BACKGROUND

Kingston University currently has around 19,000 full time equivalent students, spread across four campuses in the Kingston locality. The university covers a broad reach of subjects: as well as specialising in aeronautical engineering its faculties cover Engineering, Computing Information Systems & Maths, Business & Law, Arts & Social Sciences, Art, Design & Architecture, Science, and Health & Social Care Sciences.

Kingston is heavily involved in partnerships and collaborations: ‘partnerships are increasingly important to us,’ says Head of Content Management Elizabeth Malone. The university was an early participant in foundation degrees and the number of network partners leads to interesting challenges in delivering resources.

Most recently the university has become one of the three partners in SWan, the South West London Academic Network – a three-way relationship between Kingston, Royal Holloway and St George’s, University of London. SWan is piloting courses in the areas of healthcare management and bioinformatics.

With its multitude of users from different organisations, Kingston has always tried to keep access to resources as simple as possible. ‘At the end of the day,’ says Elizabeth, ‘the library is trying to support teaching staff by providing access to quality resources. We are already up against the challenge of the student who thinks a Google search or Wikipedia is sufficient research for their assignment. We are paying hundreds of thousands of pounds for quality resources, but there is no incentive to use them if students are having to leap hurdles’. For this reason the university’s Learning Resources Centre (LRC) previously had a SAML connection to ATHENS. When JISC announced it was ceasing to fund ATHENS, Information Services decided to join the UK federation because it was compatible with the identity architecture they already had in place.

RESOURCES

Kingston’s Learning Resources Centres (LRCs) contains a very large number of resources, including subscriptions to 32,000 e-journals – as opposed to 2000 print subscriptions. As Elizabeth points out, access to information has ‘just exploded’. Some subject areas are better provided for than others – for example, science and engineering are very well catered for in terms of electronic resources while art and design resources tend to be less electronic-based.

With such a large investment in e-resources, the Information Services staff need to ensure that they are used. Previously, many of the resources available electronically would have been requested via the interloans service costing approximately £5 per item. With current usage rates, the equivalent download from a resource such as ScienceDirect is around 25p/30p and could reduce still further with easier access and improved retrieval methods.

ACCESS MANAGEMENT

The drivers that led Kingston to join the UK federation were the desires to simplify access to all its resources, and to maximise the benefit of having them in the first place.

1 http://www.kingston.ac.uk/
2 http://www.swlacademicnetwork.ac.uk/
With all the resources at its disposal, Elizabeth says that the challenge in recent years has been where to put them so that students can reach them. For instance, is the VLE or the student portal the best place? At the end of the day, she says, we must focus on what will offer the best student experience. Students don’t see why they should hop around between different lists and they don’t like ‘multiple passwords’. They want their access kept simple.

For this reason, Kingston has always tried to keep usernames and passwords to a minimum. A single sign-on system was implemented five years ago, so Kingston started from a good position when it came to joining the federation. Len Marshall, Senior Technical Consultant at the university, says that the federation roadmap published by JISC matched what Kingston wanted to do.

AthensDA, whereby users use their university login rather than the old-style ATHENS username and password, was considered as an alternative, but Kingston decided it did not want to go down that route. Even though the UK federation did not exist as such when JISC announced it would no longer fund ATHENS, Kingston knew that the federated approach would be best for its situation.

Another powerful driver towards the UK federation, says Len, was ‘the fact it’s being managed by JANET gives a degree of confidence.’

DEPLOYMENT

Len says that while the easiest part of deployment was acknowledging that this was the right thing to do, the hardest part was finding the resources to implement the changeover. Kingston has three or four very large enterprise projects constantly on the go which stretch resources. ‘Getting to the stage of something technically working was not too hard,’ he says: ‘the hard work came afterwards.’

Many federation trailblazers seem to have dismissed the cost of moving to the federation. One such organisation that he spoke to had worked out that the cost of Shibboleth deployment was exactly £0: it apparently took no time, it required no hardware, and all the work could be called upon on demand. There is a cost, frequently unidentified, and in Kingston’s case it all came back to Information Services. Elizabeth points out that if you add up all the university staff doing the detailed resource-by-resource linking then it comes to a very big bill. Putting the big framework in was the easy bit – when it got down to individual resources and dealing with individual publishers, things got more difficult. Len can see this hitting a smaller organisation even harder.

Len found there was a lot of information available on how to go about the process, as well as a lot of retrospective information already put up by providers. Rather than spend time grappling with the initial extra workload, his solution was to outsource the work to a third party, Salford Software. Salford Software were briefed on the requirements of the federation and were responsible for talking to Eduserv and implementing Shibboleth. They handed it over to Kingston as a documented project so that Senior Technical Analyst Kevin Murray could take over and add value. As Len puts it, Salford made it work, Kevin made it usable: clearing up WAYFless URLs, tidying up, and getting relationships between resources right. Kevin says it is ‘much easier to decompose a working model than make a model work.’

Meanwhile, Kingston had already done the necessary identity provision work so the federation solution could be slotted into something that already existed.

Meeting deadlines and work in progress

The work was done over the summer of 2008 and was by and large in place for the start of the new academic year, but there will always be an element of work in progress. Elizabeth points out that new resources are always being added and different technologies are always coming along to apply pressure. There will always be new hurdles to overcome and a constant need for long term maintenance.

3 http://www.jisc.ac.uk/media/documents/publications/famroadmapleaflet.pdf
As of mid-September 2008 students – the largest group of resources users – have started to return and therefore remaining issues to be handled are emerging. Elizabeth has no doubt they will learn enormously over the next few months about user experience.

Key to the whole process was the firm, committed decision that this was the way to go. Ultimately, says Len, the decision was made after Easter 2008 that Kingston would be up and running in the UK federation by 1 August – and it was.

LESSONS AND ADVICE

Elizabeth says that the process of joining the federation reveals quirks in your own practices. Despite everyone’s best intent, some resources had become scattered over the years. Some e-journal holdings appear on the library catalogue but frequently there hasn’t been time to catalogue titles in the large packages and so users have become reliant on the separate e-resource holdings lists. Equally, e-books appear in the catalogue but whilst some links authenticate automatically, others do not and students are starting to find these. This is not a problem if students all access their resources through a master portal – but not all do.

Much work and housekeeping goes on tying up different ends and lists such as amendments to catalogue records, reading lists and embedded links in the VLE. However, Elizabeth says it is a great relief no longer to have to explain ATHENs passwords or that ATHENs itself isn’t a database.

Integration

Elizabeth says she was already aware that Kingston’s recently converged Library and ICT departments work well as a team. Deploying something like Shibboleth requires everyone to concentrate on their own specialism but also to communicate with others involved in the process. At Kingston, the LRC was responsible for talking to publishers and service providers while IT colleagues moved the technical side forward. Kingston, she says, is a good example of a converged department working. It has to be an effective partnership, playing to each other’s strengths.

Identity issues

Collaborating with two partners, says Elizabeth, presents challenges. Simply dealing within your own organisation is complex enough; it becomes even more so when each organisation is doing its own identity work and has its own system for identity management.

For instance, within SWAN students are enrolled at three organisations and have three different IDs registered on three different systems. Each organisation generates its own uniqueness and it can be a challenge to make something sensible out of three identities.

Kingston’s Healthcare faculty is run jointly with St George’s; St George’s has its own set of resources; and students belong to both institutions. Len says it is not easy to create seamless identity in this situation. He says Kingston has ‘gone with the flow on the first pass,’ getting their federated access management to a point where it simply works. It will still take two or three passes to get it right for all partners. A longer term aspiration would be the creation of a ‘meta-university’ portal where resources exist for users without appearing to be linked to any one institution.

Too much transparency

In an interesting way the success of access management breeds its own problems. Expectations generally are now very high about accessibility and integration, Len points out: students are unaware, and do not need to be aware, of the different technologies and platforms behind the seamless experience. But, if a system is so transparent, how do you troubleshoot when it goes wrong? A seamless experience often hides much
complexity. Escalating user problems though the helpdesk requires more contextual information than in the past.

DIFFERENTLY NEXT TIME

Some issues arose during deployment which, all agree, they would do differently if they had to do it all again.

Getting all the necessary resources Shibbolised proved to be a challenge. A number of providers missed the 31/7 deadline, when the LRC switched from ATHENS to the UK federation, and therefore alternative access routes had to be implemented (e.g. EZProxy). The different appearance of access screens from different publishers has also been an issue and can cause confusion amongst students. Looking back, Len sees that they sometimes didn’t realise the questions to ask or whether they were asking the right ones. Some providers would give advice from the point of view of someone using the system but not someone who simply administers it. Service provision is another matter that could perhaps have been sorted out earlier. Service providers need to be brought on board very early on so that they can help. Elizabeth cites one particular resource that has very tight rules on who can access it; Kingston has to be careful to abide by these rules. For one resource this is manageable but if all resources were as restrictive, then ‘it would be very staff intensive’.

BENEFITS

The biggest advantage of joining the UK federation has been the simple fact that students only have one password. Though it sounds like a small thing the cumulative benefits make it much bigger, with knock-on effects like fewer helpdesk enquiries, less to acquire and less to forget. Fewer barriers means increased use of resources – and those resources are accessible from simple alphabetical and subject lists via the Kingston student intranet. Staff will view user statistics with interest over the coming year to measure any increase in usage.

Len points out that for many students the UK federation is their first experience in their adult lives of integration. To some extent this may be happening in their lives via Facebook, Amazon etc. but this is the first serious example. It is teaching them a valuable lesson in management of their password: ‘look after it and it is a key to all resources.’

AND FINALLY

Kingston’s deployment of the UK federation was helped greatly by its prior experience of ATHENS and single sign-on.

Kingston has never been in any doubt that the UK federation was the way to go, and continued experience only bears this out.

Until this year, says Elizabeth, the pre-enrolment guide for students still included in its advice the need for students to get a university password and an ATHENS password. This year, she says, when the proofs for the new guide came round, for the first time she could simply cross that bit out. Kingston has moved on.

Our thanks to Elizabeth Malone (Head of Content Development), Len Marshall (Senior Technical Consultant) and Kevin Murray (Senior Technical Analyst) for agreeing to be interviewed for this case study.