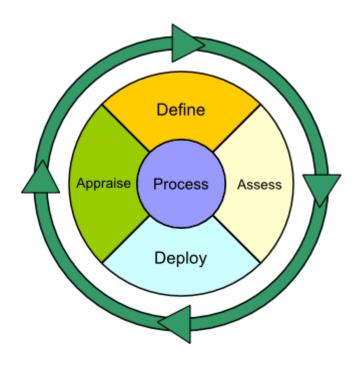


Assured Program Quality

Alterion, Inc. Case Study Independent Performance and Scalability Testing Vermont Systems WebTrac Application





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1 Overview

WebTrac is a web-based recreation management application developed by Vermont Systems, Inc. (VSI). WebTrac provides web access to VSI's suite of parks and recreation management software, allowing municipal governments, military, and other organizations to provide direct access to recreation services via the web. The popularity of Internet enrollment capabilities can lead to significant usage by citizens during registration periods. Application bottlenecks or insufficient hardware resources can potentially slow user interactions or cause servers to crash, resulting in dissatisfied customers. VSI has over 975 successful installations and was developing the latest version of WebTrac for their customers.

1.1 Business Drivers

VSI needed WebTrac to provide high system availability during peak registration periods. In addition, VSI wanted to correctly size the hardware requirements recommendations for their customers, so customers would be able to support expected user loads without over spending scarce resources on hardware. To accomplish this, VSI needed an objective assessment of the performance characteristics of the new WebTrac version under heavy loads. They also wanted to provide their customers with an objective evaluation of their systems. Using Alterion, Inc. to build and execute load and performance tests met these needs.

1.2 Alterion's Approach

Based on substantial experience with performance testing, Alterion developed a load model methodology that closely simulated real-world conditions. Using automated test tools, Alterion created virtual users that logged into the system, conducted searches, enrolled in activities, and completed credit card purchases. Engineers then executed the tests against the system with increasing numbers of concurrent users. By monitoring the virtual users and the WebTrac system, Alterion was able to provide VSI management with a detailed picture of the performance characteristics of WebTrac under increasingly heavy registration periods.

1.3 Results

Alterion was able to test the WebTrac application under significant and realistic user loads. The detailed results provided VSI management with information usable by both their developers to tune application code, and their customers to plan for the hardware needs under various load conditions. The performance tests and results enable VSI to provide a superior WebTrac experience to their customers.



About Alterion

Alterion was founded in March, 2000 with the goal of becoming a premier provider of IT Program IV&V Management and Support services. Headquartered in suburban Philadelphia, Alterion has since been successfully involved in numerous programs for corporate and government organizations.

Alterion provides a complete set of Independent Verification and Validation services through its proprietary SharpThought™ methodology. As a cost-effective method for assuring successful IT system acquisition and deployment, SharpThought minimizes risk during all phases of an engagement by identifying problems, and their corresponding corrective actions, when they can be mitigated at the lowest cost to a program.

Through SharpThought Services™, Alterion delivers IV&V expertise in areas such as Quality Management, Risk Mitigation, Requirements Analysis, Process Improvement, Performance Testing, and IT Consulting. Alterion's capabilities are further augmented by its rich network of industry partners, enabling Alterion to provide comprehensive and distinct services.

Alterion falls under the classification of a Small Business, as defined by the United States Government. For more information visit Alterion's website at www.alterion.com.

Contact Alterion

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About Alterion SharpThought™

The Alterion SharpThought™ methodology is a cost-effective method of assuring successful IT system acquisition and deployment through the verification of requirements and the minimization of risks. SharpThought minimizes risk during all phases of a program's life cycle by identifying problems early, allowing corrective actions to be taken at the lowest cost to the program.

SharpThought encompasses a product's full life cycle, from initial concept to retirement, including:

- Requirements Analysis
- Risk Mitigation
- Architectural Assessment
- Systems Integration Testing
- Deployment Assessment
- Post-Release User Surveys

- Quality Management
- Process Improvement
- Performance Testing
- Systems Acceptance Testing
- Defect Tracking and Management
- Contract Award Support

About SharpThought Services™

Backed by over 20 years of experience, and made possible by our unique expertise in process management and contemporary technologies, Alterion delivers an unprecedented level of IV&V services to commercial and government enterprises.

Aligning the core management tools of Process Improvement, Quality Management, Risk Mitigation and Technical Expertise to a varied spectrum of business activities, Alterion has constructed the SharpThought™ methodology for bringing repeatable control mechanisms to bear on complex and demanding projects. With a steady history of diverse and challenging engagements, Alterion has created a methodology that can improve all phases of an organization's business activities.

Contact Alterion to learn more about SharpThought IV&V and how it can fulfill the business execution needs of your organization.