Trend Micro

APEX ONE™

Automatic, insightful, all-in-one endpoint security from the trusted leader

The threat landscape used to be black and white—you kept the bad stuff out and the good stuff in. Now it's harder to tell the good from the bad, and traditional signature-based antivirus approaches alone are a weak defense against ransomware and unknown threats, which often slip through. Next-generation technologies help with some threats but is in no way foolproof, and adding multiple anti-malware tools on a single endpoint results in too many products that don't work together. To complicate matters, your users are increasingly accessing corporate resources from a variety of locations and devices, and even services in the cloud. You need endpoint security that is smart, optimized, and connected from a proven vendor you can trust.

Trend Micro Apex One™ uses a blend of advanced threat protection techniques to eliminate security gaps across any user activity and any endpoint. It constantly learns, adapts, and automatically shares threat intelligence across your environment.

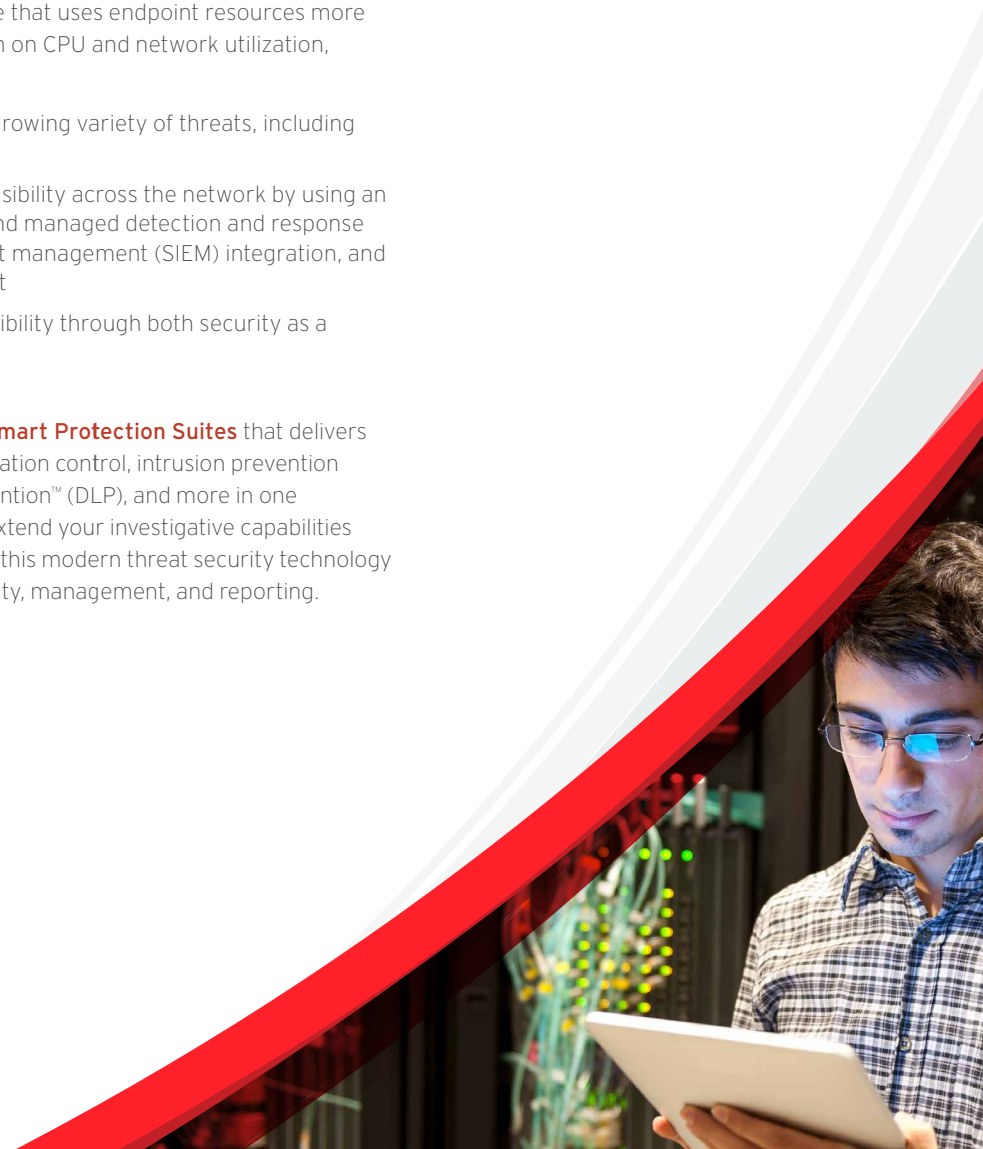
This blend of protection is delivered via an architecture that uses endpoint resources more effectively and ultimately outperforms the competition on CPU and network utilization, giving you:

- Automatic detection and response against an ever-growing variety of threats, including fileless and ransomware
- Insightful investigative capabilities and centralized visibility across the network by using an advanced endpoint detection and response (EDR) and managed detection and response (MDR) toolset, strong security information and event management (SIEM) integration, and an open application programming interface (API) set
- An all-in-one lightweight agent with deployment flexibility through both security as a service (SaaS) and on-premises options

Apex One is a critical component of our Trend Micro™ **Smart Protection Suites** that delivers gateway and endpoint protection capabilities like application control, intrusion prevention (vulnerability protection), Trend Micro™ Data Loss Prevention™ (DLP), and more in one compelling package. Additional Trend Micro solutions extend your investigative capabilities with EDR and Trend Micro™ Endpoint Encryption™. All of this modern threat security technology is made simple for your organization with central visibility, management, and reporting.

Protection Points

- Physical endpoints
- Virtualized endpoints (add-on)
- Microsoft® Windows®, PCs, and servers
- Mac computers
- Point of sale (POS) and ATM endpoints



YOU CAN HAVE IT ALL

- **Advanced malware and ransomware protection:** Defends endpoints–on or off the corporate network–against malware, trojans, worms, spyware, ransomware, and adapts to protect against new unknown variants and advanced threats like cryptomalware and fileless malware.
- **Detection and response capabilities:** Advanced detection and response capabilities are included with Apex One. An optional investigation tool; Trend Micro Endpoint Sensor, and our MDR service are available as add-ons.
- **The industry's most timely virtual patching**: Trend Micro Apex One™ Vulnerability Protection™ virtually patches known and unknown vulnerabilities, giving you instant protection before a patch is available or deployable.
- **Connected threat defense**: Apex One integrates with other security products locally–on your network and also via Trend Micro's global cloud threat intelligence–to deliver network sandbox rapid response updates to endpoints when a new threat is detected. This enables faster time-to-protection and reduces the spread of malware.
- **Centralized visibility and control**: When deployed with Trend Micro Apex Central™, multiple capabilities can be managed through a single console to provide central visibility and control across all functions.
- **Mobile security integration**: Integrate Trend Micro™ Mobile Security™ and Apex One by using Apex Central to centralize security management and policy deployment across all endpoints. Mobile Security includes mobile device threat protection, mobile app management, mobile device management (MDM), and data protection.
- **Available on-premises or as a service**: Apex One can be deployed on-site in your network or is available as a service, with full product parity between the two deployment options.

KEY BUSINESS ISSUES

* Too many malware and ransomware threats getting through, advanced threats evade pre-execution detection
* Need one solution to protect against all known and unknown threats on PC, endpoints, and Macs
* Difficulty correlating and prioritizing all alerts coming through
* Users require more automation and insights when dealing with potential threats
* Endpoint security solutions that don't talk to each other, lengthens time to protection and increase the management burden
* Risks of users working remotely, and sharing information in new ways via the cloud, etc.
* Patching endpoints quickly and thoroughly is difficult, leading to vulnerabilities

Threat Detection Capabilities

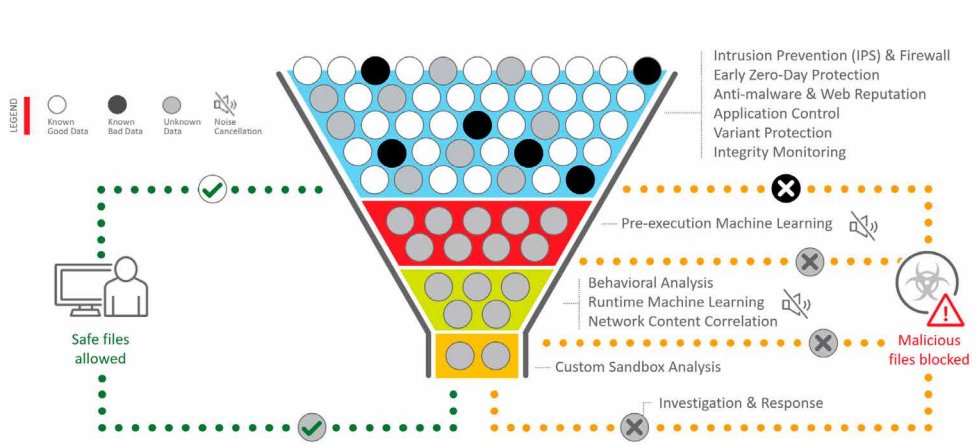
- High-fidelity machine learning (pre-execution and runtime)
- Behavioral analysis (against scripts, injection, ransomware, memory, and browser attacks)
- File reputation
- Variant protection
- Census check
- Web reputation
- Exploit prevention (host firewall, exploit protection)
- Command and control (C&C) blocking
- DLP
- Device control
- Good file check
- Sandbox and breach detection integration
- Detection and response
- Endpoint encryption (requires separate agent)
- Vulnerability protection

See how we stack up

https://www.trendmicro.com/en_us/business/technologies/competitive-benchmarks.html

Maximum XGen™ security

- Infuses high-fidelity machine learning with other advanced detection techniques for the broadest protection against ransomware and advanced attacks.



POWERED BY XGen™ SECURITY

Trend Micro user protection solution is powered by XGen™, a smart, optimized, and connected security approach.

- Progressively filters out threats using the most efficient technique for maximum detection without false positives.
- Blends signatureless techniques, including high-fidelity machine learning, behavioral analysis, variant protection, census check, application control, exploit prevention, and good-file check with other techniques like file reputation, web reputation, and C&C blocking.
- Trend Micro is the first to infuse high-fidelity machine learning, which uniquely analyzes files not only before execution but also during runtime—for more accurate detection.
- Noise cancellation techniques like census and whitelist checking at each layer reduce false positives.
- Instantly shares information on suspicious network activity and files with other security layers to stop subsequent attacks.
- Advanced ransomware protection monitors for suspicious file encryption activities at the endpoint, terminates malicious activities, and even recovers lost files if necessary.

Minimal Impact

Reduce user impact and management costs

- Trend Micro Apex One™ as a Service (only available from Smart Protection Suites) allows you to deploy and manage Apex One from our cloud-based service and offers full-feature parity with the on-premises option.
- This lightweight and optimized agent uses the right detection technique at the right time to ensure minimal impact on devices and networks.
- Comprehensive central view of endpoint status lets you get visibility to security risks quickly.
- Automatic sharing of threat intelligence across security layers enables protection from emerging threats across the whole organization.
- Enable off-premises compliance and protection with the Edge Relay that enables employees to work outside the corporate network and still connect to Apex One without a VPN.
- Customizable dashboards to fit different administration responsibilities.
- 24/7 support means that if a problem arises, Trend Micro is there to resolve it quickly.

Proven Security Partner

Trend Micro has a history of constant innovation to provide the most effective and efficient security technologies. We are always looking ahead to develop the technology needed to fight tomorrow's ever-changing threats.

- Over 30 years of security innovation.
- Protects over 250 million endpoints.
- Trusted by 48 of the top 50 global corporations.
- Trend Micro positioned as one of only three Leaders amongst a field of 21 vendors in the 2018 Gartner Magic Quadrant for Endpoint Protection Platforms.

Click here to learn more

CUSTOMIZE YOUR ENDPOINT PROTECTION

Apex One gives you the freedom to add additional security and investigation capabilities to broaden your endpoint protection. Choose from a range of advanced capabilities designed to fit your organizations unique security needs.

> "With a network like ours, spread across the entire country, being able to secure mobile and desktop devices under one platform simplifies the security for our network and improves our team's productivity."

Greg Bell,
IT Director, DCI Donor Services

VULNERABILITY PROTECTION

Backed by world-class vulnerability research, Apex One security's virtual patching delivers the most-timely vulnerability protection in the industry across a variety of endpoints.

Stop zero-day threats immediately on your endpoints—on and off the network.

Trend Micro Vulnerability Protection, along with Trend Micro's portfolio of endpoint capabilities extend protection to critical platforms, including legacy operating systems.

Defends Against Advanced Threats

- Blocks known and unknown vulnerability exploits before patches are deployed.
- Protects end-of-support and legacy operating systems, for which patches may never be provided.
- Dynamically adjusts security configuration based on the location of an endpoint.
- Protects endpoints with minimal impact on network throughput, performance, or user productivity.
- Shields endpoints against unwanted network traffic with multiple protection layers.
- Protects systems that hold sensitive data, critical to regulatory and corporate policy compliance.

Removes Bad Data from Business-Critical Traffic

- Applies control filters to alert/block specific traffic such as instant messaging and media streaming.
- Uses deep packet inspection to identify content that may harm the application layer.
- Filters forbidden network traffic and ensures allowed traffic through stateful inspection.

Provides Earlier Protection

- Provides protection before patches are deployed and often before patches are available.
- Shields operating system and common applications from known and unknown attacks.
- Detects malicious traffic that hides by using supported protocols over non-standard ports.
- Blocks traffic likely to damage at-risk components using vulnerability-facing network inspection.
- Prevents networking backdoors from penetrating into the corporate network.
- Blocks all known exploits with intrusion prevention signatures.
- Defends custom and legacy applications using custom filters that block user-defined parameters.

Deploys and Manages with Your Existing Infrastructure

- Increases convenience of implementing granular control with simplified dashboard and user-based visibility with the management console.
- Organizes vulnerability assessments by Microsoft security bulletin numbers, CVE numbers, or other important information.
- Provides logging integration with popular SIEM tools.
- Simplifies deployment and management by using the Apex One™ single agent, with centralized visibility and control.

Software

Protection Points

- Endpoints

Threat Protection

- Vulnerability exploits
- Denial of service attacks
- Illegitimate network traffic
- Web threats

Features and Benefits

- Eliminates risk exposure due to missing patches
- Extends the life of legacy and end-of-support (EOS) operating systems
- Reduces down-time for recovery with incremental protection against zero-day attacks
- Allows patching on your own terms and timelines
- Lowers potential legal exposure by improving data security compliance
- Enhances firewall protection for remote and mobile enterprise endpoints

ENDPOINT APPLICATION CONTROL

Trend Micro Apex One™ Application Control™ allows you to enhance your defenses against malware and targeted attacks by preventing unknown and unwanted applications from executing on your corporate endpoints. With a combination of flexible, dynamic policies, whitelisting and blacklisting capabilities, as well as an extensive application catalog, this easy-to-manage solution significantly reduces your endpoint attack exposure. For even greater insight into threats, user-based visibility and policy management is provided in the centrally-managed Apex Central. Apex Central also extends visibility and control across on-premises, cloud, and hybrid deployment models. Gain access to actionable threat intelligence with Trend Micro's connected threat defense from a local sandbox or the Trend Micro Smart Protection Network, which uses global threat intelligence to deliver real-time security from the cloud–blocking threats before they reach you.

FEATURES AND BENEFITS

Enhanced protection defends against malware, targeted attacks, and zero-day threats

- Prevents potential damage from unwanted or unknown applications (executables, DLLs, Microsoft's App Store apps, device drivers, control panels, and other Portable Executable (PE) files).
- Provides global and local real-time threat intelligence based on good file reputation data correlated across a global network.
- Interconnects with additional layers of security to better correlate threat data and stop more threats more often.
- Leverages application data analyzed and correlated from over 1+ billion good file records (Trend Micro Smart Protection Network).
- Complements security like antivirus, host intrusion prevention, data loss prevention, and mobile protection.

Simplified management speeds protection

- Increases convenience of implementing granular control with a customizable dashboard and management console.
- Uses intelligent and dynamic policies that still allow users to install valid applications based on reputation-based variables like the prevalence, regional usage, and maturity of the application.
- Provides greater insight into threat outbreaks with user-based visibility, policy management, and log aggregation. Enables reporting across multiple layers of Trend Micro security solutions through Apex Central.
- Categorizes the applications and provides regular updates to simplify administration using Trend Micro's Certified Safe Software Service.

In-depth whitelisting and blacklisting blocks unknown and unwanted applications

- Uses application name, path, regular expression, or certificate for basic application whitelisting and blacklisting.
- Contains broad coverage of pre-categorized applications that can be easily selected from Trend Micro's application catalog (with regular updates).
- Ensures that patches/updates associated with whitelisted applications can be installed, as well as allowing your update programs to install new patches/updates, with trusted sources of change.
- Features roll-your-own application whitelisting and blacklisting for in-house and unlisted applications.
- Delivers unparalleled breadth of applications and good file data.

Compliance with internal IT policies helps reduce legal and financial liabilities

- Limits application usage to a specific list of applications supported by data loss prevention (DLP) products for specific users or endpoints.
- Collects and limits application usage for software licensing compliance.
- Features system lockdown to harden end-user systems by preventing new applications from being executed.

> "My first objective was to get rid of the heavy overhead that the previous endpoint solution was putting on our systems, my second objective was to introduce security that really worked. Since we replaced the previous solution, we can see that Trend Micro has stopped the infections."

Bruce Jamieson
Network Systems Manager
A&W Food Services of Canada

DATA LOSS PREVENTION (DLP)

Trend Micro Apex One™ DLP minimizes the complexity and cost of data security by integrating DLP functionality directly into your existing Trend Micro endpoint solution. Quickly and easily gain visibility and control of your sensitive data and prevent data loss via USB, email, software as a service applications, web, mobile devices, and cloud storage. Leverage built-in regional and industry-specific templates to simplify deployment and comply with regional guidelines and regulations. Apex One DLP allows you to deploy data security for a fraction of the cost and time of traditional enterprise DLP solutions.

FEATURES AND BENEFITS

Strengthens Data Protection and Control

- Empowers IT to restrict the use of USB drives, USB attached mobile devices, CD/DVD writers, cloud storage, and other removable media with granular device control and DLP policies.
- Enables cloud storage with DLP enforcement of file encryption as well as SaaS application usage with DLP for Microsoft® Office 365®.
- Detects and reacts to improper data use based on keywords, regular expressions, and file attributes.
- Educates employees on corporate data usage policies through alerts, blocking or soft-blocking, and reporting.

Supports Compliance

- Simplifies regulatory compliance with out-of-the-box compliance templates.
- Speeds audits and enforcement with forensic data capture and real-time reporting.
- Provides regional specific templates and data protection options, helping customers comply with data protection guidelines such as GDPR, PCI/DSS, HIPAA, GLBA, SB-1386, and US PII.

Streamlines Administration, Lowers Costs

- Improves visibility and control with a fully-integrated, centrally-managed solution.
- Reduces resource demand and performance impact with a single agent for endpoint security, device control, and content DLP.

Central Point of Visibility and Control

- Integrated with Apex Central to provide a convenient, centralized security management console that consolidates policy, events, and reporting, across multiple DLP solutions.

Protect Data at Rest, In Use, and In Motion

- **Data at rest control points**: Recognizes and processes over 300 file types, including most email and office productivity applications, programming languages, graphics, engineering files, and compressed or archived files. Discovery capabilities scan the endpoint, file server, MailStore, Microsoft© SharePoint© Portal Server repository, including SaaS applications and cloud storage, to see where compliance data is located.
- **Data in motion control points**: Offers visibility and control of data in motion—whether it's in email, webmail, instant messaging (IM), SaaS applications, and most networking protocols such as FTP, HTTP/HTTPS, and SMTP.
- **Data in use control points**: Provides visibility and control of data that's being used in USB ports, CDs, DVDs, COM and LPT ports, removable disks, infrared and imaging devices, PCMCIA, and modems. It can also be configured to monitor copy and paste and print screen.

Granular view of data using identifiers

- In addition to templates, Apex One DLP includes a granular list of truly international identifiers to identify specific data by patterns, formulas, positioning, and more. Identifiers can also be created from scratch.

Advantages of Apex One DLP

Protection Points

- Protect your data–today
- Deploy DLP immediately and gain visibility and control of your data right away

Lower DLP costs

- Save on deployment and maintenance costs compared to traditional DLP

Protect privacy

- Identify, monitor, and prevent data loss–on or off network
- Comply with regulations
- Implement controls for protection, visibility, and enforcement

Educate users

- Notify employees of risky behavior or enforce user controls if necessary

ENDPOINT SENSOR

Provides context-aware investigation and response (EDR), recording and detailed reporting to allow threat analysts to rapidly assess the nature and extent of an attack across email, endpoint, and server*. Custom detection, intelligence, and centralized workflow enables you to:

- Record detailed system-level activities and user actions
- Perform multi-level search across email, endpoints, and servers* using rich-search criteria such as OpenIOC, YARA, and suspicious objects.
- Detect and analyze advanced threat indicators such as fileless attacks.
- Rapidly respond to threats to limit the scope of impact and protect sensitive data before it is lost.

*Note: Endpoint Sensor investigation capabilities across email and server is only available on the SaaS model. Endpoint Sensor on-premises provides investigation and response functions across endpoints.

ENDPOINT ENCRYPTION

Ensures data privacy by encrypting data stored on your endpoints—including PCs, Macs, DVDs, and USB drives, which can easily be lost or stolen. Trend Micro™ Endpoint Encryption, available as a separate agent, provides the data security you need with full-disk encryption, folder and file encryption, and removable media encryption.

- Automates data management with self-encrypting hard drives.
- Encrypts data in specific files, shared folders, and removable media.
- Sets granular policies for device control and data management.
- Manages Microsoft Bitlocker and Apple FileVault

TREND MICRO APEX CENTRAL

This centralized security management console ensures consistent security management and complete visibility and reporting across multiple layers of interconnected security from Trend Micro. It also extends visibility and control across on-premises, cloud, and hybrid deployment models. Centralized management combines with user-based visibility to improve protection, reduce complexity, and eliminate redundant and repetitive tasks in security administration. Apex Central also provides access to actionable threat intelligence from the Trend Micro Smart Protection Network, which uses global threat intelligence to deliver real-time security from the cloud—blocking threats before they reach you.

SECURITY FOR MAC

- Provides a layer of protection for Apple Mac clients on your network by preventing them from accessing malicious sites and distributing malware—even if the malware is not targeted at Mac OS X.
- Reduces exposure to web-based threats, including fast-spreading Mac-targeting malware.
- Adheres to Mac OS X look and feel for positive user experience.
- Saves time and effort with centralized management across endpoints, including Macs.

Protection Points

- Endpoints
- Servers
- Embedded and POS devices

Threat Protection

- Vulnerability exploits
- Malicious applications (executables, DLLs, device drivers, Microsoft Store apps, and others)

Educate users

- Notify employees of risky behavior or enforce user controls if necessary

MINIMUM RECOMMENDED AGENT REQUIREMENTS

AGENT OPERATING SYSTEM:

- Windows 7 (6.1)
- Windows 8/8.1 (6.2/6.3)
- Windows 10 (10.0)
- Windows Server 2008 R2 (6.1)
- Windows Server 2012 (6.2)
- Windows Server 2012 R2 (6.3)
- Windows Server 2016 R2 (10)
- Windows Server 2019
- macOS® Mojave 10.14
- macOS High Sierra 10.13
- macOS Sierra 10.12
- OS X® El Capitan 10.11
- OS X Yosemite 10.10 or later
- OS X Mavericks 10.9 or later

AGENT PLATFORM:

- Processor: 300 MHz Intel® Pentium® or equivalent (Windows 7, 8.1, 10 family) and Intel® Core™ processor for Mac
- 1.0 GHz minimum (2.0 GHz recommended) Intel Pentium or equivalent (Windows Embedded POSReady7)
- 1.4 GHz minimum (2.0 GHz recommended) Intel Pentium or equivalent (Windows 2008 R2, Windows 2016 family, Windows 2019 family)

Memory:

- 512 MB minimum (2.0 GB recommended) with at least 100 MB exclusively for Apex One (Windows 2008 R2, 2012 family)
- 1.0 GB minimum (2.0 GB recommended) with at least 100 MB exclusively for Apex One (Windows 7 (x86), 8.1 (x86), Windows Embedded POSReady 7, 10 (x64) family)
- 2.0 GB minimum (4.0 GB recommended) with at least 100 MB exclusively for Apex One (Windows 7 (x64), 8.1 (x64), 10 (x64) family)
- 512 MB minimum for Apex One on Mac

Disk Space:

- 1.5 GB minimum (3 GB recommended for all products) for Windows, 300 MB minimum for Mac
- Endpoint Sensor requires minimum 2 GB for Windows platform, 300 MB for Mac

Detailed requirements are available online at **www.docs.trendmicro.com**

TREND MICRO™

Securing Your Connected World