



- Managed Service Provider
- Govt. Services Competency
- Education Services Competency
- Public Sector Solution Provider

## Public Clinical Research Facility Case Study

### Long-term Impact of Military-relevant Brain Injury Consortium-Chronic Effects of Neurotrauma Consortium (LIMBIC-CENC)

#### Profile:

A public clinical research facility, this organization seeks to study the long-term impact of military-relevant brain injury and the chronic effects of neurotrauma. This organization aims to seek the cause and cure of diseases, new life-saving procedures, and support researchers to discover new treatments. Exciting new medicine is happening every day at this facility.

#### Problem:

As a member of the public sector health and science consortium, the team at this organization required a cost-effective, scalable, and secure platform to host its research platform. With an architecture that required security and availability, as well as the ability to integrate with sensitive PHI components, maintaining compliance while remaining accessible was key.

#### Solution:

To support this project TD SYNnex Public Sector created a new infrastructure platform to support secure hosting and operations. This included provisioning AWS services, implementing a secured VPC and subnets, configuration of frictionless customer identity and access management, configuration of enhanced data protection, migrating any existing resources or systems to new FIPS-compliant systems, and integration with monitoring applications 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:

TD SYNnex Public Sector designed an AWS architecture with multiple layers for the solution's security and operating requirements. This included an Elastic Load Balancing solution with subnets covering multiple Availability Zones, Elastic Compute Cloud Instances, Relational Database Service Instances, Web Application Firewall, AWS Cognito, Route 53, Simple Storage Service, and AWS Certificate Manager. The Virtual Private Cloud (VPC) was configured to allocate these resources into public and secure components to sandbox their respective datasets. **Third Party Tools:** Zendesk IT Service Management, AppDynamics Observability Platform, CloudCheckr, Automox Patch Management, Trend Micro Workload Security.

#### Outcome(s)/results:

With the help of TD SYNnex Public Sector, this organization was able to utilize an efficient multi-layer application with a public-facing component for the study. Together with TD SYNnex Public Sector, this organization continues to manage and scale the architecture as the study scales.

#### Lessons learned:

With this migration to a modernized cloud deployment on AWS, the organization now has experience using a multi-layer secure AWS solution to support both public and secure workloads across multiple AWS services for their current and future projects.

#### For More Information:

Visit our website: [tdsynnex.com/na/us/td-synnex-public-sector/](https://tdsynnex.com/na/us/td-synnex-public-sector/)

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