Asian
COMPUTECH BOOK





DTP
DeskTop Publishing
COURSE BOOK

A Complete Text-Book of Desktop Publishing *for* Various Courses

Detailed exposition of Basic and advanced tools available in Windows XP, Microsoft Word 2003, Adobe PageMaker 7, QuarkXpress, Corel DRAW 12, Adobe Illustrator and Adobe Photoshop CS





Step-by-step description of Commands for merging drawings, Graphics and managing long documents.

Computer/DTP Fundamentals

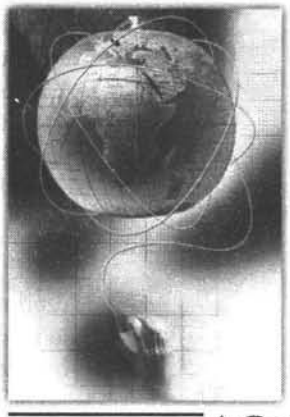
DOS / Microsoft Windows XP

Adobe PageMaker 7 / QuarkXpress

CorelDRAW 12 / Adobe Illustrator

Adobe PhotoShop CS / Utilities





DTP DeskTop Publishing COURSE BOOK

A Complete Text-Book of Desktop Publishing *for* Everyone

Windows XP ✠ PageMaker 7 ✠ QuarkXpress
CorelDRAW 12 ✠ Adobe Illustrator ✠ Adobe Photoshop CS
✠ Adobe Type Manager

by

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Preface

DTP, which is popular and short form of Desk Top Publishing is one of the major sources of self employment in our country. Any student can start his or her career in DTP and rise to become a professional graphic designer or even animator. For DTP, several application software *viz.* PageMaker 7, MS Word, CorelDraw, PhotoShop, Illustrator and Quark Express *etc* are in use.

DTP started in 90s in our country. In early years software were not as powerful and Windows was only a mother software for DTP programs and not an operating system. With introduction of Windows 95, complete structure of DTP got changed. Today, the DTP done on PCs is no less than the one time very powerful and unique MAC system. Presently XP and Vista versions of Windows are being used as main application software besides an operating system. Processing speed of PC has gone into gigahertz ; main computer memory has increased to hundreds of megahertz. Secondary memory to store data, which we call hard disk is now available in hundreds of GBs. With such huge developments in the field of hardware, you can imagine how powerful the DTP has become in current times.

Viewing large employment opportunities in the field of DTP, our Government has introduced various certificate and diploma courses in ITI / ITCs and other computer institutes throughout India. After passing out from 10^{th} or 12^{th} class, school level students can take admission in these courses and complete their training in six months to one year.

This book has been written strictly according to the requirements of those students, studying in various government and non-government institutions. Description of latest version of DTP software which are currently in use, has been given in a very simple language. DTP Fundamentals, Computer Fundamentals and various printing techniques have also been explained so that students can make their career and enter in DTP profession with full maturity.

- Authors

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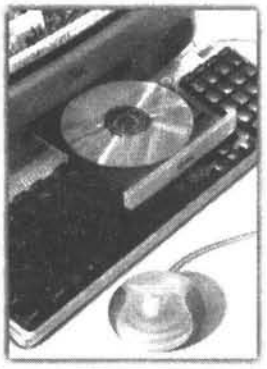
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1 Computer Fundamentals

A computer is a machine that manipulates data according to a list of instructions. Computer science is the study of the theoretical foundations of information and computation and their implementation and application in computer systems.

1.1 What is Computing?

Computing is the activity of developing and using computer technology, including computer hardware and software. It is the computer-specific part of information technology. Computer science is the study of the theoretical foundations of computing and the application of the theories in computing.

1.2 Computer hardware

Computer hardware is the physical part of a computer, including the digital circuitry, as distinguished from the computer software that executes within the hardware.

The hardware of a computer is infrequently changed, in comparison with software and hardware data, which are "soft" in the sense that they are readily created, modified or erased on the computer. Firmware is a special type of software that rarely, if ever, needs to be changed and so is stored on hardware devices such as read-only memory (ROM) where it is not readily changed.



1.3 Computer Software

Computer software is a general term used to describe a collection of computer programs, procedures and documentation that perform some tasks on a computer system. The term includes application software such as word processors which perform productive tasks for users, system software such as operating systems, which interface with hardware to provide the necessary services for application software, and middleware which controls and co-ordinates distributed systems.

1.4 Application Software

Application software is a subclass of computer software that employs the capabilities of a computer directly and thoroughly to a task that the user wishes to perform. Typical examples of software applications are word processors, spreadsheets, and media players.

1.5 System Software

System software is any computer software which manages and controls computer hardware so that application software can perform a task. Operating systems, such as Microsoft Windows, Mac OS X or Linux, are prominent examples of system software.

1.6 Operating System

An operating system (OS) is software that manages computer resources and provides programmers with an interface used to access those resources. An operating system processes system data and user input, and responds by allocating and managing tasks and internal system resources as a service to users and programs of the system. An operating system performs basic tasks such as controlling and allocating memory, prioritizing system requests, controlling input and output devices, facilitating computer networking and managing files. Common contemporary desktop OSes are Linux, Mac OS X, Microsoft Windows and Solaris. Windows is most popular on desktops while Linux is most popular in server environments.

1.7 Input/Output Devices

I/O is the means by which a computer receives information from the outside world and sends results back. Devices that provide input or output to the computer are called peripherals. On a typical personal computer, peripherals include input devices like the keyboard and mouse, and output devices such as the display and printer. Hard disk drives, floppy disk drives and optical disc drives serve as both input and output devices.

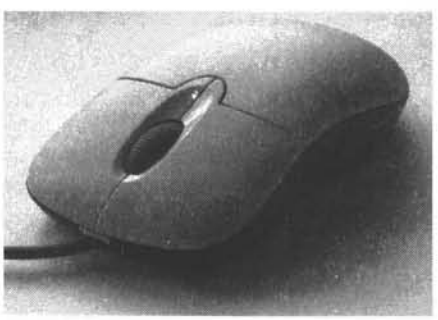
1.8 Computer Keyboard

In computing, a keyboard is a peripheral partially modeled after the typewriter keyboard. Physically, a keyboard is an arrangement of buttons, or keys.



A keyboard typically has characters engraved or printed on the keys; in most cases, each press of a key corresponds to a single written symbol. However, to produce some symbols requires pressing and holding several keys simultaneously or in sequence; other keys do not produce any symbol, but instead affect the operation of the computer or the keyboard itself.

1.9 Computer Mouse



A mouse is a pointing device that functions by detecting two-dimensional motion relative to its supporting surface. Physically, a mouse consists of a small case, held under one of the user's hands, with one or more buttons. It sometimes features other elements, such as "wheels", which allow the user to perform various system-dependent operations, or extra buttons or features can add more control or dimensional input. The mouse's motion typically translates into the motion of a pointer on a display, which allows for fine control of a Graphical User Interface.

1.10 (OCR) Optical character recognition

Optical character recognition, usually abbreviated to OCR, is the mechanical or electronic translation of images of handwritten, typewritten or printed text (usually captured by a scanner) into machine-editable text.

1.11 What is OMR?

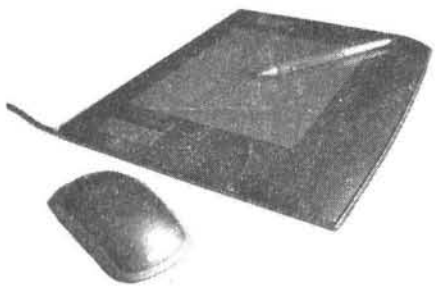
Optical mark recognition is the process of capturing data by contrasting reflectivity at predetermined positions on a page. By shining a beam of light onto the document the scanner is able to detect a marked area because it reflects less light than an unmarked surface. Some OMR devices use forms which are preprinted onto 'Transoptic' paper and measure the amount of light which passes through the paper, thus a mark on either side of the paper will reduce the amount of light passing through the paper.

1.11 MICR (Magnetic ink character recognition)

Magnetic Ink Character Recognition, or MICr, a character recognition technology adopted mainly by the banking industry to facilitate the processing of Checks. The major MICR fonts used around the world are E-13B and CMC-7. Almost all US, Canadian, and UK checks now include MICR characters at the bottom of the paper in the E-13B font.

1.12 Graphics tablet or Digitizer

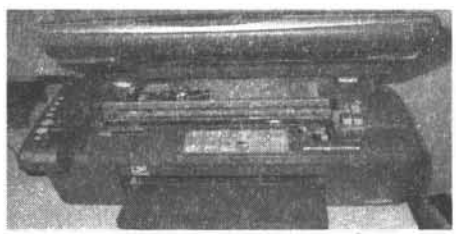
A graphics tablet (or digitizing tablet, graphics pad, drawing tablet) is a computer input device that allows one to hand-draw images and graphics, similar to the way one draws images with a pencil and paper. A graphics tablet consists of a flat surface upon which the user may "draw" an image using an attached stylus, a pen-like drawing apparatus. The image generally does not appear on the tablet itself but, rather, is displayed on the computer monitor.



Some tablets are intended as a general replacement for a mouse as the primary pointing and navigation device for desktop computers.

1.11 Computer Scanner

In computing, a scanner is a device that optically scans images, printed text, handwriting, or an object, and converts it to a digital image. Common examples found in offices are variations of the desktop (or flatbed) scanner where the document is placed on a glass window for scanning.



1.12 The Magnetic storage

Magnetic storage and magnetic recording are terms from engineering referring to the storage of data on a magnetized medium. Magnetic storage uses different patterns of magnetization in a magnetizable material to store data and is a form of non-volatile memory. The information is accessed using one or more read/write heads. Magnetic storage media, primarily hard disks, are widely used to store computer data as well as audio and video signals. In the field of computing, the term magnetic storage is preferred and in the field of audio and video production, the term magnetic recording is more commonly used. The distinction is less technical and more a matter of preference.

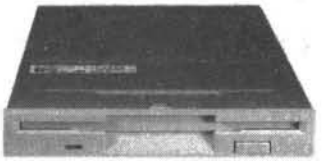
1.12 Hard Disk



A hard disk drive (HDD), commonly referred to as a hard drive, hard disk or fixed disk drive, is a non-volatile storage device which stores digitally encoded data on rapidly rotating platters with magnetic surfaces.

1.13 Floppy disk

A floppy disk is a data storage medium that is composed of a disk of thin, flexible ("floppy") magnetic storage medium encased in a square or rectangular plastic shell.



Floppy disks are read and written by a floppy disk drive or FDD, the initials of which should not be confused with "fixed disk drive", which is another term for a hard disk drive.

1.13 CD (Compact Disk)

A Compact Disc (or CD) is an optical used to store digital data, originally developed for storing digital audio. Standard CDs have a diameter of 120 mm and can hold up to 80 minutes of audio. A Compact Disc is made from a 1.2 mm thick disc of almost pure polycarbonate plastic and weighs approximately 16 grams. A thin layer of aluminium or, more rarely, gold is applied to the surface to make it reflective, and is protected by a film of lacquer. The lacquer is normally spin coated directly on top of the reflective layer. On top of that surface, the label print is applied. Common printing methods for CDs are screen-printing and offset printing.



The digital data on a CD begins at the center of the disc and proceeds outwards to the edge, which allows adaptation to the different size formats available. Standard CDs are available in two sizes. By far the most common is 120 mm in diameter, with a 74 or 80-minute audio capacity and a 650 or 700 MB data capacity.

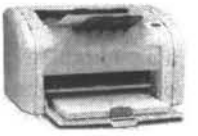
1.14 DVD (Digital Versatile Disc)

DVD (also known as "Digital Versatile Disc") is a popular optical disc storage media format. Its main uses are video and data storage. Most DVDs are of the same dimensions as compact discs (CDs) but store more than ten times as much data.

1.15 Computer Printer

A computer printer, or more commonly a printer, produces a hard copy (permanent human-readable text and/or graphics) of documents stored in electronic form, usually on physical print media such as paper or transparencies. Many printers are primarily used as local computer peripherals, and are attached by a printer cable to a computer which serves as a document source.

(a). Laser Printer



A laser printer is a common type of computer printer that rapidly produces high quality text and graphics on plain paper. As with digital photocopiers and MFPs, laser printers employ a xerographic printing process but differ from analog photocopiers in that the image is produced by the direct scanning of a laser beam across the printer's photoreceptor.

(b). Inkjet Printer

Inkjet printers operate by propelling variably-sized droplets of liquid or molten material (ink) onto almost any medium. They are the most common type of computer printer for the general

consumer due to their low cost, high quality of output, capability of printing in vivid color, and ease of use.

1.16 Bit and Byte

A **bit** is a binary digit, taking a value of either 0 or 1. For example, the number 10010111 is 8 bits long, or in most cases, one modern PC byte. Binary digits are a basic unit of information storage and communication in digital computing and digital information theory.

A **byte** is a unit of measurement of information storage, most often consisting of **eight bits**. In many computer architectures it is a unit of memory addressing. A **kibibyte** is made up of 1,024 bytes. A **mebibyte** is made up of 1,024 × 1,024 bytes.

1.17 RAM, ROM and ASCII

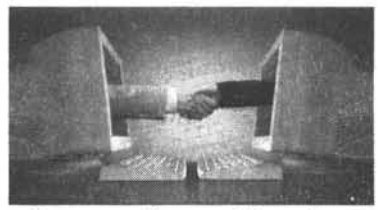
Random access memory (usually known by its acronym, RAM) is a type of computer data storage. Today it takes the form of integrated circuits that allow the stored data to be accessed in any order, i.e. at random. The word random thus refers to the fact that any piece of data can be returned in a constant time, regardless of its physical location and whether or not it is related to the previous piece of data.

Read-only memory (usually known by its acronym, ROM) is a class of storage media used in computers and other electronic devices. Because data stored in ROM, it cannot be modified (at least not very quickly or easily), it is mainly used to distribute firmware (software that is very closely tied to specific hardware, and unlikely to require frequent updates).

American Standard Code for Information Interchange (ASCII) is a character encoding based on the English alphabet. ASCII codes represent text in computers, communications equipment, and other devices that work with text.

1.18 Computer Networking

Computer networking is the engineering discipline concerned with communication between computer systems or devices. Networking, routers, routing protocols, and networking over the public Internet have their specifications defined in documents called RFCs.



(a). LAN (Local Area Network)

A local-area network is a computer network covering a small geographic area, like a home, office, or group of buildings e.g. a school. The defining characteristics of LANs, in contrast to wide-area networks (WANs), include their much higher data-transfer rates, smaller geographic range, and lack of a need for leased telecommunication lines.

Ethernet over unshielded twisted pair cabling, and Wi-Fi are the two most common technologies currently, but ARCNET, Token Ring and many others have been used in the past.

(b). WAN (Wide Area Network)

Wide Area Network (WAN) is a computer network that covers a broad area. Or, less formally, a network that uses routers and public communications links. WANs are used to connect LANs and other types of networks together, so that users and computers in one location can communicate with users and computers in other locations.

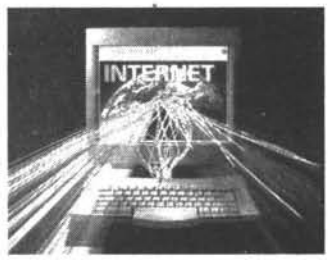
(c). MAN (Metropolitan Area Network)

Metropolitan area networks, or MANs, are large computer networks usually spanning a city. They typically use wireless infrastructure or Optical fiber connections to link their sites.

1.19 The Internet

The Internet is a worldwide, publicly accessible series of interconnected computer networks that transmit data by packet switching using the standard Internet Protocol (IP).

It is a "network of networks" that consists of millions of smaller domestic, academic, business, and government networks, which together carry various information and services, such as electronic mail, online chat, file transfer, and the interlinked web pages and other resources of the World Wide Web (WWW).



(a). E-mail or Electrnic mail

E-mail, short for electronic mail and often abbreviated to e-mail, email or simply mail, is a store and forward method of composing, sending, receiving and storing messages over electronic communication systems. The term "e-mail" (as a noun or verb) applies both to the Internet e-mail system based on the Simple Mail Transfer Protocol (SMTP) and to X.400 systems, and to intranet systems allowing users within one organization to e-mail each other. Intranets may use the Internet protocols or X.400 protocols for internal e-mail service supporting workgroup collaboration.

(b). WWW (World Wide Web)

The World Wide Web (commonly shortened to the Web) is a system of interlinked hypertext documents accessed via the Internet. With a Web browser, a user views Web pages that may contain text, images, videos, and other multimedia and navigates between them using hyperlinks.

(c). File sharing

File sharing usually follows the peer-to-peer (P2P) model, where the files are stored on and served by personal computers of the users. Most people who engage in file sharing on the Internet both provide (upload) files and receive files (download).

P2P file sharing is distinct from file trading in that downloading files from a P2P network does not require uploading, although some networks either provide incentives for uploading such as credits or forcing the sharing of files being currently downloaded. Napster started this whole wave and has since became a legal spot for downloads with a fee schedule.

EXERCISE

1. What is Computing?
2. What do you understand by Computer hardware and Computer Software?
3. Explain Application Software and System Software?
4. Explain the functions of Operating System?
5. What do you mean by Input/Output Devices of computer?
6. Write about any three computer input devices?
7. What is the difference between Hard Disk and Floppy disk?
8. Write a short nontes on CD (Compact Disk) and DVD (Digital Versatile Disc)?
9. Explain the function of a Computer Printer in computing?
10. What is the difference between Bit and Byte?
11. Write a short notes on Computer Networking?
12. What do you understand by Internet?



2

Operating Systems: DOS and MS Windows

An operating system (OS) is software that manages computer resources and provides programmers with an interface used to access those resources. An operating system processes system data and user input, and responds by allocating and managing tasks and internal system resources as a service to users and programs of the system. An operating system performs basic tasks such as controlling and allocating memory, prioritizing system requests, controlling input and output devices, facilitating computer networking and managing files.

2.1 DOS (Disk Operating System)

DOS is a single-user, single-task operating system with basic kernel functions that are non-reentrant code; once a process is begun, it must be allowed to run until finished before the same process can be used again. The DOS kernel provides various functions for programs, like displaying characters on-screen, reading a character from the keyboard, and accessing disk files.

(a). DOS Interface and Commands

The user interface with the DOS operating system is very simple. You type commands line-by-line on an undecorated computer screen. All that you see to start with is a simple designation of what directory you are in, like for the normal root directory.

C:\>

Where you type is called the command line.

---

d: (for example)

Type the letter of the drive and a colon and press ENTER to change to the named drive.

```
C:\mydocs>d:
D>
```

---

dir

Lists the contents of directory, giving for each file, the filename and extension, then the file's size in bytes, then the file's date and time of creation. Last two lines give the total number of files in this directory, the total of the file sizes, and the amount of space still free on the current drive. If the directory contains subdirectories, they will be listed, too.

md *dirname*

Makes a directory nested inside the current directory. The example makes a directory inside mydocs because that is is current directory, as is shown on the command line.

C:\mydocs>md mydrctry

---

rd *dirname*

Removes an empty directory. You're standing in it! Also, you'll have to delete all the documents inside the directory before you can remove the directory.

C:\>rd c:\mydocs\mydrctry

---

cd *dirname*

Changes to a new directory. Note the new current directory on the command line.

C:\windows>cd c:\mydocs\mydrctry

C:\mydocs\mydrctry>

---

del *filename*

Delete a file. The example deletes a file from a different drive and directory. If the file is in the current directory, you don't have to give the full path.

C:\>del d:\worddocs\letter.doc

---

move *filename*

Moves a file to a new location.

Looks just like "copy" above except for the word "move".

---

ren *filename newname*

Renames file with first name to second name. You must include the full path to the original file if it's not in the current directory.

C:\>ren oldfile.exe newfile.exe

---

edit *filename*

Brings up the DOS Edit program so you can make changes in a text file. This is a very simple text editor and won't work with regular word processing documents. It is useful, though, for editing some of the files that manage the startup of your computer. When things go wrong at a basic level, you sometimes need Edit to fix them.

C:\>edit c:\autoexec.bat

---

format *drive*

format is the most dangerous of all, since you can erase your hard drive with it. Use it only on floppy drives A and B, or when you really, really, really know what you are doing. Don't forget-formatting a disk erases the contents!

C:\>format a:

---

type *filename*

If you want to just look at a text file, this command will display it on the monitor. But if it has many lines, you'll have to be quick to press the Pause key or the top of the file will scroll out of view before you can read it.

C:\>type c:\autoexec.bat

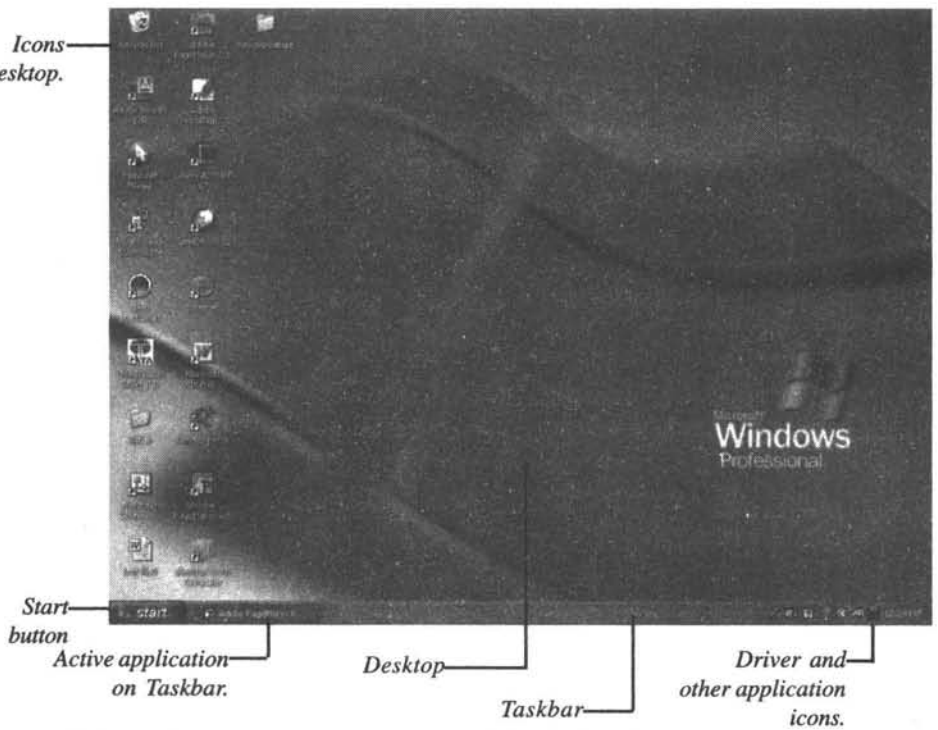
2.2 Microsoft Windows

Microsoft Windows is the name of several families of software operating systems by Microsoft. The term Windows collectively describes any or all of several generations of Microsoft (MS) operating system (OS) products such as Windows 98, Windows 2000, Windows XP or Windows Vista.

2.3 Using MS Windows XP

Windows XP is a line of operating systems developed by Microsoft for use on personal computers, including home and business desktops, notebook computers, and media centers.





The name "XP" stands for eXPerience. Windows XP introduced several new features to the Windows line, including:

- Faster start-up and hibernation sequences
- The ability to discard a newer device driver in favour of the previous one (known as driver rollback), should a driver upgrade not produce desirable results.
- A new, arguably more user-friendly interface, including the framework for developing themes for the desktop environment.
- The ClearType font rendering mechanism, which is designed to improve text readability on Liquid Crystal Display (LCD) and similar monitors.

- Remote Desktop functionality, which allows users to connect to a computer running Windows XP from across a network or the Internet and access their applications, files, printers, and devices.
- Support for most DSL modems and wireless network connections, as well as networking over FireWire, and Bluetooth.

Windows XP features a new task-based graphical user interface. The Start menu and search capability were redesigned and many visual effects were added, including:

- A translucent blue selection rectangle in Explorer.
- Drop shadows for icon labels on the desktop.
- Task-based sidebars in Explorer windows ("common tasks").
- The ability to group the taskbar buttons of the windows of one application into one button.
- The highlighting of recently added programs on the Start menu.
- Shadows under menus.

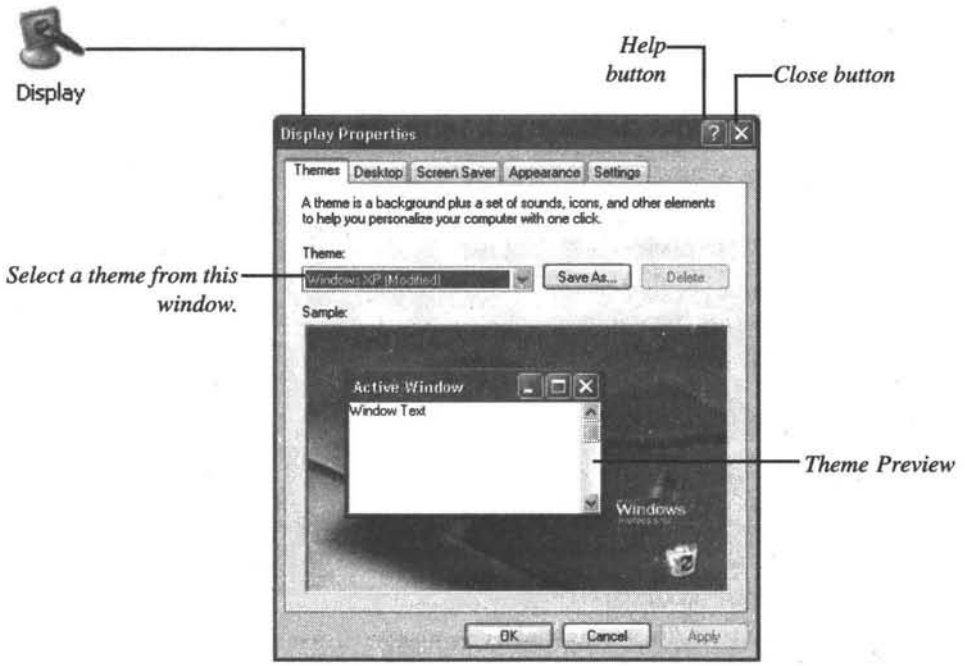
(a). Customizing Desktop

In this section you can learn how to add more colors to the screen, change the background to display a favorite picture, create a unique screen saver, add distinctive sounds, change fonts, and more.

Choose a new desktop theme

Microsoft Windows installs several themes on your computer. You can select a different theme, including the traditional Windows Classic theme.

Click on Display icon in Control Panel. On the Themes tab, under Theme, click a new theme.

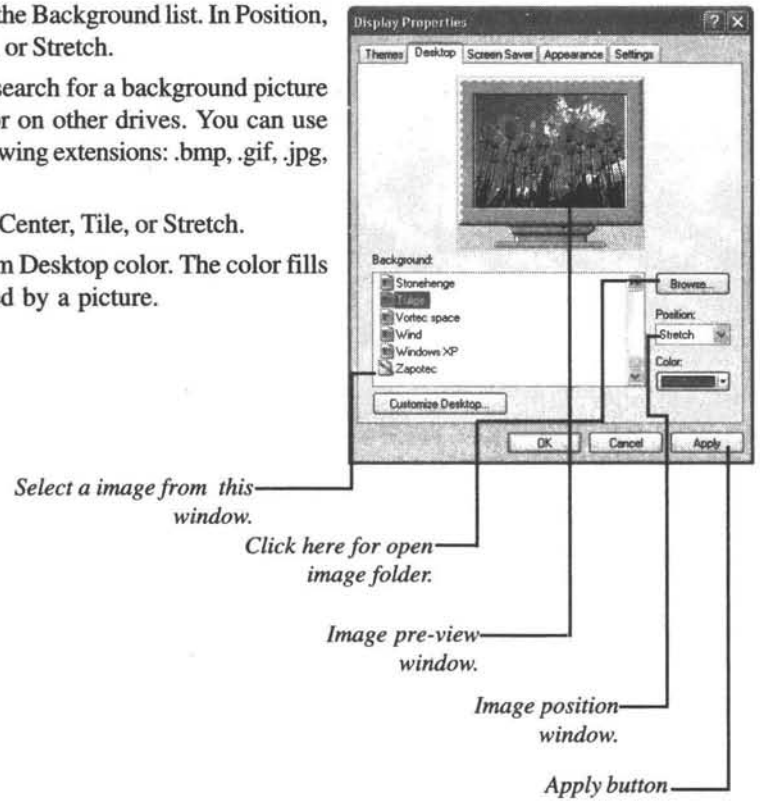


- To open Display, click Start, click Control Panel, click Appearance and Themes, and then click Display.
- Themes affect the overall look of your desktop, including the background, screen saver, icons, windows, mouse pointers, and sounds.
- If more than one person uses a computer, each with his or her own user account, each person can choose a different theme.

To change your desktop background

Open Display in Control Panel. On the Desktop tab, do one or more of the following:

- Click a picture in the Background list. In Position, click Center, Tile, or Stretch.
- Click Browse to search for a background picture in other folders or on other drives. You can use files with the following extensions: .bmp, .gif, .jpg, .dib, .png, .htm.
- In Position, click Center, Tile, or Stretch.
- Select a color from Desktop color. The color fills the space not used by a picture.

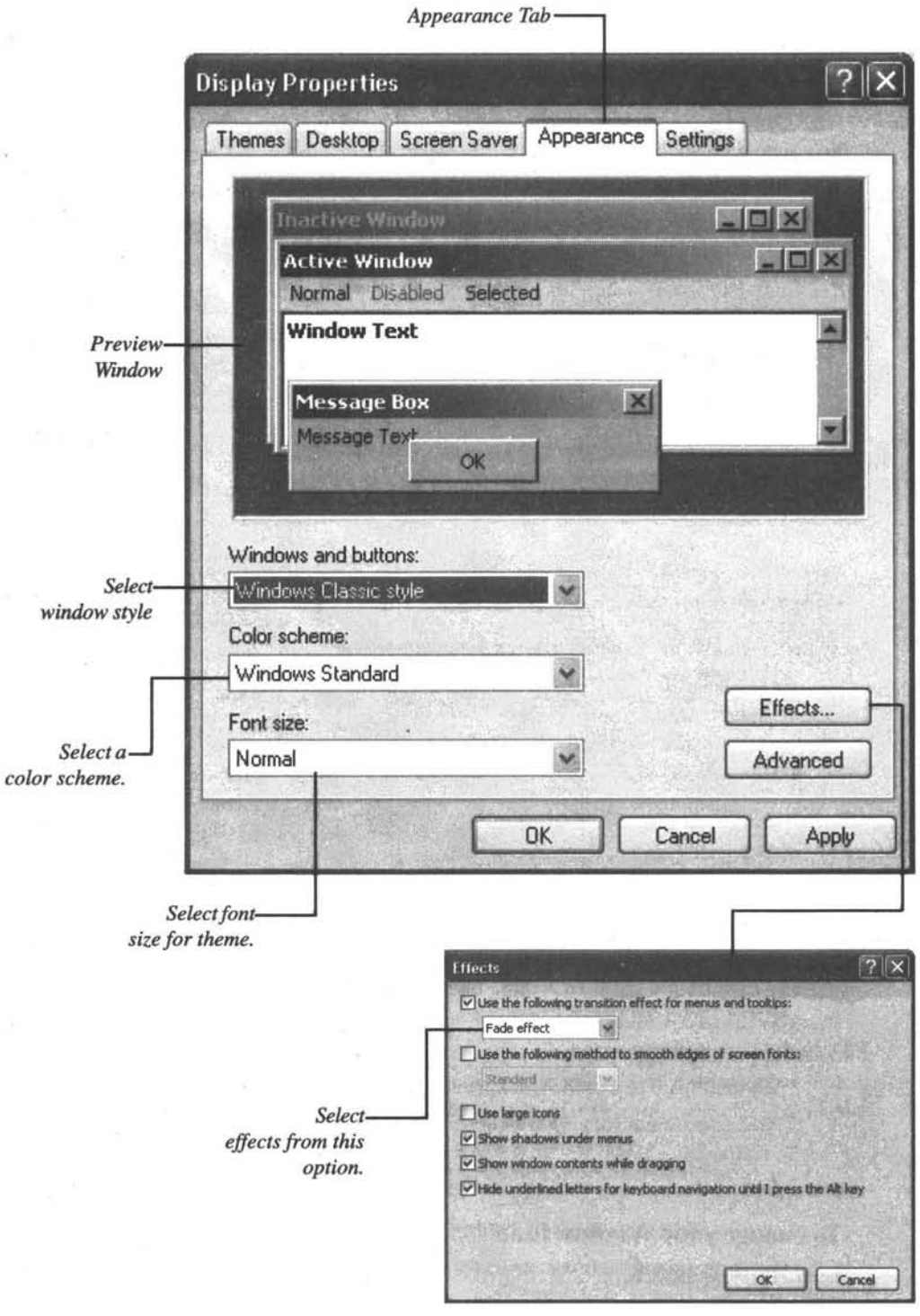


- You can use a personal picture as a background. All of your personal pictures located in My Pictures are listed by name in the Background list.
- You can save a picture from a Web site as a background. Right-click the picture and then click Set as Background.
- The picture is listed in the Background box as Internet Explorer Background.
- If you choose an .htm document as your background picture, the Position options are unavailable.
- The .htm document is automatically stretched to fill your background.

To change your Window fonts

If the text on your screen is too small for easy reading, you can increase the size of the fonts

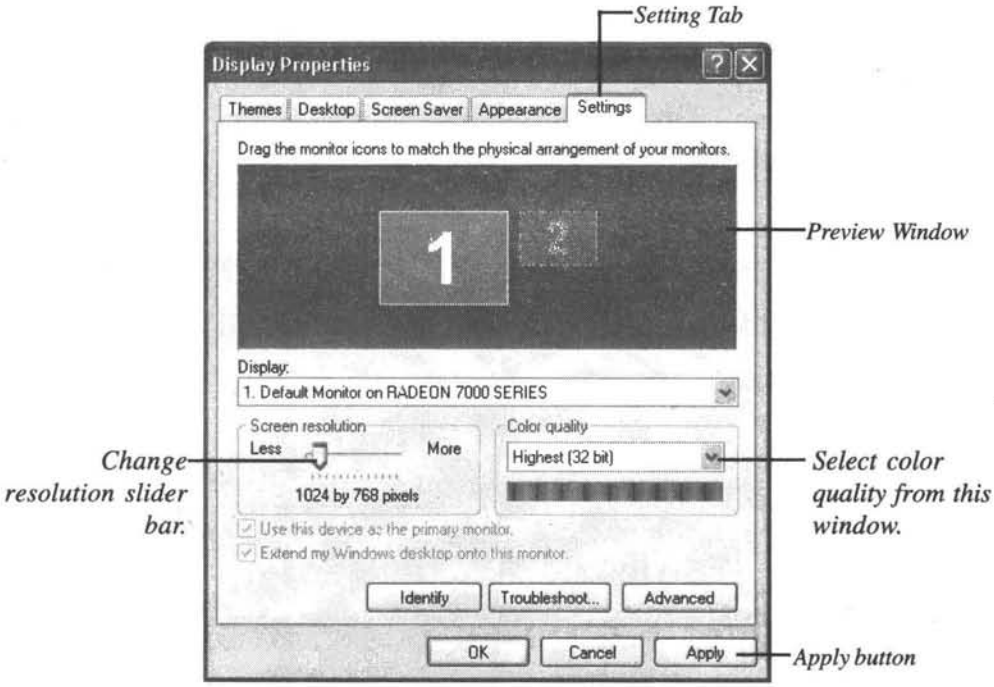
used in Windows menus, headings, and icon labels. Open Display in Control Panel. On the Appearance tab, in Font size, click a new font size.



To change your screen resolution

Increase your screen resolution to view more information at one time. Everything will appear smaller on your screen, including text. Decrease your screen resolution to increase the size of items on your screen. You will be able to view less information at one time, but text and other information will be larger.

Open Display in Control Panel. On the Settings tab, under Screen resolution, drag the slider, and then click Apply. When prompted to apply the settings, click OK. Your screen will turn black for a moment.



Once your screen resolution changes, you have 15 seconds to confirm the change. Click Yes to confirm the change; click No or do nothing to revert to your previous setting.

To put a shortcut on the desktop

Open My Computer iocn and double-click a drive or folder. Click the item you want, such as a file, program, folder, printer, or computer.

On the File menu, click Create Shortcut. Resize the window so you can see the desktop. Drag the new shortcut to the desktop.

- To open My Computer, click on Start button, and then click My Computer icon.
- You can also drag an item to the desktop with the right mouse button, and then click Create Shortcut(s) Here.
- To change the shortcut's properties, right-click the shortcut, and then click Properties.
- When you delete a shortcut to an item, the original item is not deleted. It still exists on your computer in its original location.

To move the taskbar

Click an empty area on the taskbar, and then drag the taskbar to a different location on

the desktop. If you cannot drag the taskbar to a new location, the taskbar may be locked.

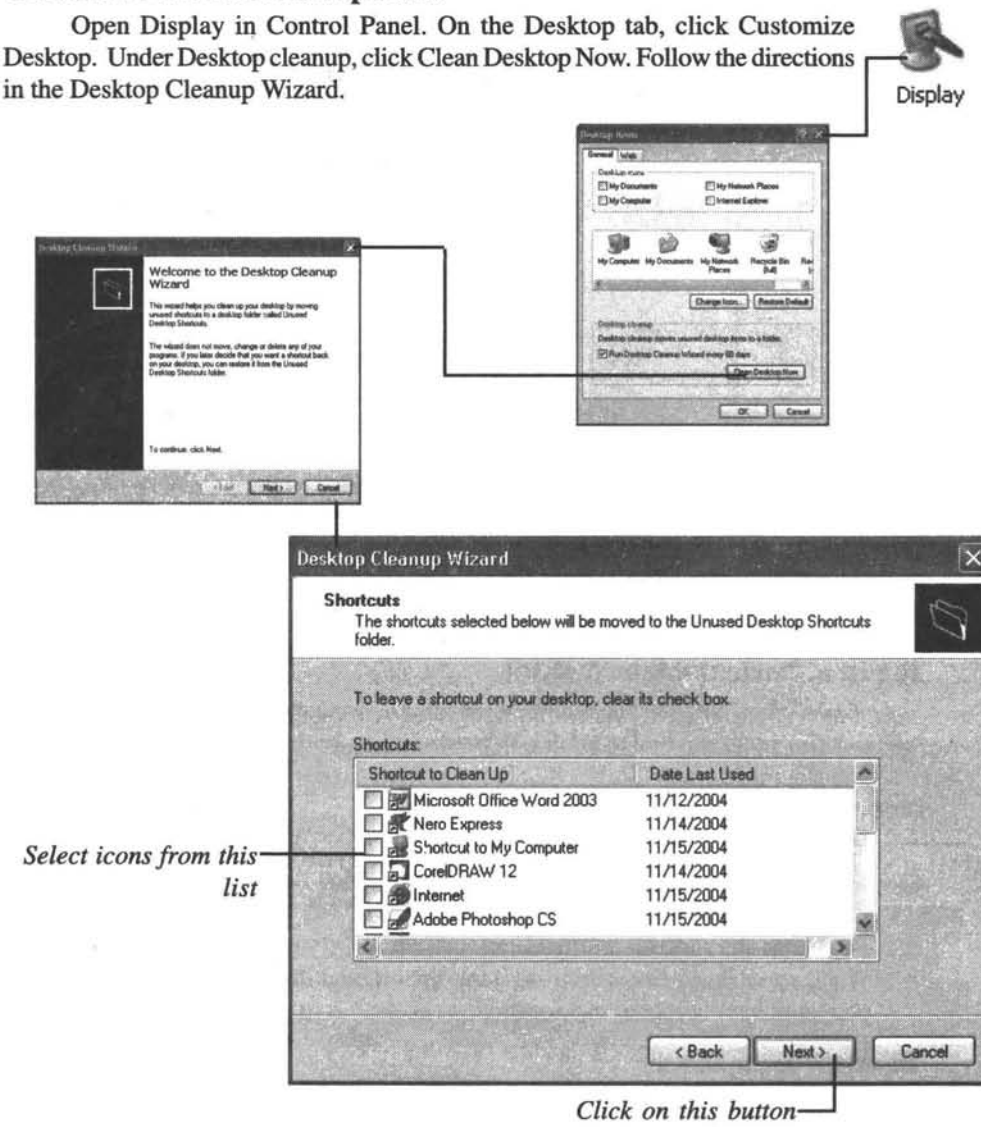
On the File menu, click Create Shortcut. Resize the window so you can see the desktop. Drag the new shortcut to the desktop.

Notes:

- To open My Computer, click on Start button, and then click My Computer icon.
- You can also drag an item to the desktop with the right mouse button, and then click Create Shortcut(s) Here.
- To change the shortcut's properties, right-click the shortcut, and then click Properties.
- When you delete a shortcut to an item, the original item is not deleted. It still exists on your computer in its original location.

To remove unused desktop icons

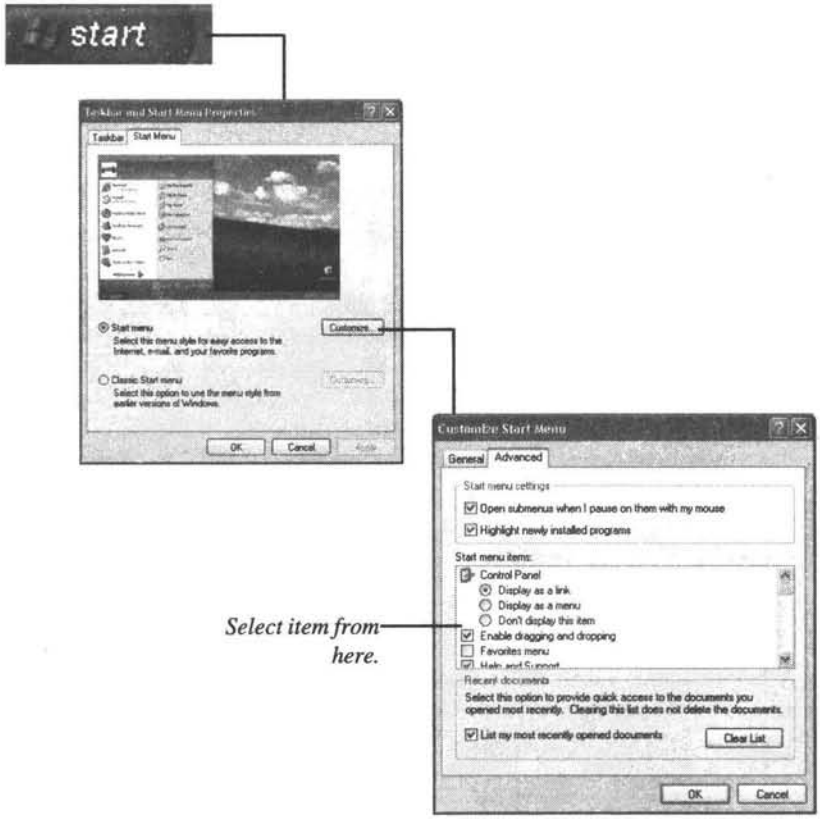
Open Display in Control Panel. On the Desktop tab, click Customize Desktop. Under Desktop cleanup, click Clean Desktop Now. Follow the directions in the Desktop Cleanup Wizard.



- To open Display, click Start, click Control Panel, click Appearance and Themes, and then click Display.
- The Desktop Cleanup Wizard displays a list of the desktop icons that have not been used for 60 days or more, enabling you to remove those icons that you don't want on your desktop.
- You can retrieve icons you have removed by opening the Unused Desktop Shortcuts folder on your desktop.
- Clear the Run Desktop Cleanup Wizard every 60 days check box if you don't want the wizard to run automatically every two months.
- You can remove an individual desktop icon by right-clicking the icon and then clicking Delete.
- To add or remove the icons for My Documents, My Computer, My Network Places, or Internet Explorer, select or clear those items under Desktop icons.

To add selected items to the Start menu

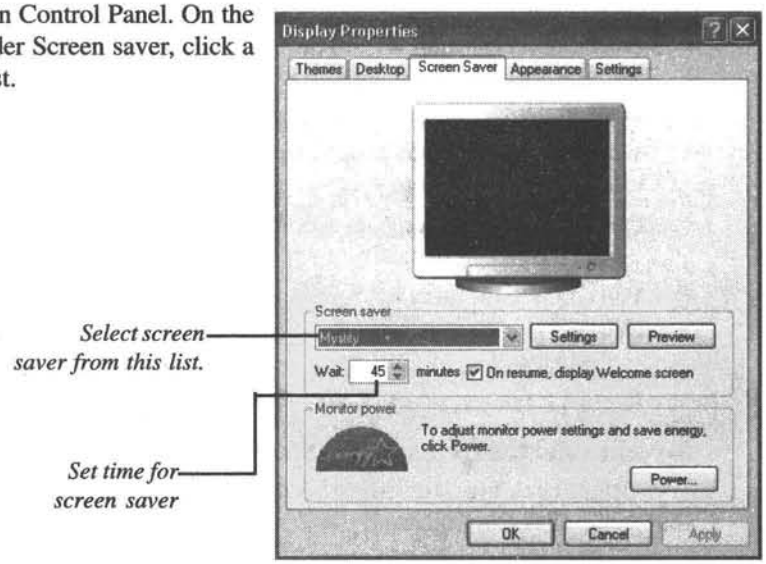
Right-click the Start button, and then click Properties. On the Start Menu tab, under Start menu, click Customize.



On the Advanced tab, under Start menu items, select the items you want to appear on the Start menu. The next time you click Start, the items you selected are on the Start menu. You can remove an item from the Start menu by clearing its check box in the last step of this procedure.

To set or change a screen saver

Open Display in Control Panel. On the Screen Saver tab, under Screen saver, click a screen saver in the list.



- To open Display, click Start, click Control Panel, click Appearance and Themes, and then click Display.
- After you select a screen saver, it will automatically start when your computer is idle for the number of minutes specified in Wait.
- To clear the screen saver after it has started, move your mouse or press any key.
- To view possible setting options for a particular screen saver, click Settings on the Screen Saver tab.
- Click Preview to see how the selected screen saver will appear on your monitor. Move your mouse or press any key to end the preview.

To change your screen resolution

Open Display in Control Panel. On the Settings tab, under Screen resolution, drag the slider, and then click Apply. When prompted to apply the settings, click OK. Your screen will turn black for a moment.

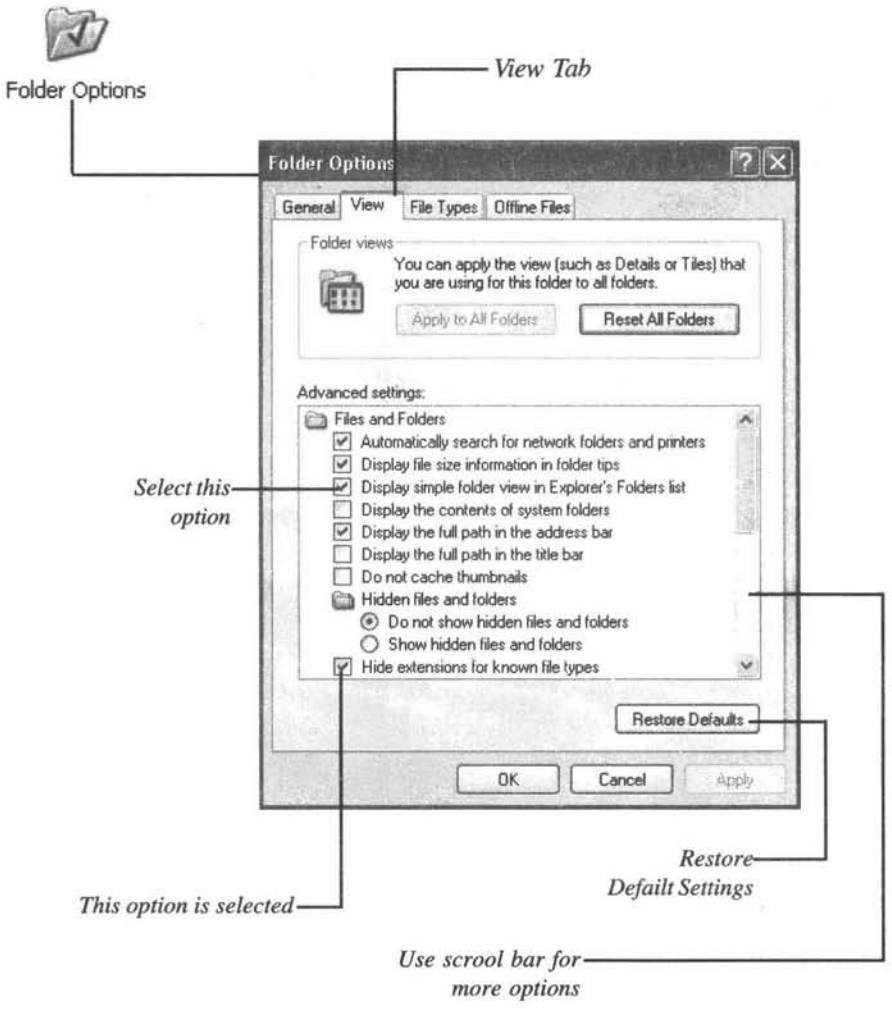
Once your screen resolution changes, you have 15 seconds to confirm the change. Click Yes to confirm the change; click No or do nothing to revert to your previous setting.

- To open Display, click Start, click Control Panel, click Appearance and Themes, and then click Display.
- A higher screen resolution reduces the size of items on your screen and increases the relative space on your desktop.
- You can switch your screen resolution temporarily to 640×480 if you have games or other programs that are set to run at that resolution. To switch, right-click the game or program (on the desktop or on the Start menu), and then click Properties. Click the Compatibility tab, and then select the Run in 640×480 screen resolution check box. Your display reverts to its default resolution when you close the program.
- Your monitor and video adapter determine how much you can change your screen resolution. You may not be able to increase the resolution above a certain level.

- Changes to screen resolution affect all users that log on to the computer.
- Only the recommended screen resolutions are listed. For additional settings, click the Advanced button on the Settings tab, click the Adapter tab, and then click List all Modes. Select the resolution, color level, and refresh rate you want.

To display simple folder view in the Windows Explorer Folders list:

- Click on **Folder Options** icons in Control Panel.
- Click on **Start button**, and then click **Control Panel**.
- Double-click **Folder Options**.



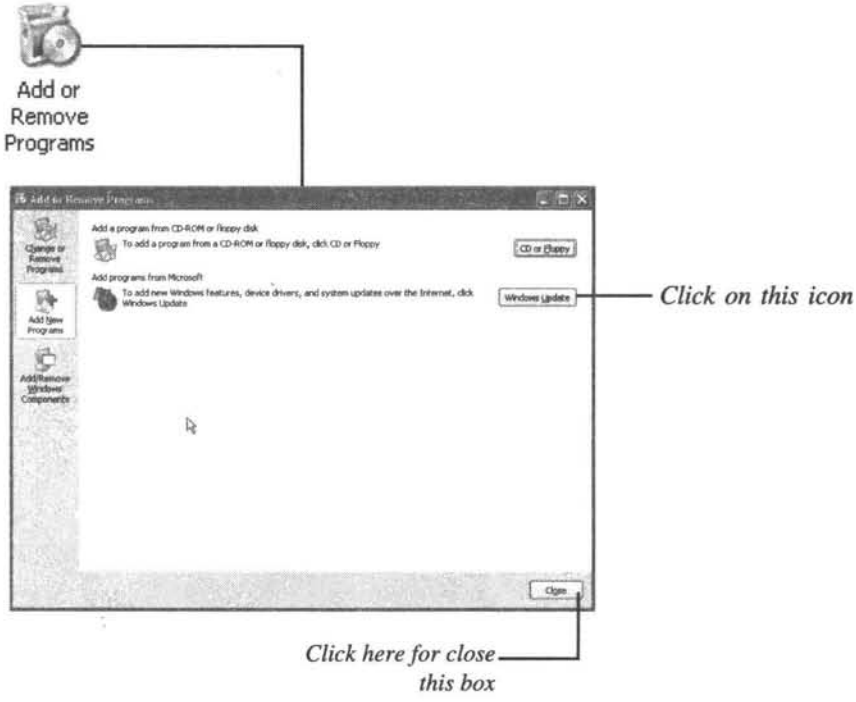
- Click on the **View** tab and select the **Display simple folder view in Explorer's Folders list** check box.
- Simple folder view displays all the folder contents and the subfolders within that folder. When you click a folder, all other folders are automatically closed.
- To display multiple open folders, click the plus or minus sign next to the folder instead of clicking the folder itself.

To show Control Panel in My Computer:

- Click **Start**, and then click **Control Panel**.
- Double-click **Folder Options**. On the **View** tab, select the **Show Control Panel in My Computer** check box.
- When you select this option, a Control Panel icon appears in the My Computer folder.

To add features from Microsoft Windows Update

- Open Add or Remove Programs in Control Panel.
- Click **Add New Programs**, and then click **Windows Update**.
- Follow the instructions to locate and add new Windows features, system updates, and device drivers.



To add or remove a Windows component

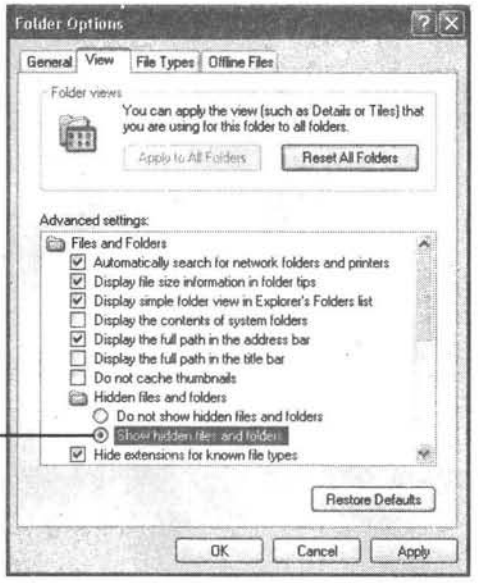
You must be logged on as an administrator or a member of the Administrators group in order to complete this procedure. If your computer is connected to a network, network policy settings may also prevent you from completing this procedure.

- Open Add or Remove Programs in Control Panel.
- Click **Add/Remove Windows Components**. Follow the instructions in the Windows Components Wizard.
- If an item is selected in the Windows Components Wizard, it has already been installed.
- If you installed Windows components without configuring them, a list of those components will appear. To configure a component, click **Configure**, and then follow the instructions on the screen.

To display hidden files and folders

- Open Folder Options in Control Panel.
- Click **Start**, and then click **Control Panel**.
- Double-click **Folder Options**.
- On the **View** tab, under **Hidden files and folders**, click **Show hidden files and folders**.

Select this option



- If you know the name of a hidden file or folder, you can search for it.
- If you want to see all file name extensions, clear the **Hide file extensions for known file types** check box.

(b). Control Panel

Control Panel is full of specialized tools that are used to change the way Windows looks and behaves. Some of these tools help you adjust settings that make your computer more fun to use.

For example, use Mouse to replace standard mouse pointers with animated icons that move on your screen, or use Sounds and Audio Devices to replace standard system sounds with sounds you choose. Other tools help you set up Windows so that your computer is easier to use. For example, if you are left-handed, you can use Mouse to switch the mouse buttons so that the button on the right performs the primary functions of selecting and dragging.

To open Control Panel, click **Start** and then click **Control Panel**. If your computer is set up in Classic view using the more familiar **Start** menu, click **Start**, point to **Settings**, and then click **Control Panel**.

When you first open Control Panel, you will see some of the most commonly used Control Panel items organized by category. To find out more information about an item in Control Panel while in Category view, hold your mouse pointer over the icon or category name and read the text that appears.

To open one of these items, click its icon or category name. Some of these items will

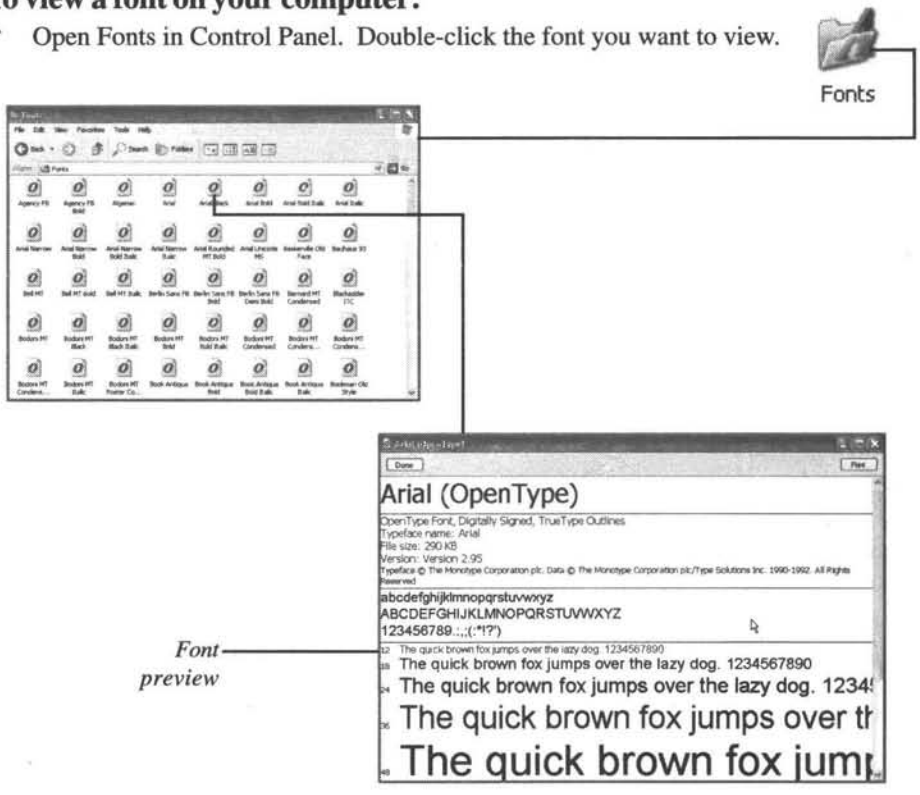
open to a list of tasks you can perform, as well as a selection of individual Control Panel items. For example, when you click **Appearance and Themes**, you will see a list of tasks such as **Choose a screen saver** along with individual Control Panel items.



If you open Control Panel and do not see the item you want, click **Switch to Classic View**. To open an item, double-click its icon. To find out more about an item in Control Panel while in Classic Control Panel view, hold your mouse pointer over the icon and read the text that appears.

To view a font on your computer:

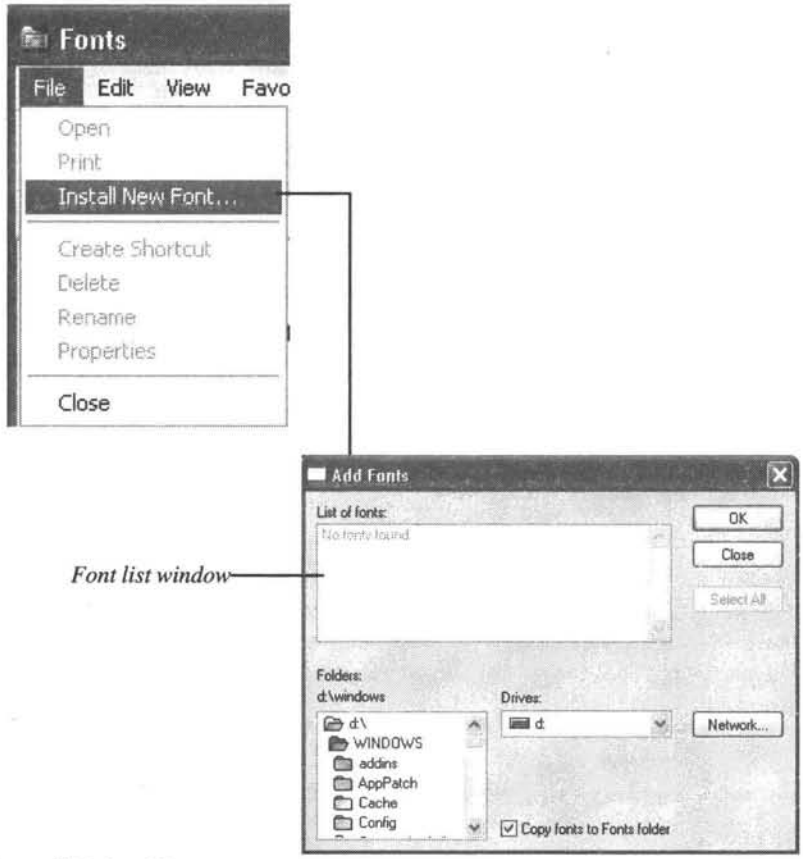
☞ Open Fonts in Control Panel. Double-click the font you want to view.



- To open Fonts, click **Start**, click **Control Panel**, and then double-click **Fonts**.
- If you don't want to display the variations for each font in the **Fonts** window, on the **View** menu, click **Hide Variations (Bold, Italic, etc.)**.
- When you install a printer, the installation program may install several printer fonts. These do not appear in the Fonts folder, but they do appear in the Font list of Windows-based programs, such as WordPad.

To add a new font to your computer

- Open Fonts in Control Panel. On the **File** menu, click **Install New Font**.



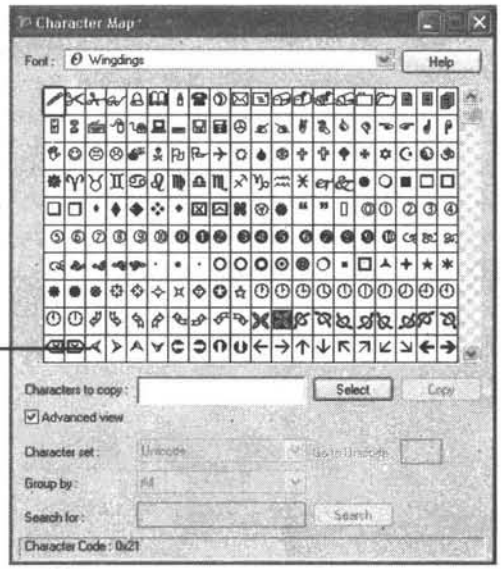
- In **Drives**, click the drive you want.
- In **Folders**, double-click the folder that contains the fonts you want to add.
- In **List of fonts**, click the font you want to add, and then click **OK**.
- To add all of the listed fonts, click **Select All**, and then click **OK**.
- To select more than one font to add, hold down the CTRL key, and then click each of the fonts you want to add.
- To add fonts from a network drive without using disk space on your computer, make sure that the **Copy fonts to Fonts folder** check box, in the **Add Fonts** dialog box, is clear. This is available only when you install OpenType, TrueType, or raster fonts using the **Install New Font** option on the **File** menu.

Using Character Map

You can use Character Map to copy and paste special characters into your documents, such as the trademark symbol, special mathematical characters, or a character from the character set of another language.

Open Character Map. To open Character Map, click **Start**, point to **All Programs**, point to **Accessories**, point to **System Tools**, and then click **Character Map**.

Select symbol from this window



Printing extended or international characters

In addition to the 128 standard ASCII characters you can type using your keyboard, you can use extended or international characters by using the Character Map program.

When Windows prints a document using printer fonts, each character your program sends to the printer is translated to the appropriate resident font. If your printer supports that character, the character prints. Otherwise, another character prints instead.

Check your printer manual and experiment with your printer to determine which extended characters your printer supports. This limitation applies only to the printer's built-in fonts. TrueType and OpenType fonts provided by Windows will print all extended characters, unless the font has been mapped to a resident font on the printer. In that case, the TrueType or OpenType font will print only the characters supported by the printer.

To connect a printer directly to your computer

Most new printers support Plug and Play, while many older printers do not. The steps involved in installing a printer that is attached to your computer differ depending on whether it supports Plug and Play.

Click one of the following links:

- My printer supports Plug and Play.
- My printer does not support Plug and Play.

If you are unsure whether your printer supports Plug and Play, consider the following:

- Does your printer use infrared technology? If it does, your printer supports Plug and Play.
- Consult the owner's manual or packaging of your printer. Most printer manufacturers advertise the fact that their printer supports Plug and Play. Look for Plug and Play on the printer's list of features.
- Check the connector on the end of the printer cable that you plug into your computer.

- If the connector that attaches the printer cable to the computer is a USB connector, then the printer supports Plug and Play.
- If the connector that attaches the printer cable to the computer is a parallel connector, then the printer *might* support Plug and Play, since the earliest Plug and Play printers use a parallel connector. If it is, the computer will inform you that it recognizes the printer when you turn on the printer and plug the printer cable into the computer.

To view documents waiting to print:

- Open Printers and Faxes.
- Double-click the printer for which you want to view the documents waiting to print.
- To open Printers and Faxes, click **Start**, click **Control Panel**, and then double-click **Printers and Faxes**.
- The print queue displays information about a document such as print status, owner, and number of pages to be printed. From the print queue, you can cancel or pause printing for any document you send to the printer.
- You can also open the print queue by double-clicking the printer icon in the notification area.
- Another way to open the print queue is to click the printer in Printers and Faxes, and then click **See what's printing** under **Tasks** on the left side of the window. This option is available only if folders are set to look like a Web page and a printer is selected.

Stop printing your file

If you send the wrong file to the printer or it's taking too long to print, you can cancel a print job and have it removed from the printer.

To cancel printing a document

By default, all users can pause, resume, restart, and cancel printing of their own documents. However, to manage documents printed by other users, you must have the Manage Documents permission, which is one of several printer permissions.

- Open Printers and Faxes.
- Double-click the printer you are using to open the print queue.
- Right-click the document you want to stop printing, and then click **Cancel**.

To change printing preferences

- Open Printers and Faxes.
- Click the printer you want to change.
- On the **File** menu, click **Printing Preferences**.
- Click each tab to see the available choices, and then make your changes.

To set printer memory

To change the amount of printer memory in Windows, your printer must support the ability to change the amount of printer memory. Otherwise, the options described here will not appear in Windows. Also, you must have the Manage Printers permission, which is one of several printer permissions.

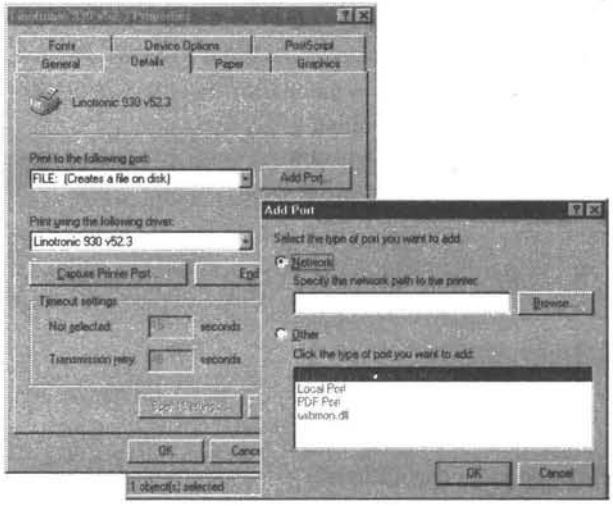
If you do not know already, find out how much memory is installed in your printer. Many

printers - especially laser printers - have a self-test feature that will print a document containing the current memory configuration.

- Open Printers and Faxes. Right-click the icon for the printer you are using, and then click **Properties**.
- On the **Device Settings** tab, under **Installable Options**, click **Printer Memory**, and then click the number that matches the amount of memory installed in your printer or plotter.

To add a port

- Open Printers and Faxes.
- On the **File** menu, click **Server Properties**.
- Click the **Ports** tab, and then click **Add Port**.

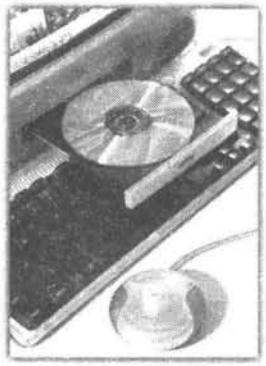


- In the **Available port types** list, click a port name to select it. By default, only **Local Port** and **Standard TCP/IP Port** appear in the **Available port types** list.
- If you want to add a Line Printer Remote (LPR) port, you need to install the optional networking component, **Print Services for Unix**. Once you do so, **LPR Port** will display as one of the available port types.
- To add other port types, click **New Port Type**, type the path to the compact disc containing the necessary files, and click **OK**.
- After clicking the port type in the **Printer Ports** dialog box, click **New Port**.
- Type a name that describes this port, and then click **OK**.
- On the **Printer Ports** dialog box, click **Close**.
- If necessary, configure the port by clicking **Configure Port**. Different types of ports have different characteristics that you can configure. To find out what each characteristic means, once you have clicked **Configure Port**, right-click a characteristic you want to learn about, and then click **What's This?**. A description of that characteristic will appear. To make the description go away, click it. Once you have finished configuring the port, click **OK**.
- Click **Close** to close the **Print Server Properties** dialog box.

EXERCISE

1. What is the main function of DOS (Disk Operating System)?
2. Explain the use of DOS interface with example?
3. Microsoft Windows
4. What is the use of CD command of DOS?
5. What is the use of FORMAT command, explain with example?
6. What do you understand by Microsoft Windows?
7. Explain the method of change the desktop background?
8. How to change your Window fonts?
9. How to change your screen resolution?
10. How to put a shortcut on the desktop?
11. How too move the taskbar?
12. Explain the procedure of removing unused desktop icons?
13. How to add selected items to the Start menu?
14. Write the procedure of changing a screen saver?
15. How to change your screen resolution?
16. How to display simple folder view in the Windows Explorer Folders list?
17. How to show Control Panel in My Computer?
18. How to add features from Microsoft Windows Update?
19. Explain the process of add or remove a Windows component?
20. How to display hidden files and folders?
21. What do you mean by Control Panel?
22. How to view a font on your computer?
23. How to add a new font to your computer?
24. Explain the process of using Character Map?
25. How to connect a printer directly to your computer?
26. How to view documents waiting to print?
27. How to stop printing your file?
28. How to cancel printing a document?
29. Write the procedure of changing printing preferences?
30. Explain the procedure of setting printer memory?



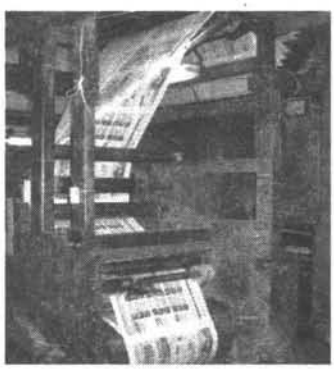


3
Printing Process

Printing is a process for reproducing text and image, typically with ink on paper using a printing press. It is often carried out as a large-scale industrial process, and is an essential part of publishing and transaction printing.

3.1 History of Printing

Phaistos Disc	1850–1400 BCE
Woodblock printing	200 CE
Movable type	1050
Intaglio	1430s
Printing press	1439
Lithography	1796
Offset press by	1800s
Chromolithography	1837
Rotary press	1843
Flexography	1890s
Screen-printing	1907
Dye-sublimation	1957
Photocopier	1960s
pad printing	1960s
Laser printer	1969
Dot matrix printer	1970
Thermal printer	1972
Inkjet printer	1976
Digital press	1993



(a). Phaistos Disc

The Phaistos Disc (Phaistos Disk, Phaestos Disc) is a curious archaeological find, likely dating to the middle or late Minoan Bronze Age. Its purpose and meaning, and even its original geographical place of manufacture, remain disputed, making it one of the most famous mysteries of archaeology. This unique object is now on display at the archaeological museum of Herakleion in Crete, Greece.

(b.) Woodblock printing

Woodblock printing is a technique for printing text, images or patterns used widely throughout East Asia and originating in China in antiquity as a method of printing on textiles and later paper. As a method of printing on cloth, the earliest surviving examples from China date to before 220, and from Egypt to the 4th century.

(c). Movable type



Movable type is the system of printing and typography using movable pieces of metal type, made by casting from matrices struck by letterpunches.

Around 1040, the first known movable type system was created in China by Bi Sheng out of porcelain. Metal movable type was first invented in Korea during the Goryeo Dynasty (around 1230).

Compared to woodblock printing, movable type pagesetting was quicker and more durable. The metal type pieces were more durable and the lettering was more uniform, leading to typography and fonts.

(d). Flat-bed printing press

A printing press is a mechanical device for applying pressure to an inked surface resting upon a medium (such as paper or cloth), thereby transferring an image. The systems involved were first assembled in Germany by the goldsmith Johann Gutenberg in the mid-15th century. Printing methods based on Gutenberg's printing press spread rapidly throughout first Europe and then the rest of the world, replacing most block printing and making it the sole progenitor of modern movable type printing.

(e). Lithography



Invented by Bavarian author Aloys Senefelder in 1796, lithography is a method for printing on a smooth surface. Lithography is a printing process that uses chemical processes to create an image. For instance, the positive part of an image would be a hydrophobic chemical, while the negative image would be water. Thus, when the plate is introduced to a compatible ink and water mixture, the ink will adhere to the positive image and the water will clean the negative image. This allows for a relatively flat print plate which allows for much longer runs than the older physical methods of imaging (e.g., embossing or engraving).

(f). Chromolithography

Chromolithography was the first method for making true multi-color prints. Earlier attempts at polychromed printing relied on hand-coloring. The type of color printing stemmed from the process of lithography, and it includes all types of lithography that are printed in color. It replaced coloring prints by hand, and eventually served as a replica of a real painting. Lithographers sought to find a way to print on flat surfaces with the use of chemicals instead

of relief or intaglio printing. Depending on the amount of colors present, a chromolithograph could take months to produce. To make what was once referred to as a "'chromo'", a lithographer, with a finished painting in front of him, gradually built and corrected the print to look as much as possible like the painting in front of him, sometimes using dozens of layers. The process can be very time consuming and cumbersome contingent upon the skill of the lithographer.

(g). Screen-printing

Screenprinting has its origins in simple stencilling, most notably of the Japanese form (katazome), used who cut banana leaves and inserted ink through the design holes on textiles, mostly for clothing. This was taken up in France. The modern screenprinting process originated from patents taken out by Samuel Simon in 1907 in England. This idea was then adopted in San Francisco, California, by John Pilsworth in 1914 who used screenprinting to form multicolor prints in a subtractive mode, differing from screenprinting as it is done today.

(h). Offset press

Offset printing is a widely used printing technique where the inked image is transferred (or "offset") from a plate to a rubber blanket, then to the printing surface. When used in combination with the lithographic process, which is based on the repulsion of oil and water, the offset technique employs a flat (planographic) image carrier on which the image to be printed obtains ink from ink rollers, while the non-printing area attracts a film of water, keeping the non-printing areas ink-free.

(i). Flexography

Flexography (also called surface printing), often abbreviated to flexo, is a method of printing most commonly used for packaging (Labels, Tape, Bags, Boxes, Banners, Etc). A flexo print is achieved by creating a mirrored master of the required image as a 3D relief in a rubber or polymer material. A measured amount of ink is deposited upon the surface of the printing plate (or printing cylinder) using an anilox roll. The print surface then rotates, contacting the print material which transfers the ink.

Originally flexo printing was basic in quality. Labels requiring high quality have generally been printed Offset until recently. In the last few years great advances have been made to the quality of flexo printing presses.

The greatest advances though have been in the area of PhotoPolymer Printing Plates, including improvements to the plate material and the method of plate creation. —usually photographic exposure followed by chemical etch, though also by direct laser engraving.

(j). Photocopier (1960s)

Xerographic office photocopying was introduced by Xerox in the 1960s, and over the following 20 years it gradually replaced copies made by Verifax, Photostat, carbon paper, mimeograph machines, and other duplicating machines. The prevalence of its use is one of the factors that prevented the development of the paperless office heralded early in the digital revolution.

(k). Thermal printer

A thermal printer (or direct thermal printer) produces a printed image by selectively heating coated thermochromic paper, or thermal paper as it is commonly known, when the paper passes over the thermal print head. The coating turns black in the areas where it is heated, producing an image.

(l). Laser printer

The laser printer, based on a modified xerographic copier, was invented at Xerox in 1969 by researcher Gary Starkweather, who had a fully functional networked printer system working by 1971. Laser printing eventually became a multibillion-dollar business for Xerox.

The first commercial implementation of a laser printer was the IBM model 3800 in 1976, used for high-volume printing of documents such as invoices and mailing labels. It is often cited as "taking up a whole room," implying that it was a primitive version of the later familiar device used with a personal computer. While large, it was designed for an entirely different purpose. Many 3800s are still in use.

The first laser printer designed for use with an individual computer was released with the Xerox Star 8010 in 1981.

(m). Digital printing

Digital printing is the reproduction of digital images on physical surface, such as common or photographic paper, film, cloth, plastic, etc. It can be differentiated from litho printing in many ways, some of which are;

- Every impression made onto the paper can be different, as opposed to making several hundred or thousand impressions of the same thing from one set of plates, as in traditional methods.
- The Ink or Toner does not absorb into the paper, as does conventional Ink, but forms a layer on the surface.
- It generally requires less waste in terms of chemicals used and paper wasted in set up.
- It is excellent for rapid prototyping, or small print runs which means that it is more accessible to a wider range of designers.

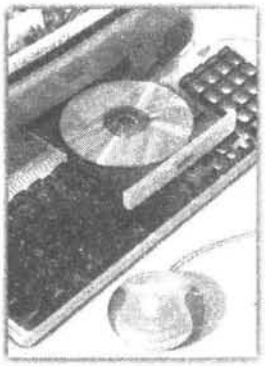
(n). 3D printing

Three-dimensional printing is a method of converting a virtual 3D model into a physical object. 3D printing is a category of rapid prototyping technology. 3D printers typically work by 'printing' successive layers on top of the previous to build up a three dimensional object. 3D printers are generally faster, more affordable and easier to use than other additive fabrication technologies.

EXERCISE

1. Write a brief note on history of Printing?
2. What is Phaistos Disc?
3. What do you mean by Woodblock printing?
4. What do you understand by Movable type?
5. Write about Flat-bed printing press?
6. What is Lithography?
7. Write a short notes on Chromolithography?
8. What is Screen-printing?
9. What is the difference between Offset press and Flat-bed printing press?
10. What is Flexography?
11. What do you mean by Digital printing?
12. Write a short notes on 3D printing

❑❑❑

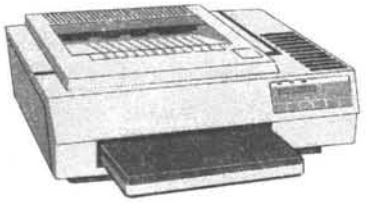


4
DTP Fundamentals

The term *Desktop Publishing* was given birth in 1985 with the introduction of the first mass produced postscript laser printers. The advent of desktop publishing meant for the first time the production of heavily formatted documents with integrated text and a single individual who was often the primary source of the information could complete graphics.



In today's workplace computer skills are necessary to avoid being left behind. Many employers won't even consider an applicant who doesn't possess a basic knowledge of computer systems.



The rise in usage of desktop publishing recently has revolutionized the printing industry. Today, more businesses are relying on desktop publishing to produce simple documents such as flyers, reports, and newsletters. In the past, these projects were sent to a print shop.

Currently, more projects are completed in-house. The technology is here and employers need people who know how to use it.

4.1 Hardware and Software

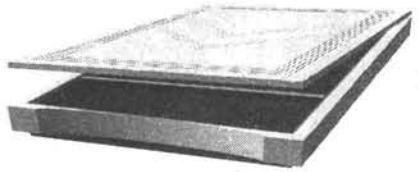
The DTP industry first had software for DTP on the Macintosh because the Mac was the first to have a true WYSIWYG GUI interface (first on the IBM as GEM, bought from Xerox, and refined by Mac!). Especially since Windows95, the market has taken to the Intel machines very well and it is growing quickly.

You will need three main types of software. Pagelayout, Painting and Drawing programs. Painting programs like Adobe Photoshop allow you to create or scan and modify Bitmap images (pictures).

Drawing programs like CorelDRAW and Adobe Illustrator allow you to create complex outlined, and then coloured, objects using what are called "Vector"ised graphics.

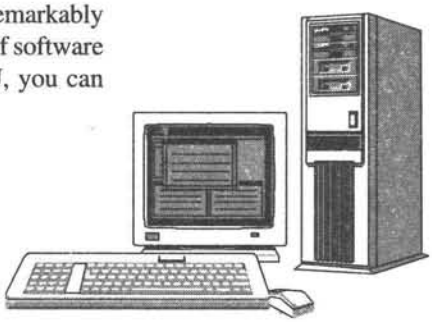
Pagelayout programs like Pagemaker and Quark can be used to create multi page products like Newsletters, Magazines and Books, and Pagelayout programs accept objects from both Painting and Drawing programs onto the page plus include extensive layout controls for the inclusion of large amounts of text.

For DTP you will need a Postscript Laser Printer for general output and proofing, and B&W artwork. Postscript is an industry standard interpreter that enables the output of complex DTP objects to ANY device that is also Postscript enabled. Until you get into plenty of colour output, a colour proofing printer is very expensive to use, so do not get one just because it is "nice" to see pretty colours.



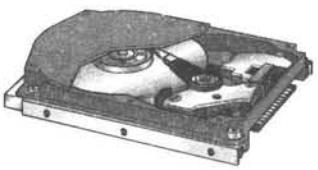
For basic B&W DTP and general Web work, an "el cheapo" flat bed scanner will do just fine. Nowadays they hold the grey balance quite well and you will have little need for more than 400 Dots Per Inch true resolution.

As for computers, the prices of Intel 2.5Ghz CPUs is remarkably low now and I would not go below 2.0Ghz for late versions of software - preferably the 3.0Ghz+. For Macs that use a RISC CPU, you can reduce this clock speed by around 15% to 20%.



For todays Graphical User Interfaces (GUI) and systems software, running recent software versions, you need to start with 64 to 128 Megabytes of Memory. Bitmap images (scans and Painting program images) gobble up memory very quickly, and you will soon progress to the need to drag and drop between several major programs running at once. Try for 128 MB RAM if possible (later on possibly, for real complex work, 128 MB of RAM will be too little!)

Recent programs and systems software also gobble up a lot of memory, as they do with the Harddrive space. Do not start with less than 3.5 Gigabytes of Hardisk space, and have it partitioned into at least 3 virtual drives right from the start. DTP and Web work soon fills the remaining harddisk space - be warned!



For hours of continuous work, you will need a fast Video Card with 32 Megabytes of onboard video memory. For quick redrawing of bitmap images, very "busy" or complex Vectorised graphics and Pagelayout pages, a fast video card with 32 MB RAM is must. Other wise the system will be distractingly slow for continuous work.

Use a minimum 15" monitor, and even at this small size, try to get used to using 1024×768 resolution. 17" monitors are really the base size for hours of DTP, but plenty of people use 15". With DTP work you need "true colour" colour rendering. This is more correctly called 24-Bit colour.

To get 24-Bit colour at a resolution of 1024×768, you must have a minimum of 4 Megabytes of

Video Ram. Check when you buy the video card because not all video drivers (the video card/system software interface) will give you 24-Bit colour at 1024×768 with 4 Megbyte - if it won't, chuck it, it's rubbish!

4.2 Main elements of DTP

This section is an introduction to some of the terminology, processes and equipment used in the DTP / Prepress industries (the Graphic Arts). It is written primarily for people that have never touched these subjects, or even experienced the DTP and Printing industries before.

(a). Halftone Dots and Dithers

Halftone dots and Dithers are both a nightmare and a blessing. We can not reproduce a controlled and repeatable infinite variation of tone or density in a truly continuous tone manner. We can reproduce or apply a solid colour (painting the bedroom walls for instance!) and we can easily reproduce no colour (too easily sometimes!).

So the only way we can virtually reproduce a strength of a given colour somewhere between nothing and 100% is use lots of tiny solids so small that they appear to the human eye as one tone. These small solid colour images can be laid out in a set pattern or randomly placed. The set pattern of predictable Halftone dots is still the easiest and cheapest method available to us today.

However, because GIF images contain a colour palette of 256 colours or less, to attain the apparent inclusion of extra colours, they can have a dithered or random pattern of existing colours applied to some areas. JPG bitmaps use an RGB palette (16.77 million colours). It may be of some interest to note that even photographers use the principle of random solids. In the emulsions of their films and final prints are millions (billions?) of tiny particles that react to light and change or retain dyes after controlled exposure and chemical development.

The particle sizes vary and larger the particle, the quicker the reaction. Where more light hits a portion of the emulsion, the more particles react, to a point where their mass appears as a tone, yet as individuals they would not be noticed.

(b). CMYK, RGB and Spot Colour

In many complex ways objects of the universe emit light (our solar sun for instance), and creatures have developed the ability to define shape and form by detecting much of this light. We, as humans, are primarily concerned with the observance of what is called Visible light. That is, our eyes can detect wave lengths of natures Primary visible light components of Red, Green and Blue. Simply, different amounts of these components reflecting off an object give us the perception of a single colour. (Portions of the three components may be absorbed by objects where as 100% reflection of each RGB component will appear white and 100% absorption will appear black).

When mankind tries to imitate nature, we can not get it quite right. Our ink pigments, television and monitor phosphors and laser printer waxes etc. are no where near perfect. Instead of an infinite variation of colour our television and computer monitors can only reproduce around 16.77 million colours. Worse still, our best printing pigments can only reproduce a portion of the millions of colours displayed on a monitor - something you must evntually understand for desktop publishing.

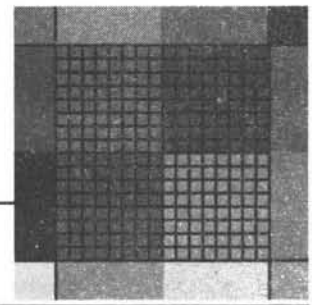
The primary Secondary colours are Cyan, Magenta and Yellow. By natures rules, certain combinations of R, G and B (light) will give us C, M and Y. Conversely, certain combinations of C, M and Y (surface pigments) would give us Red, Green and Blue. The sad news is that we (humans) don't even come close. You will learn why we need Black to help make up for pigment deficiencies.

The Prepress technician or DTP'er must get colour as close to perfect as possible when preparing halftone dots etc. so that the printer also has some hope of getting reproduced images to appear correctly on the printing press.

The use of Spot Colour in our designs refers to the selection of individual inks that will be mixed and matched by the printer. If a job is designed to use two spot colours, then those colours will be individually transferred to the paper and not matched by various combinations of C, M, Y and Black. However, some expensive (to print) jobs can include a fifth or sixth colour in addition to C, M, Y and Black. Varnish and Metallic colours are often added to a design and they would be treated as spot colours, as would a corporate colour that cannot be matched with process colours and must be printed using hand mixed and matched spot colour too.

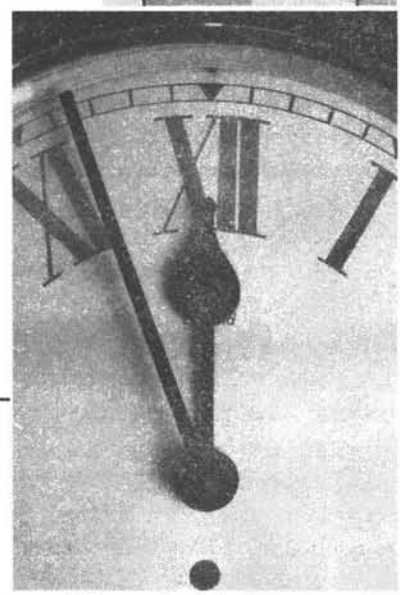
(c). Pixels and Bitmaps

In order for a computer system to create, manipulate and output an image, whether the image is scanned, photographed by a digital camera or created from a blank canvas in a Painting program like PhotoShop, the image must be digitised into tiny solid colour areas called Pixels.



Pixcels of an image

The pixels don't actually exist, your hard disk does not contain tiny individual pictures of each pixel, but they are represented on the computer screen for identification and manipulation, from saved colour values. The individual pixel colour values record the colour strength of each channel. ie a greyscale black to white pixel will have just one channel per pixel, and an RGB pixel will have three.



A bitmap image

When a bitmap image is to be created, the first thing that must be established is the bitmaps Resolution.

That is, how many pixels or areas of individual colours there will be per inch (ppi) horizontally (or per centimetre), and this will also be the same vertically. If an image has a resolution of 200ppi and will be 3 inches wide when output at same size, there will be 600 different colour blocks across each row. If the image is 4 inches high then there will be 800 rows, and the total number of pixels or individual colour areas in the image will be 480,000. If the resolution is high enough we will not see a pixelised affect when output, similar to but exaggerated in the sample above. The sample above also displays the separate rows of pixels that help make up the whole.

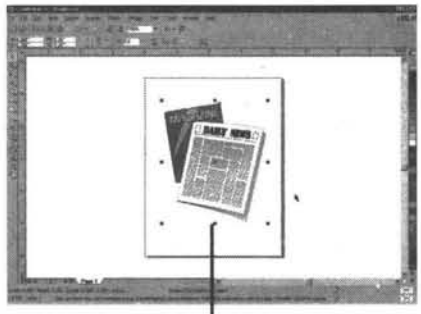
You will learn that there is a definite relationship between the required image resolution and the desired output Halftone Dot resolution. The Colour Depth of a bitmap image refers to the number of colours that an individual pixel could represent (only one of those colours per pixel) and the value is based on Bits (either 1 or 0), the lowest value used by a computer system. Eight bits equal one Byte - a binary value. Because an image is an horizontally and vertically based array of information, they

are called BITmaps. TIFF, GIF, JPG, PIC, BMP and a host of other file types are all bitmaps where the name describes the patented algorithms used to save the pixel and array information on to your hard disk.

(d). Vectorised Graphics

Vectorised Graphics are created in Drawing programs like: Freehand, Illustrator, CorelDRAW etc. and even CAD programs. For this entry, I had to make the screen capture quite large to show the Nodes appearing on the simple objects when selected with the Bezier Curve editing tool. The curve manipulating handles are also visible on the wiggly bit at the left.

When a curve or outline object is created in a vectorised drawing program, a picture of the result is not saved to the hard disk. Instead just information describing the vector or position of each node on the page and simple values describing the nodes relationship with any one node either side of it.



Handles of a vector image

The values are used to describe a virtual line between the nodes and can be manipulated with apparently simple mathematics first described by a mathematician named Bezier. Thus we have Bezier Curves, a name you will become familiar with.

The handles shown in the sample above can be altered with the mouse allowing real time changes to the shape of the curve segments, and saved with the node information will be data describing colours for the outline weight and fill options etc.

Yet one scanned image of a normal 'happy snap' photograph of the finished house, using the industry standard CMYK bitmap resolution, might require about seven 1.4megbyte floppy disks. Saving information for hundreds of thousands of bitmap pixels requires substantially more computer resources than thousands of objects with many nodes saved in a drawing program.

The text object was included in the sample above because you should also understand why quality fonts used for DTP and Prepress are often referred to as Outline fonts. Although their use and manipulation is very complex, they are computer files where the objects (characters) are described as nodes and outlines not unlike our drawing objects - they are not pictures of the characters.

(e). Printing presses

Printing presses come in many shapes and sizes, from small Single Colour presses and Label printing machines to 2, 4, 5, 6 colour presses and multi colour Screen Printing presses, up to large Flexographic presses that print on plastic for wrapping etc. and Web presses several stories high printing newspapers etc.on continuous reel paper (webs). A printing press requires one "Unit" for each colour that it can print. A one colour press needs to print on each sheet of paper three times to print a three colour job. A four colour press could print the same job in one pass (not needing the fourth unit).

Conventional Offset Lithography prints from a thin metal plate that contains an image, using one plate for each colour. These clever plates are created so that the bare metal will receive and hold water, while the image will receive ink and repel water. Therefore the damp metal background will not be covered in ink when the inking rollers apply the ink to the image areas.

The rotating plate on the Plate Cylinder passes water rollers (dampeners), then inking rollers, and finaly transfers the image onto a rubber blanket on the Blanket Cylinder. The blanket then transfers the image to paper as the paper passes between the Blanket and a Pressure cylinders. This two step arrangement gives the process the name "Offset" as in "offset between the plate and paper". Other specialist processes transfer the inked image directly to the stock (i.e. plastics). The rubber blanket (with the offset image) enables the transfer of images onto various types of even and uneven surfaces without damaging the plate.

(f). Vector and Bitmap images

The images produced in Drawing programs (CorelDraw, Illustrator, Freehand, Designer etc) are called vectorised graphics. That is, all of the objects shown on the computer monitor are representations of points and their relationship to each other on the work area, each of which is stored in the computer as simple values and mathematical equations depicting:

- The relationship between each point and the next point referenced to it, and the position (vector) of each point referenced to a starting corner of the work area.
- How all of the points react to each other and are converted to an image suitable for human interaction is based largely on equations discovered by a french mathematician named Bezier, and so we now have the familiar name of 'Bezier Curves' applied to most of the objects created in these drawing packages. The Node 'handles' displayed on the monitor when adjusting Bezier Curves are a simple interface used by the software to alter the mathematics and display the result in real time as we work. These programs are correctly called DRAWING PROGRAMS and the extensions of drawing programs allow us to apply colour etc. as fills and outlines to the points and mathematicaly recorded areas.
- Other objects like Bitmaps (*photos etc.*) can be included in a drawing page, but as yet cannot be fully manipulated in the drawing program.
- **Bitmap pictures** are stored as a vertical and horizontal array of Pixels and stored information represents the colour of each of these pixels. The resolution of a bitmap picture describes how many of these pixels exist over a set distance, usually horizontally: ie pixels per inch or pixels per centimetre. An unaltered bitmap picture of 300 pixels / inch enlarged by 1000% will therefore still have the same number of pixels across the actual picture area but each represented pixel will cover a larger area.
- At such an enlargement, the picture would be of little use for reproduction unless viewed from quite a long distance.
- Bitmap or Photo-retouching programs are correctly called PAINTING PROGRAMS.
- Vectorised drawings on the other hand can be enlarged as much as desired because, although the above mentioned points on a drawing would be further apart, the relationship of any described line between the points would always be the same. i.e. A single company logo file produced in a Drawing program could be used for a business card, any brochure or poster, or plotting out to a Screen Print stencil 3 metres (9 feet) wide, where as bitmap files would have to be created for every size used if practicable.

(g). Image output and Resolution

Scanning, Painting or Exporting a new Image without first establishing the various ways the bitmap is to be printed will often waste many hours of work. What resolution to use?, must be decided by knowing which will be the highest quality device used to output the image, immediately AND possibly sometime in the future.

When you read the 'Image Output' subjects you will learn about the definite relationship between the output device resolution and the number of grey levels available at a required halftone screen dot resolution. The ideal halftone cell (maximum grey levels) is made up of a matrix of 16 x 16 output device dots.

The Boffins and technical people who create high quality output devices like imagesetters etc. have established the golden rule, the 2X rule, for calculating the required resolution of a greyscaled bitmap (grey or CMYK picture). This equates to 4 bitmap pixels underlying or being used to calculate (the average of the four) the single channel colour value of each halftone dot, OR, horizontally 2 pixels per halftone cell - as displayed in the simple graphic above.

The 2X rule can be varied by a couple of decimal points up or down without affecting the output, but 2 is the preferred and easiest remembered number. (note that the graphic above uses the simplest scenario of a screen angle of 90 degrees for easy understanding, and the blue grid represents the ideal 16 x 16 array of output device laser dots). Therefore, very simply, if an image has to be output at #150 (150 halftone dots per inch) then our best quality bitmap image file should contain 300 pixels for each inch of that image horizontally = 150 x 2. (if the image is to be 4 inches wide, then there will be 1200 pixels in each row of pixels in that image).

Because of the method of pixel averaging per halftone dot cell, there will not be any noticeable improvement in picture quality if higher resolutions are used, and a lower resolution will begin to reduce sharpness to a point where pixalisation will become evident. The bigger file size from a higher resolution will also take much longer for the RIP (Raster Image Processor) to rasterize the page the image is placed in.

We literally throw this theory out the door when considering the resolution required for a scanned or painted Line bitmap (black OR white pixels only - a 1Bit bitmap) and here are the reasons.

(h.) DTP terminology

Ascender: The portion of a lower case character which lies above its x-height.

Baseline: The invisible line that a character of type rests upon.

Bit-Mapped Graphics: Objects (often scanned) that are made up of bits (pixels) or dots are called bit-mapped (also called raster images). The more common bit-mapped formats are TIF, PCX, GIF, and JPG.

Bleed: Describes a printing effect where a graphic element or text extends beyond the edge of a page. A full bleed means the printed elements will extend beyond all four edges of the page.

Bullets: Varying sized dots or other images used to highlight items on a list.

Clip Art: Graphics used to illustrate copy or break up large bodies of text.

Condensed Type: A type face designed to be thin and narrow. These are often used in headlines as they allow room for more information.

Crop: The removal of certain portions of an illustration, a photograph, or other similar type of graphic element. This may be done to better fit the image into the final design, or to remove any unwanted or unneeded graphic element.

Dash: A keyboard character resembling a hyphen but longer. See Em Dash and En Dash.

Descenders: The portion of a lowercase characters which lies below its x-height.

Desktop Publishing (DTP): A term usually used to describe the creation of printed documents using a desktop computer. These may be printed directly from the computer using a laser printer, or sent to a service bureau for higher quality output.

Dithering: A process which gives the illusion of varying shades of gray or shades of color.

DPI (Dots Per Inch): A measure- ment of resolution. A printer can print a certain number of dots per inch horizontally and vertically. A 600dpi printer prints 360,000 (600 by 600) dots on one square inch of paper. Scanners also scan at a certain dpi. The higher the dpi number, the better the resolution.

Drop Cap: The initial character of a paragraph that is enlarged so the top of the letter is even with or slightly above the first line and the balance of the letter drops into the body of the paragraph, usually by three lines. This design element should be used sparingly, preferably for the initial paragraph of an article only.

Encapsulated PostScript (EPS): A standardized format used to store PostScript images.

Footer: Any information that's repeated in the page's bottom margin.

Gray Scale: A scale showing the full range of gray tones between pure white and solid black. While most computer software used today recognizes 256 levels of gray, the human eye can only see 80 to 100 levels.

Gutter: White space between the edge of the binding and the first printed area. It also refers to the white space between columns of text.

Halftone: Since the gradations in the colors of a photograph cannot be reproduced directly by a printing press, the printer re-photographs your photograph through a fine screen, which produces a series of dots on his printing plates. This representation of your photograph as a series of dots is a halftone. Large, densely spaced dots represent darker areas of the photograph, while small widely spaced dots represent lighter areas.

Header: Any information that's repeated in every page's top margin.

Indent: Placing copy further from the right or left of the margin. A first line indent is often used at the begining of paragraphs. A hanging indent has the first line starting at the margin, but successive lines of that paragraph indented — often used in outlines or bulleted lists. A left/ right indent, where both sides of a paragraph are indented, is often used to highlight a long quote or bring attention to a particular passage.

Inline Graphic: The placement of a graphic within a line of text.

Kerning: The reduced spacing between certain combinations of two characters enhancing their visual appeal.

Landscape: Refers to a page or image which is wider than tall.

Leaders: A series of characters (usually dots or dashes) between two widely spaced characters used to control eye movement from one character to the other more distant character.

Leading: The amount of space below a typeset character, expressed in points. A ten point character with three points of leading would occupy 13 points of space (called 10/13).

LPI (Lines Per Inch): A measurement of resolution for halftones; the number of lines (of the printer's screen) per inch.

Pica: The basic measurement unit in the graphic arts field. A pica is about .166 of an inch, and is further broken down into points. There are 12 points per pica; 6 picas per inch; and 72 points per inch.

Pixel: The smallest picture element which can be manipulated by software. The individual "bit" in bit-mapped.

Point Size: Denotes the size of type (see pica).

Portrait: Refers to a page or image that is taller than wide.

Pre-Press: Any and all processes require prior to the printing, such as shooting halftones.

Process Colors: The four process colors — cyan, magenta, yellow, and black (CMYK). Printing from these colors produces full-color printing.

Proof: A copy of a piece for correcting by the client before the job is printed.

Quick Printer: A printer specializing in small print jobs using only one or two colors.

RGB: Acronym for red, green, and blue — the primary colors used in computer monitors.

Rule: Horizontal or verticle lines used in design for separating sections or merely provide graphic elements for decoration.

Small Caps: The uppercase version of each alphabetic character reduced to the x-height of that typeface.

Tracking: The overall spacing between all characters of a line of text (versus kerning which refers to spacing between character pairs).

Typeface (Font, Face): A specific set of characters, numbers, punctuation and symbols having the same design and weight. A typeface family would include all the various weights and styles available for a particular design.

Underline: A method for showing emphasis not usually used in modern typesetting. The advent of bold and italic faces make underlining a word almost obsolete. This method is still used though for certain types of titles, such as the names of court cases in the legal system.

Vector Graphics: A graphic created with an illustration package and made up of lines and curves. Vector graphics retain their sharpness when enlarged or reduced. Some common vector formats are CGM, WMF, and EPS.

White Space: Areas on a piece which are free of type, graphics, and photos. White space is important in good design. It makes a piece more readable.

X-Height: The height of lower case characters without considering any ascenders and descenders. The x is a good example of this measurement.

Xerography: A dry photo electrostatic method of offset plate creation (using either metal or paper plates) and copy reproduction.

Zero Leading: Used when you want no leading from a section, word or set of characters.

Zines: Small magazines with a very specific focus.

EXERCISE

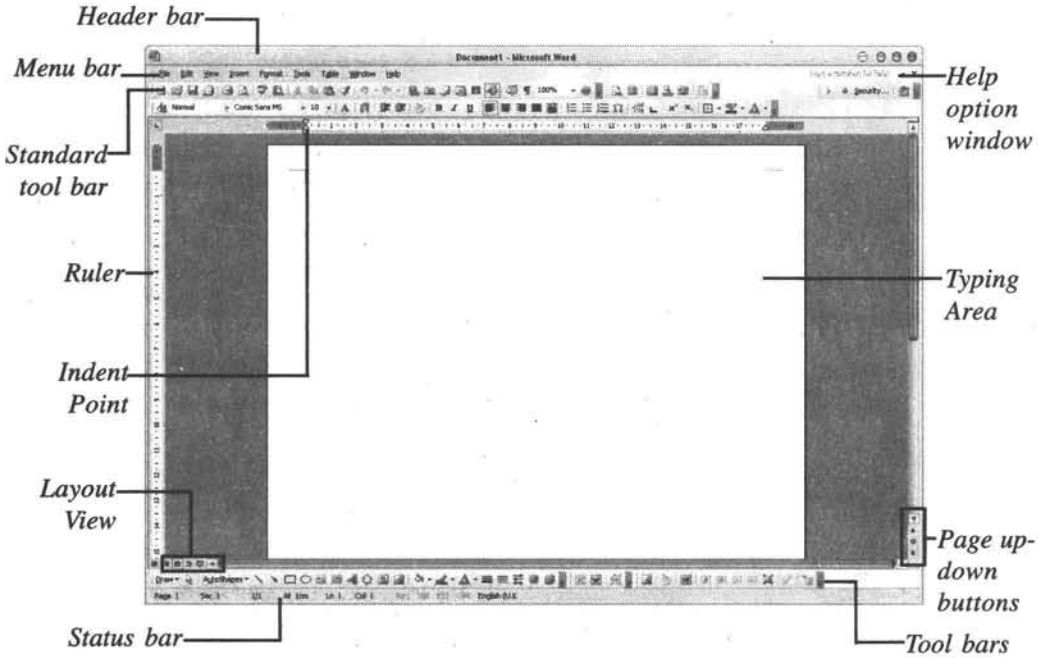
1. Write a short notes on DTP hardware and software.
2. What are the main elements of DTP?
3. What do you understand by Halftone Dots and Dithers?
4. Explain the CMYK, RGB and Spot Colour model.
5. What do you understand by Pixels and Bitmaps?
6. Write a short notes on Vectorised Graphics ?
7. What is the difference between Vector and Bitmap images?
8. Explain the Image output and Resolution?

❑❑❑



5
Word Processing: Using MS-Word 2003

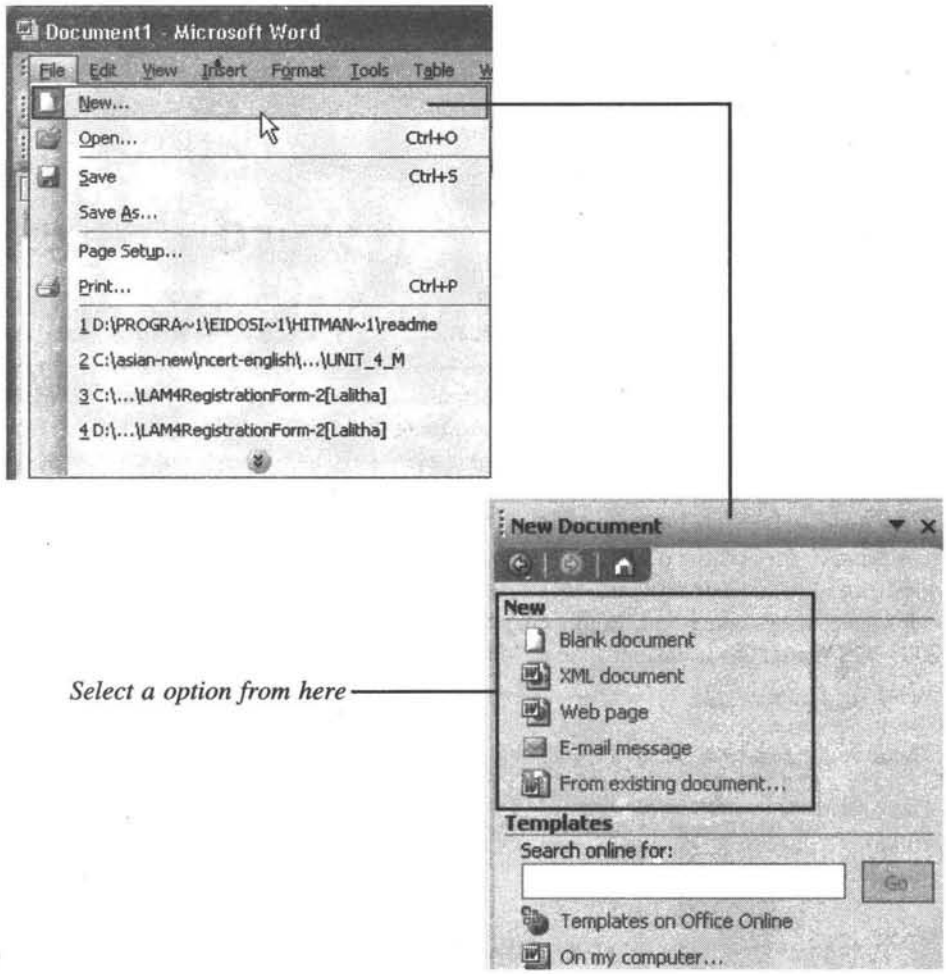
There are many different kinds of applications, all with lots of spiffy features. Word processing is the application that is used most often and most widely. We will start with it to learn about the terms and features that are common to most applications, as well as some that are specific to word processing. Word processing is the most used computer application. It has replaced the typewriter as the main way words are put on paper. Documents can be revised and corrected before they are ever printed. An existing document can be used as a template, or pattern, for a new one. So the user doesn't have to recreate standard documents from scratch each time. This is a major time-saver and helps keep things consistent. In this chapter you can learn word processing under Microsoft Word 2003. MS Word 2003 is the main part of MS Office 2003.



5.1 Create a document

The following procedure creates a new, blank document.

- On the Standard toolbar (***toolbar:*** *A bar with buttons and options that you use to carry out commands. To display a toolbar, click Customize on the Tools menu, and then click the Toolbars tab.)*, click **New Blank** Document.



- In the New Document task pane (***task pane:*** *A window within an Office application that provides commonly used commands. Its location and small size allow you to use these commands while still working on your files.)*, under Templates, click one of the links, or type text , such as **"brochure"** or **"calendar,"** into the Search online for box, and then click Go.
- Choose the **template** or **wizard** you want.

5.2 Open a file

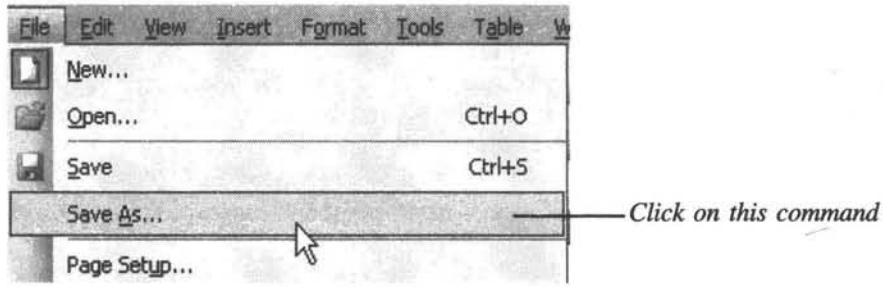
- In your Microsoft Office program, click on **File**, and then click on **Open.**
- In the Look in list, click the drive, folder, or Internet location that contains the file you want to open.

- In the folder list, locate and open the folder that contains the file.
- Click the **file**, and then click **Open** button.

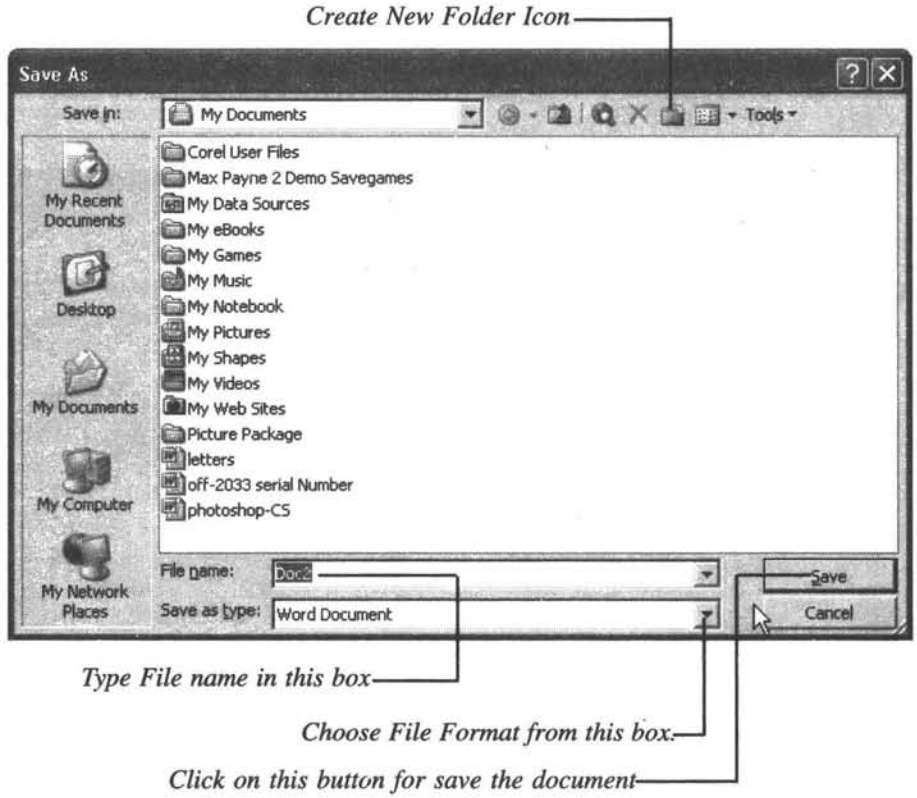
5.3 Save a document

To quickly save a document, click **Save** button on the *Standard toolbar* (**toolbar:** A bar with buttons and options that you use to carry out commands. To display a toolbar, click Customize on the Tools menu, and then click the Toolbars tab.). To save a document in a different location or format, use the procedures below.

- On the **File** menu, click on **Save As** command.



- In the File name box, enter a new name for the file.
- Click on **Save** button.



(a). Save a file to another format

- On the **File** menu, click on **Save As** command.
- In the File name box, enter a new name for the file.
- Click the Save as type list, and then click the file format that you want the file saved in.
- Click on **Save** button.

5.4 Change page margins

- In the **File** menu, click on Page Setup, and then click the Margins tab.
- Under **Margins**, select the options you want.

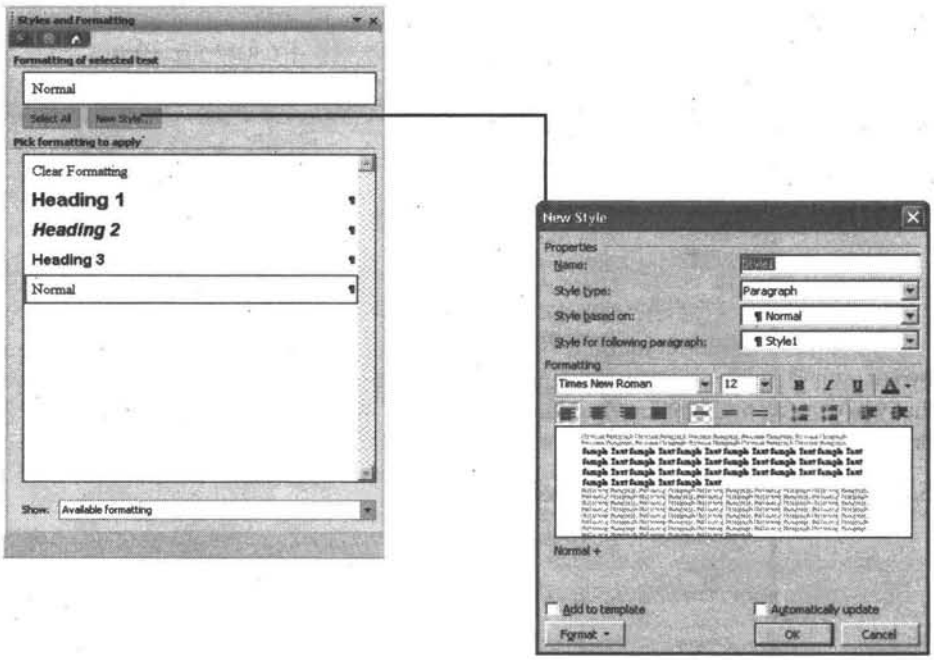
To change the default margins, click Default after you select new margin settings. The new default settings are saved in the template on which the document is based. Each new document based on that template automatically uses the new margin settings.

5.5 Select page orientation

- In the **File** menu, click on **Page Setup** command, and then click on the **Margins tab**.
- Under the **Orientation**, click on the **Portrait** or **Landscape**.

5.6 Create a new style

- If the **Styles and Formatting** task pane is not open, click Styles and Formatting on the Formatting toolbar.



- In the Styles and Formatting task pane, click **New Style** icon.
- In the **Name** box, type a name for the style.
- In the **Style type box**, click Paragraph, Character, Table, or List to specify the kind of style you are creating.
- Select the options that you want, or click Format to see more options.

(a). Modify a style

- If the Styles and Formatting task pane is not open, click Styles and Formatting on the Formatting toolbar.
- Right-click the style you want to modify, and then click Modify.
- Select any options you want.
- To see more options, click Format, and then click the attribute— such as Font or Numbering— you want to change.
- Click on OK button after you've changed each attribute, and then repeat for any additional attributes you want to change.

(b). Delete a style

- If the **Styles and Formatting** task pane is not open, click on Styles and Formatting on the Formatting toolbar.
- In the Pick formatting to apply list, right-click the style you want to delete, and then click **Delete**.

5.7 Select text and graphics

You can select text and graphics by using the mouse or the keyboard, including items that aren't next to each other. For example, you can select a paragraph on page one and a sentence on page three. Microsoft Word provides additional methods for selecting items in a table, drawing objects, or text in outline view (**outline view:** *A view that shows the headings of a document indented to represent their level in the document's structure. You can also use outline view to work with master documents.*).

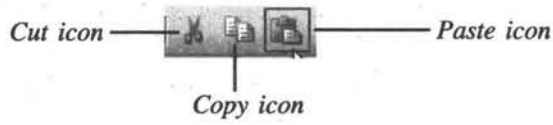
(a). Select items that aren't next to each other

- Select the first item you want, such as a table cell (**cell:** A box formed by the intersection of a row and column in a worksheet or a table, in which you enter information.) or paragraph.
- Hold down CTRL key.
- Select any additional items you want while continuing to hold CTRL key.

You can only select multiple objects of the same type, such as two or more text selections or two or more floating (floating object: A graphic or other object that is inserted in the drawing layer so that you can position it precisely on the page or in front of or behind text or other objects.) graphics, that aren't next to each other.

5.8 Move or copy a single item

- Select the item you want to move or copy.



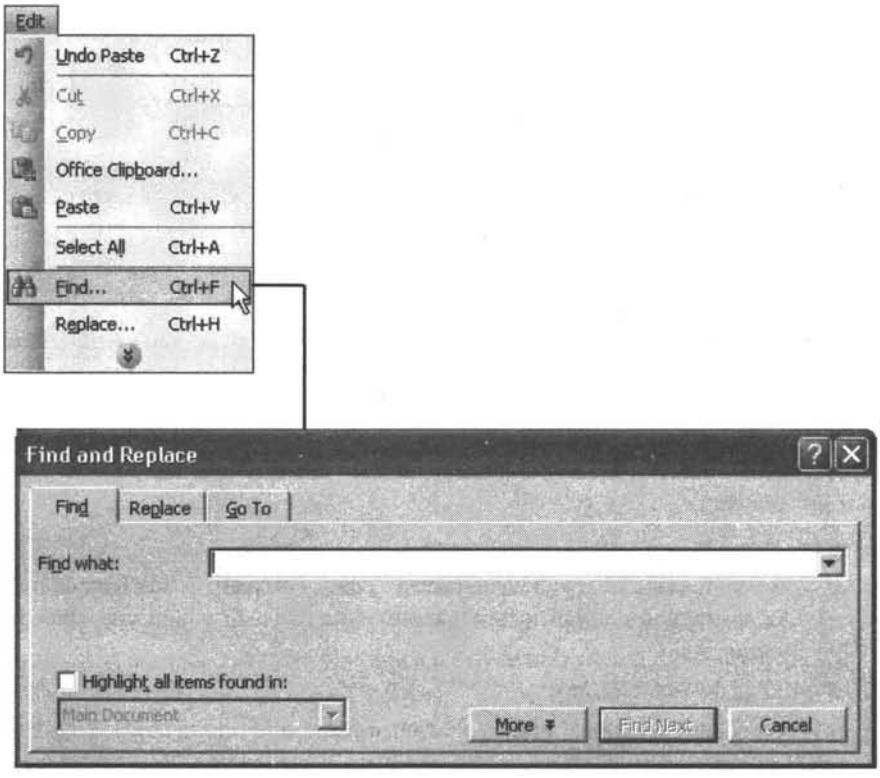
- Do one of the following:
  - *a.* To move the item, click **Cut** on the Standard toolbar.
  - *b.* To copy the item, click **Copy** on the Standard toolbar.
- If you want to move or copy the item to another document, switch to the document.

- Click where you want the item to appear.
- Click on **Paste** icon on the Standard toolbar.
- To determine the format of the items that are pasted, click an option on the Paste Options button that appears just below your pasted selection.

5.9 Find text

You can quickly search for every occurrence of a specific word or phrase.

- In the **Edit** menu, click on **Find** command.



- In the **Find what box**, enter the text that you want to search for.
- Select any other options that you want.
- To select all instances of a specific word or phrase at once, select the Highlight all items found in check box, and then select which portion of the document you want to search in by clicking in the Highlight all items found in list.
- Click Find Next or Find All. To cancel a search in progress, press **ESC** key.

5.10 Replace text

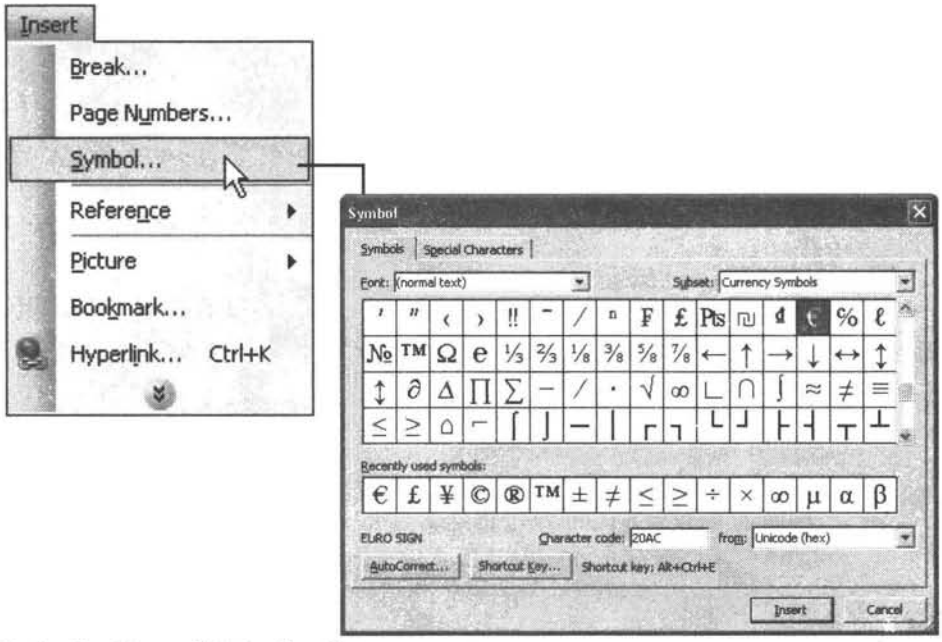
You can automatically replace text— for example, you can replace "Acme" with "Apex."

- In the **Edit** menu, click on **Replace** command.
- In the **Find what** box, enter the text that you want to search for.
- In the **Replace with** box, enter the replacement text.
- Select any other options that you want.

- Click on Find Next, Replace, or Replace All buttons. To cancel a search in progress, press ESC key.

5.11 Insert a symbol

- Click where you want to insert the symbol.
- In the **Insert** menu, click on **Symbol** command, and then click the **Symbols** tab.



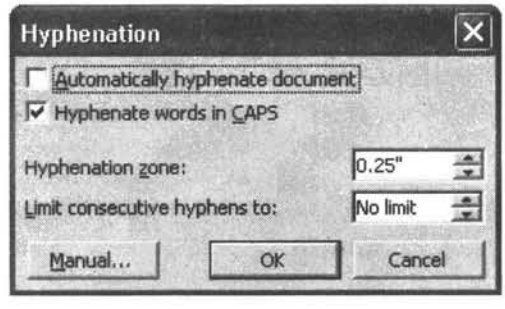
- In the **Font** box, click the font that you want.
- Double-click the **symbol** that you want to insert.
- Click on Close button.

5.12 Insert a special character

- Click where you want to insert the character.
- In the **Insert** menu, click on **Symbol** command, and then **click the Special Characters** tab.
- Double-click on the character you want to insert.
- Click on Close button.

5.13 Automatically hyphenate all of a document

- In the **Tools** menu, point to **Language** command, and then click on **Hyphenation** command.
- Select the **Automatically hyphenate document** check box.
- In the **Hyphenation zone** box, enter the amount of space to leave between the end of the last word in a line and the right margin.



- To reduce the number of hyphens, make the hyphenation zone wider. To reduce the raggedness of the right margin, make the hyphenation zone narrower.
- In the **Limit consecutive hyphens to** box, enter the number of consecutive lines that can be hyphenated.

(a). Manually hyphenate all of a document

- Make sure no text is selected.
- In the **Tools** menu, point to **Language** command, and then click on **Hyphenation** command.
- Click on **Manual** button.
- If Microsoft Word identifies a word or phrase to hyphenate, do one of the following:

  To insert an optional hyphen in the location Word proposes, click on **Yes** button.

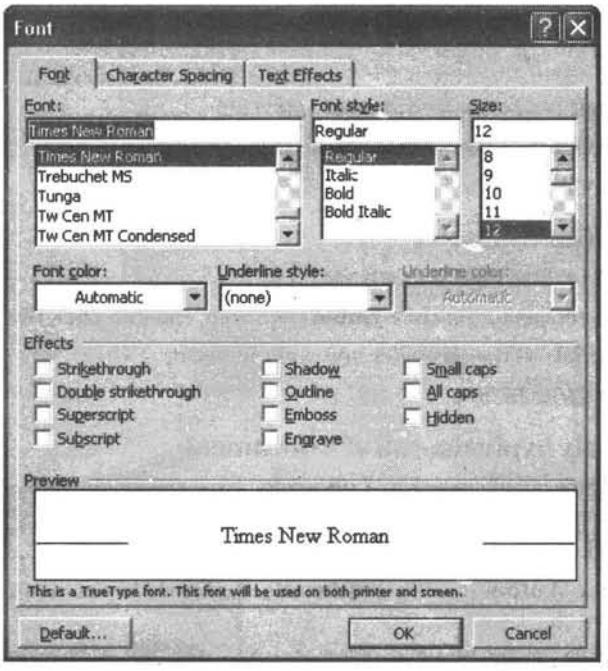
  To insert an optional hyphen in another part of the word, use the arrow keys or mouse to move the insertion point to that location, and then click **Yes** button.

5.14 Apply bold formatting

- Select the text you want to change.
- In the Formatting toolbar, click on **Bold** icon.

(a). Apply embossed, engraved, outlined, or shadow formatting to text

- Select the text you want to change.
- In the **Format** menu, click on **Font** command, and then click the **Font** tab.
- Under **Effects**, select the options you want.



- You can also create special text effects, such as curved and shadowed text, by using WordArt.

(b). Change the font

- Select the text you want to change.
- In the Formatting toolbar, click a font name in the Font box .

(c). Change the color of text

- Select the text you want to change.
- Do one of the following:

  To apply the color most recently used for text, click Font Color on the Formatting toolbar.

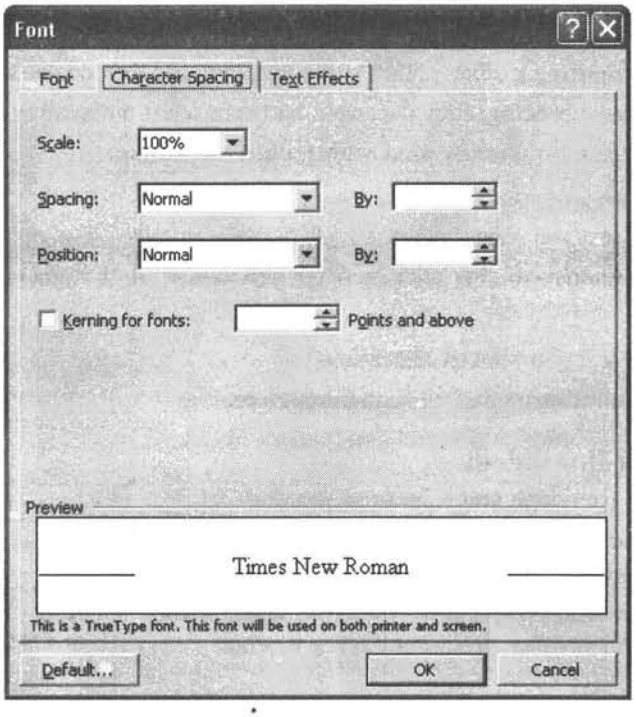
  To apply a different color, click the arrow next to Font Color , and then select the color you want.

(d). Change the size of text

- Select the text you want to change.
- In the Formatting toolbar, type or click a point size in the Font Size box . For example, type 10.5.

(e). Change the spacing between characters

- Select the text you want to change.
- In the **Format** menu, click on Font, and then click the **Character Spacing** tab.



- Do one of the following:

  Expand or condense space evenly between all the selected characters

  Click Expanded or Condensed in the Spacing box, and then specify how much space you want in the By box.

(f). Apply or remove highlighting

Use the Highlight tool to mark and find important text in your document. Highlighting parts of a document works best when the document is viewed online.

- In the **Formatting** toolbar, click on Highlight icon.
- Select the text or graphic you want to highlight.
- To turn off highlighting, click the button again, or press ESC key.

(g). Remove formatting from text

- Select the text whose formatting you want to remove.
- If the Styles and Formatting task pane is not open, click Styles and Formatting on the Formatting toolbar.
- Click on the **Clear Formatting** option.
- Microsoft Word restores the formatting to the normal style for your document.

(h). Make text superscript or subscript

- Select the text you want to format as superscript or subscript.
- In the **Format** menu, click the **Font** command, and then click the **Font** tab.
- Select the **Superscript** or **Subscript** check box.

(i). Change line spacing

- Select the text you want to change.
- In the **Formatting** toolbar, point to Line Spacing , and then do one of the following:

  To apply a new setting, click the arrow, and then select the number that you want.

  To apply the most recently used setting, click the button.

(j). Align text left or right

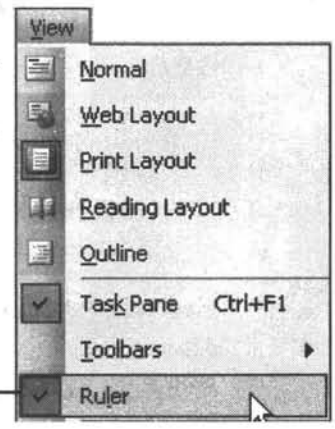
- Select the text you want to align.
- In the **Formatting** toolbar, click on Align Left icon or Align Right icon.

(k). Center text

- Select the text you want to center icon.
- In the **Formatting** toolbar, click on **Center** icon.

5.15 Create a first-line indent

- Select the paragraph you want to indent.
- If you don't see the horizontal ruler, click on **Ruler** command on the **View** menu.
- In the horizontal ruler, drag the First Line Indent marker to the position where you want the text to start.



Click here for activate the Ruler

(a). Increase or decrease the left indent of an entire paragraph

- Select the paragraph you want to change.
- In the **Formatting** toolbar, click Increase Indent or Decrease Indent icon.



- Microsoft Word increases the indent by one tab stop. If you want to change the position of the indent, you can first set a different tab stop.

(b). Change the right indent of an entire paragraph



- Select the paragraph you want to change.
- If you don't see the horizontal ruler, click **Ruler** command on the **View** menu.
- In the horizontal ruler, drag the Right Indent marker to the position where you want the text to end.

(c). Create a hanging indent



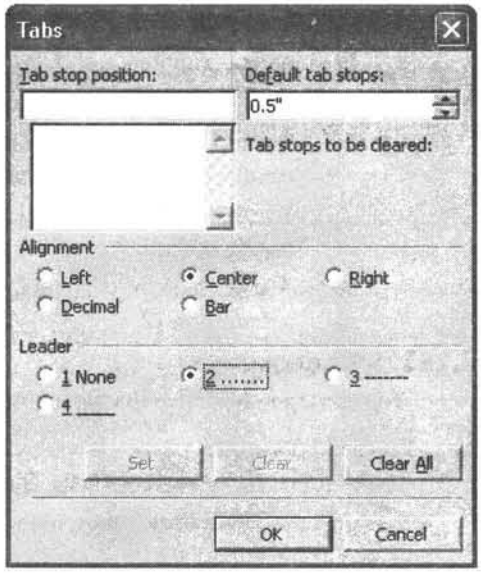
- Select the paragraph in which you want to create a hanging indent.
- If you don't see the horizontal ruler, click on **Ruler** command in the **View** menu.
- On the horizontal ruler, drag the Hanging Indent marker to the position at which you want the indent to start.

(d). Create a negative indent

- Select the paragraph you want to extend into the left margin.
- If you don't see the horizontal ruler, click on **Ruler** command in the **View** menu.
- On the horizontal ruler, drag the Left Indent marker to the position where you want the paragraph to start.

(e). To set tabs with leader characters

- In the **Format** menu, click on **Tabs** command.
- Under the **Tab stop position**, type the position for a new tab, or select an existing tab stop to which you want to add leader characters.
- Under the **Alignment**, select the alignment for text typed at the tab stop.
- Under the **Leader**, click the leader option you want, and then click Set.



5.16 Insert the current date and time

- Click where you want to insert the date or time.
- In the **Insert** menu, click on **Date and Time** command.

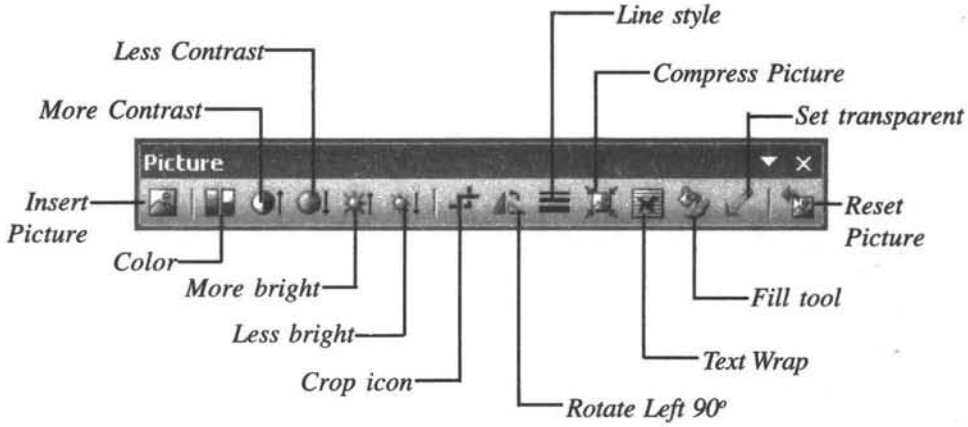
- If you want to insert the date or time in a different language format, then click the language in the Language box.

  The Language box includes a list of the enabled editing languages. Additional date and time options may also be available, depending on the language that you selected.
- In the Available formats box, click a date or time format.

5.17 Crop a picture

You can crop any picture except an animated GIF picture by using the Crop command. To crop an animated GIF, trim the picture in an animated GIF editing program, and then insert the picture again.

- Select the picture you want to crop.
- In the **Picture** toolbar, click Crop icon.



- Position the cropping tool over a cropping handle and then do one of the following:
  1. To crop one side, drag the center handle on that side inward.
  2. To crop equally on two sides at once, hold down **CTRL** key as you drag the center handle on either side inward.
  3. To crop equally on all four sides at once, hold down CTRL key as you drag a corner handle inward.
- In the Picture toolbar, click on Crop to turn off the Crop command.

5.18 Print a document

You can print the active document by clicking Print on the Standard toolbar.

(a). Preview a document

Click on Print Preview icon on the Standard toolbar.

To exit print preview and return to the previous view of the document, click Close.

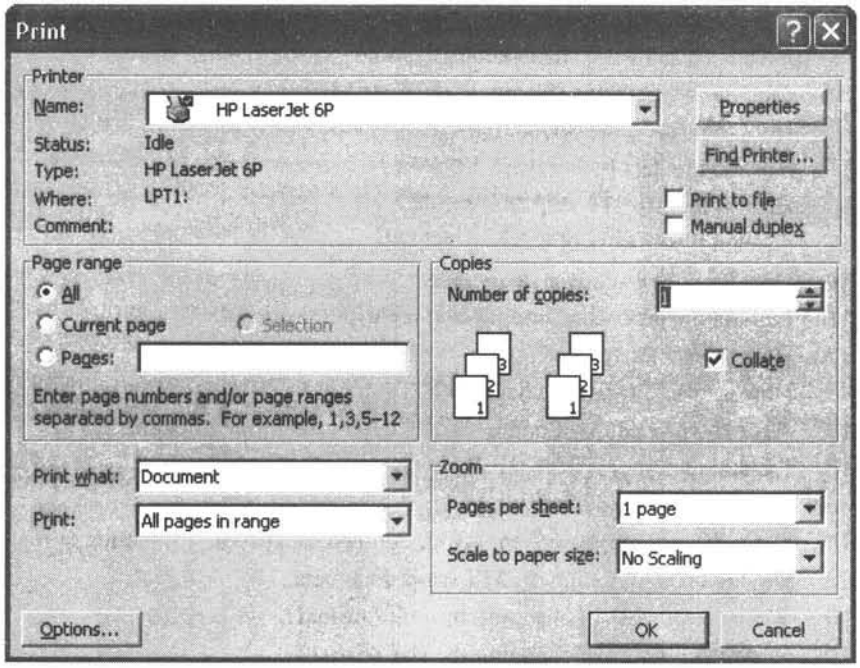
(b) Print a range of pages

- In the **File** menu, click on **Print** command.
- Under Page range, specify the portion of the document you want to print.
- If you click Pages, you must also enter the page numbers or page ranges you want to include, or both.

You can also select the portion of the document you want to print. Click Print on the File menu, and then click Selection.

(c). Print only odd or even pages

☞ In the **File** menu, click on **Print** command.



☞ In the Print box, click either Odd pages or Even pages.

(d). Print more than one copy at a time

☞ In the **File** menu, click on **Print** command.

☞ In the Number of copies box, enter the number of copies you want to print.

To print a complete copy of the document before the first page of the next copy is printed, select the Collate check box. If you prefer to print all copies of the first page and then print all copies of subsequent pages, clear the check box.

❑❑❑

EXERCISE

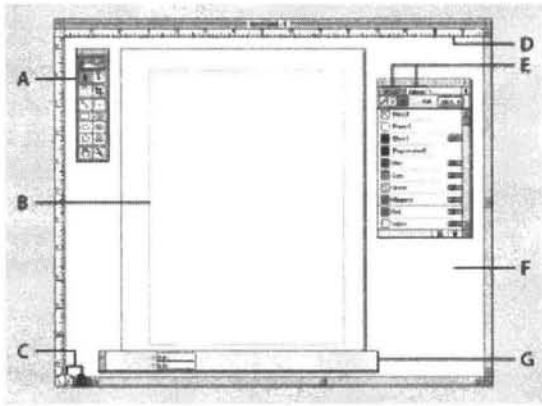
1. How to Create a document in MS Word?
2. Write the procedure of opening a file in MS Word?
3. How to save a document in MS Word ?
4. How to save a word file to another format
5. Explain the method of changing the Page Margin?
6. How to select page orientation?
7. How to Create a new style in MS Word?
8. How to modify a style in MS Word?
9. Explain the process of deleting a style?
10. How to move or copy a single item?
11. Explain the process of finding and replacing text in MS Word?
12. How to insert a symbol?
13. How to insert a special character?
14. Write the procedure of automatically hyphenate all of a document?
15. Explain the process of manually hyphenate all of a document?
16. How to apply bold formatting?
17. How to apply embossed, engraved, outlined, or shadow formatting to text?
18. How to change the font in MS Word document?
19. Write the process of changing the color of text?
20. Write the process of changing the size of text
21. What is the procedure of change the spacing between characters?
22. Explain the method of apply or remove highlighting in the text?
23. How to remove formatting from text?
24. How to make text superscript or subscript?
25. Explain the process of change line spacing?
26. How to align text left or right?
27. How to create a first-line indent?
28. How to increase or decrease the left indent of an entire paragraph?
29. How to change the right indent of an entire paragraph?
30. Write the procedure of creating a hanging indent?
31. How to create a negative indent?
32. How to set tabs with leader characters?
33. Explain the process of insert the current date and time?
34. Write the procedure of cropping a picture?
35. How to Print a document in MS Word?
36. Write the process of previewing a document before printing?





6
Page Making: Adobe Page Maker 7.0

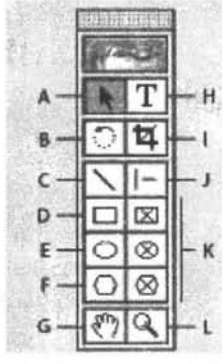
When you create a publication, PageMaker opens a publication window that contains an empty page centered on the pasteboard. The page and pasteboard, where you lay out text and graphics, are similar to the work space used in traditional paste-up.



A. *The toolbox includes tools for creating or editing objects.* **B.** *Margins appear as dotted or pink lines.* **C.** *Page icons show the master pages (L for left, and R for Right) and the regular pages in the publication.* **D.** *Rulers help you align objects on the page.* **E.** *The Colors and Styles palettes are used to add, delete, and edit colors and styles.* **F.** *The pasteboard stores items for later use.* **G.** *The Control palette provides commands for making precise changes to text and graphics.*

6.1 Using the toolbox

The icons in the toolbox represent the tools you use in PageMaker. To select a tool, click it. If the toolbox restricts your view of your work, drag its title bar to move it, or choose Window > Hide Tools to close the toolbox.



A. *Use the pointer tool to select, move, and resize text objects and graphics.*

B. *Use the rotating tool to select and rotate objects.* **C.** *Use the line tool to draw straight lines in any direction.* **D.** *Use the rectangle tool to draw squares and rectangles.* **E.** *Use the ellipse tool to draw circles and ellipses.* **F.** *Use the polygon tool to draw polygons.* **G.** *Use the hand tool to scroll the page, or to preview and test hyperlinks.* **H.** *Use the text tool to type, select, and edit text.* **I.** *Use the cropping tool to trim imported graphics.* **J.** *Use the constrained line tool to draw vertical or horizontal lines.* **K.** *Use the frame tools to create placeholder shapes.* **L.** *Use the zoom tool to magnify or reduce an area of the page.*

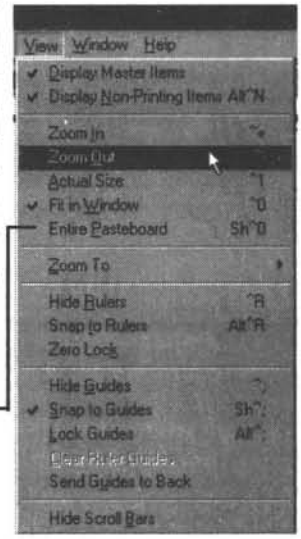
6.2 Viewing pages

You can view your pages at several preset magnifications. Alternatively, you can use the zoom tool to specify an area of the page to view, and increase or decrease its magnification at the same time. To change the part of the page or pasteboard that displays at the current view or magnification level, you can scroll within the window using the scroll bars or the hand tool.

(a). Choosing preset page views

Use commands on the View menu to display the page or pasteboard at preset views. A page retains its view until you change the view again. View settings serve various purposes. Use Fit in Window when you need to check the overall composition of a page or a two-page spread; use Actual Size to see text and graphics as they will appear when printed; and choose View > Zoom To > 200% Size or 400% Size when precision is imperative. To find or view objects on the pasteboard, use Entire Pasteboard.

To move to the next greater or lesser preset view of a page, choose View > Zoom In or View > Zoom Out.



Preset Views

(b). To magnify or reduce with the zoom tool

- Select the zoom tool. The pointer becomes a magnifying glass with a plus sign in its center, indicating that the zoom tool will magnify your view of the image. (The magnifying glass shows a minus sign in its center when in reduction mode.) To toggle between magnification and reduction, press the Ctrl key.
- Position the magnifying glass at the center of the area you want to magnify or reduce, and then click to zoom in or out.
- Continue clicking until the publication is at the magnification level you want. When the publication has reached its maximum magnification or reduction level, the center of the magnifying glass appears blank.

(c). To magnify part of a page by dragging

- Select the zoom tool.
- Drag to draw a marquee around the area you want to magnify.

(d). To zoom in or out while using another tool

1. Press Ctrl+Spacebar to zoom in. Press Ctrl+Alt+Spacebar.
2. Click to zoom in or out, or drag to select an area you want to zoom in on.

6.3 Working with text and graphics

In PageMaker, text and graphics that you draw or import are called objects. An object can be on a page or on the pasteboard. Text can be contained either in text blocks or text frames.

(a). Selecting objects

You use the pointer tool to select objects. You can select a single object, or you can

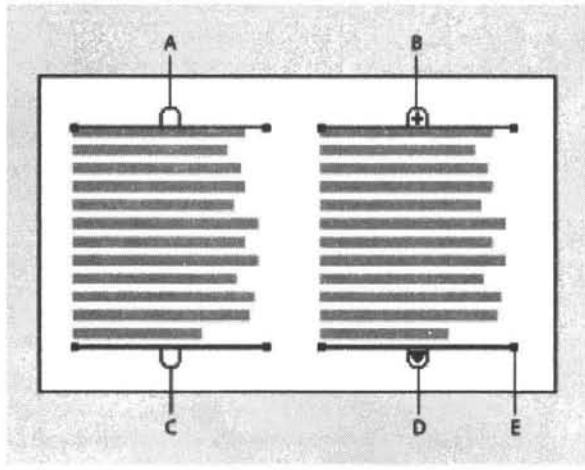
select multiple objects and modify them all at once. When objects overlap, you can select them through the stack of objects.

(b). Understanding text objects

All text in PageMaker is contained either in text blocks or in text frames. When you click text with the pointer tool, the text object's border is displayed. A text object, like a graphic, is an object that you can move, resize, and otherwise manipulate. You can connect a text object to other text objects or separate it from other text objects while keeping the flow of text (the story) intact from text object to text object.

(c). Identifying a text object

The borders of a text object are defined across the top and bottom by lines with loops, called windowshade handles, and by solid square handles at the four corners of the text block. (A text frame has a handle on each side of the object, as well as at the corners, and a nonprinting cyan border.)



A. *An empty windowshade handle at the top of a text object indicates the beginning of a story.* **B.** *A plus sign in the windowshade handle indicates that text from the same story is contained in another text object.*

C. *An empty windowshade handle at the bottom of a text object indicates the end of a story.*

D. *A red down arrow in the windowshade handle indicates that there is more text to be placed onto the page.* **E.** *A handle indicates the point where you drag to resize a text object.*

(d). Selecting text with the text tool

The options available when you work with text depend on the tool you use. When you use the text tool, you can type, edit, and format text. Use the pointer tool to manipulate a text block as an object—for example, select, move, and resize it.

To edit or format text, you must first select the range of characters you want to affect. To deselect text, click another insertion point, or select any tool in the toolbox.

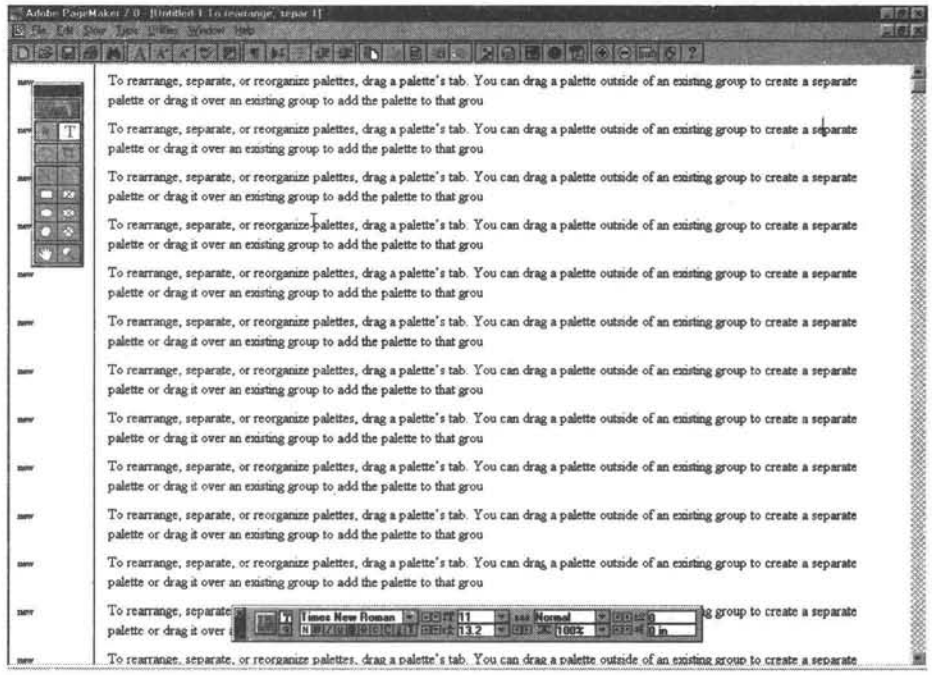
(e). Editing text

You can edit text in layout view or in story editor, which is a built-in word processor. You switch between the two views using the Edit Story and Edit Layout commands.

In layout view, you select and edit text with the text tool. This is useful when you need to see how the revisions look on the page, or when you are making only a few changes to the text.



In story editor, you work only on the text, not the layout, so revising text is fast and easy. Working in story editor is a convenient way to type or edit lengthy blocks of text. You can apply formatting to text in story editor, but you won't see most of the formatting until you return to layout view. You can also use story editor to find and change text.



- Click in a story with the text tool or the pointer tool.
- Choose Edit > Edit Story.
- When you are finished working in the story editor, choose Edit > Edit Layout to return to layout view.

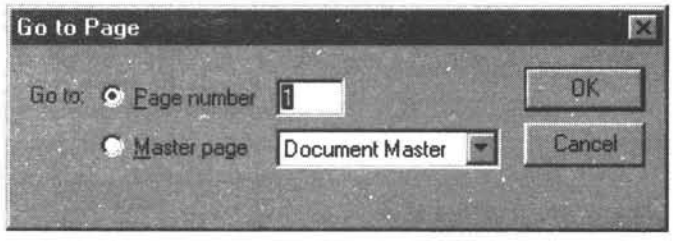
6.4 Moving between pages

You can easily move from one page or spread to another when you are working on a publication with multiple pages. You can go directly to a specific page or thumb through pages in sequential order. You can also view master pages.

(a). To move between publication pages:

Use the technique that suits your needs:

- Click a page icon along the bottom of the layout window. (Click the left or right arrows to view lower- or higher-numbered page icons.)
- Choose Layout > Go to Page, and type the page number you want.

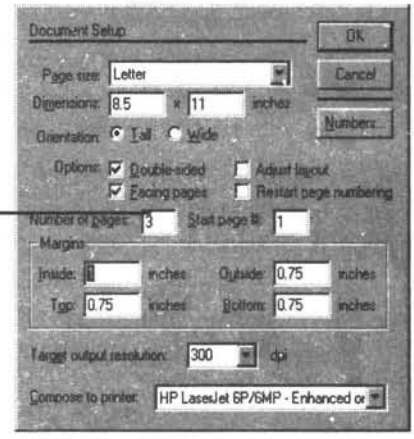


- To go to the previous page, press the Page Up key; to go to the next page, press the Page Down key.
- To go to the beginning of the text line (Windows) or text block (Mac OS), press the Home key. To go to the end of the text line (Windows) or text block (Mac OS), press the End key.
- To move sequentially through the publication as in a slide show, press Shift and choose Layout > Go to Page. To stop the slide show, click the mouse, or press any key on the keyboard.

(b). Adding and deleting pages

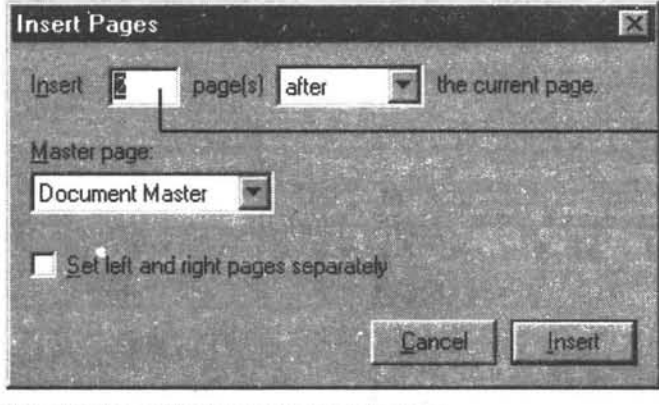
You can add or delete pages as follows:

- Choose File > Document Setup to alter the number of pages. PageMaker adds or deletes pages from the end of the publication.



Adding pages use this option

- Choose Layout > Insert Pages or Layout > Remove Pages to add or remove pages anywhere in the publication, and also to specify which master to apply to new pages you insert.



Adding pages use this option

- You can also add or remove master pages.
- To preserve text or graphics on the pages you remove, first drag them to the pasteboard—a storage place that is independent of any page.
- If you remove a page from the middle of the publication, PageMaker automatically rethreads text on the pages before and after the deleted page (provided the text is in the same story), and renumbers all subsequent pages.
- In a double-sided publication with different inside and outside margins, adding or removing

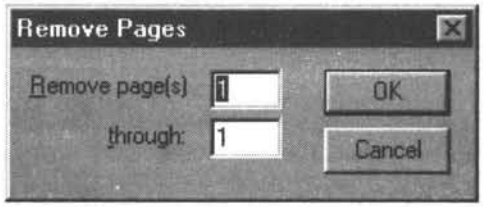
an odd number of pages causes PageMaker to shift the margins and numbering of the subsequent pages and to reposition the pages' contents accordingly to fall within the margins.

(c). To add pages anywhere in the publication

- Go to the place where you want to insert pages.
- Choose Layout > Insert Pages.
- Type the number of pages you want to add, and select a location for the new pages.
- Specify the master pages you want to apply, and then click Insert.

(d). To remove pages

- Choose Layout > Remove Pages.
- Type the range of pages you want to remove, and then click OK.



6.5 Correcting mistakes

PageMaker provides two ways to correct mistakes or to reverse actions you've taken: Choose Edit > Undo or File > Revert.

(a). Undoing changes and reverting publications

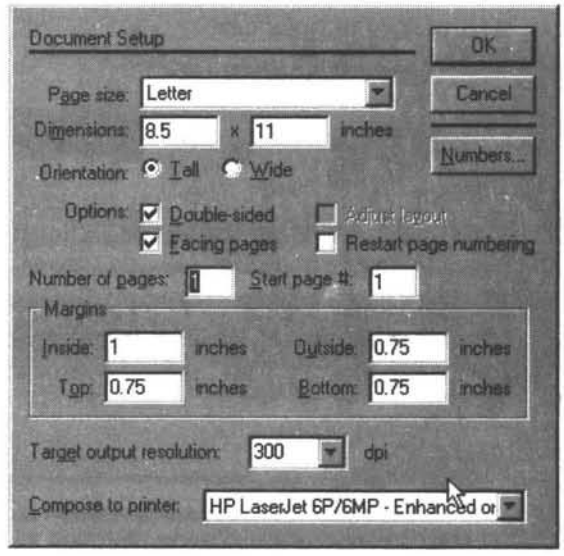
PageMaker remembers your last action and lets you reverse it by choosing Edit > Undo. You must, however, choose this command before performing any other action, as this command only reverses your most recent action. If you accidentally click anywhere on the pasteboard, you won't be able to undo your last action as intended.

6.6 Creating a publication from scratch

When creating a publication from scratch, you make basic design decisions in the Document Setup dialog box, which opens automatically when you choose File > New. For example, you can specify page size and the placement of page margins.

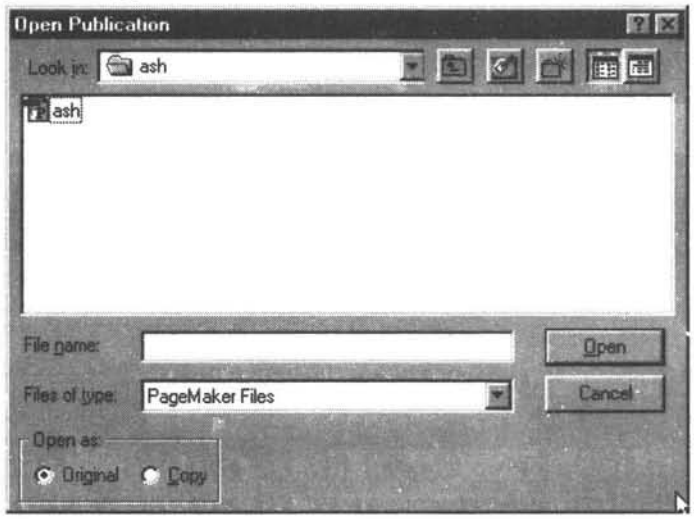
In PageMaker for Windows, you can also specify a printer so that PageMaker composes the publication accordingly. The number of publications you can have open at once is limited by the amount of memory available.

- Start PageMaker, and choose File > New.
- Specify options in the Document Setup dialog box, and then click OK.



(a). To open a publication

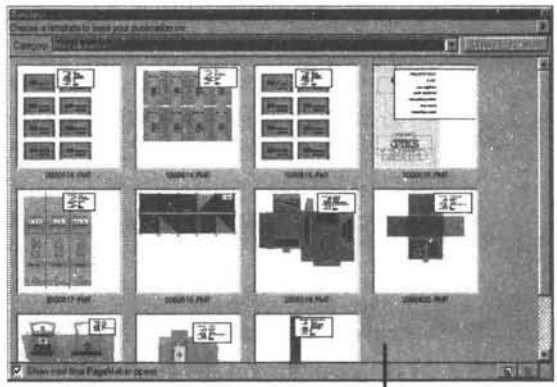
- Choose File > Open.
- Select the publication you want to open.
- Select Original or Copy.



- When you select a template or a PageMaker 4.0-6.5 publication, PageMaker automatically selects Copy. To open the original of a template instead, click Original.
- Click OK.

(b). To open a template using the Templates palette

- Click the New icon on the toolbar to view the Templates palette.
- Choose a category from the Category pop-up menu.
- Double-click the template from which you want to create the document.
- Name and save the untitled publication, if necessary, either as a template or as a publication.



Select a template from this window

(c). To save a publication as a template

- Choose File > Save As.
- Type a name for the template.
- Select Template for the Save As option, and click OK.

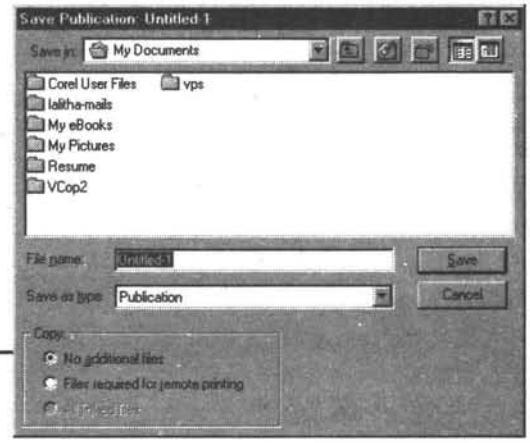
(d). To edit an existing template

- Choose File > Open.
- Select a template.
- Click Original, and then click Open.

- If you don't click Original, PageMaker opens a copy of the template, leaving the original intact.
- After you edit the template, choose File > Save As. You may want to type a new name for the template.
- Select Template for the Save As option, and then click Save.

(e). To name and save a publication for the first time

- Choose File > Save As. (If a publication has not been saved, you can also choose File > Save.)
- Select a folder in which to store the saved file.
- Type a name for the publication, and then click Save. In Windows, PageMaker adds a .PMD filename extension.



Save publication dialog box

(f). To specify a Save Option preference

- Choose File > Preferences > General.
- Select Smaller or Faster for the Save Option, and then click OK.
- If you select Smaller, PageMaker will save your publication at the smallest size possible each time you select File > Save or use the keyboard shortcut.

(g). To save a publication with a new name or in a different location

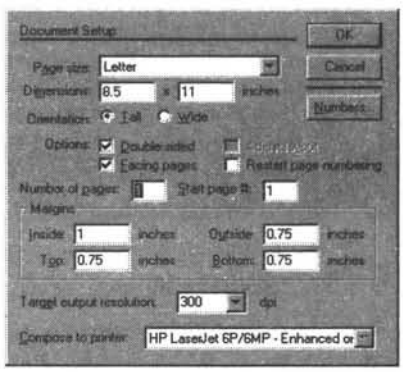
- Choose File > Save As.
- Type a new name or specify a new location, and then click Save button.

6.7 Setting up pages

When you choose File > New to begin a new publication, the Document Setup dialog box - appears. You can define the basic parameters of the publication, such as page size, orientation, margins, and the number of sides on which you print.

(a). To set up a new publication

- Start PageMaker, and then choose File > New.
- Specify page size and page attributes in the Document Setup dialog box as follows:
  - Select a standard page size from the Page Size pop-up menu. When you select a page size, its dimensions appear in the Dimensions boxes.
  - Use the Dimensions boxes to specify a custom page size up to 42 by 42 inches (1065 by 1065 mm).



- For Orientation, select Tall for a page that is taller than it is wide (Portrait orientation), or select Wide for a page that is wider than it is tall (Landscape orientation).
- Click Double-sided to set Inside and Outside margins to accommodate binding on pages that will be printed on two sides and to make the Facing Pages option available. Deselect Double-sided if you intend to print your pub-lication on one side of the paper (single-sided) and don't want to turn on Facing Pages.
- Click Facing Pages if you want left and right pages displayed together (as two-page spreads); make sure that you first select Double-sided.
- (Windows) Choose a printer from the Compose to printer pop-up menu.

☞ Type the number of pages you initially plan for the publication. (You can add or delete pages later if necessary.)

(b). To set margins

☞ Choose File > New or File > Document Setup.

☞ To change the margins, type the values in the Margins area, and then click OK.

(c). Changing Document Setup options

You can modify a publication's document setup at any point in your work by choosing File > Document Setup while the publication is active. Be sure to check the Adjust Layout option in the Document Setup dialog box if you want PageMaker to reposition and resize text, graphics, and nonprinting guides when you change page settings.

Other changes you make in the Document Setup dialog box may not require layout adjustment, but can lead to conditions you need to consider:

☞ When you change the starting number or number of pages in a publication by an odd number, left-hand, even-numbered pages become right-hand, odd-numbered pages, and vice versa.

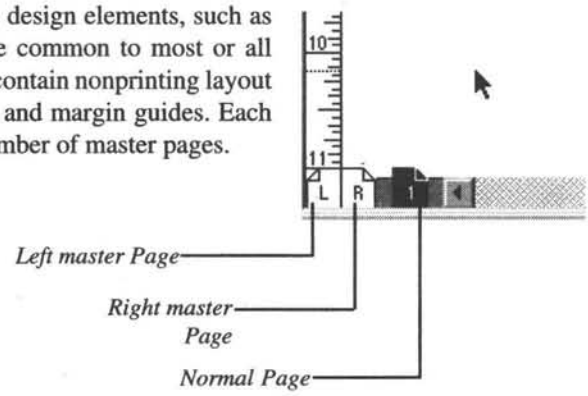
☞ If you change from a double-sided to a single-sided page, or vice versa, elements on left-hand pages may be repositioned relative to the new margins.

☞ If you change the Target Printer Resolution value, resize existing 1-bit bitmap images to match the new printer resolution.

6.8 Using Master pages

In multipage publications, your design will be more cohesive if each page is built on a common foundation, or master page.

A master page typically contains basic design elements, such as headers, footers, and page numbers, that are common to most or all pages in your publication. Master pages also contain nonprinting layout guides, such as column guides, ruler guides, and margin guides. Each publication can have a virtually unlimited number of master pages.

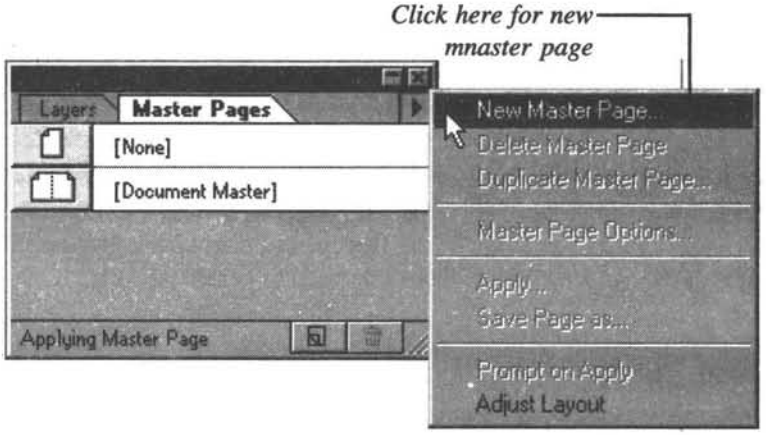


You can create, modify, and delete objects on master pages just like any other objects, but you must do so from the master pages themselves. Each publication you open contains a Document Master page or (if the publication includes facing pages) a Document Master page spread. The Document Master applies to all pages in the publication until you specify otherwise, and -cannot be renamed or removed from the publication.

An icon representing the master pages appears at the lower left corner of a publication window in layout view. The letters **L** and **R** (for left and right) mark the master page icon for facing pages; a single-sided publication icon is marked by an **R** alone. Click the icon to turn to the master applied to the current publication page.

(a). To make a new master page

- Choose Window > Show Master Pages.
- Choose New Master Page from the Master Pages palette menu, or click the new master button at the bottom of the palette.



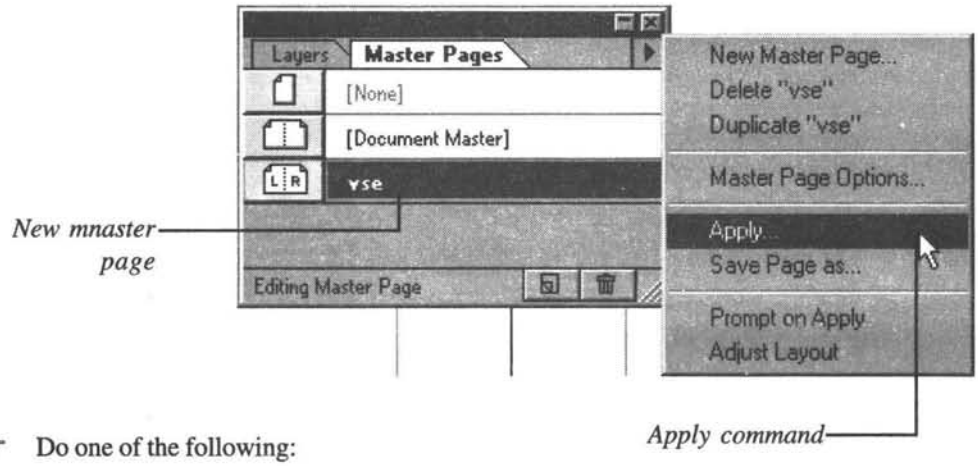
- Type a name for the master, and specify whether you want a single page or a two-page spread.
  - If your publication is single-sided, you do not have the option of creating a spread. See Setting up pages for more information on creating single-sided or double-sided pages.
- Specify the margins, number of columns, and space between the columns.
  - If you are creating a two-page master spread, be sure to specify columns and the distance between them for both left- and right-hand pages in the spread.
- Click OK.

PageMaker displays the newly created master page in the publication window, and adds its name to the Master Pages palette.

(b). To quickly apply the same master to several pages throughout a publication

- Choose Window > Show Master Pages.
- Choose Apply from the Master Pages palette menu.
- Type a range of pages to change.
  - If appropriate, use the Page Range text boxes to type a contiguous range (use a hyphen to separate the first and last page numbers in the range—as in 3-6), a

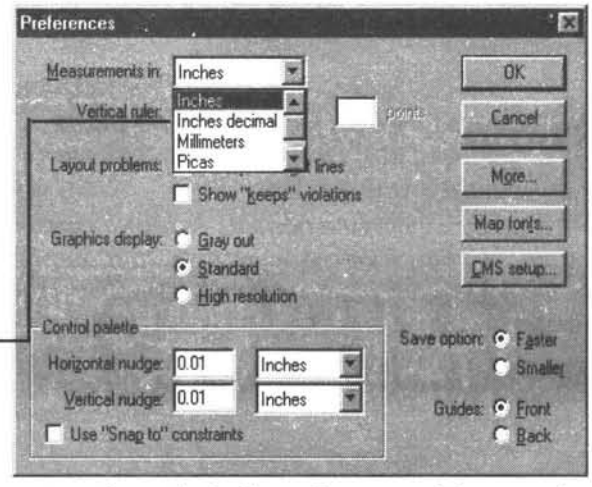
discontiguous range (use commas to separate the numbers—as in 2, 4, 8), or a combination of both. For example, typing "1, 3-6, 10-" applies the specified master to pages 1, 3, 4, 5, 6, 10, and all subsequent pages in that publication.



- Do one of the following:
  - To apply a single master, select its name from the Master Page pop-up menu.
  - If the publication is double-sided, and you want to apply one master to the left-hand pages in the range and another master to the right-hand pages in the range, select the Set Left and Right Pages Separately option, and then select the masters you want to apply.
- Select Adjust Layout if you want objects and guides on the specified pages to be repositioned or resized as appropriate for the margins and columns of the master you are about to apply.
- Click Apply.

(c). To select a measurement system and set the vertical ruler

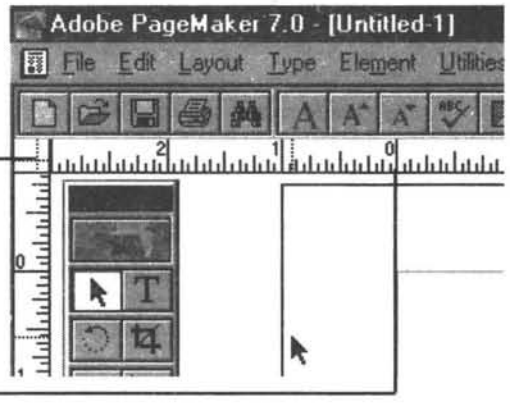
- Choose File > Preferences > General.
- Select the Measurement System option you want to use.
- The horizontal ruler reflects the measurement system you select.
- Select a Vertical Ruler option, and then click OK.



To use points for the vertical measurement, set the vertical ruler to Custom, and then type the number of points you want between tick marks on the ruler—typically this will match the leading for body text in your publication.

6.9 Using the zero point

The zero point is the position at which the zeros on the vertical and horizontal rulers intersect. When you start a new, single-sided publication, PageMaker puts the zero point at the top left corner of the page. When you work with facing pages, the default zero point is at the intersection of the top inside edges of the facing pages.



You can easily move the zero point to measure distances from a specific part of your page or to customize the way oversized pages print. To avoid accidentally moving the zero point after you set it, you can lock it in place.

(a). To move the zero point

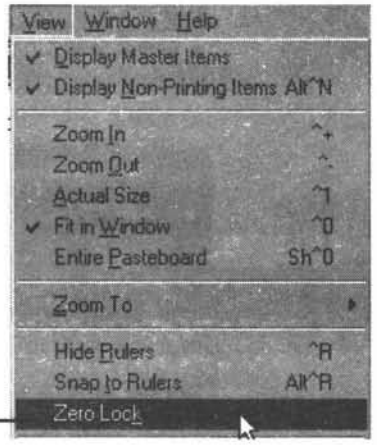
- Position the pointer tool on the crosshair in the zero point window.
- Drag to the new location.
- Release the mouse button; the zero point is reset. Before and after zero point is moved

(b) To lock the zero point

Choose View > Zero Lock.

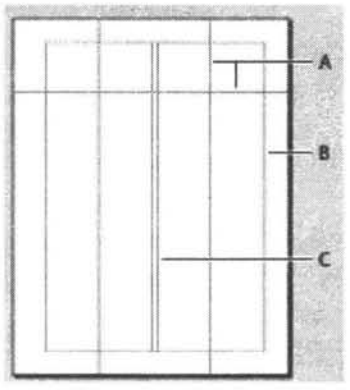
(c). To reset the zero point

Double-click the zero point to reset it to the -default location.



6.10 Nonprinting guides

Nonprinting guides are lines that help you position objects on pages but do not appear in print. These lines form the framework of the layout grid. There are three kinds of non-printing guides: margin guides, column guides, and ruler guides.



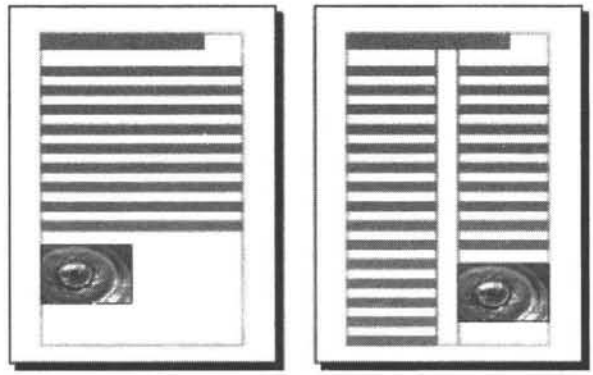
A. Ruler guide
B. Margin guide
C. Column guide

(a). To display or hide the column, ruler, and margin guides on the page

- Choose View > Show/Hide Guides.
- If you try to select an object but instead select a guide that overlaps it, you can press Ctrl (Windows) or Command (Mac OS) to select the object through the guide. Or, you can set guides to display in back of page elements throughout the current publication by choosing View > Send Guides to Back.

(b). To force objects you move or resize to align with the nearest guide

- Choose View > Snap to Guides.
- All -margin, column, and ruler guides exert a magnet-like pull on any tool, text, or graphic within 3 pixels of the guide. This option makes it easy to align text and graphics precisely to a guide, regardless of whether or not the guide rests on ruler increments.

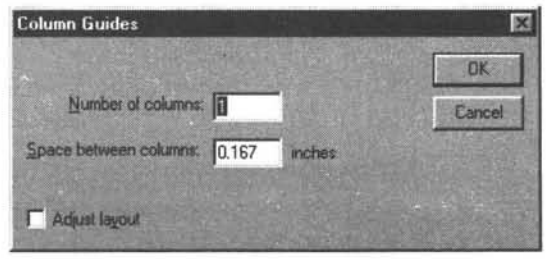


Before and after column guides are applied

- You create columns to control the flow of text in text blocks that you place automatically, and to help position text and graphics. How you specify columns is determined by the command you use.
- The Layout > Column Guides command creates a specified number of columns of identical widths, fitting them within the margins of the page. If text or graphics are already on the page, PageMaker can reposition them to align with the revised column setup if you select Adjust Layout in the Column Guides dialog box.
- You can create up to 20 columns on a page. (The default setting is one column per page, which is the entire area between the margins.)
- To save time and ensure consistency, add column guides to master pages rather than to specific publication pages.

(c). To set up columns on a page

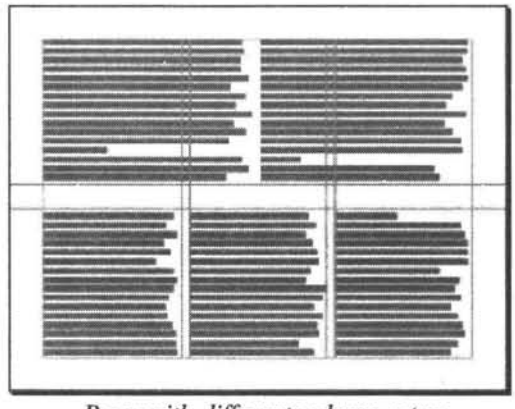
- Turn to the publication page or master page where you want the columns.
- Choose Layout > Column Guides. When facing pages appear in the publication window and you choose Column Guides, the Set Left and Right Pages Separately option appears so that you can set columns differently for each page.



- Type the number of columns you want on the page and the space you want between columns (the gutter). If you are setting left and right pages separately, type values for both pages.
- Select Adjust Layout if you want existing text and graphics on the page to adjust to the revised column setup, and then click OK. PageMaker creates the specified number of columns, equally spaced and equally sized.

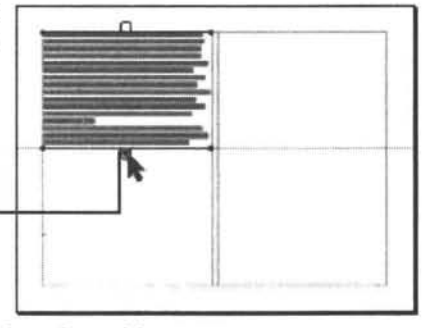
(d). To create different column setups on the same page

- Choose Layout > Column Guides, type the number of columns you want to have in the top part of your page, and then click OK.



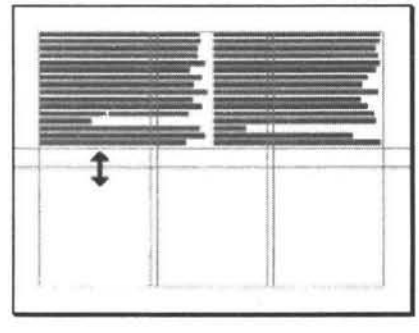
Page with different column setup

- Position a ruler guide where you want the two-column format to end.
- Position text within the first column down to the ruler guide. Then click the bottom of the windowshade handle.



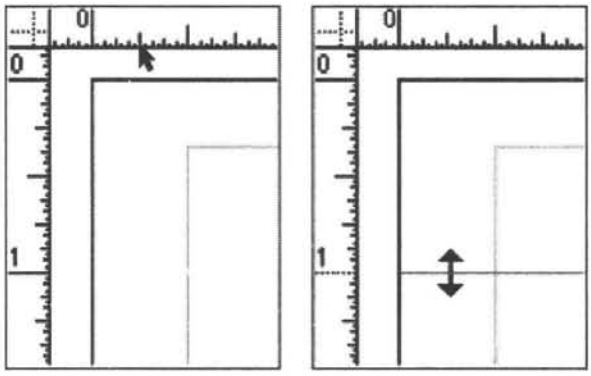
Text positioning in first column

- Position text within the second column down to the ruler guide.
- Repeat step 1, but this time type the number of columns you want to have in the bottom part of your page, and make sure that the Adjust Layout option is not selected in the dialog box. Then pull a ruler guide down and position it where you want the top of the columns to begin.
- Place the rest of the text within the newly defined columns, or -select another document to place.



6.11 Setting up ruler guides

A publication page can have up to 120 ruler guides, in any combination of horizontal and vertical. If a page contains ruler guides from a master page, those guides count toward the total of 120.



(a). To place a ruler guide

Move the pointer over a ruler, and then drag a ruler guide from the ruler. If the rulers aren't visible, choose View > Show Rulers.

(b). To remove a ruler guide

Select the guide you want to remove and drag it off the publication page.

(c). To remove all ruler guides at once

Choose View > Clear Ruler Guides. (This command is unavailable if the Lock Guides command is checked.)

(d). To lock or unlock ruler guides

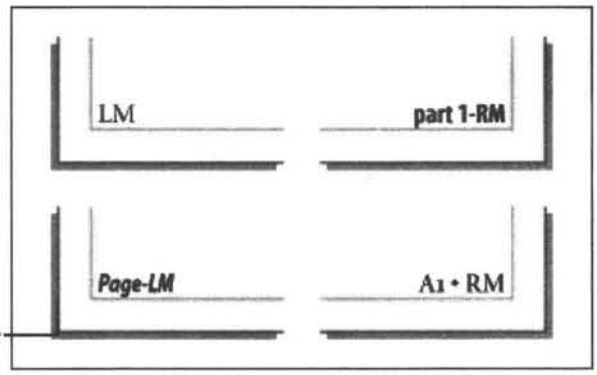
Choose View > Lock Guides. If you later change such publication-layout attributes as margins or page size, locking guides can interfere with PageMaker's ability to adjust objects on the page.

(e). To make objects align to the ruler increments:

Choose View > Snap to Rulers.

6.12 Numbering pages

To print page numbers in a publication, you must tell PageMaker where to put the numbers and how you want them to look. For example, you may want page numbers to include some text, such as the word Page -before the number, or you may want to number your introduction pages with Roman numerals.



Examples of page-number markers

Do this by adding a page-number marker, a special character that keeps track of the page order in the publication and ensures that each page is numbered correctly at all times.

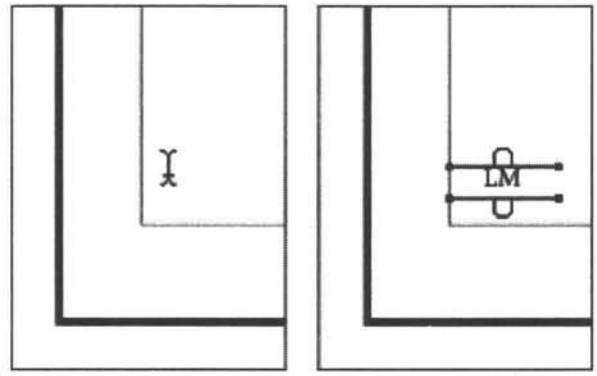
Pages are numbered starting from 1, unless you specify a different starting point in the Document Setup dialog box, or unless the publication is part of a booked publication (a series of individual publications forming a single large document) that is being numbered sequentially.

PageMaker won't allow more than 999 pages per single publication, but page numbers can be as large as 9999 (for example, you can start a 50-page chapter with page number 9949).

Although you can add page numbers to any publication page, it is best to add them to master pages. This saves time and ensures that the numbers appear at the same place on each page. Be sure to add a page-number marker to all master pages applied in your publication (assuming you want page numbers to appear on all pages).

(a). To add page numbers to a publication

- Turn to a master page or a publication page.
- Use the text tool to click an insertion point on the page where you want the page number to appear, or click in a text frame you've placed on the page for the page number.
- Press Ctrl+Alt+P Keys.
- Use the text tool to select and format the text as desired. On the master pages, a page-number marker (LM for a left master page, RM for a right master page or single page master) indicates where page numbers will appear.



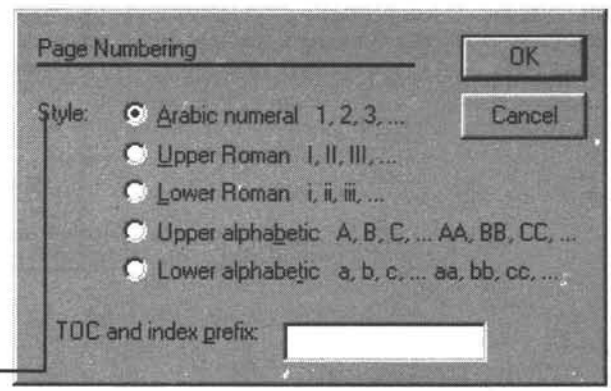
(b). To specify the starting page number

- Choose File > Document Setup.
- Depending on whether or not the publication is part of a book being numbered sequentially, specify options as follows:
  - To start pagination at a certain number, type the starting page number in Start Page #. If the publication is part of a book, click Restart Page Numbering.
  - To let PageMaker calculate the starting page number based on the publication's location in a book, deselect Restart Page Numbering.

(c). To change the numbering system

- Choose File Menu > Document Setup command.
- Click on Numbers button.
- Select the numbering system you want to use, and then click OK.

You can select Arabic numerals, Roman numerals, or letters of the -alphabet to number your pages.



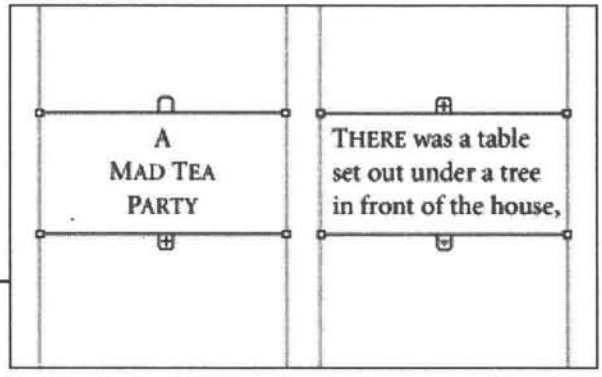
Select a number style

6.13 Creating text blocks

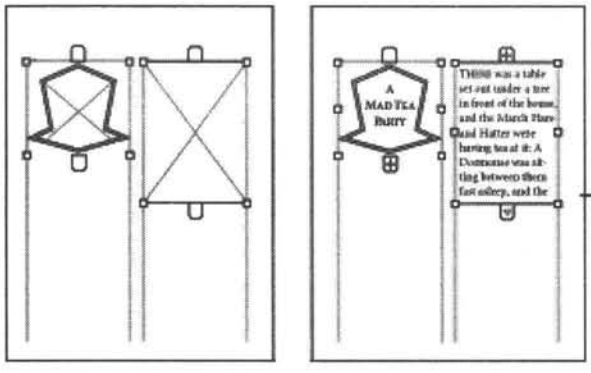
A text block contains text you type, paste, or import. You cannot see the borders of a text block until you select it with the pointer tool.

(a). You create text blocks in two ways

- Click or drag the text tool outside an existing text object on the page or pasteboard, and then type. (Unlike text frames, text blocks must contain text.)
- Click a loaded text icon in an empty column or page. PageMaker will create as many new text blocks (the exact size of the page columns) as needed to contain the text in the loaded text icon.



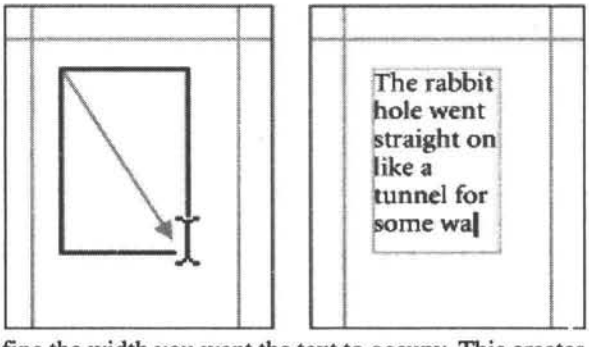
A text block must be rectangular; it cannot have a stroke or fill, and it cannot be empty.



A text frame can be any shape; it can have a stroke or fill, and it can be empty, serving as a placeholder for text to come.

(b). To create a text block with the text tool

- Select the text tool from the toolbox. The pointer turns into an I-beam.
- On an empty area of the page or pasteboard, do one of the following:
  - Click the I-beam where you want to insert text. This creates a text block the width of the column or page. By default, the insertion point jumps to the left side of the text block.

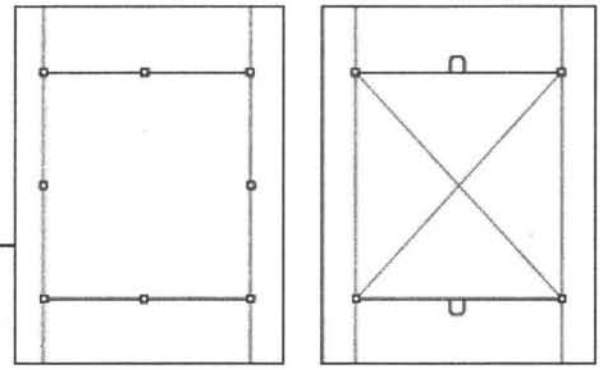


  - Drag a rectangular area to define the width you want the text to occupy. This creates a custom-size text block that may or may not fall within column or page margins. The insertion point jumps to the left side of the text block.

- Type the text you want. Unlike with a text frame, you do not see the borders of a text block until you click the text with the pointer tool.

(c). To create a text frame

- Either draw a new frame with a frame tool, or select a shape drawn in PageMaker and choose Element > Frame > Change to Frame.



PageMaker-drawn rectangle (left) and rectangle changed to frame (right)

(d). To add text to a frame

- Do one of the following:
  - Select the text tool, click in the frame, and then type or paste text directly into the frame.
  - Choose File > Place, double-click a text file, and, when the cursor becomes a loaded icon, click on the frame you want to fill with text.
  - Attach a text block to a frame, effectively deleting the text block and adding its text to the frame.

(e). To attach a text block to a frame

- Select a text block, hold down Shift, and then select an empty frame.
- Choose Element > Frame > Attach Content. The text flows into the frame and the text block disappears.

If the Attach Content option is dimmed, make sure that the selected object is an actual frame instead of a shape; you may need to select it and choose Element > Frame > Change to Frame, and then try again.

6.14 Formatting text

PageMaker provides several ways to apply character-level formatting, such as font and size, and paragraph-level formatting, such as alignment and indentation. How PageMaker applies formatting depends on what is selected when you choose options:

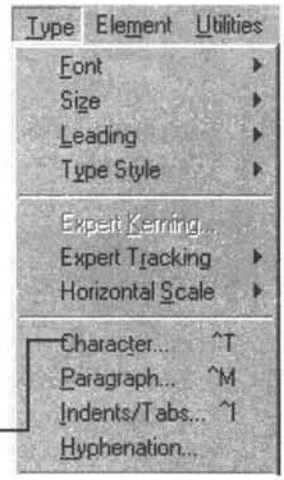
- **Pointer tool selected:** Sets the publication's default type and paragraph specifications. If no publication is open, the changes apply to text you type in all new publications you open.
- **Text selected with text tool:** Changes just the selected text or, for paragraph-level attributes, just the paragraphs selected.
- **Insertion point selected:** Applies character-level formatting to new text you type at that point, and paragraph-level formatting to the paragraph containing the insertion point.

(a). To format text

- Using the text tool, select the text you want to format.
- Choose the formatting attribute you want from the Type menu, or use the Control palette.

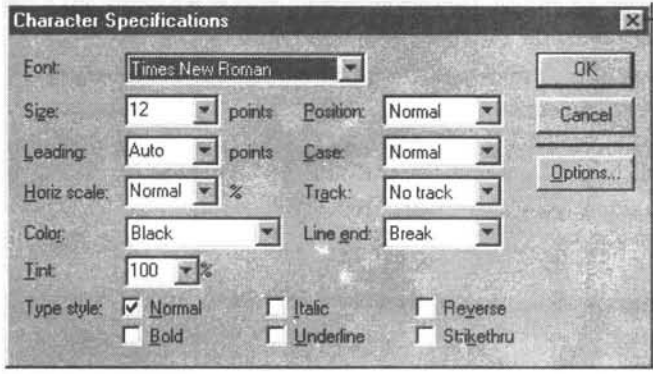
(b). To format several text attributes at once

- With the text tool, select the text you want to format.
- Choose Type > Character, or click the Control palette to activate it.
- Change settings in the Character Specifications dialog box or in the Control palette.



(c). To format characters by editing paragraph styles

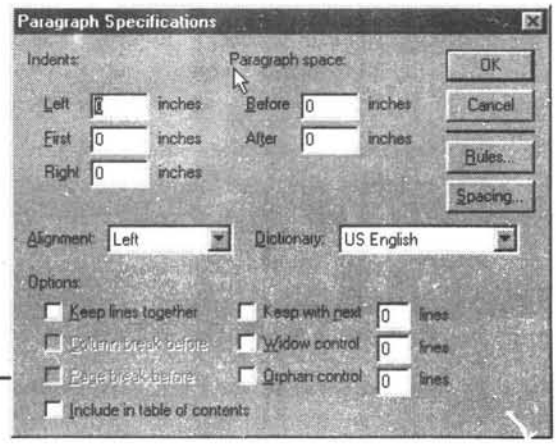
- Choose Window > Show Styles.
- Press Ctrl (Windows) or Command (Mac OS), and then click the paragraph style you want to revise.
- Click Char to open the Character Specifications dialog box.



- Select the formatting options you want.
- Click OK in each dialog box to apply the changes.
- The changes appear automatically in all paragraphs formatted with that paragraph style.

(d). To format paragraphs

- Using the text tool, click an insertion point in a single paragraph, or -select a range of paragraphs.
- Choose Type > Paragraph. The Paragraph Specifications dialog box lets you apply formatting not available on the Control palette.
- Select formatting options.



Paragraph specification box

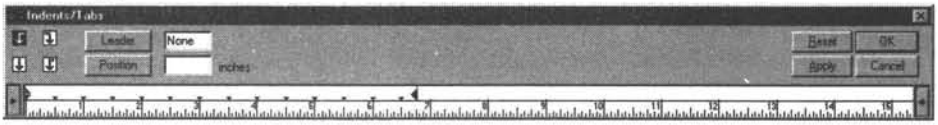
(e). To format paragraphs by editing paragraph styles

- Choose Window > Show Styles.

- Press Ctrl (Windows) or Command (Mac OS) and click a paragraph style to edit. This opens the Style Options dialog box.
- Click Char, Para, Tabs, or Hyph to select paragraph-level formatting options. The changes affect all paragraphs with that style.

(f). To set tabs with the Indents/Tabs ruler

- In layout view, click an insertion point in a paragraph, or select a group of paragraphs.
- Choose Type > Indents/Tabs.



- Click a tab-alignment icon (left, right, center, or decimal) for the first tab you want to set.
- Click a tab location on the ruler to position the new tab, or move an existing tab by dragging its marker along the ruler.
- The first tab you set deletes all default tabs (the small triangles regularly spaced along the ruler) to its left. Subsequent tabs delete all default tabs between the tabs you set.
- If you want the tab leadered, select the tab and choose an option from the Leader menu. To create a custom leader style, choose Custom from the Leader menu and then type a one- or two-character leader.
- Click Apply to preview the changes to your text, and then click OK to accept the changes.

(g). To move, delete, or repeat a tab for an evenly spaced series

- In layout view, click an insertion point in a paragraph, or select a group of paragraphs.
- Choose Type > Indents/Tabs.
- In the Indents/Tabs dialog box, select the tab you want to move, delete, or repeat, and then choose an option as follows:
  - To move the tab, drag it or type the new location in the Position box, and then choose Move Tab from the Position submenu.
  - To delete the tab, drag it off the ruler or choose Delete Tab from the Position submenu.
  - To create a series of tabs the same distance the selected tab is from the preceding tab (or from the tab ruler's zero point), choose Repeat Tab from the Position submenu for each new tab to add to the series.

(h). To set an indent using the Indents/Tabs ruler

- In layout view, click an insertion point in a paragraph or group of paragraphs.
- Choose Type > Indents/Tabs.
- Drag the indent markers on the ruler to where you want left, right, and first-line indents to be. When you release a marker, the indentation is displayed in the Position box.
- Click OK to set the indents.

(i). To set an indent using the Paragraph command

- Click an insertion point in a paragraph, or select a group of paragraphs.
- Choose Type > Paragraph.
- Type values for the Indents options, and then click OK.

(j). To set an indent using the Control palette

- Click an insertion point in a paragraph, or select a group of paragraphs.
- Choose Window > Show Control Palette, or click the Control palette to activate it. If the palette is in character view, click the paragraph-view button to display the paragraph options.
- Type values for the Indents options, and then click Apply.

(k). To create a hanging indent

- Using the text tool, click an insertion point in a paragraph, or select a group of paragraphs to be indented.
- Choose Type > Indents/Tabs.
- In the ruler, click to create a tab setting where you want the lines to be indented.
- Hold down Shift as you drag the left-indent marker (the bottom triangle) to the right until it's aligned with the tab, and then click OK.
- Click an insertion point in the text where you want a tab (for example, after a number or bullet), and then press Tab.

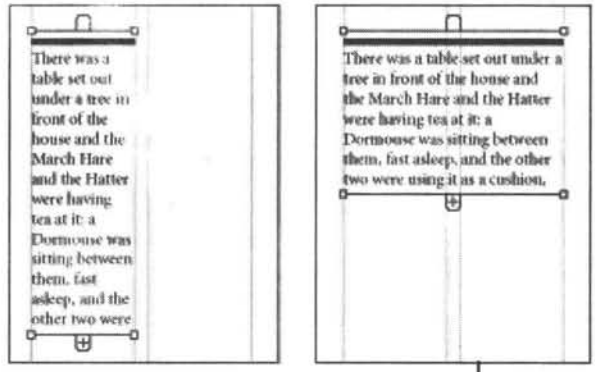
(l). To add bullets and numbers automatically

- Click an insertion point in the first paragraph you want to change, or select the range of paragraphs.
- Choose Utilities > Plug-ins > Bullets and Numbering.
- If you are numbering paragraphs, click Numbers; otherwise, go to step 5.
- Specify the following options:
  - Numbering Style
  - Separator
  - Start at Number
- Select a Range.
- If you are adding bullets or other special characters to the paragraphs, click Bullets and do one of the following:
  - Click one of the bullet characters supplied.
  - Click one of the bullet characters supplied, and then click Edit to change its font or size.
  - Click Edit to specify another character of any font or size to use as a bullet.
- Click OK.

(m). To apply a paragraph rule

- Select the paragraph you want to edit.
- Choose Type > Paragraph, and click Rules.
- Click Rule Above Paragraph or Rule Below Paragraph.
- Define stroke attributes as follows:
  - Choose a stroke pattern and weight from the Stroke Style pop-up menu. To specify a weight not listed on the menu, choose Custom and then type a weight from 0 to 800 points.
  - Choose a defined color or tint from the Stroke Color pop-up menu.

- To tint the color applied to the rule, choose a tint percentage from the Tint pop-up menu, or type a percentage from 1 to 100%.



Rules flow and resize with text.

- Choose the stroke width you want, either Width of Text (from the left indent to the line end or right indent) or Width of Column (from the left side of the text object to the right side of the text object, regardless of left or right indents or where lines end). For text frames with insets, the stroke width setting is calculated from the text inset, not the frame border.
- Set left or right indents for the rule (not for text) by typing values in the Left and Right boxes.

☞ Click Options to set the space between the paragraph and the rules.

(n). To increase or decrease space before or after a paragraph

☞ Select the paragraph you want to edit.

☞ Choose Type > Paragraph.

☞ In the Paragraph Space options, specify the values you want in the Before and After boxes.

(o) To check spelling in one or more publications

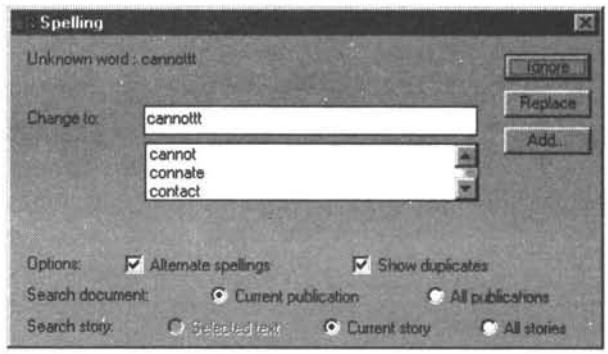
☞ Click an insertion point in a particular story, or select a range of text.

☞ Choose Edit > Edit Story.

☞ In story editor, choose Utilities > Spelling.

☞ Specify options:

- Alternate Spellings lets you see suggested replacements for possibly misspelled words.
- Show Duplicates lets you detect duplicate words, such as the the.
- Deselect these options to speed up the spell check.



- Specify the scope of the search:
  - In selected text
  - In the current story only
  - In all stories in the publication
  - If you are checking all open publications, PageMaker automatically searches all stories in those publications.
- Click Start to begin checking the spelling.
- As PageMaker finds unfamiliar words and other possible errors, choose from the following options:
  - Click Ignore to continue checking spelling without changing text.
  - Select a word in the Change To list, and then click Replace.
  - Type the correct text in the Change To box, and then click Replace.
  - Click Add to have PageMaker store the unrecognized word in the user dictionary, so that subsequent occurrences are not flagged as misspellings.

(p) To edit a track

- Choose Type > Expert Tracking > Edit Tracks.
- From the Font menu, choose the font that you want to edit.
- Click a track line to select it, or choose a track from the Track menu.
- Edit tracks (moving, adding, or deleting handles as necessary) as follows:
  - To adjust the tracking percentage value in one-tenth-of-a-percent increments, select a handle and press the up arrow or down arrow keys. (You can also adjust the tracking percentage by dragging a handle to a new location.)
  - To adjust the point size in one-tenth-of-a-point increments, select a handle and press the left- or right-arrow keys.
  - To add a track handle, hold down Alt (Windows) and click a track line.
  - To delete a track handle, hold down Alt (Windows) or Option (Mac OS) and click a handle.
- To save the changes, either click Save to save changes and close the window, or choose a new font to edit and then click OK when prompted to save changes to the previously selected font.

(q). To align a paragraph

- Select one or more paragraphs, or edit a paragraph style.
- Do one of the following:
  - Click an alignment button on the Control palette in paragraph view.
  - Choose Type > Alignment or Type > Paragraph, and then choose an alignment option.
  - If you are editing a paragraph style, click Para in the Style Options dialog box, select an alignment option, and then click OK.

(r). To specify leading

- Select text, or choose Window > Show Styles, press Ctrl, and click a paragraph style to edit.

- Depending on your selection, do the following:
  - If you have text selected, choose Type > Leading, Type > Character, or Window > Show Control palette. If you are editing a paragraph style, click Type in the Style Options dialog box.
- Specify leading in any of these ways:
  - Choose a leading value from the Leading menu.
  - Choose Auto to apply automatic leading.
  - Type a custom leading value.
  - By default, PageMaker sets leading to 120% of the font size when you -select Auto for the leading value.

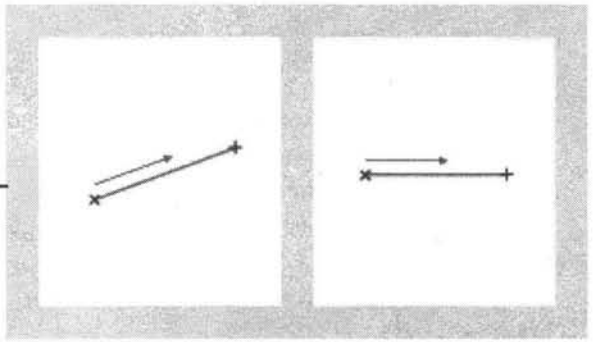
(s). To change automatic leading

- Select one or more paragraphs, or edit a paragraph style. To edit a paragraph style, choose Window > Show Styles, press Ctrl, and click a paragraph style.
- Do one of the following:
  - If you have text selected, choose Type > Paragraph.
  - If you are editing a paragraph style, click Para in the Style Options dialog box.
- Click Spacing, type a percentage for Auto-leading, and then click OK.

(t). To draw a line or a constrained line

Select the line tool or constrained-line tool , and then drag to draw a line.

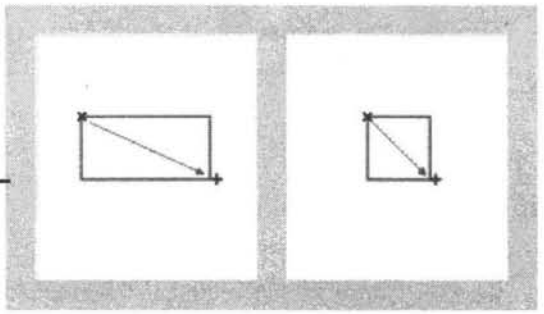
Unconstrained (left) and constrained (right)



(u). To draw a rectangle or a square

Select the rectangle tool or frame rectangle tool, and then drag to draw the shape. Hold down Shift to constrain the object to a square.

Unconstrained (left) and constrained (right)



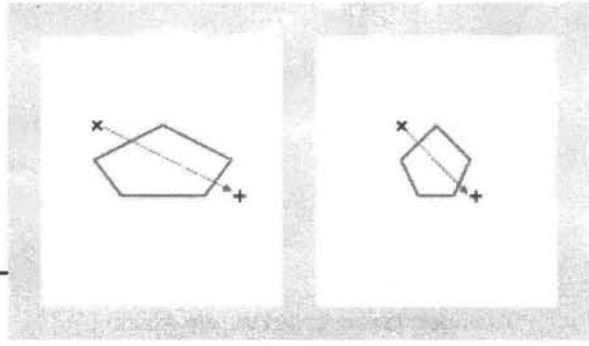
(v). To draw an ellipse or a circle

Select the ellipse tool or frame ellipse tool, and then drag to draw the shape. Hold down Shift to constrain the object to a circle.

(s). To draw a polygon

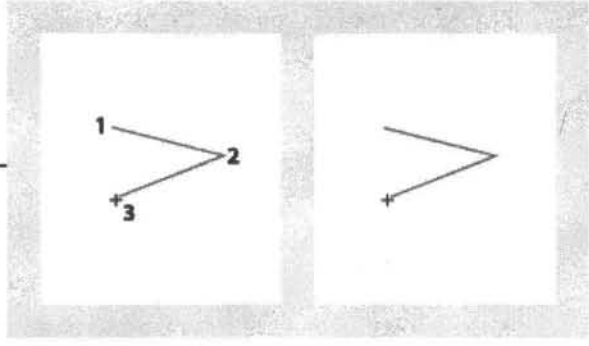
Select the polygon tool or frame polygon tool, and then do one of the following:

- Drag to draw the shape. Hold down Shift to constrain the object.



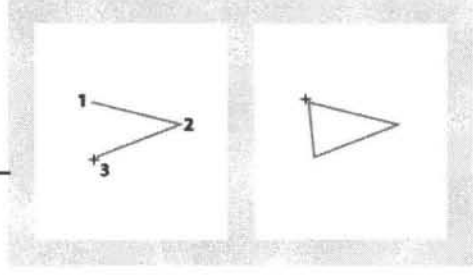
Unconstrained (left) and constrained (right)

- Draw an open-path polygon; click to anchor line segments, and then double-click (or press the Escape key) to leave the shape open.



Click to anchor line segments (left) and double-click, or press Esc to leave shape open (right).

- Draw a closed-path polygon; click to anchor line segments, and then press any key other than Backspace, Delete, or Esc--or click the first anchor point.

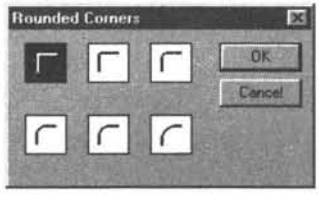


Click to anchor line segments (left) and press any key other than Backspace, Delete, or Esc; or click the first anchor point (right).

- As you create a polygon, you can press Backspace or Delete to remove the last anchor you positioned.

(t). To round rectangle corners

- Select a rectangle you want to change or, to set the default, double-click the rectangle tool.
- Choose Element > Rounded Corners.
- Select the corner style you want, and click OK.



(u). To turn a basic shape into a frame

- Create or select a PageMaker-drawn shape.
- Choose Element > Change to Frame. The shape preserves its fill, line weight, and other object attributes.

(v). To attach existing text or graphics to a frame:

- Use the pointer tool to select the frame.
- Press Shift and select the text block or imported graphic you want to add to the frame.
- Choose Element > Frame > Attach Content.

(w). To import text or graphics into a frame:

- Select the frame.
- Choose File > Place.
- Select the file you want to place, select the Place Within Frame option along with other place options, and then click OK.

(x). To type into a frame:

- Click the text tool.
- Click in an empty frame or in a frame containing text and start typing.

(y). To detach content from a frame:

- Select a graphic frame or an unthreaded text frame.
- Choose Element > Frame > Separate Content. The frame becomes empty, and an independent graphic or text block is added to the page.

(z). To delete content from a frame:

- Select a frame.
- Choose Element > Frame > Delete Content. The frame becomes empty. If the selected frame contained text, the entire story is deleted, even if the text was threaded into other frames.

6.15 Duplicating an object

Duplicate an object within a publication either by copying and pasting it, using drag-and-drop, or by using the more powerful multiple-paste feature. Use Edit > Paste Multiple to paste an object copied from one page or publication at the exact same position (relative to the zero point) on the page to which it is pasted. Make sure the Vertical and Horizontal offsets are set to zero when you click OK in the Paste Multiple dialog box.

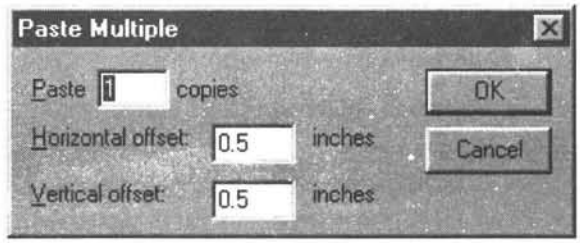
(a). To copy and paste an object

- Select one or more objects.
- Choose Edit > Copy.

- Use any of the following techniques:
  - To offset the pasted copy, choose Edit > Paste.
  - To paste the copy directly over the original object, press Ctrl + Alt + V.
  - To quickly paste copies of an object at a specific offset, press Ctrl + Alt + V, drag the copy in the direction and to the distance you want subsequent copies to be offset, and repeat this step as needed to create the effect you want.

(b). To paste several copies of an object

- Select the object you want to duplicate.
- Choose Edit > Copy.
- Choose Edit > Paste Multiple.
- Specify the number of copies to paste and the offset distance between each. Positive values move the copies to the right and down, respectively. Negative values move copies to the left and up.



(c). To change the stacking order of objects

- Select an object.
- Choose one of the following options:
  - To move the object in front of all other objects, choose Element > Arrange > Bring to Front.
  - To move the object one position toward the top of the stacking order, choose Element > Arrange > Bring Forward.
  - To move the object behind all other objects, choose Element > Arrange > Send to Back.
  - To move the object one position toward the bottom of the stacking order, choose Element > Arrange > Send Backward.

(d). To delete an object

- Select the object.
- Choose Edit > Clear, or press Backspace or Delete.

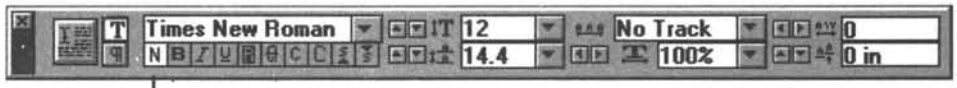
6.16 Control palette basics

To open or close the Control palette, choose Window > Show Control Palette. The Control palette appears in front of the publication and story windows. You can move it by dragging the bar at the left edge of the palette.

Click an option to activate it. (A selected value or a highlighted bar above or below an option indicates that the option is active.) Alternatively, move from option to option by pressing Tab, or, to return to a previous option, press Shift + Tab. When you select the text tool, the Control palette displays options for manipulating text within text objects.



Control palette in object selection mode



Control palette in Text selection mode

The Apply button changes to indicate the type of object or tool selected. If no objects are selected, the Apply button indicates the tool currently selected in the toolbox. If an object is selected, the Apply button indicates the currently selected object or tool, appears three dimensional, and can be clicked to apply modifications to the object. Alternatively, you can press Enter.

(a). To move an object using the Control palette

- Select the object.
- Choose Window > Show Control Palette.
- Select a reference point in the Proxy to specify the part of a selected graphic that moves. If the reference point is a box, the object will move; if it is an arrow, the object will change size. Click the reference point to toggle from one mode to the other.
- To move the object, adjust values for X and Y.

(b). To move an object using the arrow keys

- Select the object.
- Use either of the following methods:
  - To move the object incrementally by .01 inch (.25mm), press an arrow key.
  - To move the object incrementally by 0.1 inch (2.5mm), hold down Shift as you press an arrow key.

(c). To resize an object using the Control palette

- Select the object.
- Choose Window > Show Control Palette.
- Click or double-click to select the reference point on the Proxy.
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you resize the object.
  - If you double-click to select a reference point, it appears as a two- or four-way arrow, and the equivalent location on the selected object moves as you resize the object.
- Optionally, turn on the following settings to constrain the resizing:
  - Click the Proportional-scaling option on the Control palette to maintain the original aspect ratio of the object. You can then change either the X and W values or the Y and H values, depending on the selected reference point. The related value changes proportionally.

- Click the Printer-resolution-scaling option to resize 1-bit bitmap images based on the resolution of your printer. This option has the same effect as magic stretch. See Resizing 1-bit Bitmap Images.

☞ Specify a size in one of the following ways:

- If the reference point is a box or a four-way arrow, resize the object from the reference point outward by adjusting W and H or L options.
- If the reference point is a two-way arrow, move the reference point to stretch or shrink the object by adjusting values for W, H, and L, or for X and Y. (L appears only if a line is selected.)
- If you want to resize an object to a percentage of its original size, change the percentage values next to W and H.

☞ Click the Apply button.

6.17 Grouping and ungrouping objects

You can combine several objects into a group so that the objects are treated as a unit. This allows you to move or transform a number of objects together. For example, you might group the objects in a logo design so that you can move and resize the logo as one unit. When you mask selected objects, PageMaker can automatically group them. A group, when selected, appears with four handles at the corners that define the bounding box of all objects in the group. Individual objects within a group can be selected and modified. For example, you can reformat text within a text object that is grouped with an image.

(a). To group objects

☞ Using the pointer tool, press Shift and select the objects to be grouped. One or more of the objects you select can be a group, but if you select two or more groups note that all selected objects form a single, unnested group.

☞ Choose Element > Group.

(b). To select text or an individual object within a group

☞ Select the pointer tool (to select graphics or text objects), or the text tool.

☞ If selecting an object within the group, press Ctrl and select the object. To select text, click an insertion point in the text.

(c). To ungroup objects

☞ Select the group.

☞ Choose Element > Ungroup. The objects retain the changes you made while the objects were grouped.

6.18 Locking objects

You can lock individual objects in place in order to help preserve the design of your pages through all stages of production. You can change the attributes of a locked object, provided the change does not affect the object's size or position. For example, you can change a color or fill applied to a locked object, but not its degree of rotation or its skewing angle.

You cannot cut or delete a locked object without unlocking it first, but you can copy a locked object; it will be pasted as an unlocked object.

Although the position of a locked text block is fixed, the bottom windowshade handle expands downward or retracts upward if text is added, deleted, or resized.

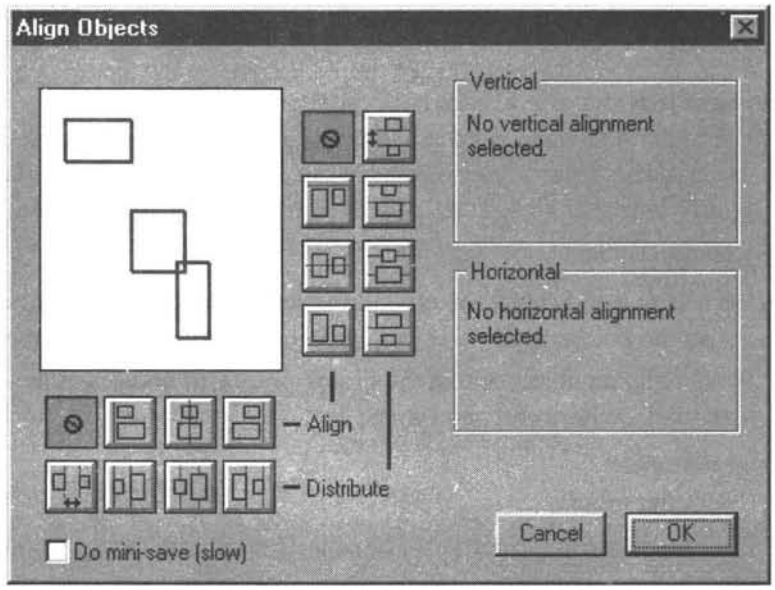
Text continues to flow through locked text objects, moving inline graphics that are in that text object: only the size and baseline shift of an inline graphic is locked. The Apply button in the Control Palette appears gray when the selected object is locked. The cursor changes to a lock icon when you try to move a locked item.

(a). To lock or unlock an object

- Select the object.
- Choose Element > Lock Position or Unlock.

6.19 Aligning and distributing objects

You can align objects in relation to one another, and then evenly distribute the spaces between the objects. Align or distribute objects based on a common edge or based on the centers of objects. For example, select the align-right icon to move objects horizontally so that their right edges line up with the right edge of the rightmost object. When you distribute objects, you can add an even amount of space between their facing edges.



To align and distribute objects:

- Select an objects.
- Choose Element > Align.
- Select one icon for each direction (horizontal or vertical) in which you want to align or distribute objects. Select the icon for no alignment if you don't want to align the objects along one of the axes.

- If you are distributing objects, select one of the following methods for each direction (vertical and horizontal):
  - Select Distribute Within Bounds to distribute objects within the bounds of the current selection. In horizontal distribution, for example, objects are evenly spaced between the leftmost and rightmost selected objects, which remain stationary.
  - Select Distribute Fixed Amount to insert a specified amount of space between the objects (or between the specified edge), and then type the increment in the Space text box. (Type a negative value to make the objects overlap.) For example, in horizontal distribution, all objects are evenly spaced by the specified amount, and the leftmost and rightmost objects are repositioned accordingly.
- Click the Do Mini-Save option if you want the option of undoing the changes you are about to make with this command.
- Click OK.

6.20 Rotating an object

You can rotate any unlocked object ±360 degrees at .01-degree increments. Use the rotating tool in the toolbox to rotate an object manually around any fixed point, or use the Rotating option on the Control palette to rotate relative to the reference point selected on the Proxy.

Whether or not you use the Control palette's Rotate option, the Control palette displays the total degrees of rotation. Rotating an object counter-clockwise increases the angle, and rotating it clockwise decreases the angle. As you rotate a single object, the Proxy on the Control palette also rotates to approximate the new position of the reference point.

If you select multiple objects before rotating, the Control palette displays the degrees of rotation for the group of selected objects, which is always 0 degrees. PageMaker rotates all selected objects by the same incremental amount, even if some objects are already rotated. For example, if you rotate two objects by 30 degrees, and one has already been rotated, PageMaker rotates both objects an additional 30 degrees.

(a). To rotate an object with the rotating tool

- Select the object.
- Select the rotating tool from the toolbox.
- Position the starburst at a fixed point—the location around which you want to rotate the selected object. If you are rotating around the center point, press Ctrl. If two or more objects are selected, the center point is based on the bounding box of the entire selection.
- Drag the starburst away from the fixed point, in the direction you want to rotate the object. To constrain rotation to 45-degree increments from the starting position, press Shift as you drag. The rotation lever helps you control the amount of rotation. The farther you drag the starburst away from the fixed point, the more control you'll have when you rotate the object.
- When the object is in position, release the mouse button.

(b). To rotate an object with the Control palette

- Select the object.
- Choose Window > Show Control Palette.
- Click or double-click to select a reference point on the Proxy:
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you rotate the object.
  - If you double-click to select a reference point, it appears as a two- or four-way arrow, and the equivalent location on the selected object moves as you rotate the object.
- Adjust values in the Rotating option, and click the Apply button.

6.21 Reflecting an object

Use the Control palette to horizontally or vertically reflect any unlocked object, including a text object or a bitmap image. When you reflect an object horizontally, it is equivalent to reflecting it vertically and then rotating it 180 degrees. Because of this, PageMaker adds 180 degrees to the existing rotation value on the Control palette.

(a). To reflect an object:

- Select the object.
- Choose Window > Show Control Palette.
- Click or double-click to select a reference point on the Proxy:
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you reflect the object.
  - If you double-click to select a reference point, it appears as a two- or four-way arrow, and the equivalent location on the selected object moves as you reflect the object.
- Click the Horizontal-reflecting button or the Vertical-reflecting button on the Control palette. Reflecting an object. Use the Control palette to horizontally or vertically reflect any unlocked object, including a text object or a bitmap image. When you reflect an object horizontally, it is equivalent to reflecting it vertically and then rotating it 180 degrees. Because of this, PageMaker adds 180 degrees to the existing rotation value on the Control palette.

(b) To reflect an object

- Select the object.
- Choose Window > Show Control Palette.
- Click or double-click to select a reference point on the Proxy:
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you reflect the object.
  - If you double-click to select a reference point, it appears as a two- or four-way arrow, and the equivalent location on the selected object moves as you reflect the object.
- Click the horizontal-reflecting button or the vertical-reflecting button on the Control palette.

6.22 Skewing an object

Use the Control palette to skew an object horizontally by ±85 degrees at .01-degree increments. You can skew any unlocked object, including a text block or a grouped item.

(a). To skew an object:

- Select the object.
- Choose Window > Show Control Palette.
- Click or double-click to select a reference point on the Proxy:
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you skew the object.
  - If you double-click to select a reference point, it appears as a two- or four-way arrow, and the equivalent location on the selected object moves as you skew the object.
- Specify a skew angle for the Skewing option on the Control palette. Positive angles move the top edge of the object to the right, and negative values move the top edge to the left, regardless of the selected reference point.
- Click the Apply button or press Enter.

6.23 Cropping a graphic

When you import a graphic from another program or publication, you can crop parts of the graphic that you do not want to print by adjusting the size of its surrounding bounding box. After you crop a graphic, you can control which portions of it appear in your publication by moving the graphic within the visible area. You cannot crop to resize the visible area of locked objects, but you can change what portion of the image shows within the cropped area. To save printing time, crop graphics before you import them into PageMaker.

If you crop an imported graphic and later relink to a different graphic, select the Retain Cropping Data option in the Place Document or Link Info dialog box (depending on whether you are replacing or relinking the graphic). Otherwise, PageMaker imports the entire graphic to fit within the cropped area, which can distort the graphic.

The Retain Cropping Data option applies only to objects you replace or relink using linking options in PageMaker. PageMaker automatically retains cropping information for OLE-linked or OLE-embedded graphics, Macintosh edition files, and also when you relink to a file that PageMaker could not find while opening or printing your publication.

(a). To crop a graphic using the cropping tool

- Select the cropping tool, and select the graphic that you want to crop.
- Position the cropping tool so that a handle shows through the center of the tool.
- Hold down the mouse button to turn the cropping tool into a two-way arrow, and drag until only the part of the graphic you want in your publication remains.
- To show more of the graphic, drag away from the center of the graphic.

- To move the graphic within the frame, position the cropping tool at the center of the graphic and hold down the mouse button.
- When the hand appears, drag until you see the part you want to appear in your publication. Then release the mouse button.

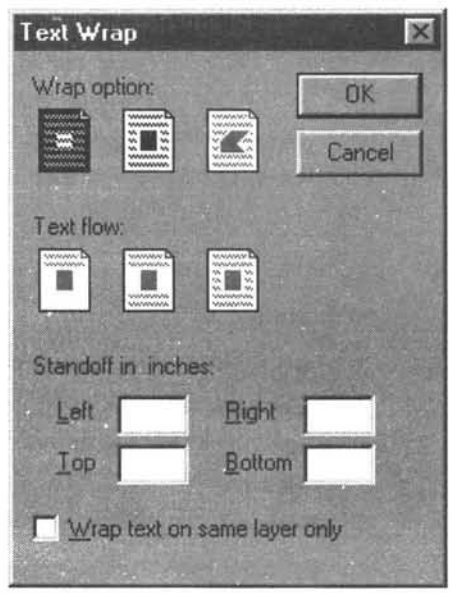
(b). To crop a graphic using the Control palette

- Select the graphic.
- Click the Cropping option on the Control palette.
- Click or double-click to select a reference point on the Proxy:
  - If you click to select a reference point, it appears as a small rectangle on the Proxy, and the equivalent location on the selected object remains stationary as you crop the object.
  - To crop the right side of a graphic, for example, select a reference point on the left side of the Proxy.
  - If you double-click to select a reference point, it appears as a two-way arrow, and the equivalent location on the selected object moves as you crop the object.
  - To crop evenly from all sides, select the center reference point.
- Change the values for X and Y or for H and W.

The X and Y options will crop the graphic only if the reference point is a two-way arrow.

(c). To wrap text around a graphic

- Select a graphic or image.
- Choose Element > Text Wrap.
- Click the middle Wrap Option.
- Specify a Text Flow option. The leftmost Text Flow icon jumps text over a graphic and continues the text on the next page or column. The middle icon allows text to jump over a graphic and continue on the same page. The rightmost icon creates a rectangular text wrap around all sides of a graphic.
- Enter standoff values for the boundary. The standoff values determine the distance of the text from each side of the graphic.
- Select Wrap Text on Same Layer Only if you want text on other layers to ignore the text wrap boundary.
- Click OK.



(d). To customize text wrap around a graphic

- Apply text wrap as described above.
- With the object selected, do any of the following:
  - Add a new handle by clicking on the graphics boundary where you want the handle to appear.
  - Reshape the boundary by dragging handles or line segments.
  - Delete a handle by dragging it onto an adjacent handle.

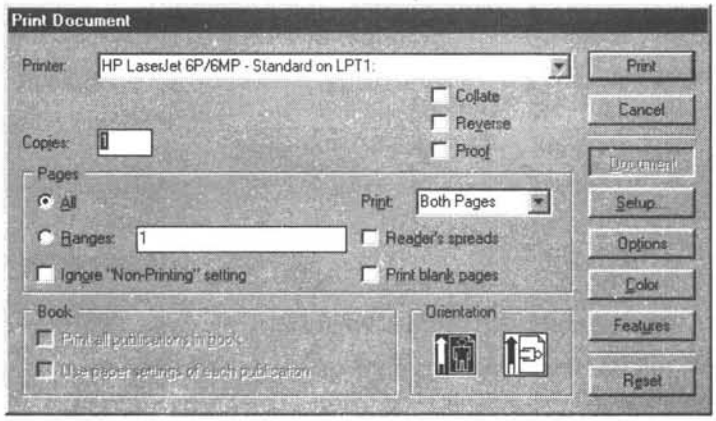
6.24 Printing in PageMaker

You can print a black-and-white, grayscale, or color publication on a range of output devices. When you open a new publication, the default print settings let you print a composite. All page elements print on the same page, as opposed to separations, where page elements print on different pages, depending on their color and page assignment.

With the latest compatible drivers installed, PageMaker can print on any PostScript printer connected directly to a compatible Windows or Macintosh computer or connected via a network. PageMaker can also print on other than PostScript printers. Consult your printer documentation for information on setting up your printer and selecting the appropriate printer driver. If you print on different printers for proofing and final output, your Document Setup settings should match those of your final output device. PageMaker has print options for creating a large tiled piece, printing several sections of a publication at once, and printing proofs without graphics.

(a). To print using the default settings of a publication

- Choose File > Print.
- If you're printing on a PostScript printer, select a PostScript Printer Description (PPD) file from the PPD pop-up menu that matches the printer type.

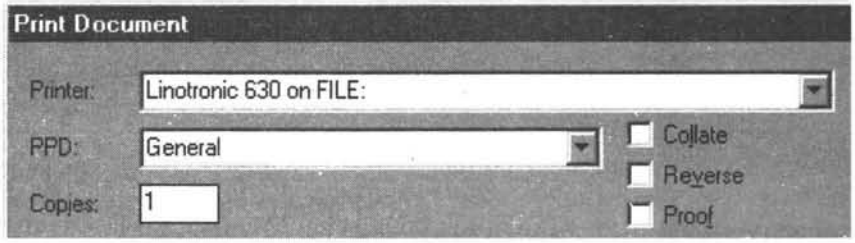


- Select the Document printing options you want.
- Do one of the following:
  - For PostScript printers, click Paper to check the fit of the publication and to set additional options.
  - For non-PostScript printers, click Setup to set additional printing options.
- Click Print.

(b). Document printing options

In the Print Document dialog box, you specify printer information and other settings:

- The Printer box displays the name of the printer currently selected.
- The PPD option, for PostScript printers only, specifies the PostScript Printer Description file that PageMaker will use for printing.

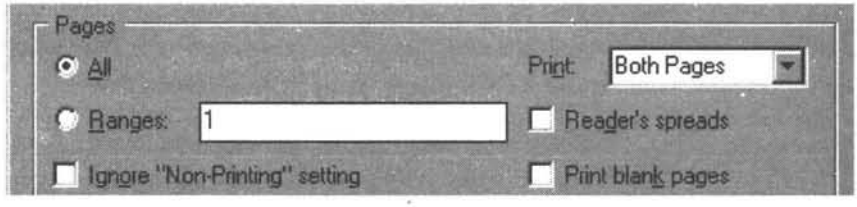


- The Copies option indicates the number of printed copies you want. For some non-PostScript printers, click Setup to set the number of copies to print.
- The Collate option prints one complete copy of the publication or book before printing the next copy. Printing is slower when this option is selected.
- The Reverse option changes the order in which pages normally print. For example, if a printer usually prints the first page of a publication first, it will print the first page last when Reverse is selected.
- The Proof option omits all imported graphics, and instead prints rectangles with Xs in them that match the dimensions of those graphics. Pages print faster with this option selected.

(c). Page range options

In the Pages section of the Print Document dialog box, you select which pages to print:

- Use the All option to print all of the pages in the active publication, or to print all booked publications if Print All Publications in Book is also selected.



- Use the Ranges option to specify the range of pages you want to print in the active publication. Type a hyphen before or after a number to print all of the pages in the publication up to and including, or following and including that page. Type a hyphen between two numbers to tell PageMaker to print all of the pages in that range. You must type the numbers separated by hyphens in ascending order (2-4, not 4-2).
- Use commas to separate the individual pages or page ranges you specify. Page numbers separated by commas do not have to be typed in any order. For example, you can type 1-5, 19, 10-11 to print pages 1 through 5, followed by page 19, and ending with pages 10 and 11. You can type up to 64 characters in the Ranges box.

- PageMaker ignores spaces in your page range entry. If you type an unknown character or describe a range incorrectly, PageMaker displays an alert message, warning you of the incorrect syntax.
- Use the Print pages options to choose which pages to print within the range you specified. Choose Both Pages to have PageMaker print all of the pages in the specified page range. Choose Even Pages or Odd Pages to print all of the even or odd pages in your publication or book in the specified page range.
- Use the Print Blank Pages option to print blank pages in their proper position in the publication.

(d). Paper printing options

In the Paper section of the Print Document dialog box, you specify paper size and handling options:

- The Size option specifies a paper size. The sizes listed are defined in the selected PPD.
- The Source option determines the paper tray that will be used to print the publication. The options listed are specified in the selected PPD.
- The Printer's Marks option prints crop marks, registration marks, density-control bars, and a color-control bar on separations or composites of your publication. These marks help your service provider align separations and judge color accuracy. The Printer's Marks option requires 0.75 inches (22.2 mm) in addition to the document size.
- The Page Information option prints the filename, page number, current date, and spot- or process-color separation name in 8-point Arial® (Windows) or Hel-vetica (Mac OS) in the lower-left corner of each sheet of paper or film. The Page Information option requires 0.5 inches (13 mm) along the horizontal edge.
- The Center Page in Print Area option centers the publication page in the printable area for the printer on which you're printing. Some output devices have a printable area that is asymmetrically offset from the edges of the paper; check your printer documentation to determine if your printer uses an offset. Click this option to center your publication within that offset printable area. Leave this option deselected to center your publication on the selected paper size.

(e). To list PPDs by filename

- Choose File > Preferences > General.
- Click More.
- Click Display PPD Name in the print section of the dialog box.
- Click OK, and then click OK to close the Preferences dialog box.

(f). To print the original EPS colors

- Choose File > Print, and then click Color.
- Select Preserve EPS Colors.
- Click Print.

(g). To print a proof without imported graphics

- Choose File > Print.

- If you're printing on a PostScript printer, choose a PPD that matches your printer type.
- Select the Proof option.
- Set your print options, and then click Print.

(h). To define a custom paper size:

- Choose File > Print.
- Choose the PPD that matches your imagesetter.
- Click Paper and select Custom from the Size pop-up menu.
- Type dimensions for your custom paper size, or accept the default dimensions. The default custom paper dimensions are equal to the size of your publication page plus the space required for any printer's marks specified.
- Choose Normal or Transverse from the Page Orientation pop-up menu.
- Click Print.

(i). To print a composite of a publication

- Choose File > Print.
- If printing on a PostScript printer, choose a PPD that matches your printer type.
- Select the Document printing options you want.
- Do one of the following:
  - If printing on a PostScript printer, click Paper to check the fit of the publication and to set additional options. Click Options to access PostScript printing options and to set options affecting how bitmap images print.
  - If printing on a non-PostScript printer, click Setup to set printer options and to check the paper selection.
- Click Color, select Composite, and then select Color/Grayscale or Print Colors in Black.

(j). To remove unused colors and inks

- Choose File > Print.
- Click Color, and then select Separations.
- Click Remove Unused.
- PageMaker prompts you for the first unused color in the list and gives you the following options:
  - Click Yes to remove the color and to continue being prompted to remove additional unused colors.
  - Click Yes to All to remove all unused colors without being prompted.
  - Click No to retain the unused color and to continue being prompted to remove additional unused colors.
  - Click No to All to retain all unused colors from that point on without being prompted.
- Click Print to create separations. To save the edited ink list without printing, press Shift and click Done.

(k). To proof separations on a PostScript desktop printer

- Choose File > Print.
- Choose the PPD for your printer.
- Click Color, and then select Separations.

- ☞ Select the inks you will use in your final separations. Double-click each ink you want to print, or select an ink and then select the Print This Ink option. To select all inks, click Print All Inks. If an ink in the ink list isn't used in the publication, PageMaker does not create a separation for that ink.
- ☞ Click Paper to check that your publication fits on the selected paper size. Consider using the Reduce to Fit or Tiling options if the publication does not fit on the selected paper size.
- ☞ Click Print.

(l). To image color separations

- ☞ If your publication contains PageMaker elements that need to be trapped, choose File > Preferences > Trapping. Select Enable Trapping for Publication, set trapping options, and then click OK.
- ☞ Choose File > Print.
- ☞ Choose a PPD for your printer type.
- ☞ Click Color, and then select Separations.
- ☞ Determine the angle and screen frequency for each ink as follows:
  - ☞ Spot and high-fidelity inks normally print at the angle specified in the PPD for Custom Color, which is usually 45 degrees. Use the default setting in the PPD for best results. To print a spot ink at an angle other than 45 degrees (for example, to create a special effect), select the spot ink and type a new value for Angle. Repeat for other spot inks you want to print.
  - ☞ For process colors, select the name of a process ink, and then verify the values for Optimized Screen. Repeat for each process ink you want to print. We recommend using the Optimized Screen settings.
- ☞ Select the name of each ink you want to print, and select Print This Ink. Alternatively, you can double-click the name of each ink you want to print. To select all inks, click Print All Inks.
- ☞ Select the Mirror and Negative options as needed.
- ☞ Click Paper to check that your publication fits on the selected paper size and to choose printer's marks and page information.
- ☞ Click Print.

(m). To print all spot colors with process inks

- ☞ Choose File > Print.
- ☞ Click Color.
- ☞ Select Separations and click All to Process.
- ☞ Click OK. The All to Process button changes to Revert to Spot once you've used it to convert your spot colors to process colors. To restore your spot colors, click Revert to Spot.
- ☞ Click Print.

If you want to permanently convert certain spot colors to process colors, you can do so for each color, using the Define Colors command. Unlike the All to Process option, this conversion preserves trapping and overprinting settings.

(n). To save files and generate a report using Save for Service Provider

- Choose Utilities > Plug-ins > Save for Service Provider.
- Depending on whether you want to check the active publication or a Post-Script file, click either Preflight Pub or Preflight.PS.
- Click a tab to see a detailed report on each aspect of the publication or PostScript file. You can print the status information of an area by clicking Print (Windows) or Print List at any time.
- If the Links dialog box shows one or more linked files needing attention, click Relink or Relink All, and navigate to the correct image files.
- To save the publication, click Package, and set options as follows:
  - From the Report Type pop-up menu, choose Formatted (for a PageMaker publication) or Text Only (for an ASCII text-only file).
  - Select Auto Open Package Report if, after saving the publication and associated files, you want to display the summary report in a new window on your desktop.
  - Select Update Links In Source Pub Before Packaging to bring out-of-date links up-to-date in the original publication before making a package.
  - For Include, select Copy Fonts to avoid missing fonts at print time, and then select the kind of fonts—All, Type 1 (PostScript), or TrueType.
  - Click Notes to enter contact information (such as your name and phone number), and any comments on printing the publication, and any film preparation changes, and then click OK.
- Specify a location in which to save all necessary files.
- Click Save to copy the necessary files to the destination folder.

(n). To create a PostScript file

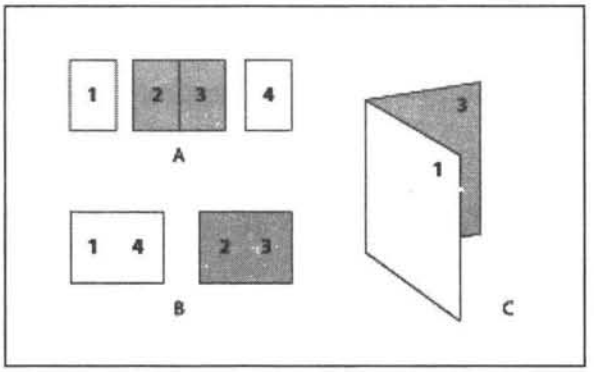
- Choose File > Print.
- Choose a PPD for your printer. If you're giving the PostScript file to a service provider, select the PPD that matches the imagesetter on which the service provider will image your file.
- Select the Document, Paper, and Color printing options you want to use, such as page range, paper size, printer's marks, page information, and composite or separation options.
- Click Options, and then select Write PostScript to File.
- Select one of the PostScript file types: Normal, EPS, or For Prepress.
- Accept the default name and location, or type a new name in the Write PostScript to File box. The default filename changes depending on the type of PostScript file you create.
- Select from the Download Fonts pop-up menu. The option None omits fonts from the PostScript file.
- Select Page Independence if you want PageMaker to download font information separately for each page in your publication. The font information is stored with each page so that pages can be moved or printed in a different order. This option is automatically selected for SEP and EPS files. If you're printing directly to a printer, deselect this option for faster printing.
- Select Extra Image Bleed to extend the bleed for images from the default of one-eighth inch to 1 inch (25 mm). This is useful when sending pages to a postprocessor. This option

doesn't affect how EPS images appear in desktop publishing applications, which restrict EPS images to the EPS bounding box size.

- Click Save to create the PostScript file.

(o). Printing booked publications

When you create long documents, such as technical manuals or books, you typically divide them into individual PageMaker publications. Dividing a book into separate publications reduces the size of a single file and lets several people work on individual files throughout the writing and production of the book. When you print, you can print the files individually or combine them to print all at once.



A. Pages as arranged in PageMaker before using Build Booklet (4 pages)
B. Pages as arranged in PageMaker after using Build Booklet (2 pages)
C. Pages after printing and folding new booklet

PageMaker lets you link individual publications together as a book so that you can generate a table of contents or an index or print the entire book. If you print separations of a book, you must print all inks in the book, rather than selecting individual inks to print.

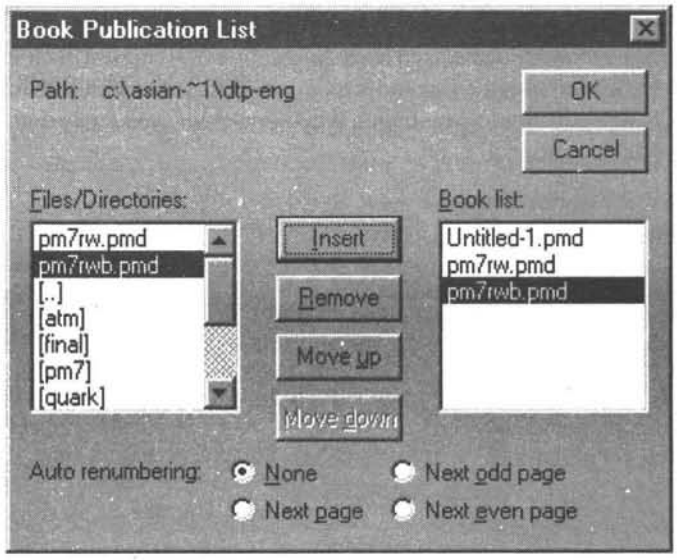
When you print booked publications all at once, PageMaker prints all of the publications in the book using the print settings specified in the active publication, with the following exceptions:

- PageMaker always uses the page Orientation setting saved with each publication.
- If All is selected in the Pages section of the active publication, PageMaker prints all of the pages in the book. If Ranges is selected, PageMaker prints the range of pages specified.
- If Write PostScript to File is selected, PageMaker prints the entire book to a Post-Script file.

To print booked publications:

- Open a new publication or an existing publication file that is part of the long document you want to print.
- Choose Utilities > Book.
- In the list on the left side of the dialog box, locate the files you want to print as a book. Double-click each filename to add it to the book list on the right side of the dialog box.
- Select one of the Auto Renumbering options to control the page numbering of the publications in the book list:
  - Select the None option to prevent automatic renumbering. Each publication in the book list retains the page numbering specified in the publication.
  - Select the Next Page option to renumber publications in a book list consecutively from the first publication to the last. For example, if the first publication ends on page 54, the second publication begins on page 55.

- Select the Next Odd Page option to number each publication in a book list so that each publication begins on an odd-numbered (right-hand) page. If necessary, PageMaker creates a blank page at the end of the publication to ensure that the next publication in the list begins with an odd page number.



- Select the Next Even Page option to number each publication in a book list so that each publication begins on an even-numbered (left-hand) page. If necessary, PageMaker creates a blank page at the end of the publication to ensure that the next publication in the list begins with an even page number.

- Click OK.
- Choose File > Print.
- If you print on a PostScript printer, choose a PPD that matches your printer type.
- Select the Print Blank Pages option to print blank pages in their proper position in the publication.
- Select the Print All Publications in Book option to print all of the publications in the book list of the active publication.
- When printing on a PostScript printer, select the Use Paper Settings of Each Publication option to print using the Size and Source settings in the Print Paper dialog box saved in each publication.
- Click Print.

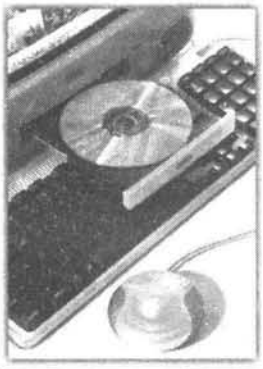
❑❑❑

EXERCISE

1. Write a short notes on using the toolbox in PageMaker?
2. How to choose a preset page view?
3. How to magnify or reduce with the zoom tool?
4. How to magnify part of a page by dragging?
5. How to zoom in or out while using another tool?
6. Explain the process of selecting objects?
7. What do you mean by text objects?
8. What is the use of text tool?
9. Explain the method of editing text?
10. Write the procedure of moving between pages in PageMaker?
11. Explain the process of adding and deleting pages?
12. How to add pages anywhere in the publication?
13. How to remove pages in a publication?
14. Write the process of correcting mistakes?
15. Explain the process of undoing changes and reverting publications?
16. How to create a publication from scratch?
17. How to open a publication?
18. How to open a template using the Templates palette?
19. How to save a publication as a template?
20. How to edit an existing template?
21. How to name and save a publication for the first time?
22. How to specify a Save Option preference?
23. How to save a publication with a new name or in a different location?
24. How to set up a new publication?
25. Write the process of setting the margins?
26. What do you mean by Master pages?
27. How to make a new master page?
28. What is zero point in PageMaker?
29. How to move the zero point?
30. How to lock the zero point?
31. How to reset the zero point?
32. What do you understand by Nonprinting guides?
33. How to display or hide the column, ruler, and margin guides on the page?
34. How to force objects you move or resize to align with the nearest guide?
35. How to set up columns on a page?
36. How to create different column setups on the same page?
37. What is the use of ruler guide in Pagemaker?
38. How to place a ruler guide?
39. How to remove a ruler guide?
40. How to remove all ruler guides at once?
41. How to lock or unlock ruler guides?

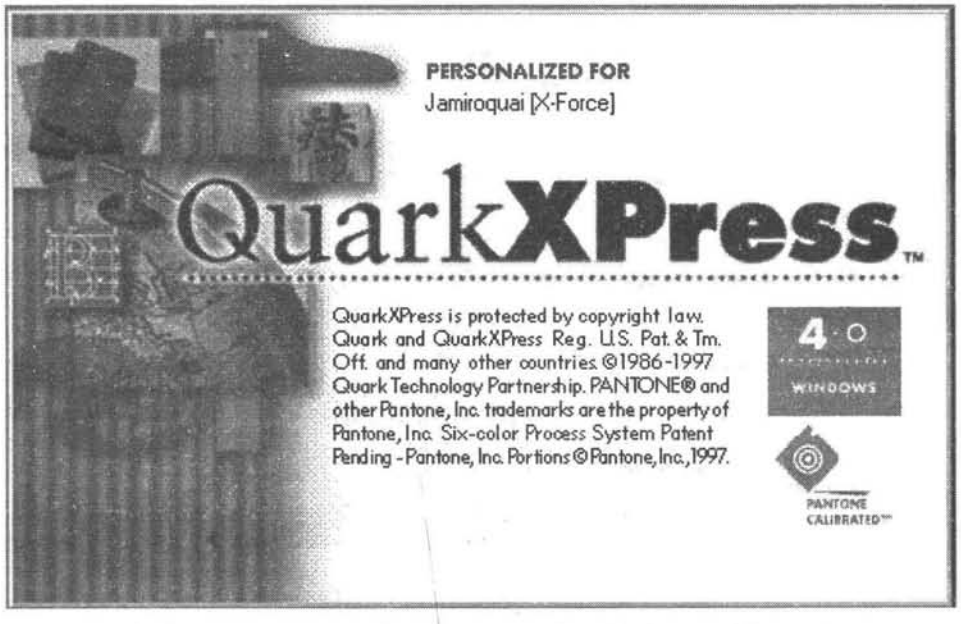
42. What do you mean by page numbering in a publication?
43. How to add page numbers to a publication?
44. How to specify the starting page number?
45. How to change the numbering system?
46. Explain the process of creating text blocks in PageMaker?
47. How to create a text frame?
48. How to add text to a frame?
49. How to attach a text block to a frame?
50. How to format text ?
51. How to format several text attributes at once?
52. How to format characters by editing paragraph styles?
53. How to format paragraphs?
54. Write the process of paragraphs formatting by editing paragraph styles?
55. How to set tabs with the Indents/Tabs ruler?
56. How to move, delete, or repeat a tab for an evenly spaced series?
57. How to set an indent using the Indents/Tabs ruler?
58. How to set an indent using the Paragraph command?
59. How to set an indent using the Control palette?
60. Explain the process of creating a hanging indent?
61. How to add bullets and numbers automatically?
62. Explain the process of applying a paragraph rule?
63. How to increase or decrease space before or after a paragraph?
64. Explain the process of check spelling in one or more publications?
65. How to edit a track in a paragraph?
66. How to align a paragraph?
67. How to specify leading?
68. How to import text or graphics into a frame?
69. Explain the process of duplicating an object?
70. How to copy and paste an object?
71. How to paste several copies of an object?
72. How to change the stacking order of objects?
73. Write a short notes on Control palette?
74. What do you mean by grouping and ungrouping objects?
75. Explain the process of rotating an object?
76. How to crop a graphic using the cropping tool?
77. How to wrap text around a graphic?
78. How to print using the default settings of a publication?
79. How to print the original EPS colors?
80. How to print a composite of a publication?
81. Explain the process of printing booked publications?





7
Page Making: QuarkXpress 4.0

In 1987 QuarkXPress ushered design into the digital age. Since then, each release has broken new ground while maintaining a tradition of delivering unparalleled performance and superlative output-on your desktop and around the world. QuarkXPress lives up to this legacy by combining revolutionary new features with the reliable tools that millions depend on to provide real results. More than a page layout tool, QuarkXPress is a way to work efficiently to achieve innovative outcomes. That's the creative productivity that drives business.

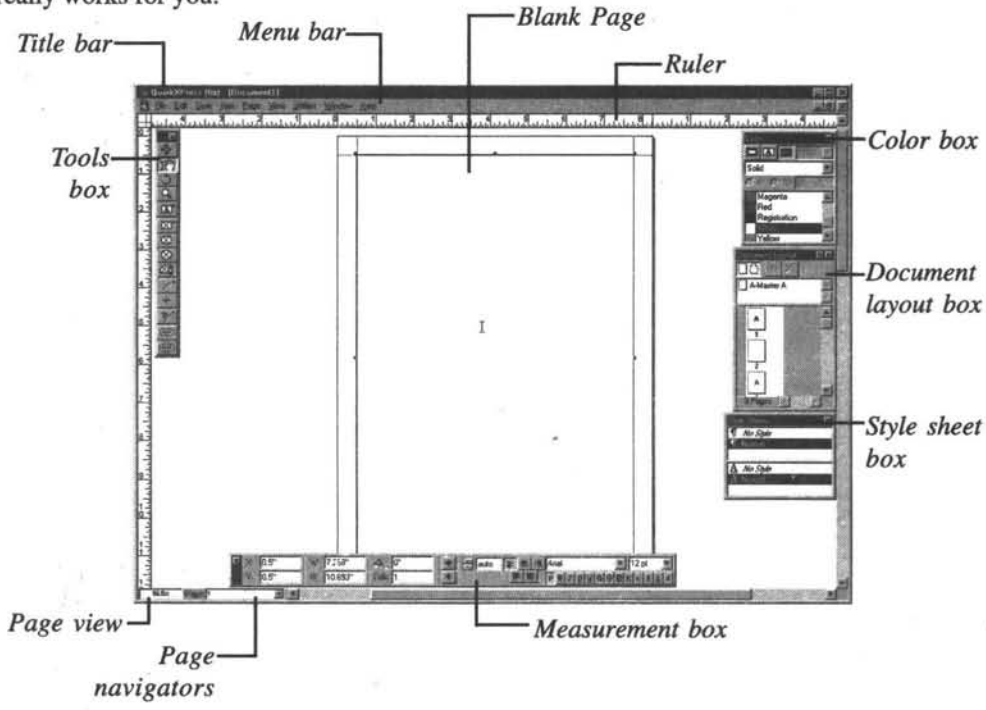


QuarkXPress is the industry-leading software for design and layout

Used by millions around the world, QuarkXPress is powerful software with an intuitive, versatile interface that lets you combine text and typography with color and pictures to produce dynamic design.

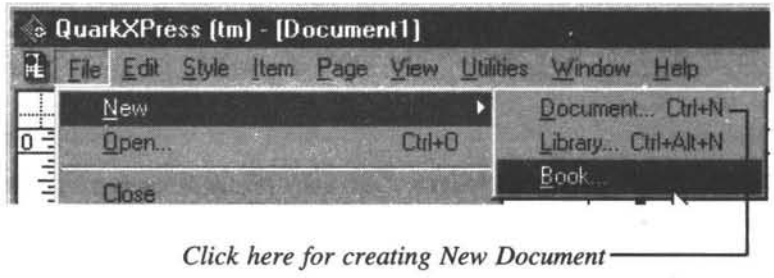
QuarkXPress is widely used by magazines, newspapers, advertising agencies, printers, corporate publishers, design firms, catalog house, book publishers, and form designers. It is also used by many companies who publish in support of their primary business.

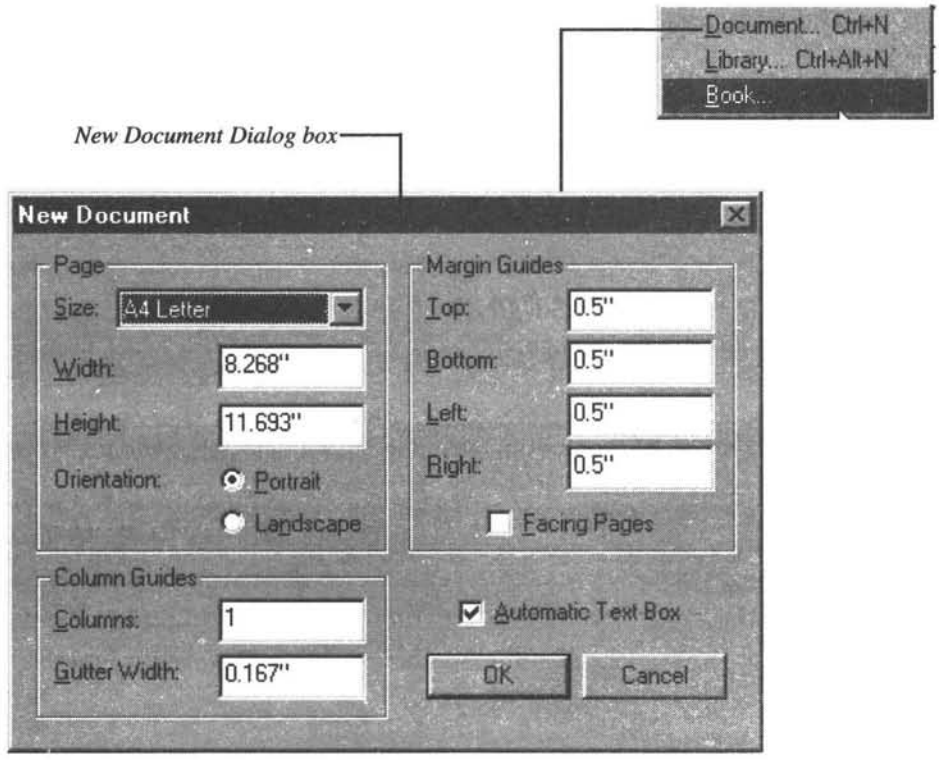
The QuarkXPress interface is based on palettes that let you choose from a variety of tools, styles, colors, measurements, and so on quickly create a layout. You can easily import pictures and text, and precisely manipulate them to suit your needs with the comprehensive editing features of QuarkXPress. And the powerful printing features allow you to output your document to exact specifications. It's easy to adapt the QuarkXPress interface to suit your work habits. For instance, you can hide palettes that you rarely use and display frequently used palettes all the time. Because palettes are movable, you can arrange them in a way that's most convenient for you. In addition to menus, you can swiftly access features using context menus, and keyboard commands let you perform routine tasks quickly. The flexibility of the QuarkXPress interface lets you design a workspace that really works for you.



7.1 Creating a New Document

You can specify the page size, margin guide position, number of columns, and space between columns for documents you create. After specifying the settings, click OK to create a document with the settings applied.





(a). Page Size

To specify the size of a document:

1. Choose File > New > Document to display the New Document dialogue box.
2. Click on the size of document you want to create. Or, enter values in the Width and Height fields.

(b). Margin Guides

To set the margins for your document:

1. Choose File > New > Document to display the New Document dialogue box.
2. Enter values in the Top, Bottom, Left, and Right fields.
3. Check Facing Pages if you want to set up a document with left-facing and right-facing spreads.

   If you select facing pages, the Left and Right margin fields change to Inside (margin between facing pages) and Outside (margin to left and right of facing pages) margin fields.

(c). Column Guides

To set up columns for a document:

1. Choose File > New > Document to display the New Document dialogue box.
2. Enter a value in the Columns field to specify the number of columns in the document.
3. Enter a value in the Gutter Width field to specify the amount of space between columns.

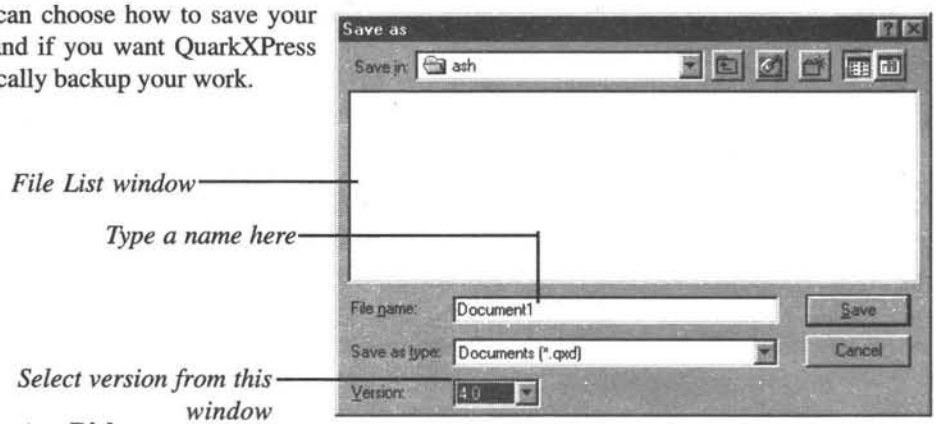
(d). Automatic Text Box

To automatically place a text box on Master Page 1:

1. Choose File > New > Document to display the New Document dialogue box.
2. Check Automatic Text Box to place a text box on a document's first page and on Master Page 1.

7.2 Saving a Document

You can choose how to save your document and if you want QuarkXPress to automatically backup your work.



(a). Saving to a Disk

To save a document:

1. Choose File > Save as.
2. Enter a name for your document in the File Name field.
3. Select a drive and directory.
4. Choose Template or Document from the Save File as Type drop-down list.
5. Click OK.

(b). Using Auto Save

You can save changes made to a document to a temporary file to protect from power interruptions by using Auto Save.

1. Choose Edit > Preferences > Application.
2. Check Auto Save.
3. Specify a time interval in the Minutes field.
4. Click OK.

(c). Using Auto Backup

You can specify that QuarkXPress make backup copies of your document and the number of copies to be made by using Auto Backup.

1. Choose Edit > Preferences > Application.
2. Check Auto Backup.
3. Enter the number of revisions (up to 100) you want to keep in the Revisions field.
4. Click the Destination button to select a new directory from the Backup Destination dialogue box.
5. Click OK.

(d). Making a Copy of a Document

You can create a copy of a previously saved document by copying it.

1. Choose File > Save as.
2. Enter a different document name in the File Name field.

   Or, specify a different drive and/or directory using the existing document name.
3. Click OK.

You can use master pages to format document pages automatically.

7.3 Creating master pages

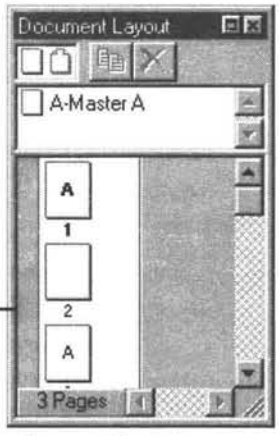
You can place repeated items on document pages automatically with master pages.

(a). Default master pages

1. Choose File > New > Document to display the New Document dialogue box.
2. Enter settings in the New Document dialogue box to specify the format of the default master page.

(b). New master pages

1. Choose View > Show Document Layout to display the Document Layout palette.
2. Click on the blank single-page icon or the blank facing-page icon in the area below Document Layout.
3. Drag the selected icon into the master page area below and release the mouse button to create a new master page.
4. The page icon and name of the new master page appear in the master page area.



Show document layout window

(c). Modifying master pages

You can design and modify master pages just as you would regular document pages.

1. Choose View > Show Document Layout to display the Document Layout palette.
2. Click on the master page you want to view or modify.

   Or, choose Page > Display > (select Master Page).
3. Changes you make to master pages automatically apply to document pages based upon the master page.

(d). Applying master pages

You can apply a master page format to existing document page(s).

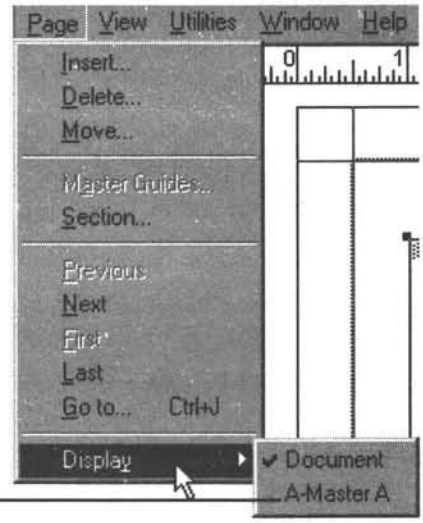
1. Choose View > Show Document Layout to display the Document Layout palette.
2. Click on the master page you want to apply and drag it over your document page.

(e). Modifying master page guides

To change the margins in a document, modify the Master Guides on each master page.

1. Choose View > Show Document Layout to display the Document Layout palette.

2. Double-click on the icon of the master page you want to modify margins or columns. Or, choose Page > Display > (select Master Page).
3. Choose Page > Margin Guides.
4. Enter new values in the Margin Guides and/or Column Guides fields to change the master page margin and or column guides.
5. Click OK to apply the new values to the master page.



(f). Deleting master pages

To remove master pages from your document design:

1. Choose View > Show Document Layout to display the Document Layout palette.
2. Click on the icon for the master page you want to delete, and press the Delete button.

7.4 Numbering Pages

You can specify page numbers and sections, or you can have QuarkXPress automatically number and section a document.

(a). Automatic page numbering

You can place and style page numbers in your document.

1. Choose Page > Display (select Master Page).
2. Create a text box.
3. Place a character in the text box, then format it.
4. As you apply master pages, pages reflect absolute position. Then, you can section.

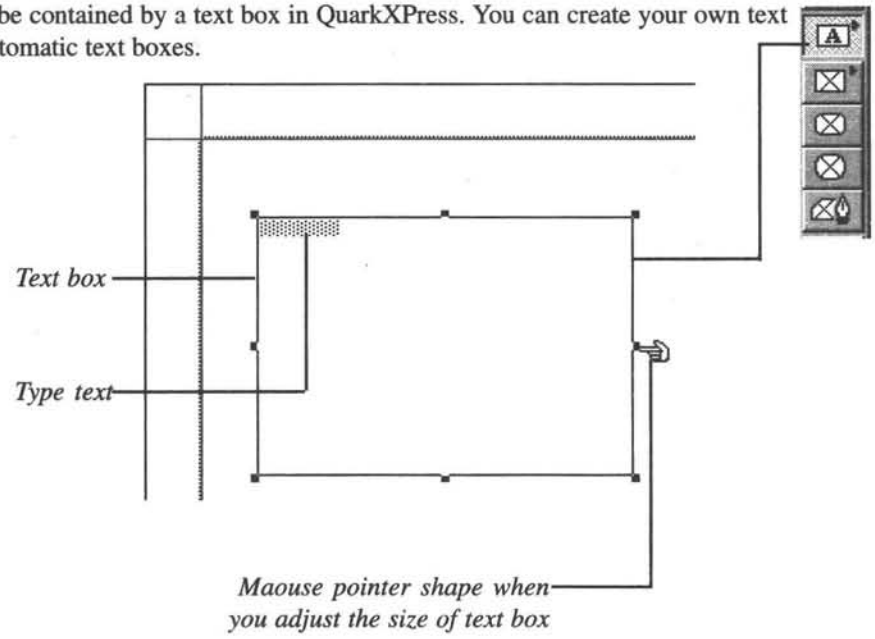
7.5 Sectioning a document

You can specify where a section starts in your document.

1. Choose Page > Section to display the Section dialogue box. Or, choose View > Show Document Layout to display the Document Layout palette. Select the page icon of the document page you want to begin a section. Click on the page number below the page icon to reach the Section dialogue box.
2. The Page Numbering area of the Section dialogue box becomes active when you check Section Start.
3. Specify characters to be used as a prefix by entering up to four characters.
4. Enter a number in the Number field. If you do not enter a value, the default first page number is 1.
5. Select the format of the page numbers by choosing an option from the Format drop-down list.
6. Click OK to apply the page numbers to your document section.

7.6 Text Boxes

Text must be contained by a text box in QuarkXPress. You can create your own text boxes and use automatic text boxes.



(a). Creating Text Boxes

1. Select the Text Box tool from the Tools palette.
2. Hold the mouse button and drag the Crosshair pointer diagonally to draw a text box.
3. Release the mouse button.
4. Select the Content tool from the Tools palette and click on the text box to enter or import text.

(b). Activating a text box

You must activate a text box to manipulate it as an item or to edit text.

1. Select the Item tool from the Tools palette to manipulate the text box. Or, select the Content tool from the Tools palette to edit text.
2. Click on a text box.

(c). To move an active text box

1. Select the Item tool and click on a text box.
2. Drag the text box to a new position with the mouse, aligning it with the ruler guides.

☞ Or, use the arrow keys to nudge the text box in 1 point increments; the position is reflected in the Measurements palette.

☞ Or, enter values in the X and Y fields in the Measurements palette or Text Box Specifications dialogue box (Item > Modify).

(d). To resize an active text box

1. Select the Item tool or the Content tool and click on a text box.
2. Drag the mouse over a text box handle so it changes to the Resizing pointer.
3. Drag any text box handle to resize the box.

☞ Or, enter values in the X and Y fields in the Measurements palette or in the W and H fields in the Text Box Specifications dialogue box (Item > Modify).

(e). To link text boxes and create a manual text chain:

1. Ensure that no text boxes are active, then select the Linking tool.
2. Click on the text box you want to begin the text chain. It becomes marqueed.
3. Click on the text box you want to become second in the chain. An arrow is displayed indicating the direction of the link.

(f). To break a link between text boxes:

1. Ensure that no text boxes are active then select the Unlinking tool.
2. Click on a text box that is part of a text chain. QuarkXPress will display arrows that show its links with other text boxes.
3. Click on the arrowhead at the top of a box to break the link from the previous text box in the chain.

☞ Or, click on the tail feathers at the bottom of a box to break the link to the next box in the chain.

(g). Automatic Text Boxes

An Automatic Text Box is a text box (or boxes) on a master page and its corresponding document pages that text flows into when a new page is automatically inserted. You can place an automatic text box on the default Master Page 1 which is automatically applied to the first page of a document.

1. Choose File > New to display the New Document dialogue box.
2. Check Automatic Text Box.
3. Click OK.

You can create new automatic text boxes on any master page.

1. Choose Page > Display and select a master page.
2. Position the text box you want to designate as an automatic text box.
3. Select the Linking tool.
4. Click on the Broken Chain icon in the upper left corner of the master page. A box is displayed around the icon.
5. With the Linking tool still selected, click on the text box. It becomes marqueed and an arrow is displayed pointing from the Broken Chain icon in the upper left corner to the linked text box.

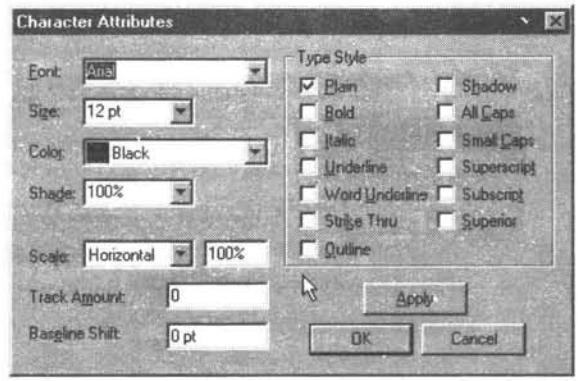
(h). Drag and Drop Text

1. Check Drag and Drop Text in the Application Preferences dialogue box (Edit menu) to enable this feature.
2. Click OK.
3. Highlight the text you want to cut or copy and drop and release the mouse button.
4. Click on the highlighted text to cut it.

   Or, hold down the Shift key and highlight the text you want to copy.
5. Drag the Text Insertion bar to where you want to insert the text. Release the mouse button.

7.7 Applying Character Attributes

You can apply character attributes such as bold, italic, and underline by using the Style menu, the Measurements palette, keyboard equivalents, and the Character Attributes dialogue box (Style > Character). Character attributes are applied to highlighted characters or at the text insertion point.



(a). Using the Character Attributes dialogue box

To apply a number of character attributes from a single dialogue box:

1. Highlight the characters you want to affect.
2. Choose Style > Character to display the Character Attributes dialogue box.

The Characters Attributes dialogue box shows all the character attributes except the Superior type style. You can use it to display a summary of the attributes applied to highlighted text, or at the text insertion point.

Attribute	Dialogue option
Font	Choose a font from the drop-down list
Size	Choose a predefined size from the drop-down list, or enter a font size in the field.
Colour	Choose a colour from the drop-down list.
Shade	Choose one of the 10% shade values displayed in the drop-down list, or enter a value in the field.
Style	Check the boxes that correspond to the type styles you want to select.
Horizontal Scale	Enter a value in the field.
Baseline Shift	Enter a value in the field.

(b). Alignment for Paragraphs

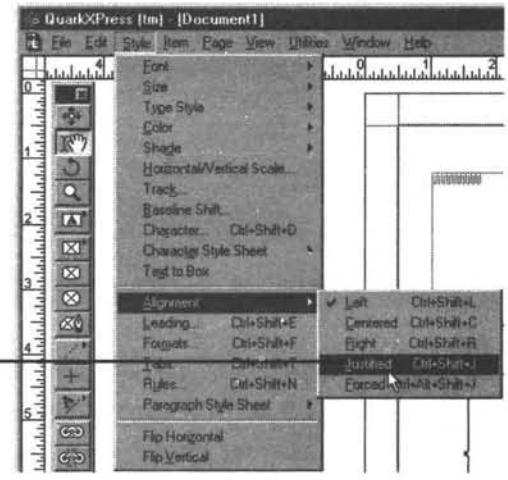
QuarkXPress has five paragraph alignments:

Alignment	Result
Left	Paragraph has a straight left margin and a ragged (uneven) right margin.
Centred	Text is centred between the paragraph's indents.
Right	Paragraph has a straight right margin and a ragged (uneven) left margin.
Justified	Paragraph has straight margins on both the left and right.

Forced	Paragraph has straight margins and the last line is automatically justified.

(c). To apply an alignment to a paragraph:

1. Select the paragraph by placing the text insertion point within it, or highlight a range of paragraphs.
2. Choose Style > Alignment to display the Alignment submenu.
3. Choose an alignment from the Alignment submenu.



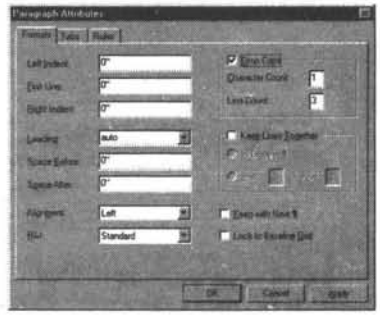
Select an option from this list.

7.8 Creating Drop Caps

A drop cap, or initial cap, is the first letter of a paragraph, enlarged and frequently embellished to create a graphic effect. QuarkXPress enables you to create a number of initial cap styles, including drop caps, hanging caps, and raised caps.

(a). To create a drop cap

1. Select a paragraph by placing the text insertion point within it, or highlight a range of text.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Check the Drop Caps check box.
4. Specify the number of characters you want to include as drop caps by entering a number from 1 to 8 in the Character Count field.



5. Specify the number of lines you want the characters to drop by entering a number between 2 and 8 in the Line Count field.
6. Click Apply to see what the drop cap will look like.
7. Click OK to create the drop cap and close the dialogue box.

7.9 First Line indent

You can specify that QuarkXPress indent the first line of each paragraph.

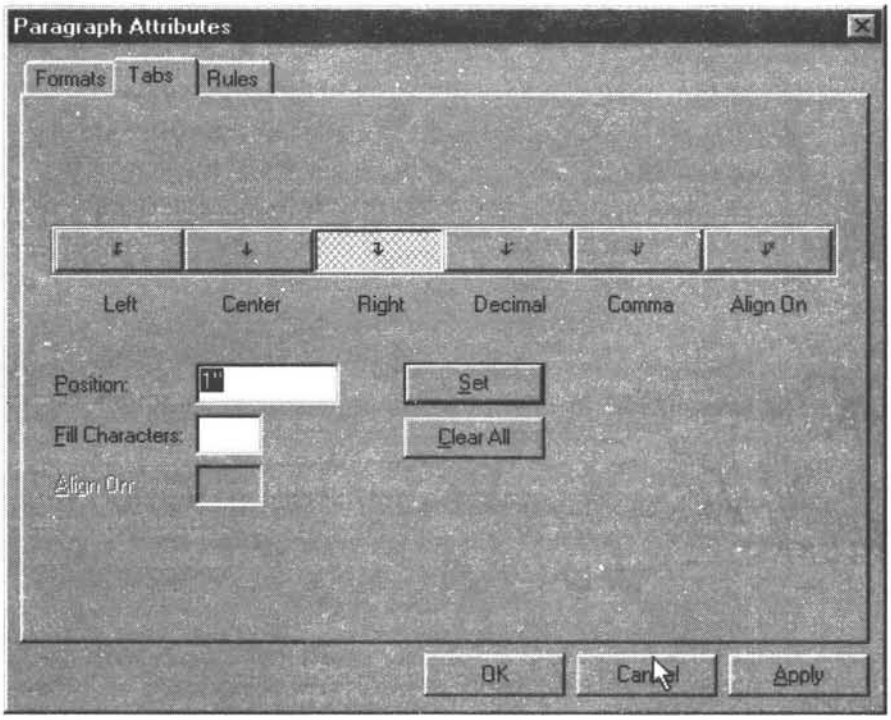
(a). To modify the paragraph indent for the first line of a paragraph

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Enter a value in the First Line field, or drag the triangular indents on the ruler.

(b). Left and Right Indent

To modify the paragraph indent for the left or right margin of a paragraph:

1. Select the paragraph by placing the text insertion point within it, or highlight a range of paragraphs.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.



3. Enter a value in the Left Indent or Right Indent field, or drag the triangular indents on the ruler.
4. Click Apply to see the results.
5. Click OK to accept the value and close the dialogue box.

(c). Applying Hyphenation and Justification Specifications

To apply a different H&J specification to a paragraph:

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Click on the H&J drop-down list to display the available specifications.
4. Choose an option from the H&J drop-down list.
5. Click Apply to see the results of the specification.
6. Click OK to accept the specification and close the dialogue box.

7.10 Leading

To specify the leading (line spacing) in a paragraph:

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.

2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Enter a value in the Leading field.
4. Click Apply to see the results of the Leading value.
5. Click OK to accept the Leading value and close the dialogue box.

(a). Locking to Baseline Grid

The Baseline Grid is an invisible grid that underlies QuarkXPress documents. You define the baseline grid in the Typographic Preferences dialogue box (Edit > Preferences > Typographic).To lock lines of selected paragraphs to the document's baseline grid:

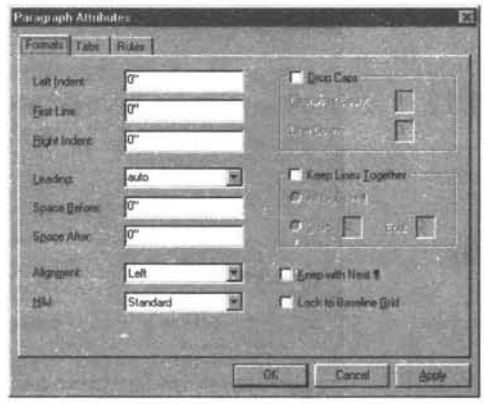
1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Check Lock to Baseline Grid.
4. Click Apply to see the results of Lock to Baseline Grid.
5. Click OK to accept Lock to Baseline Grid and close the dialogue box.

(b). Inserting Space Before or After a paragraph

To change the amount of space between lines of text within selected paragraphs by inserting space before or after the paragraph:

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Formats to display the Paragraph Formats dialogue box.
3. Enter a value in the Space Before field to insert space before a paragraph.

   Enter a value in the Space After field to insert space after a paragraph.
4. Click Apply to see the results. The sum of the Space Before and Space After values determines the total space between paragraphs.



5. Click OK to accept the value and close the dialogue box.

(c). Anchoring Rules to Paragraphs

To anchor a line above or below a paragraph and have the line move with the paragraph as the text flows:

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Rules to display the Paragraph Rules dialogue box.
3. Check Rule Above and/or Rule Below to expand the dialogue box.
4. Choose either Indents or Text from the Length drop-down list. Indents will extend the rule from the paragraph's left indent; Text will base the rule's length on the first line of text for a Rule Above, and the last line of text for a Rule Below.

5. Enter a value in the From Left field to lengthen or shorten a rule by changing the position of its left endpoint relative to the selection you make in the Length drop-down list.
6. Click OK to accept the specifications and close the dialogue box.

7.11 Tabs

Tabs enable you to position text and keep text placement consistent. Use tabs when you want to move text more than a single word space and when you want to create tables. To set tabs for a paragraph:

1. Select the paragraph by placing the text insertion point in it, or highlight a range of paragraphs.
2. Choose Style > Tabs to display the Paragraph Tabs dialogue box.

   The ruler displayed across the bottom of the Paragraph Tabs dialogue box provides a method of viewing and modifying tabs specified in the selected paragraphs.
3. Select the tab alignment you want from the Alignment drop-down list.
4. Click on the ruler to place a tab stop. A tab stop indicator is displayed on the ruler when you click. You can drag the tab stop indicator to reposition it on the ruler.

   Or, enter a value in the Position field. When you click Apply, a tab stop will be placed in the Alignment area at the location you specify.
5. Enter a character in the Fill Character field to create a leader.
6. Click OK to accept the tabs and close the dialogue box.

7.12 Style Sheets

A style sheet is a group of character attributes and paragraph formats that can be applied in one step to a selected paragraph or range of paragraphs. Use style sheets to apply a number of formats at one time, reduce typesetting and layout time, and maintain typographic consistency.

(a). Creating and Editing Style Sheets

Create a new style sheet to group a new set of character attributes and paragraph formats to apply to text. Edit a style sheet to make changes that are reflected in text with the style sheet applied.

1. Choose Edit > Style Sheets to display the Style Sheets dialogue box.
2. Click New to create a new style sheet.

☞ Or, select a style sheet from the Style Sheet scroll list and click Edit.

☞ Or, select a style sheet from the Style Sheet scroll list and click Duplicate.

3. Use the left side of the Edit Style Sheet dialogue box to specify the name and keyboard equivalent, a style sheet to base the style sheet on, and a style to follow the style sheet.
4. Use the right side of the Edit Style Sheet dialogue box to specify the character and paragraph attributes of the style sheet.

(b). Appending Style Sheets

You can use style sheets created in another document by appending them.

1. Choose Edit > Style Sheets to display the Style Sheets dialogue box.
2. Click Append to display the Append Style Sheets dialogue box.
3. Select a QuarkXPress document to append the style sheets from.
4. Click OK.

(c). Deleting Style Sheets

You can remove a style sheet from a document and specify a replacement style sheet for wherever that style sheet was applied.

1. Choose Edit > Style Sheets to display the Style Sheets dialogue box.
2. Select a style sheet from the Style Sheet scroll list.
3. Click Delete.

7.13 Picture Boxes

You can import pictures created with other applications into an active picture box in a QuarkXPress document.

(a). Creating picture boxes

To create rectangle and oval boxes:

1. Select one of the picture box creation tools.
2. Click and drag the Crosshair pointer in any direction.
3. Release the mouse when the box reaches the desired size.

☞ Hold down the SHIFT key to automatically restrict rectangles to squares and ovals to circles.

(b). To create a polygon box:

1. Select the Polygon picture box creation tool.
2. Click the mouse to establish the position of the first polygon vertex.
3. Move the Crosshair pointer where you want to place the second vertex and click. (The second click also establishes the first line segment of the polygon.)
4. Continue clicking to create additional vertices and segments.
5. Close the polygon by moving the pointer over the first vertex you created. Click when the cursor changes to the Handle Creation pointer. You can also double-click to automatically close a polygon

(c). Changing box shape

You can change the shape of a box at any time.

1. Click on the box to make it active.
2. Choose Item > Box Shape and select a new shape from the Box Shape submenu.

(d). Importing Pictures

You can import pictures into your document. You can import the following picture file formats into an active picture box:

☞ Bitmaps (.BMP, .DIB,.GIF,.PCS, .RLE)

☞ TIFFs (.TIF, .CT)

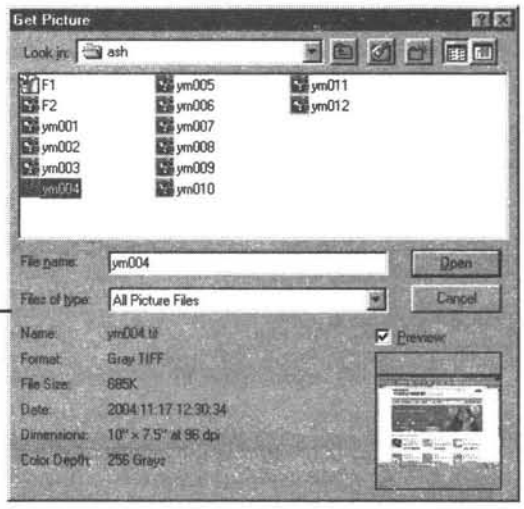
☞ Metafiles (.CGM, .DRW, .PCT, .PLT, .WMF)

☞ Encapsulated PostScript (.EPS)

(e). Importing Bitmap, TIFF (.TIF, .CT), EPS, and WMF pictures

1. Select the Content tool and activate a picture box.
2. Choose File > Get Picture to display the Get Picture dialogue box.
3. Select the type of file from the List Files of Type drop-down list, then locate and select the picture you want to import.

4. Click Unfold to view more information about the picture file selected, including a thumbnail.
5. Click OK.



Get picture diaglog box

(f). Listing and Updating Pictures

1. You can list the pictures in a document, update pictures with modified data files, and specify whether pictures should print.
2. Choose Utilities > Picture Usage to display the Picture Usage dialogue box.

(g). Setting pasteboard width

1. Choose Edit > Preferences > Application to specify the width of the pasteboard in the Pasteboard Width field of the Application Preferences dialogue box.
2. The width of the pasteboard to the left and right of a page or spread is equal to the percentage of the document's page width that you enter in the Pasteboard Width field, down to 0.5 inches.
3. There is 0.5 inches of pasteboard above and below pages and spreads. When the width of the widest horizontal spread in a document approaches 48 inches, the width of the pasteboard areas to the right and to the left of the spread is reduced to stay within the 48 inch document width limit of QuarkXPress.

(h). Using pasteboard area

Create, position, and group items on the pasteboard just as you would on a document page. Move an item from the pasteboard to a document page or another pasteboard by selecting the Item tool, activating the item, and dragging it into position.

(i). Creating "bleeds"

1. The pasteboard also makes it possible for you to "bleed" items off pages. "Bleed" is the term used to describe items that are printed to the edge of a finished page. With QuarkXPress, you can create a bleed item by extending it from a document page onto the pasteboard.
2. To print part of the pasteboard area that surrounds a page or spread, select File > Print and select Centred or Off Centre from the Registration pop-up menu in the Print dialogue box.
3. When you print registration marks for a document on paper that is larger than the page size, QuarkXPress prints 0.25 inches of the pasteboard area surrounding the document.

7.14 Working with Lines

QuarkXPress provides two line creation tools. The Orthogonal Line tool enables you to draw horizontal and vertical lines. The Line tool enables you to draw lines of any angle.

(a). Drawing lines

1. Select a line tool.
2. Position the Crosshair pointer and click to establish the first endpoint.
3. Drag the mouse until the line is the length you want.

(b). Specifying rules

1. Select a paragraph or a range of paragraphs.
2. Choose Style > Rules to display the Paragraph Rules dialogue box.
3. Check Rule Above and/or Rule Below to expand the dialogue box. (If you check only Rule Above or Rule Below, the dialogue box controls enable you to specify rule attributes for only the type of rule you check.)
4. Choose either Indents or Text from the Length drop-down list. Indents will extend the rule from the paragraph's left indent; Text will base the rule's length on the first line of text for a Rule Above, and the last line of text for a Rule Below.
5. Enter a value in the From Left field to lengthen or shorten a rule by changing the position of its left endpoint relative to the selection you make in the Length drop-down list.
6. Enter a value in the Offset field to add space between a rule and the paragraph to which it is anchored.
7. Choose a style for the rule from the Style drop-down list.
8. Choose a width for the rule from the Width drop-down list, or enter a value in the field.
9. Choose a colour for the rule from the Colour drop-down list.
10. Choose a saturation for the colour from the Shade drop-down list, or enter a value between 0% and 100% in 0.1% increments in the field.

(c). Running Text Around Items and Pictures

The QuarkXPress text runaround feature (Item > Runaround) enables you to control the way text flows around, behind, or within items and pictures. You can automatically wrap text around picture shapes, and you can create custom wraps in which text wraps around or flows into a picture shape.

7.15 Creating groups

QuarkXPress enables you to combine multiple items on a page or spread into a group, which can then be treated as a single item. You can move, cut, copy, paste, duplicate, and perform a number of other functions on a group.

(a). Grouping items

1. Activate two or more items by holding down the SHIFT key and clicking with the Item tool.
2. Choose Item > Group.
3. The selected items will be placed in a group, and the bounding box of the group will display as a dotted border behind the items.

(b). Ungrouping items

1. Activate the group by clicking on a grouped item with the Item tool.
2. Select Item > Ungroup.

The group's bounding box will no longer display and the items will become active and independent, as if the items were multiple-selected.

(c). Constraining groups

Constrain enables you to modify a group so that all items are contained within and constrained by a single box. Constrain is available when a group is active and one item in the group is a box that is behind the other items and completely contains them.

To create a constrained group:

1. Create a group, or activate an existing group by clicking on it with the Item tool.
2. Choose Item > Constrain.

An item in the constrained group cannot be resized or moved beyond the edge of its constraining box. When you move a constraining box, all items constrained in that group move as well.

(d). Unconstraining a group

1. Activate the constrained group by clicking on it with the Item tool.
2. Choose Item > Unconstrain.

Unconstraining a group does not ungroup it. Choose Item > Ungroup if you want to break the group relationship.

(e). Rotating Items and Groups

- ☞ You can rotate lines, text boxes, picture boxes, and groups.
- ☞ You can rotate an item by entering a value in a dialogue box or in the Measurements palette, or by using the Rotation tool.

(f). Dialogue boxes

To rotate an active box or group around its centre:

1. Activate the item or group by clicking on it with the Item tool.
2. Choose Item > Modify (Item menu). Depending on the type of item that is active, the Picture Box Specifications, Text Box Specifications, or Group Specifications dialogue box is displayed.
3. Enter a value in the Angle field.
4. Click OK.

(g). Measurements palette

To rotate an active box or group around its centre:

1. Activate the item or group by clicking on it with the Item tool.
2. Choose View > Show Measurements to display the Measurements palette.
3. Enter a value from -360 degrees to +360 degrees in 0.001 degree increments in the Angle field of the Measurements palette.
4. Press ENTER.

(h). Rotation tool

To rotate an item or group manually around a rotation point:

1. Activate the item or group by clicking on it with the Item tool.

2. Select the Rotation tool from the tool palette. The Rotation pointer is displayed.
3. Click on the item or group to establish the rotation point. The Arrowhead pointer is displayed.
4. Rotate the active item or group by dragging the pointer in a circular motion. As you drag the Arrowhead pointer around the rotation point, a line extends from the centre of the rotation point to the pointer, indicating the angle of rotation.
5. Release the pointer when you reach the desired angle or rotation.

7.16 Preparing a Printer

Before printing a document, you must configure your printer, specify it as the output device, and specify the way you want your document printed.

(a). Configuring a Printer

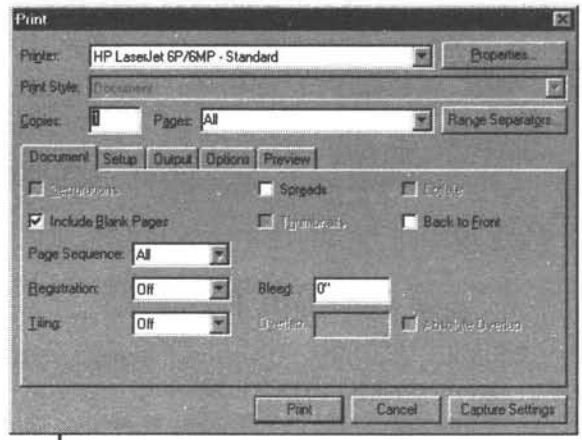
You can specify the printer for your current output port.

1. Double-click on the Printers icon in the Windows Control Panel.
2. Select the printer you want from the Installed Printers scroll list in the Printers dialogue box.
3. Click Connect. Select the port connected to your printer from the Ports scroll list in the Connect dialogue box.
4. Click OK.

(b). Using Printer Setup

You can specify the way you want to output your document.

1. Choose File > Printer Setup (CTRL+ALT+P) to display the Printer Setup dialogue box.
2. Click Default Printer, or click Specific Printer and select a printer from the Specific Printer drop-down list.
3. Click one of the orientation buttons to specify the printed page's orientation. Select Portrait to print in vertical orientation, or select Landscape to print in horizontal orientation.



Print command dialog box

4. Choose an option from the Size drop-down list and/or the Source drop-down list to specify the paper size and source.
5. Choose a printer name from the Use PDF For drop-down list to specify a Printer Description File (PDF).
6. Check Adjusted Screen Values to use screen value sets defined in the selected printer description file. If this option is not checked, QuarkXPress uses default values.

7. Enter a value in the Halftone Freq. field to specify the number of lines per inch used by QuarkXPress to print screens.
8. Choose an option from the Data drop-down list to specify how data is sent to the printer.
9. Other options:

Check Flip Horizontal	reverse the printing of page images from left to right.
Check Flip Vertical	print page images upside down.
Check Invert	print negative page images.
Click Options	print document in reduced or enlarged size.
Enter value in Scaling field	scale page in 1% increments from 25% to 400%

(c). Selecting an Imagesetter

You can prepare high-quality page art on film or paper by using an imagesetter.

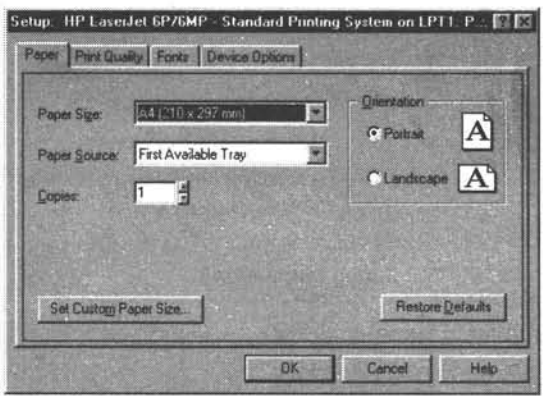
1. If you select a roll-fed imagesetter from the Printer drop-down list, the Resolution, Paper Width, Paper Offset, and Page Gap fields become active.
2. To specify settings:

To set	do this
Paper Width	enter a value in the field to specify the width of the roll of paper.
Paper Offset	enter a value in the field to move the printed page to the right on the paper or film.
Page Gap	enter a value in the field to specify the amount of space QuarkXPress inserts between pages.

(d). Using Printer Setup

You can specify the way you want to output your document.

1. Choose File > Printer Setup (CTRL+ALT+P) to display the Printer Setup dialogue box.
2. Click Default Printer, or click Specific Printer and select a printer from the Specific Printer drop-down list.
3. Click one of the orientation buttons to specify the printed page's orientation. Select Portrait to print in vertical orientation, or select Landscape to print in horizontal orientation.



4. Choose an option from the Size drop-down list and/or the Source drop-down list to specify the paper size and source.
5. Choose a printer name from the Use PDF For drop-down list to specify a Printer Description File (PDF).
6. Check Adjusted Screen Values to use screen value sets defined in the selected printer description file. If this option is not checked, QuarkXPress uses default values.

7. Enter a value in the Halftone Freq. field to specify the number of lines per inch used by QuarkXPress to print screens.
8. Choose an option from the Data drop-down list to specify how data is sent to the printer.

(e). Printing a Document

You can output a copy of your document to a printer or imagesetter.

1. Choose File > Print (CTRL+P) to display the Print dialogue box.
2. Enter a value in the Copies field to specify the number of duplicates to print.
3. Specify the document pages to print by clicking All, or enter a number in the From and To fields to select a range of pages to print.
4. Other controls in the Print dialogue box allow you to specify other conditions for printing your document.

(f). Printing Pictures

You can maintain links to pictures imported and make sure all pictures are present prior to printing your document.

1. Choose File > Print to display the Print dialogue box.
2. Click OK to begin printing.
3. If all picture files can be located, printing begins and no further action is necessary.

Without replacing missing/modified picture files:

1. Choose File > Print to display the Print dialogue box.
2. Click OK to begin printing.
3. A warning message appears if picture files are missing, or if the document contains any pictures identified as modified.
4. Click OK to continue printing without replacing or viewing the missing or modified pictures.
5. Click Cancel to stop your print job without replacing or viewing missing or modified pictures.

(g). Replacing missing/modified picture files

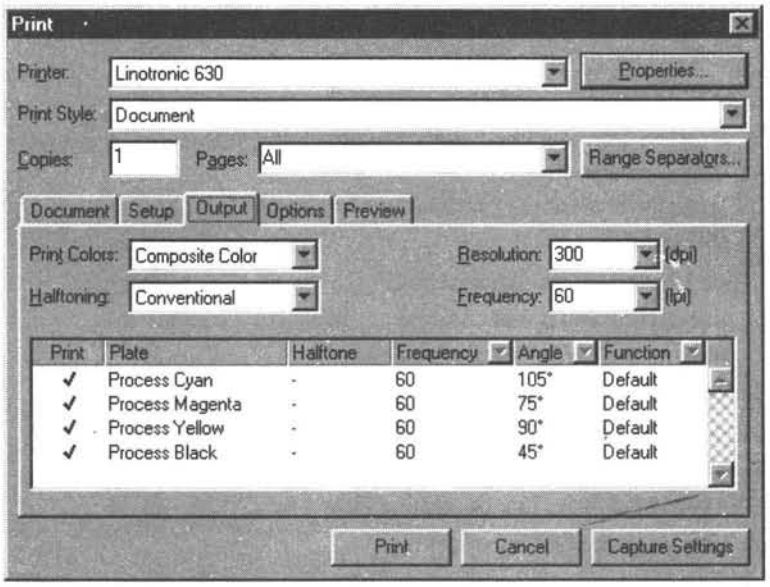
1. Choose File > Print to display the Print dialogue box.
2. Click OK to begin printing.
3. A warning message appears if picture files are missing, or if the document contains any pictures identified as modified.
4. Click Yes to view a list of modified or missing picture files. The Missing/Modified Pictures dialogue box displays.
5. Click Update to reestablish the link to a missing picture file or to reimport a modified picture file. The Find dialogue box displays.
7. Select the name of the picture and Click Show Me to display missing or modified pictures.
8. Select the picture, then click on the check mark in the Print column to suppress printing of a picture. If you want the picture to print, select the picture, then click in the Print column to create a check mark.

7.17 Printing Colour Separations

You can print spot and process colour separations for all page items which contain colour. You can also print colour separations of picture files you create using illustration applications that

support colour-separated picture formats. QuarkXPress can colour-separate pictures saved in CMYK TIFF, DCS, or EPS formats.

1. Configure your printer. (See Configuring a Printer)
2. Choose File > Printer Setup (CTRL+ALT+P) to display the Printer Setup dialogue box.
3. Select a printer from the Specific Printer drop-down list, or click Default Printer.
4. Choose On from the Separations drop-down list to print spot and/or process colour separation plates of document pages containing colour. (Colour controls in the Print dialogue box are available only when you select a PostScript printer.)



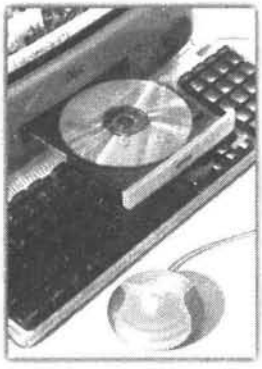
5. Choose All Plates from the Plate drop-down list if you want to print all the plates needed to output the colours for each document page. Choose a separation plate from the Plate drop-down list if you want to print an individual colour plate for each page you print.
6. Click OK.
7. Choose an option from the Registration drop-down list to place registration marks on each plate. Choose Centred to position registration marks halfway between the crop marks. Choose Off Centre to position the bottom and right registration marks slightly off centre.

❑❑❑

EXERCISE

1. Explain the process of creating a New Document?
2. What do you understand by automatic Text Box?
3. Explain the process of saving a Document?
4. Write the procedure of using Auto Save?
5. Explain the method of using Auto Backup?
6. Explain the process of creating master pages?
7. What do you mean by default master pages?
8. Explain the process of modifying master pages?
9. Applying master pages
10. What do you mean by automatic page numbering?
11. How to Create a Text Boxe?
12. Write the procedure of activating a text box?
13. How to move an active text box?
14. How to resize an active text box?
15. How to link text boxes and create a manual text chain?
16. How to break a link between text boxes?
17. What do you mean by Drag and Drop Text?
18. Write the process of applying Character Attributes?
19. How to use the Character Attributes dialogue box?
20. Explain the procedure of creating Drop Caps?
21. How to create first line indent?
22. How to modify the paragraph indent for the first line of a paragraph?
23. What do you mean by Leading?
24. Explain the process of using Style sheets?
25. What is the use of Picture Box?
26. Explain the process of creating picture boxes?
27. Write a short notes on creating groups?
28. Write a short notes on measurements palette?
29. Explain the process of Preparing a Printer?
30. How to print a Document?





8

Creating Drawings: Using CorelDRAW 12

CorelDRAW is an intuitive graphics design application that gives designers a more enjoyable work experience. CorelDRAW is built and designed to meet the demands of today's working designer to create ads or collateral for print or for the Web.

8.1 To install an application:

- Close all applications.
- Insert Disc 1 in the CD drive.
- If the installation wizard does not start automatically, click Start on the Windows taskbar, and click Run. Type D:\Setup, where D is the letter that corresponds to the CD drive.
- Follow the instructions in the installation wizard and enable one of the following options:

  Typical — to install the default applications and components

  Compact — to install the minimum components for the application to operate

  Custom — to choose applications and writing tool components
- Follow the instructions for installing and registering the application.

8.2 To uninstall applications:

- On the Windows taskbar, click Start > Control Panel. If your operating system is Windows 2000 or earlier, click Start > Settings > Control Panel.
- Double-click Add/Remove programs.
- Choose a Corel application from the list, click Change/Remove, and enable the Remove all option in the dialog box.

  If you want to remove all files, including user files, click Change, and enable the Remove user files checkbox. If your operating system is Windows 2000 or earlier, click the Remove button.
- Follow the InstallShield wizard instructions. You can choose whether the uninstalling process will remove user files such as preference, presets, user-created fills, customized files, and so on.

8.3 CorelDRAW terminology and concepts

Before you get started with CorelDRAW, you should be familiar with the following terms.

object: An element in a drawing such as an image, shape, line, text, curve, symbol, or layer.

drawing: The work you create in CorelDRAW: for example, custom artwork, logos, posters, and newsletters.

vector graphic: An image generated from mathematical descriptions that determine the position, length, and direction in which lines are drawn.

bitmap: An image composed of grids of pixels or dots.

docker: A window containing available commands and settings relevant to a specific tool or task .

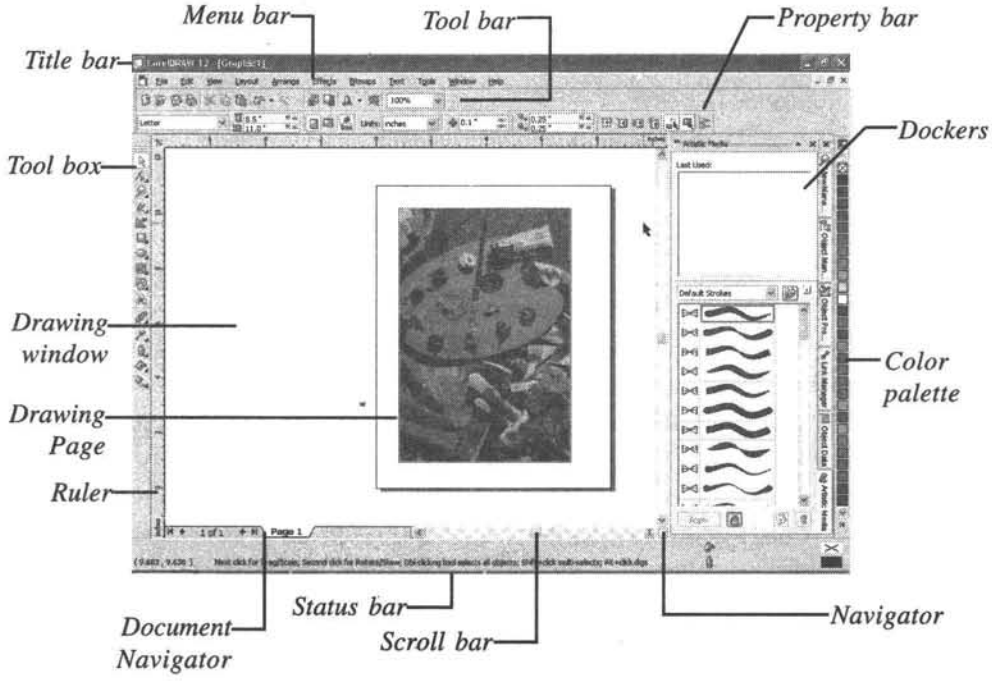
flyout: A button that opens a group of related tools or menu items.

artistic text: A type of text to which you can apply special effects, such as shadows.

paragraph text: A type of text to which you can apply formatting options, and which can be edited in large blocks.

8.4 CorelDRAW application window

When you launch CorelDRAW, the application window opens containing a drawing window. The rectangle in the center of the drawing window is the drawing page where you create your drawing. Although more than one drawing window can be opened, you can apply commands to the active drawing window only.



The CorelDRAW application window appears below. A description of its parts follows.

Menu bar

The area containing pull-down menu options

Property bar

A detachable bar with commands that relate to the active tool or object. For example, when the text tool is active, the text property bar displays commands that create and edit text.

Toolbar

A detachable bar that contains shortcuts to menu and other commands.

Title bar

The area displaying the title of the currently open drawing.

Rulers

Horizontal and vertical borders that are used to determine the size and position of objects in a drawing.

Toolbox

A floating bar with tools for creating, filling, and modifying objects in the drawing.

Drawing window

The area outside the drawing page bordered by the scroll bars and application controls.

Drawing page

The rectangular area inside the drawing window. It is the printable area of your work area.

Color palette

A dockable bar that contains color swatches

Docker

A window containing available commands and settings relevant to a specific tool or task.

Status bar

An area at the bottom of the application window that contains information about object properties such as type, size, color, fill, and resolution. The status bar also shows the current mouse position.

Document navigator

The area at the bottom left of the application window that contains controls for moving between pages and adding pages.

Navigator

A button at the bottom-right corner that opens a smaller display to help you move around a drawing.

8.5 CorelDRAW workspace tools

Application commands are accessible through the menu bar, toolbars, toolbox, property bar, and dockers. The property bar and dockers provide access to commands that relate to the active tool or current task. The property bar, dockers, toolbars, and toolbox can be opened, closed, and moved around your screen at any time.

(a). Exploring the toolbox

Flyouts open to display a set of related CorelDRAW tools. A small arrow in the bottom, right corner of a toolbox button indicates a flyout: for example, the Shape edit flyout Clicking a flyout

arrow opens a set of related tools. Clicking and dragging the grab handles at the end of the flyout sets the flyout in its expanded form. The following table provides descriptions of the flyouts and tools in the CorelDRAW toolbox.

Shape edit

Lets you access the Shape, Knife, Eraser, Smudge brush, Roughen brush, Free transform, and Virtual segment delete tools.



Zoom

Lets you access the Zoom and Hand tools.



Curve

Lets you access the Freehand, Bézier, Artistic media, Polyline, Pen, 3 point curve, Dimension, and Interactive connector tools.



Rectangle

Lets you access the Rectangle and 3 point rectangle tools.



Ellipse

Lets you access the Ellipse and 3 point ellipse tools.



Object

Lets you access the Graph paper, Polygon, and Spiral tools.



Perfect Shapes

Lets you access the Basic shapes, Arrow shapes, Flowchart shapes, Star shapes, and Callout shapes tools.



Interactive tools

Lets you access the Interactive blend, Interactive contour, Interactive distortion, Interactive envelope, Interactive extrude, Interactive drop shadow, and Interactive transparency tools.



Eyedropper

Lets you access the Eyedropper and Paintbucket tools.



Outline

Lets you access the Color docker, Outline pen and the Outline color dialog boxes, and a selection of outlines of various widths.



Fill

Lets you access the Color docker, Fill color, Fountain fill, Pattern fill, Texture fill, and PostScript fill dialog boxes.



Interactive fill

Lets you access Interactive fill and Interactive mesh fill tools.



Tools Description:

- The **Pick tool** lets you select and size, skew, and rotate objects.



- The **Shape tool** lets you edit the shape of objects. 
- The **Knife tool** lets you cut through objects. 
- The **Eraser tool** lets you remove areas of your drawing. 
- The **Smudge brush tool** lets you distort a vector object by dragging along its outline. 
- The **Roughen brush** tool lets you distort the outline of a vector object by dragging along the outline. 
- The **Free transform tool** lets you transform an object by using the Free rotation, Angle rotation, Scale, and Skew tools. 
- The **Virtual segment delete tool** lets you delete portions of objects that are between intersections. 
- The **Zoom tool** lets you change the magnification level in the drawing window. 
- The **Hand tool** lets you control which part of the drawing is visible in the drawing window. 
- The **Pen tool** lets you draw curves one segment at a time. 
- The **Polyline tool** lets you draw lines and curves in preview mode. 
- The **Freehand tool** lets you draw single line segments and curves. 
- The **Bézier tool** lets you draw curves one segment at a time. 
- The **3 point curve tool** lets you draw a curve by defining the start, end, and center points. 
- The **Artistic media tool** provides access to the Brush, Sprayer, Calligraphic, and Pressure tools. 
- The **Dimension tool** lets you draw vertical, horizontal, slanted, or angular dimension lines. 
- The **Interactive connector tool** lets you join two objects with a line. 
- The **Smart drawing tool** converts the freehand strokes that you draw to basic shapes and smoothed curves. 
- The **Rectangle tool** lets you draw rectangles and squares. 

- The **3 point rectangle tool** lets you draw a rectangle by dragging to create the rectangle baseline and clicking to define its height. 
- The **Ellipse tool** lets you draw ellipses and circles. 
- The **3 point ellipse tool** lets you draw an ellipse by dragging to create the center line of the ellipse and clicking to define its height. 
- The **Polygon tool** lets you draw symmetrical polygons and stars. 
- The Spiral tool lets you draw symmetrical and logarithmic spirals. 
- The **Graph paper tool** lets you draw a grid of lines similar to that on graph paper. 
- The **Basic shapes tool** lets you choose from a full set of shapes, including hexagram, a smiley face, and a right-angle triangle. 
- The **Arrow shapes tool** lets you draw arrows of various shape, direction, and number of heads. 
- The **Flowchart shapes tool** lets you draw flowchart symbols. 
- The **Star shapes tool** lets you draw ribbon objects and explosion shapes. 
- The **Callout shapes tool** lets you draw callouts and labels. 
- The **Text tool** lets you type words directly on the screen as artistic or paragraph text. 
- The **Interactive blend tool** lets you blend two objects. 
- The **Interactive contour tool** lets you apply a contour to an object. 
- The **Interactive distortion tool** lets you apply a Push or Pull distortion, a Zipper distortion, or a Twister distortion to an object. 
- The **Interactive envelope tool** lets you distort an object by dragging the nodes of the envelope. 
- The **Interactive extrude tool** lets you apply the illusion of depth to objects. 
- The **Interactive drop shadow tool** lets you apply a drop shadow to an object. 
- The **Interactive transparency tool** lets you apply transparencies to objects. 

- The **Eyedropper tool** lets you select object properties, such as fill, line thickness, size, and effects, from an object on the drawing window.



- The **Paintbucket tool** lets you apply object properties, such as fill, line thickness, size and effects, to an object on the drawing window after selecting these properties using the Eyedropper tool.



- The **Interactive fill tool** lets you apply various fills.



- The **Interactive mesh tool** lets you apply a mesh grid to an object.

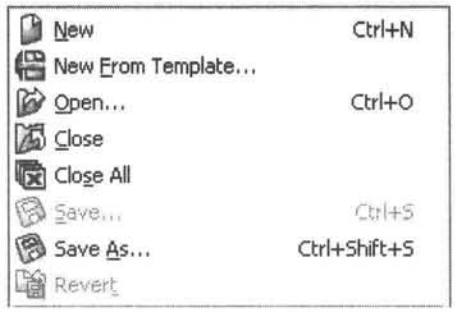


- The **Fill tool** lets you set the fill properties.



8.6 To start CorelDRAW

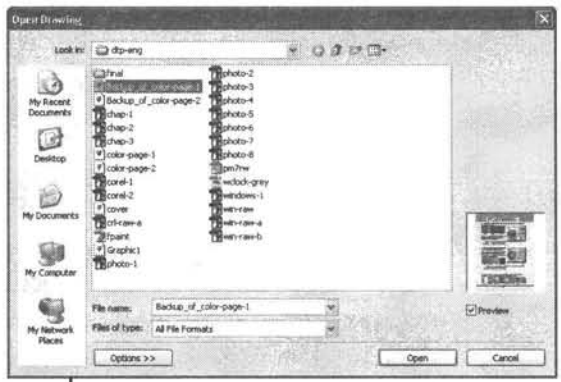
- Click on Windows Start button> All programs> CorelDRAW Graphics Suite 12>CorelDRAW 12.
- To start a drawing from a blank page, Click on File menu> New command.
- Start a drawing from a template, Click on File menu> New from template command, click the tab that corresponds to the template category you want, and choose a template.



When you start a drawing from a blank page, the drawing is based on the default CorelDRAW template (CorelDRAW.cdt).

(a). To open a drawing

- Click on File Menu > Open command.
- Locate the folder where the drawing is stored.
- Click a filename. If the drawing is from an earlier version of CorelDRAW and contains text in a language different from the language of your operating system, choose the corresponding option from the Code page list box to ensure text is converted into Unicode characters properly.
- Click Open.



Open command Option box.

- You can also open a drawing by clicking the Open button on the toolbar.
- If you want to view a thumbnail of the drawing, click the Preview check box.

8.7 Working with templates

A template is a set of styles and page layout settings that govern the layout and appearance of a drawing. You can use the default template (CorelDRAW.cdt) or choose one from a wide variety of preset templates available in the application.

If none of the preset templates meets your requirements, you can create a template based on styles you create or styles taken from other templates. For example, if you regularly put together a newsletter, you can save the newsletter's page layout settings and styles to a template.

When you create a new drawing using a template, CorelDRAW formats the page using the template's page layout settings and loads the template's styles in the new file.

You can edit a template by making changes to the styles, page layout settings, or objects. For example, if you like a template but want to make it more versatile, you can add styles that you've created or that you've taken from another template.

After you have started a drawing with a template, you can load a different template. When you load a template, you can choose to load just the styles or to load styles, page layout settings, and objects.



A Template based document

(a). To create a template

- Click on File Menu> Save as command.
- Type a name in the File name list box.
- Choose CDT - CorelDRAW template from the Save as type list box.
- Locate the folder where you want to save the template.
- Click on Save option.

(b). To edit a template

- Click on the File Menu> Open command.
- Choose CDT - CorelDRAW template from the Files of type list box.
- Locate the folder where the template is stored.
- Double-click a template filename.
- In the Open dialog box, enable the Open for editing check box.

Tip:

To preview the contents of a template, enable the Preview check box.

(c). To create a new file based on a saved template

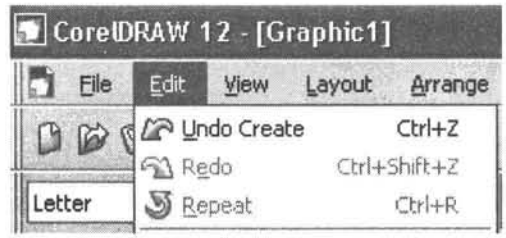
- Click on File> Open command.
- Choose CDT - CorelDRAW template from the Files of type list box.
- Locate the folder where the template is stored.
- Double-click a template filename.
- Enable the New from template check box in the Open dialog box. If, in addition to loading the template's styles, you also want to load page settings and objects, enable the With contents check box.

8.8 Undoing, redoing, and repeating actions

You can undo the actions you perform in a drawing, starting with the most recent action. If you don't like the result of undoing an action, you can redo it. Reverting to the last saved version of a drawing also lets you remove one or more actions. Certain actions applied to objects, such as stretching, filling, moving and rotating, can be repeated to create a stronger visual effect. Customizing the undo settings lets you increase or decrease the number of actions that you can undo or redo.

(a). To undo, redo, and repeat actions

- Undo an action, Click on Edit Menu>Undo.
- Redo an action, Click on Edit Menu> Redo.
- Undo or redo a series of actions, Click on Tools Menu> Undo Docker. Choose the action that precedes all the actions you want to undo, or choose the last action you want to redo.
- Revert to the last saved version of a drawing, Click on File Menu> Revert command.
- Repeat an action, Click on Edit Menu> Repeat.



When you undo a series of actions, all actions listed below the action you choose are undone. When you redo a series of actions, the action you choose and all actions listed between it and the last undone action are redone.

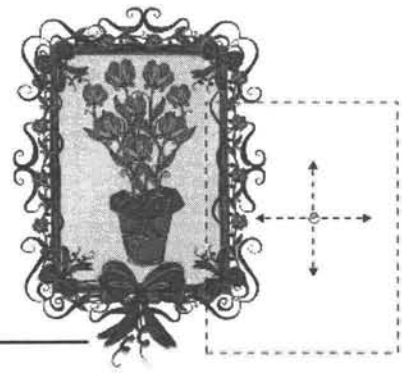
Tips

- You can repeat an action on another object or group of objects by selecting the object or objects and clicking Edit> Repeat.
- You can also undo or redo actions by clicking the Undo button or Redo button on the Standard toolbar.

8.9 Zooming and panning

You can change the view of a drawing by zooming in to get a closer look or by zooming out to see more of the drawing. You can experiment with a variety of zoom options to determine the amount of detail you want.

Another way in which you can view specific areas of a drawing is by panning. When you work at high magnification levels or with large drawings, you may not be able to see the whole drawing. Panning lets you view areas that aren't displayed by moving the page around in the drawing window.



A drawing object

You can use the Hand tool to pan around a large image and view particular areas. While you are panning, you can zoom in and out. While you are zooming, you can pan. This saves you from

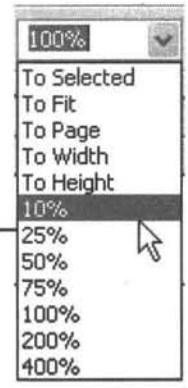
having to alternate between the two tools. You can specify zooming and panning settings to zoom in quickly to detailed parts of a drawing and zoom out to the larger context.

(a). To zoom

Open the Zoom flyout, and click the Zoom tool.

On the property bar, click one of the following buttons:

- Zoom in
- Zoom out
- Zoom to selected
- Zoom to all objects
- Zoom to page
- Zoom to page width
- Zoom to page height



Zoom level property bar

The Zoom to selected button is available only when you select one or more objects before you open the Zoom flyout. When you are not editing text, you can also access the Zoom tool by pressing the Z key. You can also zoom in by double-clicking or dragging anywhere in the drawing window using the Hand tool. To zoom out, right-click in the drawing window.

(b). To pan in the drawing window

- Open the Zoom flyout, and click the Hand tool.
- Drag in the drawing window until the area you want to view displays.

When you are not editing text, you can also access the Hand tool by pressing the H key. If you want to pan in the drawing window while zoomed in on the drawing, click the Navigator button in the bottom-right corner of the drawing window or the N key. Drag the cross-haired pointer around in the Navigator pop-up window.

8.10 Previewing a drawing

You can preview a drawing to see how it will look when you print and export. When you preview a drawing, only the objects on the drawing page and in the immediate area of the drawing window are displayed, and you can see all layers that are set to print in the Object Manager. If you want to get a closer look at specific objects in a drawing, you can select and preview them, too. When you preview selected objects, the rest of the drawing is hidden.

Before you preview a drawing, you can specify the preview mode. The preview mode affects the speed at which your preview displays and the amount of detail that is displayed in the drawing window. You can also display consecutive pages on the screen at the same time and create objects that span two pages.

(a). To preview a drawing

- Click on View Menu> Full screen preview.
- Click anywhere on the screen, or press any key, to return to the application window.
- You can press Page up and Page down to preview pages in a multiple-page drawing.

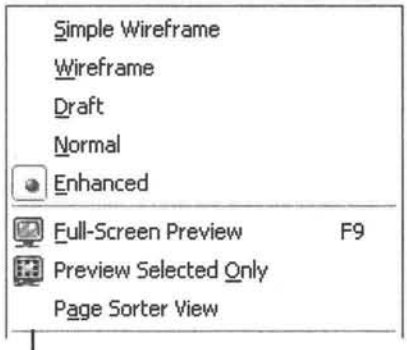
8.11 Working with views

As you work, CorelDRAW lets you display a drawing in any of the following modes:

- ***Simple wireframe*** — displays an outline of the

drawing by hiding fills, extrusions, contours, drop shadows, and intermediate blend shapes; also displays the bitmaps in monochrome. It lets you quickly preview basic elements in a drawing.

- ***Wireframe*** — displays simple wireframe in addition to intermediate blend shapes.
- ***Draft*** — displays a drawing's fills and bitmaps using a low resolution. Eliminates some detail to allow you to focus on the color balances in a drawing.



Select a view mode from this menu.

- ***Normal*** — displays a drawing without PostScript fills or high-resolution bitmaps. Refreshes and opens slightly faster than enhanced view.
- ***Enhanced*** — displays a drawing with PostScript fills, high-resolution bitmaps, and anti-aliased vector graphics.

The view you choose affects the amount of time it takes for a drawing to refresh or open. For example, a drawing displayed in Simple wireframe view takes less time to refresh or open than does a drawing displayed in Enhanced view.

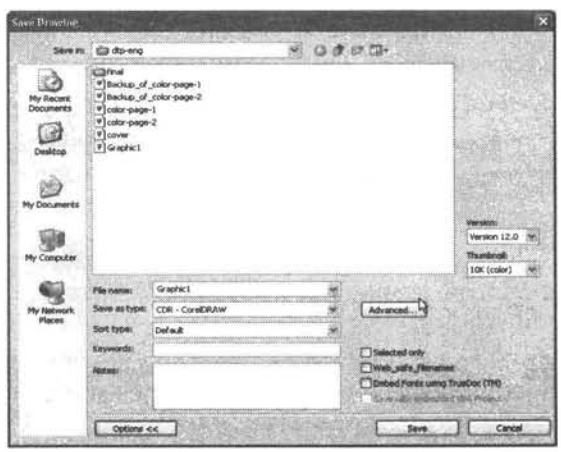
You can save a view of any part of a drawing so that you can return to that view later. For example, you can save a Wireframe view of an object at 230% magnification, and then switch to this specific view at any time.

8.12 Saving drawings

CorelDRAW lets you save a drawing as you work. The application also offers advanced options that let you assign notes, keywords, and thumbnails to drawings so that you can find them more easily. By default, drawings are saved to the CorelDRAW file format (.cdr); however, advanced save options let you choose other file formats as well. If you are saving a drawing to use in another application, you must save it to a file format that is supported by that application. You can also save a drawing to a previous version of CorelDRAW.

(a). To save a drawing

- Click on File Menu> Save as command.
- Locate the folder where you want to save the file.
- If you want to save notes or keywords with the file, type them in the corresponding box.
- If you want to specify advanced settings, click Advanced, and specify the settings you want in the Options dialog box.
- Type a filename in the File name list box.
- Click on Save button.



Tips:

- If you want to save changes made to a previously saved drawing, click File Menu > Save command.
- You can also save a drawing by clicking the Save button on the Standard toolbar.

(b). To save only selected objects

- Select the objects.
- Click File Menu> Save as command.
- Enable the Selected only check box.
- Locate the folder where you want to save the file.
- Type a filename in the File name list box.
- Click on Save button.

8.13 Quiting CorelDRAW

You can close one or all open drawings at any time before quitting CorelDRAW.

- Click File Menu> Exit command.
- You can also quit CorelDRAW by pressing Alt + F4.

8.14 Lines, Outlines and Brush Strokes

CorelDRAW lets you add lines and brush strokes using a variety of techniques and tools. After you draw lines or apply brush strokes to lines, you can format them. You can also format the outlines that surround objects.

CorelDRAW provides preset objects that you can spray along a line. You can also create flow and dimension lines in drawings. You can draw lines using shape recognition.



Line tools in CorelDRAW 12

(a). To draw a straight line

- Open the Curve flyout, and click the Freehand tool.
- Click where you want to start the line, and click where you want to end it.

(b). Draw a straight line using the Polyline tool

Open the Curve flyout, and click the Polyline tool. Click where you want to start the line segment, and click where you want to end the line segment. Double-click to end the line.

(c). Draw a straight line using the Bézier tool

Open the Curve flyout, and click the Bézier tool. Double-click where you want to start the line. Click where you want to end the line. If you want to create a multi-segment line, double-click where you want the new line segment to end. Continue this process until the line has as many segments as you want. Double-click to finish the line.

(d). Draw a straight line using the Pen tool

Open the Curve flyout, and click the Pen tool. Double-click where you want to start the line. Click where you want to end the line. If you want to create a jagged line, double-click where you want the new line segment to end. Continue this process until the line has as many segments as you want. Double-click to finish the line.

(e). Preview a line using the Pen tool

Click the Preview mode button in the property bar. Click on the drawing page, and release the mouse button. Move the mouse, and click to finish the line.

(f). Add line segments to an existing line

Using the Freehand tool, click the end node of a selected line, and click where you want the new segment to end.

(g). Create a closed shape from two or more connected lines

Using the Freehand tool, click the end node of a line with two segments. Click the first node.

- You can constrain a line created with the Freehand tool to a straight vertical or horizontal line by holding down Ctrl while you drag.
- You can change the angle of this line by clicking Tools Menu> Options command, clicking Edit in the Workspace list of categories and changing the value in the Constrain Angle box.

(h). To draw a curved line

- Open the Curve flyout, and click the Freehand tool.
- Click where you want to start the curve, and drag to draw the line.

(i). Draw a curved line using the Polyline tool

Open the Curve flyout, and click the Polyline tool. Click where you want to start the curve, and drag across the drawing page. Double-click to finish the curve.

(j). Draw a curved line using the Bézier tool

Open the Curve flyout and click the Bézier tool Click where you want to place the first node, and drag the control point in the direction you want the curve to bend. Release the mouse button. Position the cursor where you want to place the next node, and drag the control point to create the curve you want. Double-click to finish the curve.

(k). Draw a curved line using the Pen tool

Open the Curve flyout and click the Pen tool. Click where you want to place the first node, and drag the control point in the direction you want the curve to bend. Release the mouse button. Position the cursor where you want to place the next node, and drag the control point to create the curve you want. Double-click to finish the curve.

(l). Preview a line using the Pen tool

Click the Preview mode button in the property bar. Click on the drawing page, and release the mouse button. Move the mouse and click to finish the curve.

- You can erase a portion of a curved freehand line by holding down Shift and dragging backward over the line before releasing the mouse button.
- You can close an object with the Shape tool by opening the Shape flyout, and selecting a shape. Click on the Auto-close curve button.

(m). To draw a curve by specifying width and height:

- Open the Curve flyout, and click the 3 point curve tool.
- Click where you want to start the curve, and drag to where you want the curve to end.
- Release the mouse button, and click where you want the center of the curve to be.

(n). To draw a calligraphic line

- Open the Curve flyout, and click the Artistic media tool.

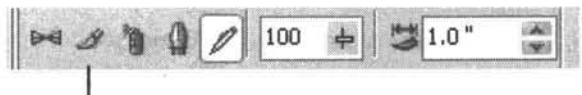
- Click the Calligraphic button on the property bar.
- Type a value in the Calligraphic angle box on the property bar.
- If you want to smooth the edges of the line, type a value in the Freehand smoothing box on the property bar.
- Drag until the line is the shape you want.
- If you want to set the width of the line, type a value in the Artistic media tool width box on the property bar.

Tips

- The width you set is the maximum line width. The angle of the line you draw in relation to the calligraphic angle determines the line's actual width.
- You can also access calligraphic lines by clicking Effects> Artistic media, and specifying the settings you want in the Artistic media docker.

(o). To draw a pressure-sensitive line

- Open the Curve flyout, and click the Artistic media tool.
- Click the Pressure button on the property bar.
- If you want to smooth the edges of the line, type a value in the Freehand smoothing box on the property bar.
- Drag until the line is the shape you want.
- If you want to change the width of the line, type a value in the Artistic media tool width box on the property bar.



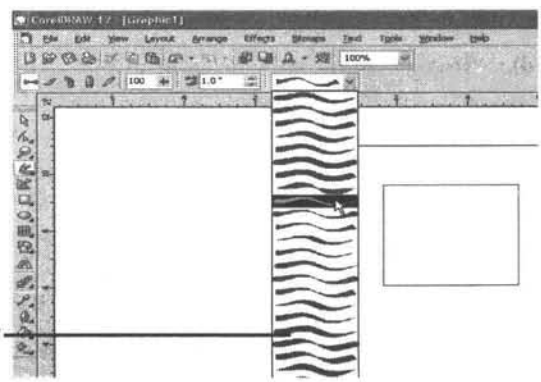
Property bar

Tips

- The width you set represents the line's maximum width. The amount of pressure you apply determines the line's actual width.
- If you are using the mouse, press the Up arrow or Down arrow to simulate the pen pressure, and, therefore, the width of the line.
- You can also access pressure-sensitive lines by clicking Effects> Artistic media.

(p). To draw a preset line

- Open the Curve flyout, and click the Artistic media tool.
- Click the Preset button on the property bar.
- Choose a preset line shape from the Preset stroke list list box. If you want to smooth the edges of the line, type a value in the Freehand smoothing box on the property bar.
- Drag until the line is the shape you want. If you want to set the width of the line, type a value in the Artistic media tool width box on the property bar.


Select a preset line from this window.

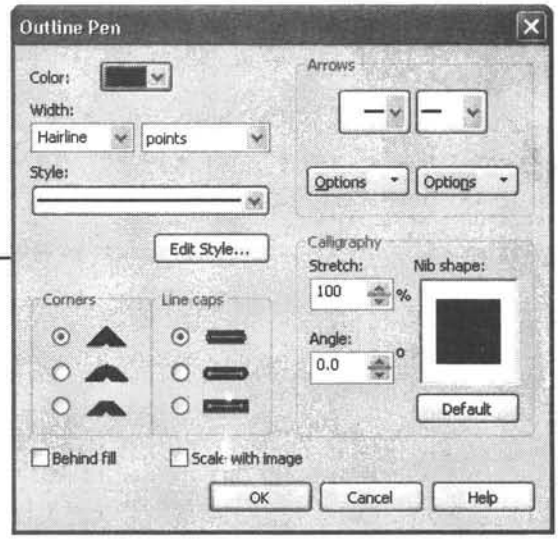
8.15 Formatting lines and outlines

You can change the appearance of both lines and outlines. For example, you can specify their color, width, style, corner shape, and cap style. You can also remove a line or outline, and you can create your own line or outline style by adjusting the distance between segments in the line.

CorelDRAW also lets you copy the color of an outline to other objects, convert outlines to objects so that you can apply a fill to them, and create calligraphic outlines. You can also add arrowheads to lines and curves. In addition, you can create new arrowheads and edit current or new ones. Setting the miter limit for outlines lets you specify at what angle a sharp corner is either mitered (pointed) or beveled (squared-off).

(a). To specify line and outline settings

- Select an object.
- Open the Outline tool flyout, and click the Outline pen dialog button.
- Specify the settings you want.



Outline Pen diaglog box

(b). Create a line style

Click Edit style, and move the slider in the Edit line style dialog box. By clicking the boxes to the left of the slider, you can specify the placement and frequency of the dots in the new line style you create.

(c). Edit a line style

Choose a line style from the Style list box, and click Edit style. Create a line style in the Edit line style dialog box, and click Replace. You can change the outline color of a selected object by choosing a color from the color picker in the Outline pen dialog box.

(d). To copy outline color to another object

- Open the Eyedropper flyout, and click the Eyedropper tool.
- Choose Object attributes from the list box on the property bar.
- Click the Properties flyout on the property bar, and enable the Outline check box.
- Click the edge of the object whose outline you want to copy.
- Open the Eyedropper flyout, and click the Paintbucket tool.
- Click the edge of the object to which you want to copy the outline.

(e). To create a calligraphic outline

- Select an object.

- Open the Outline tool flyout, and click the Outline pen dialog button.
- In the Corners area, enable a corner style option. Type a value in the Stretch box.
- Type a value in the Angle box.

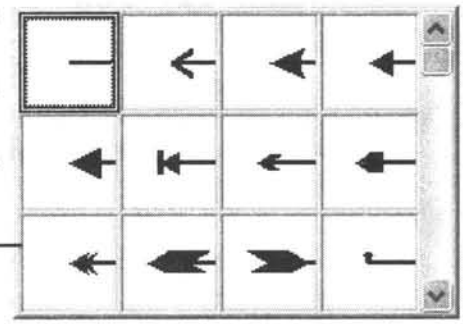
(f). To remove an object's outline

- Select an object.
- Open the Outline tool flyout, and click the No outline button.

You can also remove an object's outline by selecting the object and right-clicking No Color on the color palette.

(g). To add an arrowhead

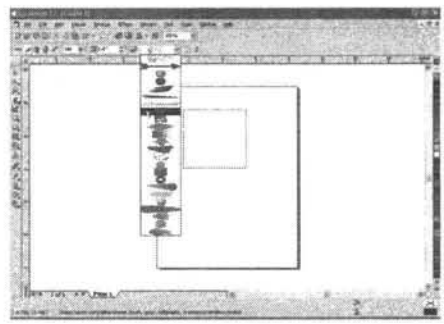
- Select a line or curve.
- Open the Outline tool flyout, and click the Outline pen dialog button.
- In the Arrows area, open the Start arrowhead picker, and click a line-ending shape.
- Open the End arrowhead picker, and click a line-ending shape.



Arrowhead Option box

(h). To apply a preset brush stroke

- Open the Curve flyout, and click the Artistic media tool.
- Click the Brush button on the property bar.
- Choose a brush stroke from the Brush stroke list box. If you want to smooth the edges of the brush stroke, type a value in the Freehand smoothing box on the property bar.



- Drag until the stroke is the shape you want. If you want to set the width of the stroke, type a value in the Artistic media tool width box on the property bar.

If you have access to a brush stroke that isn't listed in the Brush stroke list box, you can apply it by clicking the Browse button on the property bar, and locating the brush stroke file.

(i). To draw a dimension line

- Open the Curve flyout, and click the Dimension tool.
- On the property bar, click one of the following buttons:
  - Vertical dimension tool
  - Horizontal dimension tool
  - Slanted dimension tool
- Click the start and end points of the dimension line.
- Click where you want to place the dimension text.

(j). To set how the dimension units are displayed

- Select a dimension line.
- Click the Show units for dimension button on the property bar.
- On the property bar, choose options from the following list boxes:
  - Dimension style
  - Dimension precision
  - Dimension units

(k). Specify the position of the dimension units

Click the Text position drop down button on the property bar, and click a text position.

(l). Change the point size and font of the dimension units

Select a dimension line. Click Text> Format text. Choose a font style from the Font list box, and type a value in the Size box.

8.16 Drawing rectangles and squares

CorelDRAW lets you draw rectangles and squares. You can draw a rectangle or square by dragging diagonally or draw a rectangle by specifying the width and height. After you draw a rectangle or square, you can reshape it by rounding one or more of its corners.

(a). To draw a rectangle or a square by dragging diagonally

- Open the Rectangle flyout, and click the Rectangle tool. Drag in the drawing window until the rectangle is the size you want.
- A square> Open the Rectangle flyout , and click the Rectangle tool. Hold down Ctrl, and drag in the drawing window until the square is the size you want.
- You can draw a rectangle from its center outward by holding down Shift as you drag. You can also draw a square from its center outward by holding down Shift + Ctrl as you drag.
- You can draw a rectangle that covers the drawing page by double-clicking the Rectangle tool.

(b). To draw a rectangle by specifying height and width

- Open the Rectangle flyout, and click the 3-point rectangle tool.
- In the drawing window, point to where you want to start the rectangle, drag to draw the width, and release the mouse button.
- Move the pointer to draw the height, and click.
- To adjust the size of the rectangle, type values in the Object(s) size boxes on the property bar.

Hold down Ctrl as you drag to constrain the angle of the baseline to 15 degree increments.

(c). To draw An ellipse

- Open the Ellipse flyout, and click the Ellipse tool. Drag in the drawing window until the ellipse is the shape you want.

(d). To draw A circle

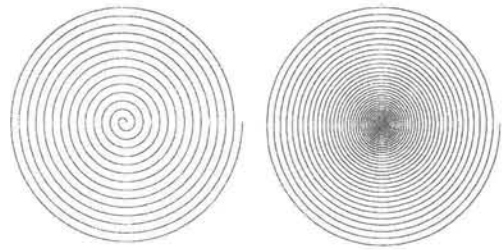
- Open the Ellipse flyout, and click the Ellipse tool. Hold down Ctrl, and drag in the drawing window until the circle is the size you want.

(e). To draw A polygon

- Open the Object flyout, click the Polygon tool, and drag in the drawing window until the polygon is the size you want.

(f). To draw a spiral

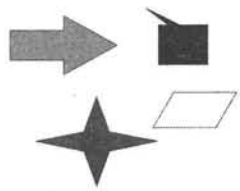
- Open the Object flyout, and click the Spiral tool.
- Type a value in the Spiral revolutions box on the property bar.
- On the property bar, click one of the following buttons:
  - Symmetrical spiral
  - Logarithmic spiral



- If you want to change the amount by which the spiral expands as it moves outward, move the Spiral expansion slider.
- Drag diagonally in the drawing window until the spiral is the required size.

(g). To draw a predefined shape

- Open the Perfect Shapes flyout, and click one of the following tools:
  - Basic shapes
  - Arrows shapes
  - Flowchart shapes
  - Star shapes
  - Callout shapes



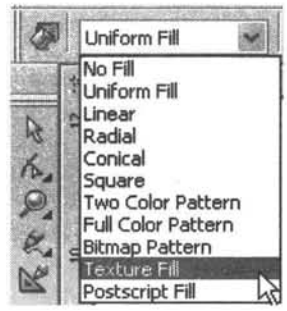
- Open Perfect Shapes picker on the property bar, and click a shape.
- Drag in the drawing window until the shape is the size you want.
- Perfect Shapes can be modified like any other shapes.

8.17 Applying uniform fills

CorelDRAW lets you apply a uniform fill to objects. Uniform fills are solid colors you can choose or create using color models and color palettes.

(a). To apply a uniform fill

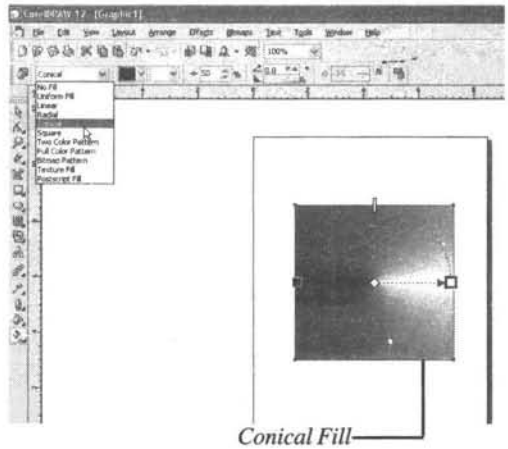
- Select an object.
- Open the Interactive fill flyout, and click the Interactive fill tool.
- Choose Uniform fill from the Fill type list box on the property bar.
- Specify the settings you want on the property bar.



You can also fill a selected object by clicking a color on the color palette. You can mix colors in a uniform fill by selecting an object, pressing CTRL, and clicking a color on the color palette.

(b). To apply a preset fountain fill

- Select an object.
- Open the Fill flyout and click the Fountain fill dialog button.
- Choose a fountain fill from the Type list box on the property bar.
- Choose a fill from the Presets list box. If you want to change the fill's attributes, specify the settings you want.



(c). To apply a fountain fill

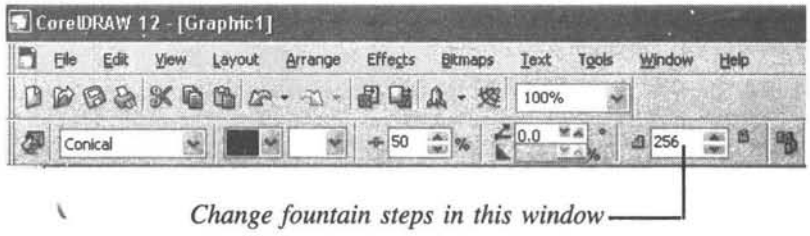
- Select an object.
- Open the Interactive fill flyout, and click the Interactive fill tool.
- Choose a fountain fill from the Fill Type list box on the property bar.
- Open the Fill dropdown picker, and click a color.
- Open the Last fill picker, and click a color. If you want to change the fill's attributes, specify the settings you want.

(d). To apply a custom fountain fill

- Select an object.
- Open the Fill flyout and click the Fountain fill dialog button.
- Choose a fountain fill from the Type list box on the property bar.
- Enable the Custom option. Click the box at one end of the area just above the color band, and click a color on the color palette.
- Click the box at the opposite end of the area just above the color band, and click a color.
- Specify the attributes you want.

(e). To change the fountain fill quality

- Select an object.
- Open the Interactive fill flyout, and click the Interactive fill tool.
- Choose a fountain fill from the Fill type list box on the property bar
- Click the Fountain step lock/unlock button, and type a value in the Fountain step box.



When the Fountain step box is locked, the number of steps in the printed fountain fill is determined by the value specified in the Print dialog box.

8.18 Applying pattern fills

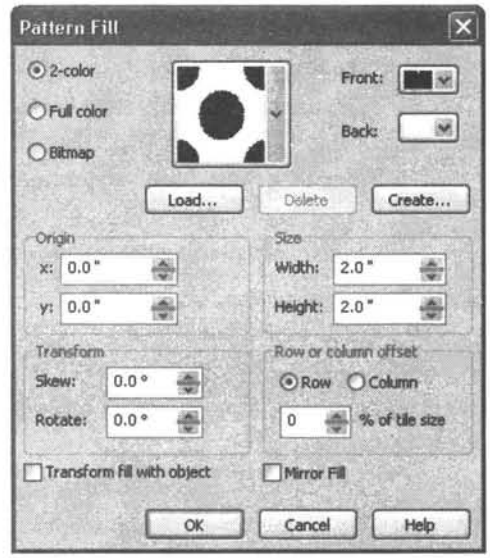
You can fill objects with two-color, full-color, or bitmapped pattern fills. A two-color pattern fill is composed of only the two colors that you choose. A full-color pattern fill is a more complex vector graphic that can be composed of lines and fills. A bitmapped pattern fill is a bitmapped image whose complexity is determined by its size, image resolution, and bit depth.

You can fill an object with a repeating pattern, set the pattern's foreground and background, and mix the colors in the pattern. CorelDRAW provides preset pattern fills that you can apply to objects; however, you can also create your own pattern fills. For example, you can create pattern fills from objects that you draw or graphics that you import. You can create a pattern using the Bitmap Pattern Editor, or import your own 1-bit bitmapped image. You can also remove a pattern fill from the list of pattern fills.

You can change the tile size of pattern fills. Decreasing the size of a pattern tile increases the density of the fill. You can also specify exactly where these fills begin by setting the tile origin. CorelDRAW also lets you offset tiles in a fill.

Adjusting the horizontal or vertical position of the first pattern, relative to the top of the object, affects the rest of the fill. You can preview any changes you make to the offset. You can rotate, skew, adjust the tile size, and change the center of the pattern to create a custom fill. You can also adjust the pattern fill using the on-screen fill tiling vector.

You can choose how the pattern fill appears by specifying whether to mirror the fill so that alternating tiles are the reflections of one another.



If you want a pattern fill to change according to actions you perform on the filled object, you can specify that you want it to transform with the object. For example, if you enlarge an object filled with a pattern that transforms, the pattern becomes larger instead of increasing the number of tiles.

(a). To apply a two-color pattern fill

- Select an object.
- Open the Interactive fill flyout, and click the Interactive fill tool.
- Choose Two color pattern from the Fill type list box on the property bar.
- Open the Fill dropdown picker, and click a pattern.
- Open the Front color picker, and click a color.
- Open the Back color picker, and click a color.

(b). To apply a full-color or bitmap pattern fill

- Select an object.
- Open the Interactive fill flyout, and click the Interactive fill tool.

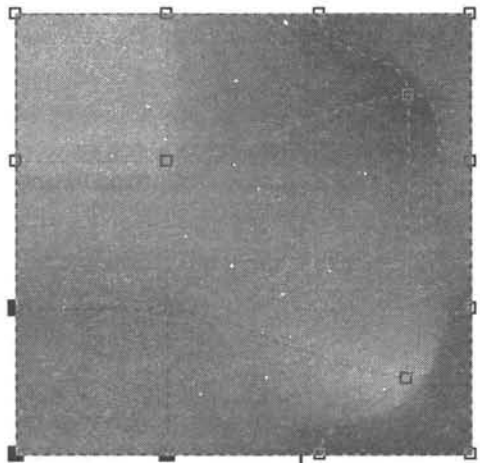
- Choose one of the following from the Fill type list box on the property bar:
  - Full-color pattern
  - Bitmap pattern
- Open the Fill dropdown picker, and click a pattern.

(c). To apply a texture fill

- Select an object.
- Open the Fill flyout, and click the Texture fill dialog button.
- Choose a texture library from the Texture library list box.
- Choose a texture from the Texture list box.

(d). To apply a mesh fill to an object

- Select an object.
- Open the Interactive fill flyout, and click the Interactive mesh fill tool.
- Type the number of columns in the top portion of the Grid size box on the property bar, and press ENTER.
- Type the number of rows in the bottom portion of the Grid size box on the property bar, and press ENTER.
- Adjust the grid nodes on the object.



Mesh fill effect

(e). To add color to a patch in a mesh fill

- Select a mesh-filled object.
- Open the Interactive fill flyout, and click the Interactive mesh fill tool.
- Drag a color from the color palette to a patch in the object.

(f). To choose a default fill color

- Click a blank area on the drawing page to deselect all objects.
- Click a color on the color palette.
- In the Uniform fill dialog box, enable any of the following check boxes:
  - Graphicapplies the default fill color to shapes you draw.
  - Artistic textapplies the default fill color to artistic text you add.
  - Paragraph textapplies the default fill color to paragraph text you add.

(g). To remove a fill

- Select an object.
- Open the Fill flyout, and click the No fill button.

You can also remove a fill from a selected object by clicking the No color swatch on the color palette.

(h). To apply fills to open curves

- Click Tools >Options.
- In the list of categories, double-click Document, and click General.
- Enable the Fill open curves check box.

8.19 Working with color

You can choose fill and outline colors using fixed or custom color palettes, color viewers, color harmonies, or color blends. Fixed color palettes are provided by third-party manufacturers. Some examples of these are PANTONE, HKS, and TRUMATCH. It may be useful to have on hand a manufacturer's swatch book, which is a collection of color samples that shows exactly what each color looks like when printed. The PANTONE, HKS, and TRUMATCH fixed color palettes are collections of spot colors. If you create color separations when you print, each color from these color palettes requires a separate printing plate. This can significantly increase the cost of your print job. If you want to use these colors but you don't want to use spot colors, convert the spot colors to process colors when printing.

- Custom color palettes can include colors from any color model or fixed color palette. Custom color palettes are saved as color palette files.
- Color viewers give a representation of a range of colors using either one-dimensional or three-dimensional shapes. The default color viewer is based on the HSB color model, but you can use this viewer to choose CMYK, CMY, or RGB colors
- Color harmonies work by superimposing a shape, such as a rectangle or a triangle, over a color wheel. Each vertical row in the color grid begins with the color located at one of the points on the superimposed shape.

The colors at each corner of the shape are always complementary, contrasting, or harmonious, depending on the shape you choose. The color harmonies allow you to choose the color model you prefer to use, and are most useful when you're choosing several colors for a project. When you choose a color using color blends, you combine base colors to get the color you want. The color blender displays a grid of colors that it creates from the four base colors you choose.

(a). To choose a color using a fixed or custom color palette

- Select an object.
- Do one of the following:

  1. Open the Fill tool flyout, and click the Fill color dialog tool.
  2. Open the Outline tool flyout, and click the Outline color dialog tool.

- Click the Palettes tab.
- Choose a fixed or custom palette from the Palette list box.
- Click the color scroll bar to set the range of colors displayed in the color selection area.
- Click a color in the color selection area.

Each color swatch on a fixed color palette is marked with a small white square. You should use the same color model for all the colors in a drawing.

(b). To choose a color using a color viewer

- Select an object.
- Do one of the following:

  Open the Fill tool flyout, and click the Fill color dialog tool.

Open the Outline tool flyout, and click the Outline color dialog tool.

Click the Models tab.

- Choose a color model from the Model list box.
- Click Options> Color viewers, and click a color viewer.
- Click the color scroll bar to set the range of colors displayed in the color selection area.
- Click a color in the color selection area.

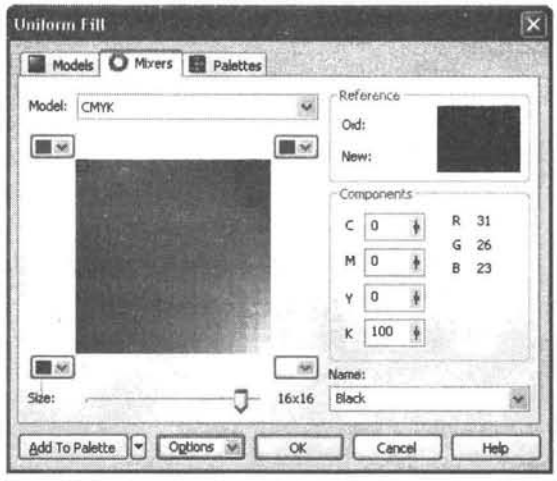
If you choose a color that is out of the printer's gamut, the color in the smaller swatch next to the New color swatch is the closest in-gamut color to the color you choose. You can click this closest in-gamut color, or you can correct the out-of-gamut color.

(c). To choose a color using color harmonies

- Select an object.
- Do one of the following:

  Open the Fill tool flyout, and click the Fill color dialog tool.

  Open the Outline tool flyout, and click the Outline color dialog tool.
- Click the Mixers tab.
- Click Options >Mixers >Color harmonies.
- Choose a shape from the Hues list box.
- Choose an option from the Variation list box.



- Drag the black dot on the color wheel.
- Click a color swatch on the color palette below the color wheel.

(d). To choose a color using color blends

- Select an object.
- Do one of the following:
  Open the Fill tool flyout, and click the Fill color dialog tool.
  Open the Outline tool flyout, and click the Outline Color Dialog tool.
- Click the Mixers tab.
- Click Options> Mixers>Color blend.
- Open each color picker, and click a color.
- Click a color in the color selection area.

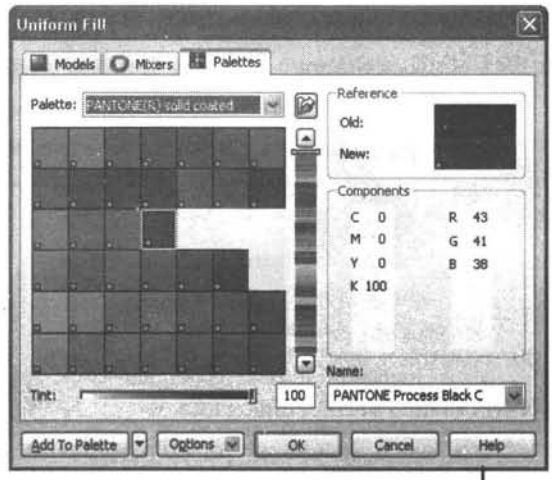
You can only blend colors that are in the default color palette. If you want to blend other colors, change the default on-screen color palette.

8.20 Working with custom color palettes

Custom color palettes are collections of colors that you save as a color palette file. A number

of preset custom color palettes are available; however, you can create color palettes from scratch. Custom color palettes are useful when you repeatedly choose the same colors, or when you want to work with a set of colors that look good together.

You can create a custom color palette using the Palette Editor, from an object in a document, or from all the colors used in a document. When you create a custom color palette, the color palette is empty; however, you can edit it by adding the colors you want to include, as well as changing, deleting, sorting, and renaming colors. You can also open a custom color palette, and set a custom color palette as the default on-screen color palette.



Color palettes option box

(a). Create a palette from the Palette Editor

Click Window Color palettes Palette Editor, click New palette, type a filename, and click Save.

(b). Create a palette from an object

Select an object, click Window Color palettes Create palette from selection, type a filename, and click Save.

(c). Create a palette from a document

Click Window >Color palettes >Create palette from document, type a filename, and click Save.

(d). To open a custom color palette

- Click Window >Color palettes.
- Click Open palette.
- Choose the drive and folder where the custom color palette is stored.
- Double-click the filename.

8.21 Understanding color models

You need a precise method to define colors. Color models provide various methods to define colors, each model defining colors through the use of specific color components. There are a range of color models to choose from when creating graphics.

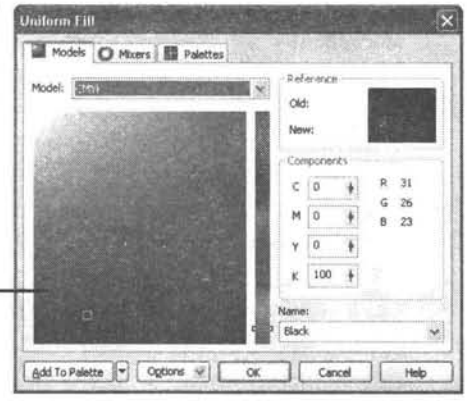
CMYK color model

The CMYK color model defines color using the following components:

- Cyan (C)
- Magenta (M)
- Yellow (Y)
- Black (K)

The cyan, magenta, yellow, and black components are the amounts of cyan, magenta, yellow, and black ink that a CMYK color contains and are measured in percent from 0 to 100.

The CMYK color model is a subtractive color model. Subtractive color models use reflected light to display color. Printed materials are produced using the CMYK color model. The combinations of the amounts of cyan, magenta, yellow, and black ink define the colors in the CMYK color model.



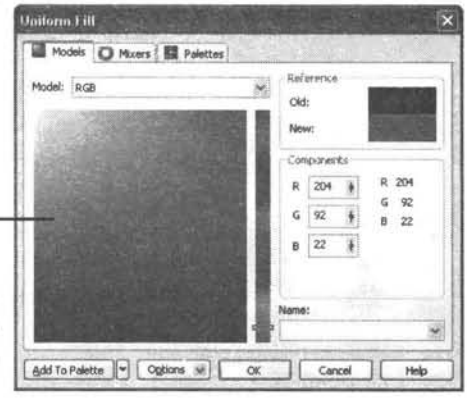
CMYK color model

When you combine cyan, magenta, yellow, and black, so that the value of each component is 100, the result is black. When the value of each component is 0, the result is pure white.

RGB color model

The RGB color model defines color using the following components:

- Red (R)
- Green (G)
- Blue (B)



RGB color model

The red, green, and blue components are the amounts of red, green, and blue light that an RGB color contains and are measured in values ranging from 0 to 255. The RGB color model is an additive color model.

Additive color models use transmitted light to display color. Monitors use the RGB color model. The combination of red, green, and blue light defines the colors in the RGB color model. When you add red light, blue light, and green light together, so that the value of each component is 255, the color white displays. When the value of each component is 0, the result is pure black.

Grayscale color model

The Grayscale color model defines color using only one component, lightness, and is measured in values ranging from 0 to 255. Each Grayscale color has equal values of the red, green, and blue components of the RGB color model.

8.21 Using Special Effects

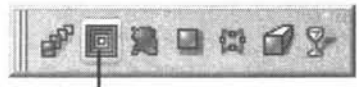
You can create the illusion of three-dimensional depth in CorelDRAW objects by adding contour, perspective, extrusion, or drop-shadow effects.

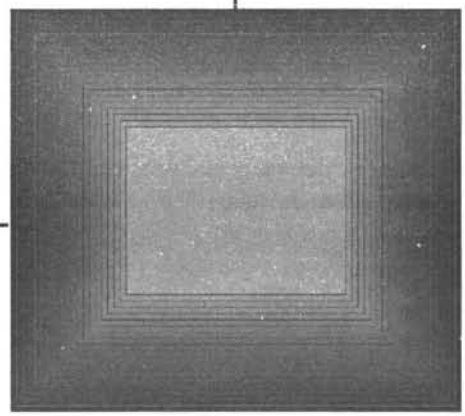
(a). To contour an object

You can contour an object to create lines that progress to the center, inside, or outside of the objects. The lines create a series of concentric steps within an object. CorelDRAW also lets you set the number and distance of the contour lines. After contouring an object, you can copy or clone its contour settings to another object.

You can also change the colors of the fill between the contour lines and the contour lines themselves. You can set a color progression in the contour effect, where one color blends into another. The color progression can follow a straight, clockwise, or counterclockwise path through the color range of your choice.

- Open the Interactive tools flyout, and click the Interactive contour tool.





Contour effect on a object

- Click an object or a set of grouped objects and drag the start handle toward the center to create an inside contour.
- Move the slider to change the number of contour steps.

(b). Applying perspective to objects

You can create a perspective effect by shortening one or two sides of an object. This effect gives an object the appearance of receding in one or two directions, thereby creating a one-point perspective or a two-point perspective.



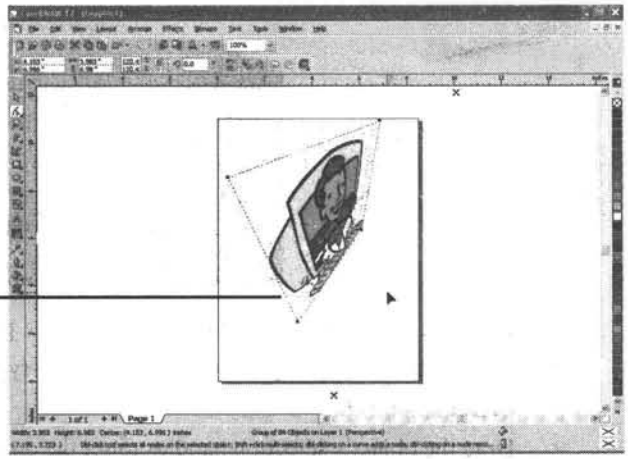
Object under perspective mode



Normal object

You can add a perspective effect to objects or grouped objects. However, you can't add a perspective effect to paragraph text; bitmapped images; linked groups, such as contours, blends, extrusions; and objects created with the Artistic media tool.

After you apply a perspective effect, you can copy it to other objects in your drawing, and you can remove it from the object.



(c). To apply a one-point perspective

- Select an object.
- Click on Effects Menu>Add perspective command.
- Hold down CTRL, and drag a node.

Holding down CTRL constrains the node's movement to the horizontal or vertical axis to create a one-point perspective effect. You can move opposing nodes the same distance in opposite directions, by holding down CTRL + SHIFT as you drag.



(d). To apply a two-point perspective

- Select an object.
- Click Effects >Add perspective.
- Drag two nodes to apply the effect you want.

(e). To copy an object's perspective effect

- Select an object to which you want to apply a perspective effect.
- Click Effects >Copy effect >Perspective from.
- Select an whose perspective effect you want to copy.

(f). To remove an object's perspective effect

- Select an object that has a perspective effect.
- Click Effects >Clear perspective.

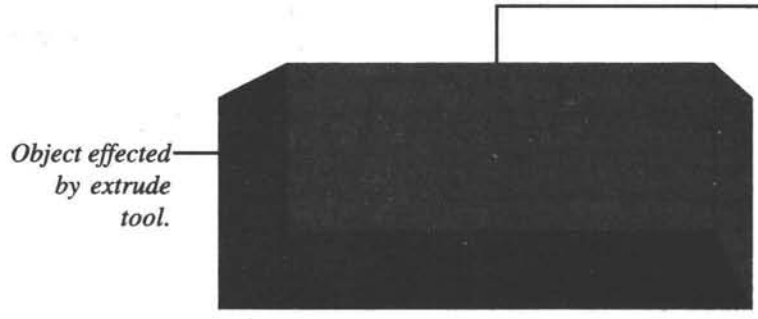
(g). To adjust the perspective

- Open the Shape edit flyout, and click the Shape tool.
- Select an object that has a perspective effect.
- Drag a node to a new position.

(h). To create a vector extrusion

- Open the Interactive tools flyout, and click the Interactive extrude tool.



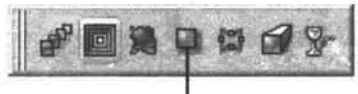


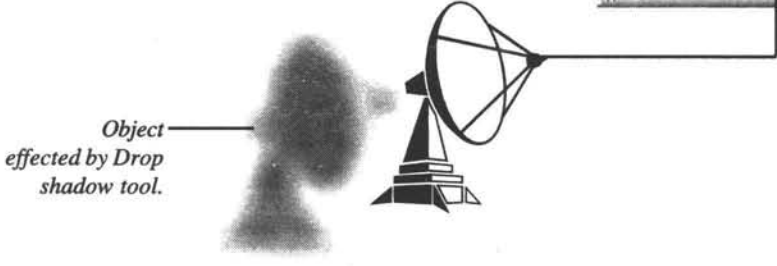
- Click the Vector extrusion mode button on the property bar.
- Choose an extrusion type from the Extrusion type list box on the property bar.
- Select an object.
- Drag the object's selection handles to set the direction and depth of the extrusion. If you want to reset the extrusion, press ESC before releasing the mouse button.

(i). Creating drop shadows

Drop shadows simulate light falling on an object from one of five particular perspectives: flat, right, left, bottom, and top. You can add drop shadows to most objects or groups of objects, including artistic text, paragraph text, and bitmapped images. When you add a drop shadow, you can change its perspective, and you can adjust attributes such as color, opacity, fade level, angle, and feathering.

- Open the Interactive tools flyout, and click the Interactive drop shadow tool.





- Click an object.
- Drag from the center or side of the object until the drop shadow is the size you want.
- Specify any attributes on the property bar.

You can't add drop shadows to linked groups, such as blended objects, contoured objects, beveled objects, extruded objects, objects created with the Artistic media tool, or other drop shadows.

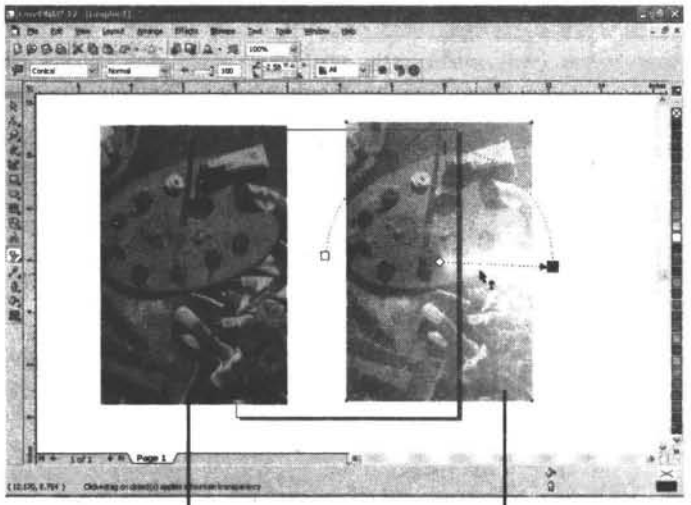
(j). To remove a drop shadow

- Select an object that has a drop shadow.
- Click Effects >Clear drop shadow.

You can also remove a drop shadow from an object by clicking the Clear drop shadow button on the property bar.

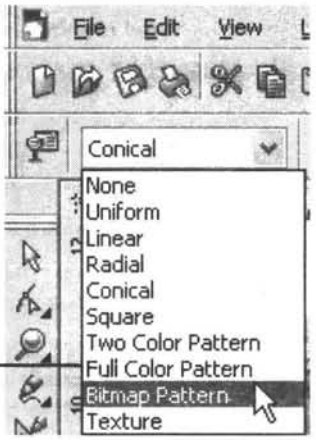
(k). Applying a transparency

When you apply a transparency to an object, you create a grayscale mask similar to a fill. By positioning a transparent object on top of another object, you simulate a lens. You can apply transparencies using the same kind of fills you apply to objects; that is, uniform, fountain, texture, and pattern.



After you decide what type of transparency you want to apply, you have a couple of options. By default, CorelDRAW applies all transparencies to the object's fill and outline; however you can specify whether you want the transparency to apply only to the object's outline or fill. You can also copy a transparency from one object to another.

- Select an object.
- Open the Interactive tools flyout, and click the Interactive transparency tool.
- On the property bar, choose Uniform from the Transparency type list box.
- Click a color on the color palette.
- Type a value in the Starting transparency box on the property bar, and press ENTER.

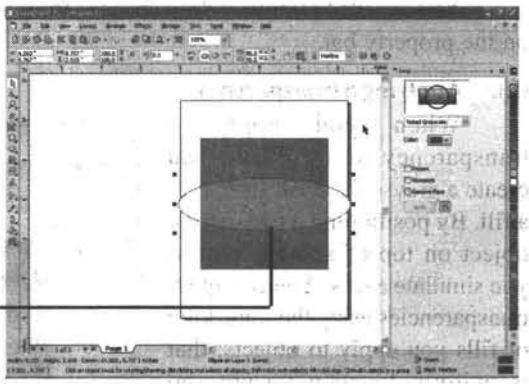


You can fix the contents of the transparency so that the contents move with the object, by clicking the Freeze button on the property bar.

(k). To apply a lens

- Select an object.
- Click Effects >Lens.
- Choose a lens type from the list box in the Lens Docker window.
- Specify the settings you want.

You cannot apply the lens effect directly to linked groups such as blended objects, contoured objects, beveled objects, extruded objects, drop shadows, or objects created with the Artistic media tool. If you apply a lens to a group, the lens applies separately to each object in the group.



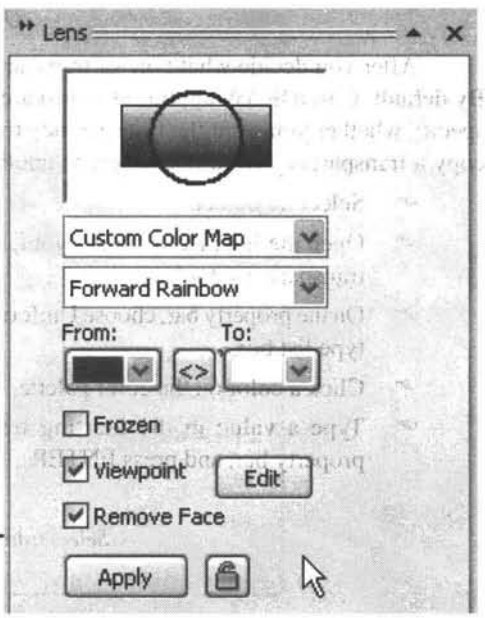
Lence effect on a object

(l). To copy a lens

- Select an object.
- Click Effects >Copy effect >Lens from.
- Click the object whose lens you want to copy.

(m). To edit a lens

- Select an object.
- Click on Effects Menu>Lens.
- Enable the Viewpoint check box in the Lens Docker window. If you want to display a lens only where it covers other objects, enable the Remove face check box.
- Click Edit to display the viewpoint marker.
- Drag the viewpoint marker in the drawing window to a new location.
- Click End. If you want to freeze the current view of a lens, enable the Frozen check box.
- Click Apply.



Lence effect editing options

The Remove face check box is not available for Fish Eye and Magnify lenses.

8.22 Using Text in Drawing

There are two types of text you can add to drawingsartistic text and paragraph text. Artistic text can be used to add short lines of text to which you can apply a large range of effects, such as drop shadows. Paragraph text can be used for larger bodies of text that have greater formatting requirements. You can add text directly in the drawing window; however, you must create a text frame for each paragraph text object that you want to add. A text frame

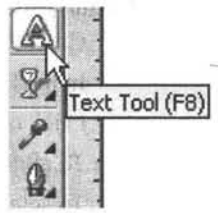
can be fixed-sized or automatically sized. A fixed-sized text frame displays a limited amount of paragraph text. Any text that continues past the bottom right border of the text frame is hidden until you enlarge the text frame. An automatically sized text frame adjusts as you type to display all of the text.

Inserting paragraph text frames in graphic objects lets you use objects as containers for text so that you can change the shape of the text frames. You can also separate a text frame from a container object. When you do, the text frame retains the object's shape.

To modify text, you must first select it. You can select entire text objects, specific characters, or single characters. The tool that you use to select text depends on whether you want to affect an entire text object or only a portion of the text.

(a). To add artistic text

Click anywhere in the drawing window using the Text tool and type.

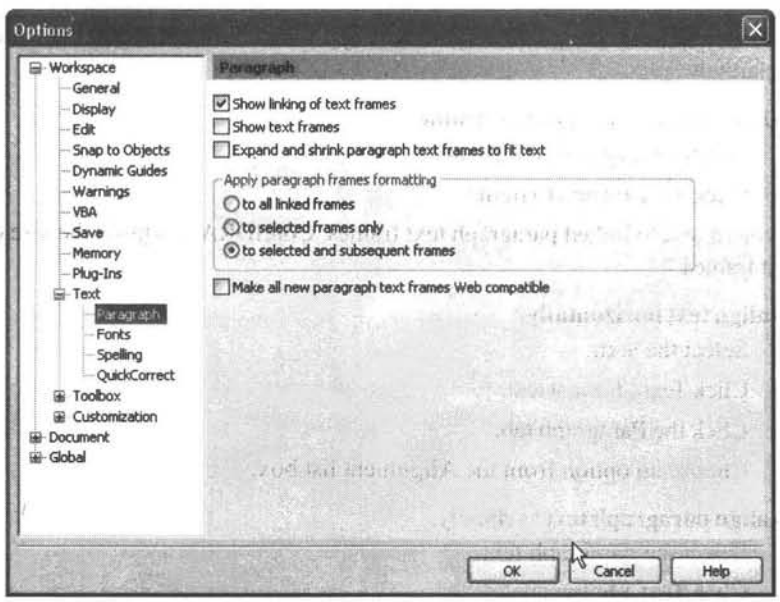


(b). To add paragraph text

Click the Text tool. Drag in the drawing window to size the paragraph text frame, and type.

(c). To add paragraph text in an automatically sized frame

- Click on Tools Menu >Options command.
- Double-click Text and click Paragraph in the list of categories.



- Enable the Expand and shrink paragraph text frames to fit text check box.

(d). To select text

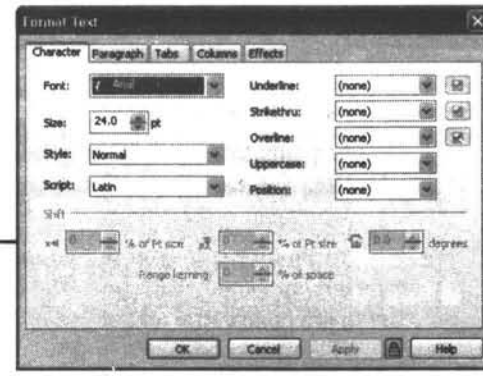
- *An entire text object* > Click the text object using the Pick tool.
- *Specific characters*> Drag across the text using the Text tool.

You can select multiple text objects by holding down SHIFT and clicking each text object.

(e). To change font attributes

- Select the text.

- Click on Text Menu >Format text command.
- Click on the Character tab.
- Specify the font attributes you want.



Select fonts, size anf other attributes for text.

(f). To choose paragraph text frame formatting options

- Click Tools >Options.
- In the list of categories, double-click Text, and click Paragraph.
- Click one of the following options:
- To all linked framesapplies the same text formatting to all connected frames
- To selected frames onlyapplies the same text formatting only to selected frames
- To selected and subsequent framesapplies the same text formatting only to selected and succeeding linked frames

If you want to add color to text, you must apply it to the text in each linked frame or to the text object separately.

(g). To fit text to a paragraph text frame

- Select a paragraph text frame.
- Click Text Fit text to frame.

If you fit text to linked paragraph text frames, CorelDRAW adjusts the size of text in all of the linked text frames.

(h). To align text horizontally

- Select the text.
- Click Text >Format text.
- Click the Paragraph tab.
- Choose an option from the Alignment list box.

(i). To align paragraph text vertically

- Select the paragraph text.
- Click Text >Format text.
- Click the Columns tab.
- Choose an alignment option from the Vertical justification list box.

(j). To add a symbol or a special character as a text object

- Select the text.
- Click where you want to add the symbol.
- Click Window >Dockers >Symbols and special characters.
- Choose a symbol category from the list box.

- Type a value in the Symbol size box.
- Double-click a symbol in the list.

(k) To add a symbol or special character as a graphic object

- Click Window >Dockers >Symbols and special characters.
- Choose a symbol category from the list box.
- Type a value in the Symbol size box.
- Drag a symbol or special character from the list to the drawing page.

You can also choose a symbol by typing its index number in the Number (#) box.

(l). To create a pattern using a symbol

- Click Window >Dockers >Symbols and special characters.
- Choose a symbol category from the list box.
- Choose a symbol from the sample window.
- Click the flyout button, and click Tile symbol/special character. If you want to change the row and column spacing, click the flyout button, click Tile options, and type values in the Horizontal and Vertical boxes.
- Drag the symbol to the drawing page.

(m). To wrap paragraph text around an object or text

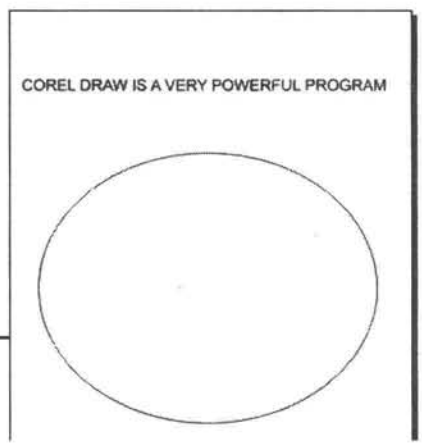
- Select the object or text.
- Click Window >Dockers >Properties.
- In the Object properties >Docker window, click the General tab and choose a wrapping style from the Wrap paragraph text list box. If you want to change the amount of space between wrapped text and the object or text, type a value in the Text wrap offset box.

(n). To remove a wrapping style

- Select the object or wrapped text.
- Click Window >Dockers >Properties.
- In the Object properties Docker window, choose None from the Wrap paragraph text list box.

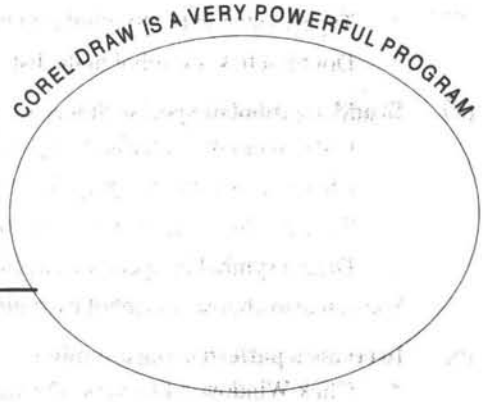
(o). Fitting text to a path

You can position artistic text along the path of an open object (for example, a line) or a closed object (for example, a square). After you fit text to a path, you can adjust the text's position relative to that path. For example, you can place the text on the opposite side of the path, or you can adjust the distance between the text and the path.



Text and object in normal position

CorelDRAW treats text fitted to a path as one object; however, you can separate the text from the object if you no longer want it to be part of the path. When you separate text from a curved or closed path, the text retains the shape of the object to which it was fitted. Straightening reverts the text to its original appearance.



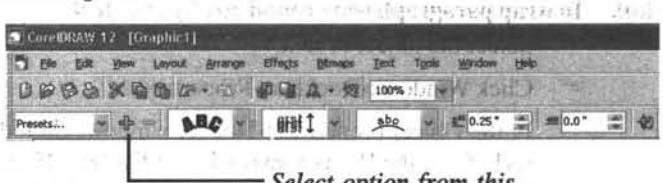
Text fit in the path.

- Select the path using the Pick tool.
- Click Text >Fit text to path.
- Type along the path.

If the text is fitted to an closed path, the text is centered along the path. If the text is fitted to an open path, the text flows from the point of insertion. You can't fit text to the path of another text object. You can also fit text to a path by clicking the Text tool, pointing over an object, clicking where you want the text to begin, and typing the text.

(p). To adjust the position of text fitted to a path

- Select the text using the Pick tool.
- On the property bar, choose a setting from any of the following list boxes:
  - Distance from path
  - Vertical placement
  - Horizontal offset
  - Text orientation
  - Text placement



Select option from this property bar.

You can also change the horizontal position of fitted text by selecting it with the Shape tool, and dragging the character nodes you want to reposition. Using the Pick tool, you can move text along the path by dragging the small red node that appears beside the text.

(q). To separate text from a path

- Select the fitted text using the Pick tool.
- Click Arrange >Break apart.

(r). To straighten text

- Select the fitted text using the Pick tool.
- Separate the text from the path.
- Click Text >Straighten text.

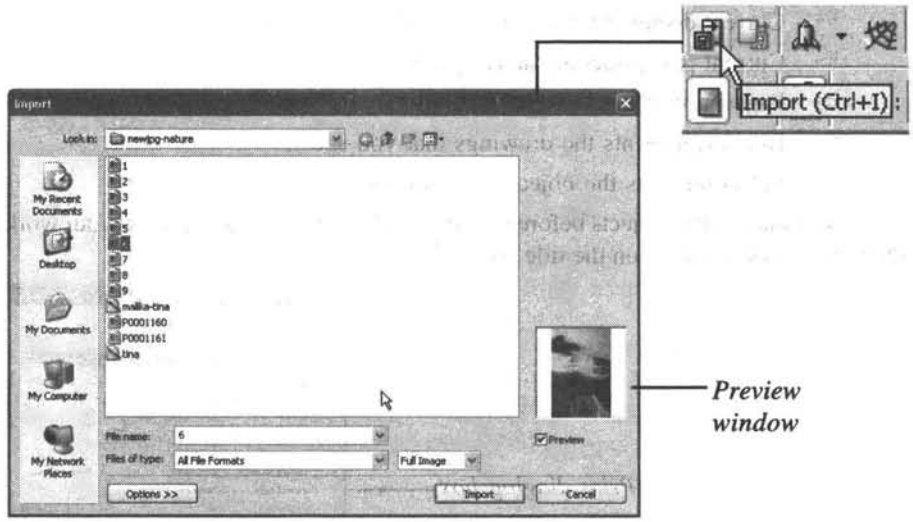
8.23 Adding bitmapped images

You can import a bitmapped image into a drawing either directly or by linking to an external image file. When you externally link to an image file, any edits to the original file can be updated in the

imported file. You can also add a bitmapped image by scanning it or by loading it from a digital camera.

(a). To import a bitmapped image

- Click File Menu>Import command or Imnport button on standard tool bar.



- Choose the drive and folder where the bitmapped image is stored.
- Double-click the folder to open it. If you want to link the image to the drawing, enable the Link bitmap externally check box.
- Select the file.
- Click on Import button.
- Click where you want to place the bitmapped image.

Ensure that Files of type is set to All file formats when you import an image. The status bar provides information about the bitmapped image, including color mode, size, and resolution. You can import a bitmapped image in its original size by pressing SPACEBAR when you click the Import button.

8.24 Print a Drawing

In CorelDRAW, you can print multiple copies of the same drawing. You can specify what to print, as well as which parts of a drawing to print; for example, you can print selected vectors or bitmapped images. Before printing a drawing, you can specify printer properties, including paper size, graphics, and device options.

(a). To set printer properties

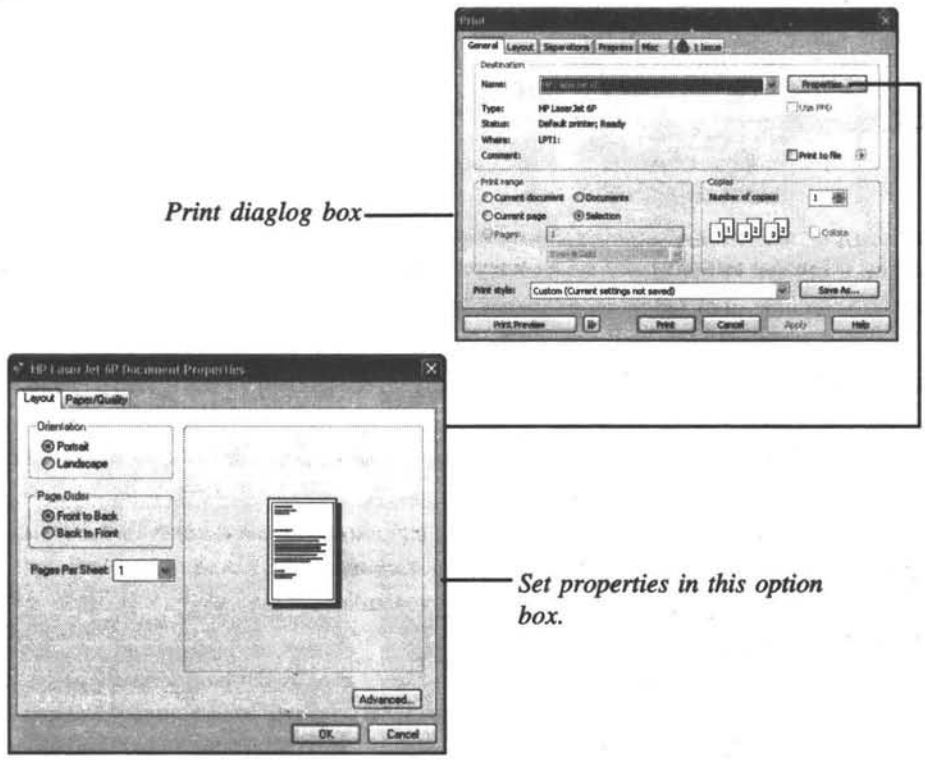
- Click on File Menu> Print command.
- Click on the General tab.
- Click on Properties button.
- In the Properties dialog box, set any properties.

(b). To print your drawing

- Click File >Print.
- Click the General tab.

- Choose a printer from the Name list box.
- Type a value in the Number of copies box. If you want the copies collated, enable the Collate check box.
- Enable one of the following options:
  - Current documentprints the active drawing
  - Current pageprints the active page
  - Pagesprints the pages that you specify
  - Documentsprints the drawings that you specify
  - Selectionprints the objects that you specify

You must select objects before printing a selection. You can preview your work by clicking on the Mini preview button on the title bar.



(c). To print selected vectors, bitmapped images, or text

- Click File >Print.
- Click the Misc tab.
- In the Proofing options area, enable any of the following check boxes:
  - Print vectors
  - Print bitmaps
  - Print text

You can print graphics in full color, monochrome, or grayscale, by enabling the corresponding check boxes in the Bitmap downsampling area. You can print all text in black by enabling the Print all text in black check box.

(d). To specify the size and position of a print job

- Click File >Print.
- Click the Layout tab.
- Enable one of the following options:
  - As in documentsizes and positions the printed image
  - Fit to pagesizes and positions the print job to fit to a printed page
  - Reposition images tolets you reposition the print job by choosing a position from the list box

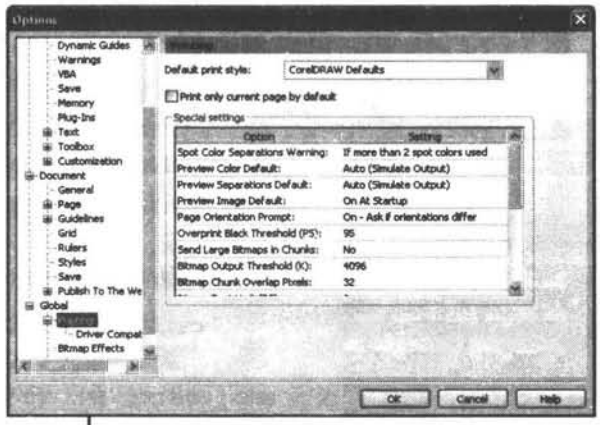
Enabling the Reposition images to option lets you specify size, position, and scale in the corresponding boxes.

(e). To tile a print job

- Click File >Print.
- Click the Layout tab.
- Enable the Print tiled pages check box.
- Type values in the following boxes:
  - Tile overlaplets you specify the number of inches by which to overlap tiles
  - % of page widthlets you specify the percentage of the page width the tiles will occupy
  - # of tileslets you specify the number of horizontal and vertical tiles
- Enable the Tiling marks check box to include tiling alignment marks.

(f). To change the page orientation prompt

- Click on Tools Menu> Options command.
- In the list of categories, double-click Global, and click Printing.
- Choose Page orientation prompt from the Option list.
- Choose one of the following from the Setting list box:
  - Off always match orientation
  - On ask if orientations differ
  - Off don't change orientation



Set printing options in this window.

(g). To preview a print job

- Click File >Print preview.

You can also preview your work by clicking on the Mini preview button on the title bar.

(h). To magnify the preview page

- Click File >Print preview.
- Click View >Zoom.
- Enable the Percent option, and type a value in the box.

You can also magnify the preview page by choosing a preset zoom level. You can also zoom in on a portion of the print preview by clicking the Zoom tool in the toolbox and marquee selecting an area.

(i). To preview color separations

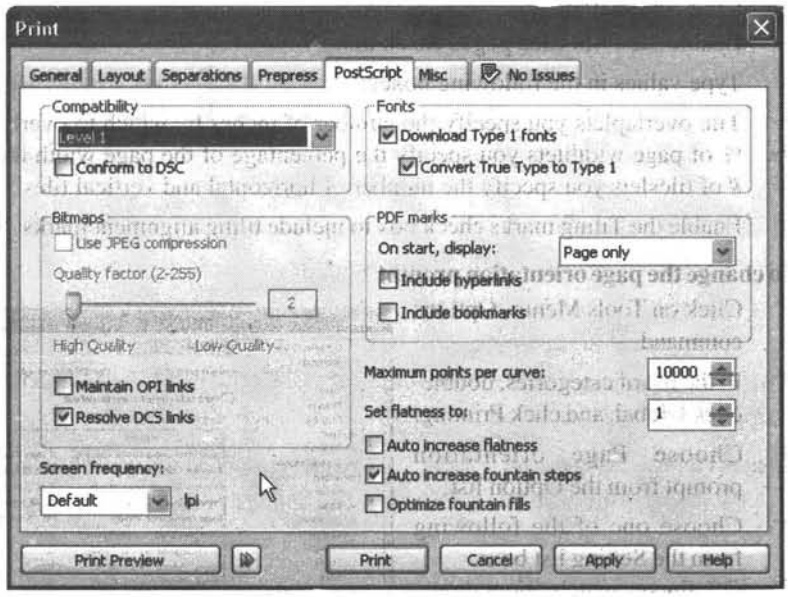
- Click File >Print preview.
- Click View > Preview color >Color.
- Click View > Preview separations > Separations.

You can only preview color separations if you have enabled the Print separations check box under the Separations tab in the Print dialog box.

You can preview the composite by clicking View Preview separations Composite. You can view individual color separations by clicking on the tabs at the bottom of the application window.

(j). To print to a PostScript device

- Click File >Print.
- Select a PostScript printer from the Name list box.
- Click the PostScript tab.



- From the Compatibility list box, choose the PostScript level that corresponds to the printer.

If you want to compress your bitmaps when printing, enable the Use JPEG compression check box, and adjust the Quality factor slider. You can only compress bitmaps by saving them as .prn or .ps files.

8.25 Preparing a print job for a service bureau

You can use the Prepare for service bureau wizard to guide you through the process of sending a file to a service bureau. The wizard simplifies processes such as creating PostScript and PDF files; gathering different pieces required for outputting an image; and copying the original image, embedded image files, and fonts to a user-defined location. You can print a drawing to a file, which lets the service bureau send the file directly to an output device. If a PostScript file is to be trapped or imposed by a service bureau, you can ensure that the file conforms to the Document Structuring Convention (DSC). If you are unsure about which settings to choose, consult the service bureau. You can include a job information sheet with all the prepress settings that you have specified.

(a). To use the Prepare for Service Bureau wizard

- ☞ Click File Prepare for service bureau.
- ☞ Enable one of the following buttons:
- ❑ Gather all files associated with this document
- ❑ Choose a profile provided by your service bureau

The PDF file settings created by the service bureau are identical to the PDF for prepress style settings. To create a service bureau profile, you need the Service Bureau Profiler utility, which you can custom install with Corel DRAW 12.

(b). To choose a preset imposition layout

- ☞ Click File >Prrint.
- ☞ Click on the Layout tab.
- ☞ Choose an imposition layout from the Imposition layout list box.

The layout you choose does not affect the original document, only the way it is printed.

(c). To edit an imposition layout

- ☞ Click File >Print.
- ☞ Click on the Layout tab.
- ☞ Choose an imposition layout from the Imposition layout list box.
- ☞ Click Edit.
- ☞ Edit any imposition layout settings.
- ☞ Click Save layout on the property bar.
- ☞ Type a name for the imposition layout in the Save as box.

When editing an imposition layout, you should save it with a new name; otherwise the settings for a preset imposition layout will be overwritten.

(d). To select a binding method

- ☞ Click File >Print preview.
- ☞ Click the Imposition layout tool.
- ☞ Choose Edit basic settings from the What to edit list box on the property bar.
- ☞ Type values in the Pages across/down boxes. If you want the page to be double-sided, click the Single/double sided button.
- ☞ Choose one of the following binding methods from the Binding mode list box:
- ❑ Perfect binding
- ❑ Saddle stitch
- ❑ Collate and cut
- ❑ Custom binding

If you choose either Perfect binding or Custom binding, type a value in the corresponding box. When you click the Single/double sided layout for double-sided printing, and you are printing on a nonduplex printing device, a wizard automatically provides instructions on how to insert the paper into the printer, so that you can print on both sides of the page.

(e). To arrange pages

- ☞ Click File >Print preview.
- ☞ Click the Imposition layout tool.

- Choose Edit page placements from the What to edit list box on the property bar.
- Click one of the following buttons:

- Intelligent auto-ordering
- Sequential auto-ordering
- Cloned auto-ordering

If you want to arrange the page numbering manually, click on the page and specify the page number in the Page sequence number box.

- Choose an angle from the Page rotation list box.

(f). To edit gutters

- Click File >Print preview.
- Click the Imposition layout tool.
- Choose Edit gutters and finishing from the What to edit list box on the property bar.
- Click one of the following buttons:

- Auto gutter spacing
- Equal gutters

- Click one of the following buttons:

- Cut location
- Fold location

If you click the Equal gutters button, you must specify a value in the Gutter size box. You can edit the gutters only if you've selected an imposition layout with two or more pages across and down.

(g). To print crop and fold marks

- Click File >Print.
- Click the Prepress tab.
- Enable the Crop/fold marks check box.

(h). To print color separations

- Click File >Print.
- Click the Separations tab.
- Enable the Print separations check box.
- If you want to print specific color separations, enable the corresponding check box in the list of color separations.



- Although not recommended, you can print separations in color by enabling the Print separations in color check box in the Options area. You can change the order in which color separations print, by enabling the Use advanced settings check box, clicking Advanced, and choosing an order from the Order list box.

(i). To print a negative

- Click File >Print.
- Click the Prepress tab.
- Enable the Invert check box. Do not choose negative film if you are printing to a desktop printer.

(j). To specify film with the emulsion down

- Click File >Print.
- Click the Prepress tab.
- Enable the Mirror check box.

8.26 Commercial printing

If you use commercial printing services for your print jobs, you probably use a service bureau or a printing shop. The service bureau takes your file and converts it directly to film or to plates. The printing shop uses the film from a service bureau to make printing plates.

When you prepare a print job for commercial printing, you can send camera-ready paper output or the work on disk. If you send the work on disk, the service bureau needs either a PostScript file or a native file from the application that you use. If you are creating a file to send to an imagesetter or a platesetter, speak with the service bureau about the best file format and printing device settings to use. Always provide a final printout of the work to the service bureau, even if it is only a black-and-white representation. This helps the service bureau to identify and assess any potential problems.

Before printing a drawing, you must choose and properly configure the appropriate printing device driver. Consult the printing device manufacturer instructions, or the service bureau or printing shop that you use to print the work, to find out the best way to set up the printing device driver.

EXERCISE

1. Write the procedure of installing and uninstalling CorelDRAW?
2. What is the use of Title bar?
3. What do you mean by Rulers?
4. What is the use of Toolbox?
5. What is the use of Docker?
6. Write a short note on Status bar ?
7. What is the function of Document navigator?
8. How to open a drawing?
9. How to create a template?
10. How to edit a template?
11. What do you mean by Zooming and Panning?
12. How to pan in the drawing window?
13. How to save a drawing?
14. How to save only selected objects?
15. How to draw a straight line?

16. How to draw a calligraphic line?
17. How to draw a preset line?
18. How to specify line and outline settings?
19. Explain the process of create a line style?
20. What is the procedure edit a line style ?
21. How to copy outline color to another object?
22. How to create a calligraphic outline?
23. How to draw a dimension line?
24. How to draw a rectangle or a square?
25. What do you mean by uniform fills?
26. How to apply a preset fountain fill?
27. Explain the procedure of applying pattern fills ?
28. How to apply a texture fill?
29. Write the procedure of apply a mesh fill to an object?
30. How choose a color using a fixed or custom color palette?
31. What do you mean by CMYK color model?
32. What is RGB color model?
33. Write a short note on Grayscale color model?
34. How to contour an object?
35. Explain the procedure of applying perspective to objects?
36. How to create a vector extrusion?
37. Explain the procedure of creating drop shadow?
38. How to apply a lens?
39. Write the process of editing lens effect?
40. How to add artistic text?
41. How to add paragraph text?
42. Write the process of changing font attributes?
43. How to add a symbol or a special character as a text object?
44. Explain the process of fitting text to a path?
45. Explain the process of adding bitmapped images?
46. How to import a bitmapped image?
47. How to set printer properties?
48. How to print selected vectors, bitmapped images, or text?
49. How to specify the size and position of a print job?
50. How to use the Prepare for Service Bureau wizard?





9

Creating Drawings: Adobe Illustrator CS

You can work with Illustrator in different ways. Whether you're creating graphics for the Web or high-resolution images for print, Illustrator delivers easy-to-use tools and editable effects to let you experiment at will—or revise as needed—and still meet your deadlines.

9.1 If you want to jump-start a project

Illustrator provides a variety of professionally-designed resources to help get your creative juices flowing:

- Use templates to start typical design projects. Illustrator comes with templates for business documents (letterhead, business cards, envelopes, and so on), CD and DVD booklets, brochures, certificates, greeting cards, Web sites, and more. In addition, you can create new templates to meet your design and production needs.
- Use libraries of symbols, brushes, styles, and swatches to speed up the design process. For a catalog of the libraries, choose Help > Welcome Screen, and click Cool Extras.

9.2 If you want to draw an illustration

From the industry-standard Pen tool to versatile brushes and symbols, Illustrator supplies tools that support your illustration style:

- Use the Pen tool to draw precise paths—smooth, flowing curves or straight lines—or use the dynamic pencil to draw on-screen as easily as you do on paper.
- Use the specialized shape tools to draw rectangles, circles, arcs, grids, spirals, stars, and more.
- Use brushes to create hand-drawn effects, such as calligraphic strokes, and paint patterns that flow along a path. Customize the brushes or edit the strokes at any time to fine-tune the image.
- If you start an illustration by sketching it on paper, simply scan your drawing and place it into Illustrator as a template layer. Then use the Auto Trace tool to automatically trace the image.
- Use symbols to add individual design elements to an illustration or create natural-looking masses of repeating elements such as foliage or crowds.

- Create complex shapes quickly by combining simple shapes into compounds. Then edit the compounds if you need to without redrawing the original shapes.
- Reshape objects with the Illustrator transformation tools. You can apply the changes interactively, or enter specific settings to control the results precisely.

9.3 If you want to apply sophisticated color effects

Illustrator offers advanced fill and stroke options such as patterns, gradients, and the ability to add multiple fills and strokes to a single object. In addition, you can apply transparency and masks to produce painterly, see-through effects:

- Use the Transparency palette to apply transparency to vector objects, bitmap images, or type. You have the option of limiting transparency to a layer, a group, or an object's fill or stroke, and transparent objects and type remain fully editable.
- Apply blending modes to blend the colors of graphics and type with the colors on underlying layers. By experimenting with different mode settings in the Transparency palette, you can create a wide range of effects.
- Use clipping masks to cut an object away from its background, or create opacity masks to let elements on an underlying layer show through an object.
- Paint objects by filling them with solid colors or patterns. Or use gradients to produce painterly fills that flow between multiple colors, similar to watercolors.
- Select Add New Fill or Add New Stroke from the Appearance palette to apply multiple strokes and fills to a single object.

9.4 If you want to add visual impact to your artwork

With Illustrator's dynamic tools and effects, you'll be able to make your ideas come to life:

- Import files from other applications to add diverse elements to your artwork.
- Use graphic styles to quickly add flair to text and artwork. Illustrator comes with over 150 preset styles, plus you can save new styles with a single click.
- Use effects to experiment with a limitless variety of appearances while keeping the ability to edit the underlying objects. Effects can be modified or removed instantly, so you'll always be in control of the final artwork.
- When applying styles and effects, use the Layers palette to target any object, group, or layer you want to change. Then use the Appearance palette to keep track of and modify the results.
- Bend, stretch, and twist your graphics in any way imaginable with live enveloping, warping, and liquify tools. The distorted objects remain editable, no matter how much they have been manipulated.

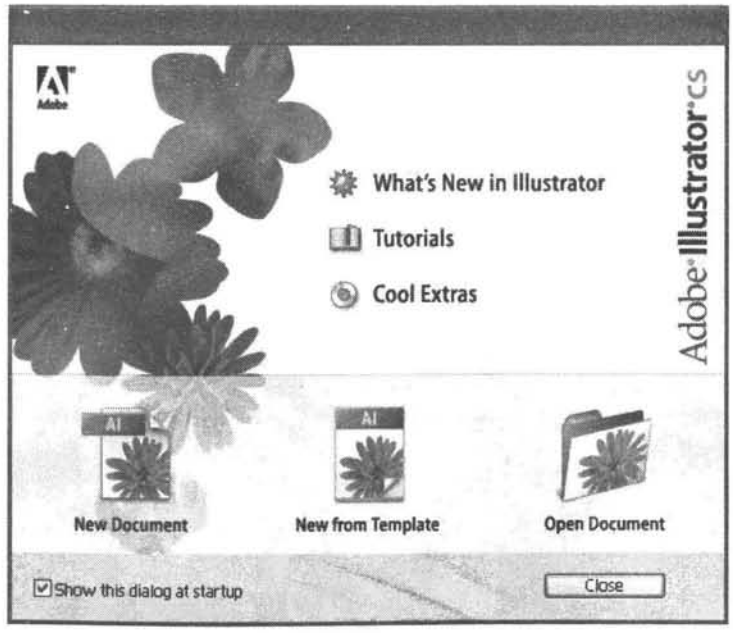
9.5 Using the Welcome screen

The Welcome screen automatically appears when you open Illustrator. You can use this window to create a new document, open an existing document, and get information about how to use Illustrator.

(a). To use the Welcome screen:

- Choose Help > Welcome Screen to display the window if it's not already open.
- Select one of the following options:
  - What's New in Illustrator to launch your Web browser and take you to a Web page describing new features in Illustrator.

- Tutorials to launch your Web browser and take you to a Web page containing illustrated lessons that will help you learn how to use Illustrator.



- Cool Extras to see a PDF catalog listing all of the samples that are provided with Illustrator, including clip art, bitmap images, premade templates, premade symbols, graphic styles, swatches, brushes, and actions.
- New Document to create a new document.
- New from Template to create a new document from a template.
- Open Document to open an existing file as an Illustrator document.
- Close to exit the Welcome screen and access the rest of Illustrator.

(b). To prevent the Welcome window from appearing each time Illustrator launches

Choose Help > Welcome Screen to display the window.

9.6 Work area

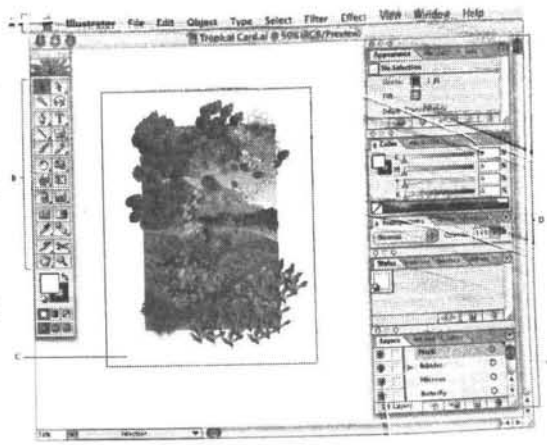
The Illustrator work area is arranged to help you focus on creating and editing artwork. The work area consists of the following components:

(a). Menus

The menus in the menu bar contain commands for performing tasks.

(b). Tools

The toolbox holds tools for drawing and editing artwork.



(c). Palettes

Palettes help you monitor and modify artwork.

(d). Artboard

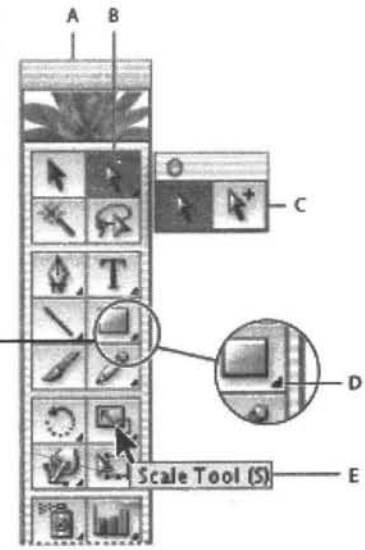
The artboard is where you draw and lay out your artwork.

9.7 Using tools and commands

Tools change the function of your mouse pointer to let you create, select, and modify objects. Commands, meanwhile, let you perform different tasks on objects you've selected and on your document.

(a). Using tools

You use tools in the toolbox to create, select, and manipulate objects in Illustrator. The name of the tool appears below the pointer when you hold it over the tool—this is called the tool tip. In parentheses within the tool tip is the keyboard shortcut to select that tool.



Selecting a hidden tool A. Toolbox B. Active tool C. Hidden tool D. Hidden tool triangle E. Tool name and shortcut

You must first select a tool to use it. The currently selected tool is highlighted in the toolbox. Some tools also have additional tools beneath them—these are called hidden tools. When you see a small triangle at the lower right corner of the tool icon, you know that there are hidden tools.

(b). To show or hide the toolbox

Choose Window > Tools. (A check mark next to the command means that the toolbox is already displayed.)

(c). To display a tool tip

- ☞ Hold the mouse pointer over the tool.
- ☞ To specify whether to show or hide tool tips:
  - ✠ Choose Edit > Preferences > General (Windows) or Illustrator > Preferences > General (Mac OS).
  - ✠ Select Show Tool Tips to display tool tips, deselect it to hide them. Then click OK.
- ☞ To select a tool:
- ☞ Do one of the following:
  - ✠ Click a tool in the toolbox. If there is a small triangle at a tool's lower right corner, hold down the mouse button to view the hidden tools. Then drag the pointer over the tool you want to select, and release the mouse button.

- Press the tool's keyboard shortcut. The keyboard shortcut is displayed in its tool tip. For example, if the tooltip says "Hand Tool (H)," you can select the tool by pressing the "h" key on your keyboard.

(d). To move the toolbox

Drag the toolbox by its title bar.

(e). To detach a toolbar from the toolbox

- Hold down the mouse button on a tool that has hidden tools underneath it.
- When the hidden tools appear, drag to the arrow at the end of the toolbar and release the mouse button. The toolbar detaches from the toolbox and you can drag it by the title bar.

(f). To close a detached toolbar

Click the close box.

9.8 Changing the tool pointer

When you select most tools, the mouse pointer matches the tool's icon. For example, choosing the paintbrush tool changes the pointer to a paintbrush.

You can also change a tool pointer to a precision pointer, such as a cross hair, for greater precision when aligning or working with detailed artwork.

(a). To change the pointer to a precision pointer

- Do one of the following:
  - While the tool is selected, press Caps Lock on the keyboard.
  - Choose Edit > Preferences > General (Windows) or Illustrator > Preferences > General (Mac OS). Then select Select Use Precise Cursors, and click OK.

(b). Using tool tips

The tool tips feature lets you display the name of tools, or of buttons and controls in palettes.

(c). To identify a tool or control

- Position the pointer over a tool or control and pause. A tool tip appears showing the name and keyboard shortcut (if any) for the item.
- If tool tips don't appear, the preference for displaying them may be turned off.

(d). To display tool tips

- Choose Edit > Preferences > General (Windows) or Illustrator > Preferences > General (Mac OS).
- Select Show Tool Tips, and click OK.

9.9 Choosing commands

Commands let you perform a wide variety of tasks. Illustrator provides several ways to choose commands:

- The menus at the top of your screen provide access to commands. If a command is dimmed in a menu, it isn't applicable to the current operation. For instance, a command may only work on a selected object, or a particular kind of object (such as type or bitmap objects).
- Context-sensitive menus display commands that are relevant to the active tool, selection, or palette. To display a context menu, right-click (Windows) or Control-click (Mac OS) in the document window or palette.

- Keyboard shortcuts let you quickly execute commands without using a menu. When available, the keyboard shortcut appears to the right of the command name in the menu.
- Illustrator lets you edit standard keyboard shortcuts and create new shortcuts.

9.10 Using palettes

Adobe Illustrator includes a number of palettes to help you monitor and modify your work. By default, these palettes appear stacked together in several groups. You can also dock palettes so that you can move them as a unit.

Each palette also has an associated menu that lists commands specifically for use with that palette.

(a). Showing and hiding palettes

You can display and hide palettes as you work.

(b). To show or hide a palette

Do one of the following:

- Choose Window > [palette name]. A check mark appears before a palette that is currently open.
- Press Tab to hide or show all palettes and the toolbox.
- Press Shift+Tab to hide or show all palettes except for the toolbox.
- Click the top right button (Windows) or the top left button (Mac OS) to close it.

9.11 Viewing artwork

Adobe Illustrator gives you great flexibility in viewing your artwork. You can view different areas of the artwork at different magnifications, use simplified views for tasks such as editing paths, and preview how your artwork will appear in a Web browser or in print.

(a). Magnifying and reducing the view area

The Zoom-in and Zoom-out tools and commands let you magnify or reduce the display of any area in the file up to 64 times its actual size. You can also magnify and reduce the view area using the Navigator palette. You see the current magnification level at the top and the bottom left of the window.

(b). To zoom in

Do one of the following:

- Select the Zoom tool. The pointer becomes a magnifying glass with a plus sign in its center. Click at the center of the area you want to magnify. Each click magnifies the view to the next preset percentage. When the file has reached its maximum magnification level of 6400%, the magnifying glass appears blank.
- Choose View > Zoom In. Each click magnifies the view to the next preset percentage. When the file has reached its maximum magnification level of 6400%, the command is dimmed.
- When no objects are selected, click the right mouse button (Windows) or Control-click (Mac OS) and select the Zoom In command from the context menu.
- Enter a magnification level in the Zoom text box at the lower left of the window.
- Select a magnification level from the Zoom pop-up menu at the lower left of the window.

(c). To zoom out

Do one of the following:

- Select the Zoom tool, then hold down Alt (Windows) or Option (Mac OS). The pointer becomes a magnifying glass with a minus sign in its center. Click the center of the area you want to reduce. Each click reduces the view to the previous preset percentage, down to a maximum reduction level of 3.13%.
- Choose View > Zoom Out. Each click reduces the view to the previous preset percentage, down to a maximum reduction level of 3.13%.
- When no objects are selected, click the right mouse button (Windows) or Control-click (Mac OS) and select the Zoom Out command from the context menu.
- Enter a reduction level in the Zoom text box at the lower left of the window.
- Select a magnification level from the Zoom pop-up menu at the lower left of the window.

(d). To magnify by dragging

Select the Zoom-in tool.

Drag a dotted rectangle, called a marquee, around the area you want to magnify. To move the marquee around the artwork, after you've begun dragging to create the marquee hold down the spacebar, and continue dragging to move the marquee to a new location.

(e). To display a file at 100%

Choose View > Actual Size, or double-click the Zoom tool.

(f). To change the view to fit the document window

Choose View > Fit In Window, or double-click the Hand tool.

9.11 Navigating the view area

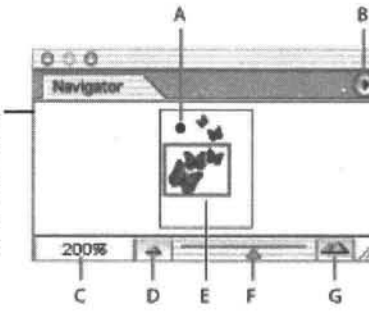
The Hand tool lets you bring another area of your artwork into view. You can also scroll through the view area using the Navigator palette. (See Using the Navigator palette.) The Units & Display Performance options in the Preferences dialog box let you set the quality of the view as you move the Hand tool.

(a). To reposition the view with the Hand tool

- Select the hand tool.
- Move the pointer onto the artwork, and drag in the direction in which you want the artwork to move.
- To switch to the Hand tool temporarily while using another tool, hold down the spacebar.
- To specify the quality of the display when using the Hand tool:
- Choose Edit > Preferences > Units & Display Performance (Windows) or Illustrator > Preferences > Units & Display Performance (Mac OS).
- Drag the Hand Tool slider left to improve the quality of the view when you move it with the Hand tool, or right to improve the speed at which you can move the view with the Hand tool.

(b). Using the Navigator palette

You use the Navigator palette to quickly change the view of your artwork using a thumbnail display. The colored box in the Navigator (called the proxy view area) corresponds to the currently viewable area in the document window.



Navigator palette A. Thumbnail display of artwork B. Palette menu button C. Zoom text box D. Zoom out button E. Proxy preview area F. Zoom slider G. Zoom in button

(c). Displaying the Navigator palette

Choose Window > Navigator.

The Navigator palette may take a long time to display when the document contains a large number of objects.

(d). Using the Navigator palette menu

Click the triangle in the upper right corner of the palette.

(e). Changing the palette display

- To display only artwork inside the boundaries of the artboard, choose View Artboard Only from the Navigator palette menu. Any objects outside the border of the artboard are removed from the thumbnail display.
- To change the color of the proxy view area, choose Palette Options from the Navigator palette menu. Choose a preset color from the Color pop-up menu, or double-click the color box to choose a custom color. Then click OK.
- To display dashed lines in the document as solid lines in the Navigator palette, select Draw Dashed Lines As Solid Lines.
- To specify the size at which text is replaced by a gray bar in the Navigator palette, enter a font size in the Greeking text box.

(f). Magnifying or reducing the view

Click the zoom in button or zoom out button; drag the zoom slider; or enter a percentage in the zoom text box and press Enter or Return. Alternately, hold down Ctrl (Windows) or Command (Mac OS), and drag over the area of the thumbnail display that you want to magnify.

(g). Moving the view

Click the area of the thumbnail display that you want to view in the document window. Alternately, drag the proxy view area (the colored box) to a different area of the thumbnail display.

9.12 Setting up windows and views

You can open additional windows to display several views of a document at once, so that you can quickly switch between view modes or magnifications. For example, you can set one view highly magnified for doing close-up work on some objects and create another view less magnified for laying out those objects on the page.

(a). To change the screen mode for illustration windows:

Click a screen mode button in the toolbox:

- The left (Standard Screen mode) button displays artwork in a standard window, with a menu bar at the top and scroll bars on the sides.

- The center (Full Screen Mode with Menu Bar) button displays artwork in a full-screen window with a menu bar but with no title bar or scroll bars.
- The right (Full Screen Mode) button displays artwork in a full-screen window, with no title bar, menu bar, or scroll bars.

(b). To open a new window

Choose Window > New Window.

A new window of the same size appears on top of the previously active window. The two windows are identical except for their window numbers. The new window is now the active window.

(c). To close a window

Do one of the following:

- Click the close button on the window.
- Choose File > Close to close the active window.
- Press Alt and choose File > Close to close all document windows.

(d). To arrange multiple windows

Do one of the following:

- Choose Window > Cascade to display windows stacked and cascading from the top left to the bottom right of the screen.
- Choose Window > Tile to display windows edge to edge.
- Choose Window > Arrange Icons to arrange minimized windows within the program window.

9.13 Viewing artwork as paths

By default, Adobe Illustrator sets the view so that all artwork is previewed in color. However, you can toggle the Preview command to Outline, so that your artwork is displayed only as paths, with all paint attributes hidden. Viewing artwork without paint attributes speeds up the time it takes to redraw the screen when working with complex artwork.

(a). To view the artwork in color or as path outlines

Choose a viewing option:

- Choose View > Pixel Preview to display the artwork as close as possible to how it will be printed—drawn with as much color, shading, and detail as your monitor is capable of displaying.
- Choose View > Outline to display the artwork as paths, hiding each object's paint attributes.
- Use the Layers palette to change the view mode of a layer, group, or object.
- Use the New Window command to see your layout in Preview view in one window while editing in Outline view in another.

9.14 Previewing how artwork will print

Illustrator provides several ways to preview how aspects of artwork will look when printed, depending on whether you are creating color-separated output, flattening transparency, or switching viewing devices when using color management.

- Overprint Preview mode provides an "ink preview" that approximates how blending, transparency, and overprinting will appear in color-separated output. To preview how colors will overprint and blend, choose View > Overprint Preview.

- Flattener preview highlights areas of the artwork that meet certain criteria for flattening. To highlight these areas, choose Window > Flattener Preview and specify the options you want.
- If you are using Illustrator's color management features, you can also display an online preview of how your document's colors will appear on a particular type of monitor or output device.
- Anti-aliasing gives vector objects a smoother on-screen appearance and gives you a better idea of how vector artwork will look when printed on a PostScript printer. This is because screen resolution is relatively limited, but vector artwork is often printed at a high resolution.

9.15 Using the status bar

At the bottom left edge of the Illustrator document window is the status bar. The status bar contains the Zoom pop-up menu and the Status pop-up menu. The Status menu can display information about any of the following topics:

- The current tool in use.
- The date and time.
- The number of undos and redos available.
- The document color profile.

If you're working with a managed file from an Adobe Version Cue project, the status bar provides additional information about the status of the file.

9.16 Undoing and redoing changes

You can use the Undo command to correct mistakes you make while using the Adobe Illustrator program. You can even undo an operation after you choose the Save command (but not if you have closed and then reopened the file).

If an operation cannot be undone, the Undo command is dimmed. Depending on how much memory is available, you can undo an unlimited number of the last operations you performed, in reverse order, by repeatedly choosing the Undo command.

You can also revert a file to the version that was last saved (but not if you have closed and then reopened the file).

(a). To undo or redo an operation

- Choose Edit > Undo or Edit > Redo. (Depending on the memory available to your system, you can choose Undo an unlimited number of times.)

(b). To revert a file to the last saved version

- Choose File > Revert. You cannot undo this action.

9.17 Using the Preferences dialog box

The Preferences dialog box lets you specify options regarding how you want Illustrator to work, including those for display, tools, ruler units, and exporting information. These preferences are added to the preference file, which is launched each time you start Illustrator. To find an explanation of a particular preference option or set of options, refer to the index.

To restore Illustrator's default settings, you can remove the Illustrator preferences file and relaunch Illustrator. This can be helpful if you are having problems with the application.

(a). To open the Preferences dialog box:

In Windows, choose Edit > Preferences, followed by the type of preferences you want.

(b). To switch to different options in the Preferences dialog box:

Choose an option from the menu at the top left of the Preferences dialog box. You can also click Next to display the next options, or click Prev to display the previous options.

(c). To restore Illustrator's default settings:

Do one of the following:

- Rename the preferences file and move it to the desktop as a safety copy.
- Delete the preferences file. Note that doing so loses all of your existing preferences.

9.18 Using plug-in modules

Plug-in modules are software programs developed by Adobe Systems, and by other software developers in conjunction with Adobe Systems, to add features to Adobe Illustrator. A number of special effects plug-ins come with your program and are automatically installed in the Plug-ins folder.

If you change the location of the Plug-ins folder, or if you want to use a different folder as your plug-ins folder, you must use the Plug-ins & Scratch Disks preferences command to tell Illustrator about the new location of the plug-ins.

You can also use plug-ins from Adobe Photoshop versions 3.0 to 5.5. In addition, you can use any commercial plug-in designed for use with Photoshop or Illustrator.

(a). To specify the location of plug-in modules

Do one of the following:

- In Windows, choose Edit > Preferences > Plug-ins & Scratch Disks.
- Click Choose and select the folder containing the plug-in modules.

Do one of the following:

- In Windows, click OK in the Browse For Folder dialog box.
- Click OK in the Preferences dialog box.
- Quit Illustrator, and then restart it for the plug-in modules to take effect.

(b). To install an Adobe Systems plug-in module

If an installer is provided, use it to install the plug-in module. Otherwise, drag a copy of the module to the Plug-ins folder inside the Adobe Illustrator folder. Restart Illustrator for the plug-in to take effect.

(c). To install a third-party plug-in module

Follow the installation instructions that came with the plug-in module. The open architecture of the Adobe Illustrator program allows developers outside of Adobe to create features that are accessible from within Adobe Illustrator.

(d). To get information about a plug-in

Do one of the following:

- In Windows, choose Help > About Plug-ins.
- Select the plug-in from the list and click About.
- Click Ok, and then click Done.

9.19 Exiting Illustrator

When you are finished creating artwork in Illustrator, you can quit the program. This frees memory for use in other applications.

(a). To close a file and quit Illustrator

☞ Choose File > Exit.

If the file has not yet been saved or named, a notice appears giving you the option of saving the file. To save the file, click Save, enter a name in the Name text box (if necessary), choose a file format and location, and then click Save.

9.20 Creating new documents

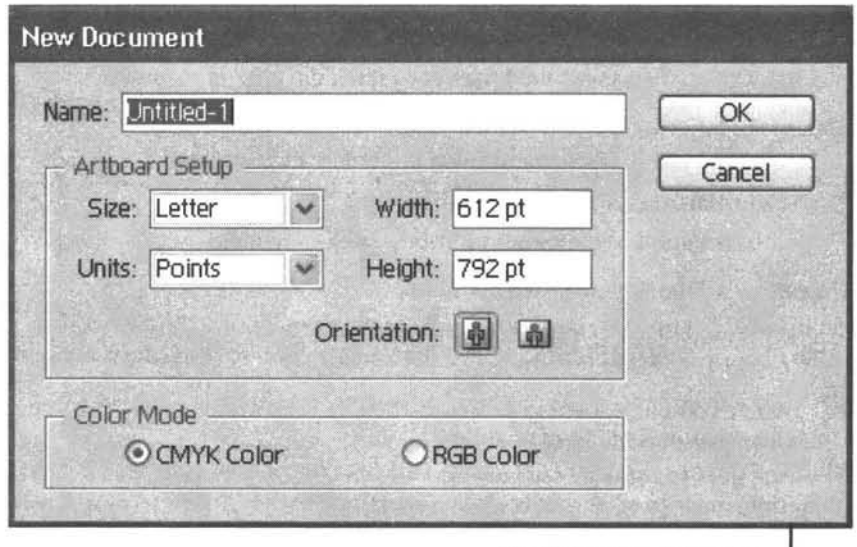
Illustrator provides two ways to create new documents: from scratch and from templates:

☞ Creating a document from scratch gives you a blank document with the default fill and stroke colors, graphic styles, brushes, symbols, actions, viewing preferences, and other settings.

☞ Creating a document from a template gives you a document with preset design elements and settings. Illustrator comes with a variety of templates, including templates for letterhead, business cards, envelopes, brochures, labels, certificates, post cards, greeting cards, and Web sites. You can also create your own templates.

(a). To create a new document from scratch

☞ Choose File > New.



New Document dialog box

☞ In the New Document dialog box, set any of the following options and click OK:

- Name to specify a name for the new document.
- Size to choose a preset size for the artboard.
- Width and Height to specify a custom size for the artboard.
- Units to choose a measurement system for the document. The option you choose determines the default unit of measurement used for rulers and in dialog boxes.

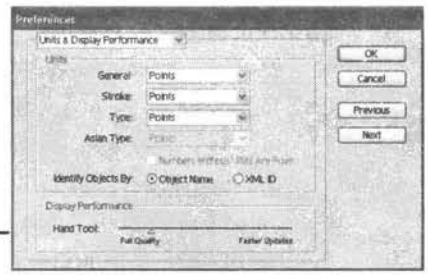
- Orientation to change the orientation of the artboard between portrait and landscape.
- CMYK Color or RGB Color to choose a color mode for the document. In general, choose CMYK if the artwork will be printed and RGB if the artwork will be published on the Web.

(b). To open an existing file

- Choose File > Open.
- Locate and select the file you want to open. If you don't see the name of the file you want, make sure all formats are showing. If you still don't see the file, it is stored in a format that Illustrator can't read.
- Click Open.
- To open a file that has recently been used:
- Choose File > Open Recent Files, and choose the filename from the list.

(c). To set the unit of measurement for all documents:

- Choose Edit > Preferences > Units & Display Performance.
- From the General pop-up menu, choose the unit of measure you want to use, and click OK.



Units & Display Performance option box

(d). To set the unit of measurement for only the current document:

- Choose File > Document Setup. Choose Artboard from the pop-up menu at the top left of the Document Setup dialog box.
- From the Units pop-up menu, choose the unit of measure you want to use, and click OK.

(e). To show or hide rulers

- Choose View > Show Rulers or View > Hide Rulers.
- The point where 0 appears on each ruler is called the ruler origin. When you open a file, the position of the ruler origin depends on the options in the Setup section of the Print dialog box. Generally, the default ruler origin is located at the lower left corner of the artboard.
- When you change the ruler setting, the new setting becomes the default for the file whenever that file is opened. You can change the origin for the rulers at any time. For example, you may be working on a 3-inch-by-5-inch card that is centered on an 8.5-inch-by-11-inch page. Setting the ruler origin to line up with the 3-by-5-inch artwork rather than the 8.5-by-11-inch page can make precision editing easier for you.

(f). To change the ruler origin

- Move the pointer to the upper left corner of the rulers where the rulers intersect.
- Do one of the following:
  - Drag the pointer to where you want the new ruler origin. As you drag, a cross hair in the window and in the rulers indicates the changing ruler origin.
  - Double-click the upper left corner where the rulers intersect to restore the default settings.

(g). To create a ruler guide

- If the rulers are not already displayed, choose View > Show Rulers.
- Position the pointer on the left ruler for a vertical guide or on the top ruler for a horizontal guide. Press Alt (Windows) or Option (Mac OS) to switch the ruler guide from horizontal to vertical, and vice versa.
- Drag the ruler guide into position.
- To make working with multiple guides easier, place all guides on a single layer. You can then choose the layer to select all guides for moving or adjusting.

(h). To convert an object into a guide object

- Select an object, a group of objects, or any combination of objects and groups.
- Choose View > Guides > Make Guides.

(i). To lock or unlock guides

- Choose View > Guides > Lock Guides. A check mark indicates that all guides are locked.

(j). To move, delete, or release a guide

- Make sure that the guides are unlocked.
- Select the guide you want to move, delete, or release, and do one of the following:
  - Move the guide by dragging or copying.
  - Delete the guide by pressing Backspace or Del (Windows) or Delete (Mac OS), or by choosing Edit > Cut or Edit > Clear.
  - Delete all guides at once by choosing View > Guides > Clear Guides.
  - Release the guide, turning it back into a regular graphic object, by choosing View > Guides > Release Guides.

(k). To show or hide guides

Choose View > Guides > Show Guides to show all guides or View > Guides > Hide Guides to hide them.

(l). To change guide settings

- Choose Edit > Preferences > Guides & Grid.
- Set either of the following options, and click OK:
  - For Color, choose a color for the guides. If you choose Other, click the color box, choose a color from the color picker, and click OK.
  - For Style, choose a display option for the guides.

9.21 Using the Info palette

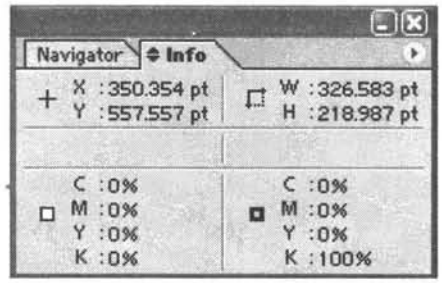
You use the Info palette to get information on the area beneath the pointer and on selected objects. Depending on the tool you're using, you can use the Info palette to measure size, distance, and angle of rotation. In most cases when a tool is in use, the Info palette displays the x and y coordinates of the pointer's position in the artwork, using the unit of measurement that has been specified in the Document Setup or Units & Display Performance Preferences dialog box.

The Info palette also displays color information for the fill and stroke of selected objects, and the names of patterns, gradients, or tints applied to the objects.

(a). Displaying the Info palette

- Choose Window > Info.

- Viewing the position and dimensions of objects
- When an object is selected and a selection tool is active, the Info palette displays the object's x and y coordinates, width (W), and height (H).



The values for width and height are affected by the Use Preview Bounds option in the General preferences. When Use Preview Bounds is selected, Illustrator includes the stroke width in the object's dimensions.When Use Preview Bounds is deselected, Illustrator measures only the dimensions defined by the object's vector path.

9.22 Placing artwork

The Place command lets you import artwork into an Illustrator document in one of two ways: by creating a link to an external file or by embedding a copy of the file in the Illustrator document. The option you choose depends on how you plan to edit the artwork:

- Linked artwork remains independent of the Illustrator document, resulting in a smaller Illustrator file. You can modify linked artwork using transformation tools and effects; however, you cannot select and edit individual components in the artwork. A preference you set for updating links determines whether the artwork in the Illustrator document changes when the linked file changes outside of Illustrator.
- Embedded artwork is copied into the Illustrator document, resulting in a larger Illustrator file. If the artwork contains multiple components, you can edit them discretely. For example, if the artwork contains vector data, Illustrator converts it to paths, which you can then modify using Illustrator tools and commands. Illustrator also preserves the object hierarchy (such as groups and layers) in artwork embedded from certain file formats.

The Links palette lets you identify, select, monitor, and update objects in the Illustrator artwork that are linked to external files.

(a). To place artwork into an Illustrator document

- Open the Illustrator document into which you want to place the artwork.
- Choose File > Place.
- Locate and select the file you want to place. If you don't see the name of the file you want, the file has been saved in a format that Illustrator cannot read.
- Do one of the following, and click Place:
  - To create a link between the file and the Illustrator document, select the Link option.
  - To embed the artwork in the Illustrator document, deselect the Link option.
  - To create a template layer using the file, select Template.
  - To replace an existing placed file, select Replace.

(b). To import artwork from a multiple-page PDF file:

- Do one of the following:
  - Choose File > Open, select the PDF file, and click Open.

- Choose File > Place, select the PDF file and placement options, and click Place.

☞ Select the page you want to import.

☞ For placed artwork, select an option from the Crop To pop-up menu to specify how much of the PDF page to place:

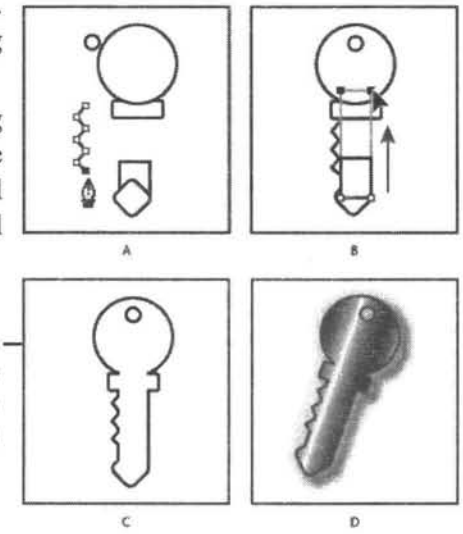
- Bounding Box to place the PDF page's bounding box, or the minimum area that encloses the objects on the page, including page marks.
- Art to place the PDF only in the area defined by a rectangle that the author created as placeable artwork (for example, clip art).
- Crop to place the PDF only in the area that is displayed or printed by Adobe Acrobat.
- Trim to identify the place where the final produced page will be physically cut in the production process, if trim marks are present.
- Bleed to place only the area that represents where all page content should be clipped, if a bleed area is present. This information is useful if the page is being output in a production environment. Note that the printed page may include page marks that fall outside the bleed area.
- Media to place the area that represents the physical paper size of the original PDF document (for example, the dimensions of an A4 sheet of paper), including page marks.

☞ Click OK.

9.23 Drawing in Adobe Illustrator CS

Drawing is what Adobe Illustrator is all about. So it's worth spending a few moments getting introduced to how and what you can draw.

Not surprisingly, you use Illustrator's drawing tools to draw objects. For instance, you use the Rectangle tool to draw squares, the Pencil tool to sketch freehand lines, and the Pen tool to create very accurate, custom shapes.



Creating drawn artwork **A.** *Drawing objects* **B.** *Adjusting their paths* **C.** *Combining objects into a single complex object* **D.** *Applying attributes to combined object*

As you draw, the resulting line is called a path. Paths can take any shape, ranging from a simple straight line to a geometric shape such as a star to a series of smooth curves and sharp corners that create the outline of a flower.

Once you've drawn an object, you can reshape it by adjusting its path with a variety of tools and commands. For instance, you might use the Erase tool to erase part of a path you drew, or the Simplify command to reshape it.

You can even combine drawn objects to create a more complex object. As a simple

example, you can place one circle on top of another and then use the Subtract From Shape Area option in the Pathfinder palette to make the top circle cut a hole in the bottom circle, creating a crescent moon shape.

(a). To draw a straight line by dragging

- Select the Line Segment tool.
- Position the pointer where you want the line to begin, and drag to where you want the line to end.
- You can press any of the following to get specific results as you drag:
  - Alt (Windows) or Option (Mac OS) to extend the line from both sides of the reference point.
  - The spacebar to switch from drawing to moving the line.
  - ` (grave accent) to create additional line segments as you move the mouse, all emanating from the same reference point.
  - Shift to constrain a single line to 45°.
- To add arrowheads to a line, use the Add Arrowheads effect.

(b). To draw a straight line by specifying properties

- Select the Line Segment tool, and click where you want to start the line segment.
- Set any of the following options in the dialog box, and click OK:
  - Length to specify the total length of the line.
  - Angle to specify the angle from the reference point of the line.
  - Fill Line to specify whether to fill the line with the current fill color.

(c). To create a rectangle or ellipse by dragging from an edge

- Select the Rectangle tool, the Rounded Rectangle tool, or the Ellipse tool.
- Position the pointer at one corner or edge of the shape you want to create, and drag diagonally until the shape is the desired size.
- You can press any of the following to get specific results as you drag:
  - Shift to constrain the tool to multiples of 45°, creating squares with the rectangle tools and circles with the Ellipse tool.
  - The spacebar to move a rectangle or ellipse as you draw it.
  - Alt (Windows) or Option (Mac OS) to draw from the center outward.

(d). To adjust corners of a rounded rectangle as you draw

- Select the Rounded Rectangle tool.
- Position the pointer where you want the rectangle to begin, and start dragging diagonally until the rectangle is the size you want.
- You can press any of the following to get specific results as you drag:
  - The Up Arrow key or Down Arrow key to change the corner radius. When the corners are the desired roundness, release the key.
  - The Left Arrow key to change to the minimum radius (most angular corners).
  - The Right Arrow key to change to the maximum radius (most rounded corners).

(e). To draw a rectangle or ellipse by specifying dimensions

- Select a Rectangle tool or the Ellipse tool.
- Do one of the following:
  - Click where you want the top left corner of the object to be.
  - Alt-click (Windows) or Option-click (Mac OS) where you want the center of the object to be.

By default, the Rectangle and Ellipse dialog boxes display the dimensions of the last rectangle or ellipse you drew. The unit of measure is determined by the setting in the Document Setup or Units & Display Preferences dialog box.

(f). To draw a polygon by dragging

- Select the Polygon tool.
- Position the pointer at the center of the polygon you want to create, and drag until the polygon is the desired size.
- You can press any of the following to get specific results as you drag:
  - Shift to constrain the tool to multiples of 45° or to the angle specified in the Constrain Angle text box in the General Preferences dialog box.
  - The spacebar to move the polygon.
  - The Up Arrow key or Down Arrow key to add or delete sides to the polygon.
  - Drag the pointer in an arc to rotate the polygon.

(g). To draw a polygon by specifying dimensions

- Select the Polygon tool.
- Click where you want the center of the polygon to be.
- Set either or both of the following options in the dialog box, and click OK:
  - Radius to specify the distance from the center point to each line's endpoint.
  - Sides to specify the number of sides in the polygon.

By default, the Polygon dialog box displays the dimensions of the last polygon you drew. The unit of measure is determined by the setting in the Document Setup or Units & Display Performance Preferences dialog box.

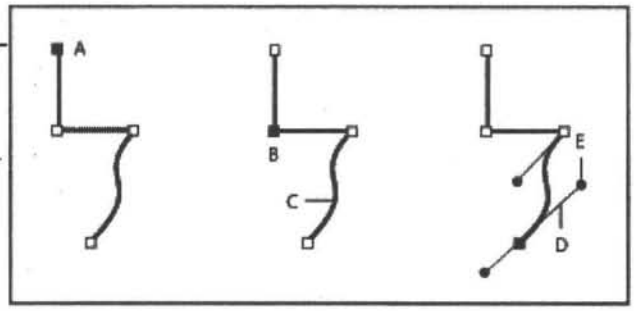
(h). To draw an arc segment by dragging

- Select the Arc tool.
- Click where you want the arc to begin, and drag to create an arc.
- You can press any of the following to get specific results as you drag:
  - Alt (Windows) or Option (Mac OS) to extend the arc from both sides of the reference point.
  - The spacebar to move the arc as you draw.
  - ' (grave accent) to create multiple arc segments as you move the mouse.
  - C to switch between an open and closed arc.
  - F to flip the arc, keeping the reference point constant.
  - The Up Arrow key or Down Arrow key to increase or decrease the arc's angle.

9.24 Drawing paths

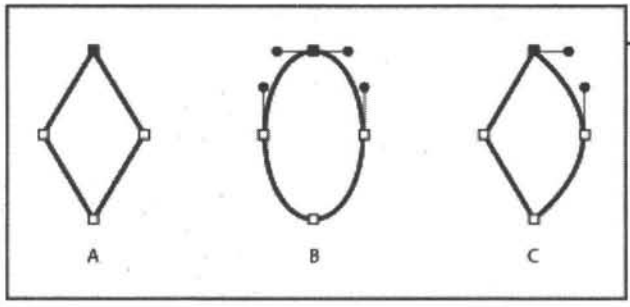
A path is made up of one or more straight or curved segments. The beginning and end of each segment is marked by anchor points, which work like pins holding a wire in place. You change the shape of a path by editing its anchor points. You can control curves by dragging the direction points at the end of direction lines that appear at anchor points.

A path is either open, like an arc, or closed, like a circle. For an open path, the starting and ending anchor points for the path are called endpoints.



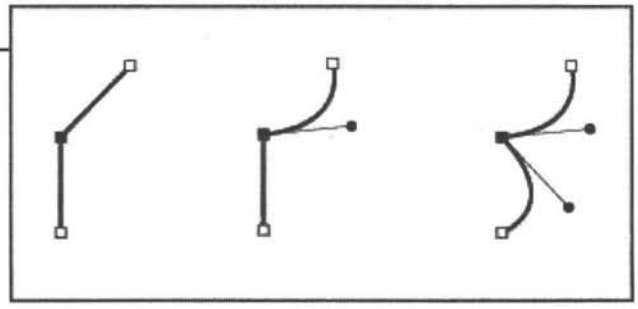
Components of a path: **A.** *Selected (solid) endpoint* **B.** *Selected anchor point* **C.** *Curved path segment* **D.** *Direction line* **E.** *Direction point*

Paths can have two kinds of anchor points—corner points and smooth points. At a corner point, a path abruptly changes direction. At a smooth point, path segments are connected as a continuous curve. You can draw a path using any combination of corner and smooth points. If you draw the wrong kind of point, you can always change it.



Points on a path: **A.** *Four corner points* **B.** *Four smooth points* **C.** *Combination of corner and smooth points*

A corner point can connect any two straight or curved segments, while a smooth point always connects two curved segments. A corner point can connect both straight segments and curved segments.



Drawing freeform paths with the Pencil tool

(a). To draw a freeform path with the Pencil tool

- Select the Pencil tool.
- Position the tool where you want the path to begin, and drag to draw a path. The Pencil tool displays a small x to indicate drawing a freeform path.
- As you drag, a dotted line follows the pointer. Anchor points appear at both ends of the path and at various points along it. The path takes on the current paint attributes, and the path remains selected by default.
- To continue the existing freeform path, make sure the path is selected, and then position the pencil tip on an endpoint of the path and drag.

(b). To draw a closed path with the Pencil tool

- Select the Pencil tool.
- Position the tool where you want the path to begin, and start dragging to draw a path.
- After you've begun dragging, hold down Alt (Windows) or Option (Mac OS). The Pencil tool displays a small o to indicate you're creating a closed path.
- When the path is the size and shape you want, release the mouse button (but not the Alt or Option key). After the path closes, release the Alt or Option key.

(c). To connect a new path to an existing path

- Select both paths.
- Select the Pencil tool.
- Position the tool where you want to begin from one path, and start dragging toward the other path.
- After you've begun dragging, hold down Ctrl (Windows) or Option (Mac OS). The Pencil tool displays a small icon of an anchor point to indicate you're adding to the existing path.
- Drag onto the endpoint of the other path, release the mouse button, then release the Ctrl or Option key.

For best results, drag from one path to the other as if you were simply continuing the paths in the direction they were created.

(d). To add a new path to an existing path

- Select the existing path.
- Select the Pencil tool.
- Position the tool where you want the path to begin, and start dragging to draw a path.
- After you've begun dragging, hold down Ctrl (Windows) or Option (Mac OS). The Pencil tool displays a small icon of an anchor point to indicate you're adding to the existing path.
- Drag onto the existing path, release the mouse button, then release the Ctrl or Option key.

(e). To change a path with the Pencil tool

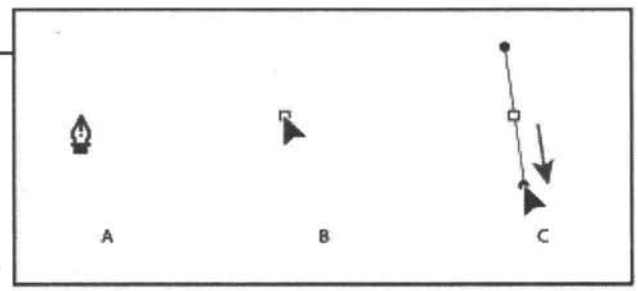
- Select the path you want to change.
- Position the Pencil tool on or near the path to redraw. (You can tell you're close enough to the path when the small x disappears from the tool.)
- Drag the tool until the path is the desired shape.

(f). To draw a straight line segment with the Pen tool

- Select the Pen tool.
- Position the Pen tool where you want the straight segment to begin, and click to define the first anchor point (do not drag). The anchor point remains selected (solid) until you add the next point.
- The first segment you draw will not be visible until you click a second anchor point. Also, if direction lines appear, you've accidentally dragged the Pen tool; choose Edit > Undo and click again.
- Click again where you want the segment to end. (Shift-click to constrain the segment's angle to multiples of 45°.) This creates another anchor point.
- Continue clicking the Pen tool to create additional straight segments.
- The last anchor point you add appears as a solid square, indicating that it is selected. Existing anchor points become deselected as you add more anchor points.
- Complete the path by doing one of the following:
  - To close a path, position the pen pointer over the first (hollow) anchor point. A small circle appears next to the Pen tool when it is positioned correctly. Click to close the path.
  - To leave the path open, Ctrl-click (Windows) or Command-click (Mac OS) anywhere away from all objects, or choose Select > Deselect, or select a different tool in the toolbox.

(g). To draw a curved segment

- Select the Pen tool.
- Position the Pen tool where you want the curve to begin. Hold down the mouse button. The first anchor point appears, and the Pen tool pointer changes to an arrowhead.
- Drag to set the slope of the curve segment you're creating. In general, extend the direction line about one third of the distance to the next anchor point you plan to draw. Shift-drag to constrain the direction line to multiples of 45°.



Drawing the first point in a curve: A. *Positioning Pen tool* **B.** *Starting to drag (mouse button pressed)* **C.** *Dragging to extend direction lines*

- Release the mouse button.
- Position the Pen tool where you want the curve segment to end, and then do one of the following:
  - To create a "C"-shaped curve, drag in a direction opposite to the previous direction line. Then release the mouse button.
  - To create an "S"-shaped curve, drag in the same direction as the previous direction line. Then release the mouse button.
- Continue dragging the Pen tool from different locations to create additional smooth points.

- Complete the path by doing one of the following:
  - To close the path, position the Pen tool over the first (hollow) anchor point. A small circle appears next to the Pen tool pointer when it is positioned correctly. Click or drag to close the path.
  - To leave the path open, Ctrl-click (Windows) or Command-click (Mac OS) anywhere away from all objects, or choose Select > Deselect, or select a different tool in the toolbox.

(h). Adjusting paths

Typically, the first step in adjusting a path is to select one or more path segments or anchor points. You can change the shape of a path by any of these methods:

- Adding and deleting anchor points.
- Smoothing sections of a path with the Smooth tool.
- Erasing sections of a path with the Erase tool.
- Converting smooth anchor points to corner anchor points and vice versa with the convert Anchor Point tool.
- Moving anchor points or the direction points of direction lines attached to a curve segment.
- Adjusting selected points and paths globally with the Reshape tool.
- Removing extra anchor points from a path without changing the shape of the path with the Simplify command.
- Splitting paths with the Scissors tool.
- Moving anchor points to a position that is the average of their current locations with the Average command.
- Connecting the endpoints of an open path to create a closed path or joins the endpoints of two open paths.

9.25 Using Colors and Fills

A color model is a system for describing color. Illustrator supports the following color models: HSB, RGB, Web Safe RGB, CMYK, and Grayscale. You can switch between color models when choosing and creating colors to use in your artwork.

A document's color mode determines how your artwork will be output. RGB mode is intended for artwork that will be displayed on-screen or projected using phosphors or light, whereas CMYK is for documents that will be printed using colored inks. Although you have to choose a color mode when you create a document, you can also change the mode at any time with the Document Color Mode command.

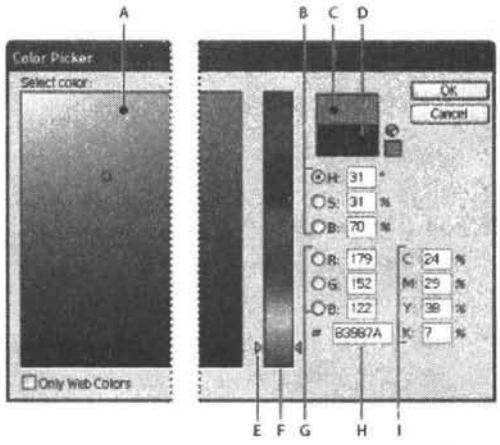
(a). To change the color mode of the document

- Choose one of the following:
  - File > Document Color Mode > CMYK Color.
  - File > Document Color Mode > RGB Color.
- Selecting colors

You can select colors to apply to objects using the Color Picker and Color palette. You can also select named colors in the Swatches palette, swatch library palettes, and with the Eyedropper tool.

(b). Using the Color Picker

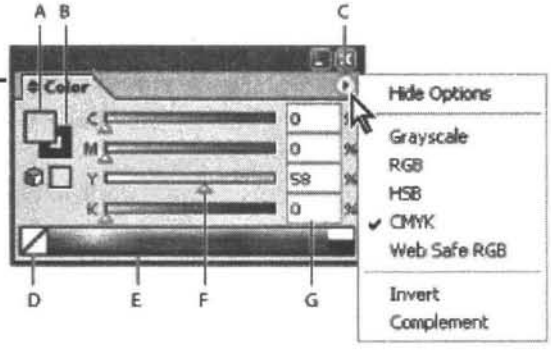
The Color Picker lets you select an object's fill or stroke color by choosing from a color spectrum or by defining colors numerically.



Color Picker: *A. Color spectrum B. HSB color values C. Current color D. Previous color E. Color slider triangles F. Color slider G. RGB color values H. Hexidecimal color value I. CMYK color values*

(c). Using the Color palette

You use the Color palette to apply color to an object's fill and stroke, and also to edit and mix colors—either colors that you create or colors that you selected from the Swatches palette, from an object, or from a color library.



Selecting colors in the Color palette: *A. Fill color B. Stroke color C. Palette menu D. None box E. Color spectrum bar F. Color slider G. Text box for a color component*

(d). To change the color or tint of objects with the same properties

☞ Select objects using one of the following methods:

- To select all objects with the same style, select an object with that style or choose the style from the Graphic Styles palette. Then choose Select > Same > Style.
- To select all objects with the same fill or stroke color, select an object with that fill or stroke color or choose the color from the Color palette or Swatches palette. Then choose Select > Same > Fill Color, Select > Same > Stroke Color or Select > Same > Fill & Stroke.
- To select all objects with the same stroke weight, select an object with that stroke weight or choose the stroke weight from the Stroke palette. Then choose Select > Same > Stroke Weight.
- To apply the same selection options using a different object (for example, if you have already selected all red objects using the Same Fill Color command and now you want to search for all green objects), select a new object and then choose Select > Reselect.

- In the Color palette, do one of the following:
  - For objects with a non-spot color, enter a color value in the associated text box.
  - For objects with a spot color, enter a tint value in the Tint Percentage text box.

(e). To change the tint of a global process color or spot color

- Select a color swatch in the Swatches palette.
- In the Color palette, enter a tint value in the Tint Percentage text box.

(f). To change fill or stroke attributes using the toolbox

- Do one of the following:
  - To change an object's fill or stroke, select the object.
  - To change the current fill or stroke without applying it to any object, make sure nothing is selected. The fill and stroke will then be applied to objects you create.
- Click one of the following buttons in the toolbox:
  - Click the Swap Fill and Stroke button or press Shift+x to swap colors between the fill and the stroke.
  - Click the Default Fill and Stroke button to return to the default color settings.
  - Click the Color button to change the currently selected stroke or fill to the last-selected solid color in the Color palette.
  - Click the Gradient button to change the currently selected fill to the last-selected gradient in the Gradient palette.
  - Click the None button to remove the object's fill or stroke.
  - Double-click the Fill or Stroke button to choose a color with the Color Picker.
- Use keyboard shortcuts to switch to Color, Gradient, or None: Press < to change the selection to a color; > to change the selection to a gradient; and / to change to None.

(g). To set stroke attributes using the Stroke palette

- Select the object whose stroke attributes you want to change.
- Click the Stroke box in the toolbox, Appearance palette, or Color palette to select the object's stroke.
- Choose Window > Stroke.

(h). To specify a stroke weight, enter the desired weight in the Weight text box

- If you enter a weight of 0, the stroke is changed to None.
- To see other options, choose Show Options from the Stroke palette menu; then click one of the following cap option buttons:
  - Butt Cap for stroked lines with squared ends.
  - Round Cap for stroked lines with semicircular ends.
  - Projecting Cap for stroked lines with squared ends that extend half the line width beyond the end of the line. This option makes the weight of the line extend equally in all directions around the line.
- Click one of the following join option buttons:
  - Miter Join for stroked lines with pointed corners. Enter a miter limit between 1 and 500. The miter limit controls when the program switches from a mitered (pointed) join

to a beveled (squared-off) join. The default miter limit is 4, which means that when the length of the point reaches four times the stroke weight, the program switches from a miter join to a bevel join. A miter limit of 1 results in a bevel join.

- ✠ Round Join for stroked lines with rounded corners.
- ✠ Bevel Join for stroked lines with squared corners.

Select Dashed Line for a custom, non-solid line, and specify a dash sequence by entering the lengths of dashes and the gaps between them in the Dash Pattern text boxes. The numbers entered are repeated in sequence so that once you have established the pattern, you don't need to fill in all the text boxes.

(i). To specify the stroke units

- ☞ Choose Edit > Preferences > Units & Display Performance (Windows) or Illustrator > Preferences > Units & Display Performance (Mac OS).
- ☞ Choose the units of measurement you want from the Stroke pop-up menu and click OK.

(j). To create multiple fills and strokes in an object

- ☞ Select the object whose stroke attributes you want to change.
- ☞ Choose Window > Appearance.
- ☞ Select the fill or stroke in the Appearance palette.
- ☞ Do one of the following:
  - ✠ Click the Duplicate Selected Item button in the palette.
  - ✠ Choose Duplicate Item from the palette menu.
  - ✠ Choose Add New Fill or Add New Stroke from the palette menu.
- ☞ Drag a fill or stroke above another one in the palette to alter its stacking position in the object.
- ☞ Do one or both of the following:
  - ✠ Apply a color or other fill to the fill or stroke.
  - ✠ Change the weight or another attribute of the stroke.

(k). Converting strokes to filled objects

- ☞ The Outline Stroke command changes the stroke of a selected object to a filled object that's the same width as the original stroke. This command lets you modify the outline of an object more than you could if it were only a stroke.
- ☞ The Outline Stroke command is also useful when you prepare artwork for trapping color separations. You can apply the Outline Stroke command as a path command or as an effect. By applying the command in the Effects menu, the converted stroke remains editable using the Appearances palette.
- ☞ Select the object whose stroke you want to convert to a path.
- ☞ Do one of the following:
  - ✠ Choose Object > Path > Outline Stroke. The converted stroke is separated from the fill.
  - ✠ Choose Effect > Path > Outline Stroke. To separate the converted stroke from the fill, choose Object > Expand Appearance, then choose Object > Ungroup.

EXERCISE

1. What is the function of Artboard?
2. How to show or hide the toolbox?
3. How to display a tool tip?
4. Explain the process of detach a toolbar from the toolbox?
5. How to close a detached toolbar?
6. Write the procedure of change the pointer to a precision pointer?
7. Explain the procedure of showing and hiding palettes?
8. How to change the view to fit the document window?
9. How to reposition the view with the Hand tool?
10. Write the procedure of displaying the Navigator palette?
11. Explain the process of magnifying or reducing the view?
12. How to change the screen mode for illustration windows?
13. How to arrange multiple windows?
14. How to view the artwork in color or as path outlines?
15. How to undo or redo an operation?
16. How to revert a file to the last saved version?
17. Write a short note on Preferences dialog box?
18. How to restore Illustrator's default settings?
19. How to specify the location of plug-in modules?
20. Explain the procedure of creating new documents?
21. How to open an existing file?
22. How to set the unit of measurement for all documents?
23. Write the procedure of change the ruler origin?
24. Explain the process of changing the guide settings?
25. How to place artwork into an Illustrator document
26. Explain the process of import artwork from a multiple-page PDF file?
27. Explain the process of adjusting paths?
28. How to change the color mode of the document?
29. How to change the color or tint of objects with the same properties?
30. How to create multiple fills and strokes in an object?





10

Image Processing: Adobe Photoshop CS

Adobe Photoshop CS is powerful, industry-standard image-editing software for professional designers who want to produce graphics for the DTP and Web. In this chapter you will learn about new features of this image processing software. Here is a brief rundown of the changes introduced in Photoshop CS:

Enhanced File Browser

In Adobe Photoshop CS, the File Browser comes into its own as your digital imaging hub. With flags, keywords, and editable metadata, you can now use the File Browser to quickly organize and locate the image assets you need.

Easily customize your keyboard shortcuts

Create, edit, and save multiple keyboard shortcut sets for menu items, tools, and palette commands, so the functions that you use most are always at your fingertips.

Quickly create, view, and edit custom file information

Use the File Browser to quickly search for files using editable metadata, without having to open each file. Fully customize your image metadata with custom panels and fields in the File Info dialog, and use the File Browser to edit the metadata of one or many images at a time.

Easily access and use multiple filters

The new Filter Gallery brings Photoshop CS filters into a single, easy-to-use dialog. Now you can access, control, and apply multiple filters at once, with a new, larger preview for easier planning of stacked filter effects.

Control your raw camera images

The new generation Camera Raw plug-in is incorporated directly into Photoshop CS, allowing direct manipulation of raw camera data, for the ultimate control over image preprocessing. Camera Raw features new color calibration controls, batch processing through the File Browser, and support for most major digital camera models.

Automatically crop and straighten

Take the pain out of scanning multiple images. Place one or more photos onto a scanner bed, scan them into Photoshop, and then run Crop and Straighten to let Photoshop automatically copy each image into its own document and rotate it as necessary.

Place editable text on a path and in a shape

Create and manipulate fully editable text on any path, or inside any shape, for eye-catching typographic designs.

Create alternate designs in a single image

Capture multiple design variations as individual Layer Comps in a single file; then quickly output them to provide alternates for client review.

Create non-square pixel documents

Work with different aspect ratios without the distortion caused by viewing non-square images on a computer monitor, seeing them exactly as they will appear when viewed on a standards-compliant external monitor.

Choose from video document presets with automatic guides

Use new, customizable document presets in standard video sizes and aspect ratios, with automatic action-safe and title-safe guides, for easier setup and creation of files for DVD, video, and film.

Export to Macromedia Flash (SWF)

Export directly to Flash (SWF), with preserved vectors and dynamic text including embedded fonts. Export each layer to its own SWF file, allowing each file to be opened in Flash as its own symbol on its own layer.

10.1 Launching Photoshop

Like any other Windows program, you must launch (or *run*) Photoshop CS in order to creat, view or edit image files. There are several ways you can do this.

- Click the start button on the Windows XP taskbar, and choose programs>Photoshop CS.
- Double-click a Photoshop CS shortcut that you've placed on the Windows XP desktop.
- Double-click (or click) a Photoshop CS file icon or any other type of graphic file that you've associated with Photoshop CS. The program launch and opens the file.



Click here and select Photoshop CS

Photoshop CS interface consists of the following components:

Menu bar

The menu bar contains menus for performing tasks. The menus are organized by topic. For example, the Layers menu contains commands for working with layers.

Options bar

The options bar provides options for using a tool.

Toolbox

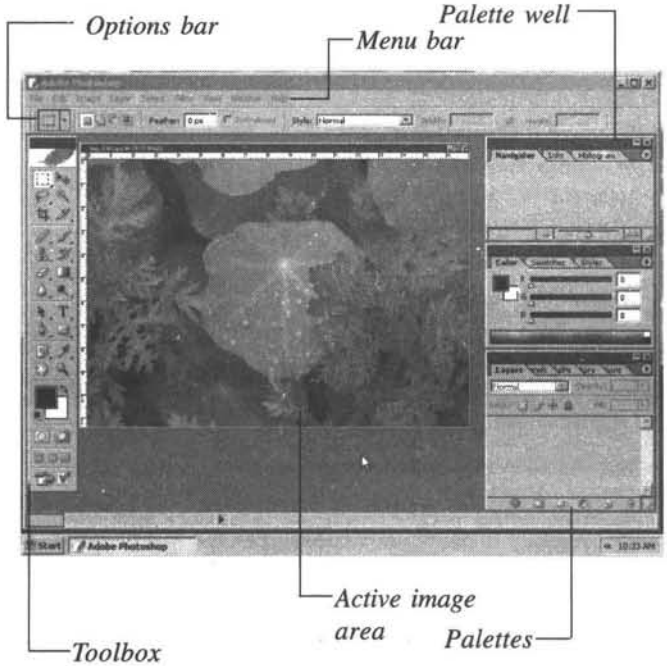
The toolbox holds tools for creating and editing images.

Palette well

The palette well helps you organize the palettes in your work area.

Palettes

Palettes help you monitor and modify images.

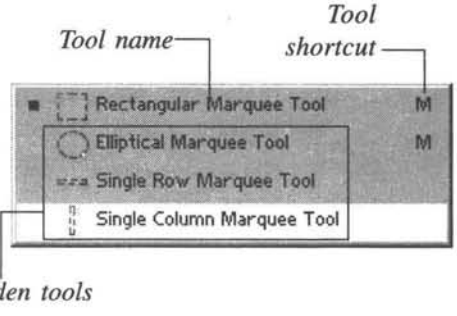


10.2 Using the tools

You select a tool by clicking its icon in the toolbox. A small triangle at the lower right of a tool icon indicates hidden tools. Positioning the pointer over a tool displays a tool tip with the tool's name and keyboard shortcut.

(a). To select a tool do one of the following

- Click the tool's icon. If the icon has a small triangle at its lower right corner, hold down the mouse button to view the hidden tools. Then, click the tool you want to select.



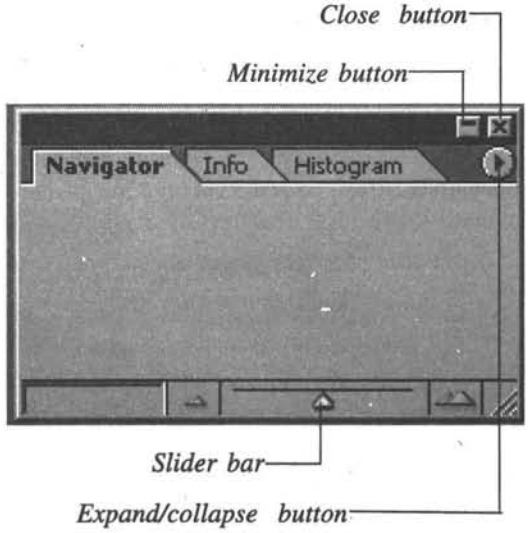
- Press the tool's keyboard shortcut. The keyboard shortcut is displayed in its tool tip. To cycle through hidden tools, hold down Shift and press the tool's shortcut key.

10.3 Using palettes

Palettes help you monitor and modify images. You can choose which palettes are visible. By default, palettes appear stacked together in groups. You can move palette groups, rearrange palettes in their groups, and remove palettes from groups. Palettes can also be docked to keep them organized.

You can rearrange your palettes to using the following techniques:

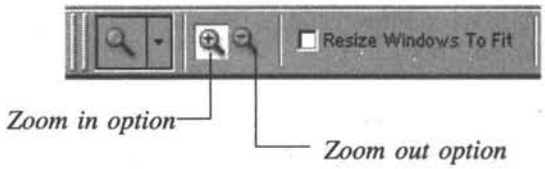
- To make a palette appear at the front of its group, click the palette's tab, or choose the palette name from the Window menu.
- To move an entire palette group, drag its title bar.
- To move a palette to another group, drag the palette's tab to that group.
- To display a palette menu, position the pointer on the triangle in the upper right corner of the palette, and press the mouse button.



- To change the size of a palette, drag any corner of the palette. Not all palettes can be resized.
- To collapse a group to palette titles only, click the Minimize/Maximize box. You can still access the menu of a collapsed palette.

10.3 Viewing images

You can change the screen display mode to change the appearance of the Photoshop or ImageReady work area. The Hand tool, the zoom tools, the Zoom commands, and the Navigator palette let you view different areas of an image at different magnifications.



- You can open additional windows to display several views at once of an image.
- You can use the screen mode options to view your images on your entire screen.

You can show or hide the menu bar, title bar, and scroll bars. You can choose from the following:

- The Standard screen mode is the default view, with menu bars, scrolls bars, and other screen elements visible.



Other viewing option on the option bar

- Full Screen with Menu Bar view enlarges your view of an image but keeps the menu bar in view.
- Full Screen mode allows you to move the image around the screen to view different areas.

(a). To zoom in or out on multiple images

- Open one or more images, or copies of a single image.

- Click on Window Menu > Arrange command > Tile to display the images edge to edge.
- Select Zoom All Windows in the options bar, and then click in one of the images. The other images zoom in or out at the same magnification.

10.4 Correcting mistakes

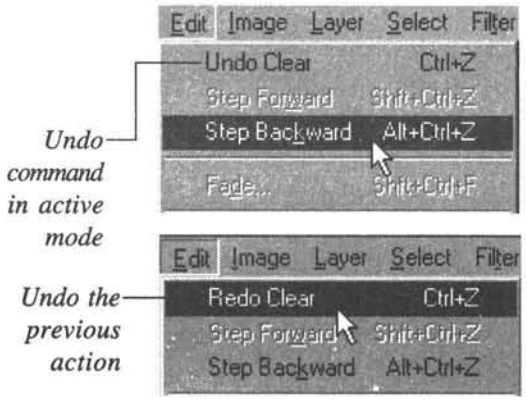
Most operations can be undone if you make a mistake. Alternatively, you can restore all or part of an image to its last saved version. But available memory may limit your ability to use these options.

To undo the last operation:

Click on Edit Menu > Undo command.

To redo the last operation:

Click on Edit Menu > Redo command.

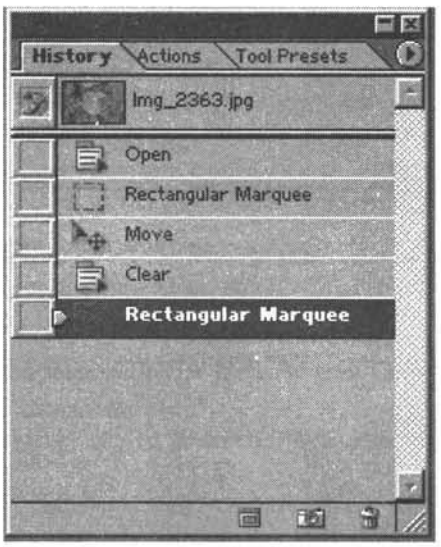


10.5 Using the History palette

The History palette lets you jump to any recent state of the image created during the current working session. Each time you apply a change to an image, the new state of that image is added to the palette. For example, if you select, paint, and rotate part of an image, each of those states is listed separately in the palette. You can then select any of the states, and the image will revert to how it looked when that change was first applied. You can then work from that state.

(a). Guidelines for using the History palette

- Program-wide changes, such as changes to palettes, color settings, actions, and preferences, are not changes to a particular image and so are not added to the History palette.
- By default, the History palette lists the previous 20 states. You can always change the number of states in Preferences. Older states are automatically deleted to free more memory for Photoshop. To keep a particular state throughout your work session, make a snapshot of the state.
- Once you close and reopen the document, all states and snapshots from the last working session are cleared from the palette.
- By default, a snapshot of the initial state of the document is displayed at the top of the palette.
- States are added from the top down. That is, the oldest state is at the top of the list, the most recent one at the bottom. Each state is listed with the name of the tool or command used to change the image.

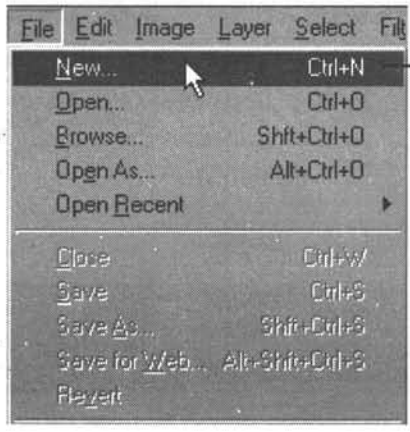


- By default, selecting a state dims those below. This way you can easily see which changes will be discarded if you continue working from the selected state.

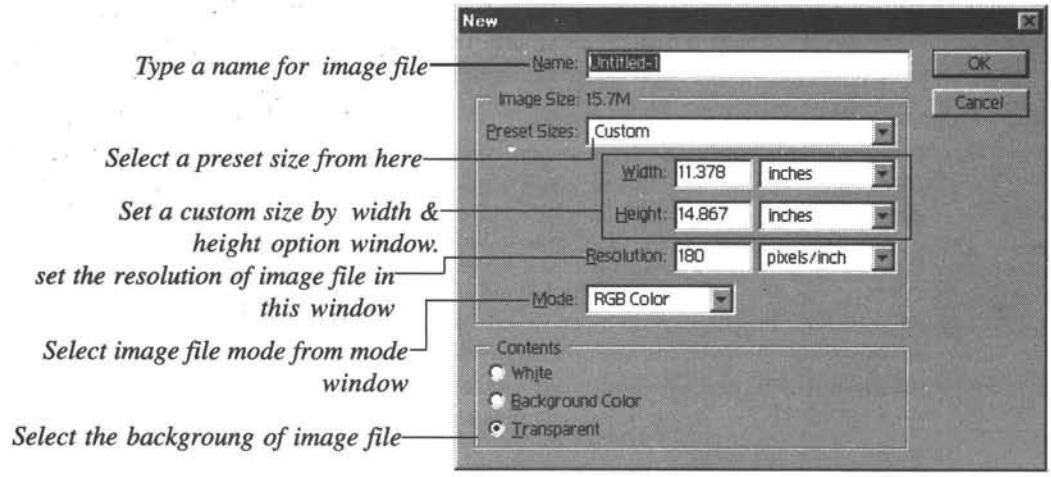
10.6 Creating new images

The New command of File Menu lets you create a blank image. If you've copied a selection to the Clipboard, the image dimensions and resolution are automatically based on that image data.

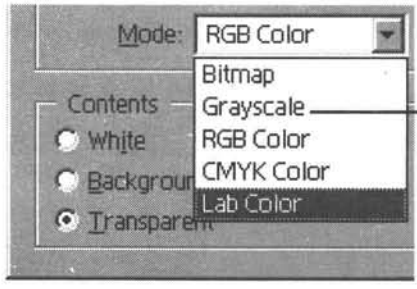
☞ Click on File Menu > New command.



☞ Type a name for the image in name window, and set the width and height.



☞ Set the resolution and mode.



☞ Select an option for the contents of the background layer of the image.

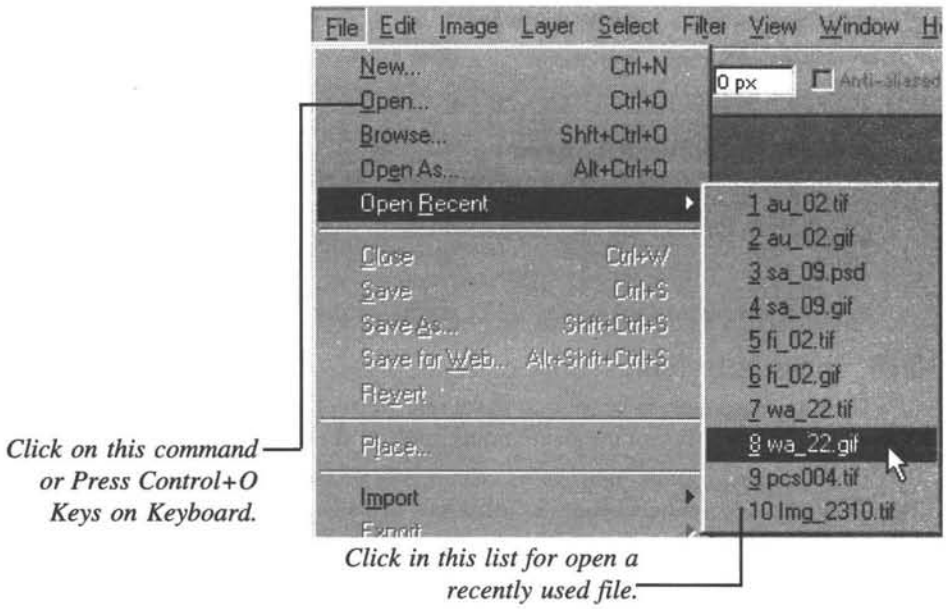
■ **White** to fill the background or first layer with white, the default background color.

- **Background Color** to fill the background or first layer with the current background color.
- **Transparent** to make the first layer transparent, with no color values. The resulting document will have a single, transparent layer as its contents.

☞ When you're finished, you can save the settings as a preset by clicking the Save Preset button, or you can click the OK button to open the new file.

10.7 Opening Image files

You can open files using the Open command and Open Recent command. In Photoshop, you can also open files using the File Browser. There may be instances when Photoshop cannot determine the correct format for a file. For example, transferring a file between Mac OS and Windows can cause the format to be mislabeled. In such cases, you must specify the correct format in which to open the file.



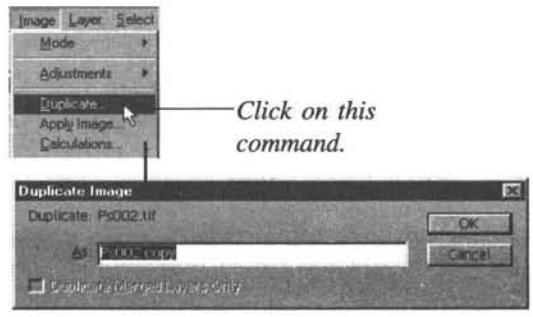
☞ Click on File Menu > Open command.

☞ Select the name of the file you want to open. If the file does not appear, select the option for showing all files from the *Files of Type*.

☞ Click on Open button. In some cases, a dialog box appears, letting you set format-specific options.

10.8 Creat a Duplicate image

You can duplicate an entire image into available memory without saving to disk. In ImageReady, you can also duplicate optimized versions of an image.



Creat a duplicate image:

☞ Open the image you want to duplicate.

☞ Click on Image Menu> Duplicate.

☞ Enter a name for the duplicated image.

- If you want to duplicate the image without merging the layers, select Duplicate Merged Layers Only.
- Click on OK button.

10.9 Saving image files

You can save a file with its current filename, location, and format or with a different filename, location, format, and options. You can also save a copy of a file while leaving the current file open on your desktop.

(a). Save changes in the current file

Click on File Menu> Save command.

(b). Save a file with a new name and new location

- Click on File > Save As command.
- Type a filename, and choose a location for the file.
- Click Save.

(c). Save a file in a different file format

- Click on File menu > Save As command.
- Select a format from the Format window.
- Specify a filename and location.
- In the Save As dialog box, select saving options and Click on Save button.

10.10 Image selection

There are separate sets of tools to make selections of bitmap and vector data. For example, to select bitmap pixels, you can use the marquee tools or the lasso tools.

To select vector data, you can use the pen or shape tools, which produce precise outlines called paths. You can convert paths to selections or convert selections to paths.

(a). Using the Select menu

You can use many commands in the Select menu to select all pixels, to deselect, or to reselect.



(b). Select all pixels on a layer within the canvas boundaries

- Select the layer in the Layers palette.
- Click on Select menu> All.

(c). Deselect selections

- Click on Select menu> Deselect.
- If you are using the Rectangle Marquee tool, the Elliptical Marquee tool, or the Lasso tool, click anywhere in the image outside the selected area.

(d). Reselect the most recent selection

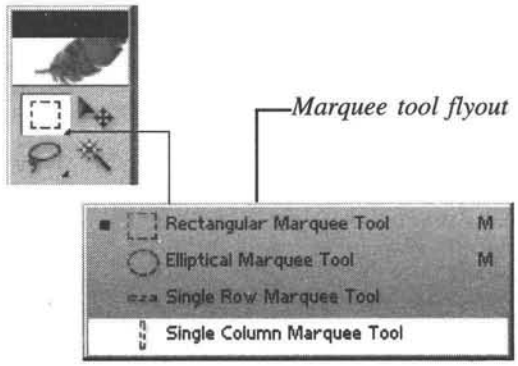
Click on Select menu > Reselect.

(e). Selection by marquee tools

The marquee tools let you select rectangles, ellipses, rounded rectangles and 1-pixel rows and columns. By default, a selection border is dragged from its corner.

1. Select a marquee tool:

- Rectangle Marquee to make a rectangular selection.
- Elliptical Marquee to make an elliptical selection.
- Single Row or Single Column Marquee to define the border as a 1-pixel-wide row or column.



2. In the options bar, specify whether to add a new selection, add to a selection , subtract from a selection , or select an area intersected by other selections .
3. Specify a feathering setting in the options bar. Turn anti-aliasing on or off for the Rounded Rectangle tool or the Elliptical Marquee tool.
4. For the Rectangle tool, the Rounded Rectangle tool, or the Elliptical Marquee tool, choose a style in the options bar:

- Normal to determine marquee proportions by dragging.
- Fixed Aspect Ratio to set a height-to-width ratio. Enter values for the aspect ratio. For example, to draw a marquee twice as wide as it is high, enter 2 for the width and 1 for the height.
- Fixed Size to specify set values for the marquee's height and width. Enter pixel values in whole numbers.
- Keep in mind that the number of pixels needed to create a 1-inch selection depends on the resolution of the image.

5. For aligning your selection to guides, a grid, slices, or document bounds, do one of the following to snap your selection:

   Click on View menu > Snap, or choose View > Snap To and choose a command from the submenu. The marquee selection can snap to a document boundary and more than one Photoshop Extra. This is controlled in the Snap To submenu.

6. Do one of the following to make a selection:

- With the Rectangle tool, the Rounded Rectangle tool, or the Elliptical Marquee tool, drag over the area you want to select.
- Hold down Shift as you drag to constrain the marquee to a square or circle To drag a marquee from its center, hold down Alt key after you begin dragging.

(f). Move a selection or Layer:

1. Click on the Move tool.
2. To activate the Move tool when another tool is selected, hold down Ctrl key.

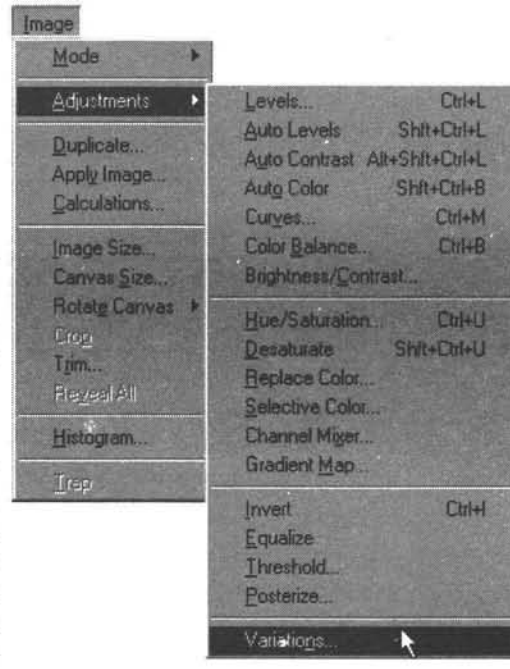
3. Do one of the following:

➢ Move the pointer inside the selection border, and drag the selection to a new position. If you have selected multiple areas, all move as you drag.

➢ Select the layer you want to move. Then drag the layer to a new position.

10.11 Make color and tonal adjustments

1. Use the histogram to check the quality and tonal range of the image.
2. Adjust the color balance to remove unwanted color casts or to correct oversaturated or undersaturated colors.
3. You can choose from the following color adjustment methods:



☞ **Auto Color command**

Quickly corrects the color balance in an image. Although its name implies an automatic adjustment, you can fine tune how the Auto Color command behaves.

☞ **Match Color command**

Matches the color from one photo to another photo, from one layer to another layer, and from a selection in an image to another selection in the same image or different image. This command also adjusts the luminance and color range and neutralizes color casts in an image.

☞ **Color Balance command**

Changes the overall mixture of colors in an image.

☞ **Hue/Saturation command**

Adjusts the hue, saturation, and lightness values of the entire image or of individual color components.

☞ **Replace Color command**

Replaces specified colors in an image with new color values.

☞ **Selective Color command**

Adjusts the amount of process colors in individual color components.

☞ **Channel Mixer command**

Modifies a color channel and makes color adjustments not easily done with other color adjustment tools.

☞ **Levels command**

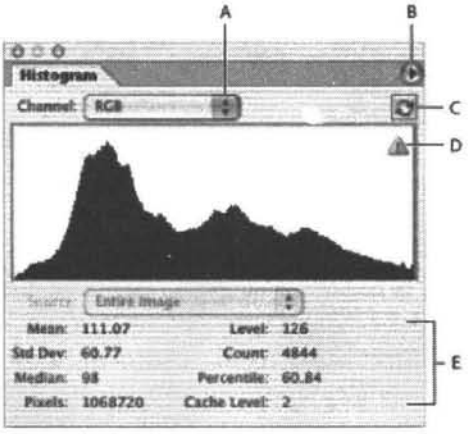
Adjusts color balance by setting the pixel distribution for individual color channels.

- **Curves command**
  Provides up to 14 controls points for highlight, midtone, and shadow adjustments for individual channels.
- **Photo Filter command**
  Makes color adjustments by simulating the effects of photographing with a Kodak Wratten filter in front of a camera lens.

(a). Tone correction

Begin tonal corrections by adjusting the values of the extreme highlight and shadow pixels in the image, setting an overall tonal range for the image. This process is known as setting the highlights and shadows or setting the white and black points. Setting the highlights and shadows typically redistributes the midtone pixels appropriately. However, you may need to adjust your midtones manually. There are many different ways to set an image's tonal range:

1. You can drag sliders along the histogram in the Levels dialog box.



Histogram palette ***A.*** *Channel menu* ***B.*** *Palette menu* ***C.*** *Uncached Refresh button* ***D.*** *Cached Data Warning icon* ***E.*** *Statistics*

2. You can adjust the shape of the graph in the Curves dialog box. This method lets you adjust any point along a 0-255 tonal scale and provides the greatest control over an image's tonal quality.
3. You can assign target values to the highlight and shadow pixels using either the Levels or Curves dialog box. This can help preserve important highlight and shadow details in images being sent to a printing press or laser printer. You might also need to tweak the target values after sharpening.
4. Adjust the tonality in the shadow and highlight areas using the Shadow/Highlight command. This adjustment is especially useful to correct photos, where the subject is silhouetted due to strong backlighting or where the subject is a bit light from being too close to the camera flash.

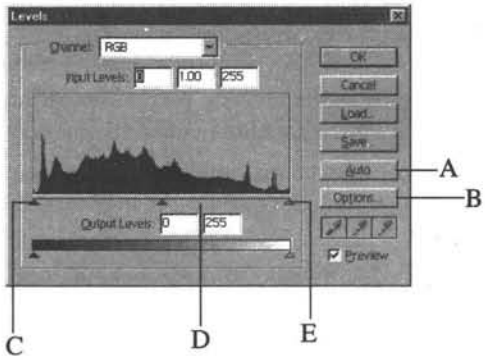
(b). Sharpen the edges of the image

1. As one of the final steps, use the Unsharp Mask filter to sharpen the clarity of edges in the image. The amount of sharpening required for an image varies due to differences in quality produced by different digital cameras and scanners.
2. Use the Output sliders in the Levels dialog box or the Curves dialog box to bring important details in the highlights and shadows into the gamut of an output device, like a desktop printer.

3. Because sharpening increases the contrast of neighboring pixels, it's possible that some pixels in critical areas might become unprintable on the press that you're sending your images to.

(c). Adjust the tonel range

1. Choose Image menu> Adjustments > Levels or Layer menu > New Adjustment Layer > Levels. Click OK in the New Layer dialog box.
2. To adjust tones for a specific color channel, choose an option from the Channel menu.



Levels dialog box ***A.*** *Apply Auto Color Correction* ***B.*** *Open Auto Color Correction Options dialog box* ***C.*** *Shadows* ***D.*** *Midtones* ***E.*** *Highlights*

3. To edit a combination of color channels at the same time, Shift-select the channels in the Channels palette before choosing the Levels command.
4. The Channel menu then displays the abbreviations for the target channels—for example, CM for cyan and magenta.
5. The menu also contains the individual channels for the selected combination. You can only edit spot channels and alpha channels individually. Keep in mind that this method does not work in a Levels adjustment layer.
6. To adjust the shadows and highlights manually, do one of the following:

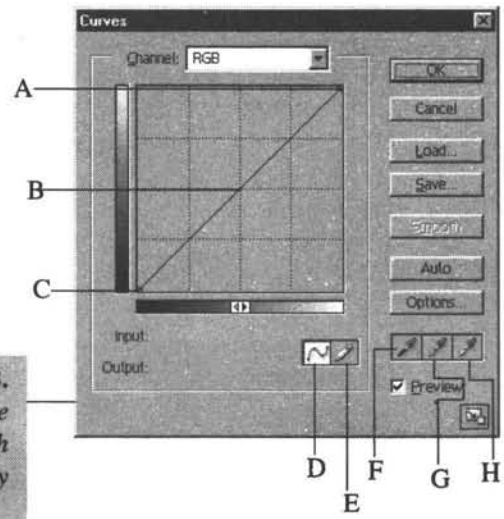
- Drag the black and white Input Levels sliders to the edge of the first group of pixels on either end of the histogram. For example, moving the black point slider to the right at level 5 tells Photoshop to map all the pixels at level 5 and lower to level 0. Similarly, moving the white point slider to the left at level 243 tells Photoshop to map all pixels at level 243 and higher to level 255. The mapping affects the darkest and lightest pixels in each channel. The corresponding pixels in the other channels are adjusted proportionately to avoid altering the color balance.
- Drag the black and white Output Levels sliders to define new shadow and highlight values. You can also enter values directly in the Output Levels text boxes.
- You can also set the white and black points by using the eyedropper tools.
- If your image needs midtone corrections, use the middle Input slider to make a gamma adjustment. Move the middle Input slider to the left makes the overall image lighter. It maps a lower *(darker)* level up to the midpoint level between the Output sliders.
- If the Output sliders are in their default position (0 and 255), the midpoint would be level 128. Move the middle Input slider to the right has the opposite effect, making the image darker.

- Moving the middle slider adjusts the image gamma.
- Click OK.
- The adjusted histogram can be viewed in the Histogram palette.

You can also enter a gamma adjustment value directly in the middle Input Levels text box.

(d). Color and Tone adjustment by curves dialog box

1. Open the Curves dialog box.
2. To adjust the color balance of the image, choose the channel (or channels) you want to adjust from the Channel menu.



Curves dialog box: A. *Highlights* **B.** *Midtones* **C.** *Shadows* **D.** *Adjust curve by adding points* **E.** *Draw a curve with the pencil* **F.** *Set black point* **G.** *Set gray point* **H.** *Set white point*

3. Add a point along the curve by doing one of the following:

- Click directly on the curve.
- Ctrl-click a pixel in the image.

4. Ctrl/Command-clicking pixels in the image is the best way to add points when you want to preserve or adjust specific details in an image.
5. You can add up to 14 control points to the curve.
6. To remove a control point, drag it off the graph, select it and press Delete, or Ctrl-click it. You cannot delete the endpoints of the curve.

- One click adjustments in the Curves dialog box
- Clicking the **Auto** button applies either an Auto Color, Auto Contrast, or Auto Levels correction, depending on the settings in the Auto Color Correction Options dialog box.

(e). Color adjustment by Replace Color command

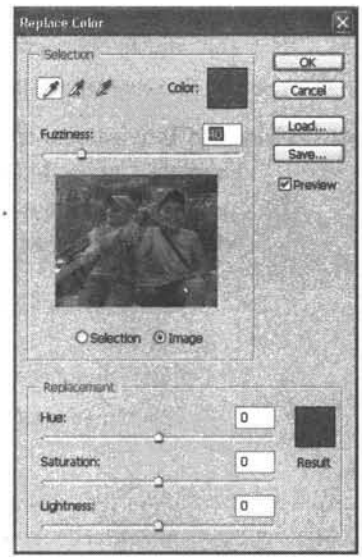
1. Click on Image menu> Adjustments > Replace Color.
2. Select a display option:

- Selection to display the mask in the preview box. Masked areas are black, and unmasked areas are white.
- Image to display the image in the preview box. This option is useful when you are working with a magnified image or have limited screen space.

3. To select the areas exposed by the mask, do one of the following:

☞ Use the Eyedropper tool to click in the image or in the preview box to select the areas exposed by the mask. Shift-click or use the Add to Sample Eyedropper tool to add areas; Alt-click or use the Subtract from Sample Eyedropper tool to remove areas.

☞ Double-click the Selection swatch. Use the Color Picker to target a color to be replaced.



4. Adjust the tolerance of the mask by dragging the Fuzziness slider or entering a value.
5. To change the color of the selected areas, do one of the following:

☞ Drag the Hue, Saturation, and Lightness sliders.

☞ Double-click the Result swatch and use the Color Picker to select the replacement color.

(f). Create a monochrome images from RGB or CMYK images

1. In the Channels palette, select the composite color channel.
2. Do one of the following to open the Channel Mixer dialog box:

☞ Click on Image menu> Adjustments > Channel Mixer.

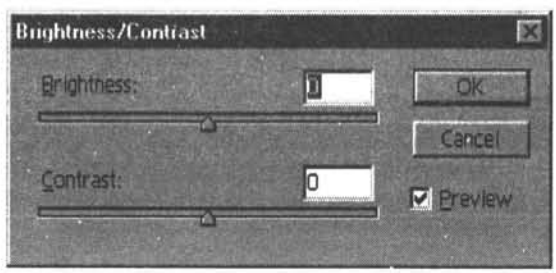
☞ Click on Layer menu> New Adjustment Layer > Channel Mixer. Click OK in the New Layer dialog box.

3. Select the Monochrome option to set Gray as the output channel. This creates a color image that contains only gray values.
4. Use the Source Channels sliders to control the amount of detail and contrast in the images you plan to convert to grayscale.
5. If you select and then deselect the Monochrome option, you can modify the blend of each channel separately, creating a handtinted appearance.
6. Drag the slider or enter a value for the Constant option. This option adjusts the grayscale value of the output channel. Negative values add more black, and positive values add more white.

(g). To use the Brightness/Contrast command

1. Do one of the following:

☞ Click on Image menu> Adjustments > Brightness/Contrast.



- ☞ Click on Layer > New Adjustment Layer > Brightness/Contrast. Click OK in the New Layer dialog box.

2. Drag the sliders to adjust the brightness and contrast.

(h). Color correction by Auto Level command

1. Do one of the following:

- ☞ Click on Image menu> Adjustments > Auto Levels. The application of Auto Levels is automatic with this option. You cannot adjust any of the options in the following steps.
- ☞ Click on Layer menu> New Adjustment Layer and choose either Levels or Curves. Click OK in the New Layer dialog box. Continue with the following steps.

2. In the Levels or Curves dialog box, click the Option button.
3. Select Enhance Per Channel Contrast under Algorithms in the Auto Color Correction Options dialog box.
4. Adjust the amount of shadow and highlight values that are clipped, and adjust the target color for the midtones.
5. Click OK in the two opened dialog boxes to apply Auto Levels.

(i). Color correction by Auto Contrast command

1. Do one of the following:

- ☞ Click on Image menu > Adjustments > Auto Contrast. The application of Auto Contrast is automatic with this option. You cannot adjust any of the options in the following steps.
- ☞ Click on Layer menu> New Adjustment Layer and choose either Levels or Curves. Click OK in the New Layer dialog box. Continue with the following steps.

2. In the Levels or Curves dialog box, click the Option button.
3. Choose the Enhance Monochromatic Contrast option under Algorithms in the Auto Color Correction Options dialog box.
4. Adjust the amount of shadow and highlight values that are clipped, and adjust the target color for the midtones.
5. Click on OK button in the two opened dialog boxes to apply Auto Contrast.

(j). Quick Color correction by Auto Color command

1. Do one of the following:

- ☞ Click on Image menu> Adjustments > Auto Color. The application of Auto Color is automatic with this option. You cannot adjust any of the options in the following steps.
- ☞ Click on Layer menu> New Adjustment Layer and choose either Levels or Curves. Click OK in the New Layer dialog box. Continue with the following steps.

2. In the Levels or Curves dialog box, click the Option button.
3. Select the Find Dark & Light option under Algorithms in the Auto Color Correction Options dialog box.
4. Select the Snap Neutral Midtones option.
5. Adjust the amount of shadow and highlight values that are clipped, and adjust the target color for the midtones.
6. Click OK in the two opened dialog boxes to apply Auto Color.

10.12 Shapes and paths

When you draw in Photoshop, you create vector shapes—mathematically defined lines and curves. You use the drawing tools to create shape layers and work paths. Shapes are resolution-independent—they maintain crisp edges when resized, printed to a PostScript printer, saved in a PDF file, or imported into a vector-based graphics application. You can use shapes to make selections and create libraries of custom shapes with the Preset Manager.

In Photoshop, paths are used for making selections and defining areas of an image. The outline of a shape is a path. Paths are made up of one or more straight or curved segments. Each segment is marked by anchor points, which work like pins holding wire in place.

You can easily change the shape of a path by editing its anchor points. The Paths palette helps you manage paths.

(a). To create a new shape

1. Select a shape tool or a Pen tool. Make sure that the Shape Layers button is selected in the options bar.



Use these option with shapes.

2. To choose the color of the shape, click the color swatch in the options bar, and then choose a color from the Color Picker.
3. If you want to apply a style to the shape, select a preset style from the Style pop-up menu. Set additional tool-specific options.
4. Drag in your image to draw a shape. You can then resize or edit the shape.

(b). To draw multiple shapes in a layer

1. Select the layer to which you want to add shapes.
2. Select a drawing tool and set tool-specific options.
3. Choose one of the following in the options bar:

- Add to Shape Area to add the new area to the existing shapes or path.
- Subtract from Shape Area to remove the overlapping area from the existing shapes or path.
- Intersect Shape Areas to restrict the area to the intersection of the new area and the existing shapes or path.
- Exclude Overlapping Shape Areas to exclude the overlap area in the consolidated new and existing areas.

4. Draw in the image. You can easily switch between drawing tools by clicking a tool button in the options bar.

(c). To select a custom shape

1. Select the Custom Shape tool.
2. Select a shape from the Shape pop-up palette.

(d). To save a shape or path as a custom shape

1. In the Paths palette, select a path—either a vector mask for a shape layer, a work path, or a saved path.

2. Click on Edit menu> Define Custom Shape, and enter a name for the new custom shape in the Shape Name dialog box. The new shape appears in the Shape pop-up palette.
3. To save the new custom shape as part of a new library, select Save Shapes from the pop-up palette menu. You can also use the Preset Manager to manage libraries of custom shapes.

(e). To create a rasterized shape

1. Select a layer. You cannot create a rasterized shape on a vector-based layer.
2. Select a shape tool, and click the Fill Pixels button in the options bar.
3. Set the following options in the options bar:

☞ Mode to control how the shape will affect the existing pixels in the image.

☞ Opacity to determine to what degree the shape will obscure or reveal the pixels beneath it. A shape with 1% opacity appears nearly transparent, while one with 100% opacity appears completely opaque.

☞ Anti-Aliased to blend the shape's edge pixels with the surrounding pixels.

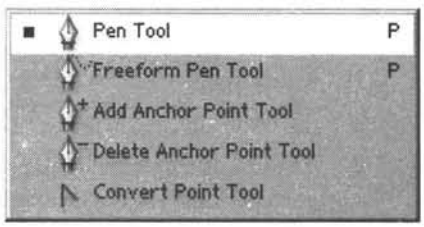
4. Set additional tool-specific options, and draw a shape.

(f). To draw with the Pen tool

1. Select the Pen tool.
2. Set the following tool-specific options:

☞ To add an anchor point when you click a line segment and delete an anchor point when you click it, select Auto Add/Delete in the options bar.

☞ To preview path segments as you draw, click the inverted arrow next to the shape buttons in the options bar, and select Rubber Band.



3. Position the pen pointer where you want to begin to draw, and click to define the first anchor point.
4. Click or drag to set anchor points for additional segments.
5. Complete the path:

☞ To end an open path, Ctrl-click away from the path.

☞ To close a path, position the pen pointer over the first anchor point. A small loop appears next to the pen tip when it is positioned correctly. Click to close the path.

(g). To draw with the Freeform Pen tool

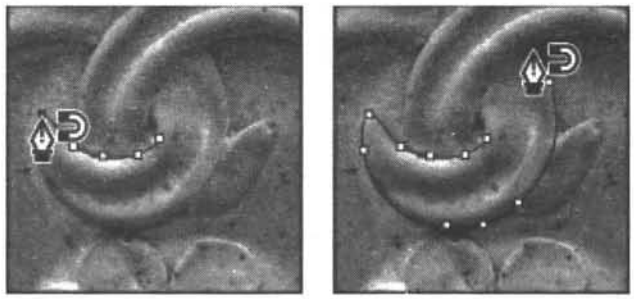
1. Select the Freeform Pen tool.
2. To control how sensitive the final path is to the movement of your mouse or stylus, click the inverted arrow next to the shape buttons in the options bar, and enter a value between 0.5 and 10.0 pixels for Curve Fit. A higher value creates a simpler path with fewer anchor points.
3. Drag the pointer in the image. As you drag, a path trails behind the pointer. When you release the mouse, a work path is created.
4. To continue the existing freehand path, position the pen pointer on an endpoint of the path, and drag.

5. To complete the path, release the mouse. To create a closed path, drag the line to the initial point of the path.

To draw using the magnetic pen options:

1. To convert the Freeform Pen tool to the Magnetic Pen tool, select Magnetic in the options bar, or click the inverted arrow next to the shape buttons in the options bar, select Magnetic, and set the following:

- For Width, enter a pixel value between 1 and 256. The Magnetic Pen detects edges only within the specified distance from the pointer.



- For Contrast, enter a percentage value between 1 and 100 to specify the contrast between pixels required to be considered an edge. Use a higher value for low contrast images.
- For Frequency, enter a value between 0 and 100 to specify the rate at which the Pen sets anchor points. A higher value anchors the path in place more quickly.
- If you are working with a stylus tablet, select or deselect Pen Pressure. When this option is selected, an increase in pen pressure causes the width to decrease.

2. Click in the image to set the first fastening point.
3. To draw a freehand segment, move the pointer or drag along the edge you want to trace.
4. If the border doesn't snap to the desired edge, click once to add a fastening point manually and to keep the border from moving. Continue to trace the edge and add fastening points as needed. If needed, press Delete to remove the last fastening point. To dynamically modify the properties of the Magnetic Pen, do one of the following:

- Alt-drag to draw a freehand path.
- Alt-click to draw straight segments.
- Press the [key to decrease the Magnetic Pen width by 1 pixel; press the] key to increase the pen width by 1 pixel.

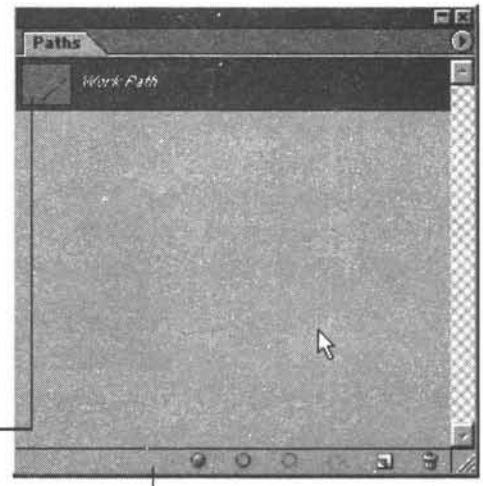
5. Complete the path:

- Press Enter to end an open path.
- Double-click to close the path with a magnetic segment.
- Hold down Alt and double-click to close the path with a straight segment.

10.13 Creating paths

A path is composed of one or more path components—collections of one or more anchor points joined by segments. Because they take up less disk space than pixel-based data, paths can be used for long-term storage of simple masks. Paths can also be used to clip sections of your image for export to an illustration or page-layout application.

The Paths palette lists the name and a thumbnail image of each saved path, the current work path, and the current vector mask. Decreasing the size of thumbnails or turning them off lets you list more paths in the palette, and turning thumbnails off can improve performance. To view a path, you must first select it in the Paths palette.



(a). To display the Paths palette

Click on Window menu > Paths.

(b). To select or deselect a path in the palette

Do one of the following:

- To select a path, click the path name in the Paths palette. Only one path can be selected at a time.
- To deselect a path, click in the blank area of the Paths palette or press Esc.

(b). To change the size of path thumbnails

1. Select Palette Options from the Paths palette menu.
2. Select a size, or select None to turn off the display of thumbnails.

(c). To change a path's stacking order

1. Select the path in the Paths palette.
2. Drag the path up or down in the Paths palette. When the heavy black line appears in the desired location, release the mouse button.

(d). To create a new work path

1. Select a shape tool or a pen tool, and click the Paths button in the options bar.
2. Set tool-specific options, and draw the path.
3. Draw additional path components if desired. You can easily switch between drawing tools by clicking a tool button in the options bar.
4. Choose a path area option to determine how overlapping path components intersect:

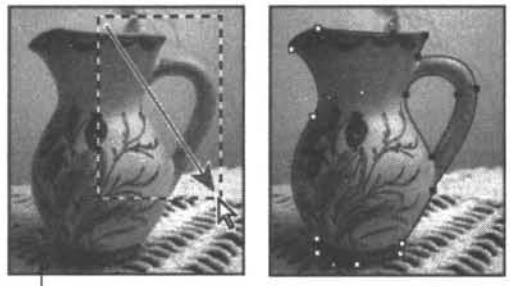
- Add to Path Area to add the new area to overlapping path areas.
- Subtract from Path Area to remove the new area from the overlapping path area.
- Intersect Path Areas to restrict the path to the intersection of the new area and the existing area.
- Exclude Overlapping Path Areas to exclude the overlap area in the consolidated path.

(e). To select a path

Do one of the following:

1. To select a path component (including a shape in a shape layer), select the Path Selection tool, and click anywhere inside the path component. If a path consists of several path components, only the path component under the pointer is selected.

2. To select a path segment, select the Direct Selection tool, and click one of the segment's anchor points or drag a marquee over part of the segment.



Drag a marquee to select segments.

3. To select additional path components or segments, select the Path Selection tool or the Direct Selection tool, and then hold down Shift while selecting additional paths or segments.

(f). To change the overlap mode for the selected path component

Using the Path Selection tool , drag a marquee to select existing path areas, and then choose a shape area option in the options bar:

1. Add to Shape Area to add the path area to overlapping path areas.
2. Subtract from Shape Area to remove the path area from overlapping path areas.
3. Intersect Shape Areas to restrict the area to the intersection of the selected path area and overlapping path areas.
4. Exclude Overlapping Shape Areas to exclude the overlap area.

(g). To show or hide the selected path component

Do one of the following:

1. Click on View menu > Show > Target Path.
2. Click on View menu > Extras. This command also shows or hides a grid, guides, selection edges, annotations, and slices.

(h). To move a path or path component

1. Select the path name in the Paths palette, and use the Path Selection tool to select the path in the image.
2. Drag the path to its new location. If you move any part of a path beyond the canvas boundaries, the hidden part of the path is still available.

(i). To reshape a path component

1. Select the path name in the Paths palette, and use the Direct Selection tool to select an anchor point in the path.
2. Drag the point or its handles to a new location.

(j). To merge overlapping path components

1. Select the path name in the Paths palette, and select the Path Selection tool .
2. Click Combine in the options bar to create a single component from all overlapping components.

(k). To copy a path component or path

Do any of the following:

1. To copy a path component as you move it, select the path name in the Paths palette, and click a path component with the Path Selection tool. Then Alt-drag the selected path.
2. To copy a path without renaming it, drag the path name in the Paths palette to the New Path button at the bottom of the palette.
3. To copy and rename a path, Alt-drag the path in the Paths palette to the New Path button at the bottom of the palette. Or select the path to copy, and choose Duplicate Path from the Paths palette menu. Enter a new name for the path in the Duplicate Path dialog box, and click OK.
4. To copy a path or path component into another path, select the path or path component you want to copy, and click on Edit menu > Copy.

   Then select the destination path, and click on Edit menu> Paste.

(l). To copy path components between two Adobe Photoshop files

1. Open both images.
2. Use the Path Selection tool to select the entire path or the path components in the source image you want to copy.

(m). To copy the path component, do any of the following

1. Drag the path component from the source image to the destination image. The path component is copied to the active path in the Paths palette.
2. In the source image, select the path's name in the Paths palette and click on Edit menu > Copy to copy the path. In the destination image, click on Edit > Paste.

   You can also use this method to combine paths in the same image.
3. To paste the path component into the destination image, select the path component in the source image, and choose Edit > Copy. In the destination image, choose Edit > Paste.

(n). To delete a path component

1. Select the path name in the Paths palette, and click a path component with the Path Selection tool.
2. Press backspace to delete the selected path component.

(o). To fill a path using the current Fill Path settings

1. Select the path in the Paths palette.
2. Click the Fill Path button at the bottom of the Paths palette.

(p). To fill a path and specify options

1. Select the path in the Paths palette.
2. Fill the path:

- Alt-click the Fill Path button at the bottom of the Paths palette.
- Alt-drag the path to the Fill Path button.
- Choose Fill Path from the Paths palette menu. If the selected path is a path component, this command changes to Fill Subpath.

3. Specify an opacity for the fill. To make the fill more transparent, use a low percentage. A setting of 100% makes the fill opaque.

4. Select a blending mode for the fill.
5. The Mode list includes a Clear mode that lets you erase to transparency. You must be working in a layer other than the background to use this option.
6. Select Preserve Transparency to limit the fill to layer areas that contain pixels.
7. Select a Rendering option:

- Feather Radius to define how far inside and outside the selection border the feather edge extends. Enter a value in pixels.
- Anti-aliased to create a finer transition between the pixels in the selection and the surrounding pixels by partially filling the edge pixels of the selection.

8. Click OK.

10.14 Stroking to paint path borders

The Stroke Path command lets you paint the border of a path. The Stroke Path command allows you to create a paint stroke (using the current settings for your painting tools) that follows any path. This is completely different than the Stroke layer effect, which doesn't mimic the effect of any of the painting tools.

(a). To stroke a path using the current Stroke Path settings

1. Select the path in the Paths palette.
2. Click the Stroke Path button at the bottom of the Paths palette. Each click of the Stroke Path button builds up the opacity of the stroke and in some cases makes it look thicker.

(b). To stroke a path and specify options

1. Select the path in the Paths palette.
2. Select the painting or editing tool you want to use to stroke the path. Set the tool options, and specify a brush from the options bar. You must specify the tool's settings before opening the Stroke Path dialog box.

(c). To stroke the path, do one of the following

1. Alt-click the Stroke Path button at the bottom of the Paths palette.
2. Alt-drag the path to the Stroke Path button.
3. Choose Stroke Path from the Paths palette menu. If the selected path is a path component, this command changes to Stroke Subpath.
4. If you did not select a tool in step 2, choose a tool from the Stroke Path dialog box.
5. Click OK.

10.15 Using Paintbrush tool

The Paintbrush tool and the Pencil tool let you paint the current foreground color on an image. The tools create different effects:

1. The Paintbrush tool creates soft strokes of color.
2. The Pencil tool creates hard-edged freehand lines.

(a). To use the Paintbrush tool, Pencil tool

1. Specify a foreground color.
2. Select the Paintbrush tool or Pencil tool.

3. Do the following in the options bar:
- Select a preset brush.
- Specify a blending mode.
- Specify an opacity.
- For the Pencil tool, select Auto Erase to paint the background color over areas containing the foreground color.

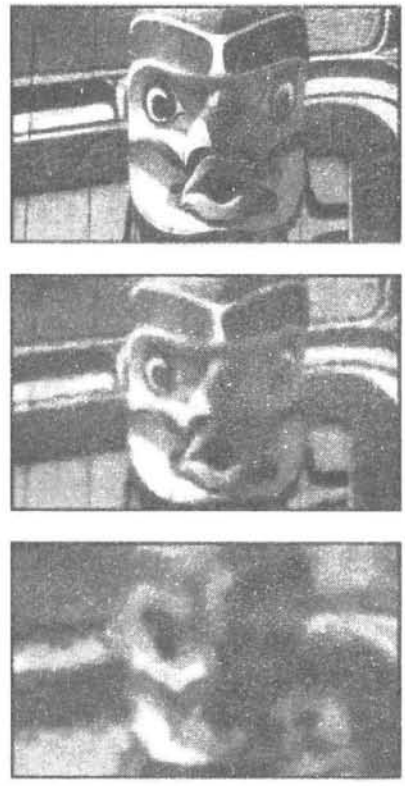
4. Do one or more of the following:
- Drag in the image to paint.
- To draw a straight line, click a starting point in the image. Then hold down Shift, and click an ending point.

(b). To use the Art History Brush tool

In the History palette, click the left column of the state or snapshot to use as the source for the Art History Brush tool. A brush icon appears next to the source history state.

1. Select the Art History Brush tool .
2. Do the following in the options bar:
- Select a brush and set brush options.
- Specify a blending mode and opacity for the paint.
- Choose an option from the Style menu to control the shape of the paint stroke.
- For Area, enter a value to specify the area covered by the paint strokes. The greater the size, the larger the covered area and the more numerous the strokes.
- For Tolerance, enter a value or drag the slider to limit the regions where paint strokes can be applied. A low tolerance lets you paint unlimited strokes anywhere in the image. A high tolerance limits paint strokes to areas that differ considerably from the color in the source state or snapshot.

3. Drag in the image to paint.



A. Original B. Using a small brush C. Using a large brush

(c). To display the Brush pop-up palette

1. Select a painting tool or editing tool.
2. Click the brush sample in the options bar.

(d). To select a preset brush

1. Click a brush in the Brush pop-up palette or Brushes palette.
2. Specify a diameter for the brush by dragging the slider or entering a value. If the brush has a dual tip, both the primary and dual brush tips are scaled.
3. Click Use Sample Size to use the original diameter of the brush tip. This option is available only if the brush tip shape is based on a sample.

(e). To create a new brush tip shape

1. Use any selection tool to select a part of an image to use as a custom brush. Feather should be set to 0 pixels if you want to create a brush with a sharp edge. The brush shape can be up to 2500 pixels by 2500 pixels in size.
2. Select Edit menu> Define Brush Preset.
3. Name the brush, and click OK.

(f). To lock brush tip shape attributes

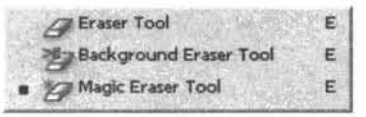
1. To lock a brush tip, click the unlock icon.
2. To unlock the tip, click the lock icon.

10.16 Using the Eraser tool

The Eraser tool changes pixels in the image as you drag through them. If you're working in the background or in a layer with transparency locked, the pixels change to the background color; otherwise, the pixels are erased to transparency. You can also use the eraser to return the affected area to a state selected in the History palette.

(a). To use the Eraser tool

Select the Eraser tool. Do the following in the options bar:

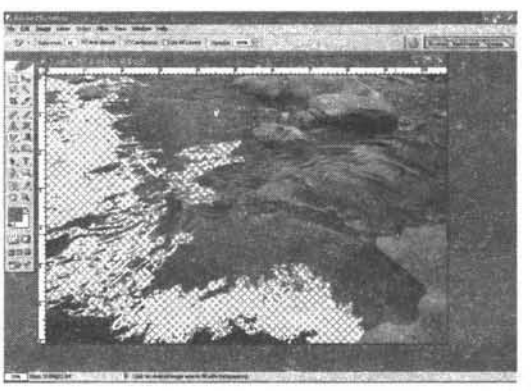


1. Select a brush and set brush options.
2. Select a mode for the eraser—Brush, Pencil, or Block.
3. Specify an opacity to define the strength of the erasure. An opacity of 100% erases pixels completely. A lower opacity erases pixels partially.
4. In Brush mode, specify a flow rate.
5. In Brush mode, click the airbrush button to use the brush as an airbrush. Alternately, select the Airbrush option in the Brushes palette.
6. To erase to a saved state or snapshot of the image, click the left column of the state or snapshot in the History palette, and then select Erase to History in the options bar.
7. Drag through the area you want to erase.

(b). To use the Magic Eraser tool

1. Select the Magic Eraser tool.
2. Do the following in the options bar:

- Enter a tolerance value to define the range of colors that can be erased. A low tolerance erases pixels within a range of color values very similar to the pixel you click. A high tolerance erases pixels within a broader range.
- Select Anti-aliased to smooth the edges of the area you erase.
- Select Contiguous to erase only pixels contiguous to the one you click, or deselect to erase all similar pixels in the image.



- Select Use All Layers to sample the erased color using combined data from all visible layers.
- Specify an opacity to define the strength of the erasure. An opacity of 100% erases pixels completely. A lower opacity erases pixels partially.

3. Click in the part of the layer you want to erase.

(c). To use the Background Eraser tool

1. In the Layers palette, select the layer containing the areas you want to erase.
2. Select the Background Eraser tool .
3. Click the brush sample in the options bar and set brush options in the pop-up palette:

- Choose settings for the Diameter, Hardness, Spacing, Angle, and Roundness options.
- If you're using a pressure-sensitive digitizing tablet, choose options from the Size and Tolerance menus to vary the size and tolerance of the background eraser over the course of a stroke. Choose Pen Pressure to base the variation on the pen pressure. Choose Stylus Wheel to base the variation on the position of the pen thumbwheel. Choose Off to not vary the size or tolerance.

4. Do the following in the options bar:

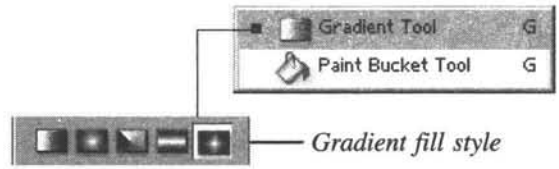
- Choose a Limits mode for erasing: Discontiguous to erase the sampled color wherever it occurs under the brush, Contiguous to erase areas that contain the sampled color and are connected to one another, and Find Edges to erase connected areas containing the sampled color while better preserving the sharpness of shape edges.
- For Tolerance, enter a value or drag the slider. A low tolerance limits erasure to areas that are very similar to the sampled color. A high tolerance erases a broader range of colors.
- Select Protect Foreground Color to prevent the erasure of areas that match the foreground color in the toolbox.
- Choose a Sampling option: Continuous to sample colors continuously as you drag, Once to erase only areas containing the color that you first click, and Background Swatch to erase only areas containing the current background color.

5. Drag through the area you want to erase. The Background Eraser tool pointer appears as a brush shape with a cross hair indicating the tool's hot spot.

10.17 Apply a gradient fill

To fill part of the image, select the desired area. Otherwise, the gradient fill is applied to the entire active layer.

1. Select the Gradient tool.



2. Select a gradient fill in the options bar:

- Click the triangle next to the gradient sample to pick a preset gradient fill.
- Click inside the gradient sample to view the Gradient Editor. Select a preset gradient fill, or create a new gradient fill. Then click OK.

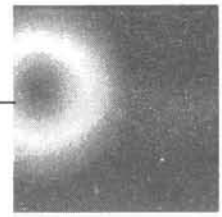
3. Select an option for applying the gradient fill in the options bar:

- Linear gradient to shade from the starting point to the ending point in a straight line.

- Radial gradient to shade from the starting point to the ending point in a circular pattern.
- Angle gradient to shade in a counterclockwise sweep around the starting point.
- Reflected gradient to shade using symmetric linear gradients on either side of the starting point.
- Diamond gradient to shade from the starting point outward in a diamond pattern. The ending point defines one corner of the diamond.



Linear gradient fill



Radial gradient fill

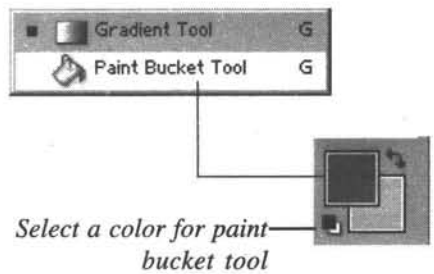
4. Do the following in the options bar:
- Specify a blending mode and opacity for the paint.
- To reverse the order of colors in the gradient fill, select Reverse.
- To create a smoother blend with less banding, select Dither.
- To use a transparency mask for the gradient fill, select Transparency.
5. Position the pointer in the image where you want to set the starting point of the gradient, and drag to define the ending point. To constrain the line angle to a multiple of 45°, hold down Shift as you drag.

(a). To add intermediate colors to a gradient

1. In the Gradient Editor dialog box, click below the gradient bar to define another color stop.
2. Specify the color and adjust the location and midpoint for the intermediate point as you would for a starting or ending point.
3. To remove an intermediate color, drag the color stop down and off the gradient bar, or select the color stop and click the Delete button.

(b). To use the Paint Bucket tool

1. Specify a foreground color.
2. Select the Paint Bucket tool.
3. Specify whether to fill the selection with the foreground color or with a pattern.
4. Specify a blending mode and opacity for the paint.
5. Enter the tolerance for the fill.



Select a color for paint bucket tool

6. The tolerance defines how similar in color a pixel must be to be filled. Values can range from 0 to 255. A low tolerance fills pixels within a range of color values very similar to the pixel you click. A high tolerance fills pixels within a broader range.
7. To smooth the edges of the filled selection, select Anti-aliased.
8. To fill only pixels contiguous to the one you click, select Contiguous; leave unselected to fill all similar pixels in the image.
9. To fill pixels based on the merged color data from all visible layers, select All Layers.

10. Click the part of the image you want to fill. All specified pixels within the specified tolerance are filled with the foreground color or pattern.
11. If you're working on a layer and don't want to fill transparent areas, make sure that the layer's transparency is locked in the Layers palette.

10.18 Filling and stroking selections and layers

Photoshop and ImageReady provide a variety of ways to fill a selection or a layer with colors and patterns. You can also paint a border around a selection or a layer. Layer styles allow you to fill or stroke a selection or layer to create a live editable effect, while you can also paint a fill or border to create a softer effect. To increase the contrast between your image and the surrounding work canvas, you can fill the canvas with a color.

You can fill a selection or layer with the foreground color, the background color, or a pattern. In Photoshop, you can use patterns from the pattern libraries provided or create your own patterns. You can also fill a shape using the Color, Gradient, or Pattern Overlay effects or the Solid Color, Gradient, or Pattern fill layers on the Layers palette. When you use fill layers to fill a selection, you can easily change the type of layer being used.

(a). To fill a selection or a layer with a foreground or background color

1. Specify a foreground or background color.
2. Select the area you want to fill. To fill an entire layer, select the layer in the Layers palette.
3. Click on Edit Menu> Fill to fill the selection or layer. Or to fill a path, select the path and choose Fill Path from the Paths palette menu.
4. In the Fill dialog box, for Use, choose one of the following options or select a Custom Pattern:

- Foreground Color, Background Color, Black, 50% Gray, or White to fill the selection with the specified color.
- Color to fill with a color you select from the Color Picker.
- Pattern to fill the selection with a pattern. Click the inverted arrow next to the pattern sample and select a pattern from the pop-up palette. You can load additional patterns using the pop-up palette menu. Select the name of a library of patterns or choose Load Patterns and navigate to the folder containing the patterns you want to use.

5. History to restore the selected area to a state or snapshot of the image.
6. Specify the blending mode and opacity for the paint.
7. If you're working in a layer and want to fill only areas containing pixels, choose Preserve Transparency.
8. Click the OK button to apply the fill.

(b). To fill the work canvas

1. Set the foreground color you want to use for the canvas.
2. Select the Paint Bucket tool.
3. In the options bar, set Fill to Foreground.

(c). To stroke a selection or layer

1. Specify a foreground color.
2. Select the area or layer you want to stroke.
3. Click on Edit menu> Stroke.

4. In the Stroke dialog box, specify the width of the hard-edged border.
5. For Location, specify whether to place the border inside, outside, or centered over the selection or layer boundaries.
6. Specify an opacity and a blending mode.
7. If you're working in a layer and want to stroke only areas containing pixels, select the Preserve Transparency option.

(d). To stroke a path

1. Select the path in the Paths palette.
2. Choose Stroke Path from the palette menu.
3. In the Stroke Path dialog box, choose a tool to stroke the path.
4. Hold down Shift, and click in the work canvas.

(e). To fill a selection with a pattern

1. Select the part of the image you want to fill.
2. Do one of the following:

☞ Choose Edit > Fill. In the Fill dialog box, for Use, choose Pattern, select a pattern from the pop-up palette, and click OK.

If Pattern is dimmed, you need to load a pattern library before you can select this option.

☞ Select the Paint Bucket tool. In the options bar, choose Pattern from the Fill pop-up menu and select a pattern from the Pattern pop-up palette. Then click to fill the selected area with the pattern.

10.19 Choosing foreground and background colors

Photoshop uses the foreground color to paint, fill, and stroke selections and the background color to make gradient fills and fill in the erased areas of an image. The foreground and background colors are also used by some special effects filters.

You can designate a new foreground or background color using the Eyedropper tool, the Color palette, the Swatches palette, or the Adobe Color Picker. The default foreground color is black, and the default background color is white. (In an alpha channel, the default foreground is white, and the background is black.)

(a). To change the foreground or background color

1. Do one of the following:

☞ To change the foreground color, click the upper color selection box in the toolbox.

☞ To change the background color, click the lower color selection box in the toolbox.

2. Choose a color in the Adobe Color Picker.

(b). To change the spectrum displayed in the color ramp

1. Choose an option from the Color palette menu:

☞ RGB Spectrum, CMYK Spectrum (Photoshop), or Grayscale Ramp to display the spectrum of the specified color model.

☞ Current Colors to display the spectrum of colors between the current foreground color and the current background color.

2. To display only Web-safe colors, choose Make Ramp Web Safe.

3. To change the spectrum of the color ramp quickly, Shift-click in the color ramp until you see the spectrum you want.

(c). To select the foreground or background color

1. To edit the foreground or background color, make sure that its color selection box is active (outlined in black).
2. To make the foreground or background color selection box active, click the box.
3. Do one of the following:

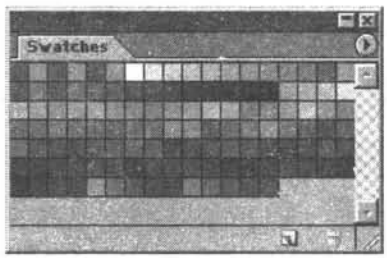
- Drag the color sliders. By default, the slider colors change as you drag. In Photoshop, you can turn off this feature to improve performance by deselecting Dynamic Color Sliders in the General section of the Preferences dialog box.
- Enter values next to the color sliders.
- Click the color selection box, choose a color using the color picker
- Position the pointer over the color ramp (the pointer becomes the eyedropper), and click to sample a color. Alt-click to apply the sample to the nonactive color selection box.

(d). To display the Swatches palette

Click on Window menu > Swatches, or click the Swatches palette tab.

(e). To change how swatches are displayed

Select a display option from the Swatches palette menu:



- Small Thumbnail to display a thumbnail of each swatch. This is the default view.
- Small List to display the name and thumbnail of each swatch.

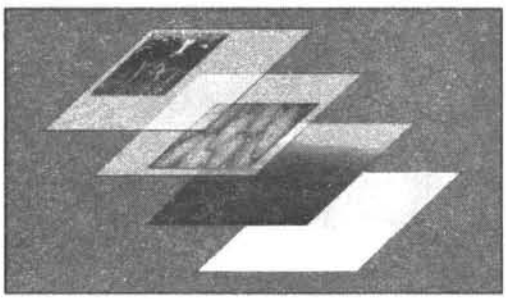
(f). To select a foreground or background color

Do one of the following:

- To choose a foreground color, click a color in the Swatches palette.
- To choose a background color, Ctrl-click a color in the Swatches palette.

10.20 Using the Layers palette

The Layers palette lists all layers, layer sets, and layer effects in an image. You can accomplish many tasks—such as creating, hiding, displaying, copying, and deleting layers—using the buttons in the Layers palette. You can access additional commands and options in the Layers palette menu and the Layers menu.



(a). Displaying the Layers palette

Click on Window menu> Layers. Be sure to move the palette from the dock to enable the palette menu.

(b). Using the Layers palette menu

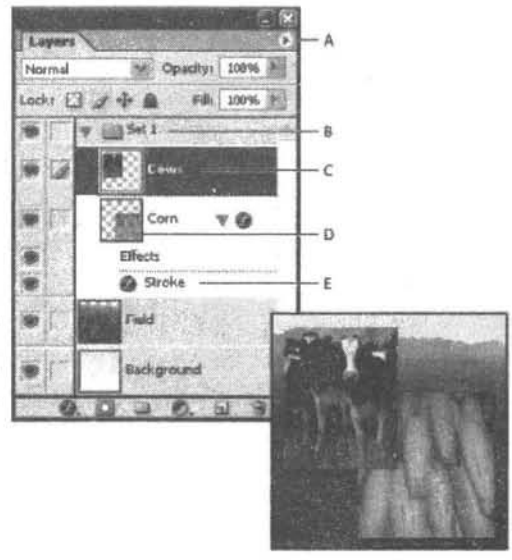
Click the triangle in the upper right corner of the palette to access commands for working with layers.

(c). Changing the size of layer thumbnails

Select Palette Options from the Layers palette menu, and select a thumbnail size.

10.21 Creating layers and layer sets

A new image in Photoshop or ImageReady has a single layer. The number of additional layers, layer effects, and layer sets you can add to an image is limited only by your computer's memory. Layer sets help you organize and manage layers. You can use layer sets to semantically arrange your layers to reduce clutter in the Layers palette. You can nest sets within other sets. You can also use layer sets to apply attributes and masks to multiple layers simultaneously.



Photoshop Layers palette:
A. Layers palette menu
B. Layer set C. Layer
D. Layer thumbnail E. Layer effect

(a). Background layer

When you create a new image with a white background or a colored background, the bottommost image in the Layers palette is Background. An image can have only one background. You cannot change the stacking order of a background, its blending mode, or its opacity. However, you can convert a background to a regular layer.

When you create a new image with transparent content, the image does not have a background layer. The bottommost layer is not constrained like the background layer; you can move it anywhere in the Layers palette, and change its opacity and blending mode.

(b). To convert a background into a layer

1. Double-click Background in the Layers palette, or Click on Layer menu> New > Layer from Background.
2. Set layer options as desired.
3. Click OK.

(c). To convert a layer into a background

1. Select a layer in the Layers palette.
2. Click on Layer menu> New > Background from Layer.

(d). To create a new layer or layer set and specify options

1. Do one of the following:

- Click on Layer menu> New > Layer or choose Layer > New > Layer Set.
- Select New Layer or New Layer Set from the Layers palette menu.
- Alt-click the New Layer button or New Layer Set button in the Layers palette.
- Ctrl-click the New Layer button or New Layer Set button in the Layers palette to add a layer below the currently selected layer.

2. Set layer options, and click OK:

- Name to specify a name for the layer or layer set.
- Use Layer Below to Create Clipping Mask.
- Color to assign a color to the layer or layer set.
- Mode to specify a blending mode for the layer or layer set.
- Opacity to specify an opacity level for the layer or layer set.
- Fill with Mode-neutral color to fill the layer with a preset, neutral color.

(e). To convert a selection into a new layer

1. Make a selection.
2. Do one of the following:

- Click on Layer > New > Layer Via Copy to copy the selection into a new layer.
- Click on Layer > New > Layer Via Cut to cut the selection and paste it into a new layer.

(f). To create a new layer set from linked layers

Click on Layer > New > Layer Set from Linked.

(g). To add new or existing layers to a layer set

Do one of the following:

- Select the layer set in the Layers palette and click the New Layer button
- Drag a layer to the layer set folder.
- Drag a layer set folder into another layer set folder. The layer set and all of its layers move.

(h). To view nested layer sets

1. Open the parent layer set.
2. Do one of the following:

- Ctrl-click the triangle to the left of the folder icon to open or close a set and its layers.
- Alt-click the triangle to open or close a set and the sets nested within it.
- Ctrl + Alt-click to open or close all layers within the set, all sets nested within the set, and the set itself.

(i). To select layers directly in the document window

1. Select the Move tool.

- In the options bar, select Auto Select Layer and click in the document on the layer content you want to select.
- Right-click in the image, and choose a layer from the context menu. The context menu lists all the layers that contain pixels under the current pointer location.

(j). To duplicate a layer or layer set within an image

1. Select a layer or layer set in the Layers palette.
2. Do one of the following:

- Drag the layer or layer set to the New Layer button.
- Choose Duplicate Layer or Duplicate Layer Set from the Layers menu or the Layers palette menu. In Photoshop, enter a name for the layer or layer set, and click OK.

(k). To duplicate a layer or layer set between images

1. Open the source and destination images.

2. In the Layers palette of the source image, select a layer or layer set.
3. Do one of the following:

- Drag the layer or layer set from the Layers palette into the destination image.
- Select the Move tool, and drag from the source image to the destination image. The duplicate layer or layer set appears above the active layer in the Layers palette of the destination image.
- Shift-drag to position the image content in the same location it occupied in the source image or at the center of the document window
- Select Duplicate Layer or Duplicate Layer Set from the Layers menu or the Layers palette menu. Choose the destination document from the Document pop-up menu, and click OK.
- Click on Select menu> All to select all of the pixels on the layer, and click on Edit menu > Copy. Then choose Edit > Paste in the destination image.

(l). To create a new document from a layer or layer set

- Select a layer or layer set in the Layers palette.
- Select Duplicate Layer or Duplicate Layer Set from the Layers menu or the Layers palette menu.
- Select New from the document pop-up menu, and click OK.

(m). To link layers

1. Select a layer or layer set in the Layers palette.
2. Click in the column immediately to the left of any layers you want to link to the selected layer. A link icon appears in the column.

(n). To unlink layers

In the Layers palette, click the link icons to remove the links.

(o). To align the contents of layers

1. Do one of the following:

- To align the content of a layer to a selection border, make a selection in the image. Then select a layer in the Layers palette.
- To align the contents of multiple layers to a selection border, make a selection in the image. Then link the layers you want to align in the Layers palette.
- To align the contents of layers to the content of the active layer, link the layers you want to align to the active layer.

2. Select Layer > Align Linked or Layer > Align To Selection (Photoshop) and choose a command from the submenu. These same commands are available as Alignment buttons in the Move tool options bar:

- Top Edges aligns the top pixel on the linked layers to the top pixel on the active layer or the top edge of the selection border.
- Vertical Centers aligns the vertical center pixel on the linked layers to the vertical center pixel on the active layer or the vertical center of the selection border.
- Bottom Edges aligns the bottom pixel on the linked layers to the bottom pixel on the active layer or the bottom edge of the selection border.
- Left Edges aligns the left pixel on the linked layers to the left pixel on the active layer or the left edge of the selection border.

- Horizontal Centers aligns the horizontal center pixel on the linked layers to the horizontal center pixel on the active layer or the horizontal center of the selection border.
- Right Edges aligns the right pixel on the linked layers to the right pixel on the active layer or the right edge of the selection border.

(p). To lock all properties of a layer or layer set

1. Select a layer or layer set.
2. Click the Lock All option in the Layers palette.

(q). To partially lock a layer

1. Select a layer.
2. Click one or more lock options in the Layers palette.
3. Select one or more lock options:

- Lock Transparency to confine editing to the opaque portions of the layer. This option is equivalent to the Preserve Transparency option in earlier versions of Photoshop.
- Lock Image to prevent modification of the layer's pixels using the painting tools.
- Lock Position to prevent the layer's pixels from being moved.

(r). To apply lock options to all linked layers or all layers in a layer set

1. Select a linked layer or a layer set.
2. Choose Lock All Linked Layers or Lock All Layers in Set from the Layers menu or the Layers palette menu.
3. Select lock options, and click OK.

10.22 Deleting layers

Deleting layers that you no longer need reduces the size of your image file.

(a). To delete a layer or layer set

1. Select a layer or layer set in the Layers palette.
2. Do one of the following:

- To delete the layer or layer set with confirmation, click the Trash button. Alternately, choose Delete Layer or Delete Layer Set from the Layers menu or the Layers palette menu.
- To delete the layer or layer set without confirmation, drag it to the Trash button or Alt-click on the Trash button.

(b). To delete linked layers

Do one of the following:

- To delete the linked layers with confirmation, choose Delete Linked Layers from the Layers menu or the Layers palette menu. Alternately, Ctrl-click on the Trash button.
- To delete the linked layers without confirmation, Ctrl-Alt-click on the Trash button.

(c), To delete hidden layers

Select Delete Hidden Layers from the Layers menu or the Layers palette menu.

10.23 Merging and stamping layers

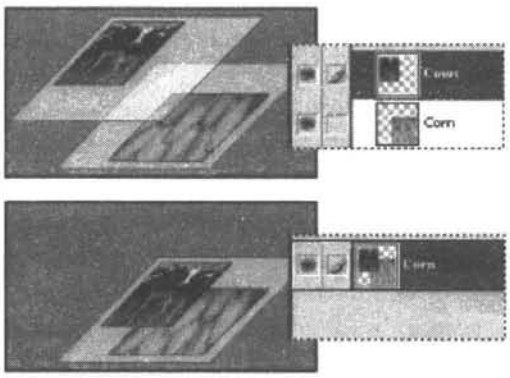
When you have finalized the content of layers, you can merge them to create partial versions of your composite image. This helps you manage the size of your image files. When you merge layers, the data on the top layers replaces the data it overlaps on the lower layers. The intersection

of all transparent areas in the merged layers remains transparent. You cannot use an adjustment layer or fill layer as the target layer for a merge. In addition to merging layers, you can stamp layers.

Stamping allows you to merge the contents of more than one layer into a target layer while leaving the other layers intact. Typically, the selected layer will stamp down to the layer below it. When you save a merged document, you cannot revert back to the unmerged state; the layers are permanently merged.

(a). To merge two layers or layer sets

1. Position the layers or layer sets you want to merge next to each other in the Layers palette, and make sure that the visibility for both items is enabled.



Before and after merging two layers

2. Select the top item in the pair.
3. Do one of the following:

- If the top item is a layer, choose Merge Down from the Layers menu or the Layers palette menu.
- If the top item is a layer set, choose Merge Layer Set from the Layers menu or the Layers palette menu.

(b). To stamp layers

1. Position the layer you want to stamp to above the layer you want to stamp from, and make sure that the visibility for both items is enabled.
2. Select the top item in the pair.
3. Press Ctrl+Alt+E.
4. The selected layer is stamped with the contents of the other layer.

(c). To stamp linked layers

Select one of the linked layers, and press Ctrl+Alt+E. The selected layer is stamped with the contents from the other linked layers.

(d). To stamp all visible layers

Select the layer or layer set that you want to contain the new contents, and press Shift+Ctrl+Alt+E. Alternately, you can hold down Alt and click on Layer menu> Merge Visible. The modified Merge command merges all the visible data into the current target layer.

10.24 Flattening all layers

In a flattened image, all visible layers are merged into the background, which greatly reduces

the file size. Flattening an image discards all hidden layers and fills the remaining transparent areas with white. In most cases, you won't want to flatten a file until you have finished editing the individual layers.

(a). To flatten an image

1. Make sure that all the layers you want to keep are visible.
2. Click on Layer menu> Flatten Image, or choose Flatten Image from the Layers palette menu.

(b). Setting layer opacity

A layer's opacity determines to what degree it obscures or reveals the layer beneath it. A layer with 1% opacity appears nearly transparent, while one with 100% opacity appears completely opaque.

(c). To specify opacity for a layer or layer set

1. Select a layer or layer set in the Layers palette.
2. Do one of the following:

- In the Layers palette, enter a value in the Opacity text box or drag the Opacity pop-up slider.
- Click on Layer menu> Layer Style > Blending Options. Enter a value in the Opacity text box or drag the Opacity pop-up slider.
- Select the Move tool and type a number on your keyboard for the percentage of opacity for the selected layer.

You cannot change the opacity of a background layer or a locked layer. You can, however, convert a background layer to a regular layer that does support transparency.

To view blending options for a text layer, click on Layer menu > Layer Style > Blending Options, or choose Blending Options from the Add a Layer Style button at the bottom of the Layers palette menu.

10.25 Choosing a blending mode

A layer's blending mode determines how its pixels blend with underlying pixels in the image. You can create a variety of special effects using blending modes. By default, the blending mode of a layer set is Pass Through, which means that the layer set has no blending properties of its own. When you choose a different blending mode for a layer set, you effectively change the order in which the entire image is composited.

All of the layers in the layer set are composited first. The composited layer set is then treated as a single image and blended with the rest of the image using the selected blending mode. Thus, if you choose a blending mode other than Pass Through for the layer set, none of the adjustment layers or layer blending modes inside the layer set will apply to layers outside the set.

(a). To specify a blending mode for a layer or layer set

1. Select a layer or layer set in the Layers palette.
2. Select a blending mode:

- In the Layers palette, choose an option from the Blend Mode pop-up menu.
- Click on Layer menu > Layer Style > Blending Options, and then choose an option from the Blend Mode pop-up menu.

10.26 Masking layers

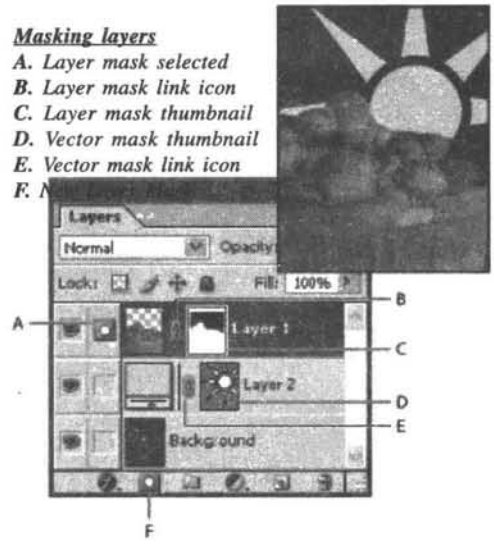
You can use masks to protect sections of layers from being edited and to show or hide sections of an image. Masks control how different areas within a layer or layer set are hidden and revealed. By making changes to the mask, you can apply a variety of special effects to the layer without actually affecting the pixels on that layer. You can then apply the mask and make the changes permanent or remove the mask without applying the changes.

(a). There are two types of masks

- Layer masks are resolution-dependent bitmap images that are created with the painting or selection tools.
- Vector masks are resolution independent and are created with the Pen or Shape tools.

In the Layers palette, both the layer and vector masks appear as an additional thumbnail to the right of the layer thumbnail. For the layer mask, this thumbnail represents the grayscale channel that is created when you add the layer mask. The vector mask thumbnail represents a path that clips out the contents of the layer.

You can obscure an entire layer or layer set, or just a selected part of it, using a layer mask. You can also edit a layer mask to add or subtract from the masked region. A layer mask is a grayscale image, so what you paint in black will be hidden, what you paint in white will show, and what you paint in gray shades will show in various levels of transparency.



Masking layers
A. Layer mask selected
B. Layer mask link icon
C. Layer mask thumbnail
D. Vector mask thumbnail
E. Vector mask link icon
F.

(b). To add a mask that shows or hides the entire layer

1. Click on Select menu > Deselect to clear any selection borders in the image.
2. In the Layers palette, select the layer or layer set to which to add a mask.
3. Do one of the following:

- To create a mask that reveals the entire layer, click the New Layer Mask button in the Layers palette, or choose Layer > Add Layer Mask > Reveal All.
- To create a mask that hides the entire layer, Alt click on the New Layer Mask button, or choose Layer > Add Layer Mask > Hide All.

(c). To add a mask that shows or hides a selection

1. In the Layers palette, select the layer or layer set to which to add a mask.
2. Select the area in the image, and do one of the following:

- Click the New Layer Mask button in the Layers palette to create a mask that reveals the selection.
- Choose Layer > Add Layer Mask > Reveal Selection or Hide Selection.

(d). To edit a layer mask

1. Click the layer mask thumbnail in the Layers palette to make it active.

2. Select any of the editing or painting tools.
3. Do one of the following:

☞ To subtract from the mask and reveal the layer, paint the mask with white.

☞ To make the layer partially visible, paint the mask with gray.

☞ To add to the mask and hide the layer or layer set, paint the mask with black.

4. To edit the layer instead of the layer mask, select it by clicking its thumbnail in the Layers palette. The paintbrush icon appears to the left of the thumbnail to indicate that you are editing the layer.
5. To paste a copied selection into a layer mask, Alt-click on the layer mask thumbnail in the Layers palette to select and display the mask channel.
6. Click on Edit menu> Paste, drag the selection in the image to produce the desired masking effect, and choose Select > Deselect. Click the layer thumbnail in the Layers palette to deselect the mask channel.

(e). To select and display the layer mask channel

Do one of the following:

☞ Alt-clickon the layer mask thumbnail to view only the grayscale mask. The eye icons in the Layers palette are dimmed because all layers or layer sets are hidden. To redisplay the layers, Alt-click or Option-click the layer mask thumbnail, or click an eye icon.

☞ Hold down Alt+Shift and click the layer mask thumbnail to view the mask on top of the layer in a rubylith masking color. Hold down Alt+Shift or Option+Shift, and click the thumbnail again to turn off the color display.

(f). To disable or enable a layer mask

1. Do one of the following:

☞ Shift-click the layer mask thumbnail in the Layers palette.

☞ Select the layer with the layer mask you want to disable or enable, and choose Layer > Disable Layer Mask or Layer > Enable Layer Mask.

2. A red X appears over the mask thumbnail in the Layers palette when the mask is disabled, and the layer's content appears without masking effects.

(g). To change the rubylith display for a layer mask

1. Do one of the following:

☞ Alt-click on the layer mask thumbnail to select the layer mask channel; then double-click the layer mask thumbnail.

☞ Double-click the layer mask channel in the Channels palette.

2. To choose a new mask color, in the Layer Mask Display Options dialog box, click the color swatch, and choose a new color.
3. To change the opacity, enter a value between 0% and 100%.
4. Both the color and opacity settings affect only the appearance of the mask and have no effect on how underlying areas are protected. For example, you might want to change these settings to make the mask more easily visible against the colors in the image.
5. Click OK.

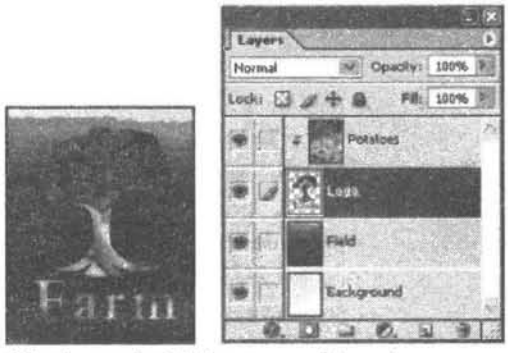
10.27 Creating clipping masks

You can use the content of a layer to mask the layers above it. The transparent pixels of the

bottom or base layer mask out the content of layers above it that are part of a clipping mask. For example, you might have a shape on one layer, a texture on the overlying layer, and some text on the topmost layer.

If you define all three layers as part of a clipping mask, the texture and the text appear only through the shape on the base layer, and take on the opacity of the base layer.

Note that only successive layers can be included in a clipping mask. The name of the base layer in the mask is underlined, and the thumbnails for the overlying layers are indented. Additionally, the overlying layers display a clipping mask icon.



Clipping mask with Potatoes and Logo layers

The Blend Clipped Layers as Group option in the Layer Style dialog box determines whether the blending mode of the base affects the whole group or just the base.

(a). To create a clipping mask

1. Do one of the following:

- Hold down Alt key and position the pointer over the line dividing two layers in the Layers palette and click.
- Select a layer in the Layers palette, and choose Layer > Create Clipping Mask.
- Link the desired layers in the Layers palette Then choose Layer > Create Clipping Mask from Linked.

2. The clipping mask is assigned the opacity and mode attributes of the bottommost layer in the group.

(b). To remove a layer from a clipping mask

1. Do one of the following:

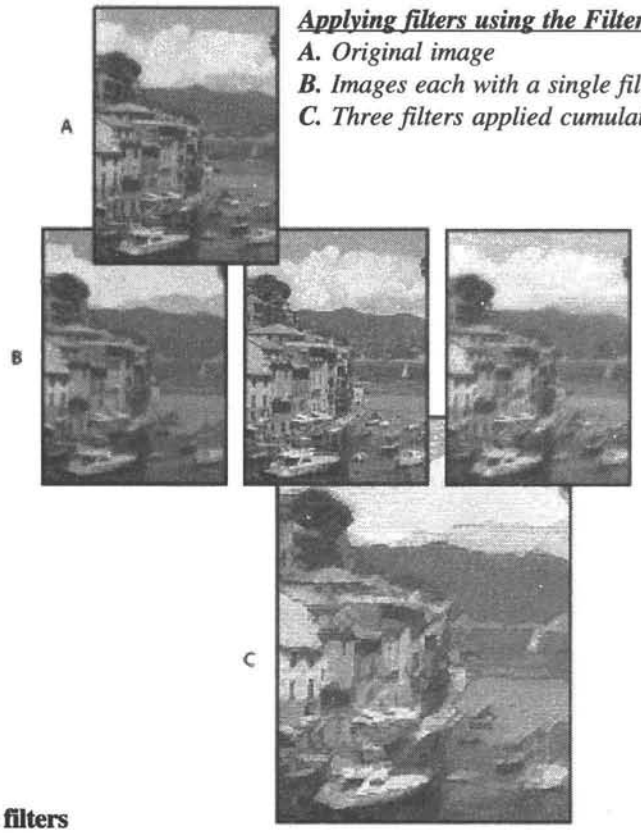
- Hold down Alt key and position the pointer over the line separating two grouped layers in the Layers palett and click.
- In the Layers palette, select a layer in the clipping mask, and choose Layer > Release Clipping Mask. This command removes the selected layer and any layers above it from the clipping mask.

10.28 Using Filters in Photoshop

To use a filter, choose the appropriate submenu command from the Filter menu. These guidelines can help you in choosing filters:

- Filters are applied to the active, visible layer or a selection.
- Most filters can be applied cumulatively using the Filter Gallery. All filters can be applied individually.
- Filters cannot be applied to Bitmap-mode or indexed-color images.
- Some filters work only on RGB images.
- All filters can be applied to 8-bit images. Only the following filters can be applied to 16-bit images: Blur, Average Blur, Blur More, Gaussian Blur, Motion Blur, Noise, Add Noise, Despeckle, Dust & Scratches, Median, Sharpen, Sharpen Edges, Sharpen More, Unsharp Mask, Stylize, Emboss, Find Edges, and Solarize.

☞ Some filters are processed entirely in RAM. If all your available RAM is used to process a filter effect, you may get an error message.



Applying filters using the Filter Gallery:
A. *Original image*
B. *Images each with a single filter applied*
C. *Three filters applied cumulatively*

(a). To apply filters

1. Do one of the following:

☞ To apply a filter to an entire layer, make sure that the layer is active or selected.

☞ To apply a filter to an area of a layer, select that area.

2. Choose Filter > Filter Gallery.
3. To apply a filter, click the filter's name. You may need to click the inverted triangle next to the filter's category to see a list of the filters.
4. Enter values or select options for the filter you've selected.
5. Do any of the following:

☞ Choose additional filters to apply.

☞ Rearrange applied filters.

☞ Remove applied filters.

6. When you're satisfied, click the OK button.

(b). Filter performance

Some filter effects can be memory-intensive, especially when applied to a high-resolution image. You can use these techniques to improve performance:

☞ Try out filters and settings on a small portion of an image.

☞ Apply the effect to individual channels—for example, to each RGB channel—if the image is large and you're having problems with insufficient memory. *(With some filters, effects*

vary if applied to the individual channel rather than the composite channel, especially if the filter randomly modifies pixels.)

- Free up memory before running the filter by using the Purge command.
- Allocate more RAM to Photoshop. If necessary, exit other applications to make more memory available to Photoshop.
- Try changing settings to improve the speed of memory-intensive filters, such as Lighting Effects, Cutout, Stained Glass, Chrome, Ripple, Spatter, Sprayed Strokes, and Glass filters.
- If you plan to print to a grayscale printer, convert a copy of the image to grayscale before applying filters. However, applying a filter to a color image and then converting to grayscale may not have the same effect as applying the filter to a grayscale version of the image.

10.29 Printing in Photoshop

Whether you are printing an image on your desktop printer or sending it to a prepress facility, knowing a few basics about printing will make the print job go more smoothly and help ensure that the finished image appears as intended. For most users, printing a file means that the Adobe Photoshop application sends the image to an inkjet printer to print a photograph. Photoshop can send your image to a variety of printing devices to be printed directly onto paper or to be converted to a positive or negative image on film. In the latter case, the film can be used to create a master plate for printing by a mechanical press.

(a). Types of images

The simplest types of images, such as line art, use only one color in one level of gray. A more complex image, such as a photograph, has color tones that vary within the image. This type of image is known as a continuous-tone image.

(b). Halftoning

To create the illusion of continuous tones when printed, images are broken down into a series of dots. When printing photos on a printing press, this process is called halftoning. Varying the sizes of the dots in a halftone screen creates the optical illusion of variations of gray or continuous color in the image.

(c). Color separation

Artwork that will be commercially reproduced and that contains more than a single color must be printed on separate master plates, one for each color. This process is called color separation and most commonly uses cyan, yellow, magenta, and black (CMYK) inks. In Photoshop, you can adjust how the various plates are generated.

(d). Quality of detail

The detail in a printed image results from a combination of resolution and screen frequency. The higher an output device's resolution, the finer (higher) a screen ruling you can use. Many inkjet printer drivers offer simplified print settings for choosing higher-quality printing.

(e). Printing by a desktop printer

Unless you work in a commercial printing company or service bureau, you're probably printing images on a desktop printer—such as an inkjet, dye sublimation, or laser printer—and not to an image setter. Photoshop lets you control how your image will print.

Because your monitor displays an image using light and a desktop printer reproduces an image using inks, dyes, or pigments, it is impossible for a desktop printer to reproduce all the colors that can be displayed on a monitor. However, by incorporating certain procedures into your workflow,

you can achieve predictable results when printing your images on a desktop printer. Here are some issues to consider when working with an image that you intend to print:

- If your image is in RGB mode, do not convert the document to CMYK mode when printing to a desktop printer. Work entirely in RGB mode.
- If you want a preview of what your image might look like on any device for which you have a profile, use the Proof Colors command.
- For accurate color reproduction between the screen and the printed page, it's absolutely necessary to incorporate color management into your workflow. You must work with a monitor that is calibrated and characterized. It's also necessary that you have a custom profile for the combination of your printer and the paper you're printing on. Using the profile supplied with your printer will only give average results (*although the results are better than using no profiles at all*).

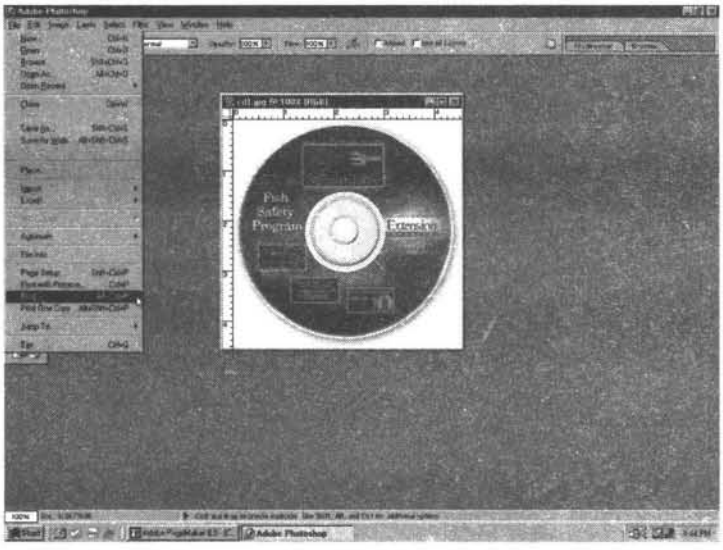
10.30 Printing images

Photoshop provides the following printing commands:

- Page Setup and Print display options that are determined by your printer, print drivers, and operating system.
- Print with Preview displays Photoshop's printing, output, and color management options.
- Print One Copy prints one copy of a file without displaying a dialog box.

(a). To print an image with its current options

- Click on File menu> Print, and click Print or OK.



- To print one copy of a file without displaying a dialog box, choose File > Print One Copy.

(b). To set printer and page setup options

1. Choose File > Page Setup or File > Print.
2. Select a printer from the pop-up list at the top of the dialog box.
3. Set additional options, such as paper size and layout, as desired. The available options depend on your printer, print drivers, and operating system.

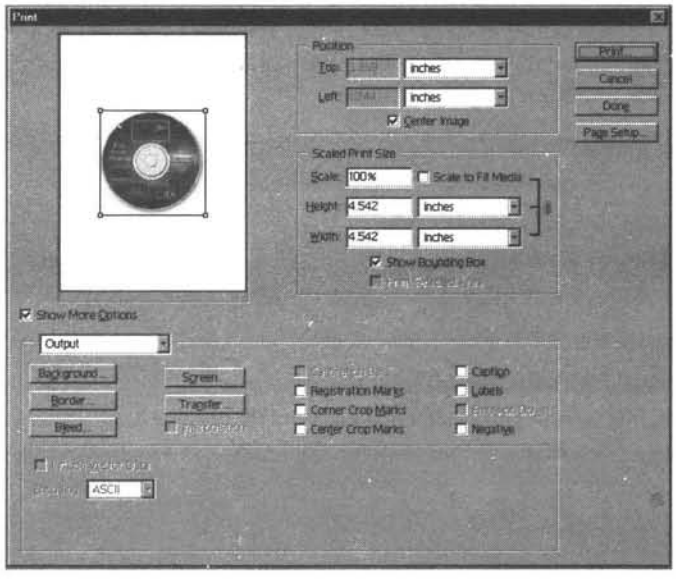
If you plan to scale the printed image, choose the Print with Preview command and use the scaling options in the Print dialog box rather than the Page Setup dialog box.

The Print dialog box is more helpful because it shows you a preview of the scaled image. Also, you don't want to set the scaling options in both the Page Setup and Print dialog boxes. This applies scaling twice, and the resulting image may not print at the size you intended.

(c). To reposition an image on the paper

Choose File > Print with Preview, and do one of the following:

- Select the Center Image option to center the image in the printable area.



- Deselect the Center Image option and then enter values for Top and Left to position the image numerically.
- Deselect the Center Image option and then drag the image in the preview area.

(d). To scale the print size of an image

Choose File > Print with Preview, and do one of the following:

- Click Scale to Fit Media to fit the image within the printable area of the selected paper.
- Enter values for Height and Width to rescale the image numerically.
- Select Show Bounding Box, and drag a bounding box handle in the preview area to achieve the desired scale.

(3). To print vector data

Choose File > Print with Preview.

- Select Show More Options, and choose Output from the pop-up menu.
- Select the Include Vector Data option. If necessary, you can choose an encoding algorithm from the Encoding pop-up menu.

10.31 Preparing images for press

Generally, your workflow depends on the capabilities of the prepress facility. Before you begin a workflow for commercial printing, you need to contact the people that will be outputting the

file and find out what they want you to do. For example, they may not want you to convert to CMYK at any point because they have specific settings that they need to use. Here are some possible scenarios for preparing your image files to achieve predictable printing results:

1. Work entirely in RGB mode and make sure the image file is embedded with the RGB working space profile. If your printer or prepress person uses a color management system, he or she should be able to use your file's profile to make an accurate conversion to CMYK for producing the film and printing plates.
2. Work in RGB mode until you finish with your image editing. Then convert the image to CMYK mode and make any additional color and tonal adjustments. Especially check the highlight and shadow areas of the image. Use the Levels, Curves, or Hue/Saturation command to make corrections. These adjustments should be very minor. Then send the CMYK file to the professional printer.
3. Place your RGB or CMYK image in Adobe InDesign, Adobe Illustrator, or Adobe PageMaker. In general, most images printed on a commercial press are not printed directly from Photoshop but from a page-layout program like Adobe InDesign or a print-savvy program like Adobe Illustrator.
4. Here are a few issues to keep in mind when working on an image intended for commercial printing:

- If you know the characteristics of your printer's press, you can specify the highlight and shadow output to preserve certain details.
- If you print an image on a desktop printer in order to preview what the final printed piece will look like, keep in mind that there are differences between a desktop printer and a commercial printing press. You may find that the resulting images do not look alike. A professional color proof gives a more accurate preview of the final printed piece.
- If you have a profile from the print house, you could choose it with the Proof Setup command then view a soft proof using the Proof Colors command. This method gives you a preview on your monitor of the final printed piece.

(a). To set output options

1. Click on File menu> Print with Preview.
2. Select Show More Options, and choose Output from the pop-up menu.
3. Set one or more of the following options:

Background

Lets you select a background color to be printed on the page outside the image area. For example, a black or colored background may be desirable for slides printed to a film recorder. To use this option, click Background, and then select a color from the Color Picker dialog box. This is a printing option only; it does not affect the image itself.

Border

Lets you print a black border around an image. Type in a number and choose a unit value to specify the width of the border.

Bleed

Lets you print crop marks inside rather than outside the image. Use this option when you want to trim the image within the graphic. Type a number and choose a unit value to specify the width of the bleed.

Screen

Lets you set the screen frequency and dot shape for each screen used in the printing process.

Transfer

Lets you adjust the transfer functions, traditionally used to compensate for dot gain or dot loss that may occur when an image is transferred to film. This option is recognized only when you print directly from Photoshop, or when you save the file in EPS format and print to a PostScript printer. Generally, it's best to adjust for dot gain using the settings in the CMYK Setup dialog box. Transfer functions are useful, however, when compensating for a poorly calibrated output device.

Interpolation

Reduces the jagged appearance of a low-resolution image by automatically resampling up while printing. However, resampling may reduce the sharpness of the image quality. Some PostScript Level 2 (or higher) printers have interpolation capability. If your printer doesn't, this option has no effect.

Calibration Bars

Prints an 11-step grayscale, a transition in density from 0 to 100% in 10% increments. With a CMYK color separation, a gradient tint bar is printed to the left of each CMY plate, and a progressive color bar to the right.

Registration Marks

Prints registration marks on the image (including bull's-eyes and star targets). These marks are used primarily for aligning color separations.

Corner Crop Marks

Prints crop marks where the page is to be trimmed. You can print crop marks at the corners.

Center Crop Marks

Prints crop marks where the page is to be trimmed. You can print crop marks at the center of each edge.

Description

Prints any description text entered in the File Info dialog box up to about 300 characters.

Labels

Prints the filename above the image.

Emulsion Down

Makes type readable when the emulsion is down that is, when the photosensitive layer on a piece of film or photographic paper is facing away from you.

Normally, images printed on paper are printed with emulsion up, with type readable when the photosensitive layer faces you. Images printed on film are often printed with emulsion down.

Negative

Prints an inverted version of the entire output, including all masks and any background color. Unlike the Invert command in the Image menu, the Negative option converts the output, not the on-screen image, to a negative. If you print separations directly to film, you probably want a negative, although in many countries film positives are common. Check with your print shop to determine which is required.

To determine the emulsion side, examine the film under a bright light after it has been developed. The dull side is the emulsion; the shiny side is the base. Check whether your print shop requires film with positive emulsion up, negative emulsion up, positive emulsion down, or negative emulsion down.

(b). Duotones

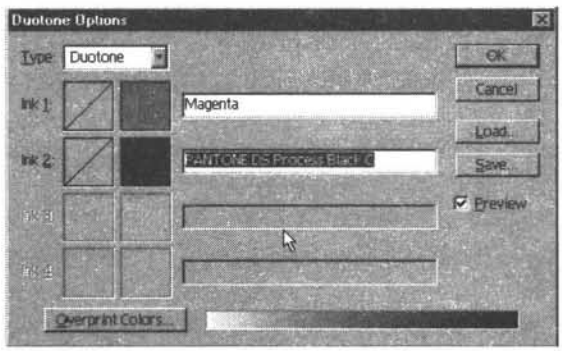
Duotones are used to increase the tonal range of a grayscale image. Although a grayscale reproduction can display up to 256 levels of gray, a printing press can reproduce only about 50 levels of gray per ink. This means that a grayscale image printed with only black ink can look significantly coarser than the same image printed with two, three, or four inks, each individual ink reproducing up to 50 levels of gray.

Sometimes duotones are printed using a black ink and a gray ink—the black for shadows and the gray for midtones and highlights. More frequently, duotones are printed using a colored ink for the highlight color. This technique produces an image with a slight tint to it and significantly increases the image's dynamic range. Duotones are ideal for two-color print jobs with a spot color used for accent.

Because duotones use different color inks to reproduce different gray levels, they are treated in Photoshop as single-channel, 8-bit, grayscale images. In Duotone mode, you do not have direct access to the individual image channels. Instead, you manipulate the channels through the curves in the Duotone Options dialog box.

To convert an image to duotone:

1. Convert the image to grayscale by choosing Image > Mode > Grayscale. Only 8-bit grayscale images can be converted to duotones.
2. Click on Image > Mode > Duotone.
3. In the Duotone Options dialog box, select Preview to view the effects of the duotone settings on the image.



4. Select Monotone, Duotone, Tritone, or Quadtone for Type.
5. To specify ink colors, click the color box (the solid square) for an ink. Then use the Color Picker or click the Custom button in Color Picker dialog box to open the Custom Colors dialog box to select an ink.
6. Click the curve box next to the color ink box and adjust the duotone curve for each ink color.
7. Set overprint colors, if necessary.
8. Click OK.

EXERCISE

1. Write the main features of Adobe Photoshop CS?
2. What do you understand by History palette?
3. How to create new image in Photoshop?
4. Explain the process of saving image files?
5. What do you mean by Image selection?
6. How to select all pixels on a layer within the canvas boundaries?
7. Explain the process of deselect selections?
8. How to reselect the most recent selection?
9. Explain the procedure of selection by marquee tools?
10. What do you mean by Tone correction?
11. Write the process of Sharpen the edges of the image?
12. How to create a monochrome images from RGB or CMYK images?
13. Explain the use of Brightness/Contrast command?
14. How to create a new shape?
15. Write the procedure of display the Paths palette?
16. How to select a path?
17. How to change the overlap mode for the selected path component?
18. Explain the procedure of filling a path using the current Fill Path settings?
19. How to stroke a path using the current Stroke Path settings?
20. What is use of Art History Brush tool?
21. Write the process of display the Brush pop-up palette?
22. How to select a preset brush?
23. Write the procedure of using the Eraser tool?
24. Explain the use of Paint Bucket tool?
25. How to fill a selection or a layer with a foreground or background color?
26. Explain the process to fill the work canvas?
27. Write the procedure of changing the foreground or background color?
28. How to display the Swatches palette?
29. Explain the procedure of displaying Layers palette?
30. What do you mean by background layer?
31. Explain the process to select layers directly in the document window?
32. How to duplicate a layer or layer set within an image?
33. Write the procedure of delete a layer or layer set?
34. What do you understand by Masking layers?
35. How to add a mask that shows or hides the entire layer?
36. Write the procedure of creating clipping masks?
37. How to remove a layer from a clipping mask?
38. How to apply filters on a image?
39. Explain the image printing process?





Appendix-A:
Font Management:
Adobe Type Manager

ATM is the most powerful utility program for font management in Windows Operating system. In this chapter you will learn about application of this program.

System requirements

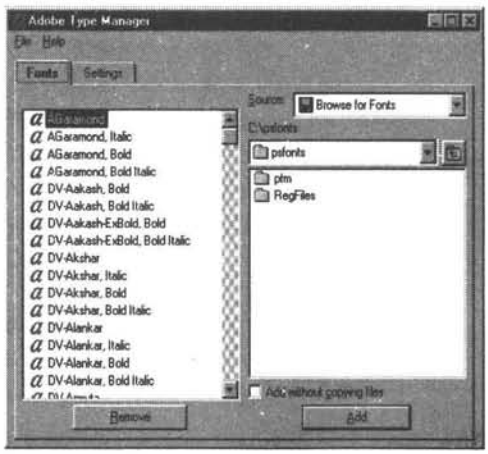
ATM requires the following hardware and software:

- A personal computer running Windows 95/98/2000/XP
- Approximately 1.5 megabytes (MB) of hard-disk space

ATM is compatible with nearly all applications that run under Windows 95. In addition, ATM is compatible with all PostScript language printers and most Windows-supported printers.

11.1 Opening ATM

By default, ATM runs invisibly on your system to improve font display. However, to install and remove fonts you need to open ATM.



(a.). To open ATM

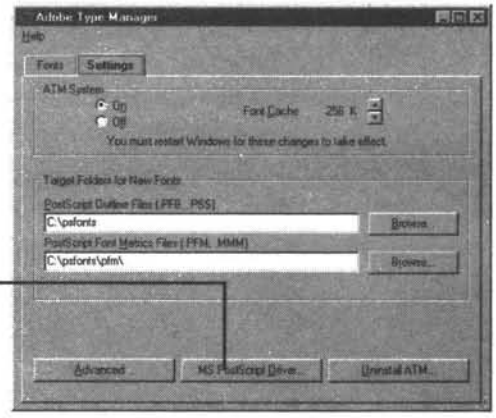
Choose Start > Programs > Adobe > Adobe Type Manager.

11.2 Removing ATM

You can remove the ATM program from your system easily. Uninstalling ATM does not delete any font files from your system, but it may prevent fonts from displaying and printing properly. If you want to remove fonts from your hard disk, you should remove them using ATM before uninstalling ATM.

(a). To remove ATM from the Adobe Type Manager window

- In ATM, click the Settings tab.
- Click Uninstall ATM.
- Click Begin Uninstall. Follow the remaining on-screen instructions.



Click on this button

Tips:

You can also remove ATM by using the Add/Remove icon in Windows Control Panel. You must close ATM before uninstalling with this method.

11.3 Multiple master font designs

Each multiple master font consists of two parts: the multiple master font itself (called the base font) and one or more instances of the font. An instance is a particular rendition of the font that varies from other instances in one or more attributes such as weight or width. Because the base font stores information required for printing, the base font must be installed when creating instances.

Each multiple master font provides a collection of ready-to-use primary instances that constitute a complete typeface family. The typeface designer or manufacturer determines the selection of primary instances to provide a useful palette of fonts. One of the primary instances is designated the default instance. The default instance is the instance displayed when you select a multiple master base font.

Each multiple master includes one or more design axes. A design axis is a variable typeface attribute, such as weight, width, style, or optical size.

To find out which design axes are included with a given multiple master font, see your multiple master font package. If you have already installed the multiple master font, you can see the design axes available for that typeface in ATM. .

Multiple master instances are named in the format Family_design coordinates where Family is the name of the typeface and design coordinates identifies a particular instance by a string of numbers and letters. For example, an instance of the Tekton multiple master font is named TektoMM_240 RG 564 NO.

The design coordinates consist of alphanumeric combinations for each design axis in the font. If the font has a single design axis, there is a single alphanumeric combination (for example, 240 RG for regular weight). If there are two design axes, there will be two alphanumeric combinations, and so on.

Within the design coordinate name, the numbers indicate the position of the instance along the design axis. The letters indicate style (regular, bold, condensed) for a primary instance, or the design axis for a custom instance. The labels for primary instances included in a multiple master font package use uppercase abbreviations (XL for extra-light), while custom instances use generic lowercase abbreviations (wt for weight and wd for width).

Note:

Some font menus and lists in Windows applications are limited in width. Longer instance names may appear clipped.

11.4 Previewing fonts

Before you add a font, you may want to see what it looks like. You can preview a font in ATM. For information on changing the sample text and printing sample sheets, see Customizing and printing sample sheets

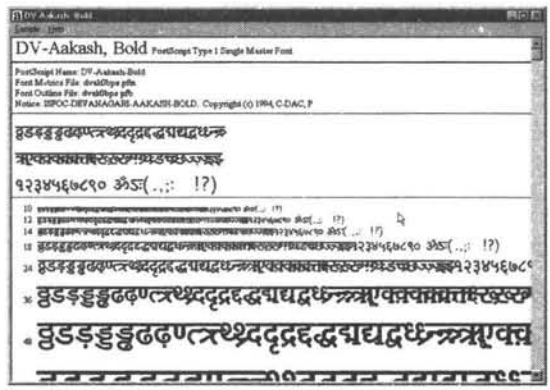
You cannot preview two special fonts: AdobeSanMM and AdobeSerMM. These multiple master fonts are used for font substitution.

(a). To preview a font with ATM

- In ATM, click the Fonts tab.
- Do one of the following:

1. Double-click a font name to preview a single font.
2. Select up to 15 fonts. Right-click one font in the selection and choose Show Sample.

- When you are finished previewing the font, choose Sample > Close, or Sample > Close All to close sample windows. In the Fonts tab, you can also choose Display > Close All Sample Windows.



Tip:

You can also preview a font by double-clicking a font file (any file with the extension mmm, pfm, pfb, or pss) in Windows Explorer or another file utility.

This starts ATM and opens the font sample window for the font file you double-clicked.

11.5 Adding fonts

Installing fonts with ATM ensures the most trouble-free use of PostScript fonts.

Note:

Adobe Type 1 outline fonts are licensed on a per-computer basis. If you use fonts on a network, be sure you're licensed for the number of computers using the fonts.

(a). To add a font

- In ATM, click the Fonts tab.
- Choose Browse for Fonts from the Source drop-down list to add fonts from a local hard disk, CD-ROM, floppy disk, or network drive. Locate the folder that contains the font files you want.
- If you want to add fonts without copying any font files to your hard disk, select Add without Copying Files. This is useful if you use a large number of fonts from a CD-ROM or network disk. If a network drive goes off line, or if you do not have the correct CD-ROM available, font names remain installed but the fonts may not display or print correctly.
- Drag and drop the selected fonts to the Destination list.

11.6 Removing fonts

You may want to remove a font you no longer use. You can remove the font files completely from your hard disk or just remove the font, leaving the font files on the disk. If you remove a font's files from your hard disk and later need that font again, you must reinstall it from the original disk.

(a). To remove a font

- In ATM, click the Fonts tab.
- Select the fonts you want to remove.
- Click the Remove button. You can also right-click a font or a selection of fonts and choose Remove.
- For each font in your selection, ATM prompts you. Choose one of the following options:

- To delete font files, select Remove Font Files from Disk.
- If you are not certain whether the font is on your own hard disk or a network disk, click Properties to verify the location of the files that will be removed.

If you are about to remove files from a network disk and other people may be using them, click Cancel to close the Properties dialog box and make sure Remove Font Files from Disk is deselected.

- Choose one of the following options:

- Click Yes to confirm removal of the font named in the dialog box.
- Click Skip to leave the font installed and go to the next selected font.
- If you don't need to check the Properties of each font, click Yes To All to remove all selected fonts.

11.7 Creating custom instances

You create custom instances by selecting positions along each of the design axes in the multiple master font, and adding instances. After that, the custom instance name appears in ATM and in your applications' font menus and lists.

To install one of the primary instances that comes with a multiple master font, add it as you would any other font from its installation disk. You can also use the Primaries button as explained below.

(a). To create a custom instance:

- In ATM, click the Fonts tab.
- From the Source drop-down list, choose Create Multiple Masters.
- From the Multiple Master Base Font drop-down list, choose the multiple master font you want to work with.
- If you want to start from one of the base font's primary instances, click Primaries. Make sure Show Primary Instances is selected. Double-click an instance to display a sample of it in ATM. When you're done, click Close.
- If desired, adjust the size of the sample text by dragging the slider to the right of the sample. This only affects the sample display, not the instance itself. You can edit the text by right-clicking in the sample and choosing Edit Sample Text. Type a new sample and press Enter.
- Adjust the design axis values for the instance by dragging the sliders or by entering a new value in the numeric field. Each design axis has its own slider.

- Select Bold, Italic, or both. Not all styles are available for all multiple master fonts. View the result in the Sample box.
- When you are satisfied with the design, drag the sample or the instance name under the slider and drop the instance on the Destination list.

Tip:
You can also select a destination in the Destination list and click Add to generate the new instance as you have specified it or click Add All Styles to generate all available styles for the custom instance, such as bold, italic, or bold italic.

(b). To see what instances have been added for a multiple master base font

- In ATM, click the Fonts tab.
- From the Source drop-down list, choose Create Multiple Masters.
- From the Multiple Master Base Font drop-down list, choose a multiple master base font.
- Click Primaries.
- Select Show Installed Instances.
- If you want to modify one of the instances, select it and click Select or double-click the instance name. Then either drag the window aside or click Close to modify the instance in ATM.

(c). Removing multiple master fonts and instances

To remove custom instances you no longer need, just remove them as you would any other Type 1 font. Follow the steps provided in Removing fonts.

(d). Using custom instances you have not created

You can open documents that use instances you may not have created on your system. As long as you have the correct multiple master base font installed, ATM renders these fonts as needed--on the fly--for the individual document.

Applications vary in the way they handle these on-the-fly instances. Some place the instance name in the application font menu, some display and print the instance correctly but do not place it in the font menu, and some alert you to the presence of the instance in a document so that you can create it yourself.

11.8 Adjusting the ATM cache size

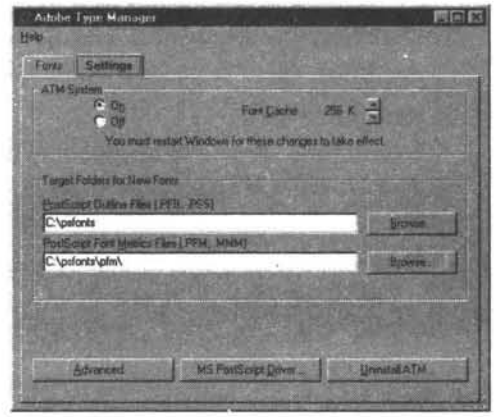
ATM uses a cache--a portion of system memory used to store font data created by ATM. A large font cache may speed up scrolling and other screen displays of fonts but can limit the amount of memory available to other applications. The default cache size is 256K. If you typically use many different fonts on a single page, you may want to experiment with a larger cache size.

(a). To adjust the ATM cache size

- In ATM, click the Settings tab.
- Click the up or down arrows next to ATM Font Cache to change the amount of memory reserved for the cache.
- Click the close box to close ATM. When prompted, click Restart to restart Windows immediately and see the changes or click Continue to see your changes the next time you start Windows.

11.9 Turning ATM on and off

By default ATM is turned on upon installation. However, you can turn it off at any time. For example, you might want to turn off ATM when trying to troubleshoot a system problem.



(a). To turn ATM on and off:

- In ATM, click the Settings tab.
- For ATM System, click On or Off.
- Click the close box to close ATM. When prompted, click Restart to restart Windows immediately and see the changes or click Continue to see your changes the next time you start Windows.

110.10 Customizing and printing sample sheets

Previewing fonts on-screen can help you decide whether a font is appropriate for your current job. Printed copies can also be given to others who get printed output from your system. The printed sample sheet has the same information as the on-screen version, plus a sample paragraph in 14-point type. You can customize the sample text you see on-screen and in printed sample sheets.

(a). To change the sample text

- In ATM, click the Settings tab.
- Click Advanced. For Sample Text, modify the text in the Sample Sheets box. Then click OK. The change takes effect the next time you display or print a sample sheet.

(b). To print a sample sheet

- In ATM, click any tab that shows individual fonts.
- Select one or more fonts for which you want to print sample sheets.
- Right-click a selected font and choose Print > Sample Sheets.
- If necessary, adjust settings for your printer. Then click OK.

Tip:

You can also print a sample sheet from the sample sheet window. Open a sample sheet window as described in Previewing fonts. Then choose Sample > Print, adjust printer settings as needed, and click OK. This is the way to print a sample sheet for a font you have not added to your system.

(c). Changing the location for new fonts

When you add a font to your system, you can designate whether ATM copies the font files to your hard disk or leaves them on their source disk. When you first installed ATM, you chose a default location for font files. You can change that location at any time using the Settings tab in ATM.



Note:

If you change the location and then add a font already on your system, ATM will detect the duplicate and will ask you which copy to use.

(d). To specify a location for font files

- In ATM, click the Settings tab.
- Under Target Folders for New Fonts, type a folder path for PostScript font outline files, PostScript font metrics files.
- To locate an existing folder, click the appropriate Browse button, locate and open the folder, and click Select.

11.11 Smoothing on-screen fonts

ATM has always improved the appearance of Type 1 fonts on-screen by smoothing out the jagged edges inherent in video displays. The new version of ATM goes a step further by using anti-aliasing--a technique for blending colors along an edge to provide a smoother, softer edge to your Type 1 fonts on-screen. Although anti-aliasing can make screen fonts appear smoother, using this feature can slow down type-intensive displays on some systems. In that case, it may help to increase your font cache.

(a). To smooth PostScript screen fonts:

- In ATM, click the Settings tab.
- Click Advanced.
- Select Smooth Font Edges on Screen and click OK.

11.12 Customizing font handling

ATM has several options that let you specify how fonts appear on-screen and how they image to a printer. Several settings are designed to address configuration-specific issues.

(a). To customize font handling settings:

- In ATM, click the Settings tab.
- Click Advanced.
- Select or deselect the options described below and click OK.

Print Fonts as Graphics. Sends fonts to the printer as graphic images rather than downloading the font file itself. This setting may help older PCL printers that cannot use downloadable fonts or when printing documents with mixed text and graphics that don't print correctly. Printing time may increase. Display Fonts as Graphics. Sends fonts to your monitor as graphic images instead of generating screen fonts from the font files. Use this setting only if you are having difficulty with on-screen font displays. Screen redraw time may increase slightly.

Use Pre-Built or Resident Fonts. Uses bitmap fonts installed in Windows for screen fonts and bitmap fonts resident in the printer for printing. Bitmap fonts take up hard-disk space but can help certain applications display and print documents more quickly.

Check for New or Removed Type 1 Fonts When Starting ATM. Tells ATM to manage PostScript fonts installed or removed by a program other than ATM. When this setting is selected, the next time you start ATM it automatically adds PostScript fonts installed by another program.

11.13 Printing files on other computers

To print a document on another computer, you have two choices:

- Create a print file or print-to-disk file, a file created when an application sends printing information for a document to a file instead of to a printer.
- Ensure that both computers have the same fonts.

11.14 Printing to a file

If you are taking your file to another location for output, the new computer does not need to have ATM or all of your same fonts installed, providing you first create a print file. When printing to a non-PostScript printer, this is often as easy as selecting Print to File in your Print dialog box. If the printer you will use is a PostScript printer, you need to make a PostScript print file and save the necessary fonts with that file. Most applications that can create a PostScript file also have an option for saving the fonts with the file. Consult your application documentation for creating PostScript print files with the fonts you need. Once you have a print file, you can take that file to another system and use the DOS copy /b command to send it to a printer without opening it.

(a.) Multiple master issues

If it's necessary to open a file in an application to print it, the system from which you print needs to have the same Type 1 fonts as are used in the document. In addition, if your document uses multiple master fonts, you should make sure that the system from which you print has the following software installed:

- The same version of the application that you used to create the document
- ATM version 3.0 or later
- The multiple master base fonts corresponding to the multiple master instances used in the document

(b). Setting download options for the Microsoft PostScript driver

If your system uses the Microsoft PostScript printer driver, you can choose where the printer driver looks for fonts when you print. This choice can affect whether you get the correct font from the printer. The option you choose in the Settings tab affects all future fonts you add, but you can also adjust these options for individual fonts. In choosing the best option, you need to consider the impact on the WIN.INI file, an important Windows configuration file. For each PostScript font you add to your system, ATM adds a reference to the WIN.INI file indicating the location of the font metrics file and (if you use the autodownloading option) the font outline file.

In addition, ATM adds one such reference for each printer port used by the Microsoft PostScript driver. If you have installed multiple PostScript printers on different ports, ATM adds a reference for each port for every installed font on your system, causing the WIN.INI file to grow in size.

As the file size approaches 64K (the maximum allowable size), you could have unpredictable system problems. To keep the WIN.INI file smaller, try one or more of these suggestions:

- Use the Adobe PostScript printer driver, which doesn't use the WIN.INI file.
- If you have PostScript printers installed on multiple ports that you don't use, choose Start > Settings > Printers and delete the printers you don't use. For more information, refer to Windows online help.
- If your printer has fonts installed on its hard disk or if you use a font downloading utility to download fonts to your printer's RAM, designate those fonts as resident in the PostScript printer.
- Use the "Mark as Not to Be Installed for the PostScript Printer" option.
- Shorten the path of your font files by installing them to folders such as c:\f and c:\f\pfm. See Changing the location for new fonts.

