Evaluation and Implementation of an Authentication and Authorisation Infrastructure

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Abstract

Well co-ordinated access control is a crucial issue for the VCS project, requiring an Authentication/Authorisation Infrastructure (AAI). SWITCH proposes a one-year mandate to study and design an AAI that suits the needs of the VCS as well as further projects within universities and for collaborations with foreign institutions. The activities within the scope of this mandate will be funded by SWITCH. An AAI deployment will be proposed in follow-up mandates jointly with the universities.

1 Introduction

In the future, the VCS enables a large number of people to access a wide range of services provided by the universities over the SWITCH backbone/Internet. In any such environment, the question naturally arises how to grant access to these
AAI - Development, as Planned in 2002

Authentifizierungs- und Autorisierungs-Infrastruktur (AAI): Projektstand

- 2001
- 2002
- 2003
- 2004
- 2005

- Vorbereitende Studie
  (Oktober 2001 - April 2002)

- Entscheid: Start Pilotphase
  (Juni 2002)

- Pilotphase
  (August 2002 - Juni 2003)

- Entscheid: Aufbau Infrastruktur
  (Juni 2003)

- Implementierung
  (August 2003 - August 2005)
Envisaged Funding Model

- **study & pilot** funded by SWITCH
- **project** funded by subsidies
- **operational service** funded by tariffs

funding / costs vs. time [years]
SUK/BBT Funding Period 2004-2007

• 2004 - 2007: SUK / BBT funds projects between SWITCH and cantonal Universities / Universities of Applied Science

• Focus:
  1. AAI (priority)
  2. video conferencing and
  3. collaboration tools, end-to-end monitoring

• Will end April 1, 2008
Achievements of AAI Project

• SWITCHaai is no longer just a project

• It is now an operational service

• It even became a piece of our IT infrastructure

• In other words:
  SWITCHaai is now an important cornerstone of our “e-Infrastructure for e-Science” in Switzerland
• Project title: “AAA/SWITCH: e-Infrastructure for e-Science”

• 1.4.2008 - 31.12.2011

• Scope:
  – AAA: Enhancing AAI with new functionality in the areas of accounting, auditing, assurance levels, authentication
  – Grid Middleware: Promoting and supporting Grid projects between universities; dissemination of Grids in Switzerland
  – Support for virtual organizations: Tool set for collaborations between scientific groups across multiple institutions
  – e-Learning: Support for the e-Learning program in Switzerland
Proposal by SWITCH

• Proposal:
  – Principle of matching funds
  – Federal funds from SBF: 8 Mio CHF
  – Federal funds from BBT: 2.5 Mio CHF
  – Contribution from ETH Rat: 3.0 Mio
  – Total: 21.5 Mio (including matching funds)

• SBF funds:
  – 4.725 Mio CHF: for universities according to size
  – 1.675 Mio CHF: for project competition
  – 1.6 Mio CHF: for SWITCH to project support and participation
Status of Project

• 11.10.2007: SUK approves project

• ETH and BBT contribution: decision pending

• 31.1.2008: AAA/SWITCH event organized by SWITCH

• 1.4.2008 : Project start
Project Submission

• Contact persons:
  – Institutions: every institution has one contact point nominated by the head of the IT department
  – SWITCH:
    □ Christoph Graf: Responsible for AAA/SWITCH project as member of SWITCH management
    □ Christoph Witzig: Project leader

• Project is submitted by a “project description”

• Two tracks exist:
  – University project:
  – Competitive bid:
Project Guidelines

• Give detailed instructions how to submit and report AAA/SWITCH projects - currently being revised

• Projects are submitted by delivering a project description

• Project management through submission of a short quarterly project report

• Guidelines for cantonal universities are released

• Downloadable from AAA/SWITCH website http://www.switch.ch/aaa
Criteria for Evaluating Projects  (not in order of priority)

1. Matching funds exist

2. Benefit by the project for the end users

3. Cooperation aspect

4. Innovation character

5. Sustainability of the solution

6. Quality of the project management
## Contact Persons at Institutions (1/2)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Contact</th>
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## Contact Persons at Institutions (2/2)

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<tr>
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<td>TBA</td>
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<tr>
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Next Steps …

- SUC approved AAA/SWITCH, BBT/ETH Rat decision pending
- Project ideas can now be discussed with contact persons and/or SWITCH, website with project guidelines available at: http://www.switch.ch/aaa
- Jan 1, 2008: Project proposals can be submitted
- Jan 31, 2008: AAA/SWITCH Information event
- April 1, 2008: Project start: “AAA/SWITCH: e-Infrastructure for e-Science”