

CUSTOMER SPOTLIGHT:

BBPOS ACHIEVES

AWS SERVERLESS SECURITY

WITH TERRAFORM AUTOMATION







Industry: Payments, Manufacturing

Headquarters: Hong Kong

Employees: 250

Challenges:

- Multi-Account Security
- · AWS Serverless Security
- · Terraform Automation

Outcomes:

- Centralized Security
 Visibility and Control
- · Streamlined Security Processes
- More Efficient Use of Tier 1 Support
- Accelerated Incident Response
- Improved SLA and Customer Experience

BBPOS Achieves AWS Serverless Security with Terraform Automation

Payments company transforms cloud incident response efficiency and service levels through network-based detection and prevention with the Valtix Multi-Cloud Security Platform

Felix Chu, IT Manager of BBPOS, is responsible for managing cloud infrastructure and cyber security for the newly acquired payments technology manufacturer. As part of the acquisition process, Felix wanted to focus on improved visibility into activity and detection of threats in their multi-account AWS environment. BBPOS was already 95% cloud, so they knew they needed a cloud-first approach to security.

The project focused on adding additional defenses to the perimeter of two of their primary public-facing cloud applications – The Terminal Management System (TMS) and Developer Site. TMS is used by their customers to manage all mPOS terminals and enable administrative tasks such as OTA firmware updates. The Developer Site is a system for customers to manage the development work such as downloading SDKs, getting the latest development documents, etc.

In researching solutions and designing an improved cloud security architecture, Felix engaged with their partner IUWorld – an experienced cybersecurity consulting firm.



Gaining Visibility to Threats Against Serverless

Underlying both applications was an AWS-based "serverless" infrastructure that included multiple platform services. Securing serverless introduced unique security challenges since much of the infrastructure was out of their control. Yet, the security burden was still on Felix and the BBPOS team. They also leveraged multiple AWS accounts and desired a better way to consolidate visibility of threats across these accounts.

Said Felix, "What we ideally sought out was a systematic way to gain visibility through intrusion detection and prevention (IDS / IPS) on AWS. Since agent-based approaches are incompatible with serverless architecture, network-based IDS made the most sense for us

Not only would it work well with our serverless architecture, but would be transparent to our existing applications and easy to implement. In addition, we wanted to centralize threat visibility across multiple accounts."

Infrastructure as Code (IaC) with Terraform was an additional critical requirement. By applying an IaC model to security and eliminating manual processes, BBPOS wanted to integrate security into the development cycle. This tactic allows them to bake security into the applications rather than adding it on top. Automation would also help to drive efficiency and reduce the risk of configuration errors – thus improving overall security posture.

By addressing these immediate requirements, Felix could greatly boost the BBPOS SOC's detection and response efforts. Working with technical advice and guidance from Stripe's security team, Felix began to research solutions that would meet their needs in a cloud-first way.

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The Valtix Solution: Centralized Multi-Account Threat Visibility and Serverless Security

With the help of IUWorld, Felix discovered Valtix on the AWS marketplace, which ensured that the solution met high standards. Valtix would immediately address their needs for network-based intrusion detection and prevention (IDS / IPS) that would be transparent to existing workloads and easy to integrate, but also opened up a number of strategic possibilities.

Valtix received buy-in from across the organization, including the software, cloud infrastructure, and Stripe security teams. Overall, the cross-functional team was impressed by the architecture and how the solution would enable security while also accelerating agility. However, what really stood out was how easy it would be to integrate Valtix into their existing environment, the breadth of cloud security capability, and the full support for Terraform.

Said Felix, "We realized that Valtix defines what cloud security should be. It's an extremely robust solution, that is easy to deploy, and supports a variety of use cases. The team is also extremely responsive and customer support has been first class.

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"Valtix would give us the centralized dashboard for visibility and detection of cloud threats that we'd sought. As a result, we could benefit from an overall increase in efficiency for our incident response operation. With better incident response, we can better manage overall service levels of our products to customers. This directly impacts customer satisfaction and revenue."

Valtix allowed them to solve the need for IDS/IPS without a lot of implementation effort and provided a platform for expanding use cases in the future.

AWS Serverless Security

The network is the common ground. By leveraging network-based security, BBPOS can easily deploy policy regardless of the underlying infrastructure.

Multi-Account Threat Visibility

Having a common plane of visibility across accounts enables more efficient security incident response operations

Intrusion Detection and Prevention (IDS/IPS)

IDS/IPS enables BBPOS to proactively detect threats that might be currently impacting the environment. Known malicious activities such as common exploits can be automatically blocked, thus reducing overall alerts and investigations.

Security Automation with Terraform (IaC)

Fully automated cloud security through deployment, maintenance and policy management, orchestrated using Terraform

For the Future: Extended Security, Deployment, and Prevention

Now that BBPOS has secured its core applications, Felix was actively considering how to leverage their investment further. "One of the great things about Valtix is that once we have it in place and enabled, turning on new security use cases was just a policy change. There's nothing to maintain, and I can adopt Valtix in an incremental fashion that mirrors my needs as they arise, whether that be capability or deployment breadth."

Now that Valtix was enabled on all public-facing systems, Felix planned to start enabling proactive blocking of known-bad activities to further improve on workload protection. Additional use cases on Felix's roadmap included microsegmentation and enhanced egress security through FQDN / URL filtering and DLP.



About BBPOS

In 2008, BBPOS founders recognized the untapped potential of smartphone technology and worked to integrate this new tool into the payment transaction process; we are now known throughout the payment transaction industry for developing systems and services ahead of technology trends. We are, in fact, one of the founders of mPOS technology. We are also recognized as an innovator, manufacturer, and worldwide distributor of end-to-end mobile POS (mPOS) solutions for retail, hospitality, delivery, transportation, and government clients. Our innovation and leadership has allowed us to become one of the world's largest and fastest growing mPOS solution providers. Our goal is building partnerships with organizations that expect speed, reliability, and versatility from their mPOS system and support from the company behind the system.

In January of 2022, Stripe announced that it had agreed to acquire BBPOS, one of its earliest and closest manufacturing partners in order to further accelerate Terminal's momentum and bring hardware development in-house. In 2021, the two vendors had collaborated on Stripe Reader, the first Stripe-designed piece of hardware. Stripe is a leading financial infrastructure platform for businesses of all sizes. Stripe Terminal enables internet-first retailers to power transactions across both brick-and-mortar and online storefronts in a single unified tech stack. Using Terminal and Stripe Connect, these hybrid retailers can provide their business users the capability to accept in-person payments.

About IUWorld

IUWorld is a cybersecurity consulting firm in Hong Kong, Macau & Greater Bay Area focusing on business resilience matters and helping companies to address cybersecurity challenges in relation to Governance, Risk Management & Compliance. Led by enthusiastic & passionate cybersecurity professionals, IUWorld clienteles range from financial services, healthcare, commercials to governmental bodies.



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Valtix is on a mission to protect every workload, every app architecture, across every cloud. The first multi-cloud network security platform delivered as a service, Valtix was built to combine robust security with cloud-first simplicity and on-demand scale. Powered by a cloud-native architecture, Valtix provides an innovative approach to multi-cloud security enabled in minutes and with no infrastructure to maintain. The result: security that is more effective and aligned to cloud agility requirements. With Valtix, organizations don't have to compromise in the cloud. They can meet critical security and compliance requirements without inhibiting the speed of the business.

Join 4 of the top 10 pharmaceuticals and leaders across every industry and sign up free in minutes.

Ready to get started?
Schedule a demo at **Valtix.com**