Trend Micro™

# DEEP DISCOVERY FAMILY

Advanced threat protection against targeted attacks

## INTRODUCTION

Targeted attacks and advanced threats are customized to evade your conventional security defenses. They remain hidden while stealing your corporate data, intellectual property, and communications, or encrypt critical data until ransom demands are met. To detect targeted attacks and advanced threats, analysts and security experts agree that organizations should use advanced detection technology as part of an expanded strategy to address today's evasive threats.

**Trend Micro Deep Discovery** is a family of advanced threat protection products that enables you to detect, analyze, and respond to today's stealthy, targeted attacks. Powered by XGen™ security, Deep Discovery blends specialized detection engines, custom sandboxing, and global threat intelligence from the Trend Micro™ Smart Protection Network™, for the highest detection rate possible against attacks that are invisible to standard security products. Deployed individually or as an integrated solution, Deep Discovery works with Trend Micro and third-party products to provide advanced threat protection across your organization.


## Key Benefits

**Protection against attacks**
Unique threat detection technologies discover attacks before the damage is done.

**Intelligence for a rapid response**
Deep Discovery and global threat intelligence drive a rapid and effective response.

**Integration of your defenses**
Deep Discovery integrates with your Trend Micro and third party security tools to help prevent successful targeted attacks.

**Protection from integrated threats**
Trend Micro Network Defense, powered by XGen™ security, goes beyond next-gen IPS to provide a blend of cross-generational techniques that apply the right technology at the right time. TippingPoint IPS and Deep Discovery advanced threat protection work closely together to deliver integrated detection and prevention of known, unknown and undisclosed threats.

**Trend Micro™ Deep Discovery™ Inspector** is a network appliance that monitors network traffic across all ports and more than 100 protocols and applications. Using specialized detection engines and custom sandboxing, it identifies the malware, command and control communications (C&C), and activities signaling an attempted attack. Detection intelligence aids your rapid response and is automatically shared with your other security products to block further attacks.

**Trend Micro™ Deep Discovery™ Analyzer** is an open custom sandbox analysis server that enhances the malware detection capabilities of all your security products. Analyzer supports out-of-the-box integration with many Trend Micro products, manual sample submission, and provides an open Web Services interface to allow any product or process to submit samples and obtain results. It also offers added sandboxing for other Deep Discovery products and extends the value of Trend Micro and other security products.

**Deep Discovery Director** is an on-premises orchestration that enables centralized deployment of product and sandbox updates, with smart threat investigation on top of an enterprise-ready deployment architecture. This virtual appliance can also be your central point for advanced threat sharing. Using standards-based formats (STIX and YARA) and transfers (TAXII) it will pull threat information from several sources and share the indicators of compromise (IOC) with Trend Micro and third-party products.

**Deep Discovery Network Analytics** is a module to Deep Discovery Director and provides prioritized visibility into an attack. Leveraging Deep Discovery Inspector as Advanced Persistent Threat (APT) detection and network metadata collection points, Deep Discovery Network Analytics utilizes expert rules to correlate and connect threat detection events against network access events, presenting threat investigators with complete view of the attack lifecycle.

**Deep Discovery Analyzer as a Service** is an add-on to the virtual Deep Discovery Inspector designed to provide cloud sandboxing capabilities. For smaller environments that require a virtual form factor and cloud-based sandboxing, this solution will provide protection from advanced threats and targeted attacks.

**Managed Detection and Response**
Let Trend Micro's security experts and industry leading artificial intelligence help you monitor and prioritize threats with Trend Micro Managed Detection and Response. Trend Micro analysts will monitor, investigate and provide a response to advanced threats discovered by Deep Discovery Inspector on a 24/7 basis.


## CAPABILITIES

**Network content inspection**. Deep Discovery Inspector monitors all traffic across physical and virtual network segments, all network ports, and more than 100 network protocols to identify targeted attacks, advanced threats, and ransomware. Our agnostic approach to network traffic enables Deep Discovery to detect targeted attacks, advanced threats, and ransomware from inbound and outbound network traffic, as well as lateral movement, C&C, and other attacker behavior across all phases of the attack lifecycle.

**Extensive detection techniques** use file, web, IP, mobile application reputation, heuristic analysis, advanced threat scanning, custom sandbox analysis, and correlated threat intelligence to detect ransomware, zero-day exploits, advanced malware, and attacker behavior.

**Custom sandbox analysis** uses virtual images tuned to precisely match an organization's system configurations, drivers, installed applications, and language versions. This approach improves the detection rate of advanced threats and ransomware designed to evade standard virtual images.

**Flexible deployment**. Deep Discovery Analyzer can be deployed as a standalone sandbox or in parallel with a larger Deep Discovery Inspector deployment to add additional sandbox capacity. It is scalable to support up to 60 sandboxes in a single appliance. Multiple appliances can be clustered for high availability or configured for a hot or cold backup. Deep Discovery Inspector is available as both a hardware appliance or as a virtual appliance to help meet your deployment objectives and needs.

**Advanced detection**. Methods such as static analysis, heuristic analysis, behavior analysis, web reputation, and file reputation ensure threats are discovered quickly. Deep Discovery also detects multi-stage malicious files, outbound connections, and repeated C&C from suspicious files.

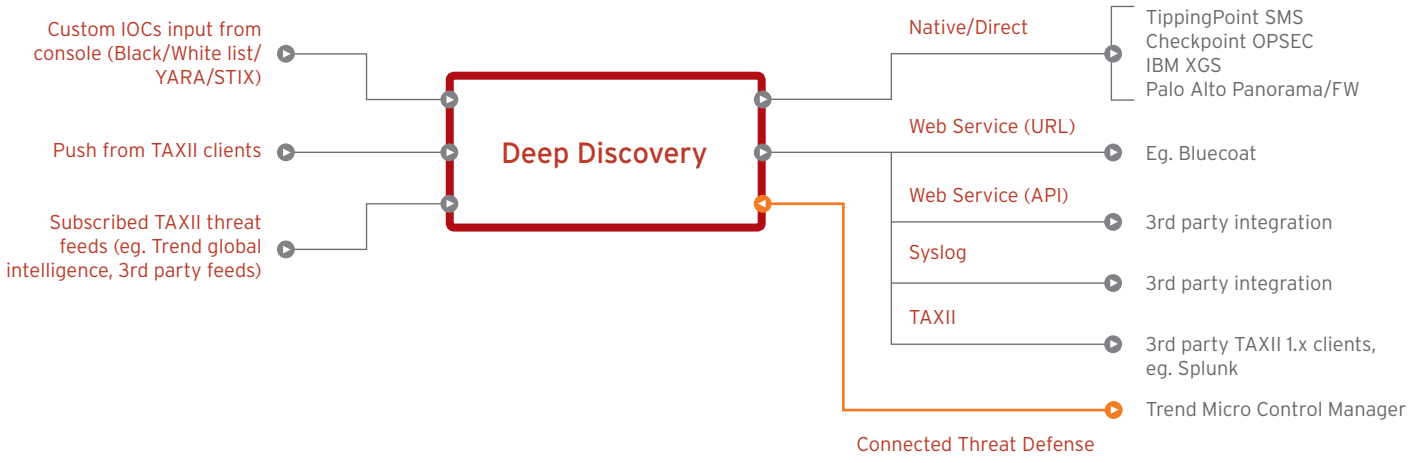
**Threat intelligence**. Deep Discovery will correlate and share advanced threat intelligence using standards-based formats and transports like STIX/TAXII and YARA. This enables organizations to stay ahead of unknown threats that may breach the network.

**Threat Analytics** will give you greater visibility into an attack, helping you prioritize the threats and show just how the threat breached the network, where it went from there, and who else has been impacted by the attack. Press play and watch the entire attack play out step by step.

**Integration**. Deep Discovery is built to work with the Trend Micro products as well as third party products. With native integration and a multitude of APIs, Deep Discovery will help automate security response, indicator of compromise (IOC) sharing, and prevention of advanced threats and targeted attacks.

## BOLSTERING THE SOC

Security professionals need to understand the threat landscape. They need to know when threats are breaking and how to stop them. A thankless job but one that is incredibly valuable. To help members of the SOC and other security professionals stay ahead of the latest threats, Deep Discovery will ingest the latest advanced threat intelligence, or IOCs, using standards-based formats and transfers (STIX/TAXII and YARA) from threat feeds and custom inputs. It will then share the IOCs with Trend Micro and third-party solutions within the network. By creating this IOC exchange, you will be able to improve your time to detect advanced threats. As all the connected products will be able to detect and block the previously unknown threats.




While Deep Discovery Analyzer, more commonly known as a pure sandbox, will automatically take IOCs from other security products, detonate and analyze the threat, and automatically send the results back for further action, Deep Discovery Analyzer can also help security analysts, or threat hunters, by accepting manual submissions of potential threats. This simplifies the analysis by providing a definitive answer to potential threats and suspicious objects.

## PRIORITIZATION AND SIMPLIFICATION

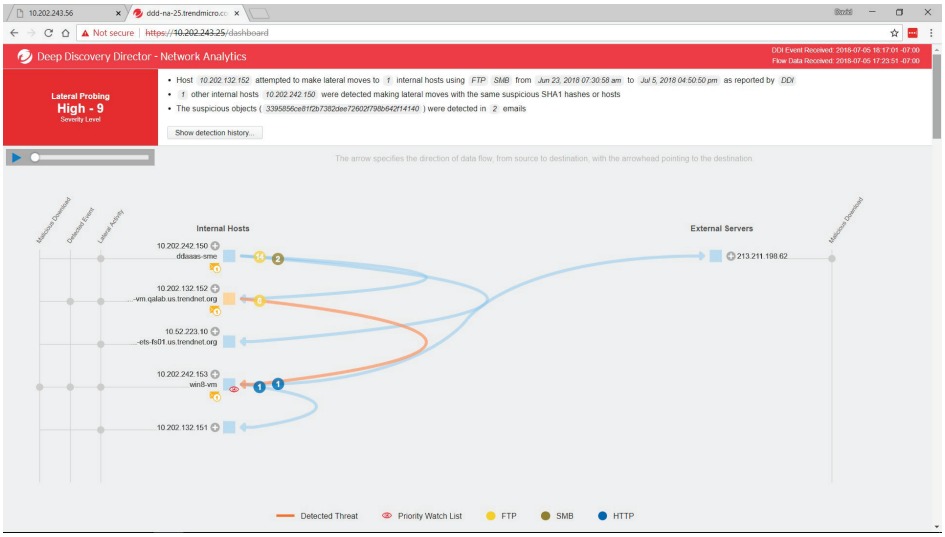
Security products are great at detecting, alerting, and blocking threats trying to attack the organization. The downside is they produce a lot of data, some of it relevant, some of it not. It is up to the security professional in the organization to comb through the potential thousands of alerts or logs each day to determine what is actually a threat and if they need to respond.

**To help prioritize and simplify the attack data, Deep Discovery Network Analytics will show you:**

**What** was the first point of entry of the attack?

**Who** else in the organization has been impacted by the attack?

**Where** was the threat calling out to? (Command and control communication)




On the easy-to-read Sankey diagram (see above) you will be able to see every step of the attack play out, dating back 90 days. Deep Discovery Network Analytics sequentially extracts metadata from the network traffic and correlates the events in a graph database for real-time visibility. This provides faster resolution, with fewer people involved, and gives you a bigger picture of the full attack. In some cases you may think the attack started today, but in fact, the initial breach happened weeks ago. Network Analytics will correlate the data and map out every step of the attack, giving you a better idea of how to respond and how to prevent future attacks..

## A KEY PART OF TREND MICRO CONNECTED THREAT DEFENSE

To adequately protect against the current threat landscape, you need a multi-layered protection platform that delivers the full lifecycle of threat defense. Trend Micro™ Connected Threat Defense™ is a layered approach to security that gives your organization a better way to quickly protect, detect, and respond to new threats targeting you, while improving visibility and control across your network.

- **Protect**: Assess potential vulnerabilities and proactively protect endpoints, servers, and applications.
- **Detect**: Identify advanced malware, behavior, and communications invisible to standard defenses.
- **Respond**: Enable rapid response through shared threat intelligence and delivery of real-time security updates.
- **Visibility and control**: Gain centralized visibility across the network and systems; analyze and assess the impact of threats.

Trend Micro Deep Discovery Family is powered by XGen™, a smart, optimized, and connected security approach.

POWERED BY XGen™ SECURITY

TREND MICRO™

Securing Your Connected World