The fight against modern malware, which is dynamic and often targeted, requires a multi-layered approach. The more multi-layered your security, the fewer incidents you'll need to resolve. ESET began incorporating proactive and smart technology into its scanning engine more than 20 years ago, and — thanks to the efforts of our global research labs — continues to add extra layers of protection.

**Network attack protection**

This extension of firewall technology improves detection of known vulnerabilities, for which a patch has not yet been deployed. It also allows for faster and more flexible detection of malicious traffic.

**Machine learning**

ESET has its own in-house machine learning engine, called ESET Augur. It monitors and evaluates all executed applications using behavioral heuristics.

**ESET ransomware shield**

This technology monitors and evaluates all executed applications based on their behavior and reputation.
Cloud malware protection system

The ESET Cloud Malware Protection System is one of several technologies based on ESET’s LiveGrid cloud system. Possible threats are monitored and submitted to the ESET cloud via the ESET LiveGrid Feedback System for automatic sandboxing and behavioral analysis.

Advanced memory scanner

Advanced Memory Scanner is a unique ESET technology which effectively addresses an important issue of modern malware — heavy use of obfuscation and/or encryption. To tackle these issues, Advanced Memory Scanner monitors the behavior of a malicious process, and scans it once it decloaks in memory.

Exploit blocker

While ESET’s scanning engine covers exploits that appear in malformed document files, and Network Attack Protection targets the communication level, our Exploit Blocker technology blocks the exploitation process itself. Exploit Blocker monitors typically exploitable applications (browsers, email clients, Flash, Java, and more) and focuses on exploitation techniques.

DNA detections

DNA Detections are complex definitions of malicious behavior and malware characteristics. While malicious code can be easily modified or obfuscated, object behavior cannot be changed so easily. Therefore DNA Detection can identify even previously unseen malware which contains genes that indicate malicious behavior.

For comprehensive information on ESET technology, visit eset.com/us/technology