Abstract

In order to facilitate the trusted electronic communications and collaboration within and between institutions of higher education and research in Australia, and between these institutions and other organizations worldwide the development of a trust federation in which its members agree to abide by a common set of rules, policies and agreements is necessary.

The Australian Government Department of Education, Science and Training in order to address this requirement is funding a project called the Australian Access Federation (AAF), which will develop the federation policy framework and deploy the infrastructure required to enable access to online resources and services for the Australian higher education and research sector. The infrastructure deployed is based on two technologies: Shibboleth and Public Key Infrastructure.

The Australian Access Federation Project focuses on three components:

1. The first component will develop the overarching federation governance and policies including legal agreements between the institutions and the federation.

2. The second component will develop specific policies and technical implementation and rollout of PKI. This project component builds on the e-Security Framework project managed by AusCERT and that has developed a Public Key Infrastructure (PKI) testbed with AusCERT acting as the top level Root Certification Authority (CA) for the Australian sector. Within the PKI model, universities are able to issue digital certificates that are chained back to the AusCERT Root Certification Authority. Under the PKI testbed certificates are issued to secure the server to server communications between Identity Providers and Service Providers within the MAMS testbed federation. AusCERT is under negotiations with vendors to embed its Root Certificate into diverse vendors’ trust lists in order to facilitate the use of certificates within the sector.

3. The third component of this project will be carried out by the MAMS project team and will develop specific policies, technical implementation and rollout of Shibboleth. The existing MAMS project has developed a Shibboleth Testbed Federation, which is already used by a number of universities.

This presentation will discuss the implementation of the first two components of the Australian Access Federation project.
About the speakers

**Viviani Paz** is the Security Assurance Manager for AusCERT (The Australian National Computer Emergency Response Team) based at The University of Queensland. Prior to joining AusCERT in 1995, Viviani worked in a range of IT areas including: system and network security; system programming and administration; and software testing and verification in the Commercial and Academic sectors for over a decade.

Viviani is the Policy Designer and Project Manager for the eSecurity Framework Project, in which a PKI environment is being developed to assist Australian Universities' collaboration and interoperation. She is also the Project Manager for the Australian Access Federation Project (AAF). The AAF project will develop the federation policy framework and deploy the infrastructure required to enable access to online resources and services for the Australian higher education and research sector. The infrastructure deployed is based on two technologies: Shibboleth and Public Key Infrastructure.

The Australian Computer Emergency Response Team (AusCERT) provides a single, trusted point of contact in Australia for the Internet community to deal with computer security incidents and their prevention. AusCERT's mission is to support and improve community awareness, representation and communication regarding computer security, both locally and internationally, by being the leading source of impartial and reliable computer security information and expertise for its members.

AusCERT is a full member of the international Forum of Incident Response and Security Teams, FIRST and Asia Pacific Computer Emergency Response Team (APCERT).

**Nick Tate** is both Director of Information Technology Services at The University of Queensland and the Director of Australia’s National CERT, AusCERT (The Australian Computer Emergency Response Team), which is based at the University.

He is also a Director of Higher Ed Systems Pty Ltd, a Director of AARNet Pty Ltd, Chair of the Queensland Regional Network Organisation (QRNO), President of the Academic Board of the International Systems Security Professional Certification Scheme (ISSPCS), Chairman of the Australian Computer Society (ACS) in Queensland and a member of the executive and former Chair of the Council of Australian University Directors of IT (CAUDIT).

Nick was the project lead/chief investigator of the Grangenet and DCITA funded CAUDIT PKI project, and currently leads the DEST funded MAPS (Middleware Action Plan and Strategy), eSecurity framework and Australian Access Federation (AAF) projects.

Prior to joining the university, Nick worked as an IT professional in Investment Banking for 20 years, the first 18 of which were spent in London before emigrating to Australia in 1997, where he became Technology Services Director at Macquarie Bank, based in Sydney. During his time in London, he worked with the United Bank of Kuwait for over 10 years and was Head of IT during the Iraqi invasion of Kuwait in the first Gulf war when there was a run on the bank and many strange requests from Baghdad! He has also worked in the defence industry as a Weapons Systems Engineer developing anti-missile missile systems for Royal Navy Warships.
Nick holds a Bachelor’s degree in Physics from the University of St. Andrews in Scotland and a Master’s degree in Computer Science and is also a Chartered Engineer, a Chartered IT Professional, a Fellow of the Australian Computer Society and a Fellow of the Royal Astronomical Society. He has over 32 years experience in IT, with more than a decade at CIO level.

In addition to his work in IT, Nick was awarded a Royal Naval Flying Scholarship whilst at school, was a pilot in the University Air Squadron/Royal Air force Volunteer Reserve, whilst at University and was a Borough Councillor (British equivalent of a City Councillor) for five years in the 1980s. Whilst he was a councillor, he chaired the health and highways committees for the council.