
  95th percentile per-packet one-way delay: -52.045 ms
  Loss rate: 0.06%
-- Flow 1:
  Average throughput: 1.46 Mbit/s
  95th percentile per-packet one-way delay: -51.961 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.91 Mbit/s
  95th percentile per-packet one-way delay: -52.340 ms
  Loss rate: 0.19%
-- Flow 3:
  Average throughput: 0.44 Mbit/s
  95th percentile per-packet one-way delay: -52.011 ms
  Loss rate: 0.00%
Run 7: Report of WebRTC media — Data Link

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

- **Flow 1 ingress (mean 1.46 Mbit/s)**
- **Flow 1 egress (mean 1.46 Mbit/s)**
- **Flow 2 ingress (mean 0.91 Mbit/s)**
- **Flow 2 egress (mean 0.91 Mbit/s)**
- **Flow 3 ingress (mean 0.44 Mbit/s)**
- **Flow 3 egress (mean 0.44 Mbit/s)**
Run 8: Statistics of WebRTC media

Start at: 2018-06-19 11:20:17
End at: 2018-06-19 11:20:47
Local clock offset: -2.415 ms
Remote clock offset: 45.606 ms

# Below is generated by plot.py at 2018-06-19 12:23:23
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.80 Mbit/s
  95th percentile per-packet one-way delay: -52.364 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.59 Mbit/s
  95th percentile per-packet one-way delay: -52.247 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.79 Mbit/s
  95th percentile per-packet one-way delay: -52.748 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: -52.289 ms
  Loss rate: 0.00%
Run 8: Report of WebRTC media — Data Link

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

- Flow 1 ingress (mean 1.59 Mbit/s)
- Flow 1 egress (mean 1.59 Mbit/s)
- Flow 2 ingress (mean 0.79 Mbit/s)
- Flow 2 egress (mean 0.79 Mbit/s)
- Flow 3 ingress (mean 0.43 Mbit/s)
- Flow 3 egress (mean 0.43 Mbit/s)
Run 9: Statistics of WebRTC media

End at: 2018-06-19 11:38:43
Local clock offset: -1.55 ms
Remote clock offset: 46.992 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
  Average throughput: 2.83 Mbit/s
  95th percentile per-packet one-way delay: -52.305 ms
  Loss rate: 0.00%
-- Flow 1:
  Average throughput: 1.50 Mbit/s
  95th percentile per-packet one-way delay: -52.272 ms
  Loss rate: 0.00%
-- Flow 2:
  Average throughput: 0.91 Mbit/s
  95th percentile per-packet one-way delay: -52.326 ms
  Loss rate: 0.00%
-- Flow 3:
  Average throughput: 0.43 Mbit/s
  95th percentile per-packet one-way delay: -52.502 ms
  Loss rate: 0.00%
Run 9: Report of WebRTC media — Data Link

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**Throughput (Mbit/s)**

- **Flow 1 ingress (mean 1.50 Mbit/s)**
- **Flow 1 egress (mean 1.50 Mbit/s)**
- **Flow 2 ingress (mean 0.91 Mbit/s)**
- **Flow 2 egress (mean 0.91 Mbit/s)**
- **Flow 3 ingress (mean 0.43 Mbit/s)**
- **Flow 3 egress (mean 0.43 Mbit/s)**

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

- **Flow 1 (95th percentile -52.27 ms)**
- **Flow 2 (95th percentile -52.33 ms)**
- **Flow 3 (95th percentile -52.50 ms)**

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Run 10: Statistics of WebRTC media

Start at: 2018-06-19 11:56:10
End at: 2018-06-19 11:56:40
Local clock offset: -1.877 ms
Remote clock offset: 52.61 ms

# Below is generated by plot.py at 2018-06-19 12:23:32
# Datalink statistics
-- Total of 3 flows:
Average throughput: 2.84 Mbit/s
95th percentile per-packet one-way delay: -52.685 ms
Loss rate: 0.00%
-- Flow 1:
Average throughput: 1.51 Mbit/s
95th percentile per-packet one-way delay: -52.875 ms
Loss rate: 0.00%
-- Flow 2:
Average throughput: 0.90 Mbit/s
95th percentile per-packet one-way delay: -52.629 ms
Loss rate: 0.00%
-- Flow 3:
Average throughput: 0.44 Mbit/s
95th percentile per-packet one-way delay: -52.537 ms
Loss rate: 0.00%
Run 10: Report of WebRTC media — Data Link

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

- Ingress: Flow 1 (1.51 Mbit/s), Flow 2 (0.90 Mbit/s), Flow 3 (0.44 Mbit/s)
- Egress: Flow 1 (1.51 Mbit/s), Flow 2 (0.90 Mbit/s), Flow 3 (0.44 Mbit/s)

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

- Flow 1: 52.88 ms (95th percentile), Flow 2: 52.63 ms (95th percentile), Flow 3: 52.54 ms (95th percentile)