Case Study: CAIT

Many of today's government organizations are trapped in legacy data systems they created decades ago. Moving from those systems is a complicated process involving challenges of data migrations, data integrity, training, budgets, time, resources, and change management. To cut budgets and expand in a growing decentralized government structure, one government agency decided to take that step.

This migration from legacy systems to present day systems was managed by the Center for the Application of Information Technologies (CAIT). CAIT, contracted by an Illinois government organization, created a user-friendly and secure web-based administration system which enabled the organization's administrators to manage their daily business processes and associated data. In an effort to provide administrators with the ability to create, manage, and publish reports securely, CAIT chose EspressReport Enterprise Server as the solution.

The Challenge

The challenge of migrating from a mainframe database to an online system with reporting for a large government organization was a laborious task. A portion of the organization's data was moved to an online system with the need for ad-hoc reporting and regularly scheduled published reports. The organization had a need to track and report on a wide array of data, including over 2.8 million records, performing it centrally but providing access to all agencies located throughout the state.

The organization required the reporting solution to possess several internal security features to ensure their highly sensitive data was protected based on a user's security access level within the application. The selected reporting solution was required to not only leverage the user's security access level, but also provide field-level security and visibility based upon the user's access privileges. Some administrators were required to create reports, but not have the ability to view all report data. Once the report was published, only individuals with specific security clearance would be allowed to generate a report with limited data returned based on user-driven security categories.

The administration system created by CAIT allowed for tracking, monitoring, auditing, and administering of information. A multitude of daily, weekly, monthly, semi-annual and annual reports were required for government regulation and auditing as well as the organization's normal procedures. The format for some of these reports were constant and could be predicted, however, many reports were unforeseeable and required the ability to be created dynamically by the end user in an ad hoc fashion.

The Solution

CAIT evaluated many reporting packages based on a pre-established list of features and requirements. Solutions which met the majority of need for this project were typically very expensive and contained too much overhead, resulting in an application that would be too difficult to deploy and train end users on how to use. Additionally, these solutions did not support the specific security requirements combined with the reporting flexibility desired by partners of CAIT.

> *"The project had specific security requirements on the data this agency was administering, and this process had to be auditable. The solutions from very large vendors we surveyed would have needed some security adjustments before we could deploy. After a demo and being able to speak directly to the Quadbase staff, I knew ERES was a product we could expect to meet our needs. Quadbase stood behind their product, and wanted it to fit our security requirements."*
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> **Russell E Glaue, Enterprise Technology Engineer, CAIT**

As a supporter of open source solutions, CAIT reviewed many open source alternatives. At the time of implementation, no solution provided all required features unless CAIT invested significant effort into the solution which was not realistic given the time constraints and budget restrictions.

After an intense evaluation and demonstration of a variety of software, CAIT selected EspressReport ES as their reporting tool. Ultimately this solution was selected not only because of its affordability and features but because it was easy to integrate into the existing Sun Microsystems web server and MySQL database environment. The ERES tool had a small learning curve which allowed CAIT to get ERES deployed and configured in a very short period of time. In addition, Quadbase implemented all the security features the project required on behalf of CAIT. The ERES solution also enabled CAIT to customize its web interfaces to offer end users a fully branded, integrated solution.

> *"It had all the security features we were looking for. The developers at Quadbase were extremely helpful and talented. They were quick to turn around new releases which implemented even more security features we had on a wish list. We were able to successfully launch the project ahead of our deadline because of the dedication Quadbase staff has to their product."*

The ERES reporting system has been in use for one full year and CAIT is pleased with the reception of this tool by end users. The organization has expressed satisfaction with this solution and has provided positive feedback. The most encouraging feedback relates to the ease of creating and generating pre-defined reports, as well as the flexibility to meet unexpected needs using the QuickDesigner to create ad hoc reports. In addition, Quadbase has continued to provide excellent support to CAIT and their clients by implementing various feature requests and enhancements within the application as needed.

About CAIT

The mission of the Center for the Application of Information Technologies (CAIT), a technology center housed within Western Illinois University, is to provide practical solutions to online information technology needs in the design, development, deployment and support of custom instructional online learning systems, and to provide applications for educational entities, businesses, public agencies and not-for-profit organizations.

CAIT, with a track record of more than 20 years, is at the forefront of distance education and web development. Among CAIT's clients are Illinois and Washington D.C. departments of Children and Family Services, Illinois Law Enforcement Training and Standards Board, McDonald's Corporation, School District of Philadelphia, Illinois Century Network, the United States Department of Education, the Illinois Community College Board, Illinois Board of Higher Education and the Office of the Illinois Attorney General.

For more information on CAIT's services, please visit www.cait.org.