Australian Access Federation
Project Update

Presented at 12th TF-EMC2 Meeting
4th December 2008

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Focus for today

- What is the AAF?
- LOAs
- PKI and the AAF
Facilitator for trusted electronic communications and collaboration within and between institutions of higher education and research in Australia and with other organizations worldwide.
Australian Access Federation components

Framework built to support access to diverse online resources and services for the sector

Currently supports two technologies

- PKI (AusCERT Root Cert in browsers)
- Shibboleth

Spanning technologies

- Levels of Assurance
- Policies, Agreements
- auEduPerson SharedToken
- Autograph/SHARPE/IAMSuite

AAF organisation (legal entity)
AAF LOA Drivers

• Address the diverse requirements of our community for identification of individuals and the authentication methods used to resources within the AAF

• Identity LOA
  – Provides a degree of confidence and understanding of the identity of a credential holder, and the process used to create such credential.

• Authentication LOA
  – Measures the strength of the authentication method used

• Common across PKI and Shibboleth
Identification Process Metric

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Identification Process</td>
<td>In person identity proofing</td>
<td>&lt; 100 Points</td>
<td>100 Points</td>
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Australia Financial Transaction Reports Act 1988
<table>
<thead>
<tr>
<th>Level of Assurance</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td><strong>Floor of Trust</strong></td>
<td>The authentication for this level includes authentication using passwords with a minimum of six characters (with at least one letter and one number).</td>
</tr>
<tr>
<td><strong>Level 2</strong></td>
<td>This level of authentication includes best practice and managed password based systems.</td>
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<tr>
<td><strong>Level 3</strong></td>
<td>This level of authentication includes two-factor systems using hard tokens or software based X.509 certificates in conjunction with pass-phrases or pins.</td>
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<tr>
<td><strong>Level 4</strong></td>
<td>This level of authentication includes hardware based X.509 certificate systems, such as crypto tokens</td>
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PKI use in the AAF

- Server and host security, i.e. SSL, TLS, VPN, etc
- Authentication
- Digital signing of documents/emails
- Encryption of documents/emails
- Enabling ad-hoc collaboration within and beyond the AAF.
Summary

• AAF is addressing particular needs of our community
• Applied lessons learned from other federations and tackling issues early
  – integrated PKI/Shibboleth, framework for levels of assurance, structured to allow evolution
  – http://www.aaf.edu.au/docs/Attributes_for_use_with_AAF_v01.5.1.pdf
• Input from our community and international experts
• Environment is changing – increased targeted phishing attacks
• Pilots completed now building production infrastructure
• Establishing the AAF organisation
Conclusion

• AAF is designed to ensure a continued focus on the community it serves

• AAF will facilitate easier access to technology and a streamlined framework for collaboration and access to resources

• Timeframe
  – Institutions and service providers to join progressively during 2009

• More information: http://www.aaf.edu.au