

Prevention-First Security with Morphisec

Preemptive Protection in Action

As ransomware evolves into more sophisticated and evasive forms, traditional security solutions often fall short. Morphisec delivers proactive, prevention-first security powered by advanced endpoint deception technology, designed to stop ransomware and advanced threats at every stage of the attack chain. This innovative strategy blocks threats proactively, focusing on pre-execution, execution, and post-execution stages to safeguard critical assets, reduce operational risks, and ensure business continuity.

Breaking the Modern Ransomware Chain

Morphisec disrupts ransomware at every stage of the attack chain, from reconnaissance to deployment.

Pre Execution	During Execution			Post Execution
Reconnaissance	Lateral Movement & Initial Access	Exfiltration	Deployment	Extortion

Reconnaissance (Pre-Execution)

Attackers analyze security gaps, vulnerabilities, and misconfigurations during the reconnaissance phase. Morphisec neutralizes these early efforts by:

- Monitoring security baseline gaps to identify and address weak points.
- Detecting vulnerabilities and misconfigurations in real-time.
- Enforcing service and privileged account hygiene to prevent initial access.
- Tracking outdated applications and end-of-life (EOL) applications to reduce exposure.
- Adaptive Exposure Management, purpose-built to strengthen Continuous Threat Exposure Management (CTEM) programs and enable preemptive cyber defense.

Value Add: By stopping attackers during reconnaissance, Morphisec limits their ability to gather information or exploit weaknesses, ensuring they cannot progress further in the attack lifecycle.



Lateral Movement & Initial Access (During-Execution)

Once attackers gain a foothold, they seek to spread across the network. Morphisec prevents this lateral movement by:

- Stopping privilege escalation and exploitation techniques.
- Detecting obfuscation and lateral movement tools like PsExec and Cobalt Strike.
- · Preventing tampering with security controls.
- Disrupting UAC and AMSI bypasses commonly used by attackers.
- · Blocking credential theft attempts from memory or browsers.

Value Add:

Morphisec ensures attackers cannot gain the access they need to infiltrate deeper into the organization, minimizing the scope of potential damage.

Exfiltration (During Execution)

During this phase, attackers attempt to steal sensitive data to use for extortion or sale. Morphisec blocks these actions by:

- Blocking data exfiltration attempts in real time.
- Preventing LSASS dump attempts to protect credentials.
- Blocking known exfiltration tools to neutralize data theft attempts.

Value Add:

By stopping exfiltration, Morphisec protects sensitive data from compromise, reducing financial and reputational risks.

Deployment (During Execution)

The final step for attackers often involves encrypting data or destroying backups to maximize their leverage. Morphisec prevents ransomware deployment by:

- Preventing endpoint encryption through decoys and traps.
- Blocking shadow copy deletion to protect recovery files.
- Preventing data destruction to safeguard critical assets.

Value Add:

Morphisec ensures ransomware cannot achieve its ultimate goal, enabling organizations to recover quickly and minimizing downtime.

Post Execution

Morphisec is leading the shift toward integrated forensic and data recovery with its Adaptive Recovery capabilities.

- Real-time evidence capture that preserves memory, process data, file paths and attacker activity.
- Secure out-of-band storage, keeping artifacts securely outside of the compromised environment to ensure they remain intact.
- Parallel data and forensic recovery with recovery workflows that restore encrypted files and deliver critical forensic artifacts for root cause analysis and regulatory reporting.

Value Add: Ensure business operations and forensic evidence can be restored simultaneously even when systems are encrypted or offline.



Key Benefits of Morphisec's Anti Ransomware Assurance Suite



Proactive Defense

Stop advanced threats before they execute, ensuring attackers cannot gain a foothold.



Lightweight, Impact-Free Solution

A 6MB agent with negligible performance impact and no need for frequent updates.



Defense-in-Depth

Complement existing tools like EDR and XDR, strengthening overall security posture.



Cost Efficiency

Reduces breach recovery costs, minimizes false positives, and eliminates unnecessary operational overhead.



Better Visibility

Early visibility into multi-dimensional exposures and gaps for ensured business continuity.



Enhanced Compliance

Meet audit and regulatory requirements while reducing cyber insurance premiums.

Take Control of Your Security Posture

Morphisec's prevention-first approach is the next generation of cybersecurity.

Protect your organization from ransomware and advanced threats with a proactive, resilient solution that works seamlessly with your existing tools.

Get a demo

About Morphisec

Morphisec is the trusted global leader in prevention-first Anti-Ransomware protection, redefining cybersecurity with our industry-leading Automated Moving Target Defense (AMTD) technology. Our solutions are trusted by over 7,000 organizations to protect more than 9 million endpoints worldwide, stopping 100% of ransomware attacks at the endpoint and safeguarding businesses against the most advanced and dangerous threats, including zero-day exploits and ransomware.

At Morphisec, we don't just fortify defenses – we proactively prevent attacks before they happen, delivering unmatched protection and peace of mind to our customers.

With our Ransomware-Free Guarantee and commitment to Preemptive Cyber Defense, we set the standard for accountability and innovation in the fight against modern cybercrime.

As a rapidly growing company, we are dedicated to empowering security professionals and organizations to adapt, protect, and defend against ever-evolving threats. Join us in shaping the future of cybersecurity with prevention-first strategies and unparalleled expertise.

To learn more, visit morphisec.com/demo