Market Insight Report Reprint

AWS rearchitects Amazon Inspector vulnerability management service

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Inspector provides continuous scanning for vulnerabilities and configuration risks such as unintended network exposure. The rearchitected service is now real time and easier to deploy, and includes enhanced risk scoring and support for container workloads.

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Introduction

In November 2021, AWS launched an improved version of Amazon Inspector, its vulnerability management service. The service provides continuous scanning for software vulnerabilities and configuration risks, such as unintended network exposure. The new service is real time, and easier to deploy. It also added multi-account support, and consolidated vulnerability management for both Amazon EC2 and Amazon ECR workloads. This version includes new features such as enhanced vulnerability risk scoring and support for container workloads.

THE TAKE

AWS's new Inspector service offers a few significant advantages over the previous version. Scans are now initiated in near real time when events such as software changes are made, or new vulnerabilities are identified in the software packages on customer workloads. The new architecture and tight integration with AWS System Security Manager (SSM) and AWS Organizations make for easier administration and deployment. The new service will likely result in increased adoption by current AWS customers, and increased adoption by customers running container workloads in AWS. It will likely pose a competitive threat to third-party vulnerability scanning offerings. We expect to see Amazon Inspector move toward addressing potential open source risk, and add software composition analysis capabilities to the offering in the future.

Details

AWS's Inspector service provides continuous scanning of AWS hosts for software vulnerabilities and configuration issues, such as unintended network exposure. The new Inspector service is now near real time and event-driven, meaning that changes to cloud resources automatically kick off new scans, and it generates vulnerability findings automatically once deployed.

The rearchitected service replaces the old Inspector agent with the widely used AWS SSM and SSM agent, which inventories software packages. The SSM agent is easier to deploy, covers an expanded range of AWS asset types, eliminates the need for an outbound internet connection to a SaaS platform, and has multiple use cases beyond vulnerability management. The previous Inspector service was widely adopted but suffered from some issues – the Inspector agents were resource intensive and difficult to deploy, and scans were not real time. One goal of the new launch was to support new use cases like containers.

Inspector includes several key added features. Enhanced vulnerability risk scoring goes beyond traditional CVE scoring by determining how exploitable the vulnerability is within the context of the customer's AWS environment. This feature helps overwhelmed security teams prioritize the riskiest vulnerabilities for remediation. The new service includes support for containers – container images are scanned for vulnerabilities when they are launched in the Amazon Elastic Container Registry. It also offers simple integration with AWS Security Hub and Amazon EventBridge, ITSM offerings such as ServiceNow and SIEM providers such as Splunk, which can help streamline the vulnerability remediation process.

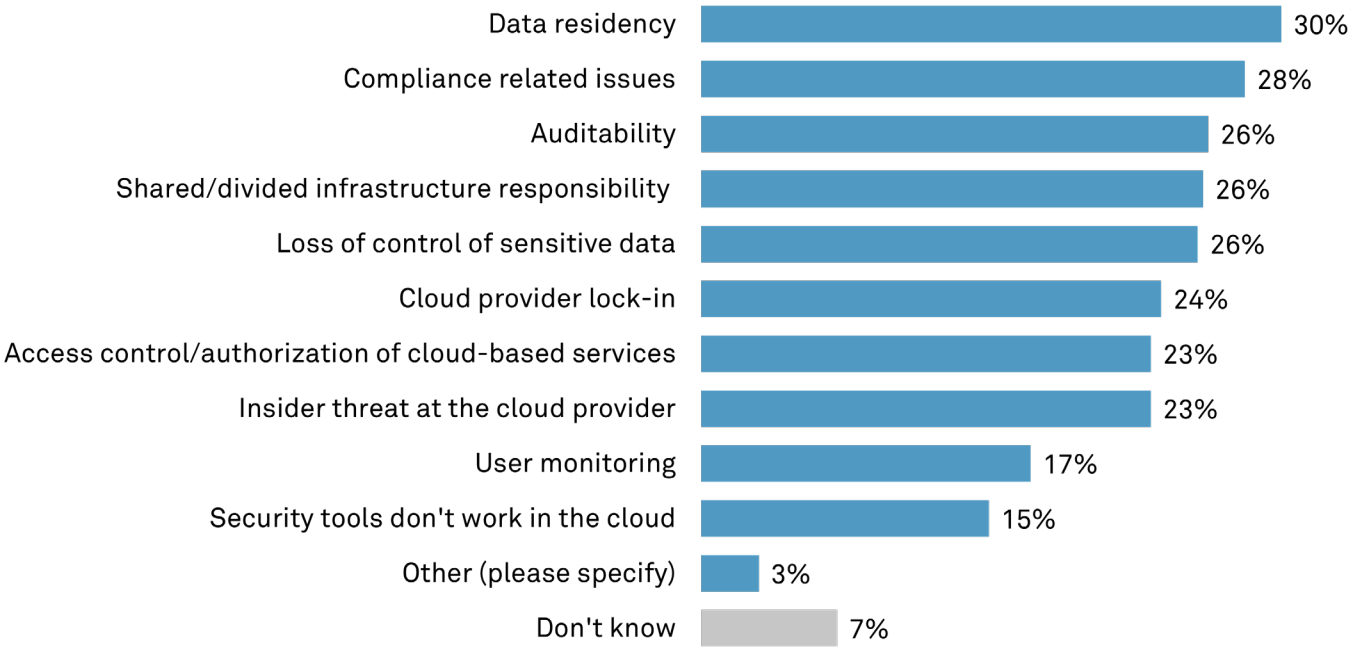
The new service will likely have an impact on traditional vulnerability management offerings (Qualys, Tenable, Rapid7) and also cloud SaaS security platforms that include vulnerability scanning as a feature. Notably, Palo Alto Prisma, a leading cloud security SaaS platform, recently added integration with Inspector. The new container-scanning capabilities are also likely to have an impact on container security platform providers, especially those that have focused on vulnerability scanning versus runtime protection.

Third-party vendors can tout advanced features and support across multicloud environments, but AWS offers easier deployment and integration, and a simplified pricing model (based on number of instances and containers scanned per month), which are often more important to customers.

The launch also improves Inspector's application security capabilities. The service has always offered scanning for open source risk against operating systems (Linux distributions) as part of EC2 scanning, but newly launched container image code scanning capabilities move it further in the direction of being a software composition analysis tool. Specifically, Inspector offers support for C#, Golang, Java, JavaScript, PHP, Python, Ruby and Rust.

AWS leverages NIST's National Vulnerability Database and vendor feeds for open source vulnerability data, and has also licensed the proprietary Snyk Intel Vulnerability Database. As noted earlier, risk scores go beyond CVE information, augmenting the risk calculation with exploitability, network reachability, and data from social media trends. A recent blog post describes how a user might identify instances of the Log4j vulnerability with Inspector, and take 'shift right' triage steps once identified, leveraging AWS WAF.

Security Concerns With the Cloud



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