

Mac OS 9 and Peripherals



Training Materials

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Overview

Computers depend on an operating system to work. The operating system manages the interaction of hardware and software to provide computer functionality.

Your iMac computer has Mac OS 9 installed and ready to go. OS 9 provides a number of features designed to make your computer using experience enjoyable and productive. The more you learn about OS 9, the more you can refine and customize your work.

The operating system of a computer also brokers the relationship with peripherals and internal and external devices, such as printers, disk drives, mouse, and keyboard. This module also addresses using the Lexmark Printer and VST Floppy Drive that came with your iMac.

Objectives

- Increase familiarity with and initial proficiency using your iMac and Mac OS 9.
- Develop understanding of and ability to print using your Lexmark printer.
- Develop understanding of and ability to use your CD and external floppy disk drives.

Prerequisites

This is an introductory course that requires no computer experience.

Glossary

The following terms and definitions are useful to know for this module:

Bit, byte

A bit is the smallest unit of data stored in a computer. 8 bits equals a byte. Data storage capacity is typically measured in bytes using powers of 10. A kilobyte is 1,000 bytes, a megabyte is 1,000,000 bytes, and so forth.

CD/CD-ROM

Compact disc, or compact disc with Read Only Memory. CDs with data burned into ROM can only be read, not written to.

Computer interface

The physical means by which you use and interact with your computer.

Default settings

The original settings for software or hardware as initially installed.

Operating system

The software that makes your computer run by facilitating the interactions between hardware and installed software.

Your New Classroom Technology Bundle

You are the recipient of a classroom technology bundle that includes an iMac computer running Mac OS 9, a Lexmark printer, and a VST floppy drive. These technology tools are intended to enhance both your work as an educator and the learning process in your classroom.

Let's begin by reviewing the items in your classroom technology bundle and some of their main features.

Your New iMac

Your iMac computer is an all-in-one unit with a number of powerful features and useful resources.

Documentation

Your iMac comes with a User Guide that provides much useful information about your iMac and its operation. This document is a good place to start for an overview of your computer.

CD-ROMs

Your iMac also comes with a number of CD-ROMs, including operating system install and restore discs and iMovie software for editing and creating digital videos.

Computer Case

The iMac has a transparent case through which you can see the inner computer parts. The case also has a built-in handle and a flip-up support foot on the front underside.

Monitor, CD Drive, and Speaker.

The iMac's monitor is built right into the computer case. Centered just below the monitor is a CD drive, which reads CD-ROMs and audio CDs. On either side of this drive is a built-in speaker. Headphone jacks are located by the left speaker.

Apple Pro Mouse and Apple Pro Keyboard

Your iMac comes with the recently released Apple Pro Mouse and Apple Pro Keyboard. The mouse uses optics and is highly responsive. The keyboard features full-sized keys and is designed to be comfortable to use.

Ports, Sockets, and Buttons

At the back of the computer case is a power cord socket for the AC cord that brings power to your computer. Along the right side is a panel with a number of ports for connecting devices and connecting to the Internet, including:

- USB ports for connecting USB devices, including your mouse, keyboard and floppy drive.
- FireWire ports for connecting digital video cameras and other FireWire-enabled devices.
- An Ethernet port for connecting an Ethernet cable to connect to a network and the Internet.
- A microphone port for connecting microphones for sound input.
- A speaker port for connecting external speakers for sound output.
- A VGA port on the back center of the case for connecting your iMac and sending your monitor signal to an external monitor.

Additionally, there is an access door below the VGA port through which the inside of the computer can be accessed to install additional memory or a wireless network card.

On the right side panel are two buttons: a recessed programmer's button (don't use), and a reset button with a triangle on it for restarting your computer when all else fails.

Your computer is an iMac DV edition, meaning that it has high-speed FireWire ports and iMovie software for importing and working with digital video.

Peripherals

A peripheral is an external or internal device that attaches to your computer and provides a certain function. Your computer came with all peripheral software installed. Make sure all peripherals are connected to the computer.

Mouse and Keyboard

As typically installed, your Apple Pro Mouse connects into the USB hub in your Apple Pro Keyboard, which connects to your computer via one of the USB ports on the right side control panel.

Printer

Your LexMark printer provides you printing capability. This printer can be connected directly to your iMac via a USB cable, but can also be connected to the network using the included Lexmark Marknet X2000 networking device, which allows multiple computers to share the one printer. In a classroom with 5 computers, for example, all 5 computers can share the one networked printer. The printer has its own manual and software.

Floppy drive

Despite the growth of networks, floppy disks are still used for storing and transferring files. Your VST floppy drive connects via USB. This floppy drive has both a guide sheet and its own software.

Headphones

Your computer came with a pair of headphones which allows any user to hear computer-generated sounds without disturbing others nearby.

Introduction: OS 9 - The Mac Operating System

When you turn on your computer, the operating system loads and begins its work of managing the activities of the computer.

Turning on your Mac

With your iMac setup and connected to a power supply, you are ready to turn on your computer. To turn on your computer, push the round On/Off button on the front of your iMac, between the two colored speakers on your computer.

When your computer successfully starts up:

1. The computer makes a chime.
2. The screen brightens and a folder icon with a happy face on it appears in the center of the screen.
3. The following Macintosh OS logo appears, replacing the happy face.

Mac OS 9



Mac OS 9 Logo

4. Control panel icons appear one at a time at the bottom of the screen as the computer loads them into memory.
5. All previous images disappear as the desktop appears and the computer concludes its startup process.

Troubleshooting Powering Up your iMac

If your iMac does not start up successfully, you must explore the potential causes to troubleshoot the exact cause and correct the problem. The following scenarios are the most common. Refer to the Troubleshooting section of your iMac User Guide for additional information.

Blinking Question Mark

If a folder with a blinking question mark appears in the center of the screen instead of a folder with a happy face, then the computer is not able to locate the installed system folder and files. This can occur for a number of reasons, including a corrupted system file, a failed hard drive, or, less likely, the lack of an installed system folder. If you encounter a blinking question mark, follow these steps:

1. Turn the computer off, wait, then turn it back on.
2. If necessary, push and hold the On/Off button located just below the computer monitor and between the two colored speakers for 5-10 seconds to force a restart.
3. If steps 1 and 2 do not work, unplug the computer from the wall, wait to the count of 10, then plug the computer back into the wall. Repeat step 2
4. If the computer still does not start up, contact your site technology coordinator or appropriate Apple tech support for assistance.

Power Issues

If the computer does not chime, make any noise, or display any light on the computer monitor, then there may be a power supply issue. Follow these steps:

1. Make sure that the power cable is plugged into the wall.
2. Make sure that the power cable is plugged into the computer
3. Make sure that the AC outlet on the wall is working properly.
4. Make sure the USB cable from the keyboard is connected to the USB port on the computer.
5. Make sure that any item associated with the computer, such as a surge protector or extension cord has all switches in the On position.

Shutting Down Your Computer

The computer has sensitive hardware and software components that can be damaged if the computer is not shut down properly. To avoid damaging these items, be sure that the computer is fully turned off and powered down before ever unplugging it.

To turn off the computer, select Shut Down from the Special menu.

Other Power Issues - Connecting and Disconnecting Cables

The computer can also be damaged immediately or over time if certain cables are connected or disconnected while the computer is on. To avoid such damage, follow these guidelines for connecting or disconnecting cables.

Cables that can safely be connected or disconnected while the computer is turned on include:

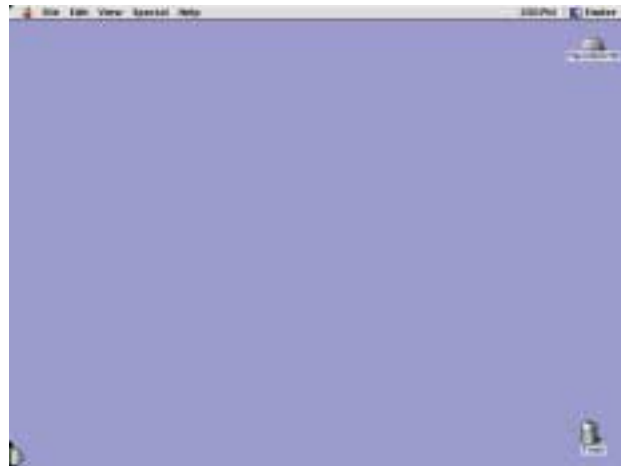
- USB cables, such as those that connect your mouse and keyboard or your VST external floppy drive to the computer.
- FireWire cables, such as those used to connect to some scanners, CD-ROM burners, digital cameras, and other devices.
- Ethernet cables, such as the one that connects your computer to the school network.

Cables that should only be connected or disconnected when your computer is off include:

- The Power cable which connects the computer to the AC outlet on the wall.
- The Microphone cable which connects an external microphone to the computer.
- Speaker and headphone cables which connect external speakers and headphones to the computer.

The Mac OS9 Desktop (aka Finder)

The Macintosh desktop, also known as the Finder, appears when your computer has fully started up and is ready to be used. The desktop contains several standard icons that represent elements of your computer, including the hard drive (Macintosh HD) located in the upper-right corner and the Trash located in the bottom right corner. Along the bottom left edge sits the control strip, and menus are located along the top.



Desktop or Finder

The computer interface is a metaphor for a physical world workspace, such as your classroom, which contains both a desk (and desktop) and file cabinet. In your classroom, you must manage papers. Your papers may be loose or placed into folders, and those papers and folders can sit on your classroom desktop or in your file cabinet. In your classroom file cabinet, you likely use some type of organization scheme.

In your computer workspace, you have a desktop and hard drive. You must manage files. Your files may be loose or placed into folders. Files and folders can sit on the desktop or on your hard drive. On your hard drive you will likely use some type of organization scheme. We will discuss file management and the hard drive later in this module.

Navigating

Navigation is the metaphor for moving throughout your computer. You navigate across the desktop and through the hierarchical levels of the hard drive. Once you reach a target folder, file, or application on the computer, you can then open and use it. Within an active file in an open application, you navigate to access commands and select where to create your content.

Moving the Pointer

Move the pointer by moving the mouse. When you move the mouse up (away from you), the pointer moves up the screen. When you move the mouse down (towards you), the pointer moves down the screen. As you move the mouse left or right the pointer moves left or right, on the screen. The speed at which you move the mouse correlates to the speed the pointer moves on the monitor screen.



Onscreen Pointer

Selecting (Clicking)

To select an icon, click the icon one time. This will highlight the item by darkening the icon and reversing the text color from black to white.



Example of One Unselected Item and One Selected Item

Opening (Double-Clicking)

Open an item by pointing to it and double-clicking, i.e., clicking the mouse twice in quick succession.

For example, when you double-click the Macintosh HD icon in the upper-right corner of the desktop, the window that opens displays the contents of the computer hard drive. Also, when you double-click an application icon (or its alias), the application opens, or launches.

Moving Objects (Dragging and dropping)

Icons on your desktop and in folders can be moved to different locations on your computer.

To move an item follow these steps:

1. Place the pointer over an icon on the screen.
2. Hold the mouse button down.
3. Continue to hold down the mouse button and drag the icon to its new location.
4. Release the mouse button to place the item in its new location.

Onscreen Objects

In this section you will explore the different types of objects that appear onscreen and how to interact with them.

Icons

Each item stored on the computer is represented by a picture, or icon, to assist you with identification. Becoming familiar with these icons will help you efficiently use your computer.



Icons that Can Be Bound on Your Computer.

Aliases

An Alias is a small file that acts like a pointer to another file, application, folder, or remote server. You can place aliases of items in convenient locations on your computer to provide rapid access to items. Alias icons contain a small arrow as part of the icon itself and use italic text for their name.



An Alias for Microsoft Word

For example, you may want to place an alias of a document or application you often use onto your desktop. When you double-click the alias, the file or application it is associated with launches, without you having to find that file or application on the computer. To create an alias follow these steps:

1. Click to select the icon of the file, folder, or application for which you want to make an alias.
2. From the File menu, select Make Alias.
3. An alias is created in the same folder as the original item or on the desktop if that is where the original is located. Move this alias to any desired, convenient location.

Control Strip

The Control Strip sits along the bottom of the desktop in the left corner. It can be extended and retracted by clicking the tab. When extended, the Control Strip displays a variety of plug-in utilities that provide easy access for changing settings on your computer or accessing certain applications.



Control Strip, Expanded

Hard Drive and its Contents

All applications and files are stored on the hard drive of the computer. Double-click the hard drive icon to view the top level contents.

Folders

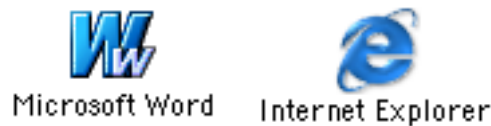
A folder works the same as the folders in a file cabinet. A folder assists you with organizing your files into groups for easy retrieval. You can nest folders, that is, place folders inside of folders. Certain folders, including the Applications folder, are identified by a customized icon. Double-click any folder to open it and view its contents.



Icons for Plain Folder and Applications Folder

Applications

Applications are programs used to create documents and other files or to perform certain functions such as enabling browsing of the Web. Open an application by double-clicking its icon.



Application Icons for Microsoft Word and Internet Explorer

Files (Documents)

Files or documents are the saved work created using an application. To help you identify the application that was used to create a document, each application uses a unique document icon. Open a document by double-clicking its icon.



SimpleText File and Word File

System Software

The most important folder on your hard drive is titled System Folder. This folder contains all of the necessary system files to make your computer function. The System folder also has a special double smiling face icon that identifies it as the system folder. The System folder opens like a regular folder, by double-clicking its icon. Be careful, however to not move items from this folder, or your computer may not function properly.



System Folder

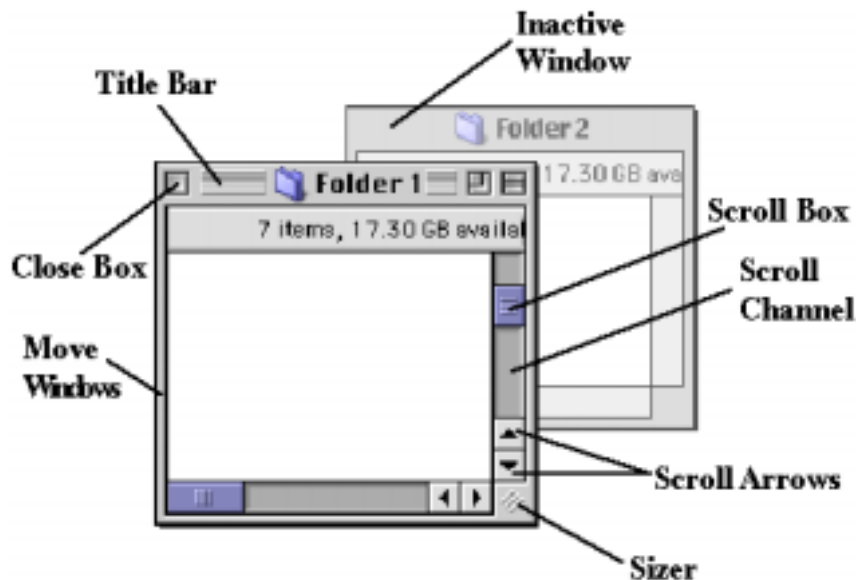
System Folder Icon

Windows, Window Elements, and Window Management

When you double-click a folder or document, a window opens to display the item's contents. This window can be manipulated a number of ways to suit your preferences and accommodate your workflow.

Title Bar

The title bar is located at the top of each window and contains the name of the folder or document that is open. The title bar indicates if the window is the active window.



Windows and Elements of Windows

For example, if you open two windows, one will be in the foreground (active) and the other will be in the background (inactive). The darker tint title and the presence of gray horizontal lines in the title bar identifies the active window.

Scroll Arrows, Channels and Boxes

Often times the window contains more content than will fit within the viewable section. When this occurs, use the scroll arrows on the right bottom corner of the window to scroll through the entire contents of the window. As you scroll, the scroll box moves up or down or left and right in the scroll channel, indicating the distance to the end of the window.

Scroll through the window contents by either:

- Repeatedly clicking the up or down arrow on the scroll bar.
- Click and hold either arrow to move more rapidly through the contents
- Click and hold the scroll box and drag it up or down.
- Click the scroll channel above or below the scroll box to jump up or down.

Sizer

Use the sizer to resize a window.

1. Click and hold in the lower right corner of the window.
2. Drag the window up, down, and sideways to achieve the size window you want.

Close Box and Closing

Use the close box to close a window.

1. Point the mouse over the upper left corner of the window you want to close.
2. Click inside the close box. The window closes.

Moving and Positioning Windows

Windows can be moved around the screen to make viewing objects behind it easier or for organizing multiple open windows. To move a window, follow these steps:

1. Click and hold the title bar of the window OR along any either of the window.
2. Drag the window to the desired location.
3. Release the mouse button.

Mac Tutorial

Your iMac came with an installed multimedia tutorial which presents basic techniques for using your computer.

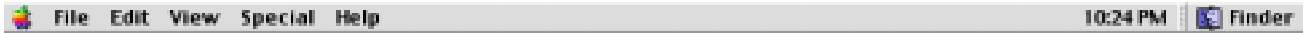
Using the Mac Tutorial to Learn/Review Mousing Techniques

The Mac Tutorial is a visual, interactive tutorial on Macintosh Basics. One section focuses on mouse techniques. For further instruction on the topics already covered in this lesson, follow these steps to begin the Mac Tutorial:

1. Point to the Help menu.
2. Click once on the Help menu.
3. Move your mouse down to the third selection titled Mac Tutorials and click the mouse.
4. Click the blue words titled Desktop Skills.
5. Follow the instructions of the tutorial.

The Menu Bar and Menus

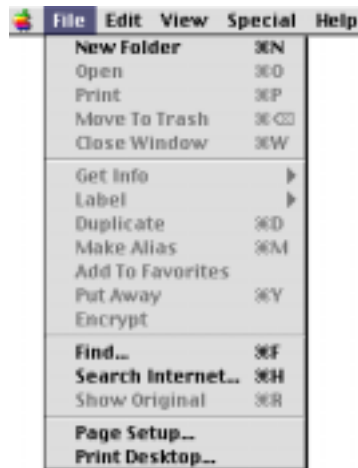
The menu bar is at the top of the Desktop and contains a many menus. Think of each menu as a category within which similar items and commands are organized. These menus change depending on which application is currently running.



Menu Bar along the top of the Desktop

To Select from a Menu:

1. Point to the word representing the menu you want to open such as File, Edit, or View.
2. Click the word. The menu opens and remains open.
3. Point to the desired item or command and click to select it. Your selected item opens or your selected command is executed.



File Menu

Application Menu

The Application menu shows you which applications are running on your computer at any given time. It is also an area where you can switch between running applications, hide applications, or show hidden applications.

To view which applications are presently running on your computer:

1. Point to the Application menu icon in the upper right corner of your desktop.
2. Click to open the Application menu. The Application menu lists the open, or currently running, applications. The currently active application, that is, the one you are currently using, is denoted by a checkmark.

Note: When viewed on a CD or web site, this training module requires both Adobe Acrobat and Internet Explorer to be running, hence their appearance in the Application menu. Because you are actually viewing this training module through Internet Explorer, it will be checked as the currently active application.



Application Menu with Internet Explorer Active

To hide an application:

1. Make sure the application that you want to hide is the currently active application.
2. Click the Application menu. The first item in the menu will be "Hide (name of currently active application)."



Selecting Hide Internet Explorer

3. Click this first item. The window for the currently active application disappears and another application or the Finder becomes active.

To show and make active an hidden application:

1. Click the Application menu.
2. Click the name of the hidden application you want to show.



Selecting to Show Internet Explorer

3. The application's window appears in the foreground.

Create a Floating Application Menu

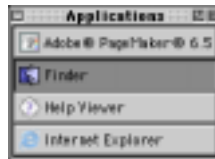
You can make the application menu float anywhere on your desktop. It will always appear in the foreground, regardless of which application is active. This technique is useful when you need to frequently switch between applications. You can place the floating application menu at a convenient location, close to where you are working, and switch between applications with a single click. To open the floating application menu, follow these steps:

1. Point to the Application menu then press and hold down your mouse.
2. While continuing to hold the mouse button down, drag your mouse downward past the bottom of the Application menu.
3. The Application menu will be "ripped off" its original location. A rectangular ghost outline remains as long as you hold your mouse down.



Floating Application Menu Ghost

4. Drag the ghost outline to where you want to place the Application menu.
5. Release your mouse and the floating Application menu appears.



Floating Application Menu, Icons and Application Names

6. View the Application menu with application icons and names or with icons only. Click the zoom box, second from right in the title bar of the menu, to toggle between these two options.



Floating Application Menu, Icons Only

7. To switch between applications, click the icon for the program you want to make active.

Note that the standard Application menu remains active and accessible even when the floating

version is selected.

9. To close the floating Application menu, click the close box at the top left of the floating Application menu.

Apple Menu

The Apple menu is located in the upper left corner of the desktop and is represented by a multicolored apple icon. The Apple menu allows you to easily access frequently used applications and utilities, such as Control Panels and the Chooser.

By default, the Apple menu supports submenus, a feature that can be turned on or off in the Apple Menu Options control panel. Many of the items listed in the Apple Menu have triangular arrows on the same line indicating a submenu for that item. When the submenus feature is active, pointing to an item with a triangle produces its submenu contents without having to open multiple windows.

Accessing the Appearance Control Panel Through the Apple menu

In a moment you will be using the Appearance control panel to customize your computer's appearance. Open this control panel by selecting it from the Control Panels submenu following these steps:

1. Point to the Apple menu and press and hold down your mouse.
2. Drag down to Control Panels, but do not release. The triangular arrow indicates that the Control Panel has a submenu associated with it. The Control Panel submenu appears to the right.
3. Continuing to hold down your mouse, move to the right into the submenu then up to the Appearance control panel and release the mouse. The Appearance control panel appears.

Modify Your Desktop Using the Appearance Control Panel

You can change certain settings on the computer to customize it for your own aesthetic and practical purposes. To change the overall appearance of the computer's background and windows, follow these steps

1. In the Appearance control panels, Click the Themes tab in the upper left corner.
2. Use the bottom scroll bar to view available themes.
3. Select a theme you want to apply to your computer by clicking its colored window.
4. Close the Appearance window by clicking the close box in the upper left corner of the window. The selected theme is applied.

Recently Used Feature

Click the Apple menu to open it. Note the three recently used items folders:

- Recent Applications

- Recent Documents
- Recent Folders

Each of these folders automatically keeps aliases of the last 10 items you accessed. For example, if you quit Internet Explorer and then want to open it again, simply select Internet Explorer from the Recent Applications Apple menu item.

OS 9 Help Resources - Help Center and Mac Help

There are numerous options available to access additional help resources for the Macintosh operating system and associated applications. All help items are available under the Help menu at the top of your screen.

Help Center

The Help Center accessed through the Help menu is a compilation of all the help topics available on the Macintosh. From the Apple DVD Player and AppleWorks to Mac Tutorials and QuickTime Help, the help files are all available here. You can type one or more words into the search field to find particular help documents you need.

Mac Help

Mac Help, a subset of the Help Center, is accessible via the Help Center or directly from the Help menu. The Mac Help documents reference Macintosh operating system help files only. These are the features of the Macintosh that are referred to in this module and are helpful for productive use of the Macintosh.

To use Mac Help to Learn about Working with Icons.

1. From the Help menu, select Mac Help.
2. Click the Shortcuts and Tips.
3. In the right column of the Mac help window, click Keyboard shortcuts.
4. In the next window, click Working with Icons.
5. Review the resulting window to learn some useful techniques for working with icons.

NOTE: You could alternately use the search feature of Mac help and search for the word "icon," which would open a window with information pertaining to icons.

Searching and Finding with OS 9

OS 9 features a search tool called Sherlock 2, named after the famous detective. Sherlock 2 helps you locate everything from files on your computer to Internet web sites.

Finding items and information with Sherlock 2

Sherlock 2 allows you to search the Internet without even launching a web browser. Sherlock 2 Uses Internet search engines to find files on the Internet. Sherlock 2 can be accessed a number of ways:

- From the File menu, select Find.
- From the File menu, select Search the Internet.
- From the Apple menu, select Sherlock 2.

The Sherlock 2 window opens. Sherlock 2 uses the concept of channels to organize its search resources. Each of these methods preselects a channel to search:

- Selecting Find from the File menu preselects the Files channel.
- Selecting Search the Internet from the File menu or Sherlock 2 from the Apple menu preselects the Internet channel.
- Eight channels are available for search. Regardless of how you opened Sherlock 2, you can easily switch between channels by clicking any channel icon. The eight channels:

- Files - The contents of the computer or local network
- Internet - Internet web sites
- People - People on the Internet
- Shopping - Shopping web sites
- News - News web sites
- Apple - Apple's web site
- Reference - Reference web sites
- My Channel - Your own customizable channel



Sherlock 2 Window

Exercise: Searching for Files or Applications on the Computer

Sherlock can locate files and applications on your computer hard drive and local network drives.

1. Use one of the three previously mentioned methods to open the Sherlock 2 application.
2. From the Sherlock 2 window, select the first channel titled Files.
3. Type all or part of the name of a file or application in the search field, for example, Internet Explorer.
4. Click the magnifying glass or press Return on the keyboard.
5. The results are displayed in a small window below your search string. Click one of the results in the results window.
6. The bottom window displays the path to locate the file, which usually begins with opening your hard drive.
7. Alternately, you can double-click the file within the bottom Sherlock 2 window to launch the item directly from the results window.

Using Other Disks and Drives

Your iMac is equipped with an internal CD/DVD ROM drive and an external floppy drive.

CD Drive

The CD drive reads CDs, both audio CDs and CD-ROMs that have been inserted into the drive. CD-ROMs contain data and are typically used for installing new software or for accessing programs, including games, and data, including images and movies. Audio CDs contain data in the form of sound files.

Using a CD-ROM

To use a CD-ROM disk, follow these steps:

1. Insert the CD-ROM disk, with the label side up, into the CD/DVD ROM slot between the two colored speakers on the computer.
2. An icon of the disk appears on the computer desktop hard drive icon.



Microsoft Office 2001

Microsoft Office 2001 CD-ROM Icon on the Desktop

3. Double-click the CD-ROM icon to view the contents of the disk.
4. Use a CD-ROM disk as you would the hard drive or other folders on the computer by double-clicking icons to open them.

There are a number of ways to remove a CD-ROM from your computer:

- Click and drag the CD-ROM icon into the trash.
- Press the Eject key located at the top right corner of the keyboard.
- Click the CD-ROM icon to select it, then from the Special menu select Eject.
- Click the CD-ROM icon to select it, then from the File menu select Put Away.

Playing an Audio CD

The computer can play audio CDs through the internal speakers or through an optional headset plugged into the computer. To play an audio CD, follow these steps:

1. Insert the audio CD as instructed above.
2. The CD should begin playing automatically; if it does not double-click the audio CD icon on the desktop, then double-click the first track (file) that appears in the resulting window.
3. The music will begin to play and the Apple CD player application will open. This program gives you greater control of CD playback.

To select specific tracks and settings using the control strip plug-in, follow these steps:

4. Click the disk icon on the control strip at the bottom left corner of the screen.
5. Click the track number you want to hear or one of the commands you want to select.



Pop-up CD Menu and CD Button on Control Strip

Floppy Drive

The floppy drive is used mainly for writing and reading data, such as documents and small applications to and from a floppy disk. In some cases floppies are still used to install software. A floppy disk is square and can hold up to 1.4MB of data.

Floppy Drive and Floppies (Floppy Disks)

Inserting and Using a Floppy Disk

Hold the floppy disk with the label side up and the metal slider away from you, towards the floppy disk drive.

Insert the floppy disk into the external floppy disk drive by pushing the disk all the way into the disk drive until you hear and/or feel a click indicating that the disk is set in position.

An icon of the disk appears on the computer desktop just below the hard drive icon.

Double-click the floppy disk icon to view the contents of the disk.

The Macintosh can read both Windows (PC) formatted disks and Macintosh formatted disks. Initializing is a process that the computer uses to format a disk and to be able to read and write data to the disk. To initialize a disk, follow these steps:

1. Insert the disk into the VST external floppy drive.
2. If the disk is not already initialized, a dialog window will prompt you to initialize the disk.

3. To proceed, click Initialize. Note that initializing will erase all existing data on the floppy disk, however if you have never written any data to the disk, then there is no data to lose.
4. The status of the initialization process is displayed. When initialization is complete, the floppy is ready to be used.



Initialize Disk Dialog Window Box

Ejecting a Floppy Disk

- There are numerous ways to remove a floppy disk from your computer:
 - Click and drag the floppy disk icon into the Trash icon.
 - Click the floppy disk icon to select it, then from the Special menu select Eject.
 - Click the floppy disk icon to select it, then from the File menu select Put Away.

Managing Your Work

The management of your documents, applications, and folders is very important. Like your teacher's desk and file cabinet, if you do not have some form of organization, it is extremely difficult to keep track of items and to use your resources efficiently.

Organizing Your Hard Drive (File Cabinet)

The computer desktop is the starting point for the hierarchical organization of a computer, and the hard drive is the first level. Frequently used documents and aliases pointing to frequently used applications are often located on the desktop of a computer. Opening the hard drive is like opening your file cabinet when you view the contents of the hard drive (double-click the hard drive icon) you will notice folders that contain additional files, folders and applications.

Creating folders

Folders are a convenient way to organize items on the computer. To create a folder, follow these steps:

1. Double-click the hard drive.
2. From the File menu, select the New Folder. A new folder is created in the active window, which in this case is the root level of the hard drive.
3. Click the new folder's name and then press the Return key.
4. The folder name is highlighted and is ready to be replaced by a new name.
5. Type My Documents, then press the return key to deselect the name.

Nesting Folders

Placing folders inside of folders is a practical way to organize your documents. Inside your My Documents folder you may want to create additional folders and levels for organizing stored files.

1. Double-click the My Documents folder that you just created to open it.
2. From the File menu, select New Folder to create another folder nested inside the My Documents folder.
3. Title this folder with a name useful for you, for example, Lesson Plans.
4. Within Lesson Plans, you may want to create folders for the different content areas.

There is no right or wrong way to organize. Use a scheme that best suits your own needs.

Working with Documents

You will likely find that skills developed using one program and be applicable to other programs. Many commands are executed in a similar or identical way in different applications. SimpleText is a basic text editor built into the Mac OS. Let's use it as our example application.

Open an Application (SimpleText)

You must first open an application before you can create or modify documents.

1. Locate the icon for the SimpleText application in the Applications folder on your hard drive.
2. Double-click the application icon to launch (open) the SimpleText application. A new, blank SimpleText document opens.

Enter Text

To enter text into your document, be sure the cursor is blinking in your document then simply begin typing.

Editing Text by Selecting, Cutting, Copying, and Pasting

Editing on the computer is easily accomplished. You can rearrange text in your document by cutting, copying, and pasting words, sentences, paragraphs, even entire documents.

1. Type a sentence into SimpleText. Use the following sentence you'd like:

Learning to use the computer can have a positive effect upon my curriculum and student learning in my classroom.

2. Select the whole sentence by clicking and holding the mouse button just to the left of the first word (Learning) and then dragging the mouse to the right side of the last word (classroom).
3. Release the mouse when all text is selected.
4. From the Edit menu, select Copy. Now the computer will remember the entire sentence that you selected.
5. Click the mouse after the last word in the sentence and press Return twice to move the cursor down to the next line.
6. From the Edit menu, select Paste.

The same sentence you just wrote, selected, and copied, is now pasted into the document. You can paste the same sentence as many times as you want and the computer will remember this sentence until you either select and copy a new letter, word, or sentence, or until you shut down the computer.

Undo Command

If you paste a section by mistake, you can undo your mistake.

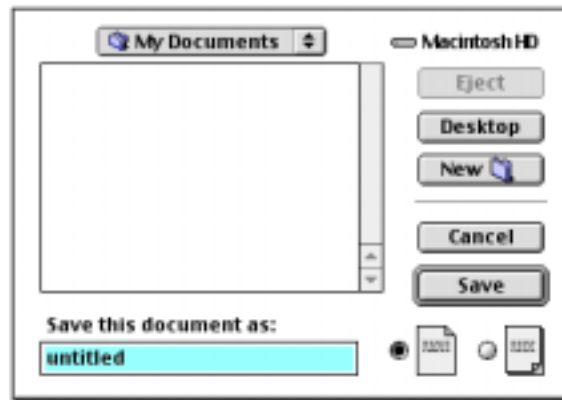
1. From the Edit menu, paste another sentence into your document as described above.
2. From the Edit menu, select Undo.

The text will be erased and the document will revert back to its appearance prior to the last paste. Some applications, including Microsoft Office 2001, provide an option for multiple Undo commands, which permits you to backtrack through the creation of your document, one step at a time.

Save a Document

The document you have just created needs to be saved to the hard drive for safe storage and future access.

1. From the File menu, select Save. The Save Dialog box opens the word Untitled is highlighted and ready to be replaced with a title of your choosing.



The Save Window

2. Type Practice Document into the field.
3. Click the Desktop button. (If the Desktop button is gray, then the computer is ready for the next step).
4. The drop down menu at the top of the dialog box should now say Desktop and the Desktop button on the right should be grayed out (this indicates that the file you are about to save will be saved to the desktop location of the computer).
5. Click Save.

The SimpleText document will reappear and the saved file will be stored on the computer desktop close to the Hard Drive icon.

Save As

The File menu contains an option to Save As which is used to make new versions or copies of a document. If, for example, you want to save another copy of this document to modify, yet maintain a copy of this document in its present state, select Save As... from the File menu and save the document with a different name. You will then have a duplicate of this document with a different name that you can modify as you wish.

Saving Directly to Desired Storage Location

To save a document into a different folder, such as the My Documents folder, instead of the Desktop, follow these steps:

1. With your SimpleText document open, select Save As from the File menu.
2. Click the Desktop button (if the Desktop button is gray, then your computer is ready for the next step). The drop down menu at the top of the dialog box should now say Desktop.
3. Double-click the words Macintosh HD in the location window.
4. Double-click the My Documents folder in the location window. The drop down menu at the top of the dialog box should now say My Documents which indicates that this is where the file will be saved.
5. Click Save.

Printing Your Document

Before you are able to print your document, you must inform the computer what printer you would like to use. Your iMac arrived with a companion LexMark printer. It may already be set up on your computer. Look for a LexMark printer icon on your desktop with a bold outline which indicates that it is the active printer. If this icon is present, you are ready to print. Otherwise, follow these steps:

1. With your SimpleText document open, select Chooser from the Apple menu. In the left pane of the Chooser window are listed the various printer drivers installed on your computer.
2. Click the driver that corresponds to the type of computer you are going to use, in your case, the LexMark printer driver. (If there is no LexMark printer driver, you will need to install the software or contact your technical support for assistance).
3. Available printers for this driver appear in the pane at right. Select the appropriate LexMark printer, that is, the one in your classroom to which you will print.
4. Close the chooser. Click the close box.

5. From the File menu, select Print. The print dialog box opens with options including the number of copies you wish to print.
6. Click the lower right button titled Print.
7. The printer prints the document.

Closing the Document

Click the close box to close the document but keep the application open. To quit the application, select Quit from the File menu.

Note, you can also Quit before closing the document window. If your document has not been saved since the last change you made, you are to save the changes or to discard them before the application quits.

Additional File Management Techniques

After you have created a file, you may want to move it to a new location, make a duplicate copy, or delete the file.

Moving a File

An easy way to move a file from one location to another is to have both the original file location and the target new location in view on the desktop. To move a file to a new location, follow these steps:

1. Point to the icon for the file you want to move then click and hold down the mouse.
2. Keep holding down the mouse button and drag the file to its new location.

Spring Loaded Windows

You may need to place a file into a folder that is several layers down in the folder hierarchy. To put the folder where you want it without having to open all the folders manually, follow these steps:

1. Click and drag the file, and pause over the top-level folder. That folder opens automatically.
2. Keep holding down the mouse button, drag the file, and pause over the next folder. That folder opens automatically.
3. Repeat step 2 until you find the folder you need, then release the mouse button to place the file into the folder.

Duplicating a file

To make an exact duplicate of an existing file, follow these steps:

1. Select the file by clicking its icon one time.
2. From the File menu, select Duplicate.

3. An exact copy of the file is created in the folder (or desktop) where the original file is located.
4. The duplicate file has the same name as the original with the addition of the word Copy at the end.

Dragging or Sending a File to the Trash

To delete an unwanted file, follow these steps:

1. Click and drag the file to the trash which is located in the lower right corner of the desktop.
2. As the file passes over the top of the Trash, the icon will highlight (become darker).



Placing an Unwanted Folder in the Trash

3. While the Trash is highlighted, release the mouse button.
4. The Trash icon changes to a Trash can with its lid off to the side, indicating that the Trash has items in it.

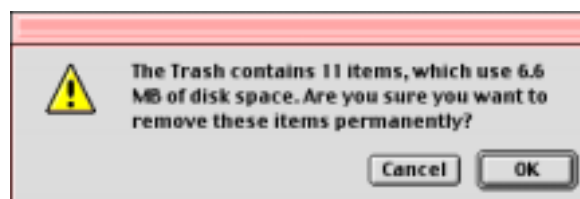
Retrieving Files from the Trash

Like trash in the garbage can in your classroom, it is possible to retrieve files from the Trash until the Trash can is emptied. The computer's trash acts like a folder. Double-click the Trash icon to view its contents. Drag the items you want to retrieve from the Trash window into another window or folder or onto the desktop.

Emptying the Trash

When you are sure that you no longer need the files located in the Trash, you can empty the trash to free up some space on the hard drive.

1. From the Special menu, select Empty Trash.
2. A dialog box opens asking you to confirm that you want to delete all the items in the Trash.

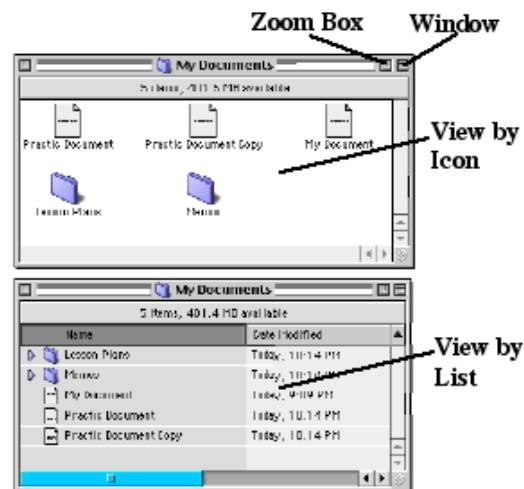


Empty Trash Confirmation Dialog Box

3. Click OK to empty the Trash.

Additional Techniques for Window Management

There are other items that are helpful to know that will assist you with window management.



View Options for Viewing Folders and Files in a Window

Window Shade

Multiple open windows can clutter the computer screen. Window Shade will assist you with minimizing window sizes and make it possible to view items that reside behind open windows.

- Click the Window Shade area of a window (top right corner) to collapse the window.
- Click the Window Shade area again to restore the window.

Zoom Box

Click the Zoom Box to expand a window to the largest size necessary to view all of its contents, or to fill the entire screen. Clicking the zoom box again toggles the window back to the previous size.

Changing Your View

As demonstrated in the previous graphic, you can view windows in a variety of formats. To change the view for an open and active window, follow these steps:

1. From the View menu, select As List.
2. The contents of the window are now displayed in list format.
3. From the View menu, select As Icon to return to the view as icon format.

Sort Column and Sort Order

When viewing as list, you can sort the items in the window by Name, Date Modified, Size, or Kind by clicking the respective column heading within the window. You can also reverse the

order that items are listed by clicking the Sort Order button in the upper right corner of a View As List window.



Column Headers in List View and the Sort Order button

Cleanup

When viewing by icon, you can have the computer arrange the icons in order. With an open window and View as icons selected, select Clean Up from the View menu. All icons in the active window are rearranged in an ordered manner.

Using Your Apple Pro Keyboard

The Apple Pro Keyboard is a full size keyboard designed for comfortable use. In addition to keys for numbers, letters, and symbols, there are function keys.

Keyboard Shortcuts

Keyboard shortcuts make it possible to activate certain menu items without using the mouse.

Most menu items have a keyboard shortcut equivalent listed next to the menu item. For example, under the File menu, next to the Save item is the keyboard shortcut listed as Command-S. The Command key is located next to the space bar and has a picture of an apple on it. Pressing the keyboard command is equivalent to selecting the menu item with the mouse.



Command-S Keyboard Shortcut

For an extensive list of keyboard shortcuts consult, Mac Help.

Understanding the Mac OS 9 System Folder

The System folder is located on the hard drive of your computer. It contains many folders and files that enable the computer operating system to function. When investigating the System folder, be sure to not move or delete items from their original location, as this may cause some programs and/or your computer to function improperly.

Contents of the System Folder

The following primary items are included in the System folder:

Files:

- System
- Finder

Folders:

- Apple Menu Items
- Control Panels
- Control Strip Modules
- Extensions
- Fonts
- Help Files
- Preferences
- Shutdown Items
- Startup items

Modifying System Settings

To effect the system settings, most of your controls are in the Control Panels folder. You can access the control panels from the Apple menu. Items such as Appearance, Date and Time, Monitors, and Sound, can all be adjusted from their respective control panels.

Default Settings

The computer comes from the factory with certain default settings already in place. Some control panels offer the option to reset the settings back to the default settings.

Memory Concepts

Memory, also known as RAM (Random Access Memory) is used by the computer to run applications and perform certain functions. Your computer presently has 64 MB (megabytes) of (RAM) memory. When the computer starts up, it loads the operating system components from the hard drive into RAM memory. When you create text in a document, that text is copied and stored in RAM memory. RAM memory is temporary memory, but your hard drive is permanent. If you turn the computer off, all items stored in RAM memory will be lost, but items that have been saved (written) to the hard drive will remain and be available when the computer starts up again. The more memory your computer has the more applications you can use at the same time and, typically, the faster the speed of computer processing.

Definitions

Below are a few definitions for items pertaining to memory.

- RAM - Random Access Memory. RAM is temporary memory that the computer uses to run applications and other functions.
- Memory - Comes in the form of a RAM chip and is installed inside the computer.
- System memory - The operating system requires a certain amount of RAM memory to run the computer. This is referred to as the system memory.
- Application memory - Each application requires a specific amount of RAM memory to run. This is referred to as the application memory. When you launch an application, the computer reserves this amount of memory for the application.

Adjusting Memory for Memory-Intensive Applications

Some applications function better when they are allotted additional memory. To boost the application memory, follow these steps:

1. Click an application icon to select it.
2. From the File menu, select Get Info then Memory from.
3. The Application Info window opens with the memory settings for the application displayed.



Get Info Window with Memory Requirements and Settings for Adobe Acrobat

4. Adjust the amount of Application Memory allotted to the application.
5. Select the numbers in the Preferred Size field and increase them by 1,000 K or more.
6. Close the window. The next time you start this application, the new memory settings will be in effect.

Troubleshooting Computer Problems

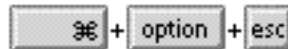
At times computers will not function properly and will need assistance to recover from the malfunction. The following are some situations that may happen and ways to correct the situation.

First Line of Defense

- Save often to avoid losing work.
- When your computer appears to be functioning improperly, check to make sure all the cables are securely plugged in.
- Restarting the computer can often times correct a problem. From the Finder's Special menu, select Restart.

Frozen Computer, Mouse Moves

If the computer is not responding to your mouse clicks, but the cursor does move properly, you may be able to force the application to quit by pressing the following key combination (pressing all keys simultaneously):



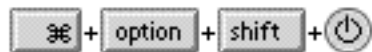
Command - Option - esc Key Command

This (hopefully) forces the application to quit. You will lose any unsaved work in the application that quits, however, you will still have the opportunity to not only save work that may be open in other applications but also restart the computer properly. A force quit will not always work. You may still have to do a soft or hard restart. Always restart the computer after forcing an application to quit.

Soft Restart

A soft restart, if possible, is always preferable to a hard restart. A soft restart involves a combination of key strokes:

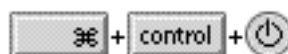
1. Simultaneously press the Command-Option-Shift keys and the Power (On/Off) button.
2. The computer should restart.



The Command-Option-Shift-Power Button Soft Restart Key Command

Hard Restart

If the computer ceases to function and a soft restart does not work, you have no option but to restart the computer. First attempt to force a restart of the computer using the following key command:



Force Restart Key Command (some models)

If this does not work, press the Hard Restart button on the side of the iMac, where all the cables connect to the computer. The Hard Restart button is marked with a small triangle and when pushed, the computer will immediately go dark before restarting itself.

Shutting Down Your Mac

It is important to shut down (turn off) the computer properly each time you are finished using it. The computer's shutdown process involves closing utilities and small applications and if these functions are not performed prior to the computer being turned off, damage may result to the system files.

Options for Shutting Down

All Macintosh computers can be shut down from the Special menu. By selecting Shut Down, your computer will close all open documents and applications and turn itself off.

Closing Thoughts

Mac OS 9 is a sophisticated operating system that runs your iMac computer. Continuing to expand your knowledge of the operating system will lead to a greater understanding of how your computer works. Developing your ability to interact with the operating system will increase the ease and efficiency of using your computer.

Resources

A list of linked web resources can be found on the [Mac OS 9 Resources](#) page.