

MPAC[®] Security

Enhanced 40Gbps capture card offloading signature detection, significantly increasing performance by accelerating IDS applications and Open Source Suricata

The Telesoft PCIe Gen 3.0 x8 IDS accelerator card speeds up Intrusion Detection System (IDS) CPU intensive signature scanning by looking for rule based byte patterns in any packet location, giving significant system performance gains.

Data streams are terminated on up to 4 x 10GbE, pre-processed for signature matches and load balanced across multiple CPU cores for processing by the host IDS application. Using this architecture, a single accelerator card in a commodity server can deliver speeds beyond 20Gbit/s with zero packet loss.

Why accelerate IDS?

Many cyber intelligence and security solutions have failed to keep up with data growth and network speeds, particularly inside the network where rates can be significantly higher than at the border. Device stacking is one solution, but this complicates network architecture and management, increases points of failure, and increases overall CAPEX and OPEX.

A signature based IDS, such as Suricata, monitors packets on the network and compares them against a database of signatures or attributes from known malicious threats. Multi-threading and load balancing across CPU cores provides performance gains, however, one of the largest CPU consumers is signature scanning, which can consume up to 80% of CPU load. By offloading signature scanning to an accelerator card, cost effective IDS systems can be built for breach detection and forensics in the network core.

Key Features

PF_RING Open API	Secure, reliable performance regardless of packet arrival rate
100% Capture	PCIe Gen 3.0 allows full line rate capture into host memory for all packets 64 to 9600 bytes
Loadshare up to 64 cores	Loadshares across up to 64 cores for maximum utilisation of multi-core CPU architectures
Signature match acceleration	Pre-process and accelerate keyword rule matches from tens of thousands of rules in dynamically programmable hardware filters
Suricata plug and play	Operation is unobtrusive and transparent through use of Telesoft code within Suricata

To find out more information about the MPAC Security or to request a datasheet, please contact us on **+44 (0) 1258 480880** or **sales@telesoft-technologies.com**