Federated Identity in Finland

AAI Info-day 29.11.2005

Mikael Linden

CSC, the Finnish IT Center for Science
mikael.linden@csc.fi



Outline

- > Finnish higher education overview
- > Organisation and status of Haka federation
- > Home organisations
- Resource categories
- > Institutional federations
- > School in user administration

Finnish higher education overview

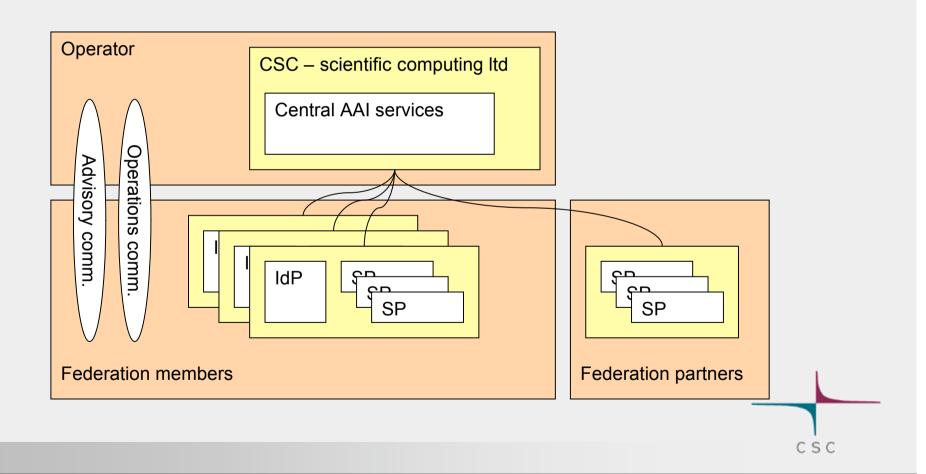
- 20 universities, 29 polytechnics (universities of applied sciences)
 - Small units spread all over the country
- > 300 000 degree students, 50 000 employees

CSC, the Finnish IT Center for Science

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



Organisation of Haka similar to SWITCHaai



Status of Haka federation

- **→** Pilot federation operational 12/2003
- > First members signed Haka service agreement 5/2005
- > Federation operational 8/2005
- > Current members: 7/20 universities, 1/29 polytechnic
 - Big universities; coverage of 68% of university people
 - Goal: 12/2006 14/20 universities, 15/29 polytechs
- > Currently no partners
- > ~58 000 logins to services in October 2005



Home organisations (IdP) Resources (SP)

Federation member	# of students	IdP	SP
Univ of Helsinki	38 400	X	2
Univ of Oulu	15 800	X	
Univ of Turku	15 600		
Univ of Tampere	15 200		
Helsinki Univ of Technology	15 100	X	
Tampere Univ of Technology	12 000	X	2
Åbo Akademi	6 900	X	
Tampere polytechnic	4 900		
CSC			1



Resource categories

☐ ibrary services

learning services

Nationally provided services

ASP services



1. Library services

- > Finnish libraries have had co-operation for years
- > The library consortiums have 3 IT systems provided nationally ("The triangle")
 - 1. Library Management System (Endeavor Voyage)
 - Reservations, renewals of loans self-service
 - Shibbolised 10/2005, 600 logins 10/2005
 - 2. Portal to article databases (Ex Libris Metalib)
 - Personalisation of the portal: setting email alerts etc
 - Shibbolised 1/2005, 3 700 logins 10/2005
 - 3. Digital object management system (Endeavor ENCompass)
 - Shibbolised by London School of Economics, introduction to Haka planned early 2006
- > Library content providers
 - Just first discussions



2. eLearning

- Learning management systems (LMS)
 - Moodle (moodle.tut.fi), 45 000 logins 10/2005
 - A&O (homegrown, ao4.ee.tut.fi), 9 000 logins 10/2005
 - WebCT (Univ of Helsinki, not registered to Haka)
 - Optima (Univ of Oulu, not registered to Haka)
- > LMS typically used locally, not cross-institutional!
- > A pilot with course roles (Internet2 CourseID)
 - "student@tut.fi:physics-101:fall-2005"
- > Applying as a visiting student in another university
 - Paper-based process turned into an electronic one
 - Electronic circulation of applications student ->student administration of the home university -> student administration of the visited university
 - Shibboleth: authentication + a large number of attributes (filled-in electronic form) of the applying student



3. Nationally provided services

- Organisations providing services to end users of several institutions
- Academy of Finland: electronic application form for research funding (work in progress)
 - Users: researchers in universities
- Student health care foundation: electronic reservation for appointments (work in progress)
 - Users: 130 000 degree students in universities
- > CSC's own services for universities
 - Funet extranet services for CSC's Funet customers (institution network admins)
 - CSC's services for researchers



4. Application Service Provisioning (ASP)

- > To enhance efficiency of administration, universities have outsourced some administrational applications
 - SW for electronic circulation of purchase invoices
 - SW for electronic claiming/circulation of travel expenses
 - Used with a web browser.
- The application services are provided by large Finnish IT companies
 - SW runs in their machine rooms
- Currently accounts typically maintained manually
 - Nightmare for administrators in a large university
 - Plenitude of uid/pwd pairs pain for the end users
- Goal: to make the IT companies Shibbolise their applications



Institutional federations

- Haka is mostly for applications used crossinstitutionally
- Institutional light-weight federations being formed for intra-institutional services
 - Learning management systems
 - Other tools supporting learning
 - Etc
- Institutions' IT services prefer Shibboleth's controlled release of attributes to opening the LDAP directory for everyone in the campus



"School in user administration": supporting institutions to improve IdM

- CSC's workshop of 3 days for staff in IT departments in HEIs 1st day 1/2005
- Theory, best practices, commercial/open source products...
- First homework: evaluate your current institutional IdM 2nd day 5/2005
- homeworks gone through
- The concept of an identity federation introduced
- Second homework: set target for your institutional IdM 3rd day 11/2005
- Again, homeworks gone through
- More best practices and products...

High-quality institutional identity management is a necessity for an organisation joining Haka



More Information

- http://www.csc.fi/suomi/funet/middleware/english/
- TNC'05 conference paper "Organising Federated Identity in Finnish Higher Education", available: http://www.terena.nl/conferences/tnc2005/programme/p resentations/show.php?pres_id=77