

## A Briefing

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## Errant Apps: Is There an App for That?

On May 23, 2012, Federal CIO Steven VanRoekel announced a new Digital Government Plan, which focuses agency IT efforts on corralling data and creating applications to make use of it.<sup>1</sup> This plan is in many ways the organic response to the rapid growth of applications already developed around the federal government for a variety of functions, from mission-critical to professional training purposes. However, the applications have begun to run amok as they overlap and interact, and in some cases, crash.

In the 21st century, new programs and initiatives are increasingly reliant on sound information technology. In many cases, if an application crashes, there are severe programmatic consequences. For example, the National Highway Traffic Safety Administration (NHTSA) deployed a customized commercial application to deal with registrations for President Obama's "Cash-for-Clunkers" program. After three days, the application was overwhelmed and crashed, backing up registrations for months.<sup>2</sup>

In light of this problem, agencies can greatly benefit from third party monitoring as they cannot afford for applications to crash for long. Such systems deploy a variety of tools to help IT managers monitor applications and reduce mean repair time. Here are three instances when agencies should have invested in application performance management systems.

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### USA Jobs

Jobs 3.0, the federal jobs website launched on October 11, 2011, was an attempt by the Office of Personnel Management (OPM) to insource the hiring tool. The site was met with an overwhelming number of complaints, up to 4,000 a day, on issues such as incorrect search results, timeouts, and lost data.<sup>3</sup>

Additional systemic problems were first identified by third parties more than a week after the launch of USAJobs 3.0. According to Avue Technologies Corporation, a company which provides job application services to federal agencies, each visitor to the USAJobs home page generated 16 hits on backend servers, frequently straining the system to overcapacity.<sup>4</sup> One of the early attempts to fix the system, a “governor” application designed to block six percent of visitors on their first attempt, instead resulted in an average of 86 percent of traffic being blocked.<sup>5</sup>

However, the problems were far deeper than OPM could initially tell. Due to the way OPM had set up its caching, some users were blocked out for days at a time.<sup>6</sup> Thus, the initial cause of the issues appeared to be simply a hyperactive governor, but in fact, caching was creating a far greater problem. Linda Rix, Avue's co-chief executive, noted eight days after the USAJobs relaunch, “[OPM is] not aware that they have more problems than what they are attempting to fix.”<sup>7</sup>

OPM was eventually able to work through many of the issues with USAJobs 3.0. However, these repairs took months and functionality was limited during this time. USAJobs has recovered to operational capacity, but the ForeSee e-Government Satisfaction Index indicates that customer satisfaction with the site after its relaunch has not recovered. Ratings are based out of one hundred points, and in April 2012, USAJobs sat five points below pre-launch levels. According to Larry Freed, the president of ForeSee, this is highly unusual.<sup>8</sup>

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—Government Accountability Office

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## Department of Veteran’s Affairs (VA) Education Benefits system

The VA recently began implementing a new system for processing education benefits provided by the Post-9/11 G.I. Bill. The old system was so complex and incompatible with other systems that it resulted in an average processing period six times longer than those of other VA benefits. This lengthy processing time created a backlog of 51,000 claims by December 2009.<sup>9</sup> Thus, the VA launched a program to incrementally build a new system to handle incoming benefits requests.

In December 2010, the Government Accountability Office (GAO) reported that, while this new system had met with some success, there were still potential improvements to be made in the development process. For example, the GAO noted, “It [VA] did not concur with our recommendation that it implement an oversight tool to clearly communicate velocity. However, without this level of visibility in its reporting, management and the development teams may not have all the information they need to fully understand project status.”<sup>10</sup>

The GAO ultimately concluded, “In order for projects to be effectively inspected and adapted, management must have tools to provide effective oversight... While VA had an oversight tool that showed the percentage of work completed... it did not depict the velocity of the work completed and the changes to scope over time.”<sup>11</sup> Without proper management tools, the project fell behind schedule and the implementation of new capabilities was pushed back.

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## OPM Retirement System

For the past two decades, OPM has attempted to modernize its federal employee retirement process by replacing outdated IT systems and automating paper-based processes. This has been an ongoing process, with GAO auditing the progress in 2005, 2008, and 2009. Updating these systems is crucial as nearly 2.5 million retired employees rely on OPM’s services, and nearly one million more employees will be eligible for retirement by 2016.<sup>12</sup> However, in 2011, OPM had to admit defeat and cancel the modernization effort despite investing \$79 million on IT projects across the agency that year.<sup>13</sup>

According to a GAO report, part of the problem that the modernization effort faced was due to a lack of effective system testing. Only one month before a major system component was scheduled to be deployed, testing indicated that the component was not performing as intended. Despite this, OPM compressed the additional testing timetable from five months to two and half months, risking inadequate testing and defects at launch. The GAO cited a lack of testing resources (especially subject matter experts) and the need for further system development as causes for the testing woes.<sup>14</sup>

Without adequate testing and monitoring programs, OPM was unable to prepare programs for launch and properly manage progress.<sup>15</sup> In response to the report, OPM began to make changes. However, it was too little too late. After 20 years and millions of dollars, OPM had to cancel the program.

## About Quest

Established in 1987, Quest Software (Nasdaq: QSFT) provides simple and innovative IT management solutions that enable more than 100,000 global customers to save time and money across physical and virtual environments. Quest products solve complex IT challenges ranging from database management, data protection, identity and access management, monitoring, user workspace management to Windows management. For more information, visit [www.quest.com/GovExecAPM](http://www.quest.com/GovExecAPM).

## About GBC: Industry Insights

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## Quest Solutions

These three diverse programs all failed or struggled without proper monitoring tools. The VA has had trouble monitoring scope and progress, leading to delays. OPM on the other hand needed a tool to diagnose the deeper issues with USAJobs and a testing and management tool for the retirement benefits system.

Many application products sold to federal managers come with performance management tools. However, these are often limited in functionality, and when an application crashes, the invested parties often begin to play the blame game. CIOs and IT managers simply want to fix the application as fast as possible and move on to the next issue. As a vendor that does not sell applications, Quest will always remain an unbiased third party mediator which can help CIOs and IT managers avoid the blame game. Additionally, its APM solutions enable managers to play back the exact end-user experience while also diagnosing back-end problems, both of which drastically reduce mean repair time. This can help a manager see current end user response time for critical applications, and set service-level agreement targets to 'scorecard' a managed services provider.

With such a solution, the OPM and the VA may have been able to implement their projects and better serve the American people.

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