Croissants

Intrusion Detection and Prevention System (IDPS)

Who am I?

Samiux is an Information Security Enthusiast.

- OSCE, OSCP, OSWP
- Blogger
- Linux user

Hobbies:

- Programming
- Reading
- Pentesting

What is Croissants?

Croissants is an Intrusion Detection and Prevention System based on Suricata.

- Developed by Samiux since 2012
- Open Source under GPLv3
- Intrusion Prevention System (IPS)
- High Performance
- Ultra-low Latency
- Network based
- Host based
- Not Embedded Linux

Main components:

- Suricata
- Hyperscan
- Ubuntu Server

General Features:

- Blocks known malicious activities
- Blocks known malware and virus
- Easy and straight forward interfaces
- Compatible with Bittorrent and 4K video streaming
- Ultra-low latency for demanding online games
- Compatible with Microsoft Windows, GNU Linux, Apple macOS, Apple iOS, Google Android
- No subscription fee
- Automatically update and upgrade
- Urgent Update Push
- Plug, Play and Forget!

Detailed Features:

- Emerging Threats (ET) Open Ruleset (Default, Free)
- ET Pro Ruleset (Optional, Expense)
- Malware Hashes Ruleset MD5, SHA1, SHA256
- Malware SSL/TLS Fingerprints Ruleset JA3
- Protocol Ruleset SSH, DNS, TLS, etc
- Malicious/Compromised IP Addresses Blacklist
- TOR (The Onion Router) Exit Nodes Blacklist
- Malicious URL/Domain Blacklist
- Malicious SSL/TLS Fingerprints Blacklist
- Bandwidth Over 10Gbps
- Drop instead of Reject

NON Open Source Features:

- Not For Sale
- Blocks Common Scanners
- e.g. nmap, masscan, Shodan, Censys, Zoomeye

Minimum Requirements:

- (1) Hardware
- Multi-Core Intel/AMD x86 CPU (at least Intel ATOM D2550)
- 8GB DDR3 RAM or more
- 64GB SSD or more
- 3 Network Interface Cards/Ports (Network Based only)
- 1 Network Interface Card/Port (Host Based only)
- CPU with AVX2 or better (at least SSSE3)
- * Intel ATOM D2550 can handle up to 300Mbps traffic only
 - (2) Software
- Ubuntu Server LTS (64-bit)

Demo

Open Source Interfaces (Network Based)

glances and netdata - https://youtu.be/kVHKU32Mky8

Non Open Source Features

- Shodan https://youtu.be/OoPS8Au2kAw
- nmap https://youtu.be/uwcCDcdaRT4

Live Target (Online Time Is Limited)

- Croissants and Longjing (Deep Learning Driven Web Application Firewall)
- Infosec Projects http://www.infosec-projects.com/

Reference

- Suricata https://suricata-ids.org/
- Hyperscan https://www.hyperscan.io/
- Ubuntu https://ubuntu.com/
- Croissants https://www.infosec-ninjas.com/croissants
- Freenode #infosec-ninjas (SSL and Port 6697)
- Infosec Ninjas https://www.infosec-ninjas.com/

Thank you!

Q&A