

Enterprise Exchange Email

Category: Enterprise IT Management Initiatives

State: Nebraska



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B. Executive Summary:

As the demand for more efficiency and transparency while navigating through State Government services continues to grow, the State of Nebraska made a decision to consolidate its email on one single platform to make contacting State employees, who assist with these service offerings, easier. With Governor Dave Heineman leading the way through his IT strategy, Nebraska embarked on this consolidation and standardization project in June 2007.

Over the course of 18 months and through the use of shared best practices, we were able to take fragmented decentralized email platforms, located on various types of hardware in different agencies with different lifecycles supported by numerous FTE's and contractors and transform email communication to an efficient, effective and reliable offering, supported and managed by a central IT organization. Under this consolidated offering, we have made it easier for citizens of Nebraska to reach us as well as provide the potential for growth to meet the needs of future technologies used by a younger workforce.

C. Description of the Business Problem and Solution:

Since the late 1980's, the methods of electronic messaging in Nebraska were generally driven by individual agencies without regard for the potential opportunity for efficiency and economy that might be gained from consolidation and uniformity. The State of Nebraska discovered that individual agency email solutions were deployed as silos without consideration given for sharing services and best practices across agency boundaries.

In the February 2006 issue of Government Technology, Governor Dave Heineman outlined his IT strategy for the State of Nebraska. Included in this strategy, was the Governor's vision to reduce duplication of government technology services and projects in Nebraska. Through the Nebraska Information Technology Commission (NITC), it was determined that common services could be most effectively delivered utilizing a shared platform. In reviewing potential shared services, email was one item taken into consideration. As the process began to unfold, it became apparent that in addition to reviewing how to consolidate email, Nebraska also had an opportunity to review the current email technology platforms to determine the system that would best meet the State's needs. Once again Governor Heineman took the lead, calling an Agency Director's meeting with a single topic – email consolidation. As a result of this meeting, agencies were interviewed about their business needs, many of which identified email as one of their top priorities for their agency and a tool that was a necessary component allowing them to complete their mission. In fact, the mission critical position of email was discussed in terms that equated it to a vital utility such as electricity. Other business drivers identified by agencies included the fact that much of the hardware being used for their email solutions would require replacement within the next two years and the incoming workforce that was being hired was expecting additional tools such as web meetings, unified messaging, newer mobility tools, etc. Finally, agencies needed a solution that ensured legal compliance, records retention and records management.

In summary, the business drivers for moving to a single, consolidated email system were:

- Providing agencies with high availability of a critical system;
- Providing agencies with robust, remote access to email anytime, anywhere;
- Providing agencies with tools that will transcend the organizational boundaries that separate them today;
- Ending the duplication of effort in supporting multiple systems in multiple agencies;
- Ensuring agencies have the technical tools for compliance with legal requirements pertaining to privacy, security, records retention and records management;
- Providing agencies with modern capabilities that are available with an enterprise email system,
- And, providing agencies with disaster recovery capabilities of a critical system in a cost effective manner.

We chose to conduct a few “town hall” meetings to discuss potential solutions to our current email structure. Consensus was quickly found indicating that a single email system for State Government would provide the requested and required economies of scale and efficiencies as well as successfully address common calendaring services, electronic mail services, instant messaging, sharing of documents, scheduling of resources, and provide the ability to use a common address book. A unified system would also be able to address records retention, archiving, as well as have backup and redundancy. We also determined we needed to be looking at future services that agencies would deploy and the technology and people resources that would be required. After evaluating software, hardware, personnel resources and future business needs of the State, a decision was made to establish the State enterprise email on Microsoft Exchange.

In June 2007, an interagency team was established to create the project plan and establish the parameters of the email system and the conversion schedule for agencies. A project manager was selected as well as team members with skill sets ranging from hardware to Help Desk to previous experience with both Lotus Notes and Exchange to Application Development. This team then began conducting more shared service meetings to lay out the plans, answer questions and determine which agencies would migrate first. Some of the criteria used to establish the conversion schedule took into account the following: 1) the agency had a business need/desire to move; 2) the agency email solution currently in use was in immediate need of hardware and/or software replacement; and 3) the current schedule of the licenses used by the agency for email and their expiration/renewal date. This team then began establishing standards such as a common naming convention (firstname.lastname@nebraska.gov), criteria used for two identical names, the use of nicknames and email box sizing standards.

To support the migrations, the email team met with each Agency on a regular basis prior to their migration. These meetings were called the “T minus” meetings. Based on the size of the migration, they were held weekly anywhere from three to ten weeks prior to the move of the first mailboxes. For the larger agencies, an Office of the CIO Leadership Team member was assigned as the “sponsor” and worked as a liaison, at a very high level, between the agency being migrated and the OCIO. During these meetings, topics discussed included naming conventions, how much email and calendar entries could or would be moved, special dates we needed to work around on the agency calendar and any other considerations we needed to be aware of, such as applications. We also had staff available the morning after each migration to assist with any questions. In some cases, our staff was physically in the agencies, working side by side with the agency IT staff. Automatically with each account migration, a “Welcome” email was sent from the Chief Information Officer welcoming them to the new email, directing them to a web page with Frequently Asked Questions as well as a link to the CIO Help Desk.

In October 2007, the first agency, Office of the Chief Information Officer, was migrated. We had 12 people working from 5:00 p.m. till 2:30 a.m. We migrated 45 mailboxes for

the Office of the CIO. We consumed 10 liters of soda, 100 wings, too many chips, dip, candy, and salsa. Our first migration took 15 minutes per mailbox. The second agency, the Governor's Office, followed shortly after that. In October 2008 for our Department of Health and Human Services migration, we had 8 people working from 5:00 p.m. till 7:30 p.m. and migrated 515 mailboxes. We consumed 0 liters of soda, no wings, chips, dip, candy, or salsa. By October, we were taking 15 seconds per mailbox migration. The success here is mostly related to automating many of the manual processes. By December 1, 2008, 97 out of 100 agencies had been migrated. These agencies include both the Executive and Judicial branch. The Legislative branch is currently in session, but discussions will be held with them regarding the benefits of the centralized email once the session is over.

D. Significance of the Project:

One of the most apparent efficiencies and benefits gained was through the use of the common naming structure, identifying us as one state government. Anyone (state or citizen) wanting to contact a state employee can now use the standard naming convention and know the email will reach that employee. With 90+ state agencies, we quickly overcame the barrier of guessing what an employee's email address was. This is valuable whether you are a state employee, a vendor wishing to do business with the State of Nebraska or a citizen wishing to contact a State of Nebraska employee. The project also kept us in alignment with the NITC's goal of shared services, providing common services efficiently and economically. One system supporting state government in contrast to the multiple systems previously being used is obviously more efficient and economical.

E. Benefit of the Project:

Today, the State of Nebraska is working with an enterprise email system where we no longer have to navigate through multiple independent systems sitting on different brands of hardware with different platforms and life cycles. We also have a global address book which not only shows us employee email addresses but also shows us what agency they work for, their telephone number, who they report to as well as who reports to them and their mailing address. Calendars and resources are easily shared across agencies, and in some cases across citizen and company boundaries.

In the area of technical benefits, consolidation to a single email system provides the ability to coordinate upgrades and assure that employees are on current and supported versions of software. Technical staff no longer have to spend time resolving conflicts stemming from linking multiple independent systems. Technical support is handled through specialization, training and cross-training of staff. Backup, security and disaster recovery capabilities are handled as a daily function of business and no longer dependent on agency-by-agency policies. All emails are kept in one centralized location and make restoration and retrieval easier.

Financial benefits have been seen in several areas. Under the decentralized solution, there were a multitude of servers in State agencies providing email for employees, many nearing end of life and in need of replacement. We have also been able to consolidate our purchases of software to ensure not only favorable pricing but also that the State of Nebraska is fully compliant with legally licensed software. In the past, there were approximately 11 agencies that independently provided email services to employees. Based on a conservative estimate of one FTE per agency to support email, this equated to a minimum of 11 FTE. By consolidating email, and using five FTE to support a single system, the remaining FTE can be redeployed to other IT projects as needed within their agencies. With a centralized environment fewer servers are needed allowing us to move towards a smaller footprint.

With this project, the State of Nebraska has been able to consolidate a service offered by multiple agencies on multiple platforms to a centralized service offered on one platform. Through the use of shared service meetings and input, we were able to incorporate other efficiencies into this project and ensure that all timeframes and considerations were taken into account during the migrations. Prior to this centralized offering, it was difficult to contact Nebraska state employees due to the multiple naming conventions. There was also no central repository for email, no centralized tracking of application uptime and no guarantee that all hardware was properly patched and maintained for security purposes. This project required each agency to recognize a centralized domain and has allowed the foundation for the State to begin another shared service, one domain for all services. It has also allowed us to formalize and standardize two other service offerings within the State of Nebraska – Efax and Secure email.

As of June 10, 2009, we have 18,497 mailboxes on our environment. Our Exchange environment has been up 99.971% of the time over this same time period. In less than two years, Nebraska has been able to take fragmented decentralized email platforms, located on various types of hardware with different lifecycles supported by numerous FTE's and contractors and transform email communication to an efficient, effective and reliable offering with massive potential for growth to meet the needs of future technologies used by a younger workforce. This project was done within existing budgets and without an earmarked appropriation to the State. We have the confidence that all costs are accounted for and controlled, hardware and software are current and accurate and that all agencies have had input into this decision and its successful deployment. And last but not least, during this email migration, the team members had 1 new daughter, 1 new daughter-in-law, 2 new grandchildren and one motorcycle wreck.