aqua

Solution Brief
End-to-End Security for AWS Lambda from Code to Runtime

With AWS Lambda serverless compute service, AWS secures the service's underlying infrastructure, the OS, and provides a high degree of isolation down to the kernel-level. Customers are, however, still responsible for securing the applications and data that run on the service.

The Aqua Security Platform enables developers and security teams to secure the lifecycle of AWS Lambda functions by detecting and contextualizing risk in the pipeline, identifying out-of-compliance and excessive permissions, enforcing assurance policies and protecting functions at run time. Aqua ensures consistent security policies with CI integration across AWS Lambda containerized functions and serverless workloads. Aqua's NanoEnforcer, injected automatically as a Lambda Layer, allows for seamless integration of security monitoring and enforcement with no code or operational modification. These capabilities are delivered as part of a comprehensive cloud native security platform, with broad and integration into AWS services and tools – including containerized Lambda and Lambda powered by AWS Graviton2.

Key Benefits

- Developer ease of use with pipeline integration for security scanning

- Detect, contextualize and prioritize function risk for vulnerabilities, permissions & Internet exposure

- Minimize the friction for developer workflow with Lambda layer seamless deployment

- Stop attacks on running functions, maintain function's integrity and prevent unauthorized changes

- Enforce preconfigured assurance policy for Lambda Functions & Container images

- Monitor events and policy violations, use your existing SIEM or analytics tools for single-pane-of-glass view.
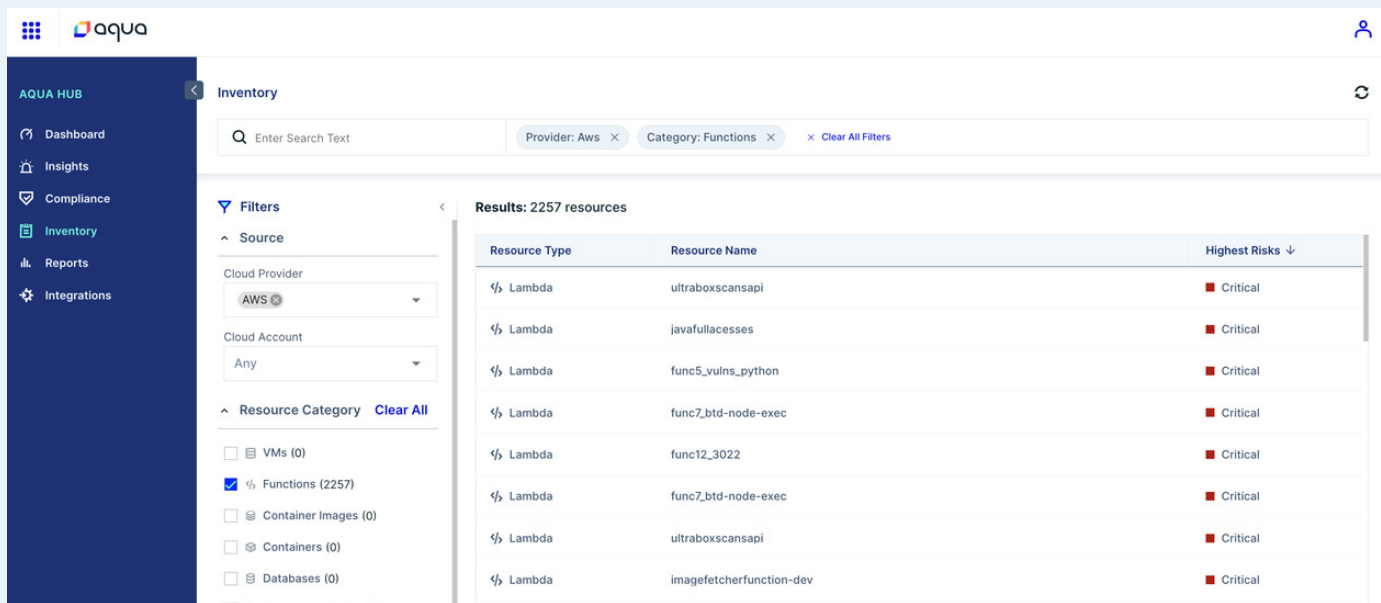
Automate DevSecOps

Shift left security with risk-based prioritization by assessing factors including known vulnerabilities, over-provisioned and unused permissions, embedded secrets, and suspicious behavior of Lambda functions.

Stop Attacks on Running Functions

Injected as a Lambda Layer with no modifications to the function code or its runtime, the Aqua NanoEnforcer ensures least-privilege permissions, automatically deploys runtime protection, and detects behavioral anomalies

Gain Security Visibility into Ephemeral Workloads

Aqua logs and audit events, 'syscalls' for ephemeral function workloads, and generates audit data of scanned functions for malware, vulnerabilities, sensitive data, and secrets

Runtime Protection and Prevention
Aqua NanoEnforcer maintains the function's integrity and prevent drift, validates that it has not been changed or updated during its lifecycle in the cloud.

Assurance Policy Enforcement
Define and configure assurance policies for your serverless environment based on vulnerability scores, detected permissions, & sensitive data.

Auditing and Monitoring
Generate scanned functions audit information for detected malware, vulnerabilities, sensitive data, and secrets; track changes in vulnerability status, timeliness of scan, and remediation trends.

CI/CD Integration for Scanning
Aqua scans serverless functions as they are built in your CI pipeline, providing feedback to developers on security issues.

Risk Posture Visibility
Ensure consolidated visibility of serverless risk posture including over-provisioned or unused permissions or administrative roles that should be reduced or eliminated.

Compliance and Security Gates
Automatically fail the build of serverless functions based on a preconfigured compliance and assurance policies.

Aqua Security stops cloud native attacks, preventing them before they happen and stopping them when they happen. With Aqua, DevOps and Security teams prioritize risk in minutes across the entire development lifecycle while automating prevention to secure their cloud native applications on day one. Real cloud native attacks are stopped immediately without killing workloads. With a platform built on the most loved open source cloud native community and innovation from dedicated threat research, Aqua is a complete solution to cloud native security for transformational teams. Founded in 2015, Aqua is headquartered in Boston, MA and Ramat Gan, IL with Fortune 1000 customers in over 40 countries.

Schedule demo ›