**Empirical Evidence**

The following uses I/O graphs to measure the traffic flow of the localized, simulated network with one server servicing a network for multiple honest clients. These experiments were recorded on a simulated network created through Mininet with the network performance recorded by Wireshark. The measurements are based on the amount of packets being sent out over the time in seconds.

* The vertical column displays packets being sent out.
* The horizontal axis shows the time passing per second.

The graph below displays the I/O performance of a host servicing 31 other clients that occasionally send queries to the host. These three graphs were from 3 different instances of a network simulation, but they are recorded at different times because the simulated network on Mininet was being upheld by a single 2.7Hz CPU on a Unix virtual machine. This issue meant that it often took extra time to set up the server and 31 clients/attackers before the network simulation was fully established.

**A picture containing text, boat

Description automatically generated**

A picture containing text, boat, water

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After the network performance of a standard network was recorded, the next set of simulations were done on the same setup of one host and 31 other clients. However, these clients were changed into attackers

Chart, histogram

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**Histogram

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Chart

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The following evidence showcases the experiment of the same Mininet network of 1 host and 31 attackers during a DDoS attack. However, the server is now using an implementation of the DDoS priority system for this experiment.

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