



Federal Government Agency – Custom Java Application

Overview

Java is the foundation for virtually every type of networked application and is the global standard for developing and delivering mobile applications, games, Web-based content, and enterprise software. With more than 9 million developers worldwide, Java enables organizations to efficiently develop and deploy exciting applications and services. With comprehensive tooling, a mature ecosystem, and robust performance, Java delivers applications portability across even the most disparate computing environments.

Java Platform, Enterprise Edition provides capabilities that make it easy for organizations to develop and deploy enterprise and Web applications. It is designed to enable organizations to develop secure, portable, high-performance applications for the widest range of computing platforms possible. By making applications available across heterogeneous environments, businesses can boost end-user productivity, communication, and collaboration—and dramatically reduce the cost of ownership of both enterprise and consumer applications. It provides a simplified developer experience; embraces innovative open source frameworks; offers a comprehensive Web profile for lightweight, standards-based Web applications; and begins the formal process of pruning outdated and unused technology from the platform.

This Government Agency is responsible for implementing the provisions of the Virus-Serum-Toxin Act to ensure that veterinary biologics available for the diagnosis, prevention, and treatment of animal diseases are pure, safe, potent and effective. The agency's primary activities include biologics licensing and permitting, inspection and compliance of licensed products, and production, evaluation and distribution. The agency was looking for a custom information management system that would enable them to exchange information with other government agencies, stakeholders, and end users of veterinary biologics.

Challenges

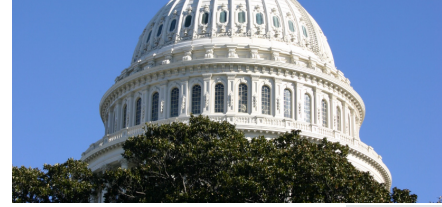
The agency had multiple information systems in use that were not in sync, lacked key functionality and were costly and inefficient to operate. The stand alone systems did not communicate well with each other, and the lack of integration and transparency hindered the ability to streamline processes and information flow within the agency. The diversity of computer platforms utilized created weak links and made it difficult and costly to provide IT support.

The agency required a secure computer system to support and manage their biological products licensing, serial release and testing processes that would address all of these issues. The system needed to allow the agency to manage these processes and for the exchange of information with other government agencies. The

Technology

Stack:

Oracle Database
Java Platform Enterprise Edition
Struts
jQuery



agency required that the system be cost effective and reliable, using the most appropriate technology available and to support accreditation efforts either federally mandated or internally driven.

Solution Details

Zirous has worked with the agency to implement two phases of a custom application that would help them overcome their challenges. The first phase was to develop a custom Java application that would enable the agency to exchange information with other government agencies.

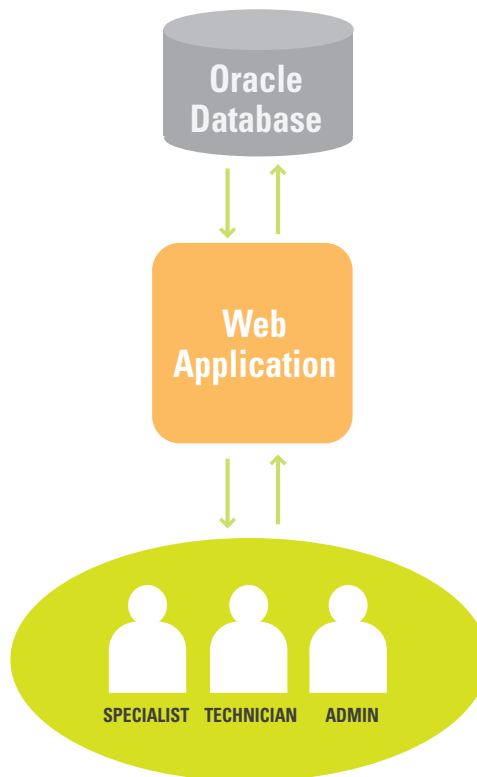
Zirous created a new system that enabled the agency to:

- Improve customer services, communications (internal and external), regulatory decisions and adaptability of systems to changing business needs.
- Decrease redundancy of information capture and management and the number of IT systems and technologies currently in use at the agency.
- Increase the ability to integrate the agency's systems with federal government systems and to partake in government-wide resource pools.

The second phase consisted of adding three custom web-based modules to their current system to help track and administer investigations and compliance, exports, and inspections.

As part of the second phase Zirous worked with the agency to:

- Standardize data format and communication across the agency
- Minimize manual intervention
- Provide a system with the flexibility to add new components in future projects
- Improve communication between the agency and external entities
- Improve transparency into regulatory decisions
- Consolidate multiple data repositories into a centralized database
- Enable efficient query and reports generation
- Enable trend analysis of data
- Improve scalability over the next 5 to 10 years



The customized Web Application was implemented with J2EE on the STRUTS framework with an Oracle database being utilized as the data store.