



Trend Micro™

Smart Protection Network™

Stop threats before they reach you. Security made smarter.

The Trend Micro™ Smart Protection Network™ infrastructure delivers advanced protection from the cloud, blocking threats in real-time before they reach you. By combining Internet-based—or “in-the-cloud”—technologies with smaller, lighter-weight clients, you will have immediate access to the latest protection wherever and however you connect— from home, within your company’s network or on the go. It’s security made smarter.

PROBLEM

The Internet is a powerful platform that impacts the way we do business and the way we communicate. It offers anonymity, a growing user base, and evolving technologies that expose new, exploitable weaknesses. Anytime we browse the Web or click on a URL embedded in an email, we put ourselves and others at risk from Web-based threats. Today’s threat landscape is characterized by profit-driven cyber criminals, who use the Internet to create a powerful underworld economy.

Today’s threats are sophisticated and dangerous. They are multi-dimensional, coordinated attacks that can cause significant damages including financial losses, identity theft, and loss of intellectual property or trade secrets to name a few. Not just your information, but your personal and business reputations are at stake.

Malicious attacks have grown exponentially. In all of 1988, security vendors dealt with 1,738 unique threat samples. Compare to 2009 where over 13 million unique samples were reported.¹ TrendLabs estimates that by 2015, we may be dealing with over 15,000 threats per hour.

Most security vendors are reacting by issuing more frequent pattern updates. This overwhelming increase in the number of threats and the consequent volume of updates has significant impact on the system resources required to manage these pattern downloads, often leading to critical performance issues—an approach that is not sustainable over time.

SOLUTION

The Trend Micro Smart Protection Network delivers security that’s smarter than conventional approaches by blocking the latest threats before they reach you. Leveraged across Trend Micro’s solutions and services, the Trend Micro Smart Protection Network combines unique “in-the-cloud” technologies and lighter-weight clients, providing stronger protection while reducing your reliance on time-consuming signature-downloads.

The Trend Micro Smart Protection Network offers real-time “better together” security against all types of threats—from malicious files, spam, phishing, and data-stealing malware, to denial of service attacks, Web vulnerabilities and even data loss. Combinations of activities are correlated to determine if they are malicious. That’s because a single activity of a Web threat may appear harmless, but when several activities are detected together, they may present a malicious result.

Stop threats before they reach you. It’s security made smarter.

KEY COMPONENTS

- Web reputation technology
- Email reputation technology
- File reputation technology
- Correlation technology
- Smart feedback
- Threat intelligence (threat collection and threat analysis)

KEY BENEFITS

- New threats, new defense
- Stronger, faster protection—lighter on your system resources
- Anywhere, anytime security
- Multi-layered protection
- Comprehensive security
- Better together security
- Backed by proven content security leadership and expertise

¹ Source: AV-Test.org



KEY COMPONENTS

Web Reputation

With one of the largest domain-reputation databases in the world, Trend Micro's Web reputation technology tracks the credibility of Web domains by assigning a reputation score based on factors such as a Web site's age, historical location changes and indications of suspicious activities discovered through malware behavior analysis. To reduce false positives and increase accuracy, Web reputation assigns reputations to specific pages or links, rather than an entire site, as sometimes only portions of a legitimate site are hacked.

Email Reputation

Trend Micro's email reputation technology validates IP addresses by checking them against a reputation database of known spam sources and by using a dynamic service that can assess email sender reputation in real time. Reputation ratings are refined through continuous analysis of the IP addresses' "behavior," scope of activity and prior history. Malicious emails are blocked in the cloud based on the sender's IP address, preventing threats from reaching the network or the user's PC.

File Reputation

File reputation decouples the pattern file from the local scan engine and conducts pattern file lookups over the network to a Smart Protection Server. That Smart Protection Server may reside on the customer premises (Private Cloud) or even on the Internet (Public Cloud). This in-the-cloud approach alleviates the challenge of deploying a large number of pattern files to hundreds or thousands of endpoints. With Trend Micro's new approach, as soon as the pattern is updated on the Smart Protection Server, protection is immediately available to all clients.

Correlation with Behavior Analysis

Patent-pending correlation technology with behavior analysis correlates combinations of activities to determine if they are malicious. By correlating the different components of a threat and continuously updating its threat databases, Trend Micro has the distinct advantage of being able to respond in real time, providing immediate and automatic protection from file, email and Web threats.

Smart Feedback

Integrated smart feedback provides continuous communication between Trend Micro products, and the company's 24/7 threat research centers and technologies. Each new threat identified via a single customer's routine reputation check automatically updates all of Trend Micro's threat databases, blocking any subsequent customer encounters of a given threat. Because the threat information gathered is based on the reputation of the communication source, not on the content of the specific communication, the privacy of a customer's personal or business information is always protected.

Threat Intelligence

With over 20 years of leadership in Internet content security and threat management, Trend Micro maintains multiple datacenters in locations around the globe, processing more than 2.8 terabytes of data every day. TrendLabssm—Trend Micro's global network of research, service and support centers—is committed to constant threat surveillance and attack prevention. With more than 1,000 security experts worldwide and 24/7 operation, TrendLabs delivers real-time security measures designed to detect, pre-empt, and eliminate attacks.

The Trend Micro Smart Protection Network continuously processes the threat intelligence gathered through its extensive global network of honeypots, submissions, feedback loops, Web crawling technologies, customers, partners and TrendLabs threat research to deliver automatic, real-time protection against the latest threats.

For more information, visit <http://www.trendmicro.com/go/SmartProtectionNetwork>.

BY THE NUMBERS

- Trend Micro Smart Protection Network processes more than 45 billion URL, email, and file queries daily.
- Every day, Trend Micro blocks over 5 billion threats
- Trend Micro processes more than 300 million new URLs daily.
- More than 250 million sample submissions originate from Trend Micro's comprehensive, global threat collection system of traps, honeypots, product feedback loops, and other proven collection techniques.
- Trend Micro maintains multiple datacenters in locations around the globe, processing more than 2.8 terabytes of data every day.
- Trend Micro has more than 1,000 security experts committed to constant global threat surveillance and attack prevention.