

## Client Success Story

# LogSystem Database Staging Data Load



## Client Need

CortiCare, a leading operator in the neurotelemetry and remote patient monitoring industry, serves hospitals, practices, and clinics with cutting-edge telehealth services and an EEG brain monitoring platform. Their technology assists with the neurological assessment of adult, pediatric, and ICU patients to monitor real-time brain activity and interpret potential seizure risks.

However, the company faced a major challenge in its testing process. With only one non-production environment available to test and validate changes before moving to the live environment, all items that needed test data exclusively were validated with production data only. Furthermore, there was no set process for creating test data for the staging environment. This resulted in additional time spent on creating data to test specific scenarios or skipping some cases during testing due to the unavailability of test data or the urgency of the item to deploy.

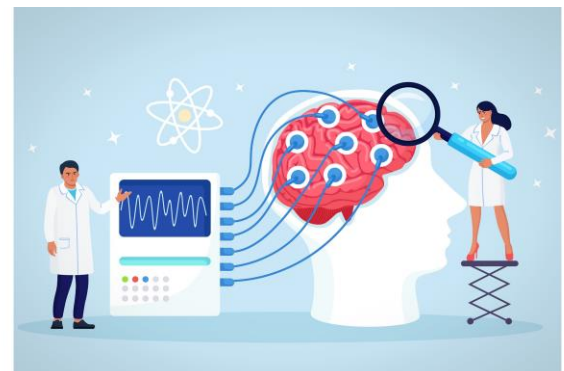
As the company revamps its reporting function to align with client invoicing needs, the unavailability of test data became a critical issue as invoice reports require full data generated by operations within the application. Additionally, 21 CFR Part 11 audit requirements for each product to have user guides created and process established for updating those documents, as the product evolves. The user guides cannot be with live patient data due to HIPAA requirements and hence needed a fully functional non-prod testing environment with proper data, without exposing PHI.

## Summary

Technossus delivered test data for the creation of user guides and training videos quickly within three weeks without any flaws.

## Key Learnings

- Developing Apps Leveraging Data Requires Team Members with Specialized Skillsets
- Documenting Processes for Knowledge Transfer Can Dramatically Impact Delivery Time
- Plan for an Appropriate Amount of Time for Complex Data Integrations
- An Agile Approach to App & API Implementations Can Speed Up Development



## Overcoming Challenges

The client was not aware of how to create test data for non-production environments and there was no set process that was used by the previous development teams.

Another constraint was limited development capacity and redirecting the team to deliver this item was not an option as that would have impacted the delivery milestones directly.

The client team was not aware of the detailed knowledge of the product, which was a challenge for us to easily identify PHI data in database tables.

The data copying exercise was dependent on a third-party vendor and took more than two days. The team also found that indexes and constraints were removed during the data copy exercise, leaving the old database instance in an unusable state.

Since the origin of test data was the production environment, all user data movement to the non-production instance could potentially cause notification alerts set up as part of the operation e.g., new patient assignment notification for monitoring to technologists and for reading to Physicians.

## Services Provided

- Data & Analytics Consulting
- Data Analytics Implementation
- Application Assessment
- Application Development
- IT Consulting



## Solution

Technossus stepped up to the challenge and offered a solution to deliver the test data within the expected timelines. A team was formed with experts in data masking. The data load plan was finalized with multiple steps and the order in which they needed to be identified along with action owners. The PHI fields to scrub were identified after a discussion with the product owner. The team created scripts for scrubbing the PHI and scrubbed data was then moved to the current staging database instance to make it available for testing.

The team took care of indexes and constraints at the database level while moving the data during the copying operation. After scrubbing, the team immediately disabled the notification services on the non-prod environment so that users do not receive those alerts and avoid any confusion or wrong alerts. Test data was validated by the team before handing over the environment back for testing as usual. The Technossus team helped establish a process to ensure the data refresh exercise as part of operations going forward.

## Outcome

Technossus delivered the test data for the creation of user guides and training videos quickly within three weeks without any flaws. By following the best practices of technology, taking proactive measures, and adopting a strategic approach, Technossus helped CortiCare overcome its data challenges and meet its auditing requirements. This streamlined their testing process and allowed them to focus on other core components of the project.

## About Technossus

Technossus helps companies modernize the technology they use to operate, increase revenue, and improve customer engagement. We provide world-class business consulting and enterprise software development services based on data & analytics to help global innovators gain practical value from their tech investments. Technossus focuses on offering Cloud Computing, Data & Analytics, and Process Engineering consulting and solutions development for the Healthcare & Lifesciences, Aerospace, and Financial Services industries.

### Reference this success story if you are:

- In Need of Data & Analytics Consulting
- In Need of IT Strategy & Consulting
- Needing a Data Assessment
- Needing App Development Consulting
- Looking to Modernize New Applications with Data & Analytics
- Developing Applications & Software Requiring Database APIs
- Looking to Transform the Way Your Organization Leverages Data