

Axiom Cloud Gains New Cloud Architecture and Standardized Tools to Facilitate IoT App Growth



Executive Summary

Founded in 2020, [Axiom Cloud](#) is a developer of software applications that enable commercial users to increase the efficiency, performance, and reliability of their refrigeration assets. The company leverages artificial intelligence (AI), Internet of Things (IoT) technology, and automation to proactively identify maintenance issues and optimize ongoing energy consumption. With Axiom Cloud, clients are able to decrease costs, reduce carbon emissions, and increase cooling system sustainability over the long term.

Axiom Cloud recently decided it was time to upgrade its IT infrastructure in order to set the stage for future growth. The company accomplished this with ClearScale, an Amazon Web Services (AWS) Premier Consulting Partner with cloud IoT and data management expertise. Together, Axiom Cloud and ClearScale made crucial improvements to the company's cloud architecture, particularly around its ability to gather, process, and analyze IoT data from countless devices.



The Challenge

A lot has changed since Axiom Cloud first started using cloud computing technology. Initially, the company built cloud infrastructure to deliver on-premises services that required maintaining hardware on client sites. This model wasn't scalable and didn't align with the leadership team's vision of serving customers entirely through the cloud. As Axiom Cloud grew, the business knew it would eventually have to replace its on-premises model and the custom tools designed to fulfill early use cases.

Axiom Cloud eventually evolved beyond its homegrown solutions and had to find a way to address new use cases, reduce dependency on custom frameworks, and improve scalability. Furthermore, technical debt was mounting, and customer demands were growing more complex.

After speaking with outside system architects, Axiom Cloud learned that AWS offered the capabilities and solutions it needed to achieve its IT performance goals. However, the company didn't have the in-house expertise or resources to implement a solution that would take full advantage of the AWS platform. This led Axiom Cloud to ClearScale, a long-time AWS specialist with the AWS IoT Competency, and significant experience designing cloud architectures and data infrastructure for next-gen business models.

"The project was a huge success, thanks to ClearScale. We're really excited about what's next for us. We are going to significantly increase the number of customers we have, the quality of our products, and the features we offer. The bedrock we built with ClearScale is going to accelerate all our growth plans."

Nikhil Saralkar, CTO, Axiom Cloud

The ClearScale Solution

Axiom Cloud charged ClearScale with creating a reliable, secure, and flexible cloud ecosystem that could meet the company's ambitious growth objectives. ClearScale decided the best way to approach the project was to leverage serverless infrastructure, purpose-built AWS solutions, and automated processes.

First, ClearScale replaced Axiom Cloud's custom tools with standardized AWS frameworks, eliminating the need to maintain certain legacy assets. ClearScale also established a new data pipeline for gathering information from IoT devices in the field. As a result, Axiom Cloud had a better way to store information and extract customer insights that could lead to new revenue opportunities.

Additionally, ClearScale automated Axiom Cloud's container orchestration workflow. Rather than monitor clusters internally, Axiom Cloud started using [Amazon Elastic Kubernetes Services \(EKS\)](#), a fully managed solution for running Kubernetes applications. Together, these changes increased the efficiency and cost-effectiveness of Axiom Cloud's IT infrastructure dramatically.

The Benefits

Thanks to its revamped cloud architecture, Axiom Cloud is positioned well for future growth. The company no longer has to manage on-premises infrastructure or pay the costs associated with custom maintenance. By leaning into AWS, Axiom Cloud has also decreased its risk tied to the current shortage of refrigeration technician skill in the world today. The firm's IoT devices proactively warn clients of potential problems through the cloud, preventing costly, on-site reactive maintenance requiring human labor and rare skill.

On top of that, Axiom Cloud is able to enhance its technology, applications, and services more easily, as new engineers don't have to learn how to use a large set of custom tools and frameworks. Axiom Cloud can leverage outside expertise, as well as establish a high-performing DevOps capability as a result of its increased standardization.

Looking to the future, Axiom Cloud is excited about the potential for its solutions to scale and improve with customer needs. The company has a robust foundation for growth and IoT innovation in the refrigeration management space. Moreover, Axiom Cloud is looking forward to finding new ways to support customers with real-time data through its suite of software products.