



## UCISA Award for Excellence 2010

### Sponsored by Eduserv

The aim of the UCISA Award for Excellence is to recognise and highlight levels of excellence and best practice that currently exist and are demonstrated by UCISA members within the UK higher and further education sector.

### Brief

UCISA and Eduserv recognise the need for higher and further education providers to get the best out of IT and their expenditure on it. We are looking to recognise IT practice or projects which bring significant new or wider benefits to learners, or researchers, or the institutions that serve them, in a cost-effective way.

The Award for Excellence may be in an area listed below, or indeed a significant integration of a number of these headings:

- Innovation
- Systems integration
- Leadership
- Self-service implementation
- Business management improvements
- Managed learning environments
- Integration of new technologies into teaching and learning
- Collaboration

The Award will be judged on the following criteria:

#### Return on Investment

Entries must include an estimate of the total costs of the project, with an indication of how internal staff costs are accounted for. They must also include a clear statement of the benefits planned and delivered. To meet this criterion, successful entries will usually relate to an active service or an achieved improvement rather than to an investigatory project.

#### Demonstration of Excellence

Entries need to explain what makes the initiative excellent, with reference where relevant to the alternative solutions available.

## Transference of Best Practice

Entries should address both –

- (a) how the initiative can benefit other institutions; and
- (b) The steps taken to communicate this to other institutions.

All entries must carry a permission to publish. The Award is given to recognise innovation and best practice, and by sharing this view, to generally increase the levels of excellence within UK higher and further education management.

## Principles

One award will be made with a monetary value of £5000.

The award will be made to a UCISA member institution and not an individual.

Only one submission from an institution for the award will be accepted. Where multiple submissions are received from an institution, the named UCISA representatives of that institution will be requested to select the valid submission for the award.

Submissions will relate to the non-commercial activities of the member institution.

The closing date for submissions for the 2010 award will be **Friday 17 December 2010**.

Submissions should be by an electronic document that includes the details from the pro forma below. The submission should consist of a brief description of the work, with supporting documentation explaining why it should be judged as excellent. The submission should include examples of how good practice can be shared to generally increase the levels of excellence within UK higher and further education management.

Submissions should be limited to 6 sides of A4 but may include appendices containing supporting evidence such as screenshots.

## Implementation

A panel of judges will be appointed to select the winner which will be announced by the end of January 2011. The Award will be presented at the UCISA 2011 Management Conference in Edinburgh, 23 – 25 March 2011 and the winning institution will be invited to present as part of the *Institutional showcases* session within the Conference. Eduserv will fund two delegate places at this conference for the winning institution in order that they can present and collect the award.

The winners will also be announced via the UCISA *Update* newsletter, the UCISA Website, and the "ucisa-announce" and "ucisa-directors" mailing lists.

The panel's decision will be final and no correspondence with unsuccessful candidates will be undertaken.

All entries must carry a permission to publish. Copyright for the submission will be assigned to UCISA. The winner will be expected to permit UCISA and Eduserv to use their name in publicity which promotes the Award or which promotes other legitimate UCISA activities.

The winner will receive publicity regarding the Award and the subject of the Award via UCISA and Eduserv. The winner may also publicise the Award received, internally and externally subject to the approval of UCISA and Eduserv.

## **Timetable Summary**

Deadline for submissions:  
**17 December 2010**

Judging complete:  
**21 January 2011**

### **Further Details**

If you require further details, please mail: [execsec@ucisa.ac.uk](mailto:execsec@ucisa.ac.uk)

Details of the contents for the application follow on the next page:

# Application Form

**Institution Name:** The University of Nottingham

**Originating Department:** Information Services

**Contact Name (and email address):** Chris Parry ([Chris.Parry@nottingham.ac.uk](mailto:Chris.Parry@nottingham.ac.uk))

**Objective of the *Project/Service*:** To develop an automated 'Associates' process to deliver the University's Identity and Access Management Policy using a Business Process Management web-delivered solution which enables the University of Nottingham to manage the identity and access requirements of all 'Associates' of the University (such as visitors, consultants etc.) effectively without the use of paper-based forms, and which meets with audit and compliance requirements.

## **Description of the *Project/Service***

The University of Nottingham has a five-year Identity and Access Management Strategy in which it will be delivering multiple services which govern access to core online services across the organisation. At the core of the implementation is the identification of individuals based on their personal details from designated 'sources of authority'. The main sources of authority were identified as the HR system and student records system for university staff and students respectively. However, there was no central system for managing the University's 'Associates'. 'Associates' are those users who have access to University systems but who are not staff or students of the institution, including visiting scholars, consultants, and certain categories of NHS staff. Associates of the University are an important category of user, both from an organisation point of view and also from a teaching and research perspective. It is often difficult to manage an Associate's access as there can be no official record of a start and leave date, and Associates have multiple entitlements. Each Associate therefore needs to be treated individually, which is both time consuming and can be frustrating for the individual. The delivery of a process for managing Associates was therefore one key project within the implementation of the Identity and Access Management Strategy.

Historically, Associate-access requests have been submitted using a paper-based form which was very complex. In practical terms, it usually took weeks or longer for Associates to gain access to core services to carry out their work on behalf of the University. The paper-based form was difficult to complete without a pre-existing understanding of which of the University's services were required by the Associate. A significant amount of the process therefore had to be completed by Information Services staff rather than Associates themselves or by the Sponsoring University School or Department. As a result, University staff found alternative ways of creating user accounts by bypassing the paper-based system. This created the risk that Associates could continue to access University licensed or proprietary resources after their association with the institution had finished. It also applies to an inconsistent implementation of University policies regarding access.

The Associates Process project was preceded by the creation of an Identity and Access Management Policy and guidance document which clarified information on the categories and roles of Associates and specified the resources to which those categories and roles should have automatic access. The Information Services Strategy Board has taken on the role of a Senior Entitlements Committee to approve these categories and ensure that any new category of Associate that was identified could be provided with the correct level of entitlements required.

The Associates process was developed using a Business Process Management tool that the University had already deployed (in collaboration with our partners from Ask-4 solutions and Salford Software), called Metastorm BPM. This was used to implement the University's Identity and Access Management procedures using a web-enabled solution which would enable Nottingham to manage the identity and access requirements of all Associates efficiently.

Since introducing the Associates process, the University has identified over 10,000 Associate accounts which were created in the past by using either the paper-based systems or a workaround, some of which had not accessed the services for many years and some which should not have had access at all. These accounts are now all being reviewed and individuals being asked to reapply using the new Associates process by the end of January 2011. Since the service went live at the end of July 2010 there have been 1200 applications and the Associates process now takes an average of 7 days from start to finish.

### **How does the Associates Process work?**

An application must be made on behalf of the prospective Associate by a University member of staff, who is known as the Sponsor. Help and guidance designed for Sponsors is shown in Appendix A. Further information for advice and guidance of Sponsors and Associate can be found at

<http://www.nottingham.ac.uk/is/connect/Associateitaccounts.aspx>

The process is split in to six stages:

- Stage 1 – Initiation by Sponsor
- Stage 2 – Verification by IT Support
- Stage 3 – Verification by Library Support
- Stage 4 – School Manager approval
- Stage 5 – Account creation
- Stage 6 - review

**Stage 1-** The Associates process (see Appendix B – Process Diagram) is initiated by the Sponsor; this way the School or Department takes responsibility for Associates' applications and their subsequent access to the University's services. The Sponsor logs in to the web form and completes basic information about the Associate, including information that may be required for contacting the Associate. The Sponsor then indicates the relationship of the Associate to the University (their 'role'). There are seven main roles:

- Emeritus Professor
- Consultant or company representative
- Special Professor
- External lecturer or researcher
- External Examiner
- On secondment and/or working within a University School/Department
- Visiting Scholar/Fellow working on University premises requiring access to University IT facilities

If an Associate has already had a previous account, the Associates process allows the Sponsor to enter a previous account name or Associate ID number; this will then match the Associate to a previously held account. The Sponsor then provides details of the services (User Accounts for Active Directory, Email, LDAP – Portal, WebCT and e-Library services – File Services, Shibboleth and Collaborative tools) to which the Associate requires access, and for how long. Access is provided for a period between 1 day and a maximum of 12 months.

On submission of the application an email is sent to the Associate's private email address which provides information on their application, including Associate ID number, and Sponsor's name, together with links to the University Code of Practice and JANET Acceptable Use Policy. The Associate must agree to the University Code of Practice and JANET Acceptable Use policy.

**Stage 2** - The application then proceeds to the first stage of approval, by the local IT Support Team. The IT Support Team representatives who are authorised to approve applications are responsible for reviewing the access that has been requested and ensuring that this is at an appropriate level. This allows for discussion to take place, if required, between Information Services and the School in order to ensure that all of the Associate's requirements are taken into consideration. Once discussions have been completed, the access and service entitlements of the Associate are set by the IT Support Team and the application is automatically passed on to the next stage of approval.

**Stage 3** - If the IT Support Team has selected the option to provide the Associate access to library e-resources, then the application is automatically routed to the appropriate Faculty Librarian for approval. The Faculty Librarian determines the level of access the Associate requires which both meets the requirements of their role within the University as well complying with relevant licensing constraints. Irrespective of whether the access to e-resources is approved or denied, the application then moves to the next stage of approval, by the School Manager.

**Stage 4** - Should the School Manager approve the application, they must provide a business case for access as part of the audit trail.

**Stage 5** - The final stage of the process is for the IT Support Team to check the application, including all access requirements and the business case. They then approve the account creation.

Once the account has been created (and only if the Associate has agreed to the University Code of Practice and JANET Acceptable Use Policy), an email is sent to the Associate's private email address (with a copy to the Sponsor) confirming that their application has been successful and their account has been created. Guidance is also provided on how they can access the services that the University offers.

As part of the account creation, the username is automatically added to the appropriate security and access groups and any attributes are set to allow access to the services they have been granted. The account expiry date is also set to meet the criteria entered by the Sponsor.

Once the account has been created, the Identity Management Solution monitors use of the account and if it is not used within 90 days of creation then the account is automatically disabled.

**Stage 6** - Thirty days before the expiry date is reached an email reminder is automatically sent to the Sponsor to ask them to review the Associate's access to University services. Access can be extended by up to an additional 12 months. If this is completed and approved within the 30 days a new expiry date is set and the Associate can continue accessing the University's services without any disruption or intervention by the Associate themselves. If the Sponsor does not reapprove the Associate's access, the account is then automatically disabled on the date of expiry and sits disabled for a further 90 days before being automatically deleted.

The application can be tracked through the approval stages and the Sponsor has full visibility of which stage the application is at. This allows a Sponsor to escalate any stalled application with the person or team responsible. Email reminders are also sent out automatically at regular intervals should the application be stalled at any of the stages.

As part of the application process an audit log and notes history is created, so should anyone appeal against a decision then the Associate's record can be viewed to gain a full picture of how their application had been processed.

### **Return on Investment**

The Associates process was just one part of a larger programme of work associated with implementing the University's Identity and Access Management Strategy. However, it is estimated this project itself took around 2 months to define: 2 months of University members work in mapping out the process and ensuring that it would meet the needs of all types of roles. We then worked with our partners, Ask-4 Solutions, to create the process in Metastorm which was made live as part of a larger Identity and Access Management programme. The staffing cost given is based on 2 FTE's over two months. Overall the Associates process from concept through development, fine tuning, to go live and finer tuning cost approximately £35,000.

The overall benefits of delivering an Associates process have been significant. We have realised all of the benefits we set out to achieve at the start of the project, and more. The key deliverables were to remove the paper-based Associates process and streamline it with a new online Associates system, to empower the Schools and Departments in taking 'ownership' of their Associates, and to deliver a solution which removed all possible workarounds and back doors for creating usernames without the relevant level of approval. These were achieved. The amount of time that is now taken to complete an Associate application has been reduced from a few weeks to an average of 7 days, with the fastest application being taken through the approval process in 2 hours. Time and effort has been reduced across IT Support as staff often had to chase paper applications across the University to ensure applications were approved; IT Support also spent considerable time after usernames had been created to add entitlements and gain further approval for access to systems and services. Significant time has also been saved by Library staff that no longer have to remove entitlements for Associates who were wrongly allocated access to e-resources. The average time saved per application is one hour, since the service has been live; this has saved over 1500 hours of effort across the organisation in just 4 months.

We have also gained some additional unanticipated benefits. These included the fact that we can now provide information (when appropriate to do so) to other Departments within the University who need to know about current Associates, this includes security for car parking passes, Library Cards and e-learning, to name just a few. The Associates process will also enable the University to meet its compliance requirements which include adherence to licence agreements, policies and meeting audit requirements and expectations.

Another future benefit will be when the University sector starts using cloud or outsourced solutions 'in anger'. Where services are charged on a per-user basis, it will become more-and-more important for IT Departments to know who their users are, and, more importantly, how they are being funded. With regard to Associates, the number of such accounts may add significant costs to a service but the University would be in a position to identify the cost of providing these accounts, and therefore be in a position to make cost-benefit judgements.

See Appendix C for a breakdown of the role and the progress made to date with regards to new Associates applying and also associate accounts that have been disabled and deleted because of the project.

### **Demonstration of Excellence**

We believe we have created a very innovative way of managing the IT accounts of Associates of the University which significantly reduces the time taken to provide access to the University services. With its automated workflow and appropriate authorisation stages, we believe that the solution creates efficiencies in, and improves the effectiveness of, the application process. It also provides relevant protection for the Associate, the University and our partners in ensuring that the associate only has access to the internal and external resources they need access to, this is especially important with regards to e-journal access. The process also ensures that Schools and Departments take full responsibility for their Associates' access to the services the University provides. As well as providing an automated workflow, the Associates process also records a full history of the decision makers involved and the decisions they made, along with a full time-and-date-stamp audit trail. This helps to ensure we meet our external and internal audit requirements.

As part of the process we did look at one other commercial solution available, AIM from Salford Software. This was similar to our chosen solution in the way it managed Associate accounts, but did not provide the additional workflow management of the process. The chosen solution enables us to tailor the workflow to the University's requirements and also allowed us to take advantage of skills already based within the IS Department.

### **Transference of Best Practice**

We have built awareness internally of the new Identity and Access Management solution by publicising the process and its implications over the past year via our own internal communications newsletters which go out to the whole University. In addition, presentations have been made to IT Support, Helpdesk, Library services and the School and Departmental staff to ensure they are aware of the service. These presentations at various stages of the project also allowed them to have an input into the process itself and how it works. There is an extensive web site dedicated to Identity and Access Management on the University's Information Services web site:  
<http://www.nottingham.ac.uk/is/identityandaccessmanagement.aspx>.

We believe the Associates process which we have developed is not specific to Nottingham. The process described earlier in this application could be used in a wide variety of institutions and could reduce the amount of paper chasing any organisation has to do in managing their Associate accounts. The idea of reviewing each application after a maximum of a year and ensuring the Sponsor takes full responsibility for the actions and activity of the Associates when using the University's services meets audit requirements without adding significant costs to the institution. The process is also flexible enough to be changed as Schools and Departments open, close or merge.

The University of Nottingham has agreed to have a poster at the 2011 UCISA conference in Edinburgh, as a start to helping other institutions to think about managing Associates in a new automated way which empowers the University community (rather than the IT Department) to grant access to its IT and Library Services whilst meeting both policy and audit requirements for very little cost.

Nottingham recently presented its complete IDM solution (which included the Associates Process) at the IDM2010 conference in London, where there were a several Universities and a significant number of organisations present. We have also attended the Identity

Matters NetSkills event where we spoke to several Universities about the project and what we had achieved.

**Name of Staff involved (including job titles and email addresses)**

- Alison Clarke ([Alison.Clarke@nottingham.ac.uk](mailto:Alison.Clarke@nottingham.ac.uk)) – Director of IT Systems
- Chris Parry ([Chris.Parry@nottingham.ac.uk](mailto:Chris.Parry@nottingham.ac.uk)) – Head of Systems and Security
- Mike Polak ([Mike.Polak@nottingham.ac.uk](mailto:Mike.Polak@nottingham.ac.uk)) – Group Leader for Innovation and Collaborative Solutions
- Christine Middleton([C.Middleton@nottingham.ac.uk](mailto:C.Middleton@nottingham.ac.uk)) – Head of Academic Services
- David Clark ([David.Clark@nottingham.ac.uk](mailto:David.Clark@nottingham.ac.uk)) – Project Manager
- Matt Holmes ([Matt.holmes@nottingham.ac.uk](mailto:Matt.holmes@nottingham.ac.uk)) – Analyst/Programmer

**Support of Institution UCISA Representative**

**Alison Clarke – Director of IT Systems, Information Services, The University of Nottingham**

The Associates Process project originated from a strategically directed project as part of IS portfolio of projects to deliver an Identity and Access Management Strategy.

The delivery of the Identity and Access Management Strategy has been challenging, but has provided the University with an excellent foundation on which it can grow its services and solutions and technologies. To be able to grow the services you offer as an IT Department, it is vital that you know who your users are and what they should have access to. In today's world waiting weeks to gain access to University systems is not acceptable to IT or the user community. A significant achievement of the Associates process is that it empowers Schools and Departments to take responsibility and ownership of their Associates rather than IT taking this responsibility, as this is often seen as IT blocking rather than enabling. With the introduction of the Associate's process we now have an end to end service which manages our Associates, and a process which has a full audit trail of decisions and decision makers which will meet our audit requirements.

Looking in to the future with more shared services, cloud services and outsourcing opportunities, knowing who your users are, and what they are entitled to access will be vital in ensuring that services are delivered to the right person at the right time and also that costs are managed correctly within the institution.

When completed, e-mail the submission to [execsec@ucisa.ac.uk](mailto:execsec@ucisa.ac.uk).

# Appendix A- Sponsor Guidance

## Associate request process

An Associate is someone who needs access to The University of Nottingham's IT services and who does not gain it automatically by being in the University's HR or Student Record systems.

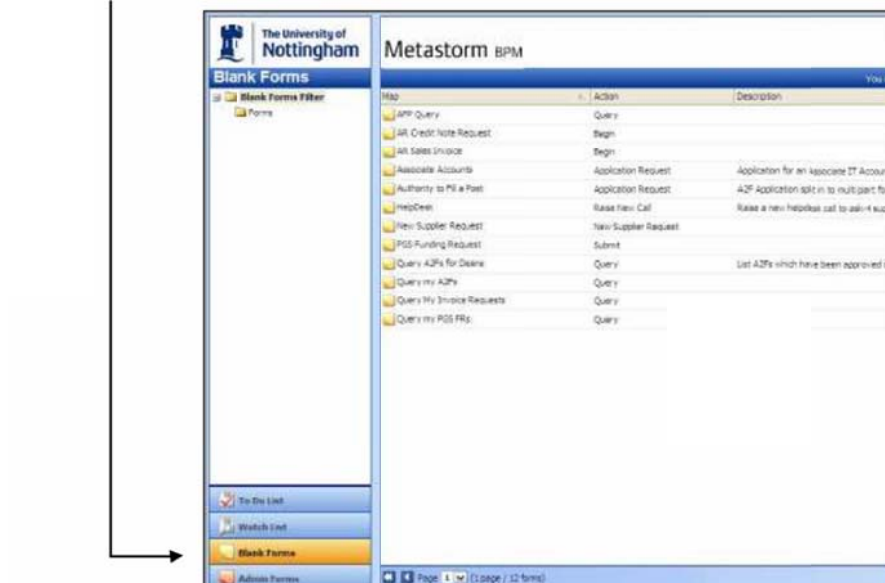
To access the University's IT services, an Associate should contact a Sponsor who is somebody Associated with the work. The Sponsor is responsible for making the application on behalf of the Associate. The following instructions deal with making an Associate account request:

### 1. Making the Request

1. to raise the Associate account request, log into **BPM** at: <http://bpm.nottingham.ac.uk>



2. you will find the Associate Request listed under the **Blank Forms** section



- You will receive the following message when you open the form. To continue, click on **Next**

**Welcome**

The University of Nottingham  
Request for Associate access to use University IT facilities

**Welcome**

Members of the University (essentially, its staff and students) are automatically entitled to use IT facilities provided by the University. Anyone else wishing to access University IT facilities must show a bona fide relationship with the University and a benefit to the University's core activities.

In making this application you, as the sponsor, must be aware that:

- Software licences (including those for networking) held by the University restrict usage to bona fide members of the University. Use of JANET and the Internet from the University is generally limited to educational research and teaching only. We need to know the associate's connection with the University in order that we can be sure that by allowing the associate direct access we will not be in breach of licensing and acceptable use regulations.

The University seeks to create a culture and an environment in which all disabled employees and applicants will feel comfortable and able to declare themselves as disabled should they wish to do so. You as the sponsor are strongly encouraged to discuss with the applicant any Specific Learning Difficulty/dyslexia that the applicant may have.

Close Cancel Next >>

- you will then be asked to fill out the Associate's details:

**Personal Details**

The University of Nottingham  
Request for Associate access to use University IT facilities

**Sponsor's Details**

Name of Sponsor	Sponsor's Department	Sponsor's e-mail address
Simon Smith	IT Corporate & Customer Services Division	cczstjs@e-mail.nottingham.ac.uk

**Associate's Personal Details**

Title:  Institution/Organisation:

Forename:  Telephone Number:

Surname:  E-mail address:

Address:

Is the applicant:

- External examiner requiring direct access to University IT facilities.
- Visiting scholar/fellow working on University premises requiring access to University IT facilities.
- External lecturer or researcher requiring access to University IT facilities
- Consultant or company representative requiring access to University IT facilities
- On secondment and/or working within a University School/Department
- Emeritus Professor
- Special Professor

Please give details of the applicant's association with the University and why you feel the applicant should be entitled to access University IT facilities

Please specify which IT services you think the applicant may require

Has the applicant previously held an account at the University?

Yes  No Account Required Until:

<< Back Close Cancel Finish

- i. your details as the Sponsor will be automatically filled in (note: you must be in the same Department as the person whose account is to be created)
- ii. Enter the person's name, contact telephone number, address and email address. The email address should be their personal, working email address (*preferably not a University one, and definitely not the one that they may have used in a previous role that could be disabled*), as they will be sent important information using it and will use it to log in to get their username and initial password

**Sponsor's Details**

Name of Sponsor	Sponsor's Department	Sponsor's e-mail address
	IS Corporate & Customer Services Divisn	@exmail.nottingham.ac.uk

**Associate's Personal Details**

Title <span style="border: 1px solid red; padding: 2px;">Mrs</span>	Institution/Organisation <span style="border: 1px solid red; padding: 2px;">University of Nottingham</span>
Forename <span style="border: 1px solid red; padding: 2px;"></span>	Telephone Number <span style="border: 1px solid red; padding: 2px; background-color: yellow;"></span>
Surname <span style="border: 1px solid red; padding: 2px;"></span>	E-mail address <span style="border: 1px solid red; padding: 2px;"></span>
Address <span style="border: 1px solid red; padding: 2px;"></span>	

Is the applicant:

External examiner requiring direct access to University IT facilities

Visiting scholar/fellow working on University premises requiring access to University IT facilities

External lecturer or researcher requiring access to University IT facilities

Consultant or company representative requiring access to University IT facilities

On secondment and/or working within a University School/Department

Emeritus Professor

Special Professor

Please give details of the applicant's association with the University and why you feel the applicant should be entitled to access University IT facilities

Please specify which IT services you think the applicant may require

Network and email account, Portal, Z drive, external email address.

Has the applicant previously held an account at the University?

Yes  No    Username ccz    Account Required Until 01/12/2010

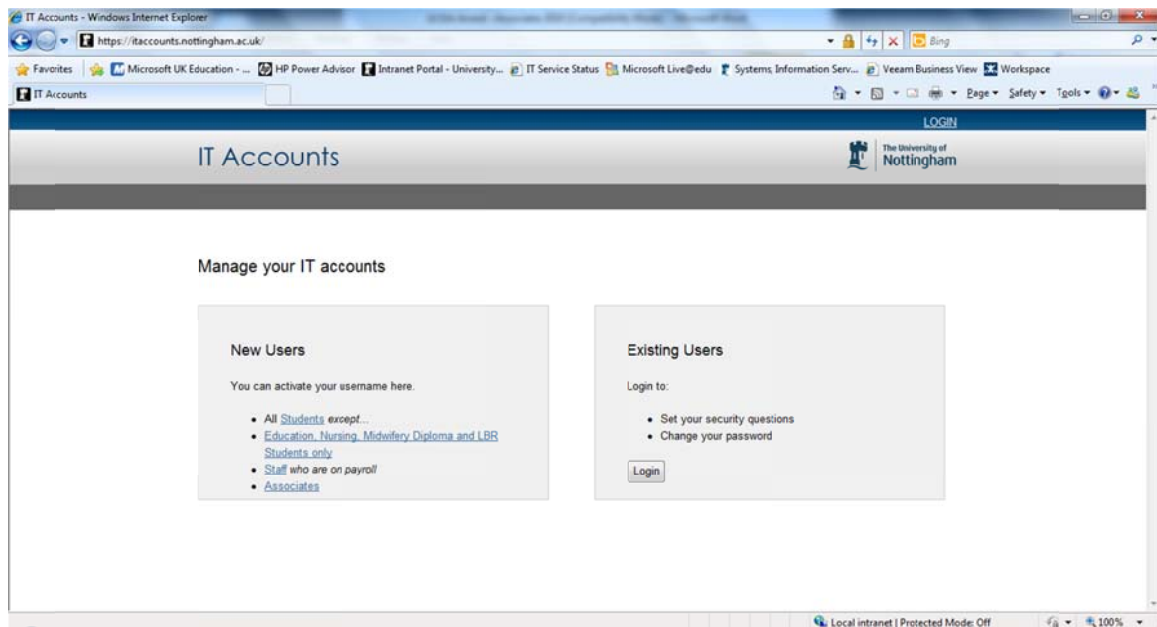
- iii. All sections outlined in red need to be filled in. If they are not filled in when you submit the form, BPM will highlight them

5. The request will then move into the **BPM** process. It will go to your local IT support team first, then to the head of School or Department for approval. You can view its progress via the **Watch List in BPM**:

Metastorm BPM			
Folder Name	Subject	Updated	Stage
Assoc000070	Associate Account Request from Simon Smith in IS Corporate & Customer Services Divisn	30/07/2010 11:17:18	Awaiting IT Support Action

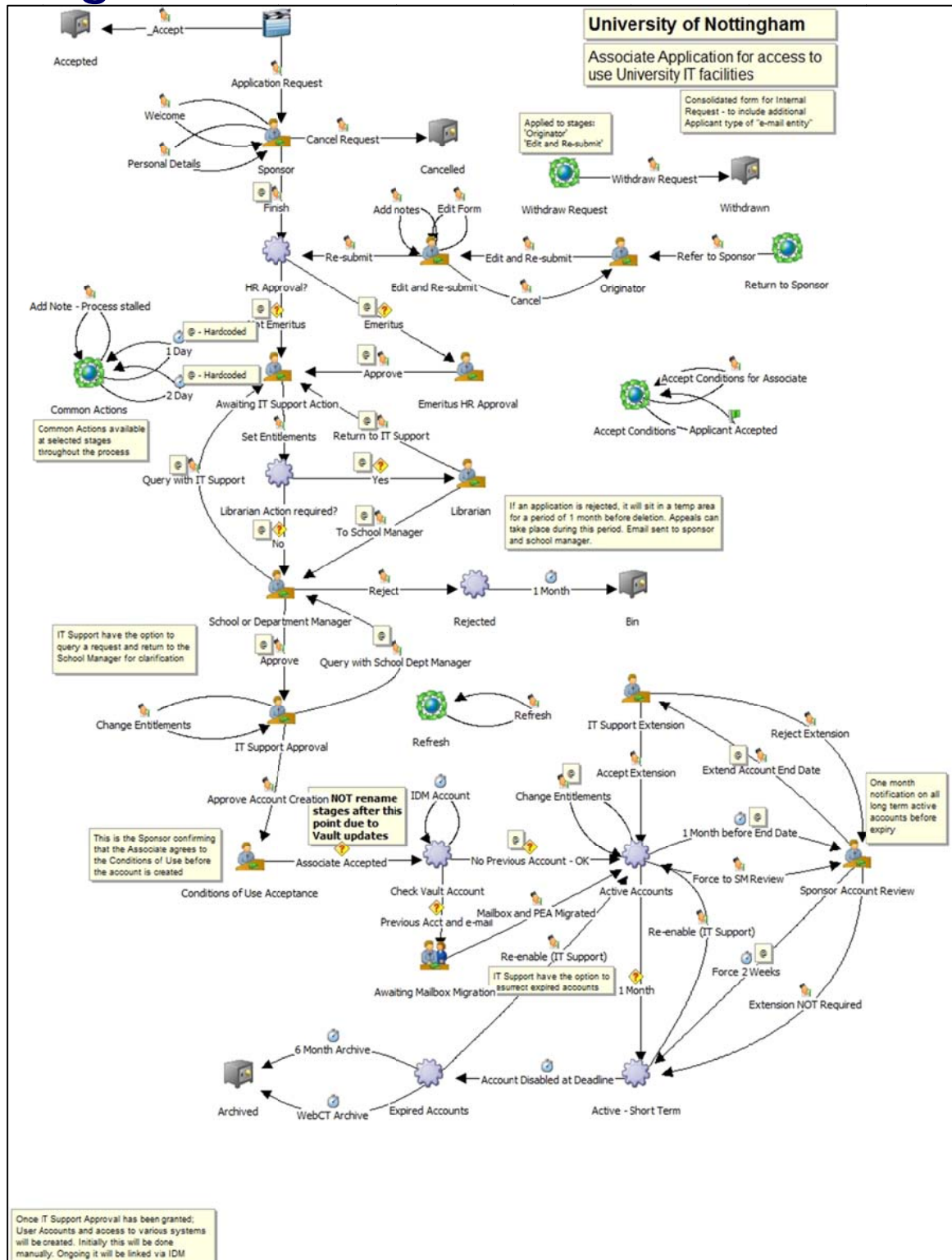
## 2. Obtaining the Associate account

When the account is available, the Associate will be notified by email. They can then go to <https://itaccounts.nottingham.ac.uk/> to obtain the account and initial password:



The Associate will need to log in using the email address that was submitted with the application and the Associate ID (the ID in the format *AssocXXXXXX*)

# Appendix B – Associates Process diagram



## Appendix C – Associates Process progress

The service has been live since the end of July 2010, the number of applications received have been:

Role	Number of applications by Nov 10	Number of applications by Dec 10
Emeritus professor	57	76
Consultant or company representative requiring access to University IT facilities	145	190
Special Professor	21	29
External lecturer or researcher requiring access to University IT facilities	163	262
External examiner requiring direct access to University IT facilities	40	51
On secondment and/or working within a University School/Department	218	302
Visiting scholar/fellow working on University premises requiring access to University IT facilities	114	203
<b>TOTAL</b>	<b>658</b>	<b>1113</b>

The University is now going through a data clean-up exercise where all Associates who applied before the new system was in place are being asked to reapply before the end of January 2011, this will allow us to know exactly who all our user are by April 2011.

The University have also identified through the project over 15,000 usernames which have never been logged in to, these have now been deleted, further tidying up is taking place and is expected to delete a further 5,000 usernames.

## Useful Web Links

University of Nottingham Identity and Access Management Web Site:  
<http://www.nottingham.ac.uk/is/identityandaccessmanagement.aspx>

University of Nottingham Associates Help web site:  
<http://www.nottingham.ac.uk/is/connect/Associateitaccounts.aspx>