TITLE: Proposals for X.500 Deployment

STATUS OF DRAFT:
This draft has been approved by the Network and Telecommunications Standing Committee and has been adopted as a "preferred practice" by the Council on Information Technologies and Services.

ABSTRACT:
This document describes proposals for managing and implementing X.500 directory services at the University of Florida. None of the procedures described in this document have been implemented as production services. See UFRFC 1 for a description of the proposed X.500 directory views.

1. CONTAINER AND OBJECT DESIGN

a. Authoritative sources of data must be provided for the information in the directory structure. Such information will come from many providers.

b. Authoritative sources of data should be accessed via pointers in objects presenting such data to users.

c. The human interface to the object must indicate whether the information being viewed is from an authoritative source.

For example, an object in a department’s container which presents information about a student might display several fields. The student’s address may be a pointer to an authoritative source, while other information may or may not be authoritative. The address field may be presented in a different manner to indicate the authoritative nature of the information displayed.

d. The use of abbreviations is discouraged throughout the design and implementation of X.500 directory services.

e. Clear markings warning users of areas that are not complete must be present. Users must be able to determine not only which fields are authoritative, but also whether record collections are complete.

f. The organizational view should follow the UF organization chart exactly, proceeding down to the department level. Departments can provide "within department" information via pointers to their Units view entries.

g. The Directory View should be expanded to contain alphabetic lists of Buildings, a three-letter acronym list of buildings, as well as a list of buildings by number.
Note that some objects in the directory structure may not appear on multiple views. An E-mail list has no geography, no position on the University organizational chart, and may not belong to any particular unit.

2. TESTING

a. CIRCA should begin testing Novell Netware Directory Services (NDS) now to gain familiarity with technical implementation details. This testing should include creation of a prototype campus root server and experimentation with distributed containers, privileges and protection across servers. Other units should be encouraged to participate in the test with additional Netware 4.0 servers.

b. A directory mockup of the proposed X.500 directory structure should be created using gopher. This mockup would help people visualize the organization of material and the utility of the information content.

Such a mockup has already been created. You can access the mockup on the main menu of the gopher of the College of Liberal Arts and Sciences. The server’s name is gopher.clas.ufl.edu.

The URL for WWW users is:

gopher://gopher.clas.ufl.edu/11/An%20X.500%20Directory%20Mockup

3. RESPONSIBILITY

a. Responsibility for implementation and operation of the campus root server (hardware and software) rests with the Office of Information and Technology Services.

b. Responsibility for implementation and operation of the campus reference time server (hardware and software) rests with the Office of Information and Technology Services.

4. ASSURANCE

a. At least three root administrators must be named, working in rotation, each capable of handling technical administration of the root and time servers. Additional backup administrators will be needed to cover emergency situations.

b. Backup, updates, cross-training, and 24 hour a day, 7 day a week uptime commitment are required for operation of the servers.

c. Replicas of the holdings of the server and provision for cut-over to replacement server(s) must be provided in the operational plan for the server.

5. ACCOUNTABILITY

a. An advisory group should be formed to report to OITS on the progress, function
Fred Buhl
Animal Science
fred@animal.ufl.edu

Stephanie George
Shands Hospital
george@net.health.ufl.edu

Eric Johnson
Astronomy
esj@astro.ufl.edu

Eric Olson
College of Business
eric@chip.cba.ufl.edu

Susan B. Wright
College of Medicine
swright@dean.med.ufl.edu

Mike Conlon
College of Liberal Arts & Sciences
mconlon@clas.ufl.edu

Todd Hester (chair)
CIRCA
todd@pine.circa.ufl.edu

Bill Covey
UF Libraries
wcovey@nervm.nerdc.ufl.edu

Dave Porkorney
NERDC Telecommunications
poke@nervm.nerdc.ufl.edu