Semesterarbeit for one student
# WS-based Provisions Service
Contact: paul.sevinc@inf.ethz.ch

Introduction

In the context of the Zurich Information Security Center's Document Security project, we have modeled a *provisions service*. A provisions service is part of an access-control system, which in our case controls access to documents (consisting of a content and a policy component). A policy enforcement point (PEP) mediates access based on access decisions by a policy decision point (PDP).
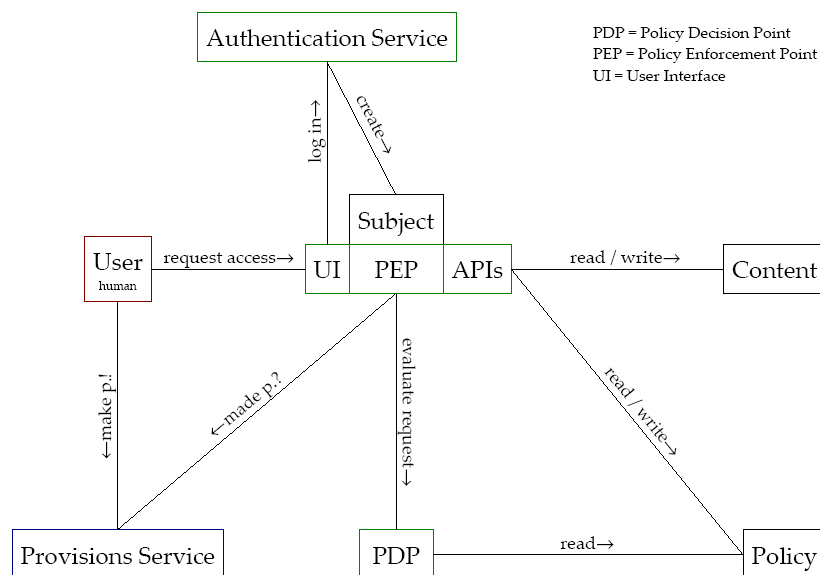
When the PDP permits an access, the permission is tentative because it depends on whether *provisions* have been made. The two provisions we have modeled are *log* and *sign*. Further provisions will certainly be added in the future. When a permission depends on a log provision, the system providing access must have logged the message specified in the provision before access can be granted. When a permission depends on a sign provision, the user requesting access must have signed the agreement specified in the provision before access can be granted. Examples for agreements are end-user license agreements and non-disclosure agreements as well as company guidelines.

Project Objective

The main objective of this project is to implement a provisions service (in Java) and deploy it as a Web service. Since the information one gains from provisions may be

sensitive in nature, the interaction between clients (i.e., between the provisions service's local stub) and the Web service must be secured appropriately.
The challenges of this project are:

- Implementing a provisions service in accordance with our model and deploying it as a Web service
- Identifying security threats and goals
- Meeting the security goals with putting WS-Security to good use

Prerequisites

- working knowledge of Java and the Java platform (and ideally its security aspects)

Supervision

Prof. Dr. David Basin and Paul E. Sevinç (paul.sevinc@inf.ethz.ch).

References

1. http://www.zisc.ethz.ch/research/docsec
2. http://java.sun.com/webservices/
3. http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=wss