

Summary

The University's relatively recent implementation of an electronic document & record management systems (Wisdom EDRMS) has been significantly enhanced by the development of a direct link with its student data system.

Automatic creation of a series of record folders for each new student allows access to information placed within them by a single click from the individual student's record in the student data system.

Records and data which have, until now, been kept separately in different Schools and Services will now be brought together and viewed as a whole, subject to agreed security restrictions. Thus our customer relationship with the individual is substantially improved by the facility to view information generated from across the institution.

Background

The University began a Document Management project in April 2004; having selected Diagonal Solutions' product Wisdom as our EDRMS two pilot phases were completed. In Spring 2006 the decision was made to go live with all formal University Committee papers in the following autumn, and to begin a full phased roll-out.

During 2005/6 and 2006/7 work was undertaken on the integration of the Wisdom system with the student data system, Tribal Technologies' SITS:vision, known locally as the Application and Student Information System (ASIS).

Requirements were the

- Automatic creation of the file plan for each student within Wisdom;
- Display of the Wisdom student file plan in ASIS (mostly used by administrative staff) and in e:Vision (the intranet portal of ASIS, mostly used by academic staff).

Original drivers

The original proposal to integrate Wisdom and ASIS was made by the Admissions and Records Office. They were aware that the paper-based enrolment forms were difficult to access and were creating a physical storage problem. Additionally it was clear that a student may have communication with many different parts of the University during a course lasting several years. At the basic level, this meant that staff in one part of the University were not necessarily aware of what had been said by another, representing a poor level of customer relationship management. Occasionally messages sent to a student from different areas could actually be in conflict, causing confusion.

It was therefore proposed that Wisdom could provide a coordinated and structured repository for all significant communications with a student, and by linking it to the ASIS system such information could be easily available to all who needed it, regardless of where they were based in the University. The ASIS system has been in use since 1997-8 and is a fully embedded system which is very familiar to staff who use it. Integrating Wisdom and ASIS in the way proposed would have significant benefits to end users in their immediate use, and could assist in the longer-term with the change in culture associated with an EDRMS implementation. It would also help to ensure the authenticity, reliability and integrity of student records by moving to storage within Wisdom, and improve their usability.

Objectives

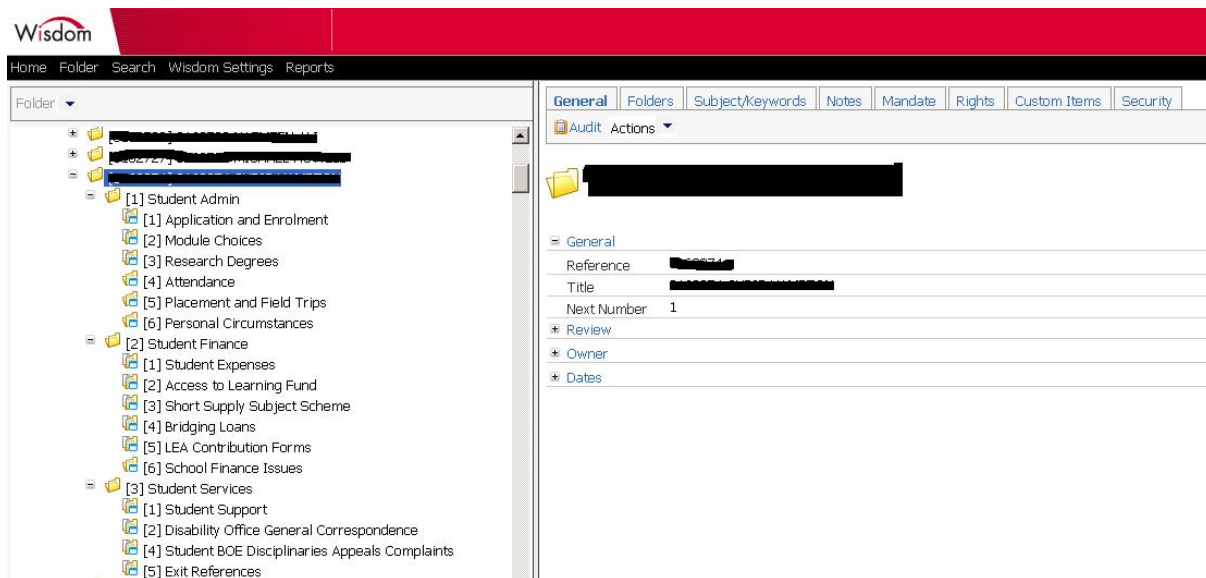
The key objectives were

1. to create a complete student file plan in Wisdom;
2. to devise a means of linking it simply and reliably to ASIS, without the need to input further passwords or conduct complex searches;
3. to create the file plan automatically as soon as a student is enrolled;
4. to ensure that access could be properly controlled.

Methodology

During summer 2005 an outline of requirements was prepared by the University in conjunction with Diagonal Solutions Ltd (now Morse Plc), the provider of Wisdom. Discussions were also subsequently held with Tribal Technologies, the provider of ASIS. It was subsequently decided that the ASIS components of the integration could be developed in-house using the functionality available with the system and existing expertise.

During 2005-6 the student file plan was developed in conjunction with Schools and Services: consultation and testing resulted in the fifth and final version of the file plan being greatly simplified on the original, resolving the poor performance experienced within Wisdom during testing of the first version. During the development of the file plan levels of security were also agreed, in order to maintain compliance with the Data Protection Act 1998 and best practice in information security. The final version of the file plan, signed off in autumn 2006, is shown in this screenshot (personal information redacted).



A feasibility study was also conducted to investigate the creation of the file plan by scanning documents for individual students. This required excessive operator intervention and the potential for much error in creating an environment in which useable records could be stored accurately and reliably.

The lessons learned during this period provided the foundation for the successful delivery in 2006-7 of the student file plan creation service and the student display from ASIS/e:Vision.

Student file plan creation:

A trigger was developed within ASIS based on student records changing from any provisional status to *confirmed*. Data relating to the student is then transferred to a temporary table for access by Wisdom.

Wisdom was extended by Morse Plc to include a Windows Service that interrogates the table and creates student file plan areas based on a template for the file plan. This process can be configured to update immediately on status change, or as a batch at a specified time (eg overnight).

Student display:

A requirements specification was produced in consultation with ASIS managers on how they would like to be able to access student information in Wisdom direct from ASIS. Investigation showed that an existing “External Details” button on the main student record screen in ASIS could be activated by the use of a system parameter. This parameter could be used to call an external application such as the Internet Explorer browser, and that the unique student ID number could be passed to the browser.

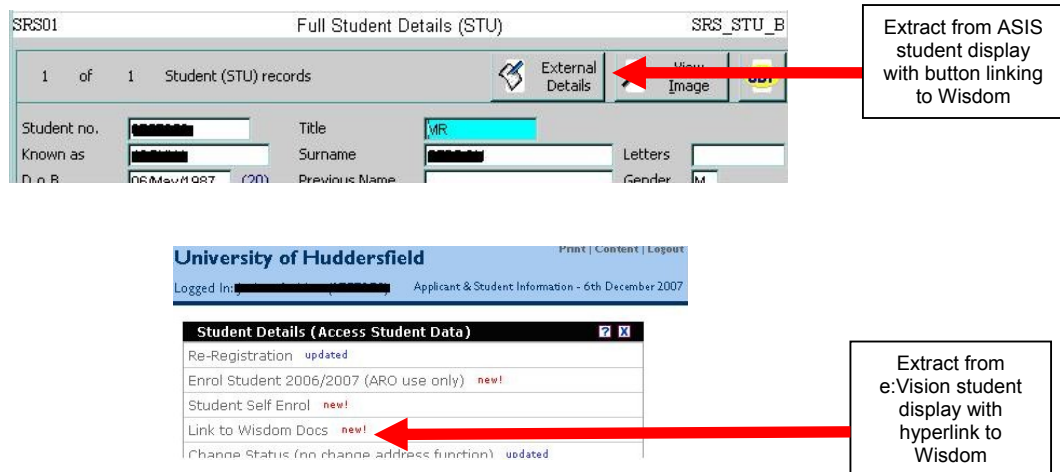
In consultation with Morse Plc, .asp code was then written to reside on the Wisdom server that would accept the unique student ID from the system parameter and perform a search through the Wisdom file plan. On a successful match the student’s folders are then displayed within the browser window allowing the user access to both the student’s records in Wisdom and the details in ASIS, subject to the agreed security permissions. Initially the file plan for all students was retrieved; however performance was slow as a result, so in January 2007 the student display was limited to the area of the file plan pertaining only to that student. This has greatly increased performance.

e:Vision was extended in a similar manner, with a hyperlink to open the file plan from Wisdom in a new window.

Final project deliverables

All the project objectives were met successfully during 2006-7. The automatic creation of the student file plan ran successfully for enrolment 2007-8, having been trialed in 2006-7, resulting in the immediate availability of folders to store documents and records relating to each individual’s transactions with the course administration, finance and support services.

From December 2006 the student display via ASIS and e:Vision has been available for use and has been used to access data input by the Admissions and Records Office.



What difference has this made?

The inclusion of student records within Wisdom will ensure that they are

- easily viewed in conjunction with data in ASIS for current business purposes;
- easily accessible to those who need and have authority to use them to maintain the University's relationship with its students;
- better maintained as authoritative records;
- disposed of within the terms of the University's retention policy;
- a critical mass of shared, common records to facilitate the roll-out of Wisdom and the associated cultural change across the University.

Easy availability of information

Display via ASIS and e:Vision has enabled seamless retrieval and upload of student records from within existing systems. The end user views documents from within applications with which they are already familiar, saving both time and mouse-clicks.

“The single storage area in Wisdom has made calling up all student details quick, easy and accurate. When we are working in ASIS it is as simple as a single mouse click to call up the complete student file plan, including all the application; all supporting documentation and the enrolment card if available. It represents a considerable improvement to our record system.”

Huw Thomas, Assistant Director Admissions and Records Office

Over the coming year staff across the University will begin to add records to the file plan. This will begin in January 2008 with the addition of student enrolment cards from the autumn 2007 intake. As the year progresses, records of other types will be added from Schools and Services, beginning to form the single point of information.

Improvements in records management: authority of the records

The use of the student file plan and other features within Wisdom in conjunction with other good records management practices and business processes promotes the authenticity, reliability, integrity and usability of the records. Specifically, those uploading reliable records are “authorized and identified”, and the records are “protected against unauthorized addition, deletion, alteration, use and concealment”. The audit features of Wisdom make “any authorized annotation, addition or deletion to a record explicitly indicated and traceable.”¹

Improvements in records management: efficiency

Automatic creation of the student file plan means that it is available for use very quickly after a student has enrolled. It has also saved resources within the records management team. Manual creation of the student file plan (including metadata creation) takes approximately 5 minutes per student. With around 5,000 students enrolling annually this would be approximately 420 hours (11 working weeks), with no guarantee of accuracy in the metadata which is vital to the usability of the file plan and the authenticity of the records stored within it.

Integration of the systems, in particular the student creation service, has also enabled developments in scanning and automatic capture. At present we are carrying out final testing of the bulk scanning of enrolment cards and their automatic filing within Wisdom; this test is proceeding well. The Admissions and Records Office will commence the scanning and uploading of both enrolment cards and student personal files from January 2008.

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¹ Characteristics of a record from ISO 15489-1:2001 § 7.2