

Trend Micro

# OPTIMIZED SECURITY FOR THE MODERN DATA CENTER

Proven, efficient security for dynamic virtualized environments

Virtualization and cloud computing can help your organization achieve significant savings in data center hardware costs, operational expenditures, and energy demands—while achieving improvements in quality of service and business agility. However, as data centers continue to transition from physical to virtual and now increasingly, cloud environments, traditional security can slow down provisioning, become difficult to manage, and cause performance lag. As you scale your virtual environment and adopt software-defined networking, evolving your approach to security can reduce time, effort, and impact on CPU, network, and storage.

**Trend Micro's modern data center security** is optimized to help you safely reap the full benefits of your virtualized environment. Our virtualization-aware security offers many advantages including performance preservation, increased VM densities, and accelerated ROI.

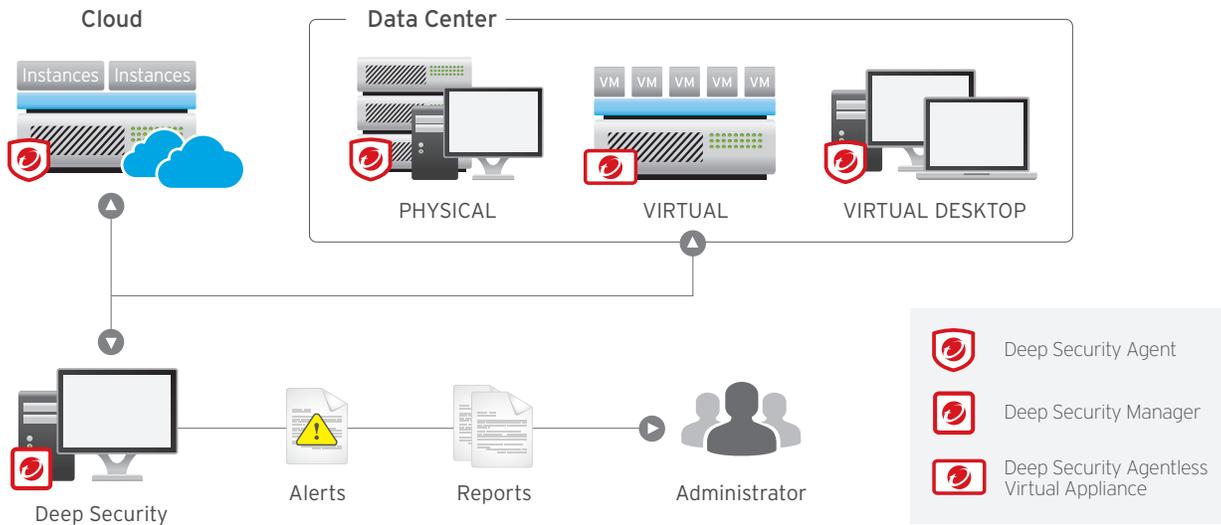
Powered by the [Deep Security platform](#), it offers a broad set of security capabilities with the features you need to benefit from the efficiencies of virtualized environments and help meet compliance. This integrated solution protects physical, virtual, cloud, and hybrid environments.

Trend Micro is the **#1 provider of server security for physical, virtual, and cloud environments**<sup>1</sup>—combining the most complete set of security capabilities with automated management to dramatically reduce both risk and cost.

<sup>1</sup> IDC Worldwide Endpoint Security 2014-2018 Forecast and 2013 Vendor Shares, Figure 2, doc #250210, August 2014

## Why Choose Trend Micro to protect your data center?

- Complete set of security capabilities to protect sensitive applications and data
- Optimized for virtualized environments to improve performance and VM densities while reducing administrative effort
- Support for major virtualization platforms and the first to bring agentless integration with the VMware hypervisor and support for NSX
- Single platform for physical, virtualized, and cloud instances to simplify security policy and infrastructure management
- First and only security architecture designed for service providers and enterprises with software-defined data centers, with support for multi-tenancy, auto-scaling, utility computing, and self-service
- Consistently ranked #1 in server security and chosen by thousands of customers to protect millions of instances



*Optimized Security for the Modern Data Center: Powered by the Deep Security Platform*

## A COMPLETE SET OF SECURITY CAPABILITIES

To be effective, security in your data center must be able to dynamically follow your servers, protect your unpatched servers from vulnerabilities, conduct real-time monitoring, and provide automatic protection. Trend Micro's security for modern data centers, powered by the Deep Security Platform, has a broad set of security capabilities to support all of the above. This integrated solution protects your applications and data from attacks, optimizes data center resources, manages security efficiently, and helps achieve cost-effective internal and regulatory compliance.

### PROTECTS YOUR MODERN DATA CENTER WITH COMPREHENSIVE SECURITY

- **Provides timely protection from constant malware attacks** on your systems and data with Anti-malware and Web Reputation. Powered by the Trend Micro™ [Smart Protection Network™](#), Deep Security deployments leverage the latest in global threat intelligence.
- **Shields unpatched vulnerabilities from attack** with Intrusion Detection and Prevention (IDS/IPS). Security policies update automatically to ensure the right protection is applied to the right cloud servers at the right time.
- **Reduces exposure to attacks** with a host firewall. Blocks attacks and limits communication to only the ports and protocols necessary with the ability to log and audit traffic for compliance reporting at the instance level.
- **Meets compliance file and system monitoring requirements** with Integrity Monitoring. Ensures unauthorized or out-of-policy changes are detected and reported—across files, ports, registries, and more.
- **Identifies important security events** buried in multiple log entries with Log Inspection. Forwards suspicious events to an SIEM system or centralized logging server for correlation, reporting, and archiving.
- **Automatically recognizes VMs** at launch. Initiates security at start to dramatically reduce the risk of any instances going unprotected.
- **Protects your SAP Database and MIME repository** from cross-site scripting and malware attacks with the Deep Security for SAP module.

“In addition to the ability to implement anti-malware functions separately on each server, we highly value the comprehensive security functions that Deep Security has, such as IPS/IDS.”

**Shuichi Hiraki**  
Associate Manager  
Astellas Pharma, Inc.

## OPTIMIZES DATA CENTER RESOURCES WITH VIRTUALIZATION-AWARE SECURITY

Deep Security can be deployed at the hypervisor level with agentless security, or a light and lean, centrally-managed agent can be deployed. This leads to tremendous improvements in management, network usage, speed of scans, host-wide CPU and memory usage, input/output operations per second (IOPS), and overall storage.

This central architecture also makes it possible to have a scan cache. The scan cache eliminates duplication in scanning across similar VMs, which can dramatically improve performance. Full scans complete up to 20 times faster, real-time scanning up to five times faster, and even faster logins for VDI. VDI security is also maximized with agentless architecture, ensuring no extra footprint from a security agent impacts the virtual desktops and the underlying host.

And, to further simplify provisioning, Trend Micro solutions take advantage of the latest VMware platform innovations. Our tight integration with VMware allows automatic protection of new virtual machines as they are brought up, while automatically provisioning appropriate security policy—all without deploying an agent. This is another key method of eliminating security gaps. This agentless approach is continued in the new NSX platform from VMware to ensure these performance advantages are preserved as organizations begin to migrate to the new architecture.

## MANAGES SECURITY EFFICIENTLY, EVEN WHILE TRANSITIONING TO NEW ENVIRONMENTS

Managing security is easy with a single dashboard that allows continuous monitoring of multiple controls across physical, virtual, and cloud environments. Robust reporting and alerting help you focus on what's important so you can quickly identify issues and respond accordingly. You can use Trend Micro Control Manager as your dashboard, or a third-party system such as VMware vRealize, Splunk, HP ArcSight, or IBM QRadar. And because in the virtualized environment, all controls are managed through a single virtual appliance, there is no need to manually keep agents up to date—an especially difficult task when rapidly scaling your operations.

Deep Security supports multiple virtualization platforms such as VMware®, Microsoft® HyperV, and Citrix® XenServer™. Plus it integrates with cloud service providers such as Amazon Web Services™ (AWS), Microsoft Azure, and VMware® vCloud Air™, to provide a single dashboard for managing security across all environments, regardless of location, from one central tool.

## ACHIEVES COST-EFFECTIVE COMPLIANCE

The complexity and fluidity of virtualized and cloud environments pose regulatory and internal compliance challenges. Trend Micro Deep Security supports audits through centralized security controls and consolidated reporting, saving time and resources.

Major compliance requirements for PCI DSS 3.0, as well as HIPAA, NIST, and SAS 70 are addressed with:

- **Detailed, auditable reports** that document prevented vulnerabilities, detected attacks, and policy compliance status
- **Continuous application scanning** to detect web application vulnerabilities
- **Support for internal compliance initiatives** to increase visibility of internal network activity
- **Proven technology** certified to Common Criteria EAL4+

“Agentless security has been key. We know we cannot proceed with ‘traditional’ antivirus products, since the impact on performance is too much in terms of I/O, CPU, and memory.”

**Jussi Tarkkonen**  
System Specialist  
City of Oulu, Finland

“Switching to Trend Micro has raised the level of confidence in security.”

**Scott Forrest**  
Director  
Networks and Infrastructure  
Guess?, Inc

## DEEP SECURITY PROVIDES AUTOMATED AND HIGHLY SCALABLE SECURITY

Trend Micro Deep Security has been chosen by thousands of global customers to protect millions of servers. Advantages include:

- **Comprehensive security capabilities** including anti-malware with web reputation, host-based firewall, intrusion detection/prevention, integrity monitoring, web application vulnerability scanning, and log inspection.
- **Reduced cost and complexity** with security optimized for virtual environments. Reduces operational impact with a single platform for management of security controls and policies across multiple environments: physical, virtual, cloud, hybrid.
- **Agentless architecture** to support major virtualization platform VMware (including NSX). In addition, Trend Micro was the first to be certified for converged infrastructures like Cisco UCS and VCE vBlock, as well as Citrix.
- **Seamlessly extends security** to physical servers and cloud environments including AWS, Microsoft Azure, and VMware vCloud Air.

### TREND MICRO™ DEEP SECURITY™

Advanced server security for physical, virtual, and cloud servers

[Deep Security](#) protects enterprise applications and data from breaches and business disruptions. This comprehensive, centrally managed platform helps organizations simplify security operations while enabling regulatory compliance and accelerating the ROI of virtualization and cloud projects. Agentless security leads to tremendous improvements in management, network usage, speed of scans, host-wide CPU and memory usage, input/output operations per second (IOPS), and overall storage.

- Designed for Today's Data Centers
- Trend Micro Deep Security helps data center operators and architects control operating costs while improving performance with security optimized for virtual environments. Decrease risk, costs, and save time with automatic policy management, agentless operation, and central management.
- Visit [www.trendmicro.com/datacenter](http://www.trendmicro.com/datacenter) to learn more about our modern data center security for your virtualized or hybrid environment.

### ABOUT TREND MICRO

- As a global leader in cloud security, Trend Micro develops security solutions that make the world safe for businesses and consumers to exchange digital information. With more than 25 years of experience, Trend Micro delivers top-ranked security that fits customers' needs, stops new threats faster, and protects data in physical, virtualized, and cloud environments.



Securing Your Journey to the Cloud

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