



Joint Solution Brief

Gain Complete Visibility into IoT Devices and Reveal Hidden Threats with Gigamon and Zingbox

The Challenge

Most internet of things (IoT) devices are not designed with security in mind, thus making them vulnerable to cyberattacks that can have significant impact on network security, quality of service (QoS) and safety.

Integrated Solution

Integrated with the Gigamon GigaSECURE® Security Delivery Platform, Zingbox IoT Guardian discovers and assesses the individual risk of every IoT device in a network, baselines normal behaviors and continuously monitors for anomalous activity.

Joint Solution Benefits

- Inspection of all traffic originating from and directed to IoT devices.
- Real-time risk assessment of individual IoT devices.
- Enforcement of acceptable behavior consistent with the unique service profile of each IoT device deployed.
- Easy to manage, enhanced visibility and access to traffic from physical, virtual and public cloud networks through the GigaSECURE Security Delivery Platform.

Introduction

Industry analysts project the number of connected IoT devices to increase to more than 20 billion by the year 2020.¹ With that growth, however, has come an overall sense of digital mistrust due to lack of visibility into each device's activities.

Traditional IT security focuses on data protection and often relies on detecting malware on assets such as PCs, laptops and servers. Unfortunately, organizations find it challenging to adapt this approach to IoT devices – for example, connected medical devices, manufacturing robots and HVAC systems – because they are not designed to be field-upgradable, cannot be easily patched or have endpoint agents installed on them.

Having recognized the need for a purpose-built IoT security solution that could instill trust in the diverse set of IoT assets coming online, Zingbox created IoT Guardian.

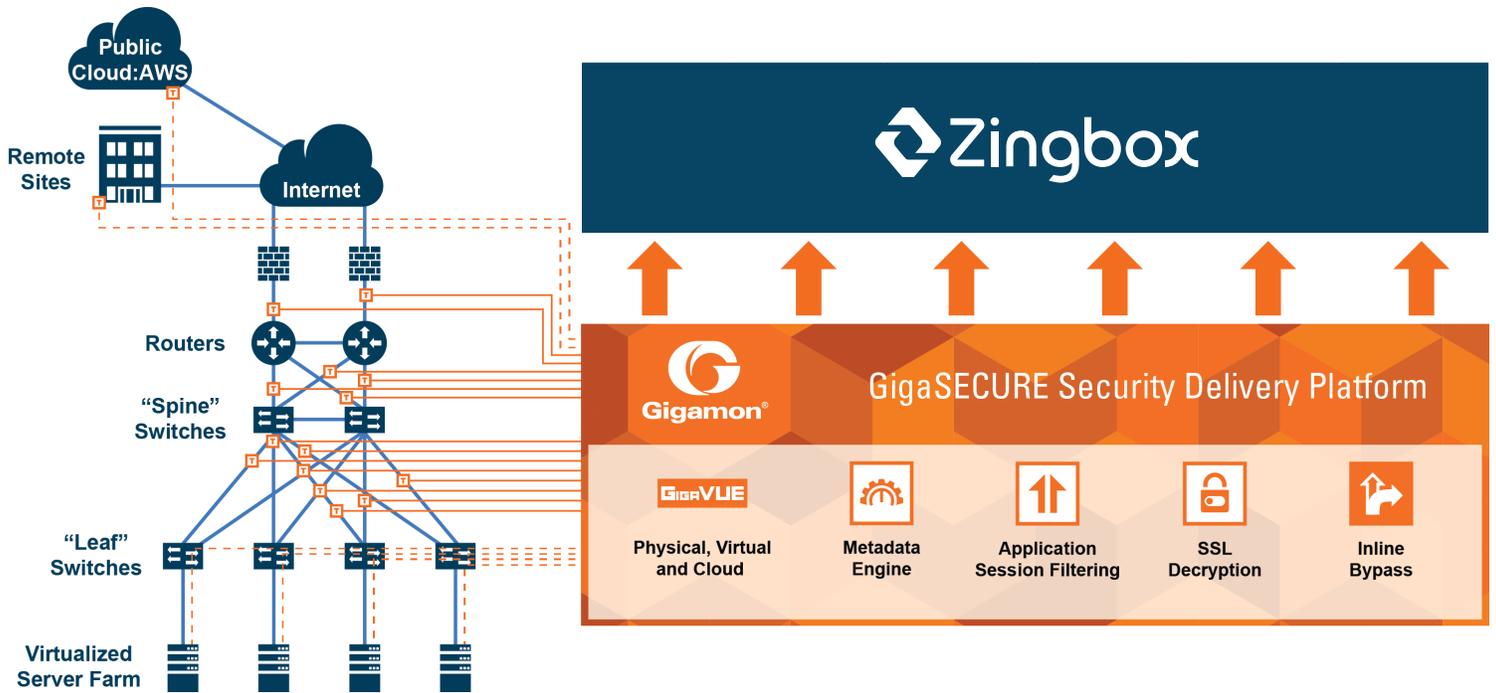
The Gigamon and Zingbox Joint Solution

Unlike traditional endpoint security products, Zingbox IoT Guardian uses a new IoT personality-based approach that leverages more than 70 device characteristics and patent-pending three-tier profiling to accurately identify IoT device in an organization's network.

With the Gigamon GigaSECURE® Security Delivery Platform, the Zingbox IoT Guardian provides visibility into the actions of all connected devices and can automatically detect, identify and classify them without the need to install and manage software agents. The Zingbox IoT Guardian solution uses artificial intelligence (AI) and deep machine learning algorithms to analyze communication to and from every device to baseline normal operating behavior and assess individual risk. With this new approach to IoT security, organizations can detect suspicious activity through self-learning and enforce trust in all connected devices.

The GigaSECURE® Security Delivery Platform augments the value of the Zingbox IoT Guardian solution by providing easy access to traffic going to and from the IoT devices across physical, virtual and public cloud networks. The GigaSECURE Security Delivery Platform can manage and deliver all network traffic – including east-west data center traffic and traffic between public cloud workloads – to Zingbox IoT Guardian, efficiently and in the correct format, eliminating blind spots and helping to ensure that all traffic is monitored and analyzed together.

¹Gartner (2017) <http://www.gartner.com/newsroom/id/3598917>



By continuously monitoring all device activities and enforcing trusted behaviors, the solution proactively protects organizations from both insider threats and external, zero-day cyberattacks across a wide range of verticals, including healthcare, manufacturing, education and technology. When Zingbox IoT Guardian detects risks or attacks, it can recommend a real-time course of action by leveraging existing network and security infrastructure, helping to contain or prevent an outbreak across an organization's entire IoT footprint – all without the need for complex in-line devices or disruption to device operation.

Learn More

For more information on Zingbox and Gigamon solutions, contact:

