
Proof of Concept Case Study: Warwickshire County Council

Challenge

To streamline the existing data flows in place for user provisioning / identity management.

Overview of the Problem

Currently, the applications available for primary and secondary schools, local authorities and colleges are either closed systems, or systems that allow customer access only through proprietary interfaces that need to be developed or purchased as an addition to existing systems.

The lack of interoperability often means that applications and their data are isolated from one another and redundant / duplicate data entry is common. Warwickshire recognise that these disparate systems increase support costs and make data reporting costly and inefficient. In addition, data is very often inaccessible to decision makers and can be inaccurate.

Demographics

Warwickshire County Council is based in the centre of England. The region encompasses:

- 249 Schools
 - 36 Secondary
 - 213 Primary, Nursery and Special Schools
- 1 Pupil Referral Unit
- 80,000 learners and 15,500 teaching and support staff



Key Benefits

- Proved SIF technology
- Streamlined existing data flows
- Integrated data from MIS systems into AD
- Quick and easy to implement

Technical Solutions and Applications

The Proof of Concept (PoC) in Warwickshire set out to test whether SIF would work with the Management Information Systems (MIS) and other systems currently in use in Warwickshire schools and the local authority.

Warwickshire County Council required the PoC to be representative of their business needs, but also to be relatively quick and easy to implement, building on the developments and infrastructure that are already in place in Warwickshire. They also expected tangible end products as an outcome of the PoC.

One of the key drivers for implementing was the ongoing need to streamline the existing data flows in place for user provisioning/identity management. With an already established Enterprise Active Directory, Warwickshire's ICT Development Service is experienced in using data for this purpose, and as a result, has worked with schools to surface many of the issues around data quality. However, the systems currently in place to extract and integrate the data are not robust and offer little flexibility in terms of ever changing data requirements.

Through the PoC, the aim was to integrate data from school MIS systems into the Enterprise Active Directory/Microsoft Identity Lifecycle Management (ILM) through an 'end to end' SIF connection.

A period of six weeks was allocated for the PoC, and nine schools were selected, all of them have a virtual server solution which enabled easy, remote access to their systems and all use the same management information systems. The ap-

What is the SIF Association?

The SIF Association is a non-profit membership organisation whose members include schools, software suppliers, local authorities, regional broadband consortia and government organisations. These members have come together to create a set of rules and definitions which enable software programs from different companies to share information. This set of platform-independent, supplier-neutral rules and definitions is called the SIF Implementation Specification.

The goal of the SIF Association is to make it possible for administrators, teaching staff and other personnel to have access to the most current and accurate data available.

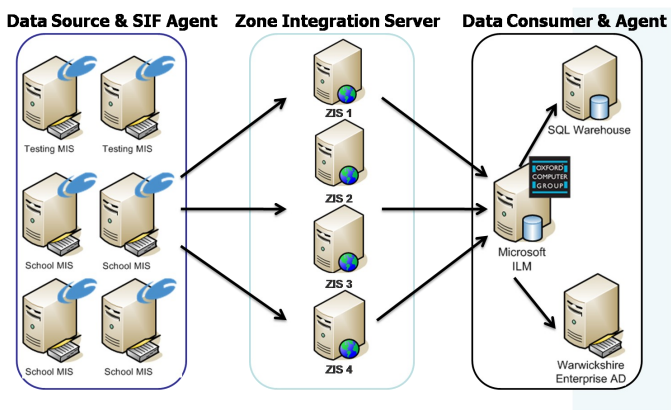
applications they selected – Capita SIMS Management Information System, Edustructures SIFWorks ZIS, RM/CPSI XDZIS, OpenZIS, Groupcall’s Xporter, RM’s Learning Platform, their own Active Directory and Microsoft ILM using Oxford Computer Groups SIF agent.

Given Warwickshire’s secure understanding of the business processes surrounding the integration of provisioning data, the PoC focused very much on the technology required to implement SIF. As a result, the decision was made to test the functionality of multiple Zone Integration Servers (ZIS) from a number of suppliers. An established SIF agent was installed on each schools admin server, and external consultants were invited to develop a SIF agent for the ILM system using various Agent Developer Kits (ADKs).

Proof of Concept Design

To enable the transfer of data, there was a need to agree what data was to be transferred and to agree the definition of this data. The decision was made to continue with the schema already in place to extract the data required for user provisioning.

However, in addition to this, a further objective was to test the ability to export a new SIF data object from school systems via an update to the Groupcall agent. The new object would then be needed to populate the data warehouse.



Benefits Achieved and Results

Generally, the PoC undertaken in Warwickshire was very successful. A small number of problems occurred throughout the period, but they were able to be resolved fairly easily. Obtaining and using evaluation copies of the various ZIS software proved less of a problem than expected, and the technical learning curve proved to be far less steep than anticipated.

The schema detailed above, was used to extract a considerable amount of data that was used to test a number of data integration requirements. The identity information collected was used to demonstrate user provisioning whilst the pastoral data collected was used to validate the data source and supplement Active Directory security groups. Other data was collected in order to demonstrate the population of Warwickshire’s data warehouse.

The following tangible results were realised through the PoC:

- Warwickshire now have a detailed analysis of the 4 ZIS products evaluated that includes information about the key

features, support available, basic performance and pricing. They have been asked to share this information in order to build a ‘Cost Benefit Analysis’ that can be shared with other local authorities that are considering adopting SIF.

- They have also established detailed requirements for the MIS agent to be deployed on each school admin server. Groupcall has been responsive to their needs and they are working with them to build an installer.
- A pre-production quality SIF agent has been developed for ILM 2007. This will be improved to production quality and certified against the SIF framework.
- Moving forward, they now have a team of people who are not only ready to support a production platform, but who can share good practice with other local authorities.
- The ability to streamline data integration through the implementation of SIF could provide a number of business opportunities for the ICT Development Service, both internally within Warwickshire and with other local authorities.

Next Steps

SIF is a powerful tool that, if implemented and used effectively, has the potential to deliver significant benefits to both the ICT Development Service and Warwickshire local authority.

In order to move forward with the SIF project, Warwickshire are pursuing the following recommendations:

- Following the successful PoC, ICT Development Service is implementing a live SIF environment using Edustructures SIFWorks and working to migrate the collection of provisioning/identity data into a live SIF flow.
- The Groupcall SIF agent has been purchased and can be deployed to all schools using CentraStage automated deployment.
- A full and thorough needs analysis of data requirements will be undertaken with key stakeholders across Warwickshire local authority.
- Warwickshire will continue to build on the work that has been started with the DCSF Gateway to Education Services (GES) project and try to secure funding in order to implement a streamlined integration of free school meals (FSM) data across Warwickshire local authority and schools.
- Working with the 14-19 Team, Warwickshire will be undertaking a PoC for the integration and sharing of data across a partnership. This would involve both reading and writing of MIS data to multiple systems.
- Warwickshire will assume a proactive role within the SIF Association UK community through the participation in working groups and task forces. This will raise the profile of the Warwickshire SIF project and provide them with the opportunity to shape future SIF developments.



How can I find out more?

You can visit the SIF Association UK website at www.sifassociation.org/uk.

Alternatively, contact the SIF Project Team at sifauk@becta.org.uk or call 024 7679 7379.