

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

Others using ActiveDirectory:

*ACS, DELTA, DSS, ITRE,
NCSU Libraries*

- **CALS**

- Dept. of Agr. and Res. Economics
- Dept. of Animal Science
- Dept. of Crop Science

Others played with using
ActiveDirectory:

*Computer Science, Physics,
Biological & Agricultural Engr.*

- **CHASS***

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

The screenshot displays the Active Directory Users and Computers console for the domain [MILHOUSE.lib.ad.ncsu.edu]. The left pane shows a tree view of the 'libraries' container, which includes several sub-objects. The right pane shows a list view of the objects within the 'libraries' container, all of which are Organizational Units.

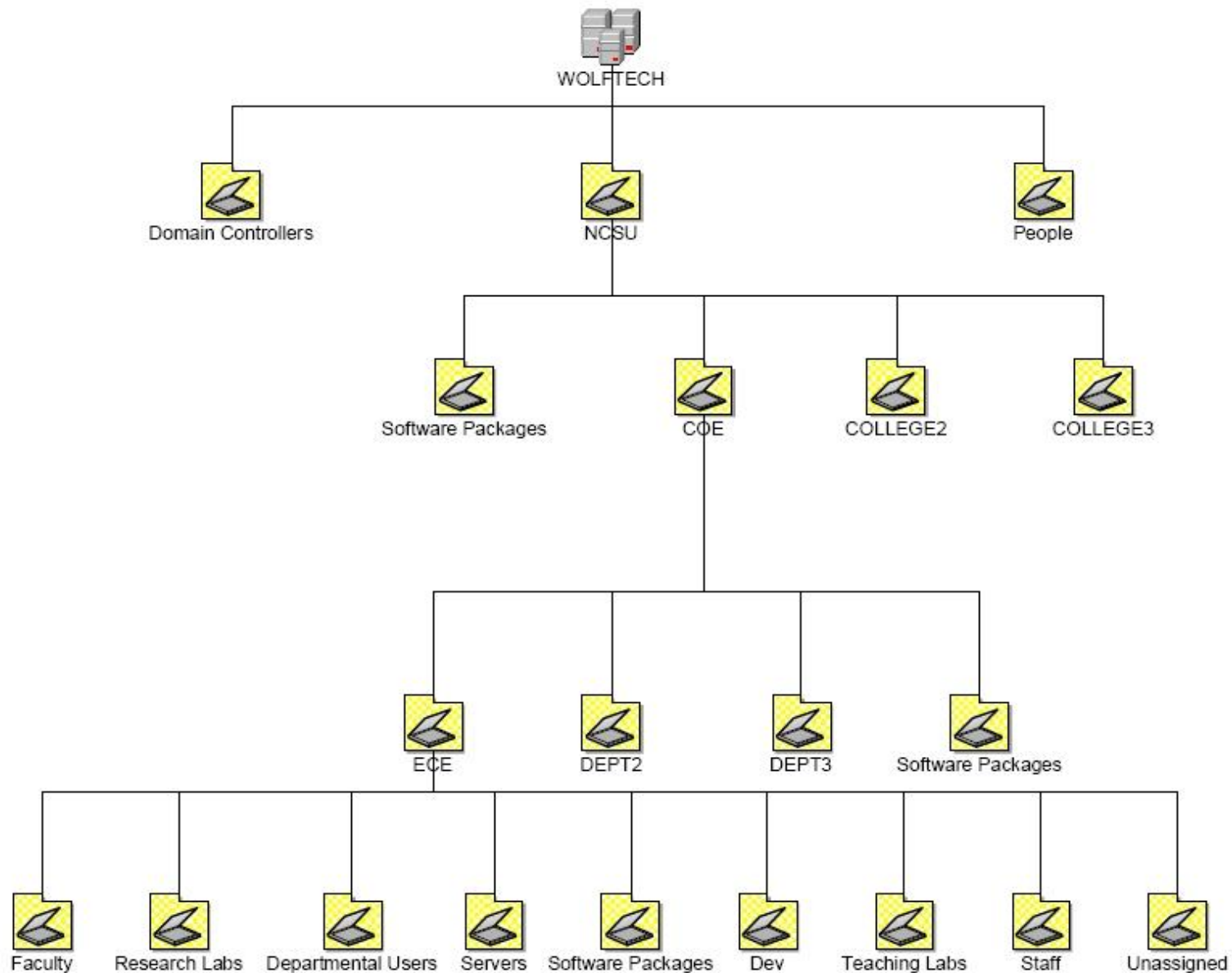
Name	Type
common	Organizational Unit
computers	Organizational Unit
groups	Organizational Unit
services	Organizational Unit
users	Organizational Unit

AD Design: ITECS

The screenshot displays the Active Directory Users and Computers console for the domain engr.ad.ncsu.edu. The left pane shows the organizational structure, with 'Engineering Online' selected. The right pane shows a list of 25 objects within this unit, including computers, security groups, and users.

Name	Type	Description
ACAD34	Computer	Martin Dulberg
EO02	Computer	Student 200 Page
EO03	Computer	Sharon Richards
EO04	Computer	Rose Hardison
EO05	Computer	Mike Myers
EO06	Computer	
EO08	Computer	Dr. Krute
EO09	Computer	Martin Dulberg
EO10	Computer	Butch Bryant
EO11	Computer	student / Kenan Miller & S...
EO14	Computer	Laura Stephenson
PC01-LAURA	Computer	
Engineering Online-Computers	Security Group - Global	
Engineering Online-Staff	Security Group - Global	
Brian A. Metzger	User	Engineering Online Student
Butch Bryant	User	Engineering Online Staff
Javier Quinones	User	Engineering Online Student
Kenan Miller	User	Engineering Online Student
Laura B. Stephenson	User	Engineering Online Staff
Linda D. Krute	User	Engineering Online Staff
Martin S. Dulberg	User	Engineering Online Staff
Mike M. Myers	User	Engineering Online Staff
Rose T. Hardison	User	Engineering Online Staff
Sharon N. Richards	User	Engineering Online Staff
Susan D. Withington	User	Engineering Online Student

AD Design: WolfTech



AD Application Deployment

(post ITD Novell Lab kit)

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

- ⌘ 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?
