CASE STUDY

Molecular Health uses Lacework to achieve transparency and meet compliance standards

MOLECULAR HEALTH

Challenges

- Manage software vulnerabilities
- Meet rigorous compliance requirements
- Gain deep insight into their infrastructure

Solutions

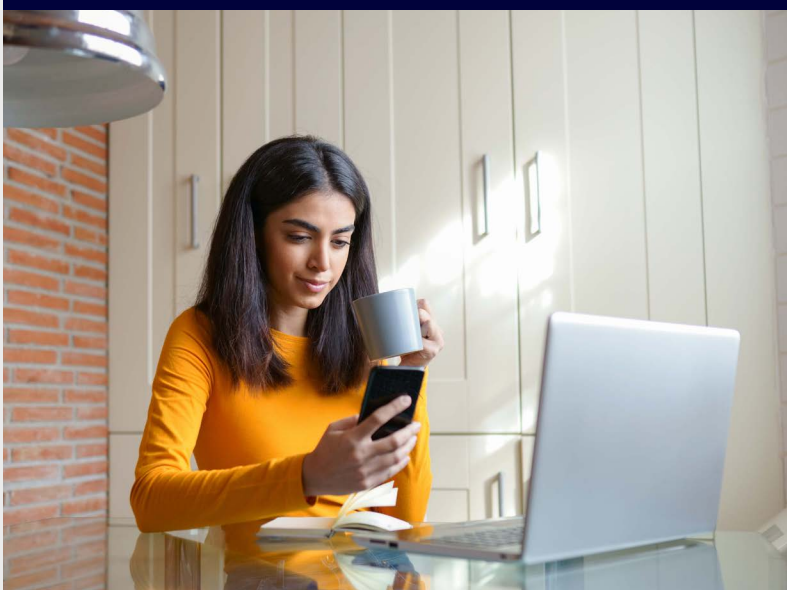
- Deployed Lacework in 30 minutes and received reports within one hour
- Identified critical vulnerabilities during Lacework deployment
- Gathered crucial data that helped make important decisions about product features

Results

- Closed gap in security strategy for upcoming certifications
- Achieved transparency with Polygraph®
- Visualized data routes and detected vulnerabilities

> "Everything was working out of the box. That's exactly what we wanted to achieve with this tool: we just installed it, and we were good to go."

— KARSTEN TEDESCO, SENIOR SYSTEM AND PRODUCT EXPERT, MOLECULAR HEALTH



> "It's really helpful to actually visualize the data routes taken between the services, and we also value the transparency of all the vulnerabilities in our current infrastructure."
>
> KARSTEN TEDESCO, SENIOR SYSTEM AND PRODUCT EXPERT, MOLECULAR HEALTH

Karsten Tedesco, the Senior System and Product Expert at Molecular Health, is responsible for maintaining and improving the data center infrastructure. Tedesco's team also handles DevOps, working closely with their development team to improve the processes around deploying and building their software. In addition, they handle the full spectrum of IT operations.

In terms of their environment, Molecular Health has an on-premises setup, with no current plans to move into the cloud. In their on-prem environment, they maintain approximately 220 VMs and between 70 and 80 Docker containers.

Challenges

With no dedicated intrusion detection system and vulnerability check tool in place to help monitor their infrastructure, Molecular Health was looking for a platform that could offer software vulnerability management as well as compliance reporting. Since their product is a medical device, Molecular Health must meet a rapidly changing set of security requirements, including HIPAA and ISO 13485.

They also wanted something that could keep up with the rising complexity of their own application. "As is the nature of a medical device, you cannot change or alter configurations once you have released a version of the product," explains Tedesco. "So in our case, when we release a new MH Guide version, we are stuck in the underlyingsoftware configuration (OS and third-party libraries) for our product." Due to these restrictions, they decided to seek out a solution that could help uncover vulnerabilities and then guide their next steps.

Tedesco notes that Molecular Health is in the process of switching from a more traditional approach to a containerized approach, and they plan to look into how they can use Lacework to get a similar overview of their security standards for the containerized environments. "Although we are on premises and Lacework is cloud native, I know we can work together to get this up and running," says Tedesco. Already, Molecular Health's successful deployment has shown that Lacework platform extends easily to secure on-prem environments.

Solution

Once Molecular Health deployed Lacework, they saw how effectively it provided the solutions they were looking for. Says Tedesco, "Lacework helps us to identify the critical vulnerabilities and then make a decision. For instance, we often have to decide whether it is really justified to alter a configuration, or if we can push it to an upcoming release."

The deployment itself went off without a hitch. "We were using Ansible as our automation tool, so it was easy to install Lacework agents on the right hosts, with specific configurations, by targeting the right labels for deployment," says Tedesco. "It was a really easy setup procedure. For the preparation and the deployment combined, it took half an hour." Almost instantly, they were ready to start using the platform. "After one hour, we already saw events coming in and got the reports," says Tedesco. "Everything was working out of the box. That's exactly what we wanted to achieve with this tool: we just installed it, and we were good to go."

Results

Transparency through Lacework Polygraph®

The unique Polygraph® technology was a crucial factor in Molecular Health's decision to choose Lacework. "It's really helpful to actually visualize the data routes taken between the services, and we also value the transparency of all the vulnerabilities in our current infrastructure," says Tedesco. "This is something we only saw with Lacework."

While Molecular Health averages less than one alert per day, their IT team appreciates using Polygraph® to investigate these alerts and make sure everything checks out. "Lacework most impactful outcome for us is transparency," says Tedesco. "With Polygraph®, we can actually see the communication between an external customer. We can see where the packet is going, through which systems it is routed, and where it comes out at the end." When they look at the communication between each service, they can check for any unexpected hops and CVEs. "Polygraph® provides a representation of our actual infrastructure and environment, and what their current state is," says Tedesco. "This is a very useful display for us."

A compliance solution

From the compliance standpoint, Molecular Health was able to fill a crucial security gap. "We had intrusion prevention systems and firewalls, but we didn't have a dedicated intrusion detection system," Tedesco says. "We filled this gap with Lacework."

In the future, Tedesco believes that Lacework will make the audit process easier, too. Though the next audit has yet to happen, Tedesco says, "I'm confident that Lacework will improve our standing there and make the audit process simpler."

On-Prem environment meets cloud native security

Ultimately, Molecular Health chose to purchase Lacework because it gave them a complete overview of the vulnerabilities in their environment, while also alerting them to events in their infrastructure. Moreover, says Tedesco, "it fills the requirements and closes the gap we had in our security strategy. We are now able to deliver our products with a higher security standard to our customers."

Lacework has also cut down significantly on time and energy for Tedesco's team. Since the platform is so simple to deploy, maintain, and upgrade, Molecular Health's IT team is able to monitor the events and records on a daily basis. "There is no maintenance necessary because of the automatic updates for the agent itself, and no rules or policies need to be written," says Tedesco. "We don't even need to take care of it. It just works."

Tedesco notes that Molecular Health is in the process of switching from a more traditional approach to a containerized approach, and they plan to look into how they can use Lacework to get a similar overview of their security standards for the containerized environments. "Although we are on premises and Lacework is cloud native, I know we can work together to get this up and running," says Tedesco. Already, Molecular Health's successful deployment has shown that Lacework platform extends easily to secure on-prem environments.

Find out more at lacework.com

MOLECULAR HEALTH

IAs a SaaS company, Molecular Health offers software to help patients and physicians with cancer treatment. Their software analyzes blood and tumor samples from newly diagnosed cancer patients and, in each case, it delivers a report to the physician that outlines how to better treat this specific cancer.