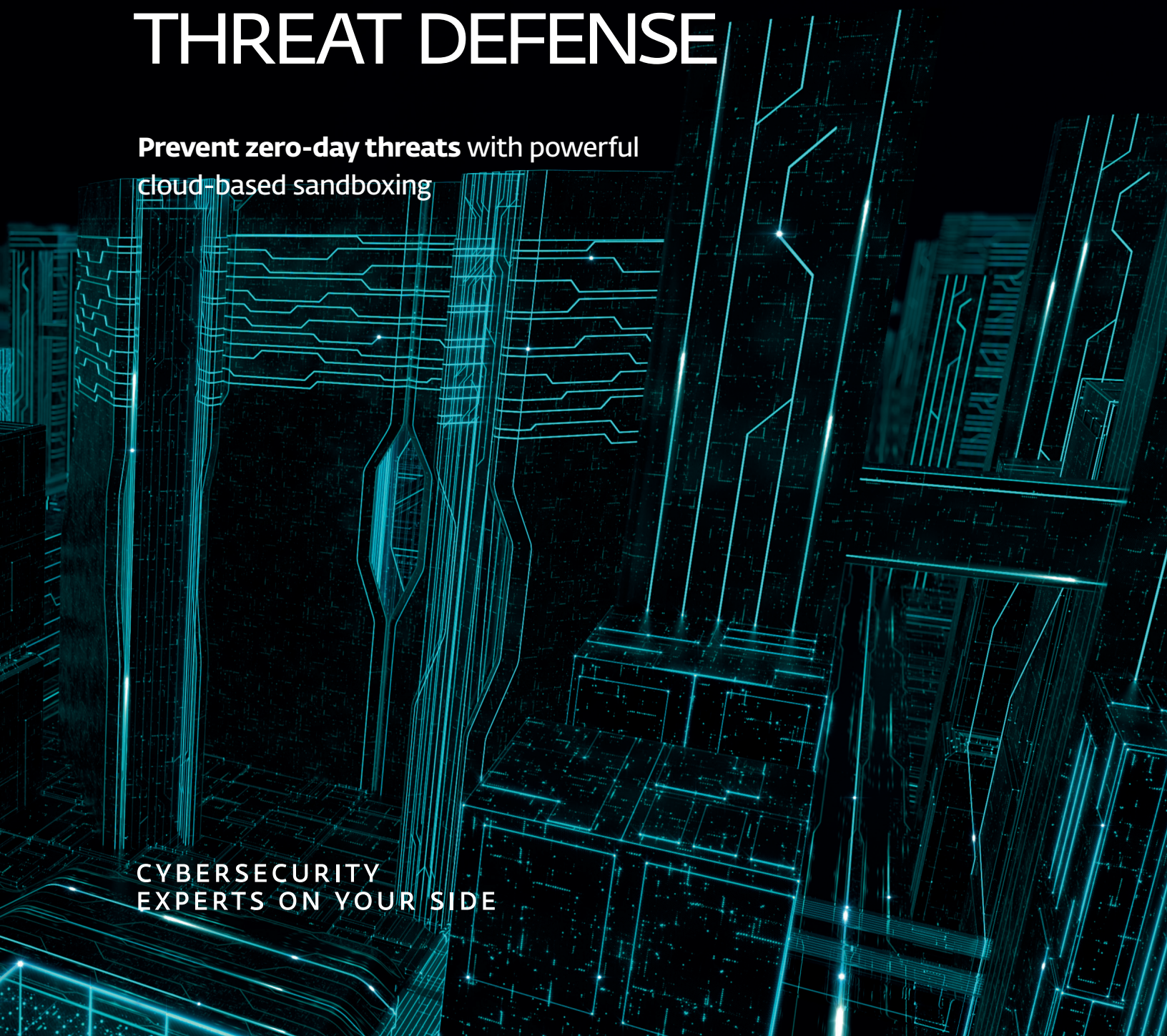
SOLUTION OVERVIEW

DYNAMIC THREAT DEFENSE

Prevent zero-day threats with powerful cloud-based sandboxing



CYBERSECURITY
EXPERTS ON YOUR SIDE

What is a **cloud security sandbox product?**

A cloud security sandbox is an isolated test environment in which a suspicious program is executed and its behavior is observed, noted and then analyzed in an automated manner.

ESET Dynamic Threat Defense provides another layer of security for ESET products like Mail Security and Endpoint solutions by utilizing a cloud-based sandboxing technology to detect new, never-before-seen types of threats. This sandbox consists of multiple types of sensors that complete static analysis of code, deep inspection of the sample with machine learning, in-memory introspection and behavior-based detection.

Why a **cloud security sandbox?**

RANSOMWARE

Ransomware has been a constant concern for industries worldwide ever since Cryptolocker in 2013. Despite ransomware existing for far longer, it was never a major threat that businesses were concerned about. However, now a single incidence of ransomware can easily render a business inoperable by encrypting important or necessary files.

A cloud security sandbox product provides an additional layer of defense outside of a company's network to prevent ransomware from ever executing in a production environment.

TARGETED ATTACKS AND DATA BREACHES

Today's cybersecurity landscape is constantly evolving with new attack methods and never-before-seen threats. When an attack or data breach occurs, organizations are typically surprised that their defenses were compromised or are completely unaware that the attack even happened. After the attack is finally discovered, organizations then reactively implement mitigations to stop this attack from being repeated. However, this does not protect them from the next attack that may use a different vector.

A cloud security sandbox's approach is much more effective than just looking at the appearance of the potential threat because it goes beyond just the mere appearance and instead observes what the potential threat does. This makes it much easier to determine whether the program is malicious or benign.

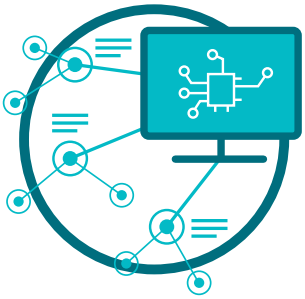
A cloud security sandbox product provides an additional layer of defense outside of a company's network.

A cloud security sandbox goes beyond just the mere appearance and instead observes what the potential threat does.

Our products and technologies stand on 3 pillars

ESET LIVEGRID®

Whenever a zero-day threat such as ransomware is seen, the file is sent to our cloud-based malware protection system, LiveGrid®, where the threat is detonated and behavior is monitored. Results are provided to all endpoints globally within minutes without requiring any updates.

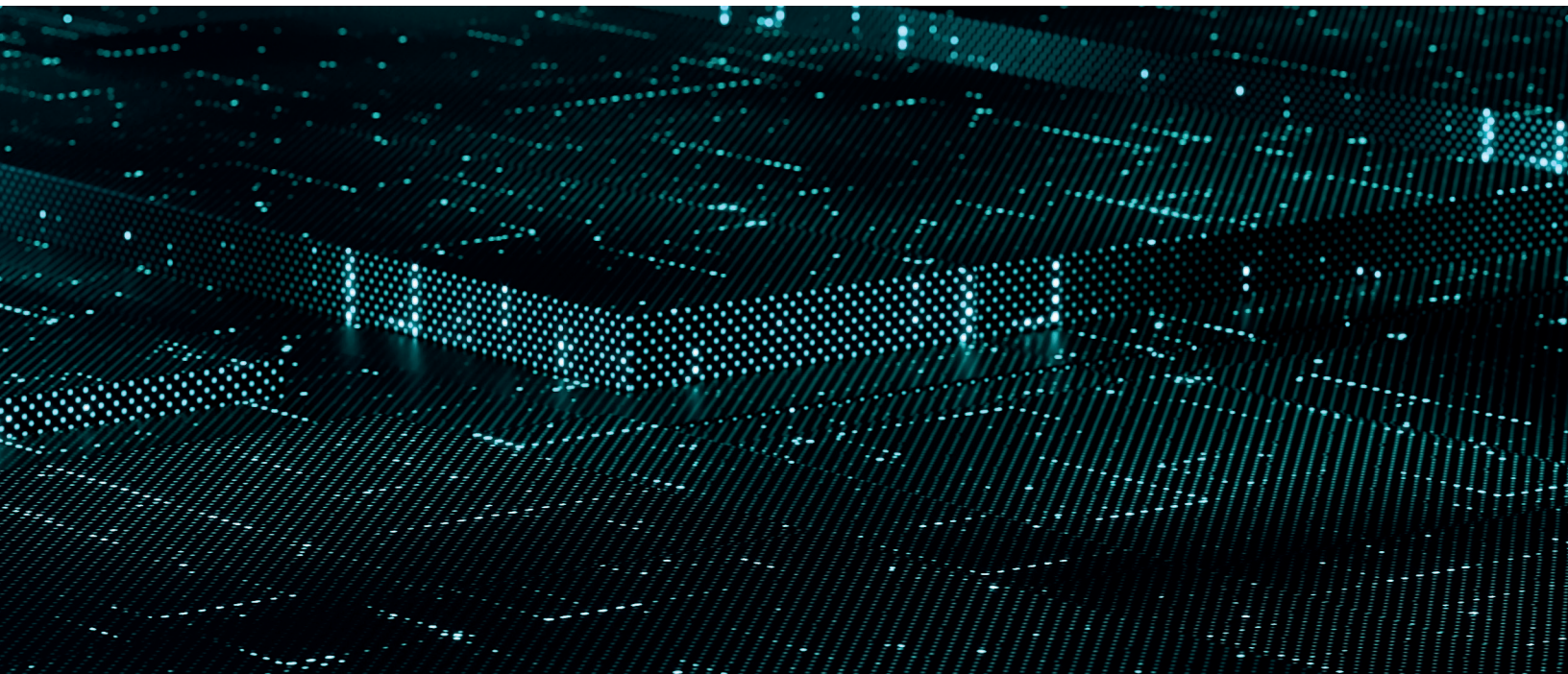


MACHINE LEARNING

Uses the combined power of neural networks and handpicked algorithms to correctly label incoming samples as clean, potentially unwanted or malicious.

HUMAN EXPERTISE

World-class security researchers share elite know-how and intelligence to ensure the best round-the-clock threat intelligence.



The ESET difference

MULTILAYERED PROTECTION

Within Dynamic Threat Defense, ESET utilizes 3 different machine learning models once a file is submitted. After that, it runs the sample through a full sandbox which simulates user behavior to trick anti-evasive techniques. Next, a deep learning neural network is used to compare the behavior seen versus historical behavioral data. Last but not least, the latest version of ESET's scanning engine is used to take everything apart and analyzed for anything unusual.

FULL VISIBILITY

For every analyzed sample, you can view the final result in ESET Security Management Center, or in ESET Cloud Administrator. In addition, customers with more than 100 seats get a full behavioral report with detailed information about samples and their behavior observed during analysis in the sandbox – all in an easy-to-understand form. Not only do we display samples that were sent to ESET Dynamic Threat Defense but everything that is sent to ESET's Cloud Malware Protection System – ESET LiveGrid®.

MOBILITY

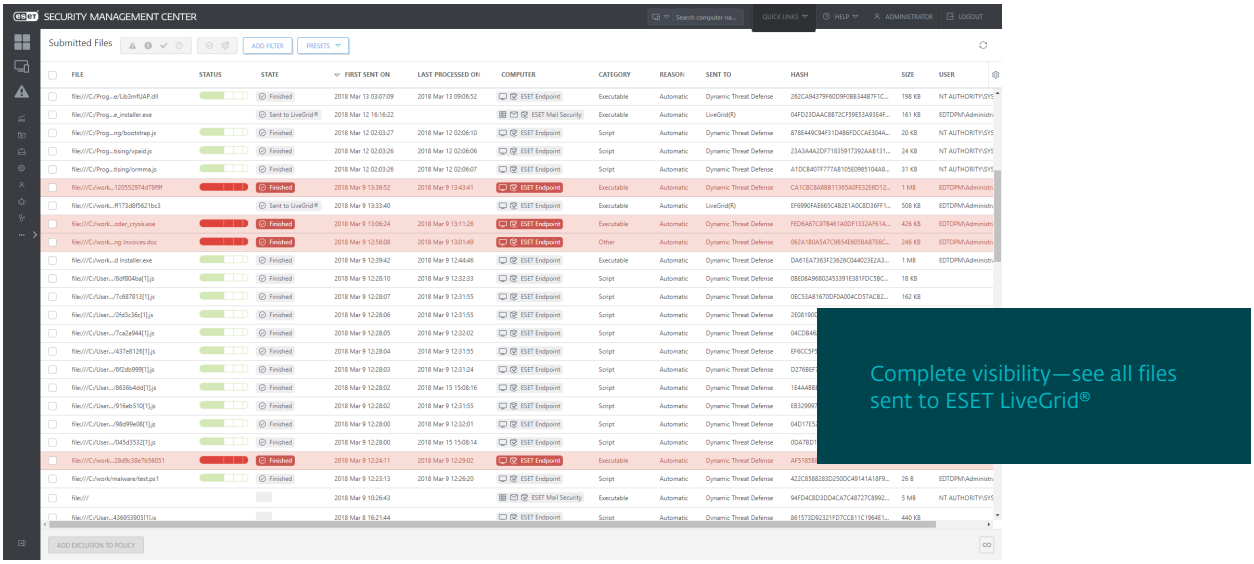
Nowadays, customers are increasingly working remotely and not on-premise. ESET Dynamic Threat Defense can analyze files wherever the users are and immediately protect the entire company.

UNPARALLELED SPEED

Every minute counts, which is why ESET Dynamic Threat Defense is able to analyze the majority of samples in under 5 minutes. If a sample was previously analyzed, it is simply a few seconds until all devices at your organization are protected.

PROVEN AND TRUSTED

ESET has been in the security industry for over 30 years, and we continue to evolve our technology to stay one step ahead of the newest threats. This has led us to be trusted by over 110 million users worldwide. Our technology is constantly scrutinized and validated by third-party testers who show how effective our approach is at stopping the latest threats.



Use cases

Ransomware

USE CASE

Ransomware tends to enter unsuspecting users' mailboxes through email.

SOLUTION

- ✓ ESET Mail Security automatically submits suspicious email attachments to ESET Dynamic Threat Defense.
- ✓ ESET Dynamic Threat Defense analyzes the sample, then submits the result back to Mail Security—usually within 5 minutes.
- ✓ ESET Mail Security detects and automatically remediates attachments that contain the malicious content.
- ✓ The malicious attachment never reaches the recipient.

Granular protection for different company roles

USE CASE

Every role in the company requires different levels of protection. Developers or IT employees require different security restrictions than the office manager or CEO.

SOLUTION

- ✓ Configure a unique policy per computer or per server in ESET Dynamic Threat Defense.
- ✓ Automatically apply a different policy based on different static user group or Active Directory group.
- ✓ Automatically change configuration settings simply by moving a user from one group to another.

Unknown or questionable files

USE CASE

Sometimes employees or IT receive a file that they want to double-check is safe.

SOLUTION

- ✓ Any user can submit a sample for analysis directly within all ESET products.
- ✓ The sample is quickly analyzed by ESET Dynamic Threat Defense.
- ✓ If a file is determined to be malicious, all computers in the organization are protected.
- ✓ IT admin has full visibility into the user who submitted the sample, and whether the file was clean or malicious.

FILE BEHAVIOR REPORT

STATUS	Malicious
SHA-1	ffd6A67c97b461A05f1332Af61A89eA0fb5A540f
SIZE	4367368
CATEGORY	Executable

Detected Behaviors

BEHAVIOR	Malware detected after execution
EXPLANATION	Sample has been detected as malicious after execution
BENIGN CAUSES	Clean applications should not do this
MALICIOUS CAUSES	Malware detected with ESET scanning engine after execution

BEHAVIOR	New files created in the Windows folder
EXPLANATION	Sample has created new files in the Windows folder
BENIGN CAUSES	This is standard behavior for some installers
MALICIOUS CAUSES	Malware tried to hide its presence

BEHAVIOR	Analyzed sample copied
EXPLANATION	Sample has been copied to a different location
BENIGN CAUSES	This is standard behavior for some installers
MALICIOUS CAUSES	Malware tried to hide its presence

BEHAVIOR	Startup list modified
EXPLANATION	Sample has added a new entry to the Windows Startup application list
BENIGN CAUSES	This is standard behavior for some installers
MALICIOUS CAUSES	Malware wants to run after a system reboot

BEHAVIOR	Machine Learning detection
EXPLANATION	Sample behaves very similarly to known malware
BENIGN CAUSES	Clean applications should not do this
MALICIOUS CAUSES	Malware has been detected by Neural network Machine Learning

BEHAVIOR	New files in Program Files folder created
EXPLANATION	Sample has created new files in the Windows Program Files folder
BENIGN CAUSES	This is standard behavior for some installers
MALICIOUS CAUSES	Sample may be a Potentially Unwanted Application

DYNAMIC THREAT DEFENSE

ESET Dynamic Threat Defense technical features

AUTOMATIC PROTECTION

Once everything is set up, there is no action needed by the admin or the user. The endpoint or server product automatically decides whether a sample is good, bad or unknown. If the sample is unknown, it is sent to ESET Dynamic Threat Defense for analyzing. Once analysis is finished, the result is shared and the endpoint products respond accordingly.

TAILORED CUSTOMIZATION

ESET allows per-computer detailed policy configuration for ESET Dynamic Threat Defense so the admin can control what is sent and what should happen based on the receiving result.

MANUAL SUBMISSION

At any time, a user or admin can submit samples via an ESET compatible product for analysis and get the full result. Admins will see who sent what and what the result was directly in the ESET Security Management Center or in ESET Cloud Administrator.

MAIL SECURITY PROTECTION

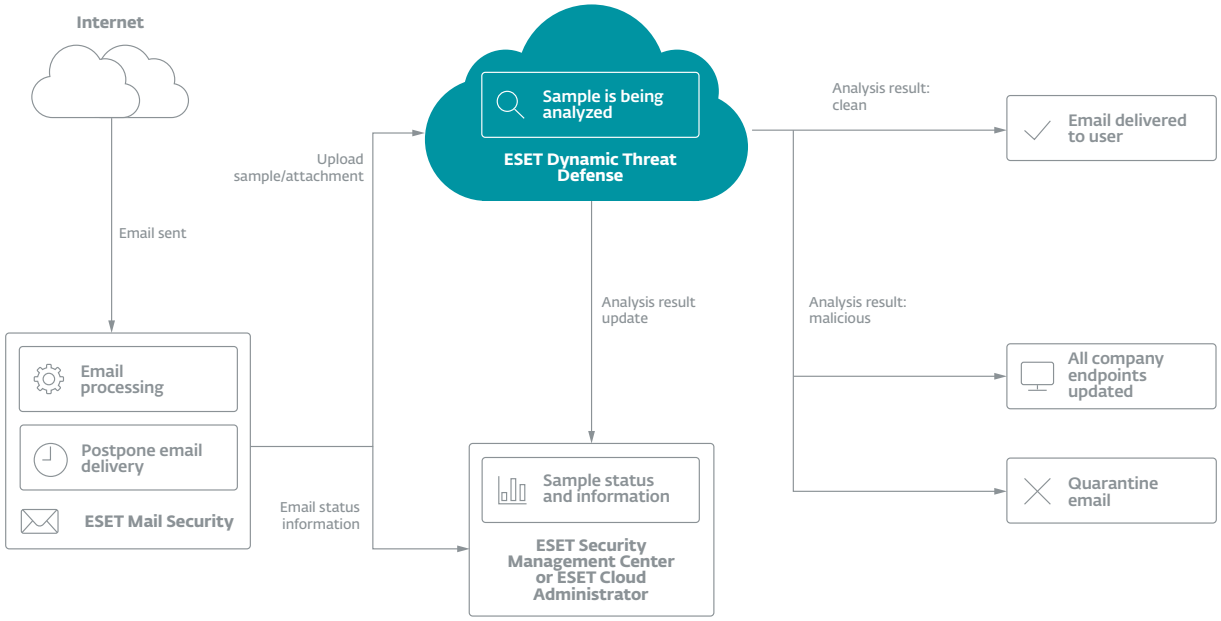
Not only does ESET Dynamic Threat Defense work with files, but it also works directly with ESET Mail Security to ensure that malicious emails are not delivered to your organization. To ensure business continuity, only emails coming from outside of the organization can be sent to ESET Dynamic Threat Defense for inspection.

"The biggest thing that stands out is its strong technical advantage over other products in the marketplace. ESET offers us reliable security, meaning that I can work on any project at any time knowing our computers are protected 100%."

—Fiona Garland, Business Analyst Group IT;
Mercury Engineering, Ireland; 1,300 seats

How **ESET Dynamic Threat Defense works**

With ESET Mail Security



"Our experience with ESET has been more than satisfactory, so much so that we have renewed our licenses for three more years. So, without a doubt, we recommend ESET solutions to all companies that want to increase their levels of security."

—Ernesto Bonhoure, IT Infrastructure Manager;
Hospital Alemán, Argentina, 1,500+ seats

About ESET

For more than 30 years, ESET® has been developing industry-leading IT security software and services, delivering instant, comprehensive protection against evolving cybersecurity threats for businesses and consumers worldwide.

ESET is privately owned. With no debts and no loans, we have the freedom to do what needs to be done for the ultimate protection of all our customers.

ESET IN NUMBERS

110M+
users worldwide

400K+
business customers

200+
countries and territories

13
global R&D centers

SOME OF OUR CUSTOMERS

MITSUBISHI MOTORS
Drive your Ambition

Protected by ESET since 2017
More than 14,000 endpoints

Canon
Canon Marketing Japan Group

Protected by ESET since 2016
More than 9,000 endpoints

Allianz Suisse

Protected by ESET since 2016
More than 4,000 mailboxes

T

ISP security partner since 2008
2 million customer base

ESET is compliant with ISO/IEC 27001:2013, an internationally recognized and applicable security standard in implementing and managing information security. The certification is granted by the third-party accredited certification body SGS and demonstrates ESET's full compliance with industry-leading best practices.

MITRE | ATT&CK™

ESET is a dedicated contributor to MITRE ATT&CK. By being one of the most referenced vendors and active contributors, ESET confirms its commitment to provide the best protection to the community and our customers.

ESET AWARDS

ANALYST RECOGNITION

Gartner

ESET named the only Challenger in 2019 Gartner Magic Quadrant for Endpoint Protection Platforms, for a second year running.

FORRESTER®

ESET was rated a Strong Performer in The Forrester Wave(TM): Endpoint Security Suites, Q3 2019.

The Radicati Group, Inc.
A TECHNOLOGY MARKET RESEARCH FIRM

ESET rated 'Top Player' in 2019 Radicati Endpoint Security report according to two main criteria: functionality and strategic vision.

Gartner Inc, Magic Quadrant for Endpoint Protection Platforms, Peter Firstbrook, Lawrence Pingree, Dionisio Zumerle, Prateek Bhajanka, Paul Webber, August 20, 2019. Gartner does not endorse any vendor, product or service depicted in its research publications. Gartner research publications consist of the opinions of Gartner's research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

Gartner Peer Insights is a free peer review and ratings platform designed for enterprise software and services decision makers. Reviews go through a strict validation and moderation process to ensure information is authentic. Gartner Peer Insights reviews constitute the subjective opinions of individual end users based on their own experiences, and do not represent the views of Gartner or its affiliates.

CYBERSECURITY
EXPERTS ON YOUR SIDE

20200813