MORPHISEC
Endpoint Threat Prevention Platform

POWERED BY MOVING TARGET DEFENSE

Protect your business from zero-days and evasive advanced threats with Moving Target Defense. Morphisec works behind the scenes to safeguard your applications and web browsers and prevent any attempts at access. You get powerful, ubiquitous protection that is deceptively simple to operate, no compromises.

Closing the Security Gap

Malicious actors are more clever, creative and persistent than ever, releasing millions of threats each year. Attacks change so rapidly that signature and behavior-based protection solutions simply can't keep up — even sophisticated AI threat-hunting solutions. Adversaries use their profound knowledge of the target environment to develop stealthy, highly-targeted attacks and use polymorphism, obfuscation, encryption and other advanced techniques to evade security mechanisms. Applications remain vulnerable from the time a new attack is launched until it is discovered, a solution developed, and a patch deployed.

Reducing Risk While Accelerating Security ROI

Morphisec redefines the way security is approached with its Moving Target Defense-based platform. Built around uncompromising protection, it enables operators to get better value out of existing security products that simply cannot prevent the volume of attacks and exploits they face daily. Morphisec blocks exploits, evasive malware and fileless attacks pre-execution deterministically, without relying on IOCs, before any damage happens. It deploys easily into existing security infrastructures and does not generate false-positives or compromise system or network performance.

Built to Defeat Fileless Attacks

Fileless, in-memory attacks evade detection by co-opting legitimate system resources. They are 10x more likely than file-based attacks to breach your company. Morphisec pre-emptively prevents such attacks by making these resources inaccessible.

Powerful Prevention at the Earliest Stage

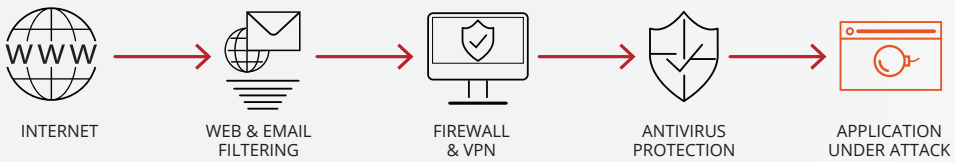
Morphisec's Moving Target Defense-based platform prevents known and unknown threats unknown threats at the earliest stage of the attack lifecycle.

- Prevents advanced threats and zero-days immediately and completely. No detection or hunting required.
- Set and Forget — Non-invasive agent with zero performance degradation and no updates needed.
- Purpose-built to reduce false-positives. No alert fatigue and wasting resources on attacks that never occurred.
- Integrates into the SOC analyst workflow, as well as SOAPA and CARTA methodologies for continuous protection and risk assessment.

Business-Aligned Security

Cut your security risk without cutting into business operations or productivity. Morphisec is built from the ground up to align business and security needs.

- Ubiquitous protection without continuous monitoring or generating reams of data.
- Minimizes IT complexity and protects business continuity.
- Protects in between patching cycles — when organizations are the most vulnerable.
- Functions across virtual, physical or hybrid IT environments.



MORPHISEC
Moving Target Defense

Moving Target Defense

Moving Target Defense is a pre-emptive early prevention strategy that uses stealth tactics employed by hackers, like deception, obfuscation, modification, and polymorphism. Morphisec Endpoint Threat Prevention is the only endpoint protection platform to employ this highly sophisticated technology. Its patented polymorphic engine continuously and randomly moves and morphs memory resources so attacks cannot execute. Threats are immediately stopped and trapped, with detailed forensic information captured.

Morphisec protects endpoints from all known and unknown exploit-based, memory injection attacks in applications such as browsers and productivity tools. It prevents evasive attacks, zero-days and attacks targeting known but un-patched vulnerabilities. It does so in a deterministic manner, without generating alerts to be analyzed, via a lightweight, 2MB agent requiring no administration.

How it Works

1. MORPH & CLOAK: Turning endpoints into unpredictable targets

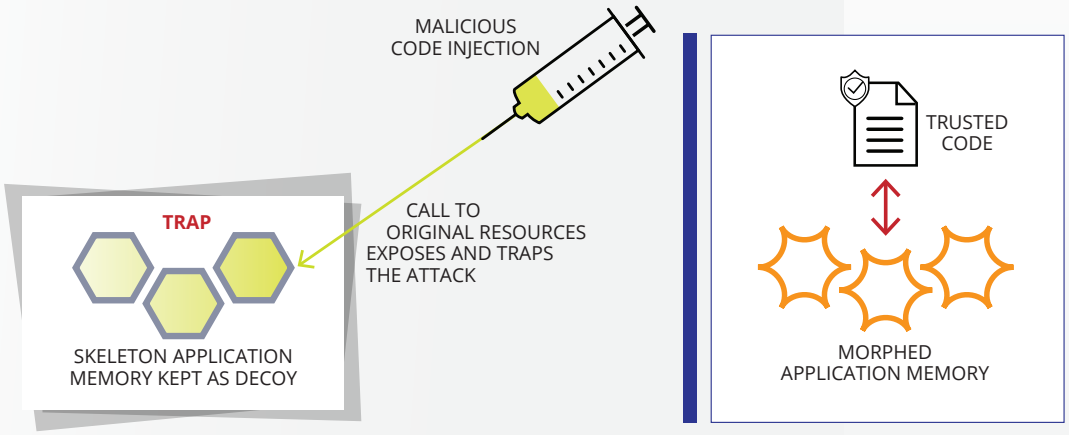
As an application loads to the memory space, Morphisec's polymorphic engine mutates the process structure. Locations of libraries, functions, variables and other data segments are transformed in a controlled manner. Each run is unique, per process instance, making the memory constantly unpredictable to attackers.

2. PROTECT & DECEIVE: Controlled access to the morphed structure

Next, the legitimate application code is made aware of the new locations of its required resources. The application continues to load normally and runs without any change to its behavior. Morphisec keeps a lightweight dummy of the original application memory to use as a trap.

3. PREVENT & UNCOVER: Neutralize and expose attacks

Attacks target the original structure, unaware that it's now a dummy. Lacking knowledge of the new structure, malicious code cannot access the functions it needs and fails to execute – the kill chain is stopped as it begins. Attacks are prevented, trapped and logged, together with rich forensic data for analysis.



BENEFITS

NEUTRALIZE ADVANCED ATTACKS AND BROWSER-BASED THREATS

Prevents all zero-days and sophisticated, evasive threats at the earliest stage, independent of threat type, technique or behavior.

COMPREHENSIVE PATCH GAP COVERAGE

Prevents exploitation of any unpatched security vulnerability, including potential exploits during operating system patch cycles.

IMMEDIATE POSITIVE ROI

No need to investigate or analyze, no false positive alerts, no remediation costs.

SECURE WITHOUT DISRUPTION

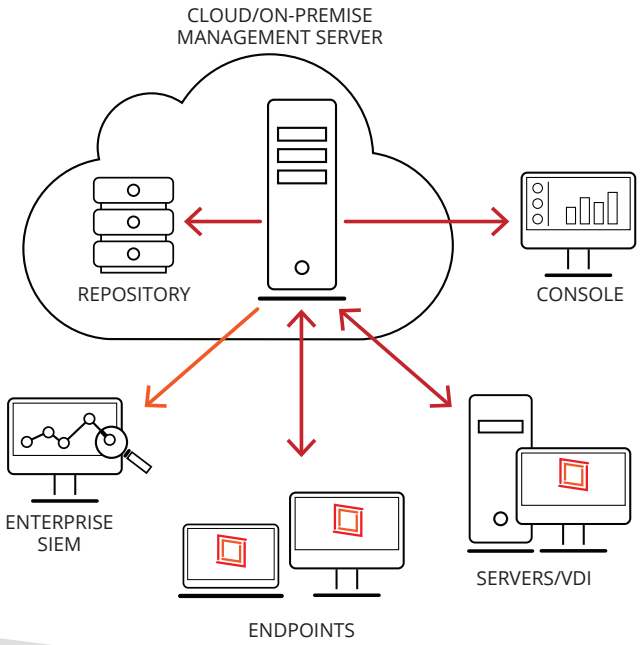
Extremely lightweight single agent active only at load-time, installs quickly, requires no management and has zero performance penalty.

REAL-TIME PROTECTION

Blocks and traps attacks pre-breach, before they can do any damage. Provides online and offline protection.

Solution Infrastructure

Morphisec Endpoint Threat Prevention is a Windows Service application built on a highly-scalable, tiered architecture. It can support organizations of any size, in a single or multi-site configuration. Blocked attacks are logged, along with the full attack fingerprint, and reported to the Management Console or organizational SIEM for forensic analysis. All communication is encrypted, and connections between tamper-resistant agents and servers are mutually authenticated.



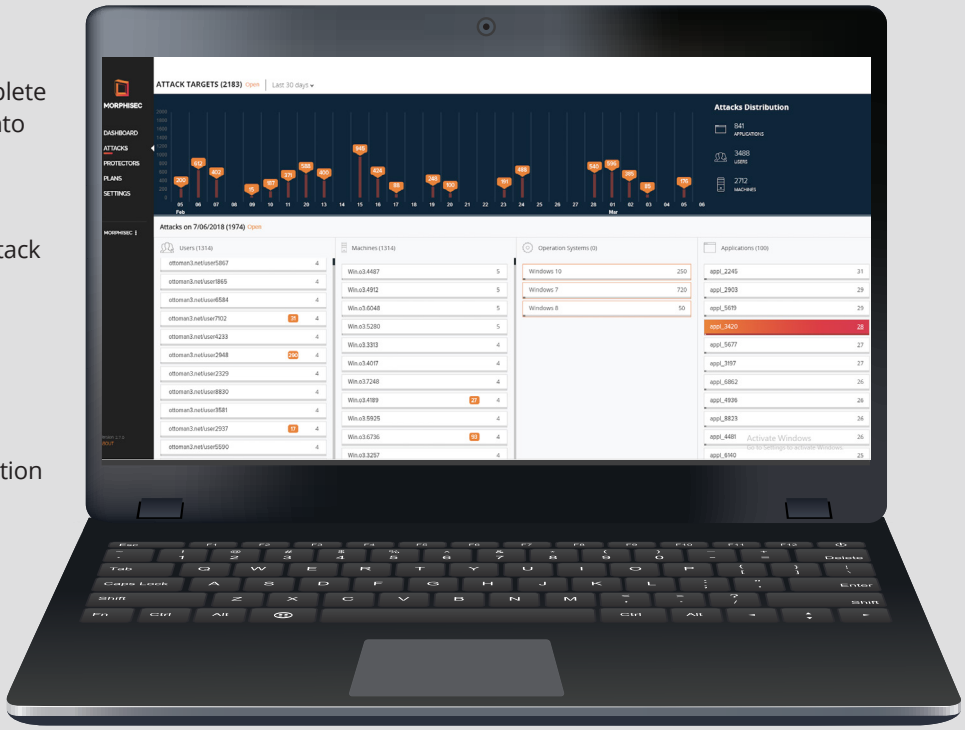
Key Components

MANAGEMENT SERVER

On-premise or cloud-based, the Management Server handles endpoint agent management and tracking, SIEM integration and dashboard generation.

MANAGEMENT CONSOLE

The Management Console provides complete system control and immediate visibility into organization threats via clear, powerful, customizable dashboards.



- Organizational risk posture based on attack and exploit prevention volume and customizable KPIs.
- Forensics and analytics for enhanced intelligence and drill-down.
- Automated reporting and threat prevention notification.

AGENT

All prevention functions are performed autonomously by our lightweight 2 MB DLL Protector endpoint agent.

- Prevent attacks without prior knowledge — no need to update rules, signatures or databases, and no learning algorithms.
- Fully application agnostic — safeguards all your applications without tedious configuration.
- No runtime components and securely communicates with the Management Console for reporting and tracking purposes only.

Suitable for Enterprise and Mid-sized Business

Morphisec adapts to the business needs of organizations of all sizes, protecting systems, intellectual property and brand without impeding operations. Enterprise-critical features include auditing capabilities, Active Directory integration and seamlessly integrating with organizational deployment systems and SIEMs.

Morphisec's unparalleled prevention capabilities, however, do not depend on the forensic data captured. So businesses with limited resources get the same level of protection as large enterprises. The system does not require daily maintenance or rule setting. And because Morphisec has zero performance impact at run-time, it easily supports endpoints that require high performance and cannot afford rapid changes.

Morphisec for VDI

Morphisec is very lightweight and requires no updating, making it an optimal security solution for VDI. Morphisec Endpoint Threat Prevention protects across virtual, physical and hybrid environments, with seamless support for all major VDI systems including Citrix VDI and MS VDI, both persistent and non-persistent (pooled) running at the VDI level. It also supports Application Virtualization platforms such as Citrix XenApp.

Third Party Partnerships and Integrations

- **CitrixReady partner:** Certified against the latest versions of Citrix XenApp and Citrix XenDesktop, and Citrix Azure.
- **Opswat bronze partner:** Tested by Opswat for quality, false positives, and compatibility with over 1,000 devices from 40+ leading access control vendors.
- **RSA Netwitness partner:** Certified interoperability with RSA Netwitness Integrations.
- **SIEM Integrations:** McAfee Enterprise Security Manager, Splunk Enterprise Security, IBM QRadar, HP Arcsite, Rapid7 InsightIDR

Technical Specifications and Requirements

ENDPOINT PROTECTOR	
Hardware	Hardware recommended by Microsoft to run the software
Software	A physical or virtual image running the following: Microsoft Windows 7 (32-bit and 64-bit) with a Windows update that supports SHA-2; Microsoft Windows 7, Service Pack 1 (32-bit and 64-bit); Microsoft Windows 8, 8.1; Microsoft Windows 10; Microsoft Windows Server 2008 R2, 2012/2012 R2, 2016 In addition, the image must include Microsoft .net 4.0 or later.

MANAGEMENT SERVER	
Hardware	Intel 64-bit Pentium 2 CPU 4 core or 8 core hyper threading, Recommended RAM 16G **Disk size:** Recommended 1T, minimum 250 G **Disk:** Recommended: Raid 5 with backup. Minimum: Raid 0
Software	A physical or virtual image running Microsoft Windows Server 2012 R2 or later

ABOUT MORPHISEC

Morphisec offers an entirely new level of innovation to customers in its Endpoint Threat Prevention product, delivering protection against the most advanced cyberattacks. The company's patented Moving Target Defense technology prevents threats others can't, including APTs, zero-days, ransomware, evasive fileless attacks and web-borne exploits. Morphisec provides a crucial, small-footprint memory-defense layer that easily deploys into a company's existing security infrastructure to form a simple, highly effective, cost-efficient prevention stack that is truly disruptive to today's existing cybersecurity model.

Third-party Validation

ESG Enterprise Strategy Group

"Morphisec improves security efficacy, while streamlining security operations by reducing security alert volumes and freeing up staff to focus on more pressing strategic initiatives."

— FROM ESG REPORT ON ADVANCED PREVENTION FOR ENDPOINT SECURITY

SE Labs Gartner CRN *CRN NAMES MORPHISEC ONE OF THE TOP 10 CYBERSECURITY STARTUPS OF 2018*

MORPHISEC Moving Target Defense

www.morphisec.com