

## 2015 NASCIO Awards

Title: Webinars Help New Jersey Keep Pace With Security Challenges

Category: Improving State Operations

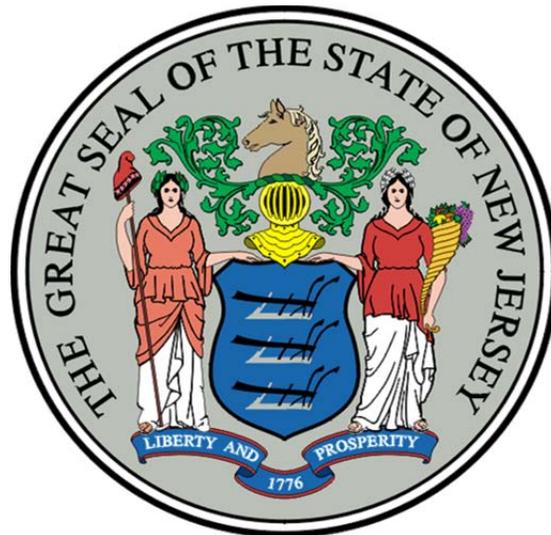
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## **EXECUTIVE SUMMARY:**

Security training was a daunting challenge for the Administrative Services Affinity Group (the Application Development Unit) at New Jersey's Office of Information Technology (OIT). The State required that applications staff code security features into new systems rather than relying on security protection to be overlaid after the system was operating. Security staff had created a painstakingly detailed package of policies and procedures guiding developers into best practices, but the applications staff had a hard time digesting so much content and consistently applying the technical guidance for performing critical tasks.

Facing this dilemma, managers decided that every one of the 140 members of the applications unit's staff could benefit from primers explaining security strategy and practices. The goals were to energize and empower the staff so they would embrace and implement the security requirements. Ideally, the training class would result in materials that could be used continuously to train new staff or personnel in other agencies within State government. In addition, the costs of the project had to be minimal, because of statewide resource constraints.

The successful solution was Webinar-based training. For the first time, New Jersey OIT would hold live webinars for the staff of an entire unit. Working with consultant Ovum, the State found two top analysts in London who were recognized experts in applications security. State staff worked with the analysts in advance of the webinars to ensure workers would receive tightly focused presentations that would encourage adherence to the security requirements for New Jersey applications development. Staff members both submitted questions to analysts in advance and asked questions raised by the presentations. The two Webinars, which were held weeks apart, took place in a conference room with every available applications manager present. The State put recordings of the events up on its online training site, making it possible for every agency to provide development staff with application security primers.

Staff response was overwhelmingly positive, prompting managers to have a third webinar that contrasted the Agile project development template to the Waterfall project development framework. This webinar was used to frame and guide an internal debate in the Applications Development unit about when the two development models should be used.

### **Statement of the Business Problem and Solution**

The OIT's application development unit was having trouble keeping pace with change. Developers were not getting the tools they needed because training them through conventional means was not possible with available resources. Specifically, critically needed security practices were not internalized among applications developers,

potentially creating unnecessary risks and remediation costs for the State of New Jersey.

To address the problem, OIT's group produced two live training Webinars that included interactive feedback between OIT staff and two research analysts from England. This was a first for OIT, which broadcast the Webinars live to staff sitting in its training room.

The Webinars provided training to key application developers and to all interested staff who attended. Managers helped tailor the Webinars for their staff members who received training credit.

The Webinars were based on IT Security in Application Development. The purpose was to train OIT application developers on best practices in the Application Development Lifecycle, and to teach them to align the application development process to OIT's policy on Security Application Development.

The first Webinar focused on the Application Development Lifecycle: IT Operations Security. Andrew Kellet, Principal Analyst of Infrastructure Solutions with Ovum, discussed development, process, vision scope, the role of developers, user acceptance testing, production, change management and the use of application code to ensure security.

Webinar two presented information about Software Development Security. Principal Analyst Michael Azoff of Ovum addressed application development security best practices and how they should be used in each phase of the System Development Lifecycle. He also discussed assessment of risk and vulnerability. Mr. Azoff reviewed security economics, security principles for developing secure applications, and the production, operation, and compliance phases during the application process.

Both Webinars included references to free security tools and services, courses, books, and links to testing tools. Attendees asked so many questions that the webinar ended with many questions unanswered, but the participants were able to contact the analysts later to get more information.

The popularity of the first two webinars with staff led to a third webinar on a non-security issue. The third Webinar, Transitioning to Agile Development, provided instruction on how to move from Waterfall to Agile Development. Principal Analyst Michael Azoff provided basic training on key Agile practices, lean methodologies, and agile lifecycle management and tools. He discussed methods for successfully adopting these best practices. He also explained the roles and structures needed to build software and govern development projects, and recommended Agile lifecycle management tools and vendors for consideration by New Jersey IT managers.

## **Improvements to the Operation of Government and Benefits**

The State of New Jersey now has three powerful, online training tools for applications developers. These tools can be used to introduce newcomers to key concepts that are driving both practices and leading edge discussions among State application developers.

The New Jersey Civil Service Commission thought so highly of the webinars that it placed them on the State's Learning Management System (LMS). Users of the LMS can enroll virtually, receive training credits and earn certification after taking a quiz created by OIT's Office of Policy and Planning. This work credit is open to managers who are reviewing workers for promotion or new assignments.

The webinars were a model for managers looking for an efficient alternative to face-to-face training. It allowed better use of staff time, ease of scheduling, elimination of travel and classroom instruction, and content reusability so that staff across the State could benefit long after the initial webinar events.

These three webinars will now serve as templates for future training efforts needed during these times when careful use of resources is imperative.