

TITLE OF NOMINATION: Alabama Consolidated Email

CATEGORY: Enterprise IT Management Initiatives

STATE: Alabama

Executive Summary

During his first term in office in 2002, Governor Bob Riley initiated "A Plan for Change" (completed in 2007) to transform Alabama government. Key to the plan was a multi-faceted project using information technology and e-government services to improve State service to the citizens of Alabama.

The cornerstone of this plan was the consolidation 45 separate e-mail systems, with 20,000 users, supporting over 250 agencies into one consolidated infrastructure. Many agencies had their own systems--many of which were out of date, not secure and not interoperable. Even the Governor could not communicate with all state employees via email.

The extreme decentralized nature of the state's e-mail systems created vast inefficiencies. There was no common address book for cross-agency communication, calendaring among the agencies was virtually impossible as each of the 45 email systems had their own calendar systems.

Many of the systems were antiquated or based on public email systems available at websites such as Yahoo.com and AOL.com. There was no common address naming convention for state e-mails. As a result, most email addresses did not reflect the agency in which the addressee worked.

There were no e-mail policies across the state and most email systems lacked basic firewall protection and email filtering.

In many of the separate email systems, the agency, without considering the personnel costs or the security risks, mistakenly thought their e-mail costs were negligible. The true cost for the agencies ranged from \$8.00 to \$50.00 per user per month.

Now agencies have the ability to share email addresses and calendars, as well as share in the cost of a robust, reliable system that is free from viruses and mass "spam."

Looking back, technology was not the barrier to a consolidated e-mail system. The system is based on mature "off-the-shelf" software, Exchange Server 2003. The primary hurdles were organizational. Many agencies were more concerned with protecting what they viewed as "theirs", and were reluctant to lose that control by turning their e-mail system over to a central authority.

Description of the business problem and solution

In his first term in office in 2002, Governor Bob Riley initiated "A Plan for Change" (completed in 2007) to transform Alabama government. Key to the plan was a multi-faceted project to use information technology to improve e-government services to citizens of Alabama in areas of education, business transactions and information on how Alabama government works.

As the Governor's plan developed it became apparent that in order for citizens to have better access and improved communication with state government, as well as to enhance efficiency in government, the Plan for Change required the consolidation of the state's email systems. At that time, the state of Alabama had over 20,000 users on 45 e-mail systems supporting 250 agencies.

Under the Department of Finance, the Information Services Division (ISD) had successfully operated a variety of shared services for the state, including: the phone system, Internet access and content filtering, WAN and mainframe operations, the state's web portal and many agency web sites. ISD obtains its revenues for operations using a revolving funds model. These funds provided the seed money and approximately \$1 million was set aside for the e-mail project.

Before anything could be done the physical network had to be enhanced to be sufficient for the e-mail consolidation project. The state's WAN connectivity and bandwidth were increased and single Simple Mail transfer Protocol (SMTP) gateway was created. This provided the base layer upon which the email system would be built.

Because the majority of state agencies already were using Microsoft Windows operating system and Microsoft Office on their desktop computers, and ISD network administrators were already familiar with Microsoft Exchange Server, the decision was made to standardize both network users and the email system on Microsoft products.

After the network upgrade was completed, the state contracted with Microsoft to design a statewide single-forest Active Directory infrastructure, as well as a clustered Exchange topology. This provided the base upon which the email system could be installed.

After installation a pilot was successfully conducted within the Department of Finance. This test involved about 550 people, 200 of whom worked in ISD.

The next step involved the marketing of the consolidated e-mail system to the agencies. The primary values offered by the new e-mail system were new functionality, such as internet browser access to e-mail and Blackberry support, a

single sign-on for access to shared state services, efficient spam-blocking and lower operational costs. In addition, agency personnel who had been dedicated to e-mail would become available to focus on more strategic agency IT initiatives.

As ISD began marketing their e-mail system to the agencies, it was found that the agencies fell into three categories, the willing, the failing and the unyielding.

“Willing” agencies were ready to turnover their email operations to ISD. These agencies immediately recognized their own limitations, and the benefits of participating in a consolidated email system.

The “failing” agencies had systems that were inadequate for their needs, vulnerable to outside attack, or just so old that they were not compatible with current software releases. These agencies frequently required assistance from ISD to keep their systems going. ISD now declined to provide assistance and instead offered their new robust e-mail system.

The agencies falling into the “unwilling” category required a consistent sales effort and some political persuasion. The Governor directed Department Directors and Agency Heads to become part of the consolidated e-mail system within 18 months. Some “unwilling” agencies argued that their email system was “free” and had to be shown where their true e-mail costs existed. Other “unwilling” agencies were reluctant to give up control over their e-mail systems because they felt ISD already provided enough of their infrastructure.

Ultimately, ISD was able to overcome the objections of all agencies by demonstrating the consolidated e-mail system and its new features, providing technical assistance, and providing support in finding adequate budget to modernize agency PCs to support at least Windows XP. The opportunity to update desktop infrastructure proved a very attractive feature to several of the larger agencies.

Alabama Consolidated E-mail (ACE) has been fully functional since August, 2007 with over 21,000 users. All agencies have been converted except for the Department of Public Health and the Department of Transportation. The Department of Public Health is in the process of converting from IBM Lotus Notes/Domino dependencies and the Department of Transportation is taking longer due to its large number of users (5,000) and geographic and WAN constraints.

Significance of the improvement of the operation of government

ACE has dramatically improved the e-mail experience. E-mail uptime is over 99.9%. Spam and virus-blocking, using Symantec and Ironport, has improved considerably. Initially, ACE processed about 1 million e-mails per month. Now, ACE is now processing over 90 million emails per month and blocking about 95% of that traffic as spam. Those sending spam are sending more than ever. Without ACE many agencies would now be buried in the daily avalanche of unscrupulous e-mails. Also, statewide e-mail policies are now in place, users have access to a statewide e-mail directory, use a common naming convention (firstname.lastname@agencyname.alabama.gov), and have cross-agency scheduling capability.

Agencies have reported that it is easier and less expensive to procure statewide applications, such as a child-welfare program because vendors are able to design the application to work with one e-mail platform where previously applications had to be written to work across multiple e-mail platforms.

Utilizing a common e-mail naming convention makes it easier for citizens to contact state agencies and state employees, resulting in a more pleasant experience, greater responsiveness towards citizens, and faster results.

Additionally, it is easier to layer new services on ACE. For example, unified messaging and the addition of Microsoft Biztalk for process automation and workflow services are now both available throughout the state to ACE users and both can be used to the complete extent of their capabilities. This would have been impossible across multiple e-mail platforms.

Benefit of the Project

- **Financial return on Investment**

In total, the state is saving over \$3 million per year with ACE.

- **Non-Financial return on Investment**

Although \$3 million in annual savings is significant, of equal benefit are the opportunities ACE created for increased productivity. Improved security and content filtering has decreased the time one must spend culling unwanted emails from one's mailbox. Uptime is over 99.9%. Previously, some agencies had so many security and email volume issues, email was only available periodically. The process of scheduling meetings is accelerated as ACE enables cross-agency meetings to be scheduled and conference rooms reserved with very little confusion in getting the participants schedules synchronized. The process of locating an employee's e-mail address has been simplified with a Global Address List (GAL), making it easier for both state employees and citizens to find and

communicate with the right person. The procurement of agency wide and cross-agency applications has been simplified and their development accelerated as new systems can be standardized on one platform and one e-mail system. Laying down the infrastructure for ACE creates the opportunity for agencies to take advantage of unified messaging. Agencies will also be able to add workflow systems that will capitalize on ACE's features.

In addition, the development of ACE has provided the infrastructure for the success of Governor Riley's "Plan for Change".