



## Axiom Insights

# Axiom Cyber Security Solutions

## The World's First Automated Threat Defense Platform "ATDP"






With threats against businesses constantly evolving, Axiom Cyber Solutions finds that the gap that businesses face in defending their company against hackers is that updates are rarely applied and even more rarely analyzed for the business case. To combat the cyber security skills and update scheduling gaps, Axiom Cyber Solutions has developed the world's first Automated Threat Defense Platform "ATDP" that can not only identify the newest threats and vulnerabilities but automatically dispatch the updates to Axiom's entire client base in real time.

## Axiom: The First Line of Defense and the Last







Axiom's Automated Threat Defense Platform (ATDP) specializes in advanced threat intelligence and cyber defense to protect organizations from ransomware and DDoS attacks.

Axiom anticipates more attacks this year and of greater magnitude. Axiom is a company built on providing assurances by protecting organizations from threats through automation and machine learning. Axiom can significantly reduce the number of breaches and attacks that our customers face in today's world.

## Product Benefits

-  The world's first touchless out-of-the-box-solution
-  Reduce risk of expensive breaches or downtime
-  Reduces cost of IT staff needed to monitor against threats
-  Axiom is complimentary to any existing network
-  Diverse family of products that fit ANY business in America. 1Gb to 80Gb, scale infinitely.

## Product Features

-  ATDP threat intelligence protects organizations from Ransomware and Distributed Denial of Service
-  Advanced Ransomware Defense blocks attacks at the firewall level
-  Advanced DDoS protecting all seven layers of the OSI stack
-  Continuously updates its defenses in real-time with no disruption of service
-  Easy to read reports include information about the abnormal activity or malicious attempts
-  Bundled for the best all-in-one solution where Axiom completely manages its products and services for the customer taking the burden off their shoulders



# Axiom Insights

## Payload Analytics

Axiom can identify and stop Ransomware and DDoS attacks at the edge of the network stopping cybercriminals in their tracks. By looking at every packet of information coming into the business and analyzing its contents, Axiom can stop threats other cyber defense systems miss.

## Ransomware Protection

The Axiom ATDP algorithm addresses ransomware, which has become an increasingly dangerous type of cyber-attack and shows no sign of slowing down. Axiom firewalls look for an encryption handshake from the ransomware. By inspecting all outbound traffic, when a call for a keypair exchange is initiated from within the business for ransomware encryption, the ATDP blocks the attack at the firewall level. According to many resources, 85% of enterprises attacked by ransomware will be retargeted, and Axiom protects their customers, keeping them safe from potential future attacks.

## DDoS Protection

The Axiom ATDP proprietary algorithms handle data packets in a very different way than the traditional IP tables and routing to combat DDoS attacks.

Axiom protects all seven layers of the OSI stack. More particularly, Axiom devices are equipped to act on the newest line of attacks, where predators feed on the application layer and orchestrate buffer overflows on the HTTPS stack. Axiom's DDoS mitigation algorithm answers the need of the hour, where Botnets—advanced DDoS frameworks—are deployed to disrupt service on much larger scales.

## Solution for Protecting the Internet of Things (IoT)

IoT devices do not have the ability to have antivirus software installed on them, leaving them vulnerable to hackers. On October 21, 2016, we saw millions of IoT devices in the Mirai botnet enlisted to conduct the largest Distributed Denial of Service attack in recorded history.

By placing the Axiom ATDP at the edge of our customer's internet connection, we can utilize deep packet inspection (DPI) and payload analytics to ensure hackers cannot compromise our clients' networks. Experts know that a large percentage of IoT breaches come from hackers on their network. The Axiom ATDP is continuously monitoring 24 hours a day to ensure that intrusions are detected and prevented in real-time through machine learning and automation.

Axiom uses a combination of heuristics, behavioral analysis, rules and signatures along with our machine learning and self-healing algorithms to ensure our customer's networks are safe from penetration and attack.



# Axiom Insights

## The World's First Touchless Firewall with Continuous Updates

Axiom knows that failing to update threats on firewalls is a grave mistake, and sometimes, updating brings an entire enterprise to its knees.

The Axiom ATDP automatically updates its defenses in real-time with no disruption of service. The Axiom ATDP engine pulls from many sources of threat intelligence data, from every corner of the globe. The data from these disparate points are not only parsed and processed by advanced analytics, but the points themselves create an essential part of the security system, where they act as specialized threat indicators.

## Positioned at the Edge

Axiom knows for any firewall to be effective in protecting organizations, its positioning is crucial. The Axiom ATDP is placed at the edge of your network, directly after the incoming internet provider device. This positioning allows Axiom ATDP to continually inspect data and look for intrusions, including malware, viruses, ransomware, denial of service attacks or other attacks.

Axiom is the first stop into the organization as well as the last stop out.

## A Device to Fit Every Organization

Axiom has categorized its portfolio into five different packages based on the bandwidth/throughput/complexity of its customer's network. Organizations with less dense traffic—not exceeding one-gigabit throughput—use the Axiom Sentry 1GB.

For small-to-mid-sized enterprises that handle much broader bandwidths of up to 5, 10 and 25GB, the company has developed the Axiom Seraph 5Gb, Paladin 10Gb, and Citadel 25Gb solutions respectively.

The Axiom Sentinel 80GB addresses the larger enterprises that work with networks of a magnitude of 80GB and above, processing up to 120 million packets per second.

## Bundled for the Best All-In-One Solution

The Axiom ATDP solutions are bundled with professional services, such as implementation, configuration, automated continuous updating without restarts, 24/7 monitoring, detailed reporting, customer support, engineer support, and notifying key stakeholders as needed. The Axiom ATDP is developed as a turnkey solution, where Axiom completely manages its products and services for the customer taking the burden off their shoulders.



# Axiom Insights

## Scalable

Ten years ago, DDoS attacks seldom exceeded 10Gbps. On September 20, 2016, the Krebs on Security site was hit with a massive 620Gbps DDoS attack. Most traditional DDoS protection devices can mitigate an attack up to a 1-2 TB. The Axiom ATDP can be stacked to absorb an attack up to 10Tbps and can be deployed into a cloud service when needed.

## Detailed Reports

Axiom's easy to read reports include mitigated attack details and information about the abnormal activity or malicious attempts. Our clients receive a personal login to the Axiom ATDP portal that provides custom reports, and Axiom sends out bi-weekly or monthly summary reports automatically. Axiom has engineers available 24/7 to assist our clients with any technical questions as they arise.

## Easy to Install

Axiom has designed all of our devices to be easy to install for our customers. No matter if you choose the transparent bridging firewall or the fully configured version, Axiom engineers configure and test every device before it ships to our clients. Once the customer receives it, it is a simple three step plug-and-play process that takes less than ten minutes from start to finish.

## Reduces IT Staff Responsibilities

Leveraging automation and machine learning, Axiom Cyber Solutions allows companies to do more with less, reducing the number of IT Security employees required or better yet, enabling these employees to focus more on the business tasks at hand.

## Axiom Automated Threat Defense Platform

Detects and blocks ransomware and DDoS attacks, taking threat defense to a higher level and stopping hackers in their tracks.