



BORLAND CASE STUDY

U.S. Army Environmental Center (USAEC)

FAST FACTS

COMPANY

USAEC supports the Army's expanding role as a world leader in environmental responsibility

INDUSTRY

Government

GEOGRAPHY

U.S.

CHALLENGES

- Automate existing manual processes
- Deliver a high-quality, easy-to-use application in less than 1 year
- Deliver a feature-rich application for less than \$350,000

SOLUTION

- Borland® StarTeam®
- Borland® CaliberRM™
- Borland® Together®

RESULTS

- Saved \$65,000 in development costs
- Delivered first application three weeks early
- Increased IT capacity by 38%
- Predict 3-year trend total benefit with agile development tools and practices

COMPANY

For the last 30 years, under evolving names and missions, the U.S. Army Environmental Center (USAEC) has supported the Army's expanding role as a world leader in environmental responsibility. Armed with lessons from the past and the vision of transforming the Army for the future, the Center provides the knowledge, tools, and programs that allow soldiers, installations, and commands to balance military readiness and quality of life with sound environmental stewardship.

CHALLENGES

Every government agency is challenged to institute best practices, processes, and standards for software development. However, unlike private business, government agencies must follow policy mandates that seek to boost data usefulness through more widely used applications, as well as show greater return on existing IT investments. To increase its operational efficiency, the USAEC's Information and Environmental Reporting Division (IERD) at the Army's Aberdeen Proving Ground in Maryland was tasked with developing a Compliance Cleanup (CC) program that would:

AUTOMATE EXISTING MANUAL PROCESSES

The Army needed to find an auditable and defensible way to track money being spent for environmental cleanup efforts stateside and overseas in Europe and Asia. Before developing the CC system, it was impossible for the user community to accurately track and defend these costs, because each team was reporting differently using a variety of applications and systems, including Microsoft® Excel, Microsoft Access databases, and homegrown systems. Once each team collected its information, it would submit that information up through the chain of command to the Office of the Department of Environmental Programs at the Pentagon, where someone else would consolidate all of the data and generate reports for Congress and the Office of the Secretary of Defense.

DELIVER HIGH-QUALITY APPLICATION IN LESS THAN 1 YEAR

Unlike traditional government software development projects— which can span multiple years and cost millions of dollars— the USAEC team was given less than a year to deliver a CC application that would give officials more flexibility in reporting, sharing, and analyzing data.

DELIVER A FEATURE-RICH APPLICATION FOR LESS THAN \$350,000

The project budget of \$350,000 included getting CC to final code, through the formal test phase, and in users' hands by August 2004. Midstream, however, the team was challenged to stay within budget while accommodating a major change in scope that required that another forecast module be added to the application.

Borland Case Study: U.S. Army Environmental Center (USAEC)

SOLUTION

The USAEC deployed Borland® StarTeam®, Borland CaliberRM,™ and Borland Together® to replace its manual processes with an automated system that enabled the team to deliver a high quality, easy-to-use CC application with added functionality, under budget and in less time.

A robust platform for coordinating and managing the entire software delivery process, StarTeam offered the USAEC team a comprehensive solution that included integrated requirements management, change management, defect tracking, file versioning, threaded discussions, and project and task management. CaliberRM provided a way for the team to capture and manage requirements throughout the project lifecycle. The USAEC team also extensively used Together, which provides two-way visual design tools for graphical Unified Modeling Language™ (UML®) representation in various formats.

Without much time to conduct an analysis of what needed to be accomplished, the group at USAEC agreed to pilot the application development using a hybrid agile development methodology. This approach would allow the development team to be more creative and work around problems endemic to traditional waterfall methods of design and development.

A committee chose Borland solutions to support its agile development effort because, over time, it believed the solutions would be less costly from a hardware, maintenance, and configuration perspective. The Borland solutions were also intuitive and easy to use, which would save money on training costs. The tight integration of the Borland products was also a benefit. In development, the team was able to take advantage of the tightly integrated pieces to manage the whole project lifecycle. Using the Borland tools, the USAEC team also was able to meet CMM-Level 3 quality standards.

RESULTS

The automated system built around Borland products is saving the U.S. Army time and money.

SAVED \$65,000 IN DEVELOPMENT COSTS

With Borland's managed software environment, the USAEC saved \$65,000 on the delivery of its high-quality, user-friendly CC project. The team also had a scope change in the middle of the project, where it had to add functionality, and still it was able to save money.

DELIVERED FIRST APPLICATION THREE WEEKS EARLY

The project manager used the Borland tools to create "lessons learned," "risk management," and "issues and action items" folders. He also deployed a Microsoft Project plug-in for realtime understanding of the development team's burn rates and ratios from month to month. In the end, the tool enabled the USAEC team to deliver a reliable, accessible system three weeks early and under budget.

INCREASED IT CAPACITY BY 38%

The CC project already has netted the USAEC a 38% increase in IT resource capacity in addition to sparing the budget and beating the schedule. Using Borland tools, the team was able to maximize productivity and deliver a quality product to its user community.

PREDICT 3-YEAR TREND TOTAL BENEFIT WITH AGILE DEVELOPMENT TOOLS AND PRACTICES

U.S. Army officials predict they can achieve a 3-year opportunity for cost savings of \$682,000 and a 3-year \$755,000 "trend total benefit" using agile development tools and practices.

ABOUT BORLAND

Borland Software Corporation is the global leader in platform independent solutions for Software Delivery Optimization.™ The company provides the software and services that align the people, process, and technology required to maximize the business value of software.



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