

CASE STUDY

Spire Health



aws partner network

Advanced Consulting Partner

DevOps Competency
Healthcare Competency
MSP Partner
Well Architected
AWS Service Catalog

Spire Health is a global leader in wearable, clinical-grade products, specializing in the collection of accurate respiratory signals through patient-friendly and unobtrusive technology. Once data is collected through Spire Health's devices, it is then shared with physicians and healthcare staff for the purposes of processing and analysis. With machine learning models built across billions of respiratory data points, Spire Health's technology is able to provide actionable and critical data for respiratory disease patients. This is a technology that is needed now more than ever before.

Due to the tremendous amount of patient-sensitive data Spire Health manages, analyzes, and transfers, HIPAA compliance and security governance are both critical infrastructure priorities. Through Ibexlabs, Spire Health hoped to engage with ongoing managed services that were designed for continuous compliance and scale.

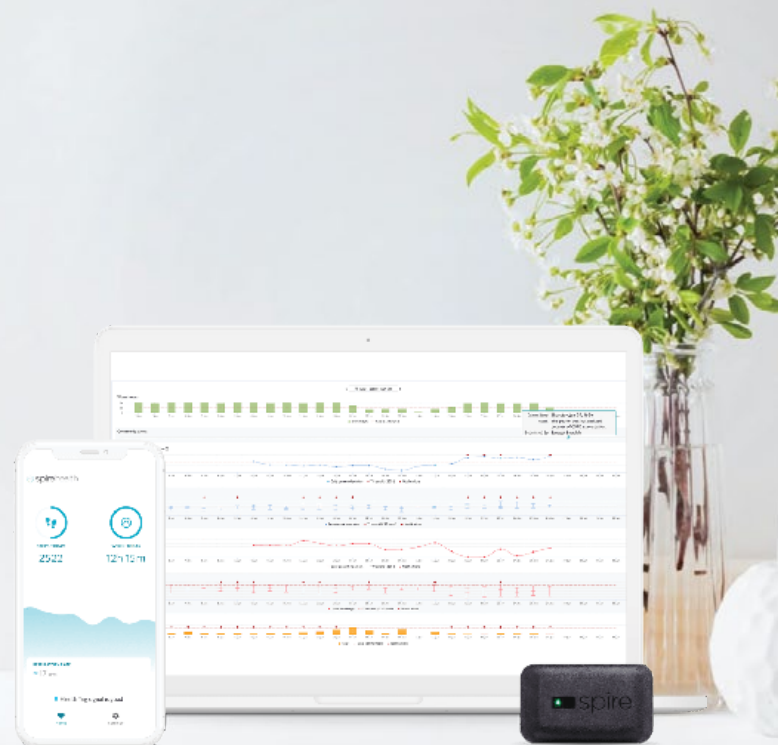


Project Dates

AUGUST 2019 →
DECEMBER 2019

“ We’re now operating as a HIPAA compliant business, and Ibexlabs is providing ongoing support to ensure that we remain compliant. We’ve successfully completed several audits and assessments.”

Ben Yule, CTO of Spire Health



Why Spire Chose Ibexlabs and AWS

As an AWS expert partner, Ibexlabs has considerable expertise in AWS managed services. For Spire Health, scalability and consistency were important — and these were things that the organization would be able to achieve through the sheer breadth of technologies provided through AWS solutions and third-party integration. Further, as an AWS Well Architected Partner, Ibexlabs could help them achieve the 5 pillars of a Well Architected system.



As a healthcare service, the security and stability of Spire Health's network were critical. But backed by the technology of AWS, Ibexlabs had the solutions they needed.

Take a Look: The AWS Systems Used

In developing Spire Health's new infrastructure, Ibexlabs would use a number of AWS services: AWS Identity and Access Management, AWS Web Application Firewall, AWS Key Management Service, AWS Security Hub, Amazon Guard Duty, Amazon Inspector, Amazon Macie, and AWS Systems Patch Manager. Another core advantage of the AWS system is that it has a wide array of third-party integrations. In addition to AWS solutions, Ibexlabs would also integrate Okta, Datadog, Terraform, OpenVPN, OpsGenie, and Jira Service Desk.

The Creation of a Transparent, Well-Architected System

Initially, Ibexlabs did a complete audit of Spire Health's solutions to identify core areas of improvement. As an AWS Well Architected Partner, Ibexlabs has extensive experience in Well Architected Reviews. This gave Ibexlabs a starting point for its future development, by identifying areas where security could further be shored up, and automating and optimizing. Spire Health was doing fine — but with Ibexlabs and AWS, it could be doing better.

Ibexlabs first worked with Spire to put together a remediation plan, enhancing existing container solutions and creating a pipeline to build application docker images and deploy ECS automatically. Ibexlabs further improved existing IAC code and migrated the Spire Infrastructure to AWS Fargate using Terraform (developed by HashiCorp, another AWS Technology Partner). This allowed Spire Health to tap into the virtually unlimited resources that AWS could provide.

End to end observability is a critical aspect of providing managed services support. Spire Health required a combined monitoring platform for application, infrastructure and logging. Ibexlabs leveraged Datadog, an AWS Technology partner who provides “three pillars of observability” to create composite alerts across application, infrastructure and logs. DataDog is able to adopt Spire Health’s dynamic environments and ensure new resources are automatically detected and monitored based on tagging criteria. It also has dynamic alerting that scales with infrastructure and monitors Spire Health’s infrastructure across multiple accounts.

Instead of monitoring fixed metrics, DataDog was designed to identify metrics based on percentiles, providing alerting based on metrics over time — the security solution could scale with the system’s growth.

Finally, for improved MSP support, Ibexlabs integrated Spire Health’s DataDog alerting to OpsGenie and Jira Service Desk. Through this, they also achieved comprehensive ticketing capabilities with timestamps and call management. At the end of it all, Ibexlabs was able to create Spire Health with a complete, all-inclusive management system that was both secure and stable even at scale.

Security and Compliance at Scale with Ibexlabs

Ibexlabs was able to integrate dozens of technologies to create a stable, seamless infrastructure for Spire Health. By enabling AWS Security hub for a consolidated view of security and compliance, Ibexlabs was able to use its AWS expertise to create a system that would serve Spire Health’s needs both today and tomorrow. And it was able to do that while achieving the 5 Pillars of AWS Well Architected Framework.

For the purposes of continuous compliance, Ibexlabs deployed the AWS security Hub, remediating caps and ensuring that the appropriate benchmarks were continuously met. AWS GuardDuty was also leveraged for continuous threat detection and was integrated with a shared slack channel between Ibexlabs and Spire Health, improving communication and transparency between client and MSP.

Ibexlabs is an expert managed services provider and AWS consulting partner. Contact Ibexlabs today to find out more about how managed services can help your organization achieve the scale it needs.



About Ibexlabs

Ibexlabs LLC is a DevOps & Managed Services provider and an AWS consulting partner. Our AWS certified AWS experts evaluate your infrastructure requirements and make recommendations based on your individual business or personal needs.

Ibexlabs believes in open communication, quality service, and custom solutions to the technical challenges of our clients. On Clutch.co, all our clients have the opportunity to detail our business relationship and report on Ibexlabs’s successes and shortcomings. As of May 2020, Ibexlabs is proud to boast an overall rating of 5/5.

Visit us on [Clutch.co](https://clutch.co) here to see all our client reviews.

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