

Setting Up a Macintosh For Use In The Medical Center

The purpose of this document is to provide some assistance and direction to the users of Macintosh computers in The Medical Center network environment. It will describe some proposed standards for minimum supportable configurations that will be able to function in the network effectively. It will describe some configuration information to allow the Macintosh to utilize the Active Directory and Exchange server capabilities. While the standard computer in The Medical Center is the Windows-based computer, Macintoshes configured appropriately can utilize most of the Windows-based enterprise facilities and can provide additional capabilities. This document hopes to make those capabilities easier to implement.

Non-current versions of the Macintosh operating system (OS 9 and before) make heavy use of Appletalk as a networking protocol. It is preferable to use IP as a networking protocol for many reasons, especially in a Windows-based enterprise such as The Medical Center. For this and other reasons, any Macintosh operating system prior to OS 10.3 (also called Panther) should be considered as a candidate for retirement. Software specifically designed to run under OS X is much more easily supported than programs written for OS 9 and run under emulation.

Minimum configuration:

- Macintosh G4 or iMac
- OS 10.3.4
- 512 MB RAM
- Microsoft Office 2004
- Other software written specifically for OS X

This configuration is based on the minimum hardware required to run the modern Macintosh operating system, OS X. While earlier computers might be able to run OS 10.3.4, supporting these computers would be very difficult. Versions of Macintosh OS X prior to 10.3 did not easily support Active Directory. Microsoft Office 2004 contains Entourage, the Exchange-based email package marketed by Microsoft. Third party software for these OS X based machines should be written specifically for OS X. Older software that is run in emulation (called Classic mode) should be discouraged whenever possible as conflicts and system crashes are much more common with this older software. Users should thus plan on acquiring a complete new and OS X designed suite of software before transitioning to OS 10.3.4.

Configuring a Macintosh to use Active Directory

There are multiple purposes for using Active Directory on a Macintosh. Only an authorized domain user can sit down at the Mac and log onto it. No local account needs to be set up before a domain user can use the Mac. Domain Admins and other enterprise support personnel can inventory and monitor the Mac remotely. Access to network

resources is improved. Security is much improved, especially versus OS 9 with was wide open for anyone who wanted to sit down at the Mac.

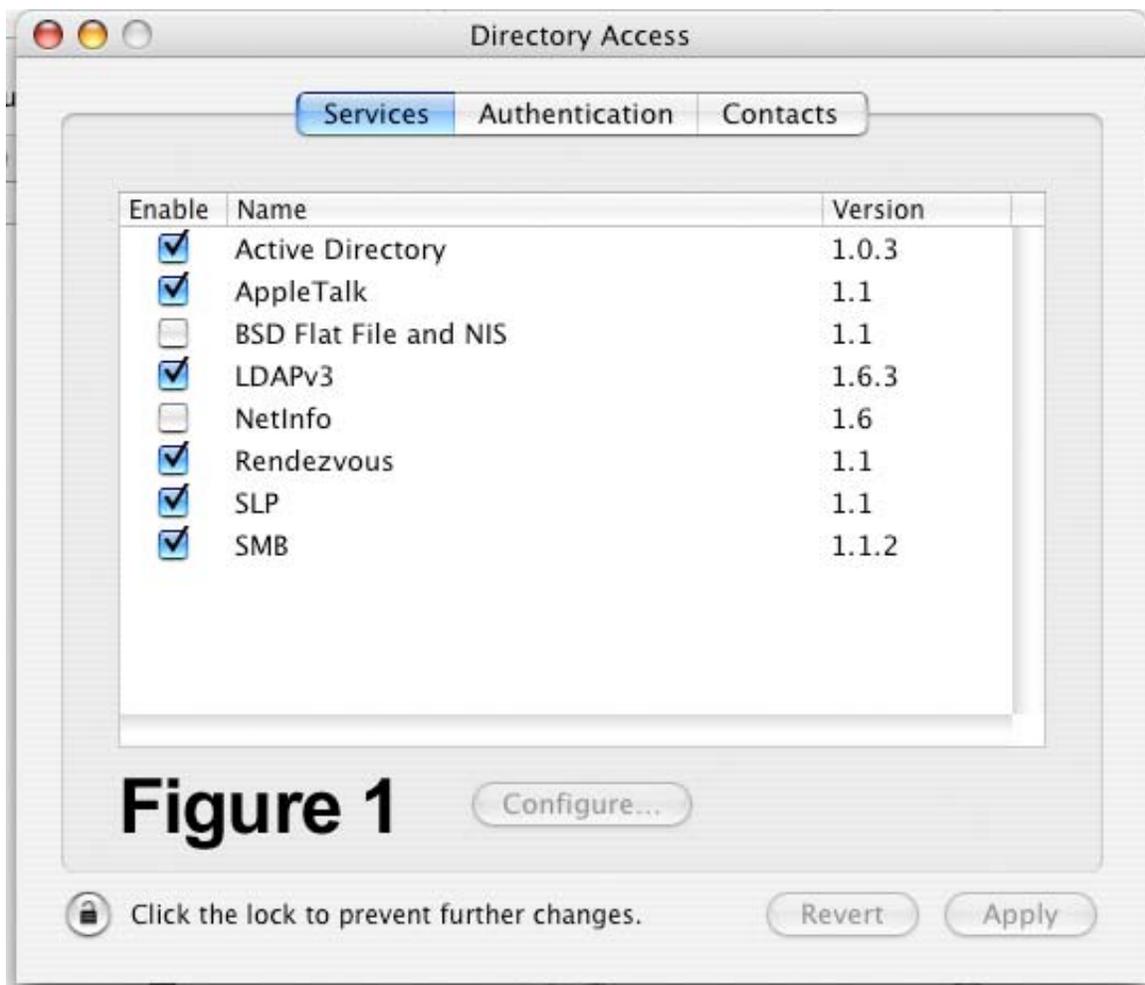
This section assumes that the user has OS 10.3.4 for the operating system and has logged in with Administrator rights on the computer. Instructions for configuration of other versions of the Mac OS may differ.

Boot the machine with the network cable attached to an active port and log in with Administrative rights.

Open Applications/Utilities/Directory Access

Click the lock in the lower left corner to enable changes if necessary

Click the Service tab and highlight and enable Active Directory

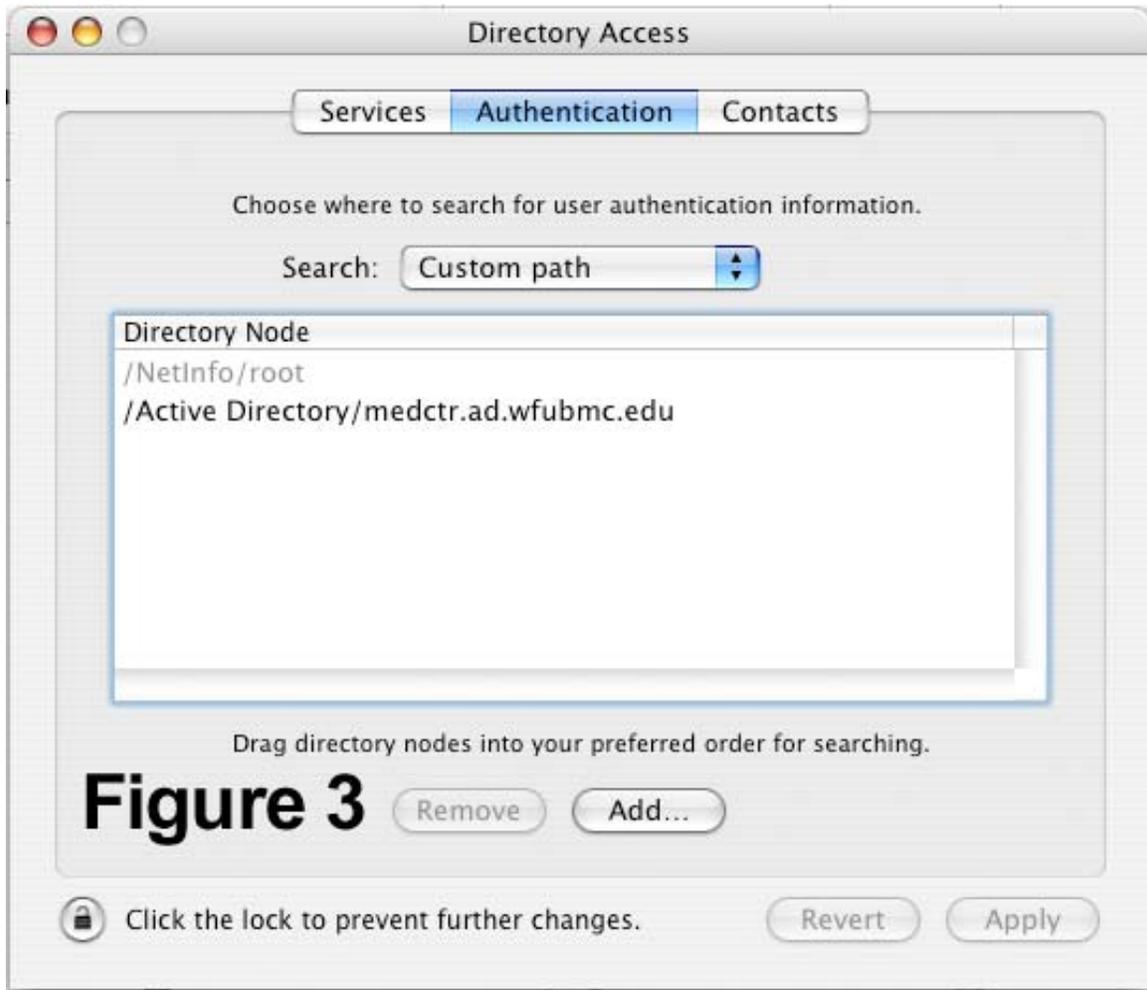


Click Configure and fill in the screen as shown

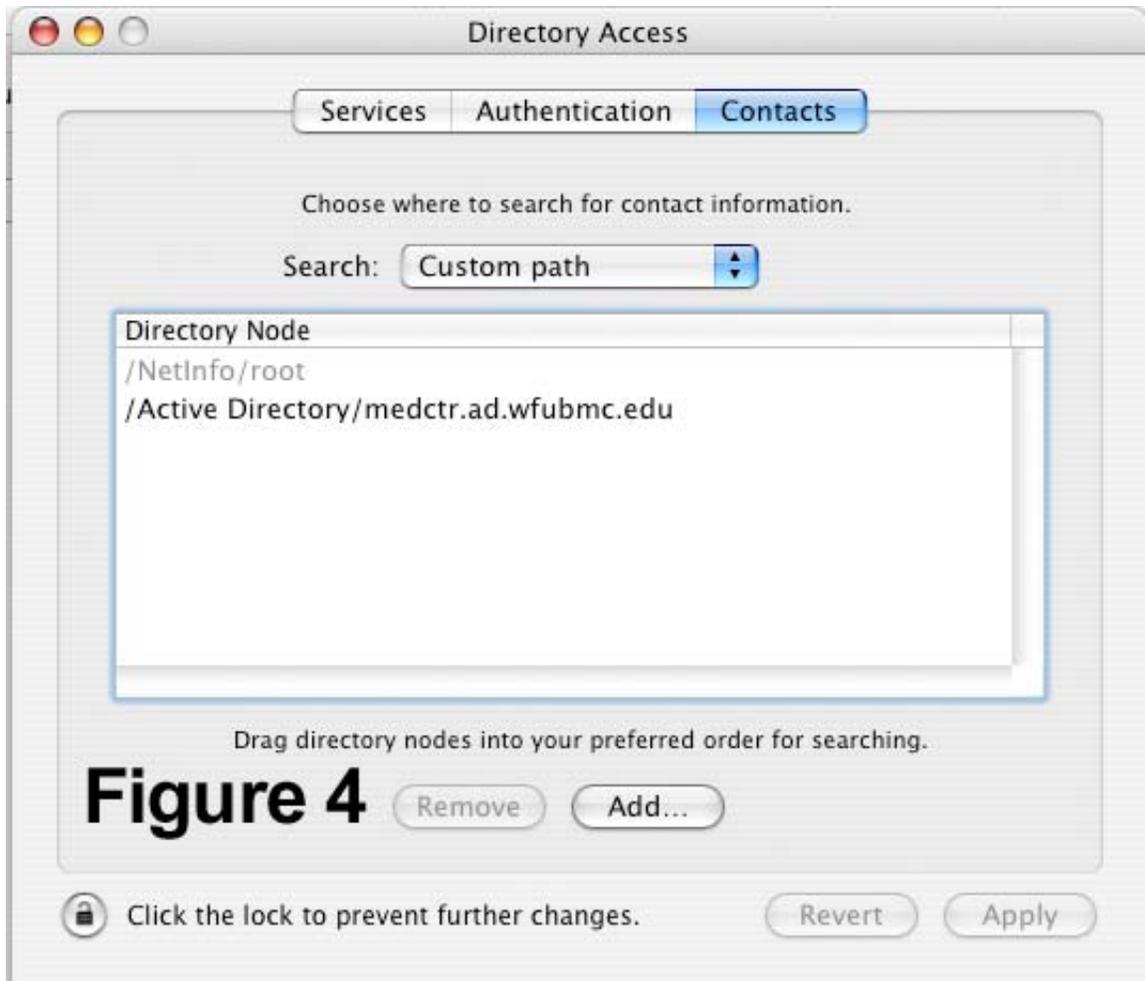


The Directory Forest and Domain are the same in our case. The Computer ID should be entered with the first 4 numbers of you department (just like PC's) and the last seven digits of the Mac serial number. (Get out your magnifying glass!) Then a user who can join the computer to the domain must hit the Bind button and enter their user ID and password. The MEDCTR domain will then add the computer account to the domain. You can check Cache last user login if you want but it will rarely be needed. Leave the other boxes alone.

Click OK to finish this dialog box and then click the Authentications tab. Select Custom Path under Search: and add the Active Directory path which should be shown as an additional option. The /NetInfo/root is the listing of local accounts and cannot be changed here.



Click OK to finish this dialog box and then click the Contacts tab. Select Custom Path under Search: and add the Active Directory path which should be shown as an additional option. The /NetInfo/root is the local machine listing cannot be changed here.



If you wish to use SMB mounts, highlight and enable SMB in the main Directory Access screen and hit Configure.

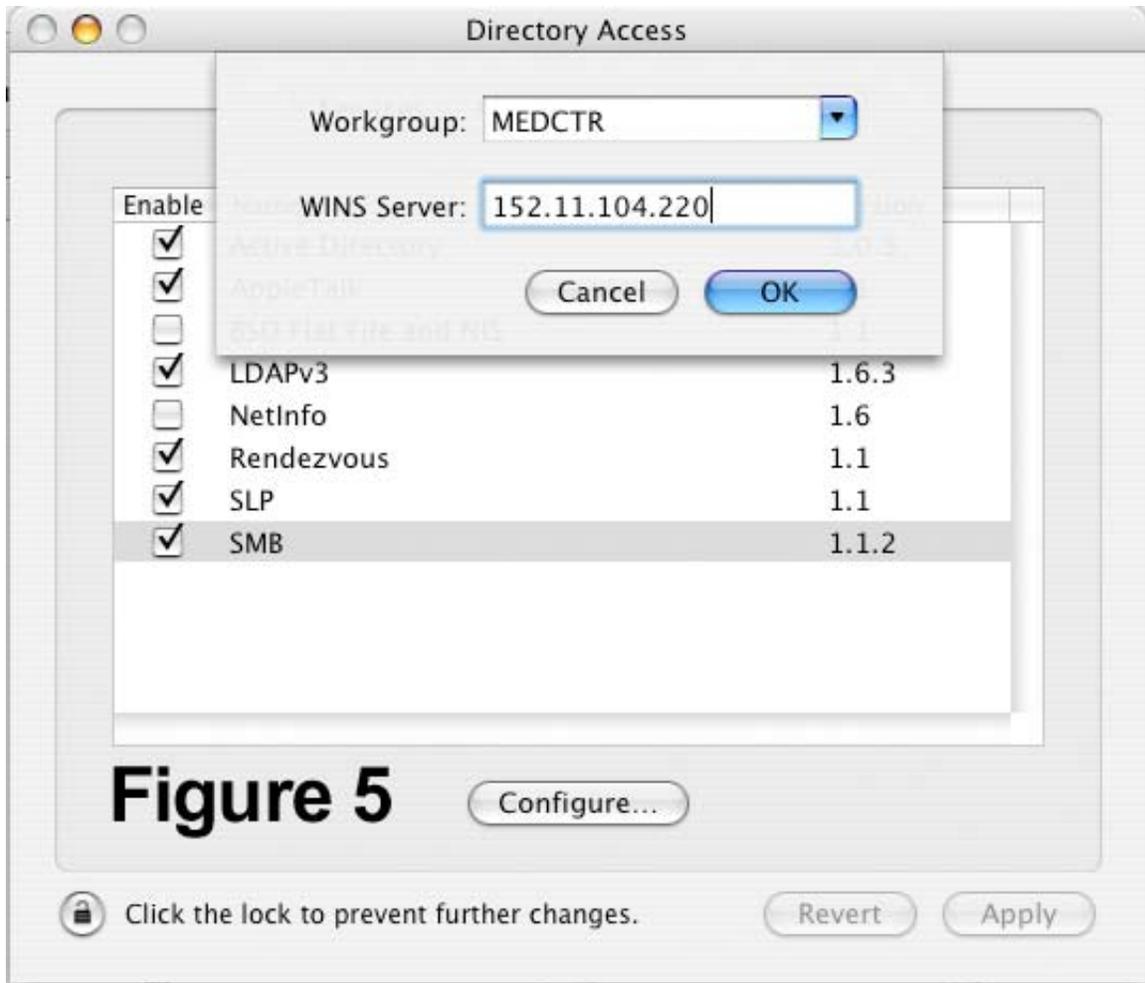
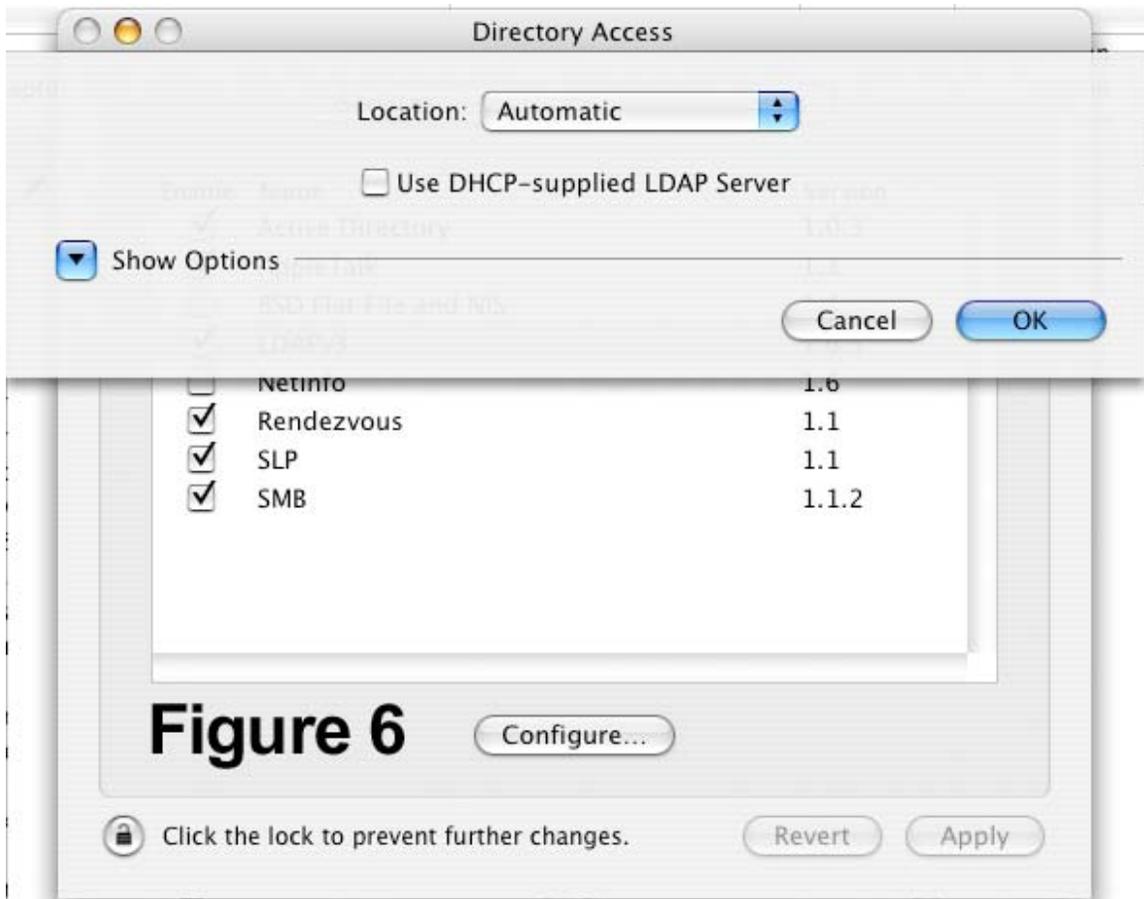


Figure 5

Select the Workgroup (actually the MEDCTR domain in this case) and enter the primary WINS server IP address as shown. Hit OK to finish this dialog box.

Highlight and enable LDAP in the main Directory Access screen and hit Configure

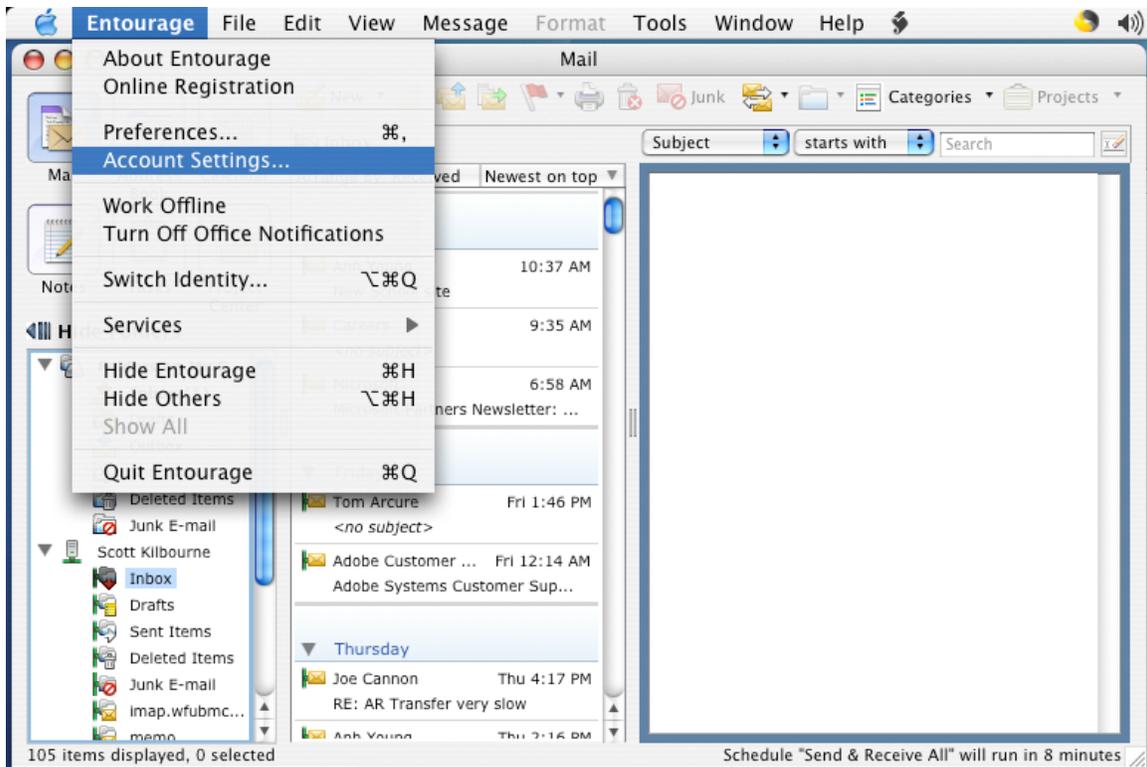


The default option of Automatic works well.

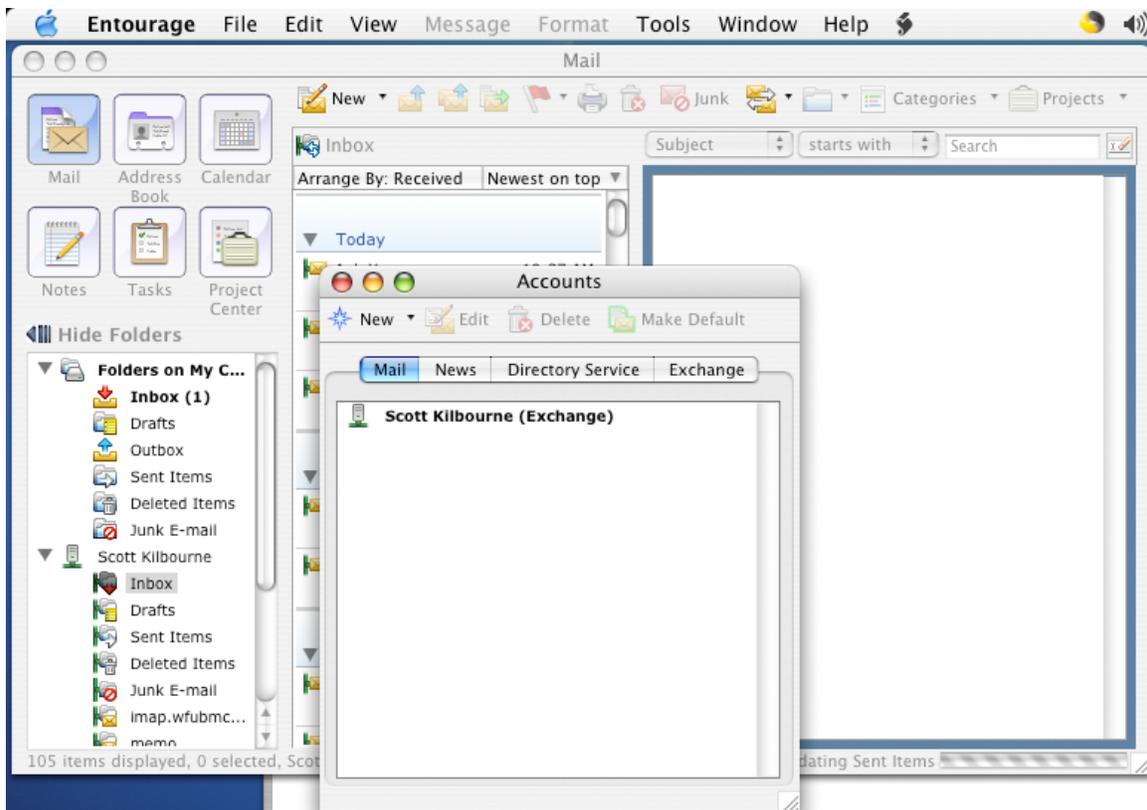
This basically completes the integration of the Macintosh into the Active Directory. When a new user logs in, the Mac will ask them if they want a new Mobile, Managed account. If the user answers Yes, the Mac will create a new local account that authenticates through the domain controllers. It will also create a local home directory, library and other personal local resources for the user. Creation of these resources can be custom scripted if desired.

Configuring a Macintosh to use Entourage with Exchange Servers

Entourage is a part of Microsoft Office 2004 and must be installed before it can be configured to work with an Exchange server. Under Entourage, select Account Settings



This will bring up a dialog box that will allow you to add users.



Add a new user by clicking on Exchange and New. This brings up the following dialog box. Click Account Setting and fill in the information as follows.

Account name: Full name as recorded on the Exchange server

Account ID: Your standard network login username

Password: leave blank

Domain: medctr.ad.wfubmc.edu

Do not save your passwords in a Mac OS keychain. It defeats most of the desirable security features and makes for difficulties when changing passwords.

Exchange server: owa.wfubmc.edu (the Exchange front end server)

Name: Same as Account name

E-mail address: your standard email address (used as return address)

Account name: Tom Roth

Account ID: tomroth

Password:

Domain: medctr.ad.wfubmc.edu

Save password in my Mac OS keychain

Exchange server: owa.wfubmc.edu

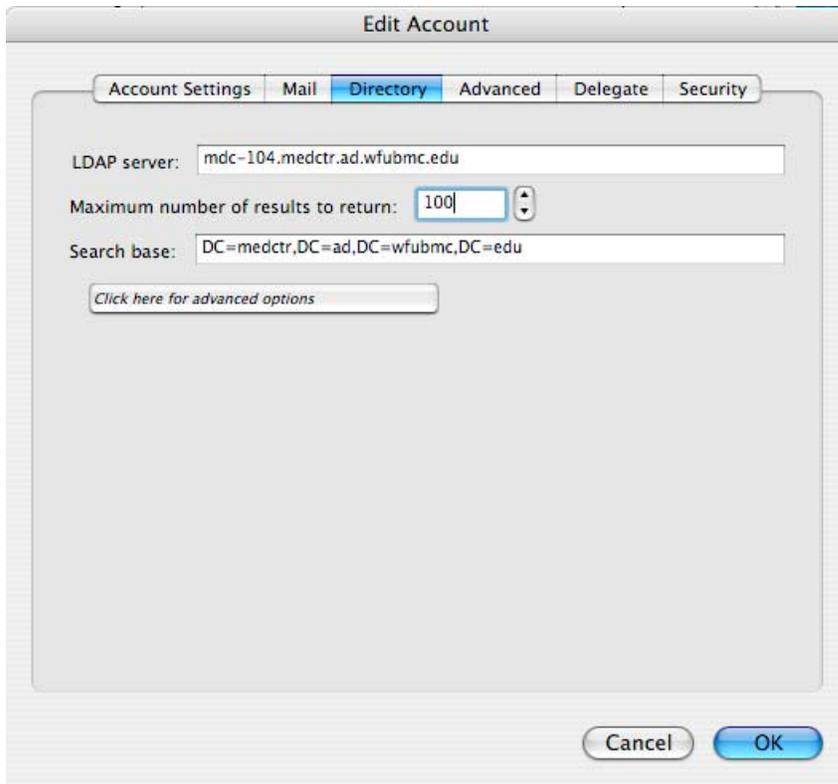
Name: Tom Roth

E-mail address: tomroth@wfubmc.edu

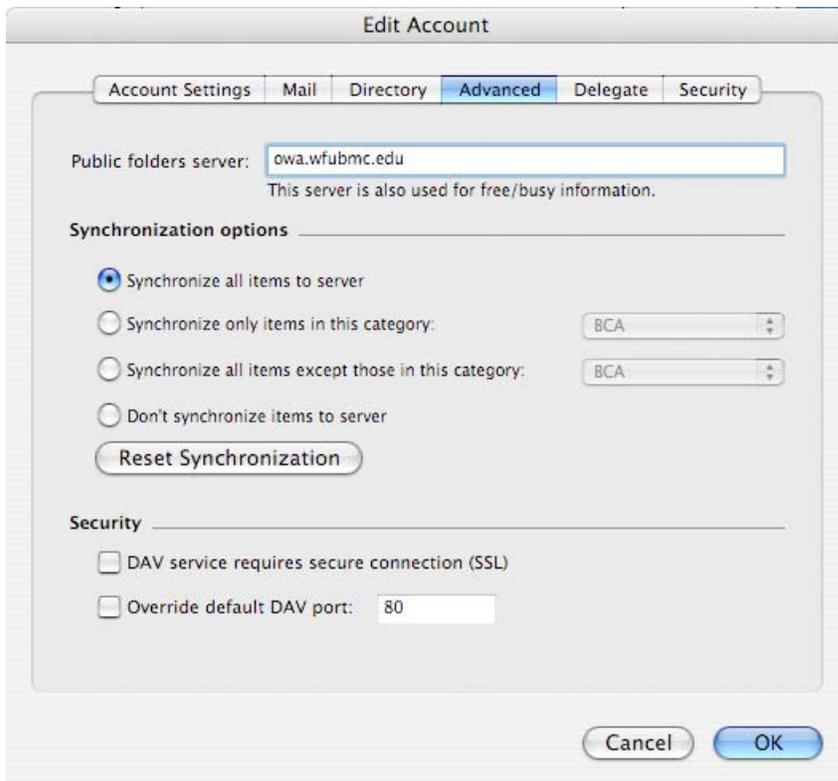
You can also enter Outlook Web Access server addresses, such as <http://mail.example.com/exchange>, into the Exchange server field. For more information, contact your Exchange server administrator.

Cancel OK

Hit the Directory tab next and fill it in as shown below.

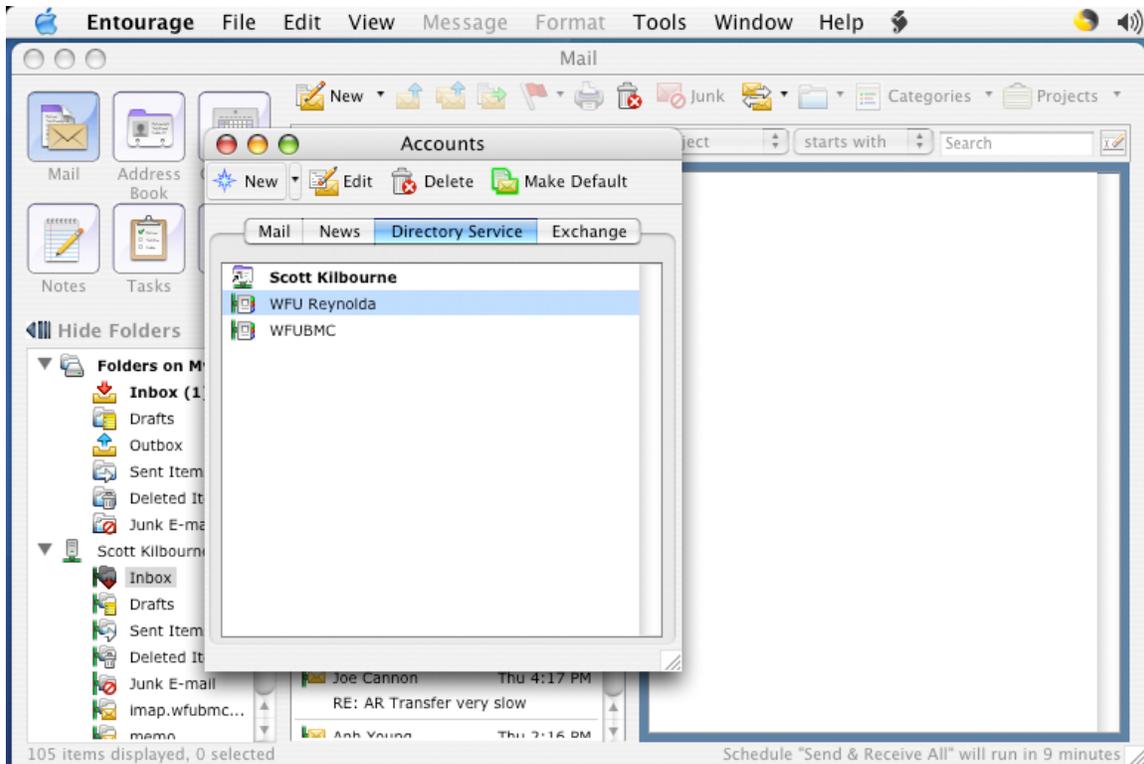


Hit the Directory tab next and fill it in as shown below.



Hit OK to finish setting up the Exchange account.

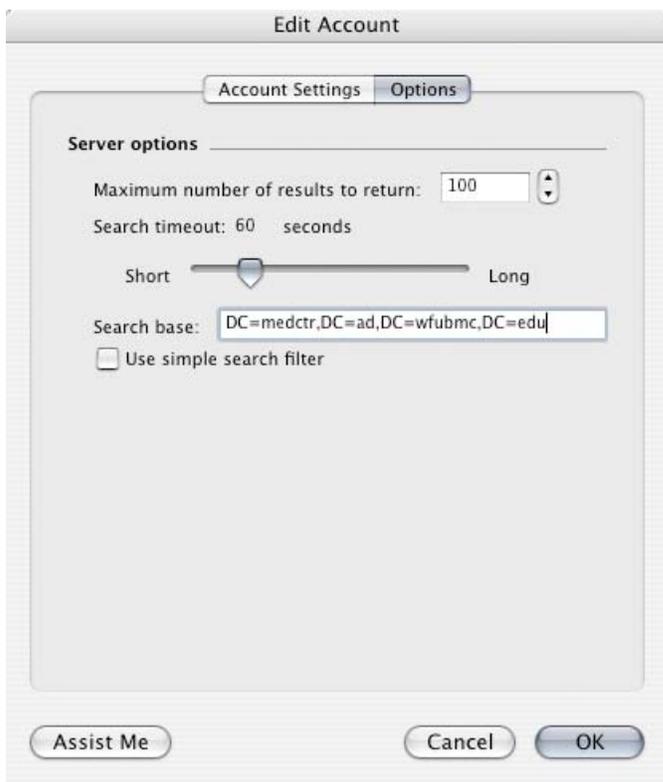
Next you need to set up the search directories for finding email addresses that are not in your personal Contacts list. Entourage will automatically suggest names as you type them into the To: field when sending emails, but searches to further global directories need to be set up. Go back to Entourage Account Settings but this time select Directory Service. The user name shown is for the email account just set up and its local contact list. We will now set up the WFUBMC and WFU Reynolda directories.



Hit Directory Service and then New which will bring up the following dialog box.



Fill it in as shown (using your own account and Password, but do not use keychain which is shown as an error here. Then hit the Options tab and you get



Be careful and copy the Search base EXACTLY as it is here and then hit OK. If you want to add the Reynolda campus directory, here are the corresponding screens.

Edit Account

Account Settings Options

Account name: WFU - Reynolda Campus

Server information

LDAP server: ldap.wfu.edu

This server requires me to log on

Account ID:

Password:

Save password in my Mac OS keychain

[Click here for advanced options](#)

Assist Me Cancel OK

Edit Account

Account Settings Options

Server options

Maximum number of results to return: 100

Search timeout: 60 seconds

Short Long

Search base: o=wfu,c=us

Use simple search filter

Assist Me Cancel OK

No password authentication is required at WFU Reynolda for directory access.

Summary

These are the basics of setting up a Macintosh with OS 10.3.4 to work with Active Directory and Exchange servers here. It might be helpful to state again that versions of the Mac OS prior to 10.3 (Panther) and applications not specifically written for OS X may be much more difficult to implement or support.