



SECURING POINT OF SALE SYSTEMS

Ensuring Business Continuity For Retailers



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Introduction

Cybercriminals are increasingly targeting Point of Sale (POS) systems as they are vulnerable to advanced attacks and can cripple businesses instantly. With advanced tools available to them, Cybercriminals can easily compromise a POS system, move laterally from a cafeteria to the datacenter, access network assets, and lie dormant inside the network while they scope out and steal sensitive information over time.

POS systems, though critical to businesses, are an intrusion point for cyber threats:

- ❖ POS downtime costs retailers an average of \$4,700 per minute¹
- ❖ 89% of all breaches are caused by a POS intrusion²
- ❖ 9 out of 10 data breaches recorded in hotels & restaurants affected a POS²

Source:

¹ [Westbase.io](https://www.westbase.io)

² 2018 Data Breach Investigations Report



A close-up photograph of a hand holding a credit card over a point-of-sale (POS) terminal. The hand has dark nail polish. The POS terminal is a handheld device with a keypad and a small screen. The background is blurred, showing what appears to be a retail or service environment. The overall color scheme is monochromatic with a blue tint.

POS SECURITY CHALLENGES

Low Cost, Low Computational Power in POS Systems

Endpoint security products installed on POS terminals are agent based. These heavy agents can erode the limited computational capacity of a POS.

- ❖ POS systems are low cost with small memory and low power CPUs. They often operate in low bandwidth environments. Periodic signature updates of antivirus (AV) and next-gen EDR may suffer due to poor network connections. They can also cause performance deterioration.
- ❖ POS systems run on a variety of Win XP/Embedded OS. With Win XP reaching EOL, OEM support is no longer available to patch the OS.
- ❖ Retailers are forced into expensive upgrade cycles for their POS systems with legacy Windows OS in order to meet PCI requirements.

ColorTokens Xprotect allows POS systems to work securely without increasing risk – independent of OS patch or upgrade. The solution has an ultra-lightweight agent with low resource utilization at all levels (CPU, RAM, DISK, Network).

Built to support Zero Trust endpoint security, Xprotect's process whitelisting technology enables retailers to remediate security issues stemming from lack of support and protect POS systems running legacy OS's such as Win XP.



Limited Internet Bandwidth in Retail Stores

Updating signatures of antivirus (AV) tools installed on POS systems very quickly consumes the limited internet bandwidth in most retail stores.

- ❖ AV tools on POS systems frequently download signature files that can choke the internet bandwidth, causing a delay in updating signatures.
- ❖ AV tools send an offending or suspicious file to their website for extracting security intelligence, creating an additional load on already strained internet bandwidth.
- ❖ Because of their signature-based technology, AV tools offer only delayed POS protection and are inadequate to combat zero-day threats.

Xprotect's Zero Trust approach does not allow any file or file-less malware or suspicious code to be executed, thus protecting POS from both known and zero-day threats. Unlike AV, it does not download signatures or send suspect files, hence bandwidth usage is low and highly efficient. Xprotect's ultra-lightweight agent also means faster installs can be done in the background even when POS systems are in use, so there is no business disruption.



Fragmented POS Environments

Fragmented POS environments, multiple business models, and high employee turnover make it impossible to implement consistent security policies and standards.

- ❖ Internet access to non-business sites, running games and connecting USB during business hours.
- ❖ A high employee turnover rate of over 35% in the retail industry makes security training ineffective.
- ❖ Multiple business models – multi-stores, franchise, and direct ownership of stores – require working with different IT standards.

ColorTokens Xprotect installs within minutes, invisibly and without the need for a reboot. The solution can lock down POS machines so that connecting USB drives or running any programs downloaded from the internet is not possible. Xprotect also stops attempts to export any data out of the POS system. By automating Zero Trust security processes, it reduces dependencies on humans and eliminates any intentional or unintentional breach attempts on the POS.

Source:

³ [Workforce](#)



ColorTokens Xprotect

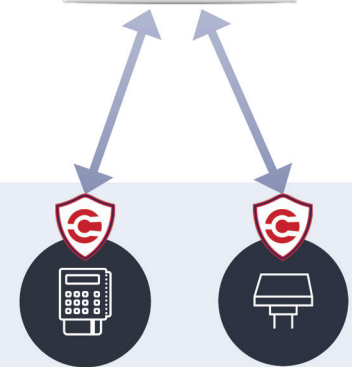
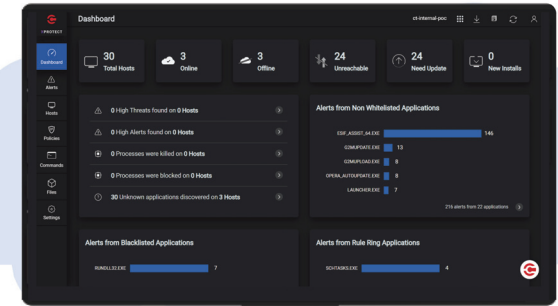
ColorTokens Xprotect is a robust, signature-less, Zero Trust endpoint solution that works at the kernel level to detect, alert, and prevent unauthorized processes running on POS terminals. End-to-end encryption of endpoints provides an additional layer of security by making data communications tamper-proof.

Achieve proactive POS system security with ColorTokens Xprotect:

- ❖ Flexibility to block/unblock applications as per store or company requirements.
- ❖ No malware, known or unknown, can execute and compromise the POS system.
- ❖ Single centralized dashboard to manage multiple stores that are geographically distributed.
- ❖ Asset inventory of all operational and non-operational POS in real-time.
- ❖ Maintain business continuity, with zero impact to performance.
- ❖ No need to download signatures – bandwidth usage is exceptionally efficient.
- ❖ Installation takes just minutes, and users can manage remotely without any in-store support staff.
- ❖ 24x7 support to ensure uptime and business continuity.
- ❖ Customized retail reports package based on store, assets, and discovered resources.

XPROTECT FOR POS AND RETAIL SYSTEMS PROTECTION

CENTRALIZED, WEB-BASED CONSOLE



POS

Kiosks

Different policies for POS systems and kiosks

ULTRA-LIGHT WEIGHT AGENT

RETAIL STORE

Conclusion

Given the increased frequency and sophistication of today's cyber threats – and the negative consequences of a cyber attack on a company's revenue and brand reputation – information security has become a boardroom discussion. In their journey to digital transformation, businesses require a proactive Zero Trust approach that secures their fragmented POS environments and cardholder data – no matter the type or location of the data center, whether on-premises or in the cloud. ColorTokens empowers enterprises to simplify their digital transformation journey, proactively secure POS systems from known and unknown threats, and move towards implementing an end-to-end Zero Trust security architecture.

Source:

⁴ Symantec and Big Commerce





ColorTokens Inc., a leader in proactive security, provides a modern and new generation of security that empowers global enterprises to singlehandedly secure cloud workloads, dynamic applications, endpoints, and users. Through its award-winning cloud-delivered solution, ColorTokens enables security and compliance professionals to leverage real-time visibility, workload protection, endpoint protection, application security, and Zero Trust network access—all while seamlessly integrating with existing security tools. For more information, please visit www.colortokens.com

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