Emerging Digital Identity Issues at Penn State
Outline

• Why we are here
• Digital Identity Management
• Why Digital Identity Management is important
• Current Challenges
• Future Challenges
Why we are here

- We need your help
  - Awareness raising about these issues in your areas
  - Pointers to places and people in your area who can help us understand your requirements and your emerging collaborative academic and business models
What is a digital identity?

- It's a digital/on-line assertion of who you are
  - Your AOL/Yahoo/Gmail account
  - Your on-line banking account (PSFCU, Wells Fargo, PNC, etc.)
  - Your Penn State Access Account
Digital Identities are changing

- Used to be a low stake assertion of who you are

- Is becoming a high stakes assertion of who you are

- Improving methods for exchanging identity assertions between organizations are here – and are an important part of a strategy for improving security and privacy – and ease of use
Penn State's fundamental issue

- The Access Account is 13+ years old – unprecedented in higher education

- When it started it was associated only with relatively low-stakes email

- Over time, it's become much, much more....
Some services using the Penn State Access Account

• WebMail
• eLion
• Filespace
• Employee Benefits
• Personal webspace
• LIAS
• ANGEL
• Penn State Portal

• e-Portfolio
• General Stores – shopping online
• Parking permit applications
• Res Hall applications, network connections
• Travel services
• Office of Physical Plant – Customer Info Center
• Id+Online
• And more....
Services using the Penn State Access Account – in new ways

• Already here
  • WebAssign (Physics)
  • Napster

• Coming soon
  • Office of Student Aid (Promissary notes w/DoEd)
  • Worldwide University Network (GIS/CMS)
  • turnitin.com
  • Lionshare
  • Thomson Publishing
  • Elsevier, OCLC, JSTOR
What's new?
InCommon and Shibboleth

• InCommon
  – Higher Education's federation
  – http://www.incommonfederation.org
  – A collection of universities that trust each other's identities

• Shibboleth
  – Middleware tools for federating identities
  – http://shibboleth.internet2.edu
What's good about the new tools?

- For the first time in computing/communications :-)\), improved security means improved ease-of-use
  - We share attributes about people, we don't give away information
  - When we share anything, it's encrypted and unidentifiable
  - People can use fewer credentials to gain access to more resources
On the horizon

- U.S. Government's eauthentication initiative
  - The feds have developed tools and a federation
  - By law, each agency must have an outward facing, federated application by September 30, 2005
  - To better serve the citizenry
Eauthentication pilot

• Penn State, Cornell, U. Washington are participating in a pilot with NSF
• Goal is to demonstrate Fastlane submissions across the two federations by July 30, 2005
• Schools must be able to present “level 1” assurances to NSF (production would require level 2, most likely)
Our challenges

- Maintain and improve the management of the Penn State Access Account
  - Password policy and procedural changes
  - Tweaking in distribution procedures

- Strengthen processes associated with Short Term Access Accounts
  - Perform regular audits of distributing units
  - Shorten duration?
  - Eventual replacement
Our challenges

• Knowing without a doubt who is using our networks, accessing repositories within negotiated terms and conditions
  – The FBI does call
  – The vendors do audits

• Improving the awareness of the importance of protecting these credentials
  – Students share passwords with parents!
  – Faculty and staff share passwords with family!
Our challenges

- Developing solutions that enable self-service access when appropriate