Cloud Migration Case Study
Federal Government Client

JHC Technology delivered a mission-critical solution to a federal government client that ensured their sensor processing software was able to predict volcanic activity through moving magma. This information is used to help scientists forecast seismic activity over multiple geographical locations. This could not have been done without a Cloud-based solution to ensure a resilient system.

THE CHALLENGE

JHC Technology's Client required a move from its on-premises infrastructure to a centralized Cloud environment in AWS. The client looked to JHC Technology to handle high availability architecture and fault tolerance to meet workloads over many geographical locations quickly after a natural disaster.

THE SOLUTION

JHC Technology provided a highly available and scalable infrastructure that ensured efficiency in wake of volcanos and other natural disasters. This sensor processing solution ensured predictive analytics, resilience, and scalability.

THE BENEFITS

Predictive Analytics

JHC Technology worked with the client to create a solution that ensured the user could collect volcano data to analyze and utilize for machine learning to better predict when volcanoes erupt.

Resilience

JHC Technology configured Amazon CloudWatch metrics to identify a surge in traffic in the event of a disaster. Kubernetes was implemented to provide automated container orchestration and higher availability to reach across multiple regions.

Scalability

JHC configured EC2 instances that ensure adequate capacity to meet traffic demands and compute capacity. JHC implemented automated launch configurations to allow the client to quickly launch and/or scale application severs in target environments in the future.

ABOUT JHC TECHNOLOGY, INC. AND AWS

JHC Technology, Inc., a Service Disabled, Veteran-Owned Small Business, is a leader in providing intelligent engineering and development services supporting the business modernization efforts of Federal, State, and Local government, non-profit organizations, and commercial enterprises. As a "born with the cloud" company, JHC has been delivering cloud solutions for nearly a decade. JHC staff members are seasoned innovators with a deep understanding of the holistic requirements for IT modernization, including infrastructure, architecture, DevSecOps, Agile, cyber security, assessment, application development, and governance.