



STUDENT
SYSTEM
SOLUTIONS



St Mary's
University
Twickenham
London

StuTalk Integrations Project



PACKAGED SOLUTION



STUTALK & OTHER SYSTEM INTERFACES



STU3 COLLABORATIVE PROJECT

▶ A StuTalk integration project for ID Cards and Active Directory

“We actually had little expertise in electronic student management let alone SITS. There were **twenty integrations** which we needed to **implement** for the core student lifecycle by August 2020.”

Sammy Massiah, SMU Chief Information Officer

Stu3 Case Study

www.stu3.co.uk

The Challenge

St Mary's University began their implementation of SITS:Vision with ambitious timelines to go-live with Admissions in August 2019 and with Students in August 2020. However, in order to fully address the historical problem of student data being administered in a very manual way resulting in bottlenecks, integrations between SITS and other core systems also had to be attended to.

St Mary's chose Stu3 as their partner experts in SITS integrations to deliver their objective of making student administration more efficient, cost effective, and seamless.



Sammy Massiah

“We actually had little expertise in electronic student management let alone SITS. There were twenty integrations which we needed to implement for the core student lifecycle by August 2020.” **Sammy Massiah, SMU Chief Information Officer**

The University enlisted Stu3 to help *“get the right solution as quickly as possible”* explains Sammy, and to take on the responsibility of delivering all SITS integrations.

Sammy goes on to say that in replacing one student record system with another, the tendency of the University was to look for 'like-for-like' replacements in the integration solutions. However, where practical, Stu3 advised to move to using **StuTalk** for real time integrations specifically between:

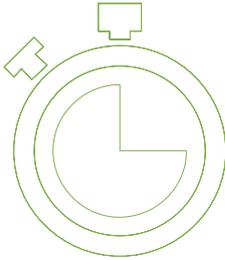
- ▶ SITS and ACT (ID Card production)
- ▶ SITS and Active Directory* (staff and student authentication)

The remainder of the integrations were delivered using database views and scheduled tasks on St Mary's Microsoft SQL infrastructure.

Stu3 was tasked with completing the design, development, and testing of all integration solutions (through development and test environments to production) within **four months**, to include:

- ▶ Confirmation of the technical requirements.
- ▶ Mapping of SITS data fields to the target data required in the target system.

- ▶ Design of SITS components to move data between SITS and the target system.
- ▶ Build of SITS components to move data between SITS and the target system.
- ▶ Provision of test scripts to support the SITS element of system, user, and end to end testing.
- ▶ Release of the SITS components to the production environment.
- ▶ Transfer of knowledge of the SITS components at go-live.



Further, the project needed to be completed in the time of lock-down and COVID-19 which meant that all work had to be delivered remotely.

The Solution

The full set of integrations solutions delivered by Stu3 within the timescales included the two StuTalk integrations linking:

- ▶ SITS and ACT - the core university identity card management system for student ID card production.
- ▶ SITS and Active Directory - the university's person authentication system for both staff and students.

Both integrations were supported by Windows-scheduling tasks also delivered by Stu3.

SITS and ACT Integration

The delivered solution included a two-way integration for student photos required in ID card production and was chosen for the following reasons:

- ▶ To provide the most suitable means to transfer images from ACT to SITS Document Manager.
- ▶ To allow ad-hoc photos captured outside of SITS to be passed from ACT to SITS as required.
- ▶ To allow SITS to complete the application-level processing when receiving the images in the document manager which would not be available via a direct database connection.

The solution enabled Student photos:

- ▶ To be uploaded via eVision workflow into Document Manager and to be passed to ACT.

- ▶ To be passed into SITS via a REST web service (StuTalk) when taken by the security team during enrolment. This is a service that can be called on demand to send photos ad-hoc to SITS.

Active Directory

The solution was also developed to include SITS integration with a staging database, presenting student data for use in Active Directory, and consuming staff data for SITS. The solution was chosen for the following reasons:

- ▶ To allow changes in SITS, such as students accepting places or enrolling, to act as triggers to send data.
- ▶ To allow comparison of student data across multiple records using StuTalk's evaluation processes, to ensure only valid records were transferred.
- ▶ To allow SITS experts to ensure mapping was done correctly by housing the data transformation in SITS.
- ▶ To use StuTalk's Transfer In Classes to ensure that when records were created, operations that hung off of them, such as user account creation for staff or triggers could fire.
 - ▷ A direct database linkup would not fire these automatically, requiring additional processes.



The solution enabled the transfer of Student Data from SITS to the Active Directory by:

- ▶ Firstly, invoking StuTalk services to generate, transform and transfer the data when applicants accept their offers, and as students enrol. This ensured the transfer of the correct enrolment or applicant data.
- ▶ Secondly, invoking a stored procedure which used a StuTalk process to call the data and then shred it into a staging table.
- ▶ Thirdly, invoking a stored procedure to write this across to FIM (the active directory), either updating existing rows, or creating new ones.

The solution also enabled the transfer of Staff Data from Active Directory into SITS by:

- ▶ Firstly, making XML Staff data available on external end points for Academic Staff, Administrative staff, and Leavers.
- ▶ Secondly running a daily scheduled windows job to call the StuTalk transfer in-tray for these endpoints.
- ▶ Thirdly, reading the XML data into SITS, validating and storing the data on the person record.
- ▶ Finally, firing triggers to disable leavers login records, or re-enable login records for leavers that re-joined.

The Benefits

St Mary's has experienced a number of business gains resulting from the integrations involving StuTalk.

- ▶ Added flexibility by allowing students and staff to upload a student photo at various points during the enrolment process and for it to end up in the same place in SITS (Document Manager).
- ▶ Close to real-time exchange of data, with much shorter wait for students to get their log-in details from the point of enrolment.
- ▶ Greater level of system security - as access by staff and students is quickly enabled and disabled depending on a change of their status.
- ▶ Reduction in manual intervention.

By partnering with Stu3 to deliver their integrations, the University benefited in the following ways:

- ▶ **Timelines:** The integrations were designed, developed, tested and delivered to very tight timelines - only four months from start to delivery - enabling St Mary's to go-live with the student replacement project, as scheduled, for the beginning of enrolment.
- ▶ **Expertise:** The Stu3 consultants' intimate knowledge of the SITS schema allowed them to quickly capture the detailed data mapping requirements, create the views, and deliver technical documentation to enable support of the integrations by the internal IT team.
- ▶ **Technical Support:** Stu3 provided handover sessions, training, and technical documentation to ensure the internal support team could support and maintain the integrations moving forward.
- ▶ **Go-Live:** Stu3 provided go-live support and were fast to respond to queries from the internal team.
- ▶ **Standard Solutions:** Stu3 implemented solutions using standard SITS functionality and Window scheduled tasks, to ensure support and future changes were easy to handle.

“Stu3’s technical understanding of SITS and data is very, very high. They provided a large amount of input, not only in relation to what SMU does to get SITS integrations up and running, but how SMU should do it.”

Sammy Massiah, SMU Chief Information Officer

Working on the project

Each integration had its own small team working on it and involved a close partnership between Stu3 and SMU. This included a Stu3 developer to handle the SITS to external system interface, a SMU developer responsible for external system changes, and where required, a SMU business user to provide input and advice regarding business processes and requirements. Each team met regularly to catch up on the status of the integrations, and to get input and clarifications.

It was the middle of the pandemic and most people were still getting used to a new, entirely virtual way of working, yet everyone involved in the integration work was motivated to complete the task, and similarly buoyed up.

“I think it helped that Stu3 are very flexible and willing to get into the customer’s space with regards to what we are trying to achieve, and being flexible in how they can help achieve our aims. I would be very happy to work with Stu3 and very happy to recommend them to other institutions. Companies like Stu3 should go far and should be successful. They have the right ethos for a HEI supplier: knowledge, experience, helpful and supportive - which is a winning combination.”

Sammy Massiah, SMU Chief Information Officer

Background on Client



Established in 1850 and with a deep heritage in education, St Mary's has a strong reputation for teaching excellence and a student-centred approach.

With an original intake of just six students, St Mary's has now grown to around 6,000 undergraduate and postgraduate students across the four academic Schools. On 23rd January 2014, St Mary's University College, Twickenham, was awarded full university title by the Privy Council and became St Mary's University, Twickenham.

Let's chat.

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