



## The Catholic Education Office, Melbourne User Integration Project The first Australian SIF project

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Catholic Education Melbourne is myinternet Limited's (myinternet's) largest non-government Australian customer. Consisting of 482 sites across Victoria, they have implemented an interoperability system using the Schools Interoperability Framework (SIF). The aim of the SIF project was to streamline the administration and management of system and user data, as well as to enable sharing of data and content across applications. The system was built to handle synchronization of user information between several databases.

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### What was the problem?

The Catholic Education Office, Melbourne (CEOM) faced a critical challenge in integrating three separate databases due to the pressing problem of interoperability. To the CEOM and schools the lack of interoperability meant:

- Applications and their data were isolated from one another.
- Multiple logins for multiple systems.
- Low security ...generic logins for some applications.
- Limited control of access to applications.

The CEOM needed an integrated system linking their three discrete applications to enable the sharing of user data and to provide single sign on. Control for staff account management and access to restricted applications was to reside at the school. The three applications included: the CEOM information system (CIS), Active Directory and myinternet's SINA<sup>®</sup>. These were very different systems (including Sun Solaris, Sybase, Microsoft and Linux), requiring separate streams of directory management and control. It was necessary for these separate systems to operate as one unified user identity system, securely, robustly, in near real time and allow for additional systems to be added over time.

Examples of data that was managed separately between their Active Directory, CEOM Information System (CIS) and myinternet/SINA databases include:

#### Internet Access

- 434 sites using SINA
- 48 sites – secondary schools – not using SINA
- Schools control of accounts
  - Usernames
  - Passwords
  - Email addresses

Catholic Education Victoria Network (CEVN) Information Portal  
Documents including

- Policies, Publications, Legal issues, PD
- Online Services including
- Staffing Records
  - Data File Transfers
  - Positions Vacant
  - Surveys

#### CEOM Information System (CIS)

- Employment Records of all staff employed at schools
- Wide variety of other school data

A key consideration was to maintain data integrity and ensure that there was replication across the entire system in near real time. This allowed these separate systems to keep user information, such as passwords and teacher privileges, consistent and synchronized across each of the applications--while at the same time securing highly sensitive and critical data.

The CEOM nominated which application was to be the authoritative data source for each element of the user data (for instance, the staff information system was to be the authoritative source for user login names for staff and *SINA* was nominated as the authoritative source for passwords and email addresses).

### **SIF Solutions**

For some time the need for the CEOM IT systems to work together was well understood. However, the path to a platform-independent, flexible and manageable solution has been out of reach. *SINA* was seen to be the basis of development as it was the place where nearly all schools maintained and controlled user identity and access. The CEOM chose myinternet to undertake the analysis of the range of options available for an interoperability identity framework that utilized *SINA* as the base for user control. Myinternet then developed the integration system based on the School Interoperability Framework (SIF). The CEOM project was the first of its kind in Australia to utilize the open education standards that SIFA advocates. SIF provides:

- Seamless integration between systems.
- Defined standard formats for shared data.
- Defined standard naming conventions for this shared data.
- Defined rules of interaction among software applications.

The design project for CEOM occurred in September 2003 and the following development and implementation of the project was deployed on 15 June 2004. The project affects staff at 494 schools and Catholic Education Offices.

### **Outcome**

When user details are now altered in one application system, the changes are immediately communicated to the other two applications via secure XML messaging. Staff in the schools now only need one user login name and password to access the internet and online systems at the CEOM. The user identity is used to control access to personal information and online applications.

The potential future use of the SIF solution may include:

- Expansion of current online services ... in the CEVN portal.
- Expansion to include students.
- School administration systems for automatic data transfer.
- School assessment data – e.g. literacy.