



Update Finland

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CSC, the Finnish IT Center for Science



Finnish higher education overview

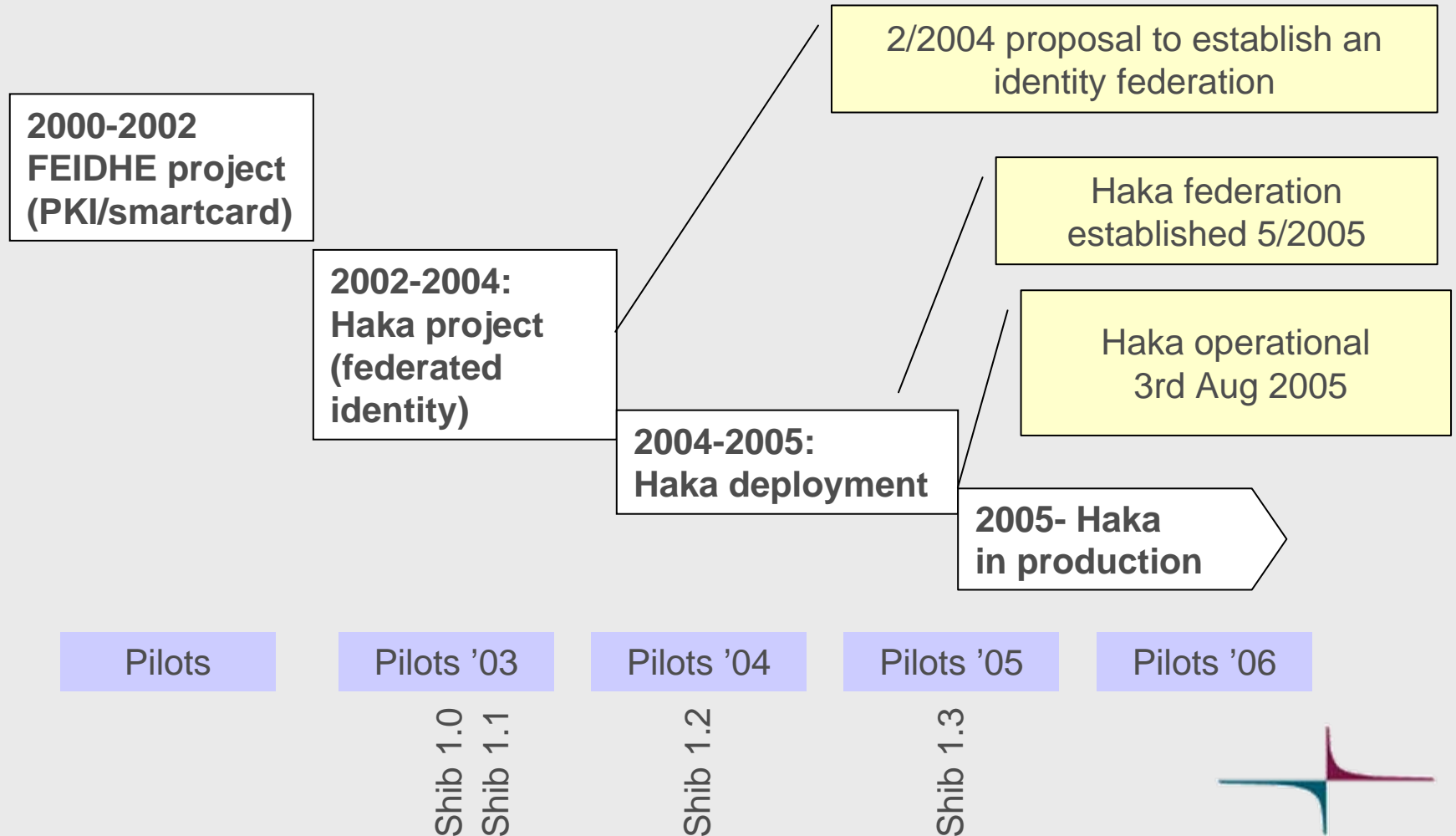
- **20 universities, 29 polytechnics (=universities of applied sciences)**
 - Small units spread all over the country
- **300 000 degree students, 50 000 employees**

CSC, the Finnish IT Center for Science

- **Non-profit company owned by the ministry of education**
- **140 employees**
- **to provide centralised IT services to higher education and research**
 - Scientific computing, supercomputing
 - Funet – the Finnish national research network (NREN)
 - Haka identity federation (part of Funet services)



The short history



Status of Haka federation

- **Pilot federation operational 12/2003**
- **Production level federation operational 8/2005**
 - running Shibboleth (mostly, ver 1.3)
- **Current members: 11/20 universities, 8/29 polytechnic**
 - coverage 80% of edupersons in universities, 31% in polytechs
 - goal 12/2006: 14/20 universities, 15/29 polytechs
 - proposed goal 12/2007: 16/20 univs, 20/29 polytechs
- **Current partners**
 - Elsevier inc
 - Personec Oyj (ASP service provider)
- **Several universities have Shibboleth in intra-organisational use**
- **Haka is only for higher education and research institutions**



Home organisations (IdP)

Service Providers (SP)

9 IdPs

- University of Helsinki
- University of Oulu
- Lappeenranta University of Technology
- Pirkanmaa Polytechnic
- University of Tampere
- Tampere University of Technology
- Helsinki University of Technology
- Åbo Academi
- University of Turku

138 000 end users

3 library services

- Nelli portal
- HUT Library database
- Univ Oulu Library database

3 learning management systems

- Moodle /TUT
- A&O/TUT
- Optima/Oulu

CSC's own services

- Scientist's Interface
- Funet extranet

Student administration

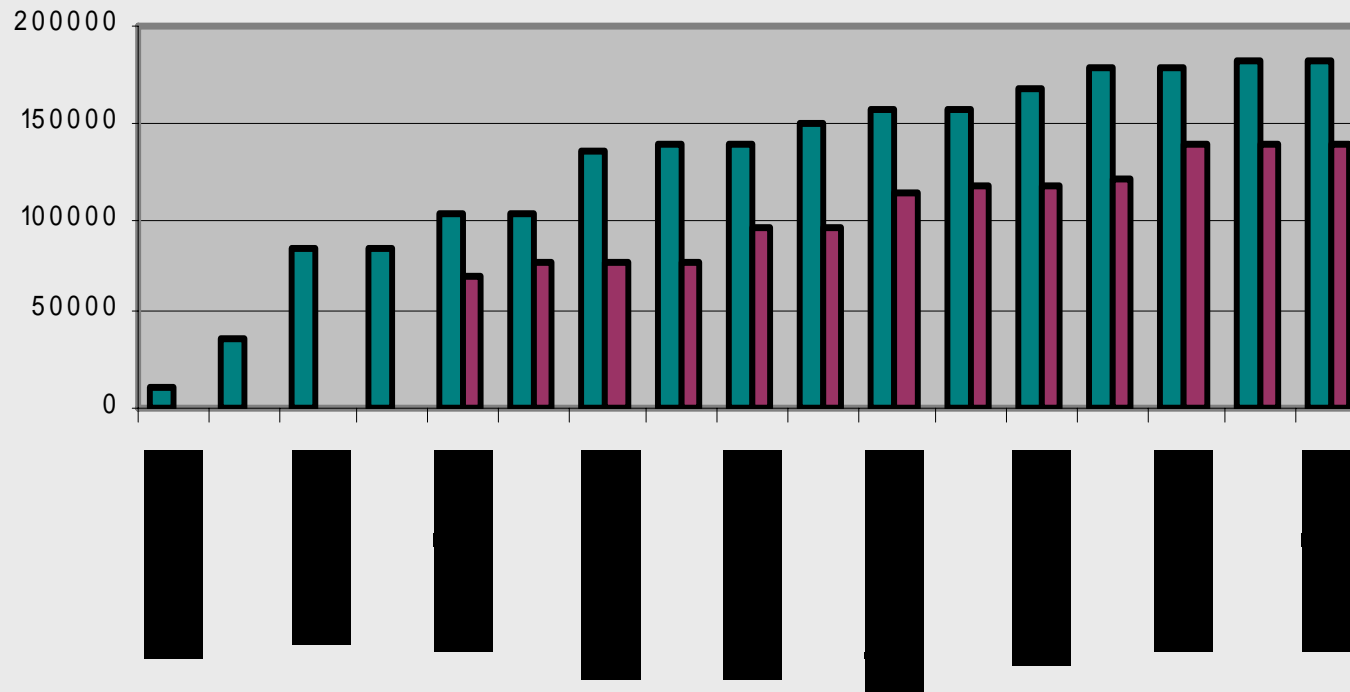
- JOOPAS

43000 logins in April



Number of end users in Haka

No. of end-users



■ Agreement coverage ■ End-users

Recent areas of development

- **the WAYF moved to a commercial 24x7 machine room**
- **monitoring, reporting and configuration management of a federation (part of GN2/JRA5)**
 - how to make sure that all the IdPs and SPs are up and running
- **Library content providers as SP (Elsevier)**
 - Who is "a student, staff or library walk-in"?
 - urn:mace:dir:entitlement:common-lib-terms
- **trying to find companies that provide 'Shibboleth as a service'**
 - Shib IdP hosting, Shibboleth consulting
- **preparing for SAML2.0 and non-Shibboleth implementations in Haka**

Pilots

- **Internet2 CourseID attribute on Shibboleth**
 - for authorization of learning management systems
 - in Tampere univ of Technology
- **Internet2 Grouper ver 1.0**
 - for group management in Helsinki univ of technology
- **Shibboleth and strong authentication**
 - potentially using the PKI/smartcard that the ministry is pushing

funetEduPerson 2.0 released

- **<http://www.csc.fi/suomi/funet/middleware/haka/fep/>**
- **adopts schac and eduPerson 200604**
- **new attributes**
 - funetEduPerson(Primary)StudyStart, funetEduPerson(Primary)StudyToEnd
 - funetEduPersonCreditUnits, funetEduPersonECTS
 - funetEduPersonHomeCity (national numeric codes for cities)
 - funetEduPersonStudentCategory
 - funetEduPersonStudentStatus (absent/present)
 - funetEduPersonStudentUnion (membership in the student union)
 - funetEduPersonEPPNTimeStamp (to tackle reassignments of EPPN)
- **interpretation of eduPersonAffiliation**
- **MUST attributes: cn, sn, displayName, eduPersonPrincipalName, schacHomeOrganization, schacHomeOrganizationType**



fep 2.0: Defining categories for students

<u>funetEduPersonStudentCategory</u>	<u>eduPersonAffiliation</u>
Bachelor	Student
Master	Student
Licentiate	Student
Doctor	Student
Other-degree	Student
Visiting-student	Student
Exchange-student	Student
Qualifying-studies	Member
Further-education	Member
Open-university	Affiliate
other	affiliate

Shibbolising commercial services

➤ **ASP services: Personec**

- Competence management: Personec HR: shibbolized
- HR registry: Personec f/ESS, tendering process going on
- Travel administration: Personec Travel, technically feasible

➤ **ASP services: WM-data**

- Rondo(circulation of incoming invoices): waiting for the State Treasury of Finland to do decisions

Things outside universities (1): Authenticating citizens

➤ **VETUMA: a common authentication hub for citizens in public sector services**

- relies on
 1. TUPAS, the authentication service provided by banks
 2. FINEID card, the government's citizen card
 3. ETSI 102-204, certificates in the SIM card (to be released later)
- a bank authenticates the citizen, and provides the National Identification Number to the service in HTML/POST form (proprietary, not SAML)
- some universities are using/going to use VETUMA for password reset (significant cost saving in the help-desk)

Things outside universities (2): Authenticating state officials

- **GovernmentIT program: a project for authentication and authorisation of government officials in government's services**
 - 25% of government officials are employed by universities!
 - ASP services, other services
- **Ministry of Education pushing PKI/smartcard to key officials in the universities' administration**
 - CA Population Registry Center, the government CA of Finland
 - related to the GovernmentIT program
- **Are the activities and Haka Federation going to benefit from each other?**