2003 NASCIO Recognition Awards

Nomination Form

Please complete entire form. All nominations must be postmarked no later than May 18, 2003.

Title of Nomination: State of Delaware e-Payment Process

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Category for judging (please list only one): Enterprise Information Architecture

Person Nominating (if different than above): Same as above.

Delaware Statewide e-Payment Process

Executive Summary

Delaware currently has three separate e-Payment solutions in place. Each of these disparate solutions is managed by separate agencies through relationships with three different vendors. In addition, there are a number of new applications currently in development that are expected to have a payment component. Until now, no common interface for e-Payment existed for State agencies to employ when building web applications. Additionally, until now there has been little or no information available on statewide policies regarding the security of web-based credit card transactions.

Beginning in the spring of 2002, an RFP for e-Payment services was developed by the Delaware Department of Technology & Information (DTI) and the State Treasurer's Office. In developing the RFP and evaluating responses, the State considered both an in-house (state managed) solution and an outsourced (vendor managed) approach. The "pre-bid" meeting for the e-Payment RFP (held prior to the awarding of a contract) was attended by over 150 different vendors. After an exhaustive analysis, the State selected Govolution in December 2002 (http://www.govolution.com/) to provide e-Payment services for state agencies.

In parallel with this selection process, the State has developed a comprehensive application development process to support the use of the new e-Payment solution. This process (http://www.state.de.us/dti/epayment2.htm) will allow DTI to ensure compliance with statewide technology standards and alignment with agency-specific and statewide strategic goals.

Finally, the State has developed a "distributed customer service system" to support the use of electronic payments by Delaware citizens and businesses. This will help the state reap the benefits of online transactions and electronic payments (i.e., lower cost of service delivery) by ensuring a high level of citizen satisfaction.

Description of project, including length of time in operation

The State of Delaware's e-Payment Process is a combination of **technical components**, **standards** and **processes** that will be used by all state of Delaware agencies to enable web-based payment by citizens and businesses.

e-Payment Solution:

The Delaware e-Payment solution uses the Govolution "Velocity Payment Platform" and V-Relay payment interface to provide electronic payment processing for agency web applications. V-Relay enables Delaware to offload the complexity and risks of payment transaction processing onto the Velocity Payment Platform while, at the same time, assuring a seamless end-user payment experience.

By using V-Relay, front-end agency web sites hand off citizen communications (via a standard API) to agency branded pages on the Velocity Payment Platform's secure web servers. Verification during this hand-off is assured by a server-to-server exchange of secure tokens between the Velocity Payment System and the agency's server.

The user begins his or her session on the agency web site, which is responsible for displaying application specific information such as product or service specifications, purchase quantity, user's outstanding balance and other payment information. The agency web site then directs the user's browser to V-Relay, which assumes transactional responsibility for account authorization (credit card or ACH), approvals/denials and settlement through the credit card/ACH banking networks. Upon transaction completion, the user is seamlessly returned to the agency's web site. Because the V-Relay payment information page makes use of the agency site's graphical look and feel, the entire process is transparent to the end user, and appears to have taken place solely within the agency's web site. A graphical depiction of this entire process can be viewed on the Delaware e-Payment site at http://www.state.de.us/dti/epayment.htm.

Application Development Standards:

In parallel, the State has developed a comprehensive application development process to support the use of the new e-Payment solution. This process (http://www.state.de.us/dti/epayment2.htm) will allow DTI to ensure compliance with statewide technology standards and alignment with agency-specific and statewide strategic goals. In order to utilize the e-Payment solution, agencies must articulate and justify the business case for their application and establish customer service contacts for citizens and businesses.

Customer Service System:

The distributed customer service system that supports agency use of the e-Payment solution brings together agency-specific customer service contact information into a toll-free customer service hotline and top-level web page. These customer service channels provide users with the information they need to contact agency customer service personnel to have questions answered and issues resolved.

As part of the process to establish a merchant account with the State Treasurer's office (required for an agency to collect credit card and ACH payments), agencies must identify specific customer service contacts within their agencies that will be responsible for responding to customer questions and/or inquiries. This information is tied to a unique merchant number that is assigned by the State Treasurer's Office. This application-specific identifier is the linchpin of the distributed customer service system.

By assigning a unique merchant account number, this identifier can be carried through to a citizen credit card statement -- a unique three-digit code will appear in the "business name" field of the credit card statement based on the type of transaction conducted. [1] A cardholder can access a toll-free telephone system to be routed directly to the agency's customer service personnel. This phone system is fully operational (866-282-7503), and an accompanying customer service web site will be deployed when the initial e-Payment application is launched in early June.

Current Status:

The identification of the e-Payment solution was completed in December 2002. The development of application development standards and a customer service system have now been completed. The first implementation of the State of Delaware's new e-Payment solution will be for the online purchase of hunting and fishing licenses through the Department of Natural Resource and Environmental Control. This application will be deployed in early June 2003. Subsequent applications through the Department of Natural Resource are scheduled for deployment throughout 2003 (e.g., park passes, surf fishing licenses, dog licenses, water and septic permits, etc.).

Subsequent implementations, including the transition of agencies currently using non-standard e-Payment solutions are expected before the end of CY 2003.

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[1] For example, the unique code used for hunting and fishing licenses through the Delaware Department of Natural Resources and Environmental Control is "111". This identifier will appear on a cardholder's statement along with the toll free customer service telephone number (866-282-7503).

Delaware Statewide e-Payment Process

Significance to the improvement of the operation of government

Delaware currently has 3 separate e-Payment services in place, managed by separate agencies with different vendors. This current situation is inefficient because it requires state IT staff to have knowledge in multiple technologies and systems. It is wasteful because it requires the State to purchase and/or build the same kind of solution more than once.

The new centralized e-payment process will speed the development and deployment of agency web applications, and will improve the ease of use of agency web applications by providing a common payment interface for citizens. It will save the State money by eliminating investment in disparate solutions.

Additionally, it will make up an important reusable architectural component that any agency can leverage as part of a web-based application. It will also help the Department of Technology and Information ensure that agency web applications are in compliance with statewide technology standards (http://www.state.de.us/dti/standards.htm) and in alignment with agency-specific and statewide strategic goals.

Benefits realized by service recipients, taxpayers, agency or state

By enabling the more efficient deployment of web-based applications, the e-Payment process will improve service delivery by allowing more citizens to access government service via the web. Because the V-Relay payment information page makes use of the agency site's graphical look and feel, the entire process is transparent to the end user, and appears to have taken place solely within the agency's web site.

By ensuring a common look and feel for agency e-payment pages, citizens are given assurances that they are conducting transactions with government entities and that the transaction security and handling of their personal information will be consistent with Delaware government standards.

Return on investment, short-term/long-term payback

The technical infrastructure of the e-payment solution is an important statewide e-Government component. An e-Government component is a service, system or solution that can be:

- Utilized by multiple agencies at once.
- Easily and quickly deployed as a part of an agency e-Government application.
- Constructed or licensed up front with little (or reduced) marginal costs for multiple uses.

The e-Payment process will provide a return on investment in two ways. First, it will obviate the need for future investment in non-standard e-Payment software or systems. It will also allow existing payment systems that use non-standard software to migrate to a centrally managed e-Payment processing solution.

Additionally, it will allow the Department of Technology and Information to enforce other technology standards that will prevent investment in disparate, non-standard solutions. For example, agencies that seek to use the new solution must comply with promulgated standards for application development. As such, the e-payment solution is an architectural component that helps the Department enforce other elements of the IT architecture.

DISTRIBUTED CUSTOMER SERVICE SYSTEM

Application specific information on citizen credit card statement

The agency's business name and unique three-digit identifier will appear on each users card statement along with a toll free customer service phone number.

Treasurer's Office
Using specific number convention, merchant ID # is assigned to each agency application.

This information is captured in an XML data source that contains all merchant (agency) data.

Agency
Provides customer service contact information (phone, e-mail) for specific agency applications. This information is submitted as part of the merchant account application process.

Agency customer service information is used to create and update customer service pathways

Using Extensible Stylesheet Language Transformations (XSLT), agency-specific customer service information is transformed from XML format to VoiceXML and XHTML formats.

XML data is updated through an intuitive graphical user interface and XSL transformations occur automatically when updates occur via server side scripting.

VoiceXML

Statewide Toll Free Customer Service Line (866-282-7503)

XHTML

Customer Service Web Site (Will appear on www.delaware.gov)

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