

# SWITCH

The Swiss Education & Research Network

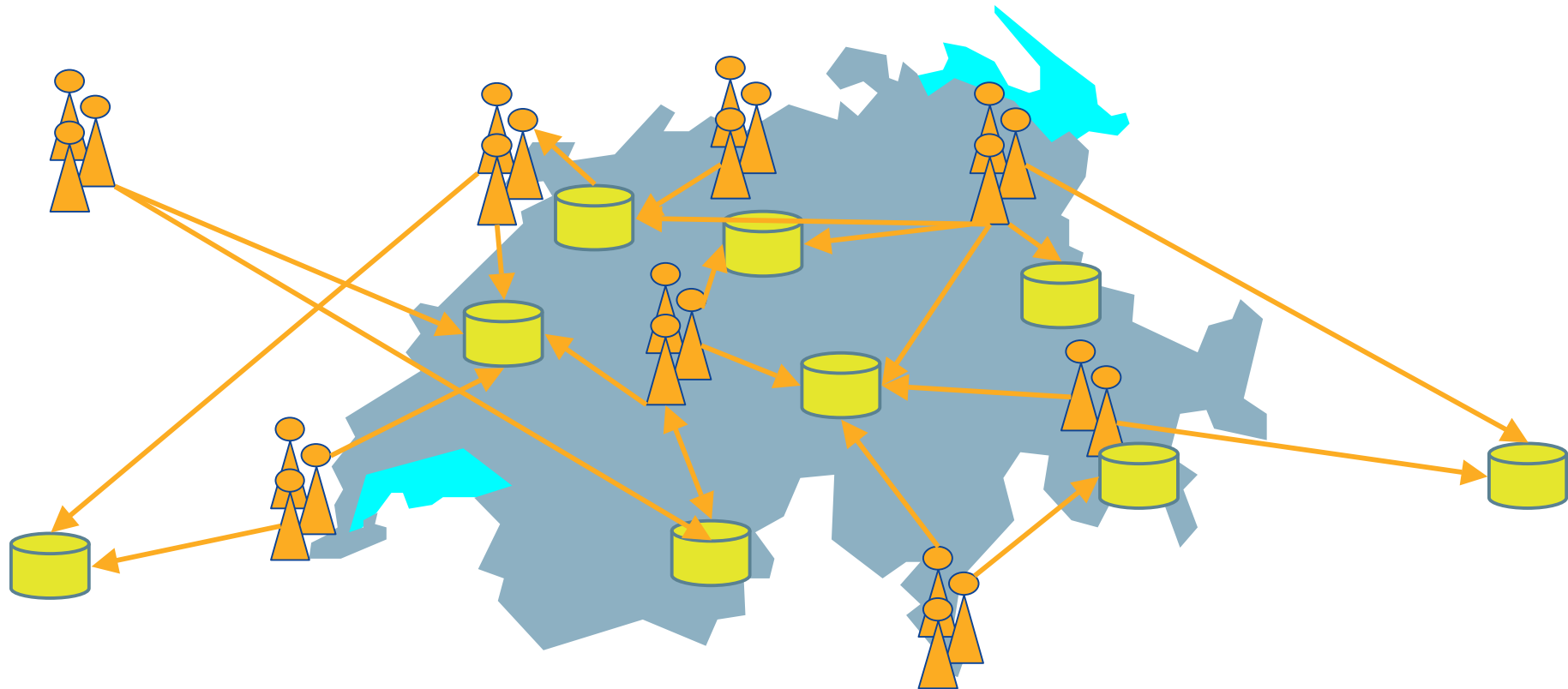
## Introduction to AAI

Ueli Kienholz, <[kienholz@switch.ch](mailto:kienholz@switch.ch)>

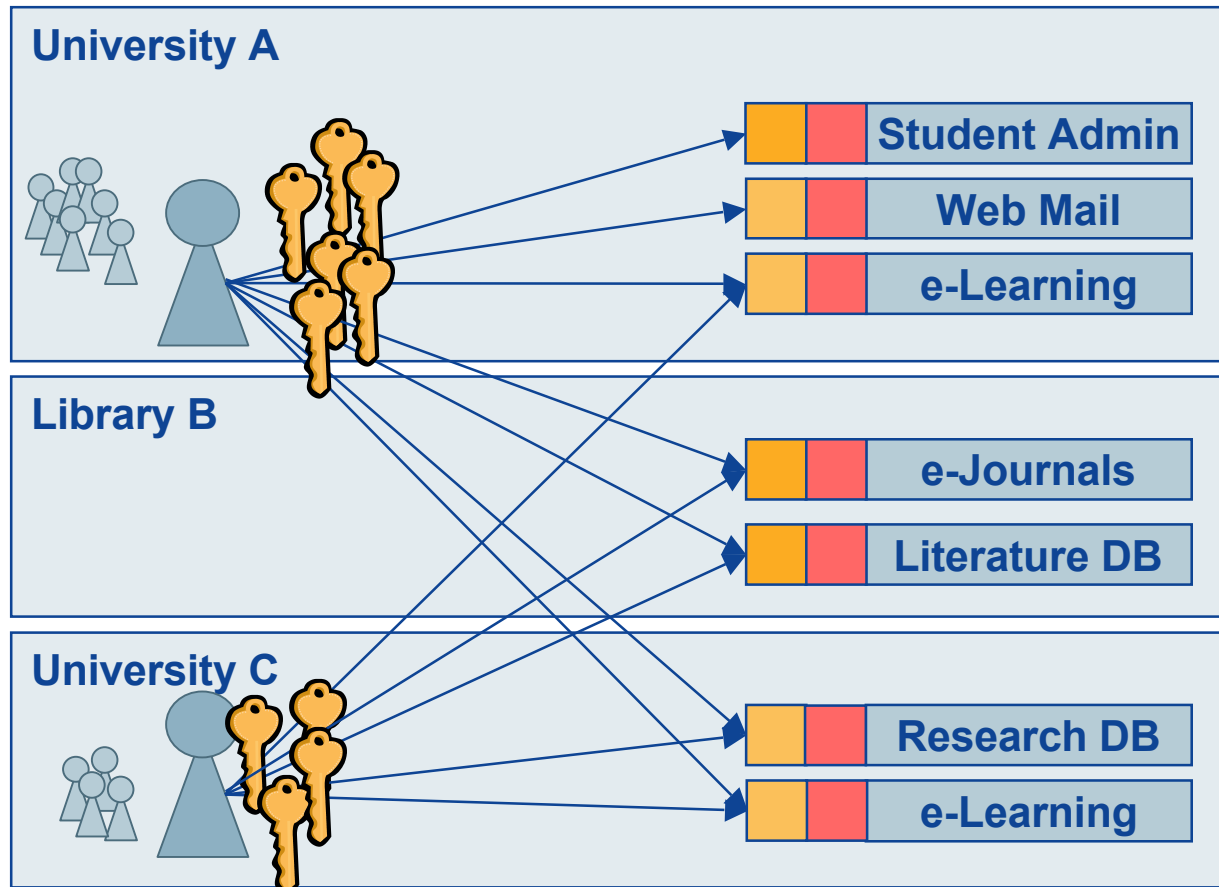
# The AAI Vision

SWITCH

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# Without AAI



- Tedious user registration at all resources
- Unreliable and outdated user data at resources
- Different login processes
- Many different passwords
- Many resources not protected due to difficulties
- Often IP-based authorization
- Costly implementation of inter-institutional access

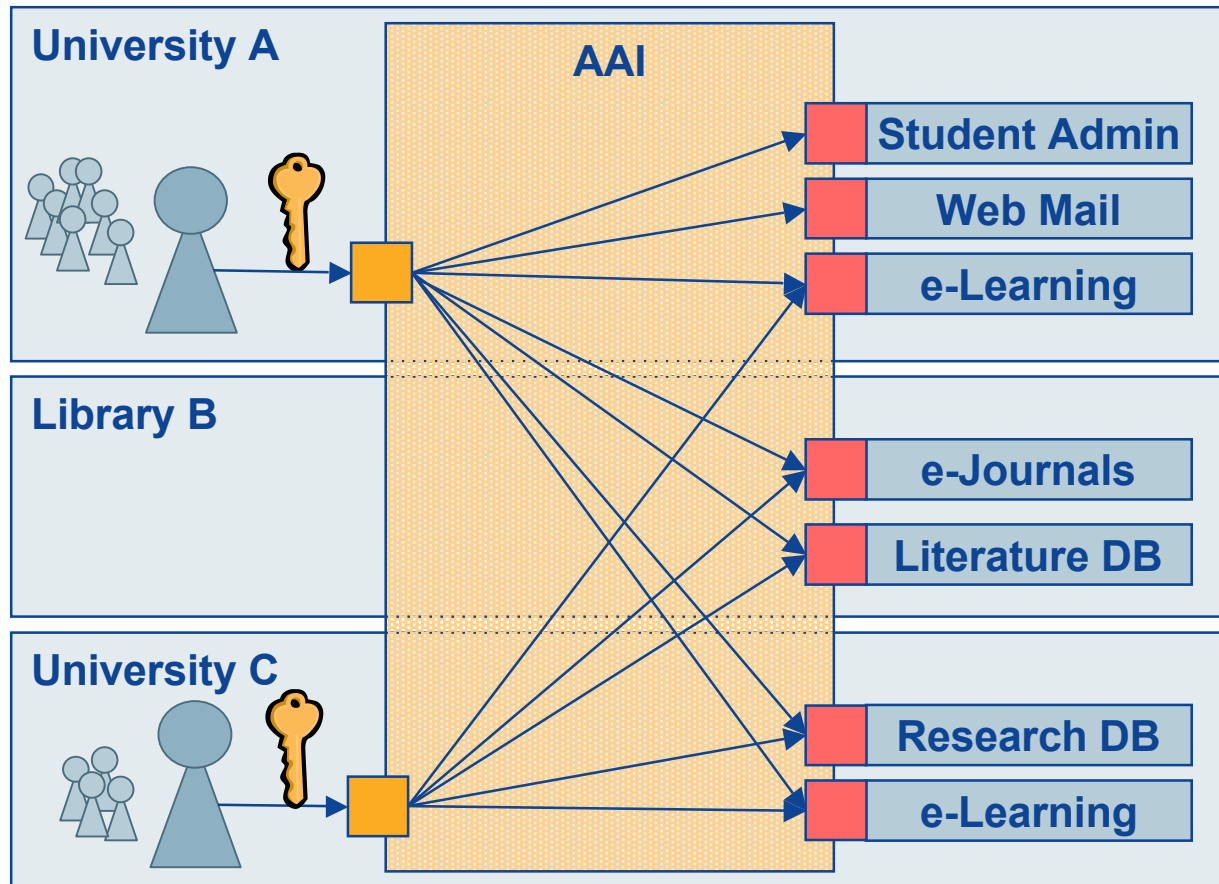
User Administration  
Authentication

Authorization

Resource

 Credentials

# With AAI



- No user registration and user data maintenance at resource needed
- Single login process for the users
- Many new resources available for the users
- Enlarged user communities for resources
- Authorization independent of location
- Efficient implementation of inter-institutional access

User Administration  
Authentication

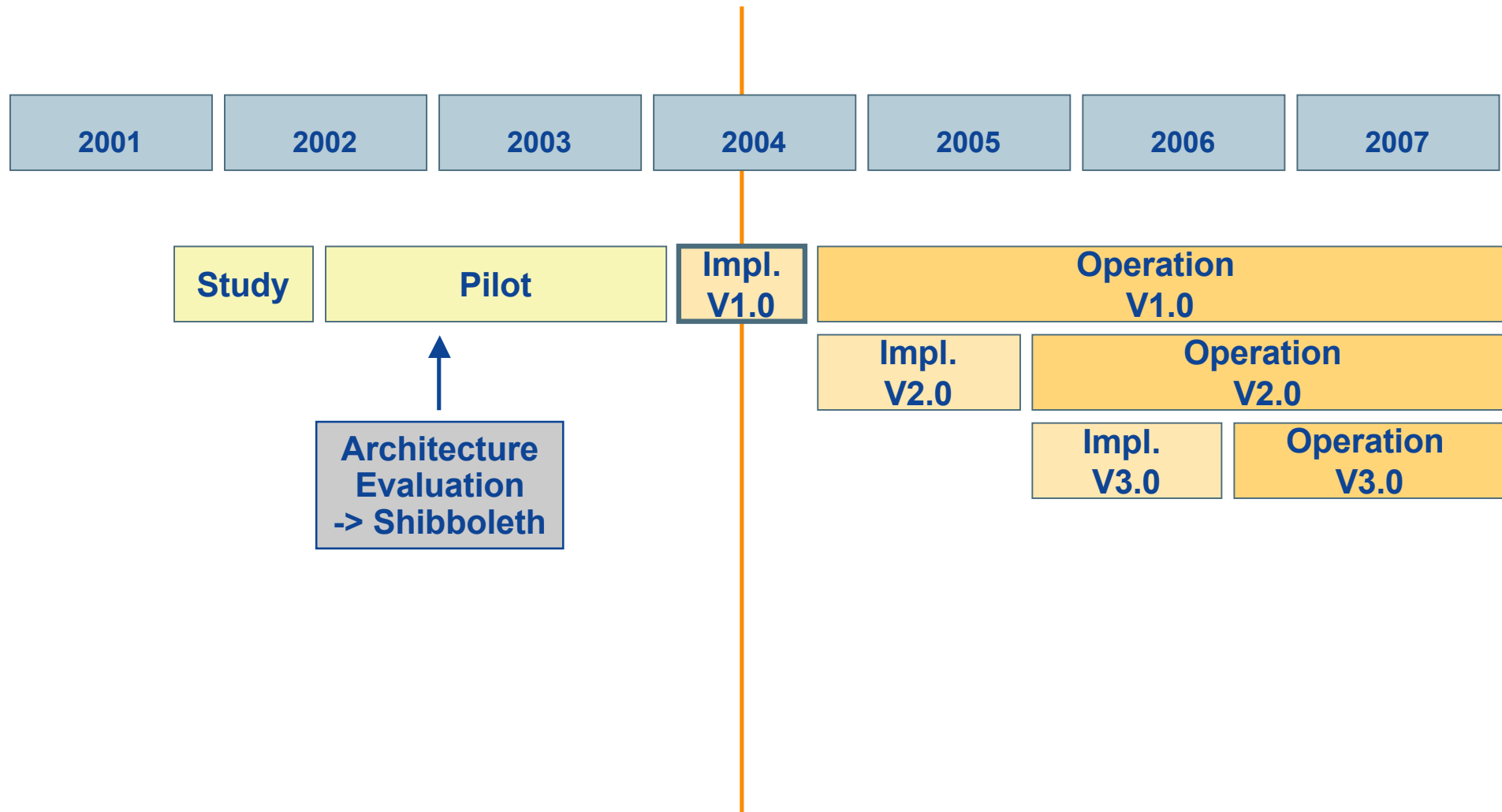
Authorization

Resource

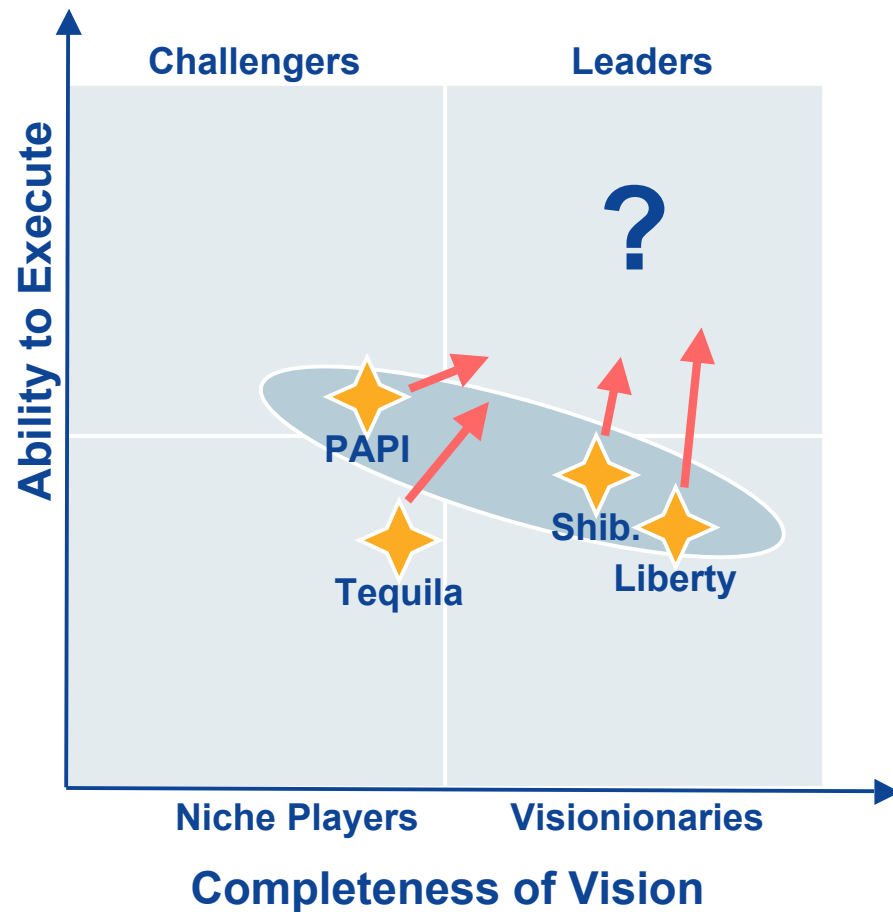


Credentials

# SWITCHhai Project Planning

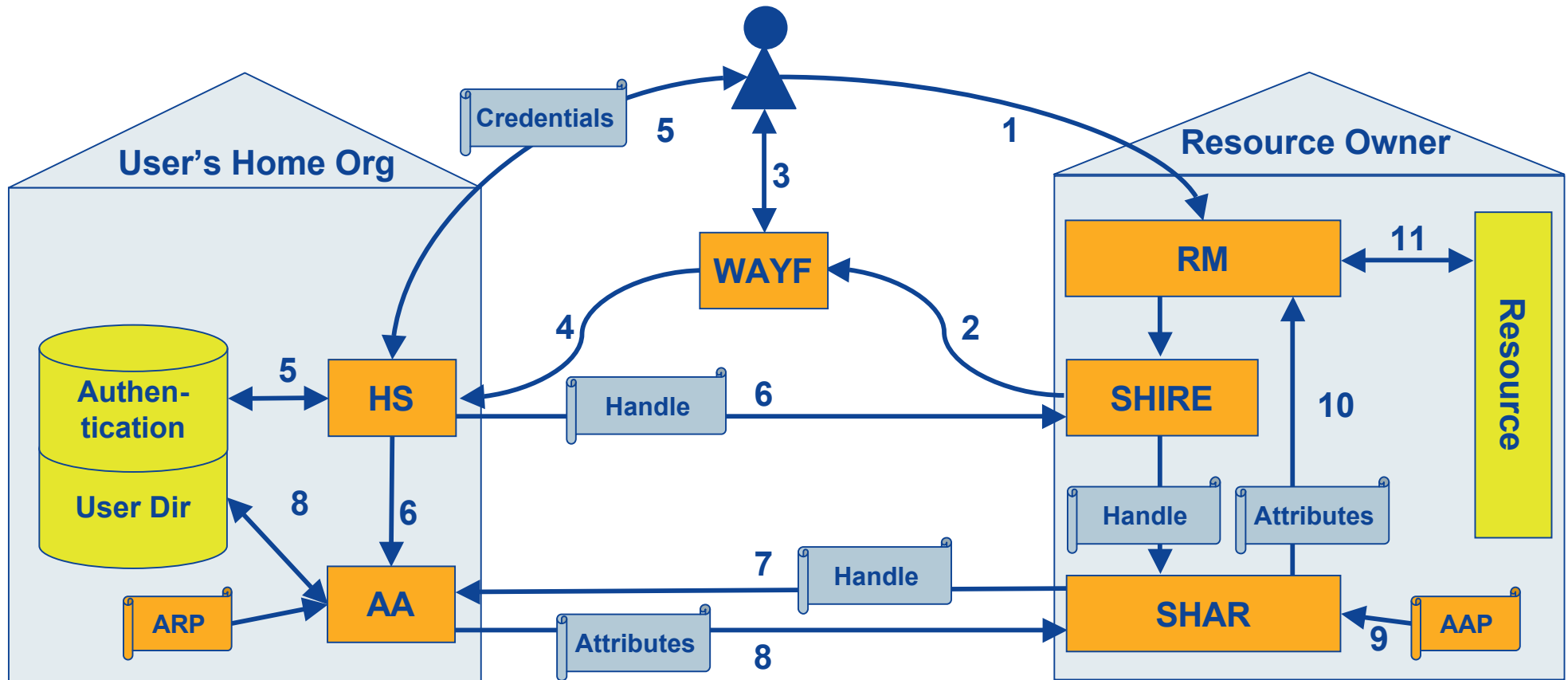


Status as of January 2003



- No leader in the AAI market
- Selection of **Shibboleth** because
  - International reference architecture
  - cooperating with Liberty Alliance, PAPI, Oasis (SAML), content providers, software vendors (WebCT, Blackboard, ...)
  - large community

# Shibboleth Process: The Details



HS Handle Server  
AA Attribute Authority

WAYF 'Where Are You From'-Server

RM Resource Manager  
SHIRE Shibboleth Indexical Reference Establisher  
SHAR Shibboleth Attribute Requestor

Shibboleth AAI Components

<http://www.switch.ch/pki/import.html>

## Safari (für OS 10.3 Panther)

- Download Certificate
- Doubleclick on File
- X509 Anchors
- Keychain Password = Administrator Password
- Keychain Access -> Quit Keychain Access

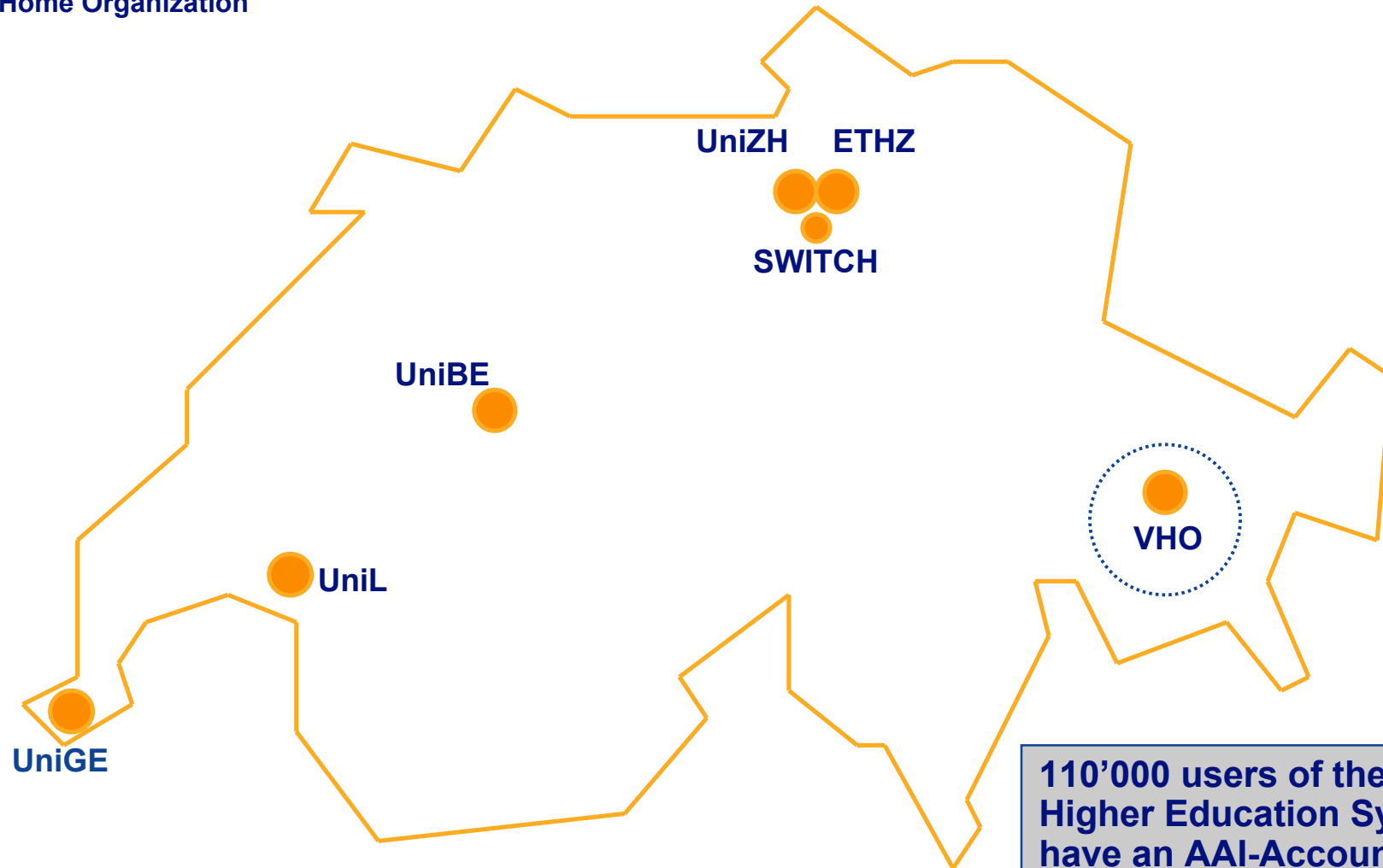
## Internet Explorer (Windows)

- Click on Certificate
- Open
- Install Certificate
- Defaults OK



# SWITCHhai Status - Home Organizations

● AAI Home Organization



**110'000 users of the Swiss Higher Education System have an AAI-Account (= 50% of all users)**

# Demo User Accounts

- ❑ Username: **demo1 .. demo30** (according number on nametag)
- ❑ Password: **demo**
- ❑ Home Organisation: **Test Home Organization @SWITCHaai**

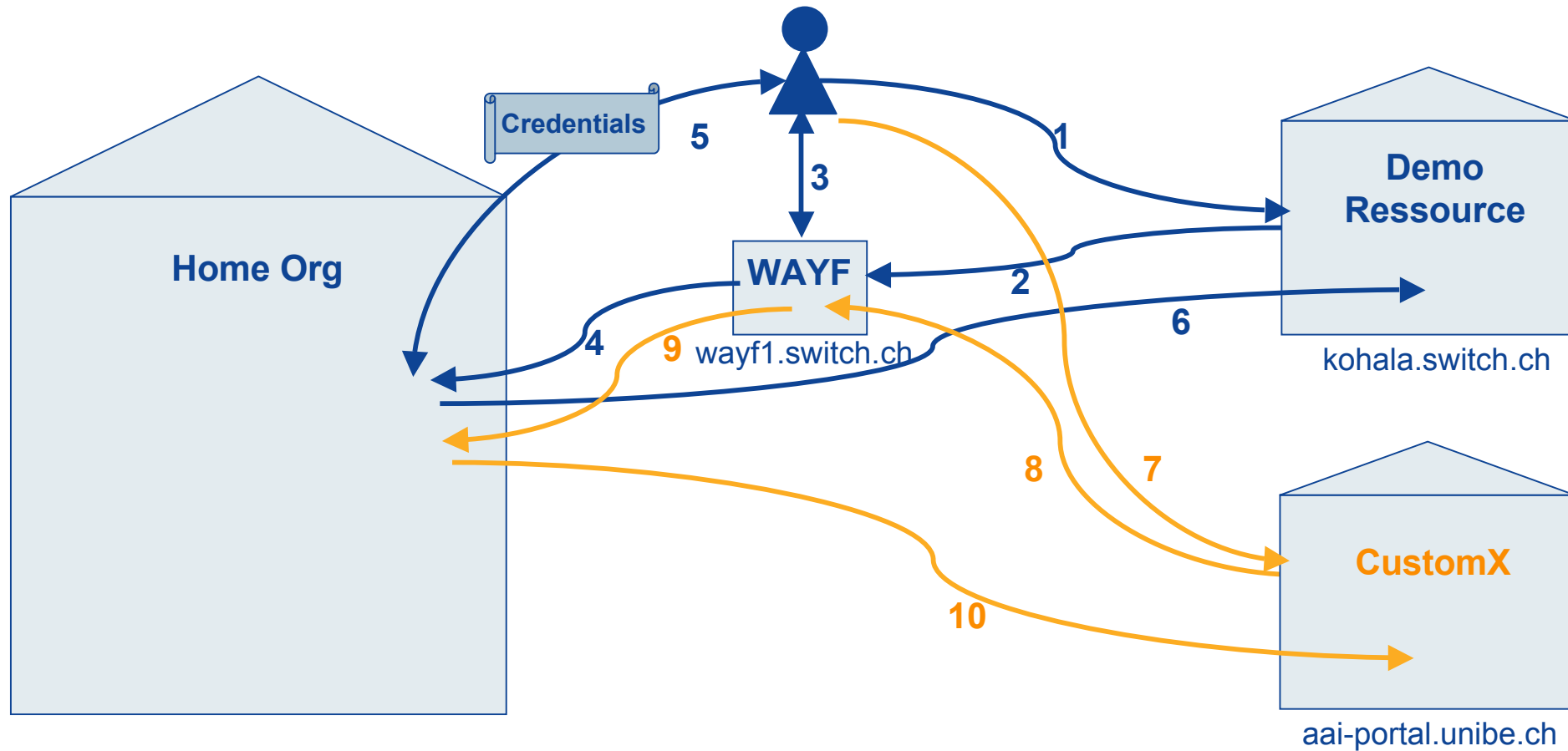
□ <http://www.switch.ch/aai>

-> Demo

-> Try it yourself

(<https://kohala.switch.ch/secure>)

# Single Sign On



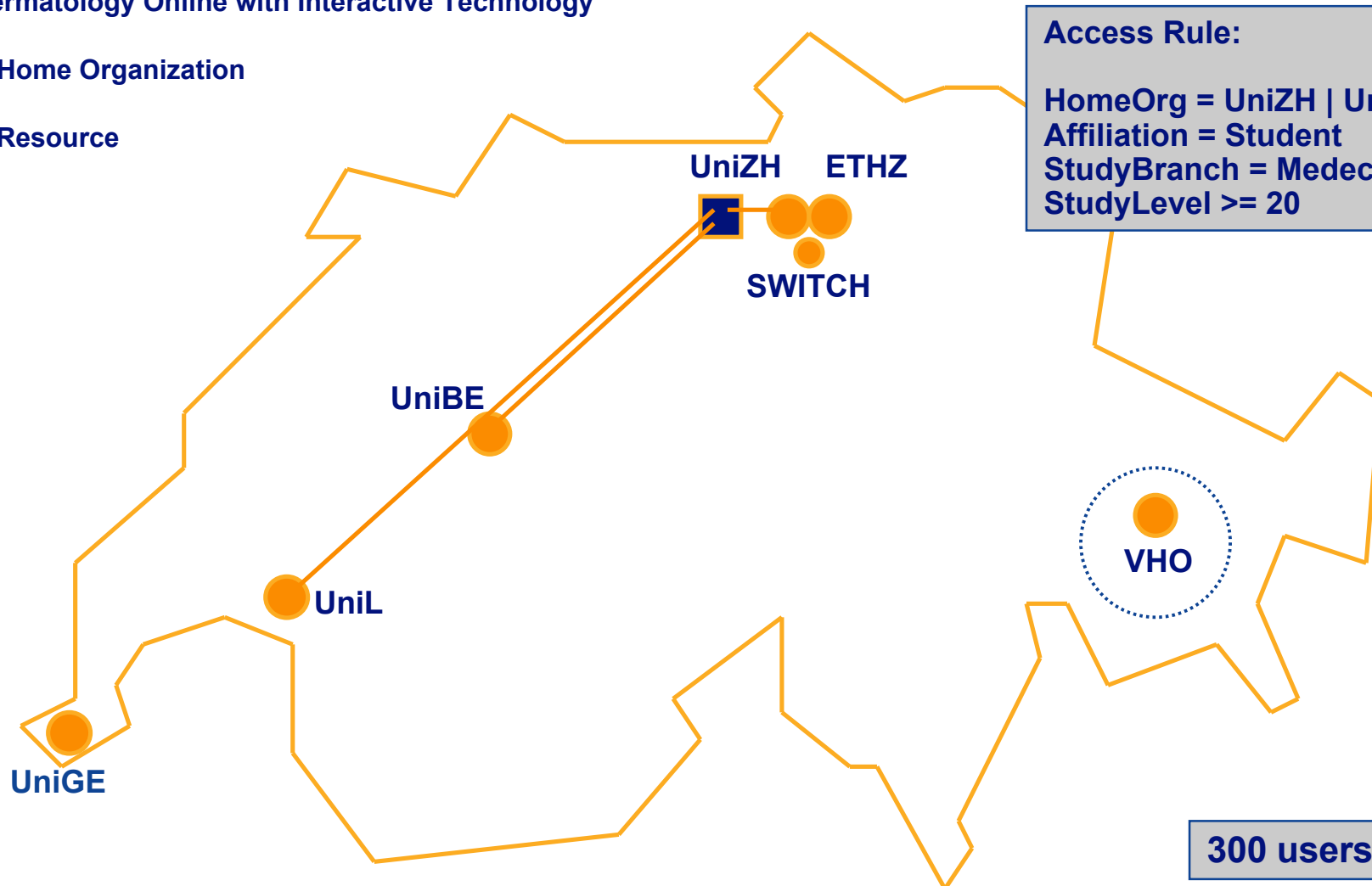
<https://aai-portal.unibe.ch/aai-portal/user/aai>

# Showcase 1: DOIT

## DOIT: Dermatology Online with Interactive Technology

● AAI Home Organization

■ AAI Resource



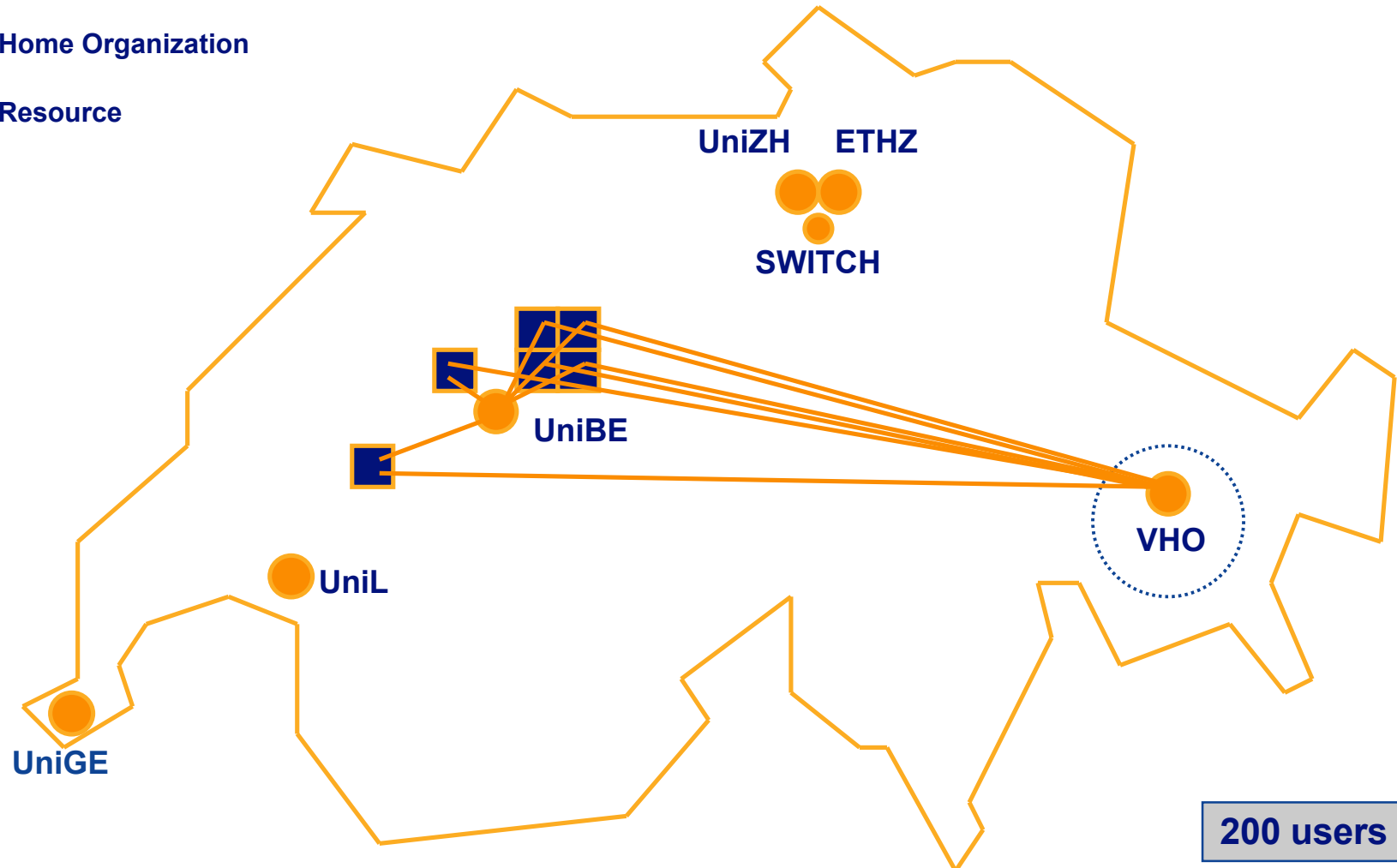
300 users

# Showcase 2: VITELS

VITELS: Virtual Internet and Telecommunications Laboratory of Switzerland

● AAI Home Organization

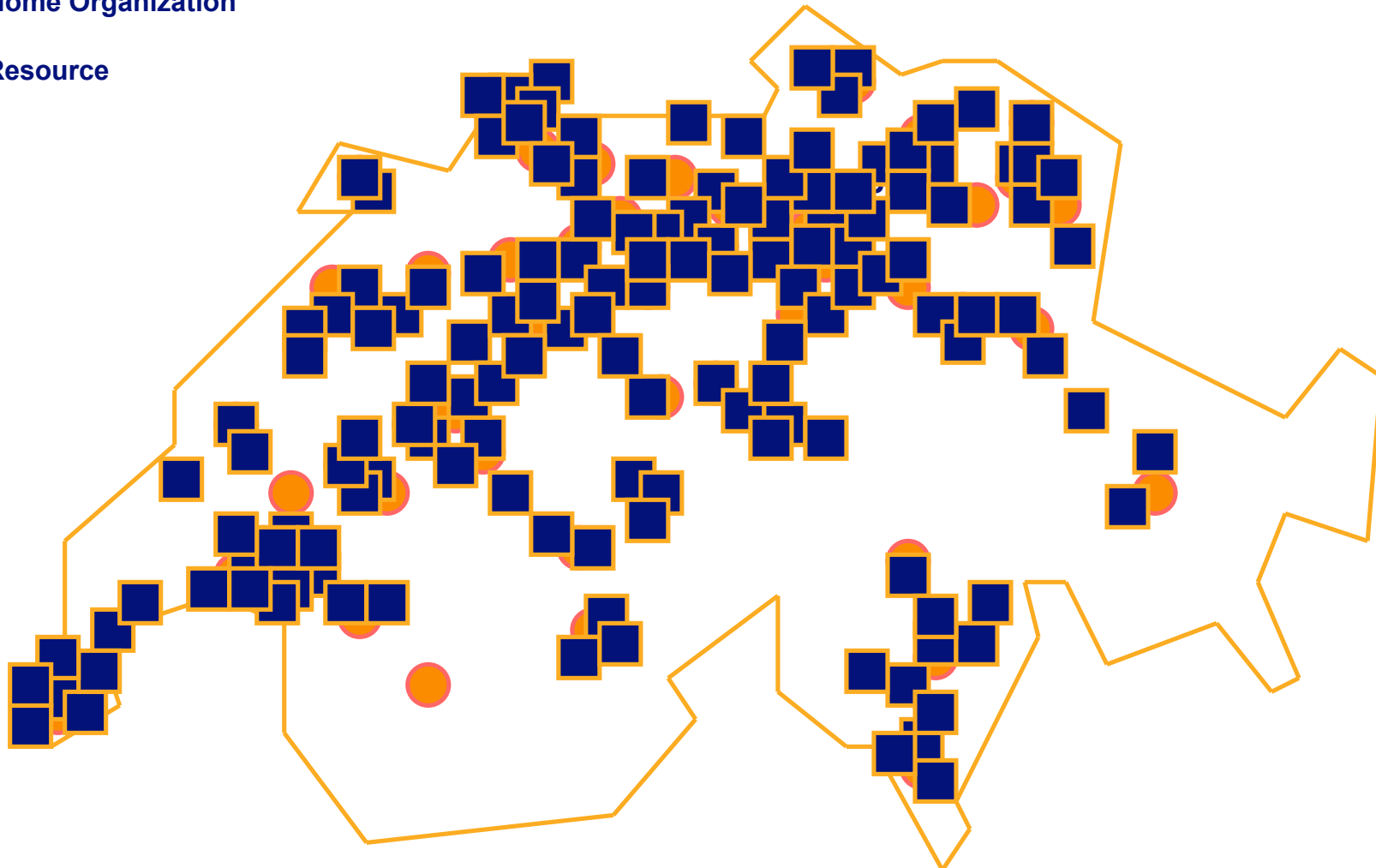
■ AAI Resource



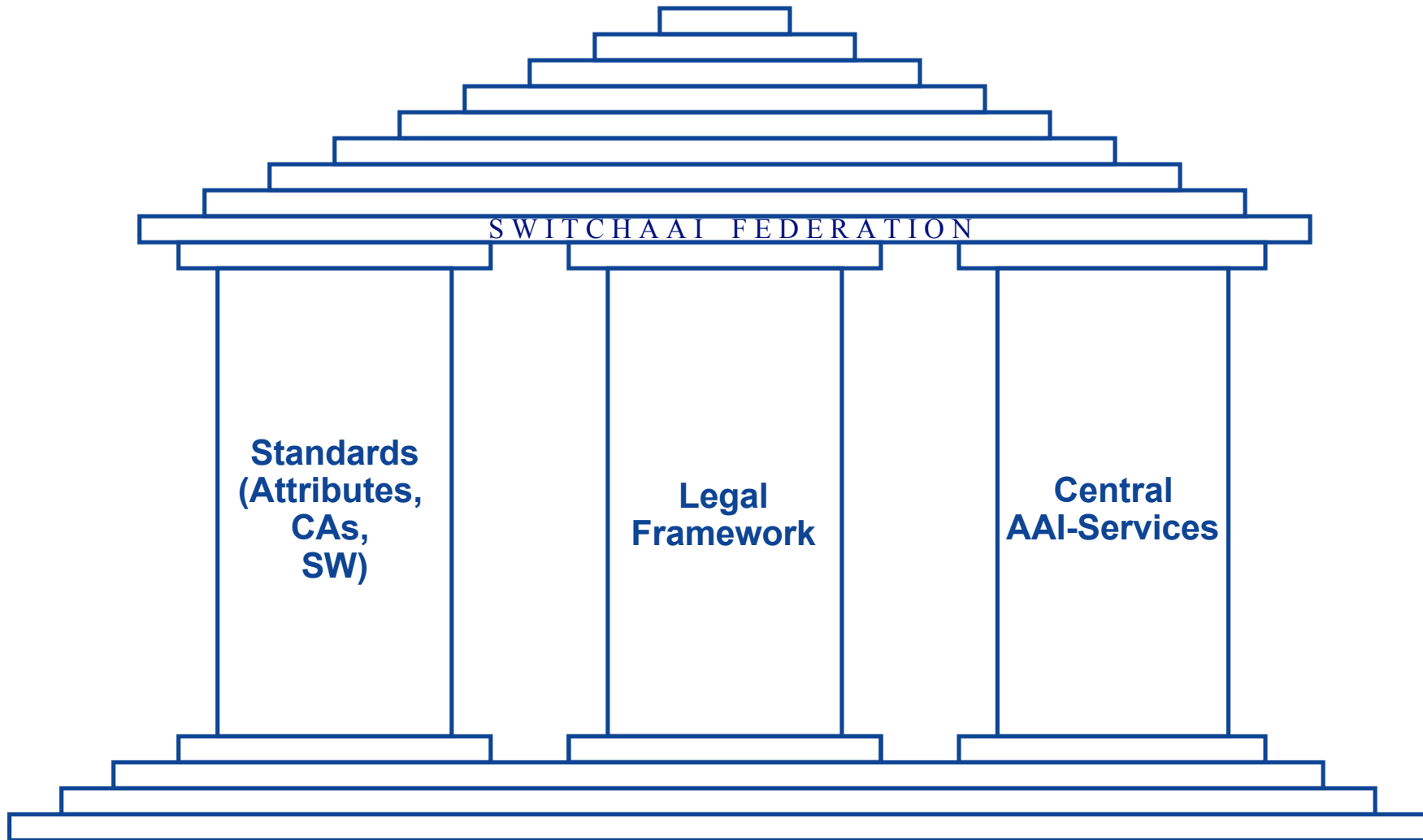
# The Goal (mid 2006)

● AAI Home Organization

■ AAI Resource



# The SWITCHaai Federation

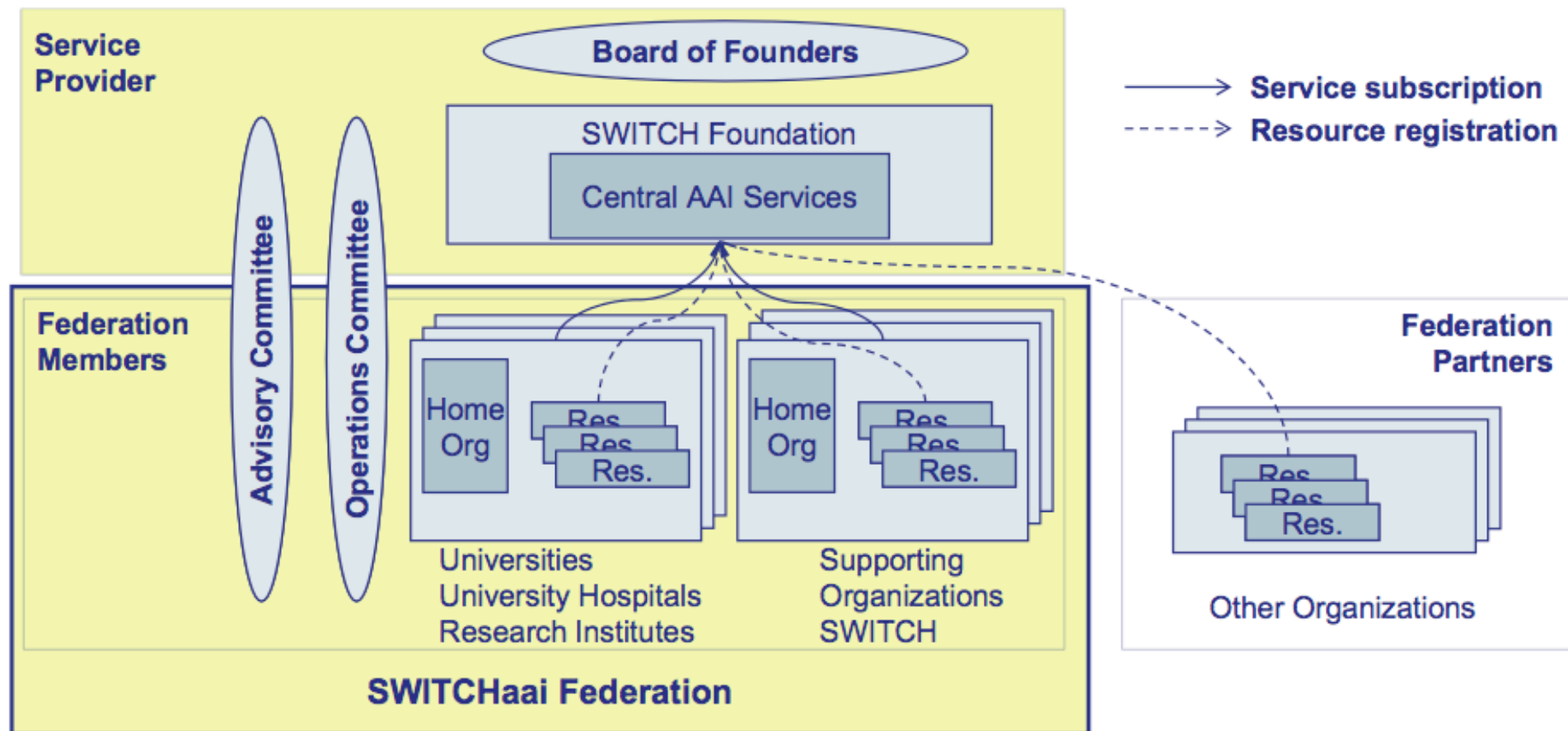


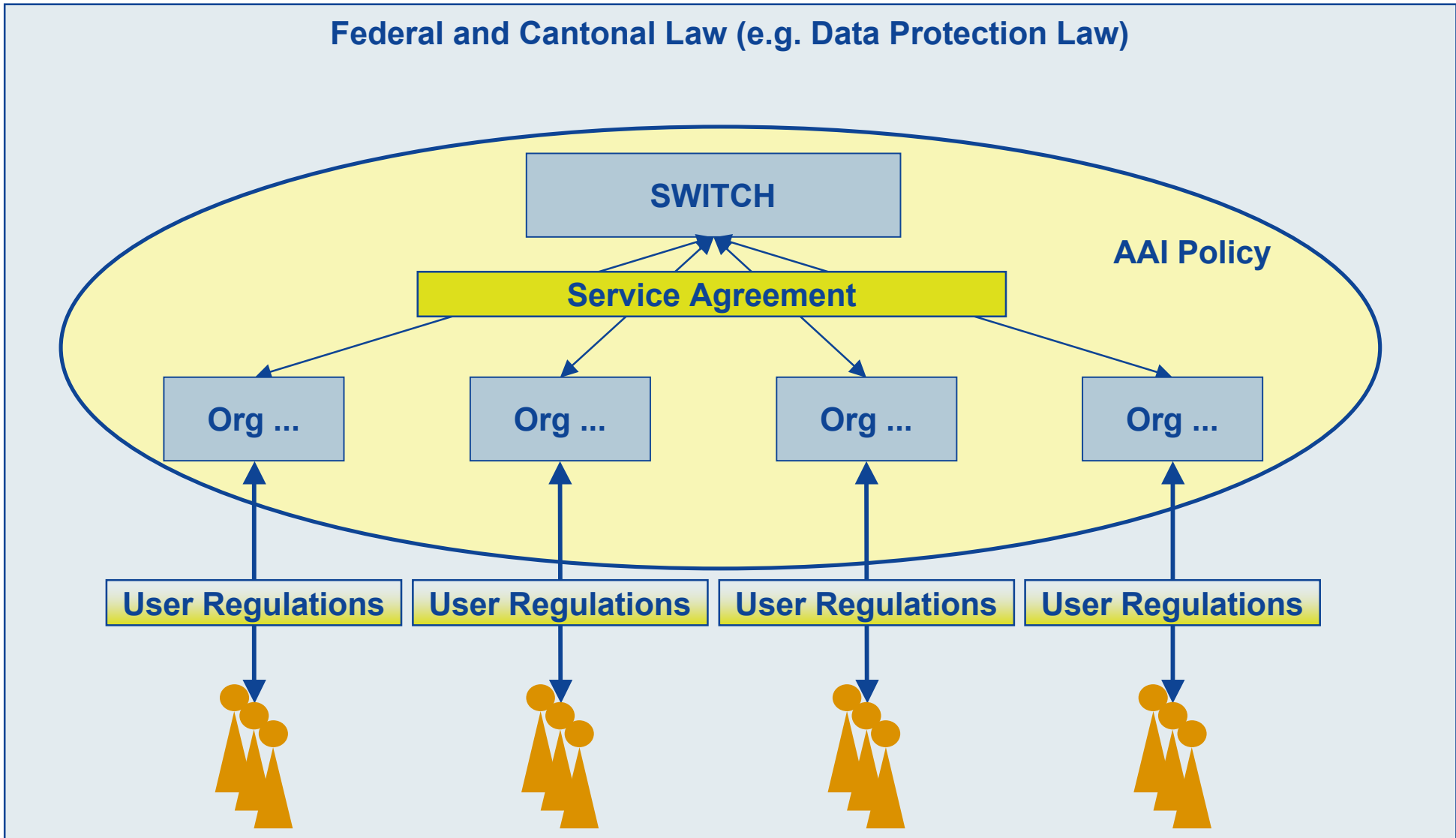


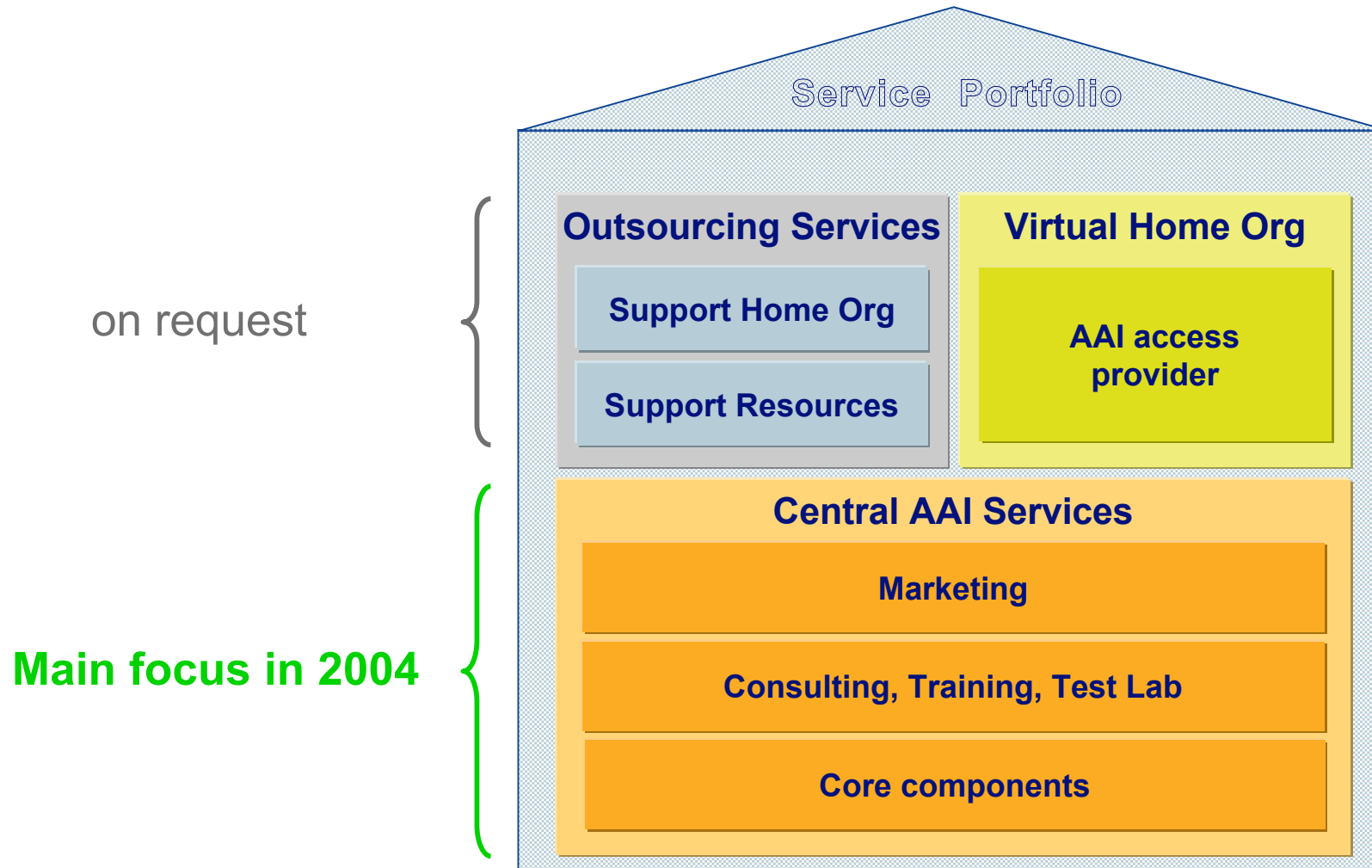
# SWITCHhai Federation

SWITCH acts as federation service provider

Federation membership based on signed service agreements







- ❑ **Strategy & Marketing**
- ❑ **Support, Consulting, Training**
- ❑ **Providing Federation-specific Files and Configuration Guides**
- ❑ **Operating WAYF (Where Are You From Server)**
- ❑ **Test-HomeOrg and Test-Resource**
- ❑ **Tools (AAIportal, AAIproxy)**
- ❑ **Virtual Home Organization**

- ❑ **Shibboleth:**  
<http://shibboleth.internet2.edu/>
  
- ❑ **Shibboleth Demo:**  
<http://www.switch.ch/aai/demo>
  
- ❑ **Pilot Results Report:**  
[http://www.switch.ch/aai/docs/AAI\\_Pilot\\_Results.pdf](http://www.switch.ch/aai/docs/AAI_Pilot_Results.pdf)
  
- ❑ **Attribute Specification:**  
[http://www.switch.ch/aai/docs/AAI\\_Attr\\_Specs.pdf](http://www.switch.ch/aai/docs/AAI_Attr_Specs.pdf)