



## Macintosh OS X [10.3 – Panther] Outline

Summer 2004

1. Introduction to Macintosh OS X - Panther
2. New Terms
3. Desktop Layout
4. Finder Window Layout
5. The Dock
6. Apple Menu
7. Application Menu
8. Go Menu
9. Menulets
10. Home
11. Save / Open Dialogs
12. Printer Setup Utility
13. Connect to Server
14. Burning CDs / Backing up Data
15. Additional Applications
  - a. Address Book and Mail
  - b. iChat AV
  - c. iCal
  - d. iMovie
  - e. Internet Connect
  - f. iPhoto
  - g. iSync
  - h. iTunes
  - i. Preview
  - j. Safari
  - k. Stickies
  - l. Sherlock
  - m. Text Edit
16. Utilities
17. Useful Web Links
18. Keyboard Shortcuts
19. File System Hierarchy



## Macintosh OS X [ 10.3 – Panther ] Training

March 2004

### I. Introduction

A computer's operating system is at the core of everything you do on the computer: it displays what you see on the screen, it opens and closes files and programs, it connects you to the Internet, it prints your documents, etc. There are MANY different operating systems, some of which are related: for example, the various versions of Microsoft Windows (Windows 3.1, 95, 98, NT, 2000, ME, XP). Other examples of operating systems are Microsoft DOS, Linux, and UNIX. Linux and UNIX are quite similar (Linux is an off-shoot of UNIX) and both come in many different varieties (Red Hat, Mandrake, Solaris, BSD, System V, HP-UX, AIX, Irix, etc.).

Apple's Macintosh operating system was introduced in 1984 with the original Macintosh computer. At the time, it was truly groundbreaking because it was the first commercially available system to use a Graphical User Interface (GUI, say "goeey"). With the Macintosh, its all point and click on graphical objects you see on the screen. There have been many enhancements to the Macintosh system over the years, but fundamentally it has remained much the same since 1984...until March 2001 when Apple released its first version of Macintosh OS X.



When you start using OS X you will immediately notice the new graphical look of the system (the new look is called 'Aqua'). As you become familiar with OS X, you'll see that most things seem to

work the same way they did before with the old Macintosh system, with a few notable exceptions (printing, connecting to servers, Control Panels/Control Strip). What you will probably NOT notice is that OS X is actually a UNIX operating system.

Over the years, UNIX has become the benchmark for system stability in the computer industry. Many of the most powerful servers on the Internet run some form of UNIX or Linux, and in fact many aspects of the Internet (Web, email, FTP, etc) are the product of UNIX. So why doesn't everyone just use UNIX? The answer is that until OS X, UNIX was just too complex for the average user. But Apple has actually hidden the UNIX underpinnings of OS X so well that you'll probably never even know you're running UNIX. You'll just enjoy all the benefits of UNIX... the most important of which is that your computer will be very stable.

The ONLY disadvantage of using OS X is that some aspects of how you have used your computer are now either different or eliminated altogether, thus forcing you to learn a new way. This learning process will be like any learning process in that you will get better with more practice.

## II. New Terms

### Classic

The old Macintosh operating system you have used up until now is called 'Classic.' Programs written for the Classic Mac OS will NOT run under OS X until they have been re-written specifically for OS X. This is because OS X is a UNIX operating system. Fortunately, most of the programs you'll want to use (Word, Excel, PowerPoint, Internet Explorer, Entourage, FileMaker, Dreamweaver, Photoshop, iMovie) have already been updated to run under OS X, but what about those that have not?

Apple has cleverly devised a system whereby you run Classic Mac OS as its own program under Mac OS X. If you double-click on any file or program on your hard disk that is not native to OS X, the system will automatically attempt to launch the Classic system. This is actually similar to starting up your computer under Classic Mac OS. A small Classic icon will appear on your desktop. Be advised that it may take anywhere from 45-60 seconds to load everything, but then you can open and run any program that is not updated specifically for OS X. One other drawback of using Classic Mode with a laptop in particular is that the process draws more heavily on the computer's central processor. Therefore, **Classic will drain your laptop's battery much faster when it is running (not a problem if you've got your power adapter plugged into the laptop). The best way to stop Classic is to log out of your computer and then log in.**

Note that your Classic programs are stored in a different place on your disk than your OS X programs:

- . Classic programs: Macintosh HD/Applications (OS 9)
- . OS X Programs: Macintosh HD/Applications

## Dock


The floating bar on the bottom of the screen...it contains icons of applications you're most likely to use. The Dock has a divider that keeps applications on the left, and various other items—folders, files, Trash—on the right. So what do you do with the Dock?



Just click once on any item in the Dock and it will launch. If you click on the icon for Internet Explorer, then IE launches and you can surf the Web. Note that applications that are open have a black triangle underneath. If you click on the Trash icon, a window opens showing you what's in the Trash. If you click on the 'Applications' folder icon on the right side of the dock, a window opens taking you right to your OS X Applications folder.

HINT: You can customize your Dock any way you want!

If there is an application you use frequently which is NOT already in your Dock, just locate it in your 'Applications' folder and drag it into the **left side** of your Dock...same thing with files and folders, except they go on the **right side** of your Dock. Note that there is

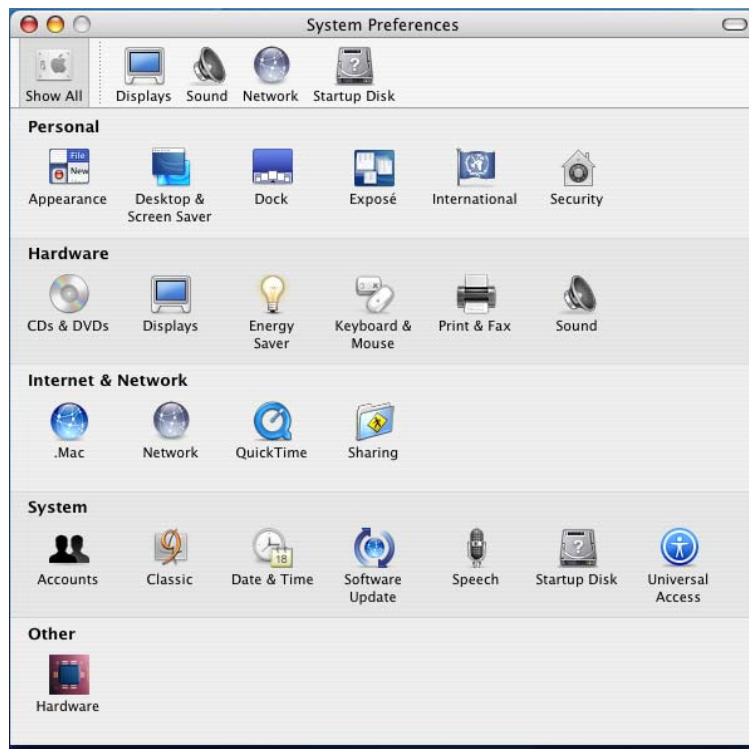
already an icon for 'Home' in your Dock...  clicking once on this opens the Home Directory on your laptop (more on Home shortly). You can have as many items in your Dock as you want. You can also customize certain aspects of how the Dock works by pulling down the 'Apple' menu and selecting 'Dock.'

## System Preferences

This replaces the Control Panels from Classic Mac OS. You can access System Preferences either by clicking the light switch icon in the Dock, or by selecting 'System Preferences' from the Apple Menu (more on the Apple Menu below). Here are some System Preferences that you might want to adjust:

- . **Desktop & Screen Saver:** sets the background picture on the desktop and allows

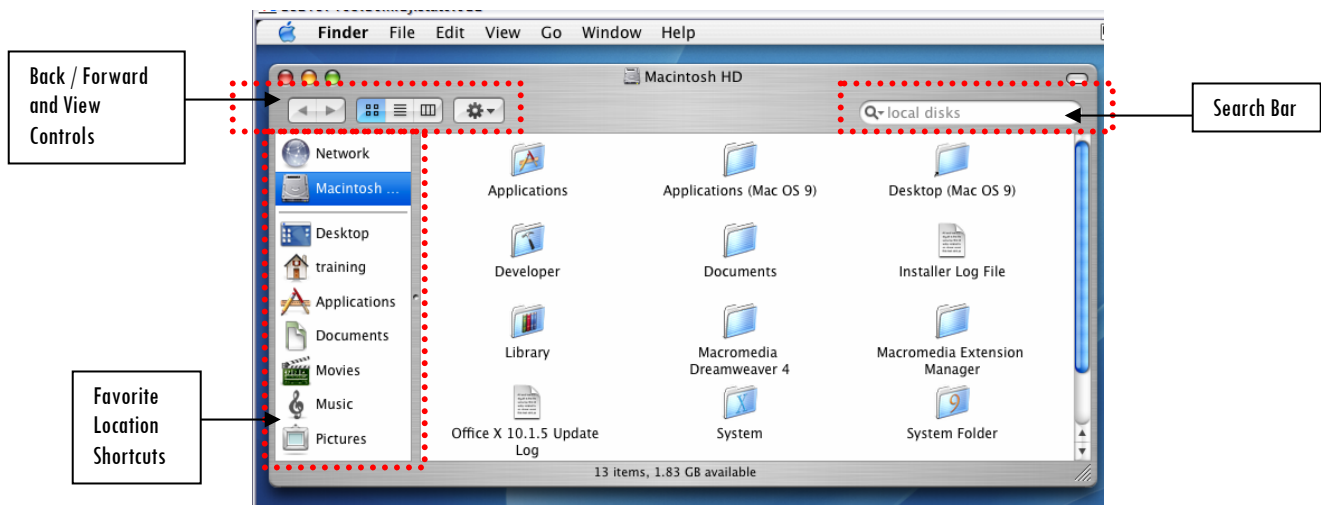
- you to manage and customize Screen Saver functions.
- . **Dock:** adjust settings for the Dock.
- . **Appearance:** some basic appearance settings.
- . **Screen Saver:** manage and customize Screen Saver functions
- . **Exposé:** gives you instant access to any open window with a single keystroke.  
Display all open windows as thumbnails, view windows of the current application, or hide all windows to quickly locate a file on your desktop.
- . **Security:** At home and away, keep your valuable documents safe with powerful AES-128 encryption. FileVault automatically encrypts and decrypts the contents of your home directory on the fly.



Obviously, there are many other System Preference panels but in general you will not need to access them unless instructed to do so by Computer Support. For example, Software Update lets you download and install important system updates from Apple Computer; Computer Support will advise when and how to do this as updates become available.

### Finder Window & Toolbar

Double-click on the 'Macintosh HD' hard disk icon on your desktop...look carefully at the window that pops open. This particular type of window is called a 'Finder' window because it helps you navigate and find things on your hard disk. Classic Mac OS also had Finder windows but OS X's Finder windows have MUCH more functionality allowing you to quickly jump around from place to place on your computer.



**Back:** It allows you to go back to wherever you had been browsing, much like a web browser.

**Forward:** It allows you to go forward after clicking the back button to wherever you had been browsing, much like a web browser.

**View Controls:** The 3 buttons allow you to switch to different views for easier navigation to whatever it is you are looking for.

- . Icon view: items in window appear as icons (Command + 1 key)
- . List view: items in window appear in a list (Command + 2 key)
- . Column view: a new way of viewing the contents of your hard disk in columns. (Command + 3 key)

**<< user >> Home:** This is the most important button in OS X as it takes you right to your 'Home' folder...more on this below.

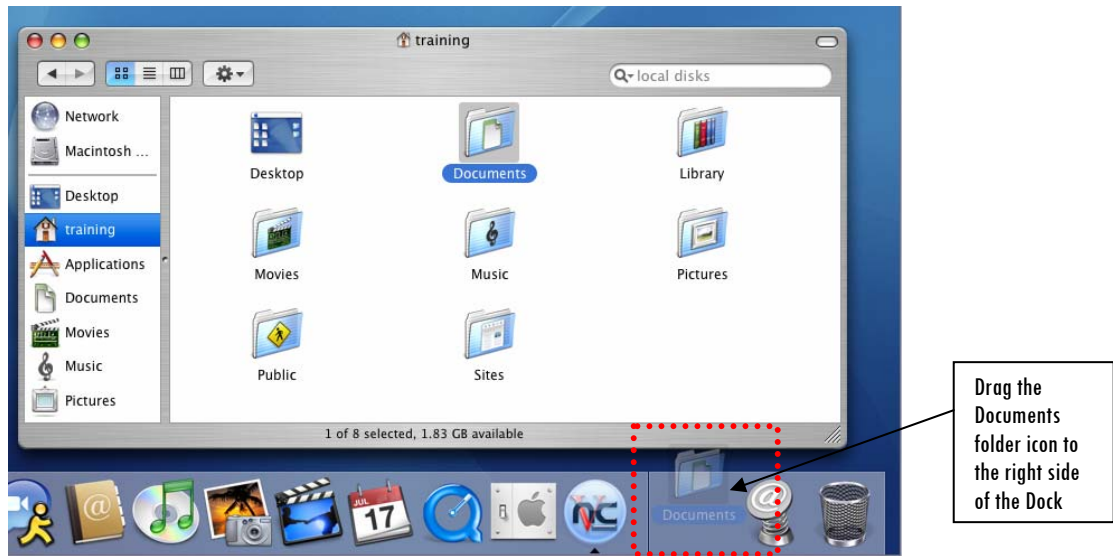
**Applications:** This button takes you to the folder where the OS X programs are stored on your laptop. Classic programs are stored in the 'Classic Apps' folder.

**Search:** The text box on the top-right of the Finder window. You can start typing in a file name, and Finder will start searching (from the current folder and deeper) with the first letter you type in, and narrow down its results the more you type. If you want to use it to search your entire hard drive, click the 'Macintosh HD' in the left pane, then search.

**HINT:** The Finder Window Toolbar is VERY customizable. Just pull down the 'View' menu and select 'Customize Toolbar.'

We will add our Documents Folder to the Finder Window Toolbar. From your home folder, click and drag the 'Documents' folder to the right of the separator bar on

the Dock. A space will expand for you to drop it.



One last thing about OS X's windows...notice the Red, Yellow, and Green lights at the top left-hand corner of each window. Here is what clicking once on each button does:

- . Red: closes the active window
- . Yellow: minimizes the active window (hides it in the dock)
- . Green: makes the active window larger or smaller

## Apple Menu

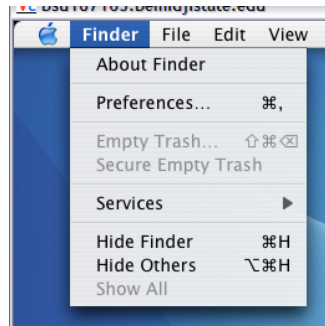
The first menu on the top left-hand side of the screen. Not really new, but the contents of it are different from Classic Mac OS. Use this menu for the following functions:



- . **About This Mac:** Hardware information about your computer
- . **Software Update...:** Download any new security and Apple Application updates
- . **System Preferences...:** Change user system preferences (Screen Saver, etc)
- . **Dock:** Change Dock settings
- . **Location:** Switch between Ethernet, Airport, and Modem. Most of the time it is set to Automatic. If you are having trouble establishing a network connection, switch manually to the connection type you want to use.
- . **Recent Items:** Recently used programs and files
- . **Force Quit:** Forces any program that is misbehaving to instantly quit without saving changes. Very useful!
- . **Sleep**
- . **Restart...**
- . **Shutdown...**
- . **Logout**

## Application Menu

The next menu over from Apple Menu. This new menu item is mainly used to Quit or Hide the program you're currently using. This is also how you modify the preferences for the program you're currently using. Note that it is not actually called 'Application Menu.' The name of this menu will change depending on which program you're currently using. When you don't have any programs open it will just say 'Finder.'



HINT: the 'Empty Trash' command is now under the Application menu when it reads 'Finder.' If you're working in another program, you can get to Finder instantly by clicking once anywhere on the desktop background. Or, simply click once on the Finder (happy Mac) icon in the Dock, or click and hold down on the Trash Can.

## Go Menu

Many of the items in this menu simply duplicate what you can do in a regular OS X Finder window: i.e. jump directly to Computer, Home, Favorites, or Applications. However, there are a few important additions:



**iDisk:** This is now a pay service from Apple called .mac. It will not be of use to you unless you subscribe to the service. Cost is \$100.00 per year. There are many useful services if you want to use it on your own.

**Recent Folders:** keeps track of the most recent folders you have visited. Just select the one you want to get back to it.

**Connect to Server: \*\*\*VERY IMPORTANT\*\*\* There is no Chooser in OS X! This menu option allows you to browse servers on the network and connect to the one you want. More on this later.**

## Menulets

Menulets are the small icons at the top right-hand corner of the screen. Most of the tools that were formerly in your Control Strip (eliminated under OS X) can be found here.

Among the many menulets available are...

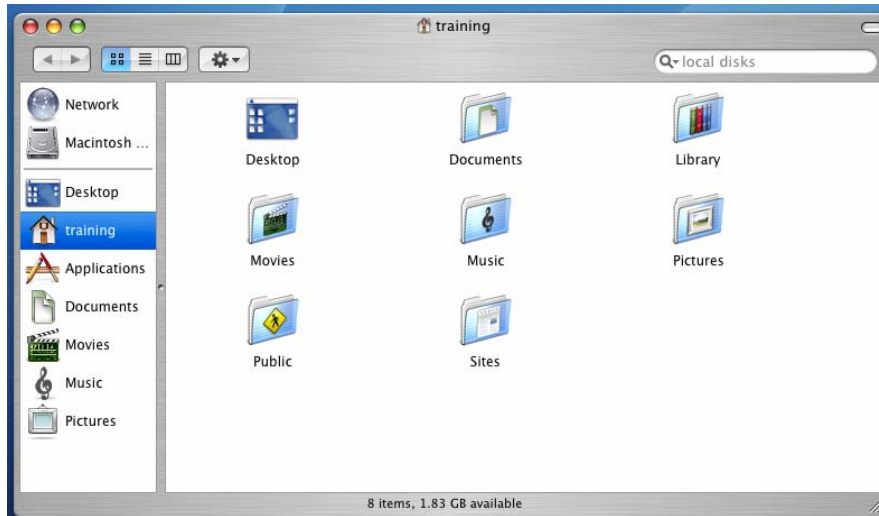


- . Internet Connect: dial-up remote access using the modem – try it!
- . Airport: wireless access (select an Airport Base Station)
- . Displays: screen settings, including video mirroring
- . Sound: volume control
- . Battery: status indicator (time remaining on battery charge)

## Home < user name >

Home is the NEW most important location on your computer. This is where you must store all your documents, movies, music, photos, web sites, etc on your laptop. This folder will have your user name and an icon of a house. There are at least 4 different ways to get to your Home Directory on your laptop:

1. Pull down the 'Go' menu and select 'Home' (option + Command + H)
2. Double-click on Macintosh HD and in the new window that opens click once on the 'Home' icon.
3. Double-click on Macintosh HD, then double-click on the 'Users' folder. Inside this folder you will see a folder with your user name on it...this is your Home Directory.
4. Easiest way – Add Home to the Dock and then click once on the icon of a house in the Dock.



## What is in your **Home**?

**Desktop:** This is where all of those things you put on your desktop are actually stored. They only look like they are on the actual desktop. Think of your desktop as its own special folder on your hard drive.

**Documents:** This is the default location for saving your files...Word, Excel, PowerPoint, etc. When you select the 'Save' option in any program, this is where OS X takes you to save your files.

**HINT:** Take special note of the folder called 'Microsoft User Data' because this is where ALL your Entourage email and address book contacts are stored. If you move or delete this folder, then you'll lose your Entourage data.

**Library:** This folder is used to store important information such as sounds, fonts, preferences and so on. There is not much in this folder you will likely need to look at...for the most part, deleting or moving files/folders in the 'Library' folder will only impact your own work. For example, modifying the contents of Library may cause you to lose your Internet Explorer Favorites. So it is best to keep out of this folder unless you are specifically told otherwise by Computer Support. The main exception is the 'Fonts' folder in your Library. Any fonts you want to use can be dragged into this folder. The next time you launch an application the font(s) will become available to you.

**Movies:** The default location used to store your movies when using iMovie. When you import video from a camcorder, **DO NOT** store the video files, rather save them to the Shared Folder on your Hard Drive. If you do not adjust this location,

the backing up of your Home Directory will not be effective (more on this later).

**Music:** Used to store music files. When you launch iTunes and attempt to import songs from an audio CD, iTunes will store the actual audio files in this folder.

**Pictures:** This is where iPhoto stores your images when you plug in a USB camera. Any other pictures you have should be stored in this folder.


**HINT:** One cool feature of OS X is that you can set the Screen Saver (in System Preferences) to be a slide show of all the images in your 'Pictures' folder.

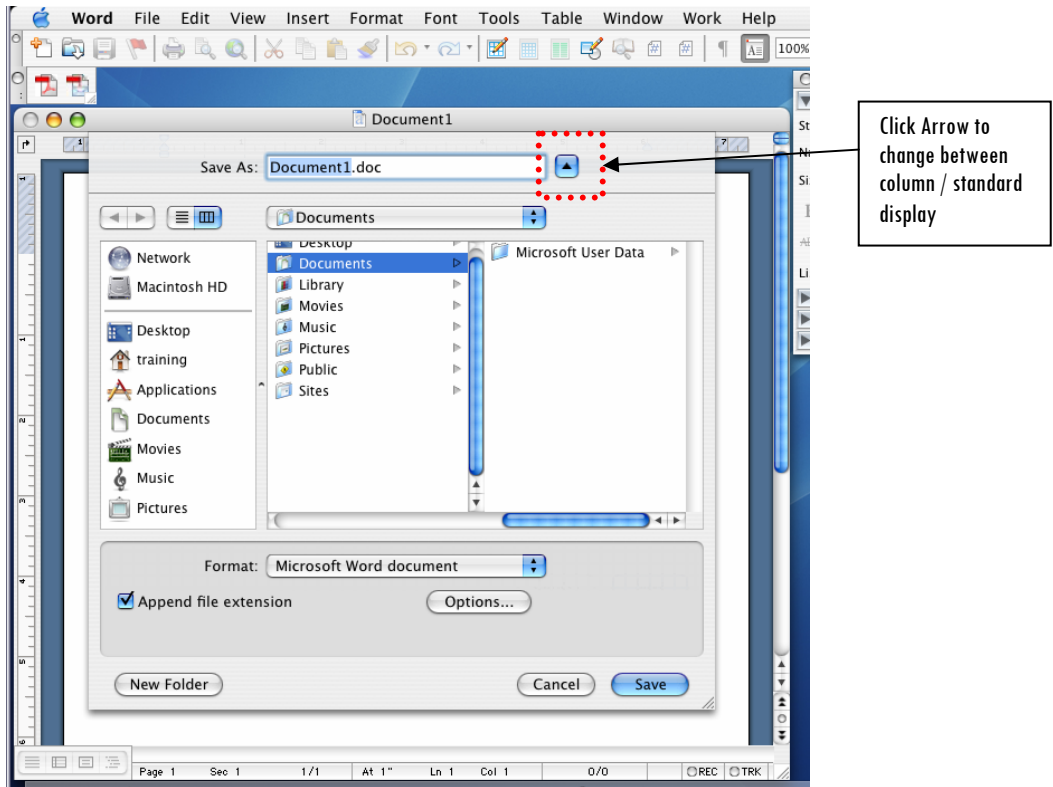
**Public:** Works much like your Public folder in your Home Directory on a server except it is used to share documents among different users of your own computer. Since no one else will probably use your computer, you may not have much use for it... But **note** that you also have a Public Folder in your Home Directory on the server that you can use to share documents with other teachers and students.

**Sites:** This could allow you to serve web pages out from your own computer if it was always connected to the Internet. In your case, this is not a useful idea because your laptop is not always turned on.

### The Save and Open Dialog Sheets



Click on the  icon in your Dock to launch Microsoft Word. Now attempt to save your blank document and look closely at the window that pops open. Click the down arrow next to the 'Save As...' text box. You will see a column display (like Column View in a Finder window) allowing you to navigate to exactly where you want to go. It slides into view allowing you to give it a name and a location to save it. To select a different location use the Slider Bar to Slide to a different location. You will notice on the **Where** jump bar are choices for where you might want to save your file. It also lists Favorite Places and Recent Places you have saved to. If you get confused, click on the Home icon and go to the Documents folder.



## SAVING AND ACCESSING DOCUMENTS

Your documents will always be saved in your Documents folder, unless you specify otherwise.

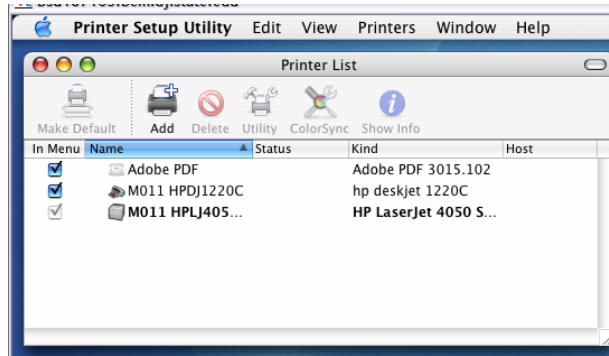
Use the Go Menu to access Home where you will see that one of the items is called 'Documents.' This is a shortcut to accessing items in the Documents folder on the laptop. It is also located on the right side of the Dock. Inside the Documents folder you will find the following:

iTunes: required by the iTunes program. Do not delete.

Microsoft User Data: required by Microsoft Office. Do not delete. Your Address Book information is stored in this folder.

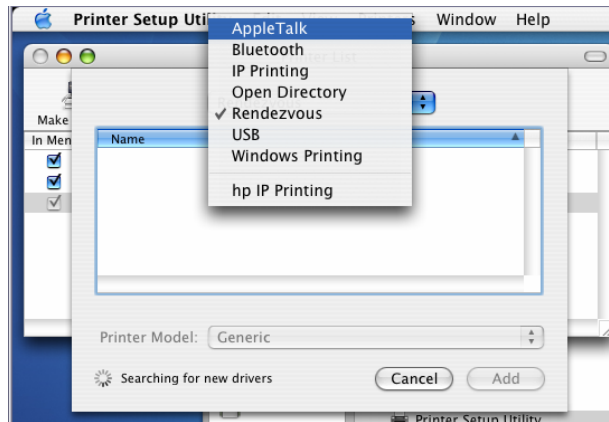
### Printer Setup Utility

As mentioned previously, there is NO Chooser in OS X. So how do you print? There is a program called Printer Setup Utility that allows you to select a printer or setup a new printer. The Printer Setup Utility application is in the 'Utilities' sub-folder of the OS X Applications folder; for your convenience, we will add it the Dock so that you won't need to go looking for it.

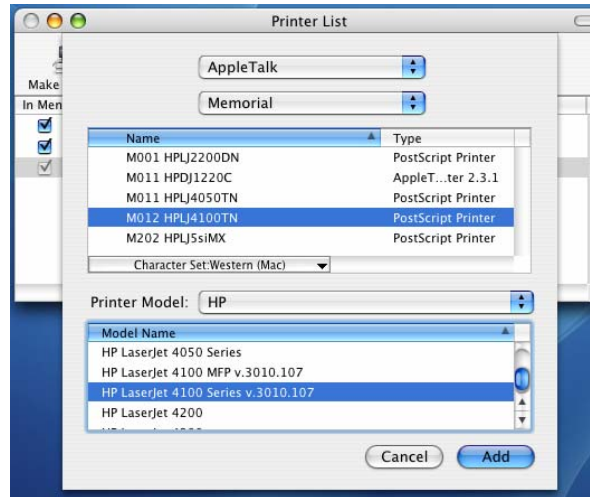


To setup a new printer...launch Printer Center from the Dock and click the 'Add Printer' button. There are several options for creating printers, the ones we will use are listed below:

- **AppleTalk** – Use this setting at Bemidji State University for network printers
- **USB** – For local printers



Select AppleTalk. The building you are currently in will show up as your current 'Zone.' Then select the printer in the list you want to install. They are listed by Building / Room Number and printer model number. Select the Printer Manufacturer, then the Printer Model from the list. Use the model number versus Generic as it will work better. Click 'Add.'



After your printer has been created, it will always show up in Printer Setup Utility unless you choose to delete it. The default printer is bolded, and the checkbox is grayed out. You can change the default printer by simply clicking once on whichever printer you want and then selecting 'Make Default' from the 'Printers' menu of the Printer Setup Utility program.

You can also add printers from inside the Print Dialog box of any software program if needed. It is always best to do it from in Printer Setup Utility though.

If you are having any type of printing problems the first place to look is Printer Setup Utility. Pay attention to the exclamation mark inside of a grey circle as if you see this, it means you have stopped the printing. Until you go into Printer Setup Utility and double click on that printers name so you can start the printing jobs. Until you do this, nothing you send to this printer will print as all of the jobs are stopped.

**HINT:** It's easier to just change the printer selection from the Print dialog box in whichever application it is you're printing from.

### **Connect to Server**

As discussed previously, you now must use the 'Connect to Server' option (Command + K) in the 'Go' menu to log in to a network file server (i.e. Storage) for the first time. When you open the Connect to Server window, what you type in the 'Address' field determines the server you connect to. We will enter the name (Storage) of the Faculty / Staff Server where your Home Directory resides.



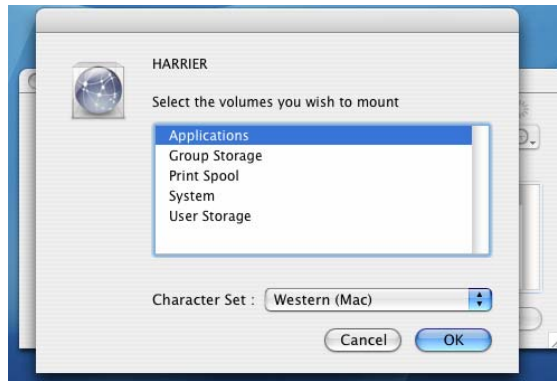
OS X will remember recent servers you have connected to. If you click on the 'At' jump bar in 'Connect to Server' you'll see a list of them to choose from. Click the Plus '+' button to add 'storage' to your favorite servers.



When you press 'Connect,' the login dialog box will appear.



Enter your username and password in the fields and press 'Connect.'



Another dialog box appears with the available volumes. You will be most interested in:

- Group Storage: Departmental shared files.
- User Storage: Your personal files stored on the server.

Select one of the options and press 'OK'

Whichever volume you select will mount on the Desktop and open a Finder window. You will need to follow the folder path to the files you want to access. You will know you are



connected to the server when you have the following icon on your Desktop

It will say either User Storage or Group Storage, depending on the volume you have mounted. To disconnect and logoff, just drag the User Storage / Group Storage icon displayed above to the trash. It turns into an 'Eject' icon as shown below.



### **Burning CDs**

Burning CDs is quite simple on OS X. You have a couple different options to burn CDs.

1. Insert a blank CD-R or CD-RW and a dialog box will pop up saying that you have inserted a blank CD.

### **III. Other Programs [ Location: Macintosh HD < Applications < ... ]**

#### **Address Book and Mail**

Free software from Apple for managing your contacts and sending/receiving email. You probably won't use these because Microsoft Entourage provides the same functionality.

#### **iChat AV**

Apple's instant messaging software. With video-conferencing features.

## **iCal**

Apple's calendar application.

## **iMovie**

iMovie makes it easy for you to turn your digital photos, music, videos and photographs into movies.

## **Internet Connect**

Internet Connect is a mini-program that helps you connect to the Internet using a modem. It replaces the Remote Access program in Classic Mac OS.

## **iPhoto2**

iPhoto 2 is a fantastic piece of free software for digital photography. iPhoto is a virtual scrapbook for managing all your digital images. You can also perform some basic image editing functions such as crop, resize, and adjust red-eye, brightness, and contrast. The program is designed to provide superior printouts of your digital photos with almost any printer. There will be workshops on iPhoto if you wish to learn more about the program.

HINT: Apple has established a service with Kodak where you send your digital photos electronically over the Internet to be printed in any format you choose. You can then have the prints mailed to yourself or anyone else.

## **iSync**

Apple's synchronization utility. It can be used with PDA's and Apple's .mac service.

## **iTunes**

Music store, jukebox, online radio, etc.

## **Preview**

This is an application that is similar to Classic Mac OS's Picture Viewer program in that it will open most image and picture files. It can even open PDF files, much like Adobe Acrobat Reader (which is also installed on your laptop). Working with Preview is generally much faster than Acrobat Reader, but Acrobat Reader has more options for viewing and navigating a long PDF file.

HINT: You can **create your own PDF** files with OS X! They can be opened either by the Preview application or ANY version of Adobe Acrobat Reader (Windows, Mac, etc). Just select 'Print' from the 'File' menu of any OS X application. Click on the jump bar where it

says 'Copies and Pages' and select 'Output Options.' Click the check box for 'Save as file' and make sure 'PDF' is selected as the format. Click the 'Save' button, enter a name for the file and where you want it saved, and voila...instant PDF file.

### **Safari**

Safari is Apple's new web browser that is much faster and more stable than Internet Explorer, and is for Macintosh OS X users only. It has a feature called Tabbed Browsing that is very useful. We explore this later.

### **Stickies**

The Scrapbook is gone so you will now use the Stickies Application to store any text, images or even reminders to yourself. They are better than putting paper sticky notes on your laptop.

### **Sherlock**

Sherlock 3 displays custom information in content-specific windows, so you can grasp the information you want quickly.

### **Text Edit**

Text Edit replaces SimpleText in Classic Mac OS, and is just a bare-bones text editor.

### **Utilities**

This sub-folder of Applications contains many administrative (read: Computer Support) programs for managing your computer. Therefore, it is VERY IMPORTANT that you leave the Utilities folder where it is along with all its contents. There is probably nothing in this folder that you will need to use anyway except Printer Setup Utility, which we have added to your Dock.

### **Useful Web Links**

- **Mac OS X – New Features:** <http://www.apple.com/macosx/newfeatures/>
- **Mac OS X – Overview:** <http://www.apple.com/macosx/overview/>
- **Mac OS X – Feature Comparison:** <http://www.apple.com/macosx/upgrade/compare.html>

## Mac OS X Keyboard Shortcuts

| <b>Startup</b>                                   |   |
|--|---|
| <b>Keystroke</b>                                 | <b>Description</b>  |
| Press X during startup                           | Force Mac OS X startup  |
| Press Option-Command-Shift-Delete during startup | Bypass primary startup volume and seek a different startup volume (such as a CD or external disk)                                 |
| Press C during startup                           | Start up from a CD that has a system folder   |
| Press N during startup                           | Attempt to start up from a compatible network server (NetBoot)  |
| Press R during startup                           | Force PowerBook screen reset  |
| Press T during startup                           | Start up in FireWire Target Disk mode   |
| Press Shift during startup                       | start up in Safe Boot mode and temporarily disable login items and non-essential kernel extension files (Mac OS X 10.2 and later) |
| Press Command-V during startup                   | Start up in Verbose mode.   |
| Press Command-S during startup                   | Start up in Single-User mode (command line)   |
| <b>Finder window</b>                             |   |
| <b>Keyboard shortcut</b>                         | <b>Description</b>  |
| Command-W  | Close Window  |
| Option-Command-W                                 | Close all Windows   |
| Command-Right Arrow                              | Expand folder (list view)   |
| Option-Command-Right Arrow                       | Expand folder and nested subfolders (list view)   |
| Command-Left Arrow                               | Collapse Folder (list view)   |
| Option-Command-Up Arrow                          | Open parent folder and close current window   |
| <b>Menu commands</b>                             |   |
| <b>Keyboard shortcut</b>                         | <b>Description</b>  |
| Shift-Command-Q                                  | Apple Menu<br>Log out   |
| Shift-Option-Command-Q                           | Apple Menu<br>Log out immediately   |
| Shift-Command-Delete                             | Finder Menu<br>Empty Trash  |
| Option-Shift-Command-Delete                      | Finder Menu<br>Empty Trash without dialog   |
| Command-H  | Finder Menu<br>Hide Finder  |
| Option-Command-H                                 | Finder Menu<br>Hide Others  |
| Command-N  | File Menu<br>New Finder window  |
| Shift-Command-N                                  | File Menu<br>New Folder   |
| Command-O  | File Menu<br>Open   |
| Command-S  | File Menu<br>Save   |
| Shift-Command-S                                  | File Menu   |

|                  |  |
|------------------|--|
|                  | Save as                                |
| Command-P        | File Menu<br>Print                     |
| Command-W        | File Menu<br>Close Window              |
| Option-Command-W | File Menu<br>Close all Windows         |
| Command-I        | File Menu<br>Get Info                  |
| Option-Command-I | File Menu<br>Show Attributes Inspector |
| Command-D        | File Menu<br>Duplicate                 |
| Command-L        | File Menu<br>Make Alias                |
| Command-R        | File Menu<br>Show original             |
| Command-T        | File Menu<br>Add to Favorites          |
| Command-Delete   | File Menu<br>Move to Trash             |
| Command-E        | File Menu<br>Eject                     |
| Command-F        | File Menu<br>Find                      |
| Command-Z        | Edit Menu<br>Undo                      |
| Command-X        | Edit Menu<br>Cut                       |
| Command-C        | Edit Menu<br>Copy                      |
| Command-V        | Edit Menu<br>Paste                     |
| Command-A        | Edit Menu<br>Select All                |
| Command-1        | View Menu<br>View as Icons             |
| Command-2        | View Menu<br>View as List              |
| Command-3        | View Menu<br>View as Columns           |
| Command-B        | View Menu<br>Hide Toolbar              |
| Command-J        | View Menu<br>Show View Options         |
| Command - [      | Go Menu<br>Back                        |
| Command - ]      | Go Menu<br>Forward                     |
| Shift-Command-C  | Go Menu<br>Computer                    |
| Shift-Command-H  | Go Menu                                |

|                  |                                     |
|------------------|-------------------------------------|
|                  | Home                                |
| Shift-Command-I  | Go Menu<br>iDisk                    |
| Shift-Command-A  | Go Menu<br>Applications             |
| Shift-Command-F  | Go Menu<br>Favorites                |
| Shift-Command-G  | Go Menu<br>Goto Folder              |
| Command-K        | Go Menu<br>Connect to Server        |
| Command-M        | Window Menu<br>Minimize Window      |
| Option-Command-M | Window Menu<br>Minimize All Windows |
| Command-?        | Help Menu<br>Open Mac Help          |

#### Universal Access

| Keyboard shortcut                   | Description   |
|-------------------------------------|---|
| Option-Command-* (asterisk)         | Turn on Zoom  |
| Option-Command++ (plus)             | Zoom in   |
| Option-Command-- (minus)            | Zoom out  |
| Control-Option-Command-* (asterisk) | Switch to White on Black  |
| Control-F1                          | Turn on Full Keyboard Access<br>When Full Keyboard Access is turned on, you can use the key combinations listed in the table below from the Finder. |
| Control-F2                          | Full Keyboard Access<br>Highlight Menu  |
| Control-F3                          | Full Keyboard Access<br>Highlight Dock  |
| Control-F4                          | Full Keyboard Access<br>Highlight Window (active) or next window behind it  |
| Control-F5                          | Full Keyboard Access<br>Highlight Toolbar   |
| Control-F6                          | Full Keyboard Access<br>Highlight Utility window (palette)  |

The Universal Access preference pane allows you to turn on Mouse Keys. When Mouse Keys is on, you can use the numeric keypad to move the mouse. If your computer doesn't have a numeric keypad, use the Fn (function) key.

| Mouse Keys           |   |
|----------------------|---|
| Keystroke            | Description                                 |
| 8                    | Move Up                                     |
| 2                    | Move Down                                   |
| 4                    | Move Left                                   |
| 6                    | Move Right                                  |
| 1, 3, 7, and 9       | Move Diagonally                             |
| 5                    | Press Mouse Button                          |
| 0                    | Hold Mouse Button                           |
| . (period on keypad) | Release Mouse Button (use after pressing 0) |

| <b>Other Commands</b>                                    |  |
|--|--|
| <b>Keystroke</b>   | <b>Description</b>   |
| Option-Command-D   | Show/Hide Dock   |
| Command-Tab  | Switch application   |
| tab  | Highlight next item  |
| Command-Up Arrow   | Move up one directory  |
| Command-Down Arrow                                       | Move down one directory  |
| Page Up or Control-Up Arrow                              | Move up one page   |
| Page Down or Control-Down Arrow                          | Move down one page   |
| Option-Drag  | Copy to new location   |
| Option-Command-Drag                                      | Make alias in new location   |
| Command-Drag   | Move to new location without copying   |
| Shift-Command-C  | Show Colors palette in application   |
| Command-T  | Show Font palette in application   |
| Command-Shift-3  | Take a picture of the screen   |
| Command-Shift-4  | Take a picture of the selection  |
| Command-Shift-4, then press Control while selecting      | Take a picture of the screen, place in Clipboard   |
| Command-Shift-4, then Spacebar                           | Take a picture of the selected window  |
| Option-Command-esc                                       | Force Quit   |
| Control-Eject  | Restart, Sleep, Shutdown dialog box  |
| Control-Command-Eject                                    | Quit all applications and restart  |
| Option-Command-Eject <b>or</b><br>Option-Command-Power   | Sleep  |
| Command-click window toolbar button (upper right corner) | Cycle through available views for the window's toolbar (dependant on the nature of the Finder or application window) |