

SMART

Student-Managed Access to Online Resources

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Outline

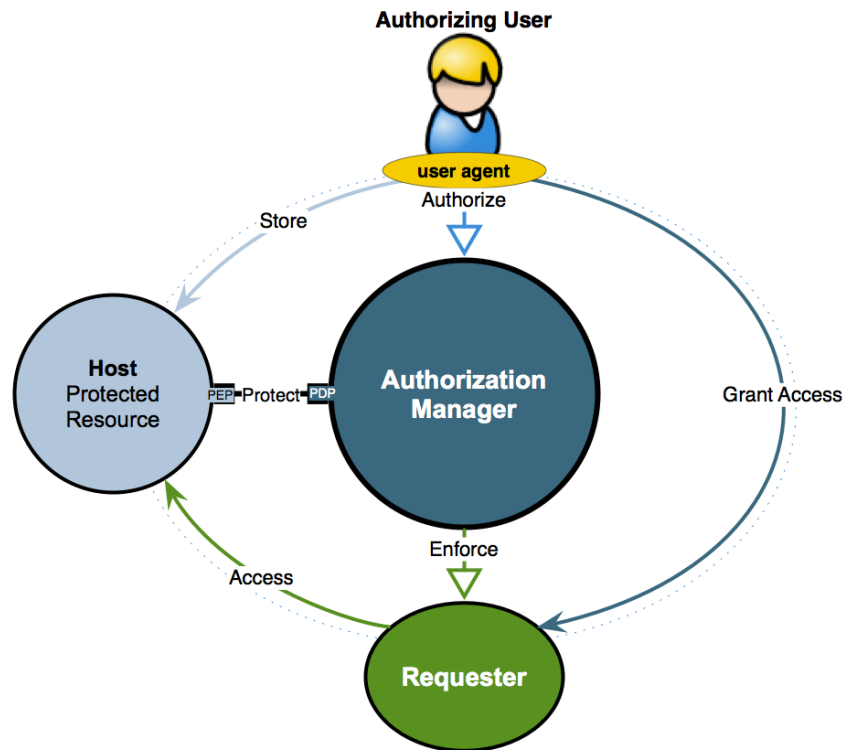
- SMART Project
 - ▣ Description
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Project Description

- The **SMART** (Student-Managed Access to Online Resources) project will develop an online data access management system based on the User-Managed Access (UMA) Web protocol, deploy it within Newcastle University and evaluate the system through a user study.
 - ▣ The project team will also contribute to the standardisation effort of the UMA protocol by actively participating in the User-Managed Access Work Group (UMA WG – charter of the Kantara Initiative)

Project Description - UMA

- **User-Managed Access protocol** – allows an individual control the authorization of data sharing and service access made between online services on the individual's behalf.



Project Description – Objectives

- Objectives:
 - **Define scenario** for UMA use case within Higher Education (HE) environments and provide a comprehensive **requirements analysis**
 - **Develop UMA**-based authorisation solution
 - **Deploy the UMA**-based solution within Newcastle University:
 - **Integrate** the system with institutional Web applications
 - **Evaluate** the system through a user study
 - **Contribute** with the scenario, software and project findings to the **UMA WG** and actively participate in the standardisation effort of the UMA Web protocol.
 - **Demonstrate, document and disseminate** project outputs

Institutional Context

- Newcastle University has ~4,500 staff members and more than 19,000 students
- This results in **large amounts of data** being hosted within our institution:
 - **personal information** – dob, address, lists of modules and courses, certificates, marks, reference letters, resumes, calendars, etc.
 - **resources** – documents, presentations, software, etc.
- There is a need for **efficient, secure** and **usable** access management system that:
 - supports data owners with sharing their data
 - supports data consumers with accessing this data

Institutional Context - Objectives

- Deploy UMA-compliant software to allow **data** hosted within Newcastle University to be **shared** more **efficiently** and more **securely**
- **Evaluate** how students and academics manage their access control using **UMA in a large HE institution**
- By defining the HE scenario we aim to **capture distinctive aspects of the UMA** protocol necessary for HE environments
- We also aim to **contribute with lessons learnt from the deployment of UMA-compliant software** within a large institution to the UK academic (and AIM) community

Project Benefits

- Participation in the UMA WG ensures that HE requirements for access management are taken into consideration. It also ensures that JISC and UK HE remains at the forefront of developments in Web authorisation solutions
- Scenario for UMA use case shows applicability of the new technology to HE environments
- Conducted research, experience and developed software for UMA to be reused by AIM community within and outside UK
- Contribution to JISC e-Framework:
 - ▣ UMA use case scenario & RESTful access control system based on an emergent technology
 - ▣ Reports and the technical architecture of the solution

Project – Measuring Success

Deliverable	QA Method	Evidence
Use Case Scenario (M1-M2)	Fitness for purpose Usability	Relevant to UMA Written clearly
Requirements Analysis (M1-M2)	Fitness for purpose Usability	Allows to develop UMA in HE Written clearly, no ambiguity
Developed Software (M3-M9)	UMA Compliance Fitness for purpose Usability	Passes validation tests Satisfies Requirements Can be easily integrated
Demo Application (M6-M13)	Fitness for purpose Usability	Matches Use Case Scenario Proves to be usable within HE
Participation in UMA WG (M1-M15)	Active Participation	Co-authorship of UMA WG deliverables

Project Team

- Project Manager:
 - ▣ Maciej Machulak, Newcastle University
- Project Team:
 - ▣ Prof. Aad van Moorsel, Newcastle University
 - ▣ Chris Franks, Information Systems and Services, Newcastle University
 - ▣ Lukasz Moren, Newcastle University

Project WWW



□ <http://research.ncl.ac.uk/smart>

Student-Managed Access to Online Resources


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SMART Project - what's that?

The project will develop an online data access management system based on the User-Managed Access (UMA) Web protocol, a newly proposed technology that builds on OAuth. UMA is in the process of being standardised by the UMA work group (charter of the Kantara Initiative). The project will define a Higher Education (HE) case study that exemplifies access management requirements for HE applications, implement UMA-based access management solution and evaluate this through a user study. Through this work, we aim to ensure that HE requirements for access management are taken into consideration early in the standardisation process, and, at the same time, ensure that UK HE continues to be at the forefront of developments in this area.

Latest news

JISC AIM 08/09 Start-Up Meeting
Posted on 27.02.2010.

Project Website Launched
Posted on 23.02.2010.



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Questions and Discussion

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Thank You

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