

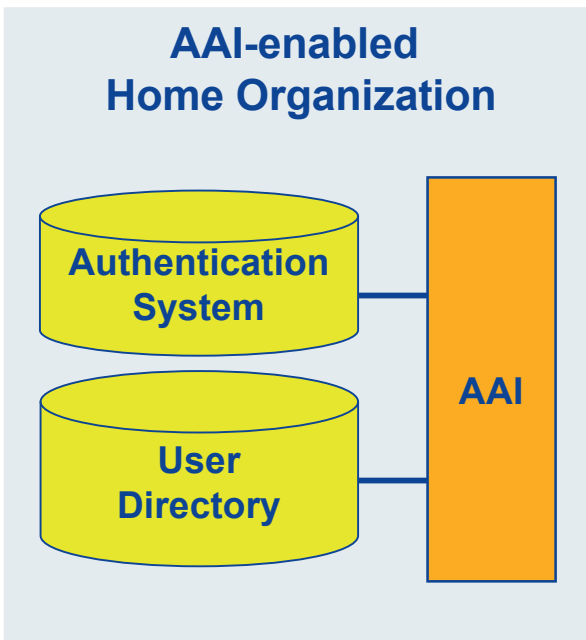


SWITCH

The Swiss Education & Research Network

AAI Attributes

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- **Authentication System**
 - any Apache compatible authentication method: LDAP, PAM, RADIUS, TACACS, end-user certificates, Web SSO (e.g. Pubcookie), ...
 - any Tomcat compatible authentication method: e.g. Web SSO (CAS):
 - LDAP, end-user certificates, NIS, SQL database, Kerberos
 - any IIS compatible authentication method
- **User Directory**
 - Integration via Java APIs
 - LDAP via JNDI
 - Databases via JDBC

→ Username is the link between the two parts

SSO = Single Sign On

- **AAI transfers user attributes from a Home Organization to a Resource**
 - **Requires a common understanding of what a value means**
 - ➔ **Authorization Attribute Specification v1.1**
http://www.switch.ch/aai/docs/AAI_Attr_Specs.pdf
- **A task force selected the attributes for SWITCHaai**
 - **minimal set to start with**
 - **attributes with pre-existing 'common understanding'**
 - **in line with foreign activities**
- **Descriptions are LDIF like, but use of LDAP not required**

Authorization Attributes (2)

Personal attributes

- **Unique Identifier**
- **Surname**
- **Given name**

- **E-mail**
- **Address(es)**
- **Phone number(s)**
- **Preferred language**
- **Date of birth**
- **Gender**

Group membership

- **Name of Home Organization**
- **Type of Home Organization**
- **Affiliation (student, staff, faculty, ...)**

- **Study branch**
- **Study level**
- **Staff category**
- **Group membership**
- **Organization Path**
- **Organizational Unit Path**

- based on eduPerson specification
- study branch, study level, staff category are based on SHIS/SIUS
- username and password are missing
⇒ only used locally!
- commonName is missing
no common understanding on how to use it
- 'Matrikelnummer' is missing
for data protection reasons

- Based on 'Schweizerisches Hochschulinformationssystem (SHIS/SIUS)'
<http://www.bfs.admin.ch> (Fachbereich Bildung und Wissenschaft)

- Example for Universities of Applied Sciences

studyBranch1 (17 codes)

40000 Landwirtschaft — Agriculture

studyBranch2 (64 codes)

40200 Pflanzenproduktion — Production végétale

studyBranch3 (110 codes)

40202 Obst-, Wein-, Gartenbau — Arboriculture fruitière/Horticulture

studyLevel

40202-15 Studierende in der Studienphase, die zum Bachelor führt
Etudiants réguliers se trouvant dans une phase d'études
qui les conduit au titre de Bachelor

- **Only very broad categories, also derived from SHIS/SIUS**
- **Categories defined**

Teaching/Research

101/201 Professors and Permanent Researchers

102/202 Oberer Mittelbau — Corps intermédiaire supérieur

103/203 Unterer Mittelbau — Corps intermédiaire inférieur

Administration/Support/Technical

301 Administrative Personnel

302 Administrative Personnel: Apprentices and Interns

303 Technical Personnel

304 Technical Personnel: Apprentices and Interns

305 Janitors, Building Managers

306 Social and Wellness Personnel

307 Library Personnel

308 Safety Personnel



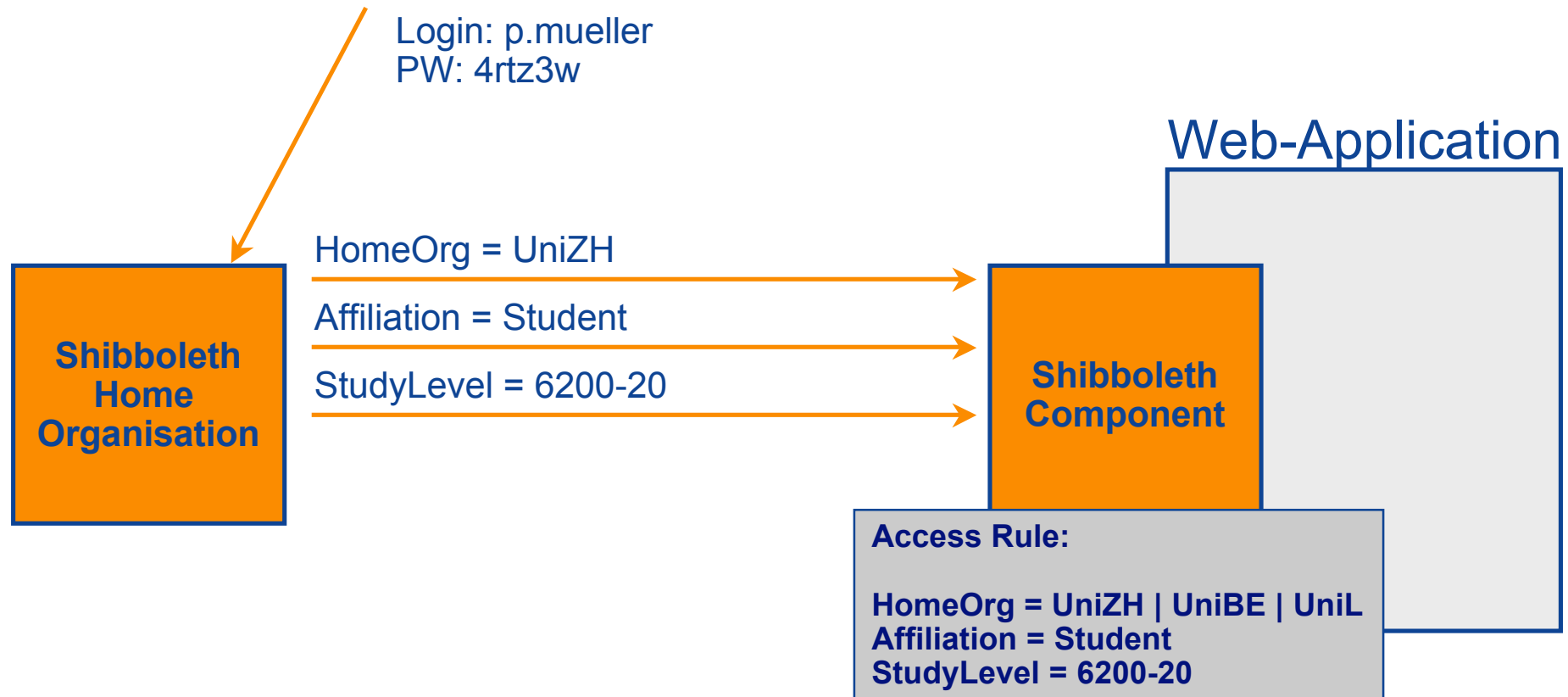
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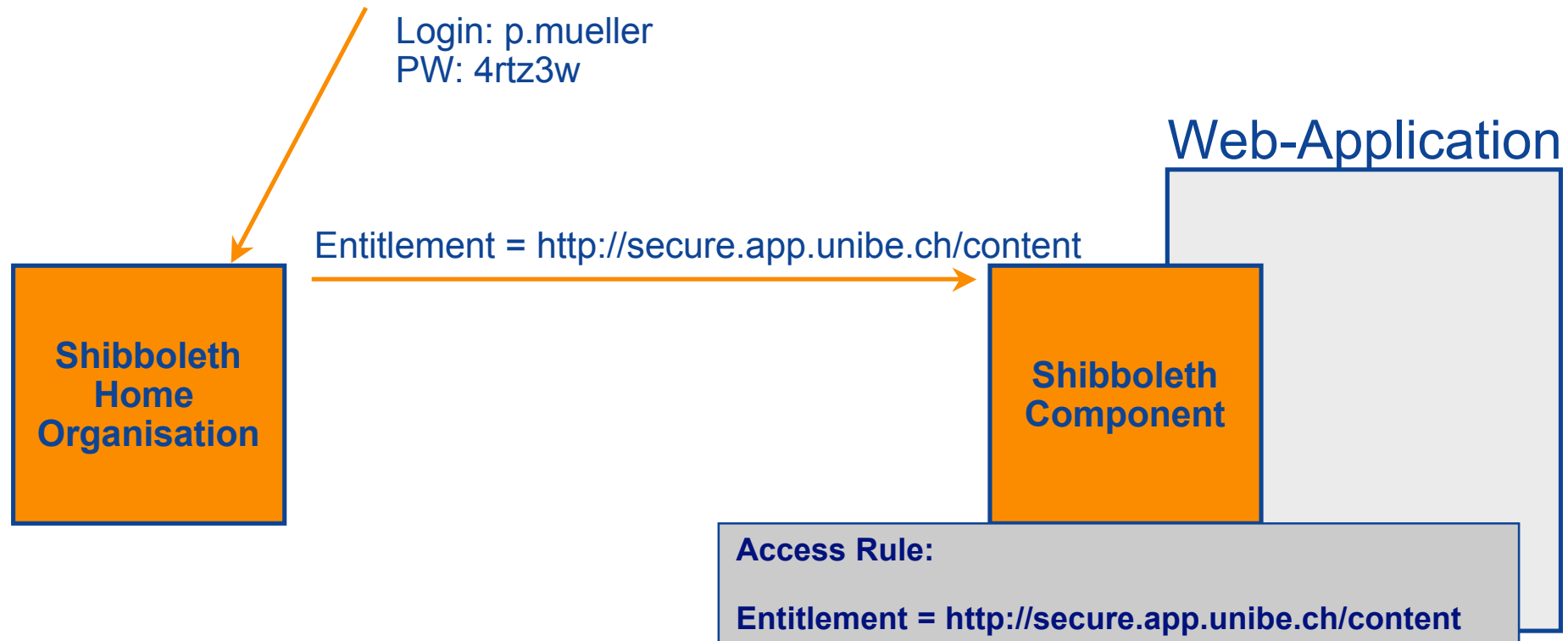
Authorization

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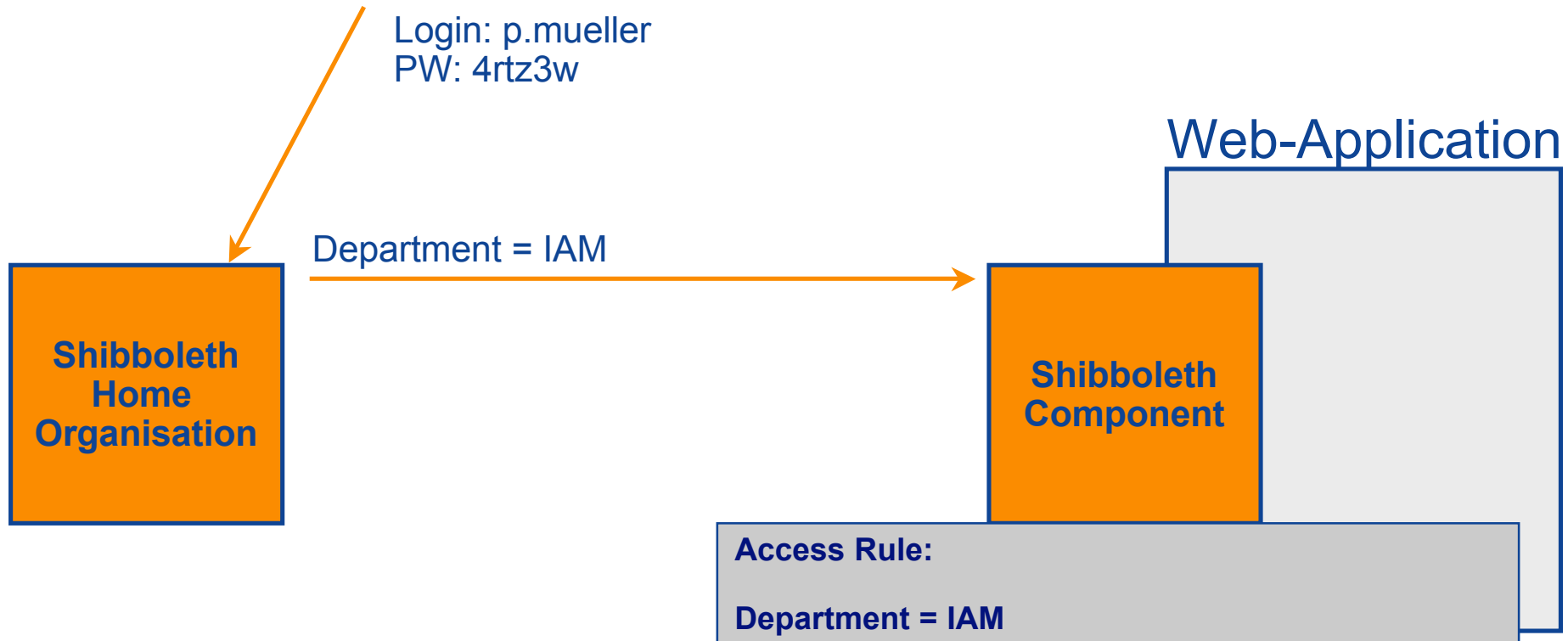
Method 1: SWITCHaai Attributes



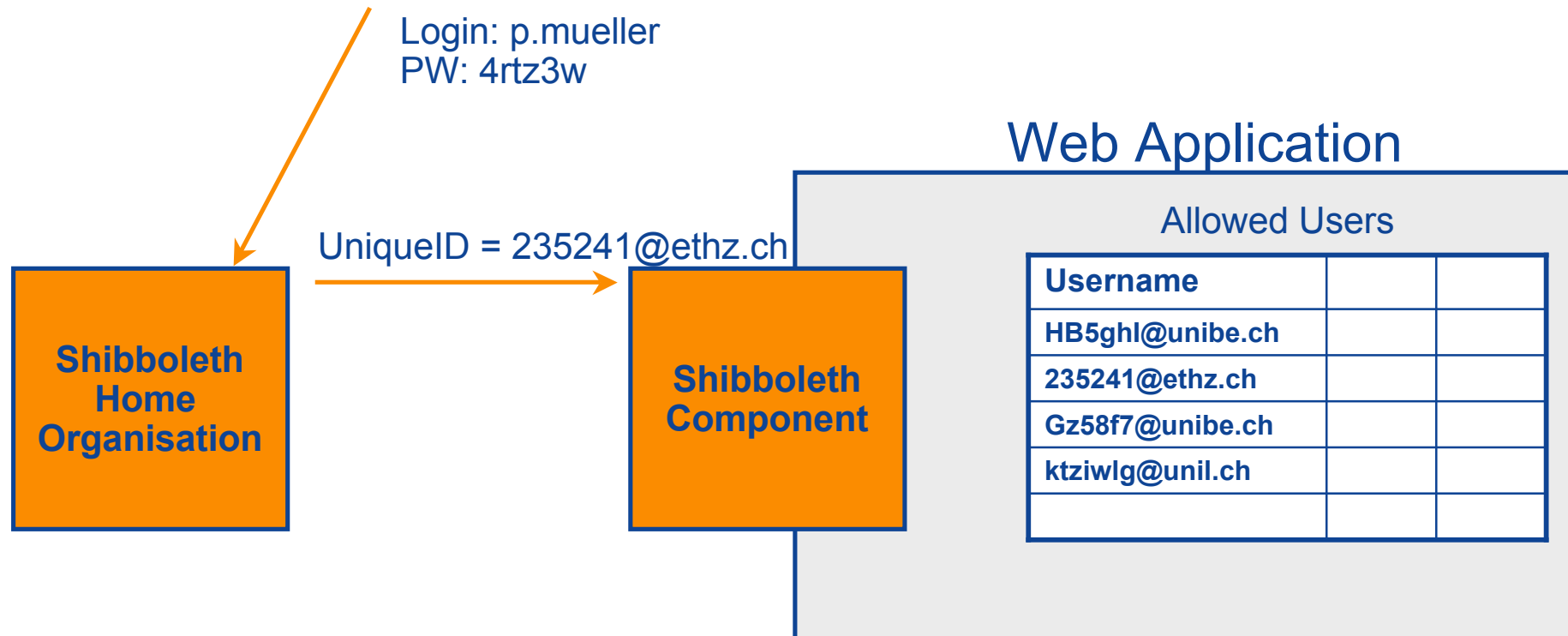
Method 2: Entitlement



Method 3: Definition of additional Attributes



Method 4: Application has it's own Access Control





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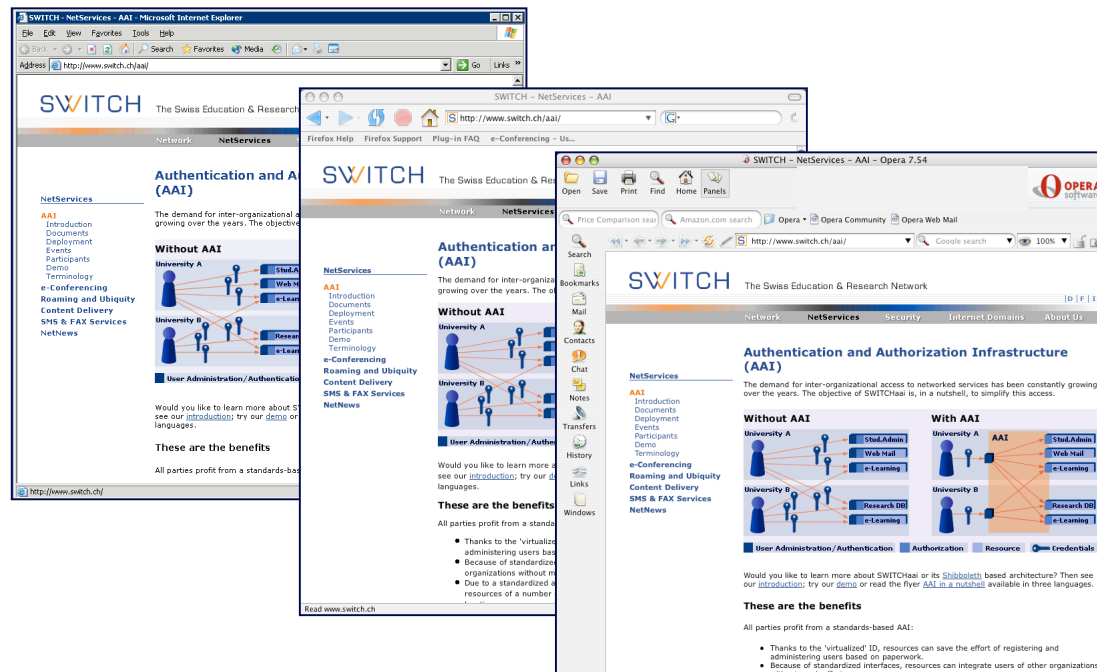
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System Requirements

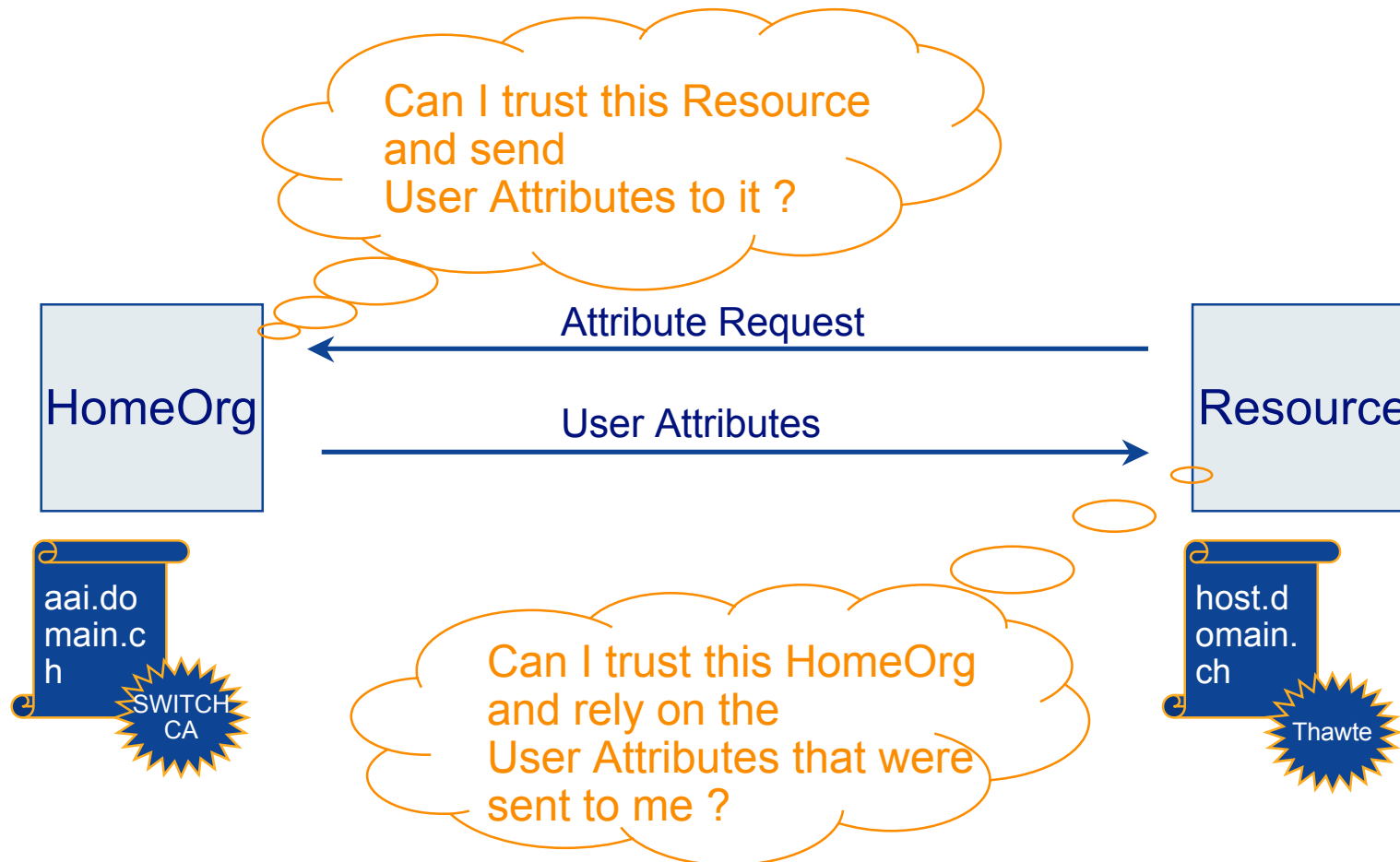
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Browser Requirements

- ❑ Cookies
- ❑ Browser redirect
- ❑ SSL
- ❑ If no JavaScript: additional click necessary



Requirement: Server Certificates



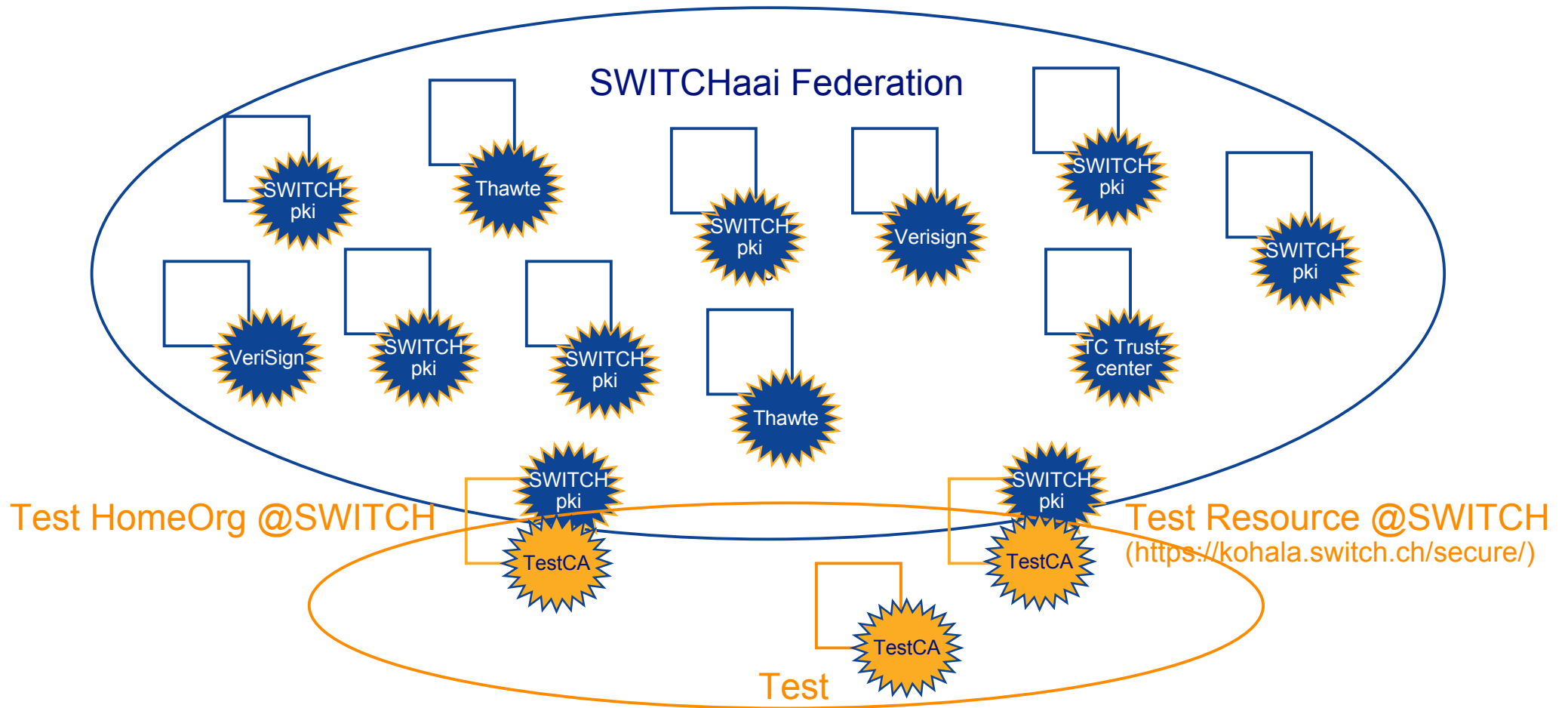
Currently accepted

- SWITCHpki
- (One of) Thawte
- (One of) VeriSign
- (One of TC) Trustcenter

Procedure defined to include additional CAs

<http://www.switch.ch/aai/ca-acceptance-policy.html>

Exception: Mere Test-Purposes



Q & A

<http://www.switch.ch/aai>

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Exception 2: SSL connection from Browser

