OVERVIEW

Netcope Session Filter (NSF) is a session-oriented packet capture solution that leverages the hardware platform of Netcope FPGA board to accelerate per-packet processing and flow-based stateful filtering, which leaves more CPU performance for complex processing of network traffic, like DPI. The cooperation of hardware and software makes it possible to build a powerful solution even for 100G Ethernet networks based on commodity multi-core servers.

NSF perceives network traffic as a set of network flows and it is able to track hundreds of thousands of network flows directly in hardware. Software applications leverage hardware preprocessing of network flows to identify flows of interest for further processing and instructs hardware through API on how to deal with each flow. In other words, it allows you to zoom in interesting traffic, drop the traffic of no interest and gather statistical information about the rest of the traffic.

FEATURES

- **Models for 100G, 40G, and 10G Ethernet available**
- **Wire-speed traffic processing including the shortest packets**
- **Hardware flow cache with hundreds of thousands of flow records**
- **Hardware packet processing based on flow records**
  - **Update per-flow statistics**
  - **Transfer per-flow statistics to SW**
  - **Transfer whole or cropped packet to SW**
  - **Extract and transfer packet header fields to SW**
  - **Drop packet**
- **Intelligent packet transfer to SW**
  - **Flow-aware distribution over multiple CPU cores**
- **Field upgradable**

APPLICATIONS

- **Acceleration of DPI-based (deep packet inspection) systems**
  - **IDS/IPS (instrusion detection/prevention systems)**
  - **UTM (unified threat management)**
- **Application-specific statistics (time-based, TCP flags, etc.)**
- **Acceleration of lawful interception systems**
- **Forensic analysis of network traffic (dynamic zoom-in)**

SPECIFICATION

- **2× CFP4 / QSFP28 network interfaces**
  - **Each interface supports 1×100G / 1×40G / 4×10G**
  - **100GBASE-SR4* / LR4 / ER4**
  - **40GBASE-SR4 / IR4 / LR4, 10GBASE-SR / LR**
- **PCI Express Gen 3 x16 host interface**
  - **Aggregate throughput 100Gbps to SW**
- **PCI Express form factor**
  - **Full height (126mm)**
  - **Half length (180mm)**
- **Weight 470g**
- **PPS (pulse per second) synchronization input**

* Please contact Netcope Technologies for details.

SOFTWARE INTERFACES

- **Command-line tools and drivers for Linux OS**
- **C API for configuration and high-speed data transfers**
- **Intel DPDK, PCAP, and Linux network interfaces**
- **Support of NetFlow/IPFIX export**

ORDERING INFORMATION

Please contact Netcope Technologies for pricing and additional information about this product.

NETCOPE
ACCELERATING YOUR SUCCESS

RedLinX
Engineering
www.redlinx.co.za