Active Directory

Academic IT Directors
December 6th 2005
AD is…

- Two (or more) Domain Controllers talking to each other and any clients you connect to it.
- Centralized user accounts and permissions for domain resources (computers, printing, files)
- Not necessarily better than Novell, just an alternative.
- Very redundant. DCs replicate; clients remember…
AD isn’t… (i.e., the fine print)

- The solution to all your computer problems.
- Easy, at least not to do it right.
- A quick fix. Conversion will take time.
- University supported. *YOU* have to deal with all accounts, software. But the other AD groups can help…
AD @ NCSU

- College of Natural Resources
- College of Textiles
- COE
  - Dept. of Electrical and Computer Engr.
  - Dept. of BioMedical Engr.
  - Dept. of Civil Engr.
  - Dept. of Industrial Engr.*
  - ITECS
- CALS
  - Dept. of Agr. and Res. Economics
  - Dept. of Animal Science
  - Dept. of Crop Science
- CHASS*

Others using ActiveDirectory:
ACS, DELTA, DSS, ITRE, NCSU Libraries

Others played with using ActiveDirectory:
Computer Science, Physics, Biological & Agricultural Engr.
Why’d We Move to AD?
(common themes)

- Control
- Timing / Responsibility
- IT Backgrounds
- Footprint / Overhead
- Ability to evolve as needs change
- Flexible to address different needs / designs
- Easier group policy / security maintenance
Things you need to Consider

- User Management / Authentication
- Computer Management / Creation
- Printing
- Application Deployment
- Lab Machine Deployment (Ghost/RIS/Sneaker)
- Roaming Profiles VS Local VS Redirected Folders
- Support: College lvl VS University, 2x year updates; hardware/maintenance for DCs and supporting servers
- Conversion from Novell to AD on workstations
AD Design: NCSU Library

[Image of Active Directory Users and Computers interface]

- Libraries
  - Common
  - Computers
  - Groups
  - Services
  - Users
  - Staff
    - Aaccrr
    - Accessdelivery
    - Acquisitions
    - Administration
    - Cataloging
    - Collectionmangement
    - Designlibrary
    - Digitallibraryinitiative
    - Distancelearningservice
    - Facilities
    - Financeandbusiness
    - Humanresources
    - Interlibraryloan
    - Naturalresourcelibrary
    - Nclive
    - Photocopy
    - Preservation
    - Risd
    - Scholar
    - Specialcollections
    - Systems
    - Textile

- Type: Organizational Unit
AD Design: ITECS

![Active Directory Users and Computers screenshot]
AD Application Deployment
(post ITD Novell Lab kit)

- Ghost or Sneaker.net
- Microsoft SMS (PUSH)
- AD via MSI's and GPO's (PULL)

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- Software: Installshield, Wise; WinInstLE, Orca
- What are: MSIs, MSPs, MSTs
- DFS – Distributed File System
- Computer vs. People distribution
- Assigned vs. Published distribution
Future AD @ NCSU

- Password Synch – NCSU Passwd
- Automated User creation
  - Faculty/Staff by request of OU admins
  - Batch student account creation
  - Later part of the Realm ID creation?

- Automated Class Groups from RegRec
  - New DNS Methodology (“Yale Method”)  
  - Web (PHP) Administrative Interfaces
  - Single NCSU Forest
    - OU delegation vs. Multiple domains?
    - Exchange questions / requirements?
Create Your Own AD

1. Request <college/dept>.ad.ncsu.edu
2. Create 2 (or more) Windows Domain Controllers
3. Add netlogon.dns from DCs to NCSU DNS *(CHANGING)*
4. Maintain Domain, Servers
5. Conform to new NCSU AD Audit Recommendations (see http://ncsu.edu/internal_audit/main.php?name=activedirectory_audit)

OR

Join the WolfTech AD Domain:
- Help develop single domain model.
- Get full admin rights to your OU.
- We manage the domain controllers for you.
- You manage everything else.
Questions?