E-AUTHENTICATION

SMART CARD - LOGICAL ACCESS

PROJECT PLAN

APRIL 30, 2004
WO-850

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C.

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Project Goals and Objectives:

Our goal is to expand our existing physical access Smart Card system into a fully integrated credentialing system. This will enable BLM employees and contractors to have all security credentials, logical, physical and government identification stored on a single secure card, which will also contain their photograph for visual identification.

The logical access component of the e-authentication project will provide BLM with a system to deploy, manage and sustain a Smart Card-based credentialing system that provides for secure and portable storage of the user's credential to enable and control logical access to their computer desktop and BLM's network, and provide e-credentials used for Public Key Infrastructure (PKI) enabled applications. The solution is flexible, scalable, allows for seamless integration, and is easy to use and administer. Visit the GSA Smart Card web site for the latest smart card developments affecting electronic government.

The three components of the e-authentication project are:

1. **Identification Issuance (previously piloted/implemented in FY01)**
   Incorporating DOI name badge standards, the photograph of each employee and contractor is placed on a Smart Card that will also contain basic demographic data pertaining to that person, application logon ID's and passwords for system authorization and application access, and certificates which will authenticate the individuals signature on official documents.
2. **Logical Access**
   The e-authentication project will replace user login ID's and passwords for all BLM employees and contractors. Smart Card readers will be installed on all computers and laptops. Access to applications will occur through the Smart Card reader and a PIN entered by the user.
3. **Electronic Forms Process**
   Using VeriSign issued digital certificate, BLM will be able to demonstrate electronic signature and validation of documents.

The Smart Card Issuance component of the e-Authentication project is complete in the Washington Office, Nevada, Denver Federal Center and the National Training Center. Deployment is continuing in the other States and Centers throughout the BLM. A pilot project of the logical access component has been completed in Nevada and testing is underway at the National IRM Center and the Washington Office.

The strategic objectives for this project:

1. Improve logical security and reduce the cost of assigning user IDs and passwords and the associated administrative costs of maintaining and servicing those ID's and passwords.
2. Improved coordination between BLM and our partners when this solution is implemented enterprise wide;

Compliance with Laws and OMB Guidance:

This project will enable achievement of BLM's strategic and program goals. It will improve existing operations by eliminating redundant, non-valued administrative tasks allowing the Bureau to better focus on it's core business lines. This process is crucial in continuing to protect our government, business, and employee and public business lines from disruption due to unauthorized access to BLM's computerized systems and data. Implementation will enhance our electronic trusted processes. This project phase directly supports:

1. OMB circular A-130 compliance (secure systems);
2. President's Management Agenda (E-Gov, IEE);
3. DOI's plan for citizen centered governance (security); and
4. OMB's E-Gov strategy.

Project Overview:

BLM employees with the appropriate security clearances will perform all security officer functions. While implementation of a portion of this credentialing solution is outsourced, all policy and business decisions will made by BLM employees.

While there is a project web site portal for the purposes of making project related documents available for project team members as well as BLM employees this project does not directly involve the development of a web site as an end product.

There are several application related transactions. Certificates will be stored in the Active Directory as well as in a global repository at VeriSign's California location. Additionally, one of VeriSign's deliverables is a local hosting kit. The local hosting kit will support Renewal and Revocation services via separate web pages. An audit trail of all transactions is managed by VeriSign at their California location. The BLM e-authentication data administrator will also have access to this data.

The process of users logging onto their PC's and laptops will generate a security transaction very similar to what is generated in the existing system. The Windows XP Operating System will seamlessly facilitate the storing of the security transaction in its revised format.

The Smart Card has the ability to store multiple login ID's and passwords. This will allow the user to login to all systems, networks, and applications to which they have access by swiping the card. They no longer will be required to remember all of their login ID's and passwords. They will simply have to remember *one* PIN number.

Tasks to Achieve Goals:

Detailed tasks and the associated task completion schedule is contained in the e-Authentication Integrated Project Plan. The following table contains the key tasks and milestone dates.

Milestones & Approvals	Completion Criteria	Approved By	Date
Business Requirements Analysis	Functional Need Identified Detailed Logical Data Model	BLM Nevada project team review and approval	Jan 2002
Technical Requirements	-High level technical infrastructure requirements -High level application (Interface) requirements -Security requirements -Distribution requirements -Audit and control requirements -System performance requirements	BLM Nevada project team and contractor review.	Jan 2002
Investment proposal approval for BLM e-authentication project	Business case for e-authentication	ITIB, SCO	Mar 2002
Business Case Development and Approval	ITIB approval obtained for business case	ITIB	April 2002
Phase I — Reno rollout	Pilot program consisting of 200 users in Reno issued Smart Cards	BLM project team review and approval	July 2002
Phase II Nevada rollout systems design.	Release II - systems design alterations based on lessons learned feedback.	BLM project team review and approval	Aug 2002
Budget Approval	Obtain budget approval for project.	BST / ITIB / AD'S	Sept. 2002
Phase II Nevada rollout development	Phase II Nevada rollout development	BLM user acceptance	Sept. 2002
Phase II — Nevada rollout	Remaining Nevada users receive Smart Cards (1,000)	BLM project team review and approval	Oct. 2003

NIRMC Testing Complete	Test Report	Project Manager	May 2004
Satisfy Privacy Act requirements	Privacy Act Notice published in Federal Register	Project Manager	May 2004
Satisfy Security Requirements	Interim Authority to Operate	Project Sponsor & BLM CIO	May 2004
Approval to deploy to desktop and implement certificate logon Bureauwide	Decision document	BLM CIO	May 2004
Phase III — Bureau-wide rollout	Complete certificate logon to all BLM computer sub-networks and stand alone pc's.	BLM project team review and approval	Dec 2004

Resources Needed:

The total estimated cost of the total e-authentication project over a five-year live cycle is 7 million dollars. The following methodologies and assumptions were used in this estimate.

Labor assumptions — Assuming the BLM staff involvement would equal approximately three dedicated months to implement the project. Their time will not be dedicated but will be spread out through the year. The GS level of each team member was identified. Step 5 of each GS Level (according to the 2002 GS Salary Table) was used to obtain the hourly rate. NOTE: Step 10 was used for those BLM staff located in the Washington DC office to adjust for their generally higher rate. The resulting total labor rate was then rounded up to the next highest $100,000. For the two years post implementation it is assumed that maintenance of the system will only require 50% of the originally effort. The two years after that this figure was reduced to 15% of the original effort.

Contract costs — Next years contract cost for the project manager was extrapolated based on the current contract. An 80% factor was used due to the project manager having responsibilities other than this project. Next years contract cost for technical consulting was also extrapolated based on the current contract. A 60% factor was used due to this consultant working on other projects.

Software licenses — Adobe is currently offering a site license program. An estimate of $19.00 a seat was provided by Adobe. The maintenance for this software is 10.50 a seat for two years. The current cost per seat for the middleware from ActiveCard and VeriSign is 146.90 for the first year. Maintenance cost for this software is $56.90 per seat, per year. The implementation costs were based on 11,000 seats as the pilot implementations will take us up to 1,000 seats leaving 11,000 seats to complete the BLM rollout.

Equipment — While the cost of the Smart Card was initially $23 a card, this price has dropped by about 50% and is expected to drop further as the Federal Government increases the volume of cards purchased. The estimated price used for the required 11,000 cards for the remaining BLM rollout is $12 each. It is estimated that 2,000 cards will be required for each year after the initial rollout. This will be for new employees, contractors, and re-issuing of lost cards.

Approximately 5,000 PCMCIA readers for laptops have been purchased for distribution.

A supply of 2,250 USB stand alone readers have been purchased for use with ergonomic keyboards where keyboard readers can't be used.

For the remaining workstations, the following assumption was employed. Approximately one third of all PC's are replaced each year as part of the normal hardware retirement schedule. Slightly less than one third of the workstations were replaced in 2002 and these workstations can be replaced with the new equipment. An additional one third of the workstations will be replaced in 2003 as part of this retirement schedule. It was assumed that all replacement pc's would be purchased off the consolidated buy which included smart card reader keyboards. This would leave one third of the remaining 11,000 workstations to be replace ahead of schedule. This figure was rounded up to the next highest 1,000 for a total need of 4,000. To meet this need, a supply of 2,250 USB and 2,250 serial port keyboard readers have been purchased to complete the BLM's need for workstation readers.

Associated budgets:

An OMB exhibit 300-1 has been completed for fiscal year 2005 and 2006. These exhibits contain the entire project budget for all years. Preliminary Annual Work Plan Directives for fiscal year 2005 have been drafted, but are not yet finalized.

Costs to be funded from State and local office budgets are expected to be nominal and limited to labor costs associated with issuance of the certificates and administration of the MS Active Directory to enable certificate logon. These costs are expected to be offset by avoiding the necessity to issue and administer password logon functions.

Costs to enable certificate logon to function as single sign-on to BLM and DOI applications is expected to be funded by the individual System Owner's budget and is not considered a cost of this project.

Timelines for Completion:

The overall project schedule, including dependencies on related e-Authentication project components, and the schedule for individual task completion is contained in the e-Authentication Integrated Project Plan. Complete implementation of the logical component of e-Authentication is scheduled for December 31, 2004.

Implementing the Project Plan:

The e-Authentication Project Manager has been assigned the responsibility to plan, schedule, direct and monitor the tasks and document preparation necessary to ensure successful implementation of this project.

Controls to stay on the "Critical Path":

The Project Manager maintains a current schedule of project tasks and related events to ensure that no task slippage affects the critical path. Periodic reports of progress are made by the Project Manager to the Project Sponsor. These reports describe the status of tasks and highlight any events that may delay the project. This project is tracked by the BLM Deputy Director on the Management Information Tracking System. The required status updates are made to this tracking system by the Project Manager.

Supporting Documentation:

The documents listed below can be found on the e-authentication web site.

- Technical Overview and Summary of BLM's e-authentication project. — March 18, 2002
- Presentation from Reno Meeting — January 29, 2002

The following documents are available from the Project Manager but have not yet been posted to the e-Authentication web site.

- Privacy Act Notice OS-15, Physical Access ID Card, published in Federal Register, April, 2004
- Privacy Act Notice DOI-01, Logical Access, began surname April 22, 2004

Approved by: 

Bob Donelson
e-Authentication Project Sponsor