

Research University Case Study



DLT Provides a Secure and Compliant Hosting Environment for Top-Tier University

Profile

A premier public research university, this top-ranked large university continuously looks to advance knowledge and research in addition to student success. One of its core commitments is to achieving health care that strives to preserve and restore health for all people, to seek the cause and cure of diseases through groundbreaking research and to educate those who serve humanity.

Problem

As a partner of a government-funded health and science consortium, the team at this large university was looking for a cost-effective, scalable, and secure platform to host their scientific study data and application. With a web architecture that needed both publicly available and sensitive PHI components, meeting compliance guidelines while remaining accessible was key.

Solution

To support this project DLT proposed an architecture along with ongoing managed services to assist with infrastructure deployment and keep the environment compliant and up to date. This included provisioning the AWS services, implementing an isolated VPC and subnets, backup and failover scenario configuration, and integration with cloud monitoring systems for security, compliance, and performance.

This Managed Services engagement is in addition to the existing agreement to provide ongoing AWS IaaS, PaaS, and SaaS under a collective state purchasing agreement.

How AWS Services Were Used as Part of the Solution

DLT proposed an AWS architecture with multiple layers for the solution's security and operating requirements. This included multiple Availability Zones with Elastic Load Balancing, Elastic Compute Cloud, Relational Database Service, Simple Storage Service, WAF, Route 53, and AWS Certificate Manager. The Virtual Private Cloud (VPC) was built out to allocate these resources into public and secure components to house their respective datasets.

Third Party Tools

CloudChecker, Zendesk Support Ticketing, Automox, Skeddly

Outcome(s)/Results

With DLT's help, the university was able to successfully roll out an efficient multi-layer application with a public-facing component for its joint study. Together with DLT, they continue to manage and iterate the architecture as the study grows.

Lessons Learned

After this foray into AWS and its capabilities, the team at the university now has experience using a multi-layer AWS deployment to support both public and secure workloads across varied AWS services for their current and future projects.