



**Maintaining a sustainable Future  
for IT in Higher Education**

**Thursday 16th June 2011**

**Time: 14:00 - 14:30**

## **Integrating Social Media with Campus Security Solutions**

### **1. INTRODUCTION**

The general trend within the higher education community has been to increase security with regards to user identification and security. This has been a very successful practice, enabling campus-wide single sign-on and national federations. However, this evolution has exempted non-admitted students or citizens from gaining access to certain resources. As many internet sites now offer login from other sources such as Facebook, Twitter and Microsoft Live, there is a possibility for the higher education community to open up.

The Swedish Alliance for Middleware Infrastructure (SWAMI) is a virtual project organization run by the Swedish national research and education network, SUNET. Roland Hedberg, on an assignment from SWAMI, has built a piece of software to bridge the most common sites and technologies to the upcoming lingua franca of security, SAML2.

### **2. CURRENT SITUATION**

According to the NSF (2011), in 1988, only 8% of the world's science and engineering articles had international coauthors; by 2007, this share had grown to 22%. This is only one of many indicators showing that collaboration is rapidly increasing. The support for collaboration is growing from many angles. For instance, SWITCH (2011) is improving the support for virtual organizations, and is expected to be usable during the coming year. The identity federations are bringing more and more identities under their umbrellas. These solutions are worthwhile; however, they are not ubiquitous.

### **3. IDPPROXY**

Almost all identity federations have standardized on SAML as the standard for exchanging authentication and authorization data between institutions. This allows for a high-security interchange. For the situations where a low level of assurance is required, a different solution is needed.

The IdPproxy fits into the standard SAML infrastructure by acting as a fully compliant SAML2 IdP. The differentiating aspect is that IdPproxy gets its identities from social media services. As an example, a service provider can choose to accept identities from IdPproxy, which redirects the user to authenticate against one of the configured social media services. Currently Facebook, Google, Microsoft LiveID, general OpenID and Twitter are supported. IdPproxy can be set up to either show a list of identity providers which the user can authenticate with or be configured to target a specific provider.

The IdPproxy does not request or transmit any user attributes such as the social graph from Facebook. This gives IdPproxy a uniform interface to the service provider.

## 4. USE CASES

### Alumni

When student accounts expire due to finished studies, an institution will probably keep in touch. One option is to use IdPproxy to link their social media identity with the expiring student identity. This allows an institution to keep track of the students without having to offer an account.

### Vocational training

When students are out in the field doing practical activities, their tutors might want to log in to the LMS to set grades or upload a certificate of completion. If the tutors e-mail address is known, an invitation service can be used to link their social media identity to the LMS. The invitation service handles authorization tokens and the access to the LMS.

### Student recruiting

When a potential student visits an institution to seek more information about the available offerings, the student can be given additional services if logged in. For instance, student counseling and guidance can be offered to logged-in students. The counselor can save the state of the conversation in order to pick it up on subsequent log-ins.

## 5. REFERENCES

- ❖ National Science Foundation, 2011, Expanding International Research Collaborations, <http://www.nsf.gov/statistics/seind10/c0/c0s7.htm>
- ❖ SWITCH, 2011, Virtual Organization Concept <http://www.switch.ch/aai/support/tools/vo-concept/index.html>