

# Keane Logs 98.9% Success Rate in Application Deployments at PBGC

## Delivers Highly Reliable Applications at Lower Cost

### Abstract

The Pension Benefit Guaranty Corporation (PBGC) protects the retirement incomes of about 44 million Americans. As the pension insurance agency supports a growing number of participants with new services and enhanced applications, Keane is helping to enhance mission-critical and customer service applications while managing costs through its lifecycle management approach to testing. In tests, Keane measured a 98.9% success rate in application deployments and infrastructure changes at PBGC. Also, by using a controlled testing environment and formal testing processes, PBGC achieved a 21% boost in testing volume using 25% fewer contracted staff at the agency.

### Client Overview

The Pension Benefit Guaranty Corporation (PBGC) is a federal agency created under the Employee Retirement Income Security Act of 1974 (ERISA) to insure defined benefit pension plans sponsored by private sector employers. If an employer can no longer fund a plan because of bankruptcy or other financial distress, PBGC steps in to ensure timely and uninterrupted payment of retirement benefits to American workers who would otherwise lose their hard-earned pensions.

#### Passing the Test

- 98.9% success rate in application deployments and infrastructure modifications
- 21% increase in testing volume
- 25% savings in contracted IV&V staff

### Business Challenge

From 1999 to 2004, PBGC's responsibility for pension plan participants grew from 532,000 to 1,061,000, largely as a result of major corporate bankruptcies. If significant growth continues, IT resources will be stretched. To meet the needs of PBGC's growing client base, Keane is working on a significant IT transformation, moving to a services-oriented architecture (SOA) environment that upgrades mission-critical applications and offers new, efficient, and highly reliable customer services — such as electronic service options for plan administrators and Web-based applications that enable plan participants to access their accounts online.

### Solution

Before it started managing PBGC's in-house Integration and Testing Center (ITC) in 1998, Keane noted that the agency's testing, often performed using disparate systems and methodologies, resulted in high defect rates and costly support issues. Entering the picture to manage the ITC, Keane has worked to reduce support costs, improve IT performance, and increase organizational flexibility for PBGC.

In 2004, Keane expanded its responsibility at PBGC to provide a comprehensive quality assurance enterprise solution that spans the testing lifecycle through rollout. Keane's lifecycle management approach ensures that testing begins at the very start of the development process and becomes an integral activity as the project progresses. This approach prevents defects from occurring altogether or enables them to be caught early on in the process. The solution consists of three parts:

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**“For more than 10 years, Keane has demonstrated its track record of cutting client IT costs and improving organizational performance at PBGC. We look forward to continuing our work to align PBGC’s business and IT processes and ensure worldclass application development and enhancement projects through highly reliable quality assurance.”**

Glenn Giles, Vice President, Keane Federal Systems, Inc.

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- The Integration and Testing Center, which enables PBGC developers and the independent validation and verification (IV&V) group to perform tests in a controlled lab that meets developers' technical specifications and replicates PBGC's production environment. Once the applications or infrastructure changes are approved for production, Keane's ITC team manages the rollout.
- An IV&V group, whose function is to perform independent testing of new applications, infrastructure changes, and the “services” used to build SOA applications prior to production release. Keane's IV&V team develops test cases and scripts based on user requirements; executes tests in the ITC, when appropriate; communicates defects; retests; and reports final testing results.

## Client Story: US Federal Agency

- A software quality assurance (SQA) group, which audits the work of the IV&V team, ensuring another layer of verification as measured by the Software Engineering Institute's (SEI) Capability Maturity Model Integration (CMMI) (a process improvement model). The SQA team ensures that process improvements are made and requirements are met.

### Results

At PBGC, Keane has measured a 98.9% success rate with applications and infrastructure changes that were tested using formal and repeatable testing processes in the Keane-managed Integration and Testing Center — helping to ensure that PBGC's mission-critical,

custom applications adhere to federal regulations and position the agency to deploy new and highly reliable products to its customers faster. With 52 workstations, the lab enables PBGC to test on average 24 projects per month and increase workload capacity 21%, using 25% fewer staff. Under its service level agreement with PBGC, Keane completes application rollouts and infrastructure changes on time and within budget.

PBGC recently awarded Keane several new contracts, including implementing a next-generation, multi-channel customer contact center and enabling the PBGC Project Management Office to comply with SEI CMMI levels.

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*Keane is a global services firm that specializes in enabling transformation of its clients' business and IT functions.*