Kerberos in Education Environments

MIT Kerberos Consortium

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Andrea Beesing

Cornell University

Kerberos at Cornell

- Overview of Kerberos implementation
- Kerberos integration points
- Current and future challenges

Kerberos Implementation

- Two realms
  - NetIDs, ServiceIDs
  - ApplicantIDs, GuestIDs (legacy)
- Redundancy across two data centers
- Moving from physical boxes to VMs by mid-2012
- Software versions
  - Kerberos 5 release 1.7
  - RHEL 5

Integration Points: AuthN

- CUWebLogin for web SSO
- Radius for secure wireless, VPN
- kProxy – reverse proxy for webDav authN
- Shibboleth – federated authN

Integration Points: provisioning

- NetIDs
  - Administrative tool for creation/expiration/ password resets
  - Automated mechanism for new student NetID creation based on PeopleSoft query
  - Self-service activation/password change & reset
  - KBA solution for alumni self-service: RSA VerID
- ServiceIDs
  - Self-service web app for service providers

Integration Points: Provisioning

- ApplicantIDs
  - Automated mechanism using PeopleSoft query
- GuestIDs (legacy)
  - Self-service app for creation and password management
  - Moved to Active Directory in 2010

Challenges

- MIT Kerberos/Active Directory roadmap
- Limitations of single factor, password-based authentication
- Certification requirements for federation
- Impact of cloud computing on how we do authentication and other IdM services