



Overview

Lyell Immunopharma is a South San Francisco-based, publicly traded cell therapy company (LYEL). Their T cell reprogramming technology focuses on the mastery of T cells to cure patients with solid tumors. They apply proprietary genetic and epigenetic reprogramming technology platforms to address barriers present in solid tumors in order to develop new medicines with improved, durable, and potentially curative clinical outcomes.



Problem

As a cloud-first company, much of Lyell's business operations rely on cloud services, where they generate and store proprietary data. The biotechnology industry operates in an environment that is subject to stringent regulatory standards. Whatever solution Lyell selected would need to ensure fundamental host, network, and cloud security. It would also need to identify software vulnerabilities and compliance issues and report them back to their DevSecOps and security teams. And it would need to automate workload security in the production environment and ensure regulatory compliance while being easy to install and manage.

After a thorough requirements definition and series of vendor evaluations, Lyell determined that only Fidelis CloudPassage Halo® provided the means to programmatically define configuration via APIs, allowing it to be seamlessly integrated into Lyell's automated CI/CD and Software Development Life Cycle (SDLC) processes.



Security



Automation



Compliance



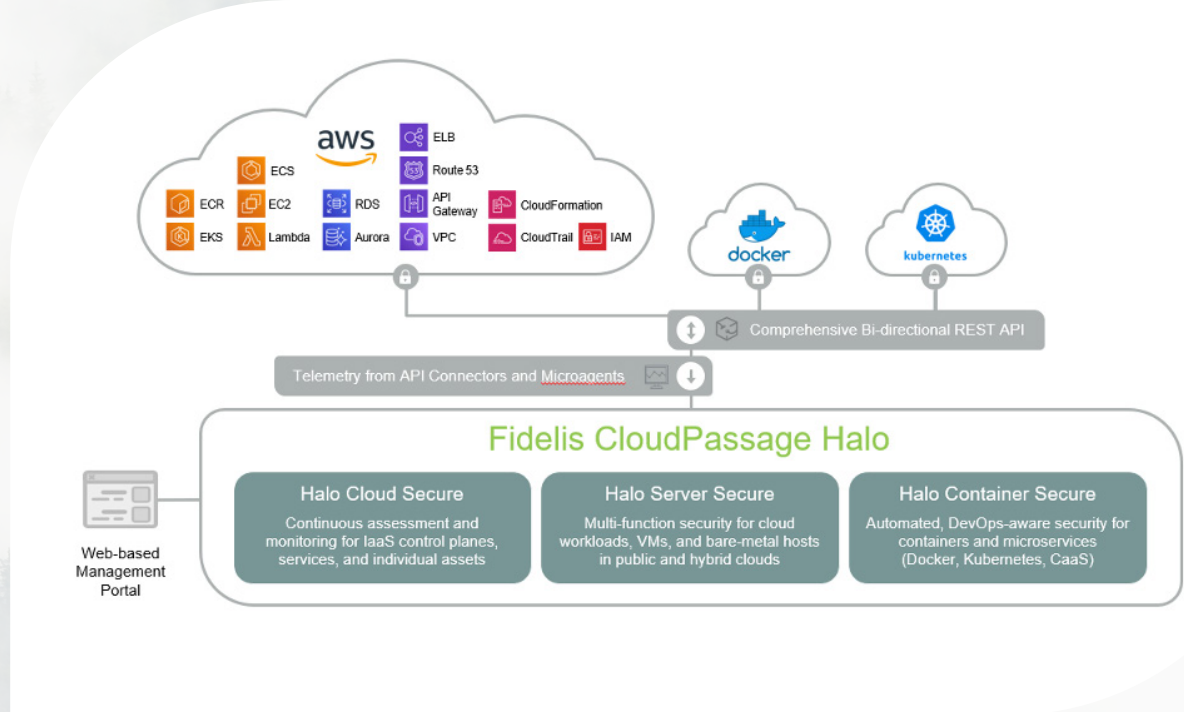
Solution Deployed

Lyell started with Fidelis Halo Cloud Secure™ to implement AWS foundations and CIS benchmark policies for all AWS accounts across the organization. They quickly expanded the solution, leveraging Fidelis Halo's breadth of features to immediately gain insights into all their AWS workloads and containerized environments. This also led to a security solution for securing containerized Lambdas throughout the continuous deployment pipeline.

With vulnerability management, file integrity monitoring, log-based intrusion detection, container monitoring, and more in place, Lyell focused their attention on harnessing the Fidelis Halo REST API for DevSecOps automation. They automated provisioning of new AWS accounts while ensuring security and compliance. Lyell also implemented CI/CD pipeline integrations that catch misconfigurations and insecure coding practices before they reach production.

“Policy assignments work surprisingly well. I can just set policies for our assets and servers, and those policies apply to any new instances that we spin up.”

Eric Hoffmann
Staff Software Engineer, DevSecOps
Lyell Immunopharma



Results

Fidelis Halo has resulted in several benefits to Lyell, including the speed and simplicity of asset tagging and policy assignment on initial configuration. With Fidelis Halo pulling tags on resources, the platform helped Lyell accelerate and simplify policy compliance across all AWS assets. Fidelis Halo now automates security issue management for Lyell, and they've come to trust the best-practice remediation guidance supplied through alerts.

Fidelis Halo's ease-of-use allows Lyell to quickly and easily configure their foundational cloud security implementation so they can focus on deeper mission-critical objectives, including continuous regulatory compliance and securing the delivery pipeline. Because Fidelis Halo supplies hundreds of policies and thousands of rules—including significantly more checks than are required to meet their critical GxP checks—Lyell is able to work toward closing monitoring gaps with only minor rule changes to fit specific needs.

With Fidelis Halo in place, Lyell accelerated their cloud security implementation by a full year. Their near-future roadmap includes using the comprehensive Fidelis Halo API for automated remediation of common issues.

“ It's hard to ensure security around Lambdas because they are ephemeral. Fidelis Halo easily inventories and assesses containerized Lambdas during deployment, allowing us to keep our security strategy in place.”

Eric Hoffmann
Staff Software Engineer, DevSecOps
Lyell Immunopharma

About Fidelis Cybersecurity

Fidelis Cybersecurity, the industry innovator in Active XDR and proactive cyber defense solutions, safeguards modern IT environments with unparalleled detection, deception, response, cloud security, and compliance capabilities. We offer full visibility across hybrid environments via deep, dynamic asset discovery, multi-faceted context, and risk assessment. These features help minimize attackable surface areas, automate exposure prevention, threat detection, and incident response, and provide the context, accuracy, speed, and portability security professionals need to find and neutralize adversaries earlier in the attack lifecycle. Fidelis Cybersecurity is dedicated to helping clients become stronger and more secure. Fidelis is trusted by many top commercial, enterprise, and government agencies worldwide. For more information, please visit www.fidelissecurity.com

