

Belfast Institute of Further and Higher Education

Athens DA Case Study

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Overview

The Belfast Institute of Further and Higher Education wished to give students and staff secure access to Athens services. The requirement was first raised by the Library and Learning Resource Centre staff, and the solution was implemented as a joint project between the Web Development Centre and the IT Support Centre. The Institute uses Blackboard and Microsoft Active Directory.

Three main options were considered:

1. Send batch files of our users to Athens for uploading into their authenticating database
2. Integrate Athens locally with Blackboard
3. Integrate Athens locally with Active Directory

The first option was impractical due to the numbers involved and therefore the ongoing management issues that would inevitably arise. As not all courses are supported with Blackboard, it was decided that the third option was the most appropriate. This would involve implementing Athens Devolved Authentication to enable students and staff to use their network (Active Directory) login to gain access to a single set of Athens resources that the Institute subscribes to. Athens facilitates permission sets which enable students and staff to have their own tailored list of resources; however it was decided that one permission set would be appropriate.

The system was implemented on Microsoft IIS using the Athens DA Active X components and customised ASP (Active Server Pages) code.

Key Stages in the Process

1. The Active X version of the Athens DA software was downloaded and installed
2. Sample ASP code was downloaded
3. ASP code was customised for our own set of requirements
4. The installation was tested by Athens
5. The system was set live and integrated into our website via a login page - <http://www.belfastinstitute.ac.uk/e-learning/athens/>

Customising the ASP Code

The core of the Athens setup is the local authentication process. The system essentially:

- Accepts a username and password provided via an HTML form
- Queries the local Active Directory database
- Writes key data to a database for logging purposes
- Validates the login and sends specified data to Athens
- Athens then redirect to our XAP (Extensible Authentication Point) URL

Two Domains: The ASP code had to be heavily adapted to cater for the fact that we have two domains (staff and student). Code was written to first check one domain followed by the

other. This enabled one form to be used for both staff and students, rather than separate entry points.

Unique ID: Code had to be written to convert our unique login identifiers into the format specified by Athens. The unique identifiers (usernames) used at the Institute contain a mixture of letters and numbers, Athens require a numerical identifier. An algorithm was written to convert one to the other and generate unique numbers from the alphanumeric usernames.

Logging System: Code was written to record successful and failed logins. The local alphanumeric ID, the numerical ID, the source IP address and the date and time are written to a SQL Sever database. This logging system is a requirement from Athens.

Passing Data to Athens: The system passes the following to Athens:

1. The Institute's unique identifier (as provided by Athens)
2. The permission set
3. The XAP URL
4. The numerical user Identifier

The Result

By successfully implementing Athens Devolved Authentication, the Belfast Institute has made its online resources available to all its students and staff via one web portal. This single point of access allows the Institute to make resources available that are appropriate and relevant for the student. Flexible learning is facilitated in that access is not limited to within the College network, whilst at the same time security is considered in that no usernames or passwords are transmitted on the internet.