

Project Startup Report

Presented to the IT Committee <TBD>

Project Name: K-12 Identity Management Services Project

Agency: Information Technology Department – North Dakota Educational Technology Council

Business Unit/Program Area: EduTech

Project Sponsor: Jody French (Director – ND ETC)

Project Manager: John Wohl (ITD)

Project Description

The vision of the North Dakota K-12 Identity Management Services project is to develop a robust and stable Active Directory environment that will facilitate effective and manageable identity management services for current and future applications of State Government for Education and K-12 Districts

The solution is to implement a single credential repository that can serve the widest possible range of authentication capabilities for applications and services while surrounding that repository with workflow processes that assure the integrity, consistency, and efficiency of the credentials in order to optimize user experience and time requirements of students, teachers, and K-12 education-focused staff within the State of North Dakota. Microsoft's Forefront Identity Manager (FIM) product will be acquired, configured and deployed to populate and maintain the credential repository. A Request for Proposal (RFP) will be issued for the implementation services of the FIM product. EduTech will be the business owner of the application and Information Technology Department will host the system.

Business Needs and Problems

State entities currently offer numerous services to K12 which do not share a common authentication or management infrastructure. A common authentication system reduces user frustration, resulting from confusing collections of usernames and passwords, and increases integration capacity between systems.

Existing systems require significant manual processes—prone to error—to request, validate, and provision accounts. As people move from one school to another, or forget their authentication credentials, they may obtain duplicate identities, even within the same service, which impedes support, usability and security. Orphaned accounts (active accounts which should have been disabled) and weak validation methods are a security concern. Password problems currently require some level of technical support intervention which can only be resolved during business hours.

A successful future state will be a single authoritative K12 Active Directory which will be used to authenticate services provided for North Dakota K12 schools by EduTech, ITD, and DPI. The directory accounts will be populated and moved between organizational units automatically by an identity management system. This identity management system collates information as K12 students or teachers are entered into the state's longitudinal data system via the state's enterprise student ID systems. Using a web-based portal, individuals will be able to manage their own account, or the accounts of others within their organizational unit, depending on roles assigned to them. Being so largely automated and delegating appropriate amounts of management to schools and individuals will provide a vastly improved level of service and support over manual handling of accounts.

Key Metrics

Project Start Date	Project End Date	Original Baseline Budget
5/14/2014	11/01/2014 (30 days post Prod)	\$451,283

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Objectives	
Project Objectives	Measurement Description
<p><u>Business Need/Problem 1:</u></p> <p>State entities currently offer numerous services to K12 which do not share a common authentication or management infrastructure. A common authentication system reduces user frustration, resulting from confusing collections of usernames and passwords, and increases integration capacity between systems.</p> <p><u>Objective 1.1:</u></p> <p>Implement Active Directory as a single, unique, authoritative authentication system for services delivered by the State of North Dakota for K12 Schools.</p>	<p><u>Objective 1.1:</u></p> <p>Implement Active Directory as a single, unique, authoritative authentication system for services delivered by the State of North Dakota for K12 Schools.</p> <p style="text-align: center;"><u>Measurement 1.1.1:</u></p> <p>Office 365, EduTech WordPress-based services, SLDS, and PowerSchool will all authenticate against ND K12 AD. Success will be based upon all of these systems being capable of K12 AD authentication by August 25</p> <p><u>Anticipated Benefit(s):</u></p> <p>Use of a common authentication system will reduce the number of usernames and passwords K12 students and staff need to remember to access services from the State. This will improve the user experience, reduce support needs and improve troubleshooting.</p>
<p><u>Business Need/Problem 2:</u></p> <p>Existing systems require significant manual processes--prone to error--to request, validate, and provision accounts. As people move from one school to another, or forget their authentication credentials, they may obtain duplicate identities, even within the same service, which impedes support, usability and security. Orphaned accounts (active accounts which should have been disabled) and weak validation methods are a security concern. Password problems currently require some level of technical support intervention which can only be resolved during business hours.</p> <p><u>Objective 2.1:</u></p> <p>The Microsoft Forefront Identity Management (FIM) system will be implemented to manage ND K12 identity records, and automatically provision and de-provision K12 Active Directory accounts based upon data collected from appropriate sources for all administrators, teachers and students in North Dakota K12 public schools. This will be accomplished by using K12 user information that currently resides in the ND Statewide Longitudinal Data System.</p>	<p><u>Measurement 2.1.1:</u></p> <p>FIM will provision or de-provision accounts for students or staff within 24 hours of their entry/exit into/out of the SLDS with an accurate statewide student ID or teacher license number. Success will be based upon the system automatically processing account changes (account creation, account disable, account OU move) at an accuracy level of 95% (provision changes/provision change requests) within one full business day.</p> <p><u>Measurement 2.1.2:</u></p> <p>The efficiency of managing K12 identities will be determined by the ratio of administrator time to total active identities being managed. Success will be determined to by having no more than one (1) total FIM system admin FTE per 50,000 active identities</p> <p><u>Anticipated Benefit(s):</u></p> <p>Accounts can be automatically provisioned, de-provisioned, and moved between OUs based upon the person's entry, exit, and transition between school units, piggybacking on existing school business practices for enrolling students and staff in their student information system. This will save significant system management time, reduce errors, and improve security.</p>
<p><u>Objective 2.2:</u></p>	<p><u>Measurement 2.2.1:</u></p>

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<p>The Microsoft Forefront Identity Management Portal (FIM Portal) will be implemented to provide schools with the ability to add staff members that are not in the SLDS into the identity management system in such a way that the accounts linked to the non-SLDS staff will not become orphaned. This same system will be the management portal allowing individuals to manage their own account, and/or the accounts of others within their administrative authority.</p>	<p>This will be measured by the successful implementation of FIM portal, allowing schools to add/approve local staff with linked accounts that are automatically de-provisioned unless renewed one year after creation and manage the roles and group memberships of users within their administrative authority.</p> <p><u>Anticipated Benefit(s):</u></p> <p>Allowing school staff to grant services to staff not present in the student information systems fills a critical account provisioning need that would otherwise have to be filled by service administrators at the state level. Performing basic management of group membership, password reset and other low level functions further mitigates service administrative workloads.</p>
<p><u>Objective 2.3</u></p> <p>Self-service password reset will be implemented and made available to all K12 users in the system.</p>	<p><u>Measurement 2.3.1:</u></p> <p>This will be measured by the successful implementation of the self-service password reset functionality for users in the system.</p> <p><u>Measurement 2.3.2:</u></p> <p>The effectiveness of the self-service password reset will be measured by the help desk requests that are documented for password reset assistance. Success will be determined with 25% of password resets occurring via self-service means.</p> <p><u>Anticipated Benefit(s):</u></p> <p>Self-service password reset functionality will reduce the volume of the most common end-user support issue. More importantly, it allows them to access their necessary services without waiting for support response, including events outside of business hours.</p>

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Cost/Benefit Analysis

Description	After Detailed Planning
Hardware	
<i>O/S Hardware/Software (*1)</i>	\$79,450
Software/Licenses:	
<i>MS FIM/FIM Sync/FIM Portal</i>	\$78,893
Consulting:	
<i>Write RFP</i>	\$9,313
<i>CampusEAI Implementation (Initial budget \$200,000)</i>	\$192,116
<i>SLDS, etc Development (All SLDS database work – no Development needed)</i>	\$0
Training	n/a
Project Management (5 mo 195 hrs at \$96 hr)	\$19,000
Staff (*2) - ITD hosting backfill	\$5,000
Travel	n/a
Miscellaneous (LPO Charges)	\$7,500
e.g., Rental Space	n/a
Risk Contingency (20% of 400k)	\$40,000
Management Reserve (10%) <i>Applied to Application Arch: 30 hours</i> <i>Applied to Application Developer: 34 hours</i>	\$20,011
Sub-Total	\$ 451,283
TOTAL Cost of Project	\$ 451,283

Key Constraints or Risks

1.1.1 Constraints:

Constraints are defined as the state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external, to the project that will affect the performance of the project or a process.

The project has the following constraints:

- Cost, schedule, scope, and quality are often in conflict during projects. The sponsor elected to prioritize as follows:
 1. Schedule – K-12 Cyclical business processes (Implement during summer session)
 2. Cost
 3. Scope
 4. Quality