



WELCOME TO CORELDRAW™

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CorelDRAW™ is a vector-based drawing application that makes it easy for you to create professional artwork — from simple logos to intricate technical illustrations. With enhanced text-handling capabilities CorelDRAW also allows you to create text-intensive projects, such as brochures and reports with greater ease than ever before.

If you're new to the world of CorelDRAW, you'll soon discover how the new interactive tools and the on-screen display enable you to get up to speed in no time. If you've used CorelDRAW before, you'll soon find out how the new tools and enhanced features give you even more power to design and publish all your graphics.

About Corel Corporation

Corel Corporation is recognized internationally as a world leader in the development of graphics and business application software. CorelDRAW for Windows is now available in more than 17 languages and has won more than 215 international awards from major trade publications. CorelDRAW is now available for Power Macintosh users.

We pride ourselves in delivering high-quality graphics, productivity, and business application software by actively seeking your input. We encourage this feedback and respond quickly to you, the users of Corel products worldwide.

Corel ships its products through a network of more than 160 distributors in 70 countries worldwide. Corel is traded on the Toronto Stock Exchange (symbol: COR) and the NASDAQ — National Market System (symbol: CORL).

For more information about Corel and our products, see our World Wide Web site at www.corel.com.

Enough about us, what do you have to say?

In our continuing efforts to help you get the most from Corel applications, we look for new and better ways to document our products. If you've developed a unique effect that you'd like to share with us, please let us know. Send us the details and we may include them in future Corel learning materials.

Address your letter to

Graphics Documentation Manager

Corel Corporation
1600 Carling Avenue
Ottawa, Ontario
Canada
K1Z 8R7

Using Help

CorelDRAW features a variety of electronic resources that provide on-screen assistance as you need it. The main form of assistance is the online Help, which, apart from a minimum of graphics, is an electronic version of the CorelDRAW manual. You find information in online Help by double-clicking specially coded words, phrases, or icons that display the topic. ToolTips describe individual features in the application, whereas the CorelDRAW tutorial guides you through basic tutorial procedures as you complete a range of practical tasks.

Accessing online Help

Online Help connects you to an overview or a procedural topic when you choose a topic from the table of contents or the index. You can also search for a topic using keywords that describe a feature or task.

To access online Help from the table of contents

1. Choose Help, CorelDRAW Help Contents.
2. Double-click a topic.

To access an online Help topic using a word search

1. Choose Help, CorelDRAW Help Contents.
2. Choose the Find tab.

3. Type a word in the search box, and click the Search button.
4. Choose a topic from the list, and click the Display button.



- After you access an online Help topic, you can access related topics by clicking the green highlighted text, the How To buttons, the Related Topics buttons, or the Overview buttons. Hypertext links jump to a topic on a new page or display a pop-up topic on the original page.
 - You can print a topic or keep it displayed on screen for easy reference. For more information about printing Help topics, see “Printing Help” on page 3.
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Accessing ToolTips

ToolTips identify the icons and buttons that correspond to various features in CorelDRAW, such as toolbars, Property Bars, and tool flyouts.

To access ToolTips

- Position the cursor over an icon or a button.

Accessing the tutorial

The CorelDRAW tutorial guides you through a series of practical lessons that give you a general idea of the application’s major capabilities. Although intended mainly for novices, the tutorial also offers helpful information for advanced users and explores concepts that are common to many CorelDRAW operations.

To access the tutorial

- Choose Help, CorelDRAW Tutorial.

Printing Help

You can print entire sections of the online Help or only specific topics.

To print an entire section

1. Choose Help, CorelDRAW Help Contents.
2. Choose a book, and click the Print Topics button.

To print a topic

1. Choose Help, CorelDRAW Help Contents.
2. Choose a topic, and click the Print Topic button.



- You can also print an individual topic by clicking the Print button in the CorelDRAW Help window.
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CorelDRAW concepts

Computer imaging applications are based on creating either vector graphics or bitmap images. This section presents the basic concepts of a vector-based program like CorelDRAW and outlines the differences between vector images and bitmap images such as ones you work with in Corel PHOTO-PAINT™.

If you haven't worked with drawing applications before, or if you've worked solely with paint or photo-editing applications, you'll find this section especially informative.

What is a vector image?

Vector images, also called object-oriented or draw images, are defined mathematically as a series of points joined by lines. Graphical elements in a vector file are called objects. Each object is a self-contained entity, with properties such as color, shape, outline, size, and position on the screen, included in its definition.

An example of a vector graphic.



Since each object is a self-contained entity, you can move and change its properties over and over again while maintaining its original clarity and crispness without affecting other objects in the drawing. These characteristics make vector-based applications ideal for illustration, in which the design process often requires individual objects to be created and manipulated.

Vector-based drawings are resolution independent. This means that they appear at the maximum resolution of the output device, such as your printer or monitor. As a result, the image quality of your drawing is better if you print from a 600-dpi (dots per inch) printer than from a 300-dpi printer.

CorelDRAW allows you to incorporate bitmaps into your drawings and to export bitmaps you create. For simple drawings, you can use the Autotrace command or the Freehand tool to trace around the outline manually.

What is a bitmap image?

Photo-editing applications like Corel PHOTO-PAINT work with bitmap images. When you work with bitmap images, you can refine small details, make drastic changes, and intensify effects.

Bitmap images, also called raster or paint images, are made of individual dots, called pixels (picture elements), that are arranged and colored differently to form a pattern. When you zoom in, you can see the individual squares that make up the total image. Increasing the size of a bitmap has the effect of increasing individual pixels, making lines and shapes appear jagged.

.....
An example of a
bitmap image.
.....



However, the color and shape of a bitmap image appear continuous when viewed from a greater distance. Because each pixel is colored individually, you can create photorealistic effects, such as shadowing and intensifying color.

Reducing the size of a bitmap, distorts the original image because pixels are removed to reduce the overall image size. Also, because a bitmap image is created as a collection of arranged pixels, its parts cannot be manipulated (e.g., moved) individually.

You can open vector-based CorelDRAW files, which have been saved as CPT file format, directly in Corel PHOTO-PAINT. Corel PHOTO-PAINT automatically creates a bitmapped version of the original.

Exploring the work area

The large white portion of the CorelDRAW Application Window is the Drawing Window. The rectangle in the center with the drop shadow is the Drawing Page. Usually, only the part of your drawing that falls within the Drawing Page is printed.

You can think of the remaining space in the Drawing Window as your workspace in which you can keep your tools and pieces of your drawing handy.

The application commands available through the menu bar can also be accessed through toolbars and flyouts. The Property Bar provides you with quick access to frequently used functions that are relevant to the active tool or the task you're currently performing.

With CorelDRAW you have the ability to create multiple workspaces. A workspace is a configuration of settings you specify which you can save and reapply. If several people are using a single version of CorelDRAW, or if you find you need different settings for different tasks, you can use workspaces to save the settings for each user or task.



- The toolbars are optimized for 800 x 600 resolution. Therefore, if you are working in a lower resolution, portions of toolbars will appear cut off.

Using the Toolbox

The CorelDRAW Toolbox contains tools for creating, filling, and manipulating objects in your drawing. The drawing tools let you design a variety of objects for your drawing, and the shaping tools let you modify your drawing. The Toolbox also contains tools that let you apply a number of effects interactively.

Tool...	Description...
	The Pick tool lets you select and transform 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 Free Transform tools let you transform your object by using the Free Rotation, Angle Reflection, Scale, and Skew tools.



The Zoom tool lets you change the magnification level in the Drawing Window.



The Pan tool lets you move the display of the Drawing Window.



The Freehand tool lets you draw lines and curves.



The Bezier tool lets you draw curves using a connect-the-dots style of drawing.



The Natural Pen tool lets you create closed objects that are shaped like curves, with variable thickness.



The Dimension tool lets you draw vertical, horizontal, slanted, or angular dimension lines.



The Connector tool lets you join two objects with a line.



The Rectangle tool lets you draw rectangles and squares.



The Ellipse tool lets you draw ellipses and circles.



The Polygon tool lets you draw 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 Text tool lets you type words directly on the screen as Artistic Text or as Paragraph Text.



The Interactive Fill tool lets you apply various fills using the mouse.



The Interactive Transparency tool lets you apply transparencies to objects using the mouse.



The Interactive Blend tool lets you blend two objects.



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 that is placed on top of the object.



The Interactive Extrude tool lets you apply a three-dimensional to objects.



The Interactive Drop Shadow tool lets you apply a drop shadow to an object.



The Outline Tool opens a flyout that lets you set the outline properties of an object.

Accessing flyouts

Flyouts are toolbars that are accessible through one tool. A small black arrow at the bottom right corner of a tool indicates that it is a flyout grouped with other tools.

To access flyouts

- Do one of the following:
 - Click the arrow on the tool.
 - Position the cursor on the tool, and hold down the mouse button.



- You can display a flyout as a separate toolbar by clicking outside the button area, and dragging the flyout from its host toolbar. Dragging flyouts off their host toolbars doesn't actually remove the flyout from the toolbar.

Using the Property Bar

The Property Bar is a context-sensitive command bar that displays different buttons and options, depending on the tool or object you select. For example, when you click the Text tool, the Property Bar contains only text-related commands. You can customize your work area by displaying, hiding, or docking the Property Bar. The Property Bar can be docked to any side of your screen.

To display or hide the Property Bar

- Choose Window, Toolbars, Property Bar.

To dock the Property Bar

- Drag the Property Bar to any side of the screen.

Using toolbars

Each button on a toolbar represents a command. Some are shortcuts to menu commands; others are commands that are available only as toolbar buttons. You can customize your work area by displaying, hiding, sizing, or docking the toolbars. Toolbars can be docked to any side of your screen. You can also arrange toolbars by snapping them to the edges of other toolbars, the Property Bar, Palettes, or the Drawing Window.

To display or hide toolbars

- Choose Window, Toolbars, and choose a toolbar from the list.

To size a toolbar

- Click and drag the bottom right corner of the toolbar.

To dock a toolbar

- Drag the toolbar to any side of the screen.

To snap a toolbar

- Drag the toolbar to the edge of another toolbar, the Property Bar, Palettes, or the Drawing Window.

Working with Palettes

A Palette is a dialog box that contains the same operations as most dialog boxes, e.g., command buttons, options, and list boxes. Unlike most other dialog boxes, however, you can keep Palettes open while working on a drawing to access the operations you use most frequently, or to experiment with different effects.

The following lists some common Palette operations:

To ...	Do this ...
Open a Palette	Choose Window, Palettes, and choose the palette you want to open.
Move a Palette	Click and drag the Title Bar to another location.
Combine Palettes	Drag a tab from the Palette onto another Palette.
Separate Palettes	Drag a tab out of the Palette.

Using multiple Workspaces

A workspace is a specific configuration of settings you specify in the Preferences dialog box. You can create multiple workspaces for specific users

or specific tasks and then apply them when you want. You can also delete workspaces when they are no longer needed. For more information about using workspaces, see “Customizing workspace settings” on page 577.

To create a workspace

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace.
3. Click the New button.
4. Type a name in the Name Of New Workspace box.
5. Choose a workspace on which to base the new Workspace from the Base New Workspace On pop-up menu.
6. Type a description in the Description Of New Workspace box.



- The description that you type in the Description Of New Workspace box appears in the list of available Workspaces.



- You can enable the Set As Current Workspace button to apply the new workspace immediately.
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To choose a workspace

1. Follow steps 1 and 2 from the previous procedure.
2. Choose a workspace from the Workspaces Available list.
3. Click the Set As Current button.

To delete a workspace

1. Follow steps 1 and 2 from “To create a workspace” procedure.
2. Choose a workspace from the Workspaces Available list.
3. Click the Delete button.

Using AppleScript

AppleScript is a language created by Apple Computer and used by the Macintosh Operating System (O/S) to automate tasks in scriptable applications, such as CorelDRAW. A number of sample scripts are included with CorelDRAW. You can record and save new scripts or run existing

AppleScript scripts to automate your CorelDRAW operations. For more information about AppleScript, see the AppleScript documentation.

You can also use the Script Editor to automate a series of CorelDRAW operations. The CorelDRAW AppleScript Dictionary, accessed from the Script Editor, provides you with a list of application commands grouped in suites. The Dictionary provides a description for each application command and associated parameters.

Recording and saving scripts

You can record and save a script within CorelDRAW. The application records every action you perform from the moment you start recording until you end the recording.

To record and save a script

1. Choose , Start Recording.
2. Perform the drawing actions that you want to automate.
3. Choose , Stop Recording.
4. Type a name for the script file.
5. Locate the folder where you want to save the file.
6. Click Save.

To run a script

- Choose , and select a script from the list.



- To view a recorded script in the menu list you must save your script to the AppleScripts:CorelDRAW folder.
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Corel services and support

Corel is committed to providing customers with high-quality technical support. The following sections describe the variety of support services available.

Basic services

Corel offers the following technical support options, most of which are available 24 hours a day, 365 days a year. These services are useful if you prefer not to pay for support or encounter problems during off-hours.

Interactive Voice Answering Network (IVAN)

The Interactive Voice Answering Network contains answers to commonly asked questions about Corel products and is available 24 hours a day, 365 days a year. It is regularly updated with the latest information, tips, and tricks. You can also request that IVAN solutions be faxed to you. There is no charge for this service beyond the cost of the telephone call. To call IVAN toll-free dial **1-877-42-COREL**.

Automated FAX on Demand

Technical Support maintains an automated FAX on Demand system of numbered documents that contain up-to-date information about common issues, tips, and tricks. This service is available 24 hours a day, 365 days a year.

FAX on Demand 1-877-42-COREL (toll-free)

You will be asked for a document number and your fax number. The document you request is automatically sent to you. To fax a catalog of documents to yourself, call the Automated FAX on Demand system number and request document 2000.

AnswerPerfect

Customers can now submit support incidents (questions) by e-mail to Corel's Web site at www.corel.com/support/answerperfect.htm. Corel is committed to responding to AnswerPerfect support incidents within one business day.

Corel TutorLine

Now you can access a "how to" service that will allow Corel's Support staff to guide and tutor you through the features and functionality of CorelDRAW for the Power Macintosh. This line is not for technical issues, but to serve as an extension to the online and paper documentation. It is available to U.S. residents only. Call Corel TutorLine at (900) 733-8789. The cost is \$2.00 U.S./minute. The first three minutes are free.

Note: Persons under the age of 18 must have the consent of a parent or legal guardian to use this service.

Bulletin Board System (BBS)

If you have a modem and communications software package, you can access the Corel BBS. You can download files, including printer drivers, troubleshooting information, and utilities. You can also transfer problem files to Customer Support through the BBS.

CompuServe

Interact with other users and Corel technicians to obtain product information and support. CompuServe is available 24 hours a day, 7 days a week, including holidays. Corel representatives will respond from 8:30 A.M. to 5:00 P.M. Eastern Standard Time, from Monday to Friday, excluding holidays.

If you have a CompuServe membership, you can access Corel technical information by typing **GO COREL** at the CompuServe prompt.

World Wide Web Site (WWW)

The World Wide Web address for Corel products on the Internet is **www.corel.com**. At this location, you can quickly search Corel's Searchable Knowledge Base. From the database you can read, print, or download documents that contain answers to many of your technical questions or problems. This site also contains files you can download.

File Transfer Protocol (FTP)

You can download updates, patches, and utilities by accessing our anonymous FTP site at **ftp.corel.com**.



- The terms of Corel technical support offerings are subject to change without notice.

Worldwide technical support

Corel customers residing outside North America can contact Corel Technical Support representatives in Dublin, Ireland, or a local Authorized Support Partner. Technical support outside North America is available to you at the following locations. If your country is not listed below, please check the Support section on our World Wide Web site at **www.corel.com**.

Priority technical support services

To request an up-to-date listing of Corel Authorized Support Partners worldwide, and a copy of Corel Priority Technical Support Policy, contact Corel Technical Support at **(353)-1-7082580**.

Latin America

Argentina	(54) (0) 114 954 6500
Brazil	(55) (0) 11 304 07740

Chile	(56) (0) 2 2361023
Colombia	(57) (9) 1 5231240
Mexico	01-800-024-2673
Europe	
Austria	(43) (0) 1 58924130
Belgium-French	(32) (0) 2 7144130
Belgium-Dutch	(32) (0) 2 7144131
Denmark	(45) 35258030
Finland	(358) (0) 9 22906030
France	(33) (0) 1-40-92-76-20
Germany	(49) (0) 180 5258211
Hungary	(36) (9) 1 3275737
Italy	(39) 06-523-542-37
Netherlands	(31) (0) 20-504-0570
Norway	(47) 22-97-19-30
Portugal	(44) 0800 853042
Russia	(7) 095 3782111
Spain	(34) 91-661-3627
Sweden	(46) (0) 680-711-751
Switzerland-French	(41) (0) 848-80-85-90
Switzerland-German	(41) (0) 848-80-85-90
United Kingdom	(44) (0) 171-298 85 16
Eastern Europe	
Czech Republic	(42) (0) 2-2423-9645
Poland	(48) (0) 71-347-72-79
Middle East	
UAE	(971) 4336-6885
Israel	(972) (0) 2 5322224

Asia Pacific

Australia	1 300 650 601
Hong Kong	(852) 81003729
India	(91) (0) 11 3351948
Japan	(81) (0) 3 3222 8918
Malaysia	1 800 801090
New Zealand	(64) (0) 9 5261155
Singapore	1-800-773-1400
South Korea	(82) (0) 2 34446781
Taiwan	(886) (0) 2-25509502

Africa

South Africa	0860 223388
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- The terms of Corel technical support offerings are subject to change without notice.

Before calling Corel Technical Support

Before calling Corel Technical Support, please have the following information available. This information assists the Technical Support representative in helping you more quickly and efficiently:

- A brief description of the problem, including the exact text of any error messages received, and the steps to recreate the problem.
- The type of computer, monitor, pointing device (e.g., mouse, tablet), printer, and video card (display adapter) in use.
- The versions of Macintosh operating system and the Corel product in use. Choose the About This Computer command from the Apple menu in the Finder to find which version of the Macintosh operating system you are running. To find the version of CorelDRAW, go to the folder where the application resides, select it and perform a “Get Info”.
- A list of any programs loaded into RAM. Check the Startup folder on the System folder to determine if you are running any other programs.

Customer service worldwide

Corel Customer Service is operated by a number of third-party companies on behalf of Corel. If you would like additional information about Corel products or services, please call one of the telephone numbers listed below. If your country is not listed, please call the general number listed below. General customer service and product information can also be accessed through the World Wide Web at <http://www.corel.com>.

Country	Call this number
United States	1-800-772-6735
Canada	1-800-772-6735
Argentina	0-800-3-9192
Australia	1-800-658-850
Austria	0800-201583
Belgium	0800 11930
Denmark	800 187 55
Finland	0800-1-13502
France	0800-90-65-12
Germany	0130 815074
Ireland	1800-242800
Italy	06-52362602
Japan	03-3222-3255
South Korea	82-2-3444-5166
Luxembourg	0800-2213
Mexico	1-800-024-2673
Netherlands	0800-22-2084
New Zealand	0800-267351
Norway	800 11661
Portugal	0800-8-53-001
South Africa	0800-23-4211
Spain	900 95 35 38
Sweden	020 791 085
Switzerland	800-55-8224

United Kingdom

0800-581028



GETTING STARTED

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You can take care of your basic file management needs while working with CorelDRAW. You can create, open, save, and close your drawings.

When saving a file, CorelDRAW lets you choose appropriate options so that you can use your files on Windows and Macintosh platforms, and applications other than CorelDRAW. You can undo a change or a series of changes while drawing, or revert back to the most recently saved version of the file. To safeguard your files against power failures or system problems, CorelDRAW automatically backs up your files at intervals you specify. It can also create a backup copy of your files when you save them.

While working with large and complex files, the Find and Find and Replace wizards can help you make changes to any particular object in your drawing. In addition, you can create space for temporary file storage by specifying a hard disk. You can view file information, such as drawing attributes, resolution, etc.

Through warning alerts, CorelDRAW lets you know about the consequences of an action you are about to take. You can specify which warning alerts you want displayed. For example, you can enable a warning alert to appear when the file format you are saving your multipaged drawing in does not support multiple pages.

Creating and opening drawings

You can create a drawing or open an existing drawing. You can also open a drawing created with a previous version of CorelDRAW.

Creating and opening drawings

You can create a drawing, or open CorelDRAW files from previous versions. You can also open drawings of other vector file formats.

When you open a drawing, CorelDRAW provides information on the last version of the file and the compression ratio with which the file was last saved (e.g., 60% means the file was 60% smaller after saving).

To create a drawing

- Choose File, New.

To open a drawing

1. Choose File, Open.
2. Choose a file type from the Format pop-up menu.
3. Locate the folder where the file is stored.
4. Choose the filename.
5. Click Open.



- You can have more than one viewing window open for a file.
-



- Before you open a file, you might find it useful to enable the Preview check box to display a thumbnail representation of the file.
 - A list of the last four files used appears at the bottom of the File menu. Through this list, you can quickly open a recently used file.
-

Saving and closing

CorelDRAW lets you save your files in ways that best suit your file management needs. You can save selected objects of a drawing. You can also make a copy of a drawing by saving it with a different name, thus, keeping the original intact. CorelDRAW lets you save a drawing in one of its previous versions. It gives you several vector formats from which you can choose to save your drawing in. You can include fonts, textures, blends, and extrudes when saving a drawing.

You can use the Close command on the File menu to close the active file. Before closing the selected file, CorelDRAW lets you decide whether to save it or not.

Saving files

You can use the Save As command to specify a new filename for your drawing and a location in which to store it. If you want to save parts of your drawing, you can select and save them under a filename that you specify.

To save a new drawing

1. Choose File, Save As.
2. Choose a file type from the Format pop-up menu.
3. Locate the folder where you want to save the file.
4. Specify a filename, and click Save.

To save selected objects



1. Select the objects you want to save with the *Pick tool*.
2. Follow steps 1 to 3 from the previous procedure.
3. Enable the Selected Only check box.
4. Specify a filename, and click Save.

To keep the original drawing, type a different name in the Save Drawing box or locate a different folder in which to save this file.



- It is recommended that you create your own folder to save your files rather than saving them in the CoreIDRAW folder or any of its sub-folders.



- You can also use the Save As command to save a copy of an existing drawing. Saving a copy under a different name, keeps the original intact.
- You can select multiple objects by holding down Shift and clicking each object with the Pick tool.

Saving files using other options

Using the Save As command, you can save your drawing in previous versions of CoreIDRAW. You can also choose a thumbnail format from the thumbnail pop-up menu. Thumbnails allow you to see a small bitmap of a file's contents before you open it. The Thumbnail pop-up menu consists of thumbnail formats whose color depths can be supported by the system in which you next open the file.

By embedding (saving) fonts with your drawing, you enable other people with CorelDRAW to open your drawing without having to install the drawing's fonts. You can save your drawing in the Corel Presentation Exchange file format. This makes your drawing readable to all applications that support the Corel® Presentation™ Exchange file format.

To save a drawing in a previous version of CorelDRAW

1. Choose File, Save As.
2. Locate the folder where you want to save the file.
3. Choose a version from the Version pop-up menu.
4. Specify a filename, and click Save.

To save a drawing with a different thumbnail format

1. Follow steps 1 and 2 from the previous procedure.
2. Choose an appropriate thumbnail format from the Thumbnail pop-up menu.
3. Specify a filename, and click Save.



- You can choose None, if you don't want to attach a thumbnail.
-

To save a drawing with the fonts embedded

1. Follow the steps 1 and 2 from the “To save a drawing in a previous version of CorelDRAW” procedure.
2. Enable the Embed Fonts Using TrueDoc check box.
3. Specify a filename, and click Save.

To save a drawing in Corel Presentation Exchange file format

1. Follow the steps 1 and 2 from the “To save a drawing in a previous version of CorelDRAW” procedure.
2. Enable the Save Presentation Exchange (CMX) check box.
3. Specify a filename, and click Save.



- Saving your drawing in Corel Presentation Exchange file format increases your file size.

- Options such as previous version, thumbnail formats, and font embedding preferences are not available when you save your drawing in a non-CorelDRAW file format. However, if you choose the Pattern file format, you can choose a previous version of CorelDRAW.
 - If you open your drawing in a previous version of CorelDRAW that does not contain the fonts of your drawing, you can convert the text to curves using the Convert To Curves command before you save the file.
-

Setting save preferences

Before saving your file, CorelDRAW lets you set additional save preferences. You can make your files smaller, more portable, or faster to open or save.

You can save various elements of your drawing (fonts, textures, blends, or extrudes) with the drawing instead of just saving a reference to these items. Saving textures, blends and extrudes with the drawing increases the file size. However, complex drawings can be opened faster.

To set save preferences

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Save.
3. Enable one or both of the following check boxes:
 - Save Presentation Exchange (CMX) — makes the drawing readable by all applications that support the CMX format. The file size will increase
 - Use Current Thumbnail — saves the drawing with its current preview
4. In the File Optimization section, enable one or both of the following check boxes:
 - Use Bitmap Compression — reduces the file size
 - Use Graphic Object Compression — reduces the file size
5. In the Textures section, enable one of the following buttons:
 - Save Textures With The File — enables complex drawings to open faster. This increases the file size
 - Rebuild Textures When Opening The File — creates smaller files. Complex files may take longer to open
6. In the Blends And Extrudes section, enable one of the following buttons:

- Save Blends And Extrudes With The File — enables complex drawings to open faster. This increases the file size
- Rebuild Blends And Extrudes When Opening The File — creates smaller files. Complex files may take longer to open

Closing files

You can save a file before closing it, if you want to keep the changes made since the file was last saved. When you try to close the file without saving, CorelDRAW asks if you want to save the changes before closing the file. If you want to lose the changes, close without saving.

To close a file

- Choose File, Close.



- If your file has more than one viewing window, only the active window is closed. To close the file, you must close all of its viewing windows.
-

Creating space for temporary file storage

CorelDRAW supports the use of a scratch disk to store temporary files. This is useful when you are handling large and complex files.

Choosing a hard disk for temporary file storage

CorelDRAW stores temporary files, that are currently not in use in scratch disks. It can store these files in compressed or uncompressed form. If you have two hard disks or two partitions, you can choose one for primary and the other for secondary storage.

To choose a hard disk for temporary file storage

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Memory.
3. In the Scratch Disks section, do the following:
 - From the Primary pop-up menu, choose a hard disk you want to use first to store temporary files.
 - From the Secondary pop-up menu, choose a hard disk you want to use second to store temporary files.

To store temporary files in compressed form

1. Follow steps 1 and 2 from the previous procedure.
2. Enable the Enable Compression check box.



- You must restart CorelDRAW to apply your changes.
- If you have a hard disk with no partitions, then the Primary and Secondary options apply to the same hard disk.



- You can determine the size of an image as well as its compression status. For more information about document information, see “Viewing document information” on page 34. When you work with bitmap images, the file size is always uncompressed in the Document Information dialog box.

Backing up your work

It is important to safeguard your work against power failures or system problems that can corrupt and even destroy your files. For this reason, CorelDRAW provides automatic saves and backup features that protect your files in case you forget to save them manually.

You can set values to specify automatic save intervals. If you enable the Auto-backup check box, CorelDRAW save your file according to the time intervals that you set. The backup file which is generated is called Filename Autobackup, where Filename is the name of your file.

Another way to safeguard your work is to instruct CorelDRAW to automatically create a backup copy of your image every time you save. This file is named Filename Backup, and is saved to the same folder as your CorelDRAW file.

When a non-CorelDRAW file is opened in CorelDRAW, it opens in the CorelDRAW file format. This version of the file is then backed up.

You can backup your files in the same location or in two separate locations. You can save the Autobackup file in the same location as the Backup file. However, to further safeguard your work, you can use a different folder to store your Autobackup file.

Backing up as you work

To safeguard your work against unexpected catastrophes, you can have CorelDRAW save your image as you work. Files created by the Auto-backup feature are named as Filename Autobackup.

To back up as you work

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Save.
3. Enable the Auto-backup Every check box in the Auto-Backup section.
4. Type a value in the Minutes box.

The number that you type represents the time interval between auto-saves.

5. Enable one of the following buttons:
 - Save Back-up To Same Folder As The CorelDRAW File — backs up to the same location as your file
 - Always Back-up To button — backs up to a location that you specify

Creating backup copies of your images

You can instruct CorelDRAW to create a backup copy of your image each time you save it so that you always have another version of the file on your system. Backup files are named Filename Backup. Backup files are especially useful in cases where the original file is corrupted or lost (e.g., due to power failures or system problems).

To create backup copies of your images

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Save.
3. Enable the Make Backup On Save check box.

CorelDRAW creates the backup file in the same folder in which you save your document.

Substituting for unavailable fonts

CorelDRAW provides font substitutions for those fonts that are not installed on your computer. You can either select the font substitution or install the missing font.

Changing font substitutions

If a document contains fonts that are not installed on your computer, the PANOSE Font Matching Results dialog box appears. It suggests a substitute that most closely resembles the missing font. However, if you are not satisfied with the suggestion, you can specify a substitute font from the provided list. This list reflects all the fonts that are installed on your computer.

Whether you choose the suggested substitute font or one from the provided list, you can save your settings temporarily or permanently.

To change a font substitution

1. Open the file.

If the document contains fonts that are not installed on your computer, the PANOSE Font Matching Results dialog box appears.

2. Choose the Missing Font and Substituted Font match you want to change, from the PANOSE Font Matching Results dialog box.
3. Enable the Use PANOSE Substitute button, and choose a new font from the pop-up menu.
4. Click OK.
5. PANOSE Font Matching asks you if you want to save your changes to the Font Matches Exceptions file. Choose the option that best suits your needs.

To change a font substitution for a document temporarily or permanently

1. Open the file.
2. In the PANOSE Font Matching Results dialog box, enable one of the following buttons:
 - Temporary — replaces the missing font for the current session
 - Permanent — replaces the missing font permanently



- When you choose the Permanent option you are given the option of making the change in the Exceptions file. Making this change means the font substitution becomes permanent for all documents.
-

Building a list of matches for missing fonts

Rather than substituting missing fonts each time you open a document that has fonts missing, you can set up a list of matches for uninstalled fonts. When you quit CoreIDRAW, the list is saved. It is then applied to all documents that are open.

To build a list of matches for missing fonts

1. Choose Edit, Preferences.
2. In the list of categories, double-click Text, and choose Fonts.
3. Click the PANOSE Font Matching button.
4. Click the Exceptions button.
5. Click the Add button in the PANOSE Font Matching Exceptions dialog box.
6. Type the name of the font that is to be replaced in the Missing Font box.
7. Choose a font that is installed on your computer from the Substituted Font list.



- To delete a Macintosh font and its Windows equivalent, click the Remove button in the PANOSE Font Matching Exceptions dialog box.
-

Matching a Macintosh font to a Windows font

If you import a document from a Windows program into a Macintosh program, you might need to specify the Macintosh equivalent for Windows fonts contained within the document.

To match a Macintosh font to a Windows font

1. Choose Edit, Preferences.
2. In the list of categories double-click Text, and choose Fonts.
3. Click the PANOSE Font Matching button.
4. Click the Spellings button.
5. Click the Add button in the Alternate Spellings dialog box.
6. Choose a Macintosh font name from the Macintosh Name box.
7. Type the Windows spelling for the font in the Windows Name box.



- The PANOSE Font Matching feature only works with CorelDRAW and CorelDRAW Template files. It will not work with text that you copy from the Clipboard.



- To change the spelling of the Windows or Macintosh fonts, you can click the Edit button in the Alternate Spellings dialog box.
- To delete a Macintosh font and its Windows equivalent, you can click the Remove button in the Alternate Spellings dialog box.

Finding and replacing

You can use the Find and Find and Replace wizards to find an object in your drawing that fits general or specific criteria.

The Find wizard takes you through each step of finding objects in your drawings that fit general or specific criteria. When you're finished searching, you can save the search criteria to use in other documents in the current CorelDRAW session or in subsequent ones.

The Find and Replace wizard takes you through the steps of finding and replacing colors, color models or palettes, outline pen properties, and text properties (font, weight, and size).

With text, you can search for both specific text characters and the text with specific properties. For example, using the Replace Text command in the Edit menu, you can search for the word "junction" and replace it with the word "intersection." Using the Find and Replace wizard, you can search for text that is bolded and 16 points in size and replace it with 10 point, non-bolded text.



- Because the Find and Find and Replace wizards give you step-by-step instructions, only the basics are covered here.

Finding objects

The Find wizard identifies objects that match the search criteria you specify for graphical and text objects with specific properties. You can also search for objects that match the criteria of a selected object in your drawing.

With the Find wizard, remember that you can always go back to the preferences that you specify to change the search criteria.

To find objects

1. Choose Edit, Find And Replace, Find Objects.
2. Enable one of the following buttons:
 - Begin A New Search — starts a new search
 - Load A Search From Disk — loads a preset search or one you've previously saved
 - Find Objects That Match The Currently Selected Object — finds objects that have properties matching those of the selected object
3. Click Next to continue with the search.
4. Follow the instructions until you reach the end of the search.



- You can click the Find Previous, Find Next, Find All, or Edit Search buttons on the Find toolbar until the search is complete.
-

Replacing object properties

You can search for specific properties of objects and replace them with other like properties. For example, you can search for specific outline pen properties and replace them with other outline pen properties. You can select some objects that have identical properties and replace them with another set of identical properties. For example, you can select and replace 3 of 5 green rectangles with pink.

To replace object properties

1. Choose Edit, Find And Replace, Replace Objects.
2. Enable one of the following buttons:
 - Replace A Color — replaces a specific color with another color
 - Replace A Color Model Or Palette — replaces a specific color model or color palette with another color model or palette
 - Replace Outline Pen Properties — replaces specific outline pen properties in your drawing
 - Replace Text Properties — replaces specific text properties with other text properties
3. Click Next.
4. Specify both find and replace properties as necessary.

5. Click Finish.

The Find and Replace wizard replaces the properties of the first object that matches your search criteria, or displays a message that none was found.

To replace properties of selected objects



1. Select the objects with the *Pick tool*.
2. Follow steps 1 and 2 from the previous procedure.
3. Enable the Apply To Currently Selected Objects Only check box to replace the properties of the selected objects.
4. Follow steps 3 to 5 from the previous procedure.

The Find and Replace wizard replaces the properties of the selected object that matches your search criteria or displays a message that none was found.



- Click the Find Previous, Find Next, Find All, Replace, or Replace All buttons on the Find and Replace toolbar until your search is done.

Finding and replacing text objects

In CorelDRAW, you can search for text objects with specific properties and search and replace text objects with specific properties. For information about finding text objects with specific properties, see “Finding objects” on page 29. For information about replacing text properties, see “Replacing object properties” on page 30.

To find text objects

1. Choose Edit, Find And Replace, Find Text.
2. Type the text you want to find in the Find What box.
3. Enable the Match Case check box to find the exact case of the text you typed in the Find What box.
4. Click the Find Next button.

To find and replace text characters

1. Choose Edit, Find And Replace, Replace Text.
2. Type the text you want to replace in the Find What box.
3. Type the replacement text in the Replace With box.

4. Enable the Match Case check box to find the exact case of the text you specified.
5. Enable one of the following buttons:
 - Replace — replaces the first occurrence of the text specified in the Find What box
 - Replace All — replaces all occurrences of the text specified in the Find What box
 - Find Next — finds the next occurrence of the text specified in the Find What box

Undoing, redoing and repeating changes

If you make a change to your document then wish you hadn't, you can undo the operation. If you then decide to keep the change, you can redo the operation.

When you have finished saving your document and want to undo any changes made before the save, you can use the Undo command to complete this operation.

CoreIDRAW also lets you discard all your most recent changes and revert to the last saved version of your drawing. In addition, CoreIDRAW lets you repeat an action.

Undoing the last change

In CoreIDRAW, you can undo the last several actions performed.

To undo the last change

- Choose Edit, Undo.

The last action you performed is reversed.



- You can also access the Undo command by holding down Control, and clicking the selected object, and choosing Undo from the pop-up menu.
-

Redoing a change

CoreIDRAW lets you redo an action that you had undone.

To redo a change

- Choose Edit, Redo.

The last action recovers what you had undone.

Changing the number of undo levels

By default, the number of actions you can undo is set to 99, but you can change this number to suit your needs. The higher the number, the greater the demand on your system resources will be.

To change the number of undo levels

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, General.
3. Type values in the Regular and Bitmap Effects boxes in the Undo Levels section.

Undoing all changes since you last saved

The Revert command undoes all the changes you have made to a drawing since your last save. This is the best method to use if you want to undo a series of changes and if you tend to save each time you get to a point in your drawing's development that you like.

To undo all changes since you last saved

- Choose File, Revert.

Repeating commands

The Repeat command lets you repeat a previously performed task on an object. For example after rotating an object, you can use the Repeat command to perform the same operation on another object. The same degree of rotation performed on the first object is repeated on the second.

Using the Repeat command you can repeat the following commands: Fill, Outline, Move, Scale, Skew, Nudge, Rotate, Duplicate, Delete, Copy Properties From, and any command in the Arrange menu.

For example, you can fill one object, then select another and fill it with the same fill.



To repeat a command

1. Select one of the objects with the *Pick tool* and apply one of the commands listed above.
2. Select another object with the Pick tool, and choose Edit, Repeat.



- The command name in the Edit menu varies depending on what command you're repeating, such as, Repeat Move, Repeat Skew, etc.

Viewing document information

CorelDRAW lets you view details of your active file. You can view details such as the number of layers, graphics, and text objects. In addition, you can view the resolution and the type of style, effects, and fills, etc., that you have used in your file. This information can be saved and printed.

Viewing document information

The Document Information dialog box displays detailed information about the contents of your document and the objects it contains.

To view document information

1. Choose File, Document Info.
2. Enable one or all of the check boxes to display the information in the View box.

Saving and Printing document information

You can save document information in a text file that can be opened by applications such as word processor programs. You can also print document information.

To save document information

1. Choose File, Document Info.
2. Click Save As.
3. Locate the folder where you want to save the file.
4. Specify a filename, and click Save.

To print document information

1. Choose File, Document Info.
2. Click Print.

Setting warning preferences

You might encounter a warning while working with CorelDRAW. Warnings explain the consequences of the action you want to perform and inform you of any permanent changes that might be made.

Although the warnings are helpful, you might not need to view them once you become familiar with the software. Avoid disabling warnings until you are comfortable with the application and familiar with the results of the commands you use.

Enabling and disabling warnings

When you use features like converting to CMYK, CorelDRAW displays a warning alert advising you of the consequences of your actions.

To enable and disable tool warnings

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Warnings.
3. Enable or disable one or more of the check boxes.



SETTING UP YOUR DRAWING

3

Before you start creating the objects that will make up a drawing, you'll find it helpful to learn a bit about setting up the environment in which you'll be creating them. This setup process can be divided into five tasks: setting the properties of the Drawing Page, setting up multipage documents, setting up a style template, setting up measurement and alignment tools, and specifying how you want to view your work. By learning to establish an ideal work environment whenever you start a drawing, you can make the process of creating the drawing run more smoothly.

Setting up the Drawing Page

By the time you're ready to start a drawing, you'll probably know what type of page you want to use. The controls on the Size and Layout pages in the Preferences dialog box make it easy to get the exact page settings you want. These controls let you adjust the parameters of the Drawing Page, including its size, orientation, and layout. For added convenience, there are also controls on the Layout page that let you view facing pages in a multipage document. The controls on the Background page let you assign a color or a bitmap to the page to create a page background. You can make this background printable and exportable, or you can use it simply to view your drawing as it would print on colored paper.

Use the page setting options in the Preferences dialog box to adjust the appearance of the page.



In addition to its functions, the Size page is designed to help speed up the setup process so that you can start drawing as quickly as possible. For example, the Paper pop-up menu provides easy access to envelopes and predefined page sizes and orientations, including standard legal and letter paper, and A, B, and C sizes. The Labels page contains predefined label and envelope styles. If you can't find the page size you require, you can create and save your own page size.

Creating labels

CorelDRAW provides numerous label formats from various label manufacturers. You can choose the exact label you want and (in most cases) adjust it as needed using the controls in the Customize Label dialog box. You can also use these controls to create and save your own original labels.

Each label you create should appear on a separate Drawing Page. Before you print labels, however, you should check your printer's warranty information. Some manufacturers state that your warranty is invalidated if your labels damage the printer.



- The page settings on the Size page and the print settings on the Printing Defaults page in the Preferences dialog box are closely related, but their settings are not always identical. If your printed drawing doesn't look right, make sure your page and print settings match.

Choosing a page size

CorelDRAW provides an array of preset page sizes, including standard North American sizes (e.g., letter and legal) and European sizes (e.g., A4 and German Fanfold). You'll also find options that let you set up the page so that you can design and print booklets, greeting cards, and more. If CorelDRAW does not include a page size that meets your specific requirements, you can

define, name, and save a custom page size. For more information about custom pages, see “Defining and saving a custom page size” on page 40.

The rectangle in the middle of the Drawing Window always reflects the current size and orientation of the Drawing Page.

To choose a preset page size

1. Choose File, Document Setup.
2. Choose a preset page size from the Paper pop-up menu.



- The rectangle in the middle of the Drawing Window always reflects the current size and orientation of the Drawing Page.



- You can also choose a preset page size by clicking a blank space in the Drawing Window, and choosing a paper size from the Paper Type/Size pop-up menu on the Property Bar.

Setting the resolution

You can adjust the screen, printer, and export resolution settings. You should adjust the resolution setting according to the output device you’re using.

For information about using pixels as the unit for a drawing, see “Setting ruler units for Internet objects” on page 63.

To set the resolution

1. Choose File, Document Setup.
2. Choose a resolution from the Resolution pop-up menu.



- When you change the resolution, CorelDRAW adjusts the horizontal and vertical rulers to reflect the resolution. The number of pixels equals the resolution multiplied by the page dimensions. For example, a five by five inch document at 72 dpi has 360 pixels.
- Drop shadows and texture fills are affected by the page resolution. If the page resolution is low and the resolution of your printing device is high, the bitmap will appear jagged when it’s printed.



- If the resolution you want is not provided in the Resolution pop-up menu, choose Other, and type values in the Horizontal Resolution and Vertical Resolution boxes.
-

Defining and saving a custom page size

You can create and save your own page size if CorelDRAW doesn't provide the page size you require. Custom page sizes are extremely useful when you're creating Web graphics, icons, or buttons because you don't have to remove any extraneous white space. For example, you can create a page as large as 150 by 150 feet or as small as 1 pixel by 1 pixel.

To define a custom page size

1. Choose File, Document Setup.
 2. Choose Custom from the Paper pop-up menu.
 3. Type values in the following boxes:
 - Width — to specify the horizontal dimension of the page
 - Height — to specify the vertical dimension of the page
-



- The rectangle in the middle of the Drawing Window always reflects the current size and orientation of the Drawing Page.
-



- You can view changes made to the page size using the Preview window.
 - You can also define a custom page size by typing values in the Paper Width And Height boxes on the Property Bar, and pressing Return.
 - You can choose a different unit of measurement from the pop-up menu that appears beside the Width box. The dimensions are automatically converted when you change units.
-

To save a custom page size

1. Follow all of the steps from the previous procedure.
2. Click the Save Custom Page button.
3. In the Custom Page Type dialog box, type the name of the new page type in the Save Custom Page Type As box.



- Custom pages you save are listed in the Paper Type/Size pop-up menu on the Property Bar.
-

Removing a custom page size

If you decide you no longer need a page size that you created, you can remove it.

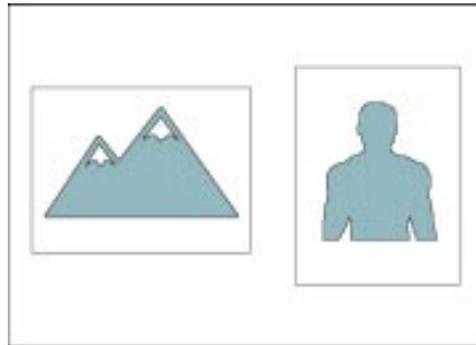
To remove a custom page size

1. Choose File, Document Setup.
2. Choose a custom page size from the Paper pop-up menu.
3. Click the Delete Custom Page button.

Setting the page orientation

You can change the orientation of the Drawing Page so that it matches the paper in the printer or other output device you are using. You can set the orientation manually or have CorelDRAW automatically match the page orientation to the current printer (or similar output device) settings.

You can set page orientation to landscape or portrait.



To set the orientation for the Drawing Page

1. Choose File, Document Setup.
2. Enable one of the following buttons:
 - Landscape — makes the horizontal dimension of the page greater than the vertical dimension
 - Portrait — makes the vertical dimension of the page greater than the horizontal dimension



- If the values you type in the Width and the Height boxes are the same, the page orientation is set to Portrait automatically.



- You can also set the orientation for the Drawing Page by clicking a blank space in the Drawing Window, and clicking the Portrait or the Landscape button on the Property Bar.

To match the Drawing Page's size and orientation to the current printer settings

1. Choose File, Document Setup.
2. Enable the Use Page Setup For Document Setup check box.

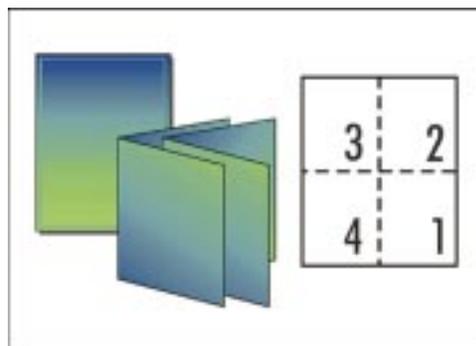


- You can change the printer's page size and orientation by clicking the Page Setup button on the Size page in the Preferences dialog box.
- If you are printing crop marks, remember that they appear outside of the drawing's dimensions (i.e., the Drawing Page). Consequently, the printer page needs to be larger than the Drawing Page. For more information about crop marks see, "Printing crop marks and registration marks" on page 550.

Setting the layout style

CorelDRAW offers layouts for single-page documents as well as standard publications like books, booklets, and pamphlets.

CorelDRAW automatically prints your documents to match the layout style you're drawing.



To set the layout style

1. Choose Edit, Preferences.

2. In the list of categories, double-click Document, Page, and choose Layout.
3. Choose a layout style from the Layout pop-up menu.



- Although the pages display sequentially on screen, they don't necessarily print in that order. Instead, CorelDRAW automatically arranges the pages so that they appear in the proper order when you bind the publication.



- Each layout style is accompanied by a short description, as well as a graphical example in the Preview window.

Viewing facing pages

You can display two consecutive pages on the screen at the same time. Using this option, you can add an interesting dimension to your work by creating objects that span two pages. Additionally, you can specify whether you want CorelDRAW to start the document on a right- or left-facing page.

To view facing pages

1. Choose File, Document Setup.
2. From the list of categories, choose Layout.
3. Enable the Facing Pages check box.

To set the starting side of a multiple page document

1. Follow all of the steps from the previous procedure.
2. Choose an option from the Start On pop-up menu:
 - Left Side — starts the document on a left-facing page
 - Right Side — starts the document on a right-facing page



- You may find that you can't display two consecutive pages. For example, you can't view facing pages if your drawing uses a Tent Card or Top-Fold Card layout style. The Left Side option is only available for the Full Page and Book layout styles.

Adding a page frame

You can quickly add a printable and exportable background frame that covers the entire Drawing Page. The frame is sized to fit the page and appears behind all other objects in the drawing. Page frames assume the default fill and outline style, but you can change these attributes just as you would with any other object. For more information about fills and outlines see, “Filling and outlining objects” on page 169.

To add a background frame

1. Choose File, Document Setup.
2. Click the Add Page Frame button.

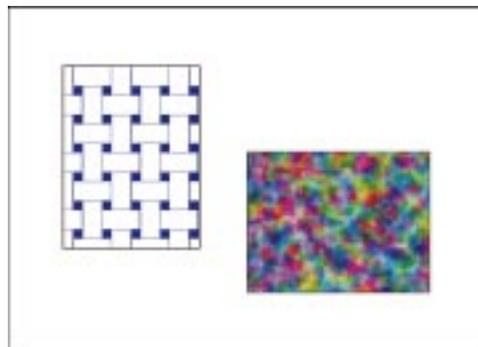


- You can also create a background frame by double-clicking the Rectangle tool on the toolbox.
-

Adding a page background

You can color the background of the Drawing Page with a solid color or a bitmap. You can print and export backgrounds with your drawing, or you can use the background for display purposes only.

You can add a page background to enhance the appearance of a document.



When you use a bitmap to create a background, you can specify the dimensions of the bitmap and link the graphic to or embed it in your document. If you link a graphic to your document, any changes you make to the source graphic are automatically reflected in your document, whereas embedded objects remain the same.

To color a page background using a solid color

1. Choose File, Document Setup.

2. From the list of categories, choose Background.
3. Enable the Solid button.
4. Choose a color from the pop-up menu.



- If you don't see an appropriate color, click the Other button and create a custom color, or choose a color from any of the color models provided with CorelDRAW.

To color a page background using a bitmap

1. Choose File, Document Setup.
2. From the list of categories, choose Background.
3. Enable the Bitmap button.
4. Click the Select button.
5. Locate the folder where the file is stored.
6. Choose a file format from the Format box.
7. Choose the filename.
8. Click Open.

To link or embed the bitmap background

1. Follow all of the steps from the previous procedure.
2. Enable one of the following buttons:
 - Linked — links the bitmap externally
 - Embedded — adds the bitmap directly to your document



- You must include linked graphics if you send the file to someone.

To specify the dimensions of the bitmap background

1. Follow all of the steps from the “To color a page background using a bitmap” procedure.
2. Enable the Custom Size button.
3. Disable the Maintain Aspect Ratio check box.
4. Type values in the following boxes.

- H — to specify the background's width
- V — to specify the background's height



- You can set the size of a bitmap to its default size by enabling the Default Size button.
-

To make the background printable and exportable

1. Follow all of the steps from the “To color a page background using a bitmap” procedure.
2. Enable the Print And Export Background check box.

Removing a page background

You can quickly remove a page background from the Drawing Page without affecting the rest of your drawing.

To remove a page background

1. Choose File, Document Setup.
2. From the list of categories, choose Background.
3. Enable the No Background button.

Hiding and displaying the page border

The page border — the rectangle with the drop shadow that appears in the Drawing Window — indicates the dimensions and orientation of the Drawing Page. Although it is displayed by default, you can hide the page border while you work.

To hide the page border

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Page.
3. Disable the Show Page Border check box.

To display the page border

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Page.
3. Enable the Show Page Border check box.

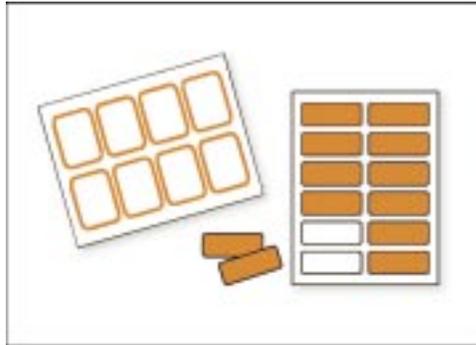


- The effect of hiding or displaying the page border is shown in the Drawing Window only.
-

Creating labels

You can create labels from any of the predesigned label formats that CorelDRAW provides. The label formats are arranged alphabetically by manufacturer.

You can create labels quickly and easily using preset label styles.



To use a preset label style

1. Choose File, Document Setup.
2. From the list of categories, choose Label.
3. Enable the Labels button.
4. Double-click the manufacturer name.
5. Choose the label style you want from the list.



- You can use the Preview window to see the dimensions of the labels, as well as how they fit on a printed page.
-

Adding and deleting custom label styles

If CorelDRAW does not provide a label style that meets your specific requirements, you can modify an existing style or create and save your own original style. You can also remove any label style from the list.

To add a custom label style

1. Choose File, Document Setup.

2. From the list of categories, choose Label.
3. Enable the Labels button.
4. Double-click the manufacturer name, and choose the label style closest to the one you want from the list.
5. Click the Customize Label button.
6. Adjust the label size, margins, gutters, and the number of labels that appear on each sheet by typing values in the boxes provided.
7. Click the *Add button*.
8. Type a name for the new label style in the Save As box.



To delete a custom label style

1. Follow steps 1 to 3 from the previous procedure.
2. Click the Customize Label button.
3. Choose a label style from the Label Style pop-up menu.
4. Click the *Delete button*.



Working with multipage documents

You can create multipage documents and navigate through them by using commands or using the Navigator. You can add, rename, move between, and delete pages using commands in the Layout menu.

You can also use the Navigator to add, rename, and delete pages, and move from page to page. You can quickly add blank pages and delete pages without interrupting your work.

Working with multipage documents using menu commands

You can use menu commands to add, rename, and delete pages, as well to move to a specific page in your document. Also, you can delete a range of pages.

To add pages

1. Choose Layout, Insert Page.
2. Type the number of pages you want to add in the Insert Pages box.
3. Enable one of the following buttons:
 - Before — to add a page before the active page
 - After — to add a page after the active page



- You can change the relative page by typing a new page number in the Page box.

To go to a specific page

1. Choose Layout, Go To Page.
2. Type a number in the Go To Page box.

To rename a page

1. Choose Layout, Rename Page.
2. Type the name of the page in the Page Name box.

To delete a page

1. Choose Layout, Delete Page.
2. Type a page number of the page in the Delete Page box.

To delete a range of pages

1. Choose Layout, Delete Page.
2. Type the number of the first page in the Delete Page box.
3. Enable the Through To Page check box.
4. In the box beside the Through To Page check box, type the number of the last page.

Working with multipage documents using the Navigator

The Navigator allows you to add and delete pages, and helps you move through multipage documents quickly without interrupting your work.

The Navigator appears in the bottom left corner of the Drawing Window. It shows the total number of pages in your drawing and the number of the page that's currently displayed.

Using the Navigator, you can do the following:

To ...	Do this ...
Add a page	Hold down Control, click a page tab, and choose Insert Page Before or Insert Page After.
Add a page to the beginning	Move to the first page of the document, and click Add Beginning Page.
Add a page to the end	Move to the last page of the document, and click Add Ending Page.

Rename a page	Hold down Control, click a page tab, and choose Rename Page. Type a name in the Page Name box.
Delete a page	Hold down Control, click a page tab, and choose Delete Page.
Go to the first page	Click First Page.
Go to the last page	Click Last Page.
Go forward one page	Click Forward One.
Go back one page	Click Back One.
Go to a page	Click Page Number.

Resizing the Navigator

If the Navigator does not displaying enough information, you can widen it.

To resize the Navigator

- Drag the right border of the Navigator as required.

Working with styles and templates

Every CorelDRAW drawing you create is based on a template, which is a pattern, or mold, for the text, graphics, and formatting in a document. You can start a drawing using the default template, or a template that you create.

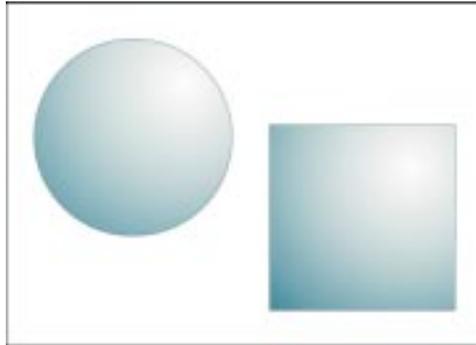
Templates are based on sets of styles that govern the appearance of specific types of objects, including shapes, lines, and text. When you apply a style to an object, the object assumes the appearance dictated by the style. By building a drawing around a template, you can control the attributes of every object in it.

Working with styles

The ability to create and store instructions that determine the appearance of text has long been a feature of word processing and desktop-publishing programs. Called “styles” or “tags,” these instructions reduce layout time and make it easier to create documents with a consistent look.

CorelDRAW brings the benefit of styles to graphics creation. These styles can control the appearance of graphic objects and text. A graphic style can include fill and outline attributes, transformations, and certain special effects. A text style can include these graphic style attributes, as well as text-specific attributes such as font, spacing, alignment, and so on.

.....
You can use a style
to apply similar
properties to any set
of objects.
.....



You can use the styles provided with the default template or create your own custom styles. Any styles you create are saved with the current drawing. To use a style for other documents, you can save the style, then retrieve it in another document. You can also copy a style to a template for use in other documents. For added convenience, changes to a style are automatically applied to all objects that use that style.

The styles you create can be applied to any object and added to a collection of styles to form a custom template. By saving different sets and combinations of styles, you can have templates for use with specific types of design projects. As with other features in CorelDRAW, you control how styles and templates work for you. For more information about templates see, “Working with templates” on page 56.

Creating a style based on an object

You can create a style based on a graphic or text object that has the attributes you want. For example, you can define a style from an object that has a red outline and blue fill. Then, if you apply the new style to another object, the object takes on a red outline and a blue fill.

To create a style based on an object



1. Hold down Control, and click the object using the *Pick tool*.
2. Choose Styles, Save Style Properties.
3. Type a name for the style (up to 31 characters including spaces) in the Name box.
4. Enable and disable the style attributes as required.



- You can overwrite an existing style by leaving the name of the style in the Name box unchanged.
 - CorelDRAW adds the style to the current template and to the list of styles on the Graphic And Text Palette.
-

Creating a style using the Graphic And Text Palette

You can create a style based on the default style and copy the attributes from a graphic or text object. You can also name the style you create.

To create a style using the Graphic And Text Palette

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Tools, Graphic And Text Styles.
3. On the Graphic And Text Palette, click , choose New, and choose one of the following:
 - Graphic Style
 - Artistic Text Style
 - Paragraph Text Style
4. Choose the new style from list.
5. Click , and choose Copy Properties From.
6. Click the object from which you want to copy the style attributes.

To rename a style

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, click , and choose Rename.
3. Type a new name, and press Return.

Applying a style

You can apply a style from the current template, or you can load a different template and apply one of its styles. For more information about templates, see “Working with templates” on page 56.

When you apply a style to an object, the object takes on only those attributes governed by the style. For example, if you apply a style that controls outline attributes, the object’s outline changes while its other attributes stay the same.



To apply a style to an object

1. Select an object with the *Pick tool*.
2. Choose Tools, Graphic And Text Styles.
3. On the Graphic And Text Palette, choose a style from the list.
4. Click , and choose Apply Style.



- You can also apply a style to an object interactively. Hold down Control, click the object with the Pick tool, choose Styles, Apply, and choose the name of the style you want.

To apply styles from another template

1. Follow steps 1 and 2 from the previous procedure.
2. On the Graphic And Text Palette, click , and choose Template, Load.
3. Locate the folder where the file is stored.
4. Click the name of the template.
5. Click Open.
6. Follow steps 3 and 4 from the previous procedure.

Editing a style

You can use the Graphic And Text Palette to make specific adjustments to the style's attributes.

To edit a style

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, choose a style from the list.
3. Click , and choose Properties.
4. Click the appropriate Edit button and change the style attributes as required.



- You can also edit a style by changing the attributes of an object that uses the style in question, then resaving the style. For more information see, “Creating a style based on an object” on page 51.

Restoring an object's style

You can undo any changes you make to an object's attributes after you've applied a style to the object. Modified attributes that are defined by the style revert to the style's settings. Modified attributes that are not defined by the style remain unchanged.

To restore an object's previous style



1. Hold down Control, and click the object using the *Pick tool*.
2. Choose Styles, Revert To Style.

Finding objects that use a specific style

You can locate any object in the active drawing that uses a particular style. For example, you can find all objects that use the Default Graphic style.

To find objects that use a specific style

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, click the style assigned to the objects you want to find.
3. Click , and choose Find.
A selection box appears around the first object with the specified style.
4. Click , and choose Find Next to find the next object that uses the style.

Assigning a shortcut key to a style

You can assign a shortcut key to a style. The shortcut can use up to four different keystrokes. If another style is using the shortcut key that you want to apply, you can delete the existing shortcut key.

You can also use the Customize dialog box to assign a shortcut key. For more information, see "Assigning keyboard shortcuts" on page 578.

To assign a shortcut key to a style

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, choose a style.
3. Click , and choose Edit Hot Key.
4. Click the Press New Shortcut Key box.
5. Press the combination you want to assign to the style, and click the Assign button.



- You can find out what shortcut keys are assigned to that style by referring to the Current Shortcut Keys box.
-

To delete an existing shortcut key

1. Follow steps 1 to 4 from the previous procedure.
2. Enable the Delete Conflicts check box.
3. Enable the Navigate To Conflict check box to select the style or command to which the shortcut was originally mapped.
4. Click the Assign button.

Deleting a style

You can remove styles you create from any template. When you delete a style, objects that use that style revert to a default style based on the object type. However, their appearance doesn't change. For more information see, "Working with templates" on page 56.

To delete a style

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, choose a style from the list.
3. Click , and choose Delete.



- You can't delete any of the following styles: Default Paragraph Text, Default Artistic Text, and Default Graphic.
-

Customizing the display of the Graphic And Text Palette

You can determine which styles — graphic, Artistic text, or Paragraph text — are displayed on the Graphic And Text Palette. You can also customize the Graphic And Text Palette to automatically display the styles you can apply to an object when you select it. For example, when you select Artistic text, only Artistic text styles appear on the Graphic And Text Palette.

To specify which styles are displayed on the Graphic And Text Palette

1. Choose Tools, Graphic And Text Styles.

2. On the Graphic And Text Palette, click , choose Show, and choose any of the following options:

- Graphic Styles — displays Graphic styles only
- Artistic Text Styles — displays Artistic text styles only
- Paragraph Text Styles — displays Paragraph text styles only

A check mark appears beside enabled options.

To display only the styles you can apply to a selected object automatically

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, click , choose Show, Auto-View.

Working with templates

A template is a file that contains a collection of styles that work together to define the overall appearance of a drawing or document. The styles in CorelDRAW come in three formats: graphic styles, Artistic text styles, and Paragraph text styles. These styles help control the appearance of specific objects or types of objects like lines, curves, shapes, and text.

.....
Templates help
control the
appearance of objects
and text.
.....



CorelDRAW includes a default template that has one style each for graphics and Artistic text, and seven styles for Paragraph text. When you start CorelDRAW, a blank drawing is created based on this default template.

You can create your own template based on your own styles or styles taken from other templates. You can also create a template from any drawing you create in CorelDRAW.

Templates can be applied at any time during a CorelDRAW session. For example, you can load a template when you start a new drawing, then apply a different template after you've worked on your drawing.

Creating a template

You can use styles you create or styles from another template to determine what styles are stored in your CorelDRAW template file. For more information about styles, see “Working with styles” on page 50. For information about loading a template see, “Loading a template” on page 58.

You can create a template using the Graphic And Text Palette or the Save Drawing dialog box. When you use the Save Drawing dialog box, CorelDRAW automatically saves objects on the Drawing Page along with the styles.

To create a template using the Graphic And Text Palette

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, do any of the following:
 - Create text and graphics, and use them to create the styles you want.
 - Use the Clipboard to add objects with the styles you want to save in your new template.
 - Load an existing template with the styles you want, and apply them to objects on the page.
3. Click , Template, Save As.
4. Locate the folder where you want to save the file.
5. Specify a filename.
6. Do one of the following:
 - Enable the With Contents check box to include page settings and objects on the active page.
 - Disable the With Contents check box to save only the styles.
7. Click Save.

To create a template using the Save Drawing dialog box

1. Choose File, Save As.
2. Locate the folder where you want to save the file.
3. Choose CorelDRAW Template from the Format box.
4. Specify a filename.
5. Click Save.



- You must create styles before saving a template.
-



- You can save the page settings with the template if you altered the page layout.
-

Loading a template

Each new drawing you start using the New command uses the default template. If you don't want to start with this template, you can load a different template.

To load a template

1. Choose File, Open.
2. Locate the folder where the template file is stored.
3. Choose CorelDRAW Template from the Format box.
4. Choose the filename of the template.
5. In the Open Template dialog box, do one of the following:
 - Enable the With Contents check box to include page settings and objects that were saved along with the styles.
 - Disable the With Contents check box to load the styles only.
6. Click Open.

Applying a new template to a drawing

You can apply a new template to your drawing at any time.

To assign a new style template

1. Choose Tools, Graphic And Text Styles.
2. On the Graphic And Text Palette, click , choose Template, Load.
3. Locate the template you want to load.
4. Click Open.



- The Load command does not add saved objects to your page or change the page settings. For more information about loading templates that contain objects and page settings, see “Loading a template” on page 58.
- If objects in your drawing use styles with the same names as those in the new template, CorelDRAW prompts you to indicate whether you want to apply the new styles to those objects.

Using the rulers, grid, and guidelines

The grid, ruler, and guideline features are designed to help you draw and arrange objects with precision. The grid is an adjustable tool that is superimposed on your drawing to help you draw and align objects precisely. The rulers are also adjustable and help give you a sense of location and size within the Drawing Window. Guidelines are lines that you can add to the Drawing Window to help you align objects. By default, guidelines do not appear when you print your work; however, you can set them to print.

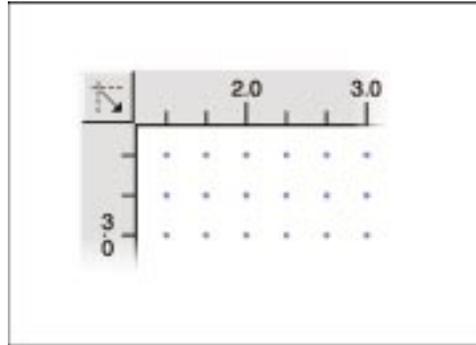
Like the majority of the tools and features in CorelDRAW, you decide how you want to use the grid, rulers, and guidelines. In each case, you can set the properties that control how the tool operates within the drawing. As a result, you may find it helpful to make sure that the grid, rulers, and guidelines are set up the way you want before you start adding objects to a drawing. Although you can change their settings at any time, you’ll probably find that you get more work done if you set up the grid, rulers, and guidelines first.

Using the rulers and grid

The movable on-screen rulers provide a visual reference that can help you determine the size and position of any object in your drawing. The rulers are particularly effective when you use them to help you position objects by dragging them with the mouse. As you move the cursor around the Drawing Window, the rulers help you find your current position relative to their origin (the position where the rulers’ 0 points intersect). In fact, the Status Bar displays the cursor’s position by default. You can have the rulers display the unit of measurement that best suits your diagram.

The grid system works with the rulers to help you align and position objects accurately. CorelDRAW displays the grid as a series of intersecting dotted lines spaced according to the settings on the Grid And Guidelines page in the Preferences dialog box. By displaying the grid, you provide an easy and accurate way to position objects relative to one another and to the Drawing Page. In addition, you can use the Snap To Grid feature to ensure that objects automatically line up with the grid as you move them.

.....
The grid and rules
work together to help
you set an object's
size and position.
.....



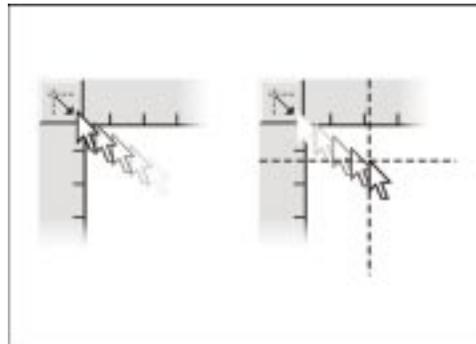
Setting a drawing scale

You can increase the effectiveness of the rulers and grid by establishing a drawing scale that relates all distances in the drawing to distances in the real world. For example, if you're creating a technical drawing in which you want to show large objects on a small page, you can adjust the drawing scale accordingly. You can use the Drawing Scale dialog box to set the scale for the current drawing.

Setting ruler parameters

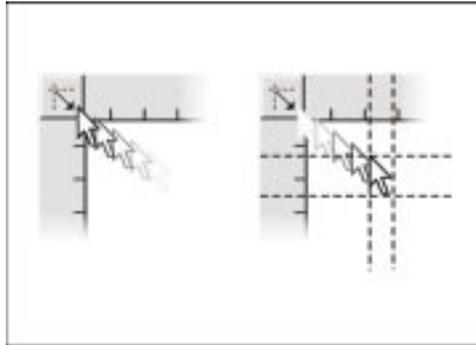
The rulers are useful for determining the size and position of objects. You can set the rulers, the rulers' origin so that the ruler coordinates emanate from the exact location you want.

.....
Dragging the ruler
intersection to the
Drawing Window to
reposition the ruler
origin.
.....



In addition, you can move the rulers within the Drawing Window. For example, you can move the rulers right over your drawing so that you can create or move an object with precision.

Reposition the rulers to create or move objects with precision.



Moving the rulers has no effect on their origin, only on where the rulers are displayed in the Drawing Window.

To set the ruler origin

1. Choose Layout, Grid And Ruler Setup.
2. From the list of categories, choose Rulers.
3. Type values in the Horizontal Origin and Vertical Origin boxes to set the location of the origin.



- The values you specify represent the position of the ruler origin relative to the bottom-left corner of the Drawing Page. For example, if you set 1.0 as the horizontal coordinate and 5.0 as the vertical coordinate, CorelDRAW places the ruler origin 1 inch to the right and 5 inches up from the bottom-left corner of the Drawing Page.



- You can open the Rulers page in the Preferences dialog box by double-clicking either of the rulers on the Drawing Window.
- You can set the ruler origin by dragging the ruler intersection point onto the Drawing Window, and releasing the mouse button when the ruler crosshairs occupy the origin point you want.

To reposition a ruler

- Hold down Shift, and drag the ruler to a new position.



- You can move both rulers simultaneously by holding down Shift, and dragging the ruler intersection point.
-

To return a ruler to its original position

- Hold down Shift, and double-click the ruler.

Setting ruler units

You have complete control over the units of measurement displayed on the horizontal and vertical rulers. CorelDRAW provides an array of units, ranging from small units like points, millimeters, and inches to larger units like meters, kilometers, and miles. Use the unit setting that best suits the type and size of drawing you want to create.

In addition to setting the units used for the horizontal ruler, the Horizontal box also sets the units used for all controls that indicate units of measurement. These controls are found in dialog boxes, Palettes, and the Property Bar.

When you change the ruler units, you should also specify a new grid frequency. For more information about setting the grid frequency, see “Setting grid parameters” on page 64.

To change the units of measurement on the rulers

1. Choose Layout, Grid And Ruler Setup.
2. From the list of categories, choose Rulers.
3. Choose a unit of measurement from the Horizontal pop-up menu.
4. Enable the Same Units For Horizontal And Vertical Rulers check box.



- You can use different measurements for the each ruler. Disable the Same Units For Horizontal And Vertical Rulers check box and choose a unit of measurement for the vertical ruler from the Vertical pop-up menu.
 - You can display measurements on the rulers in fractions instead of decimals. Double-click a ruler, and enable the Show Fraction check box.
 - You can change the units of measurement of the rulers by clicking a blank space in the Drawing Window with the Pick tool, and choosing a unit of measurement from the Drawing Units pop-up menu on the Property Bar.
-

Setting ruler precision marks

You can specify how many precision marks appear between each full unit mark or “tick” on the horizontal and vertical rulers.

To set the number of precision marks

1. Choose Layout, Grid And Ruler Setup.
2. From the list of categories, choose Rulers.
3. Choose an option from the Tick Divisions pop-up menu.

Setting ruler units for Internet objects

If you’re creating a graphic for Internet use, you’ll find it most useful to use pixels as your ruler unit. By using pixels and setting a horizontal and vertical resolution for your graphic, you ensure that it looks the same no matter what application you use to display it.

When you select pixels as your ruler units, pixels becomes the default unit for your drawing. You can then size the page to ensure that the Drawing Page is the size you want for your graphic.

For more information about setting up the Drawing Page, see “Setting up the Drawing Page” on page 37.

To have the rulers display measurements in pixels

1. Choose Layout, Grid And Ruler Setup.
2. From the list of categories, choose Rulers.
3. Choose Pixels from the Horizontal pop-up menu.
4. Enable the Same Units For Horizontal And Vertical Rulers check box.
5. Click the Resolution button.
6. Type a value in the Horizontal Resolution box.
7. Do one of the following:
 - Enable the Identical Values check box to make the horizontal and vertical resolutions the same.
 - Disable the Identical Values check box, and type a value in the Vertical Resolution box.

Setting the drawing scale

You can use the controls in the Drawing Scale dialog box to set the scale for your drawing. In CorelDRAW, the scale represents a ratio between the

drawing (page distance) and the real world (world distance). For example, if you choose a drawing scale of 1:10, 1 unit on the ruler corresponds to 10 units of “real” distance.

You can choose from a variety of preset scales or create a custom scale that suits your needs.

To choose a preset drawing scale

1. Choose Layout, Grid And Ruler Setup.
2. From the list of categories, choose Rulers.
3. Click the Edit Scale button.
4. Choose a drawing scale from the Typical Scales pop-up menu.

To set a custom drawing scale

1. Follow steps 1 to 3 from the previous procedure.
2. Choose Custom from the Typical Scales pop-up menu.
3. Type a value in the Page Distance box to set the part of the scale represented in the drawing.
4. Choose a unit for the page distance from the pop-up menu.
5. Type a value in the World Distance box to set the actual distance you want represented by each unit of page distance.



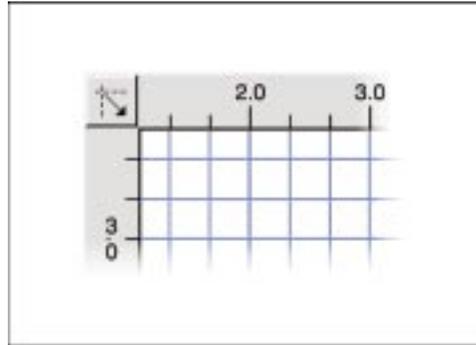
- If you want to change the World Distance units, change the horizontal ruler units. If the drawing scale is set to anything other than 1:1, the vertical ruler units will always be the same as the horizontal ruler units. For more information about changing ruler units, see “Setting ruler units” on page 62.
-

Setting grid parameters

You can set the distance between grid dots by specifying the number of grid dots per horizontal and vertical unit of measurement or by specifying the space between each grid dot.

By default, CorelDRAW displays the grid as dots. You can also display the grid as lines so that it looks like grid paper. The points where horizontal and vertical lines intersect represent grid dots; therefore, the frequency or spacing settings you specify also apply to grid lines.

.....
You can display the
grid as lines.
.....



To set the distance between grid dots

1. Choose Layout, Grid And Ruler Setup.
2. Enable the Show Grid check box to display the grid.
3. Click one of the following buttons:
 - Frequency — sets the grid spacing as a number of dots per unit of measurement
 - Spacing — specifies the distance you want between each grid dot
4. Type values in the Horizontal and Vertical boxes.



- Set high frequency values or low spacing values for added precision.
-

To display the grid as lines

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Show Grid As Lines button.

Using Snap To Grid

You can use the Snap To Grid feature to align objects precisely. When you enable Snap To Grid, objects you move or draw automatically snap to the grid so that they line up vertically and horizontally with the nearest grid marker.

To have objects snap to the grid

- Choose Layout, Snap To Grid.



- You can have objects snap to the grid by clicking a blank space in the Drawing Window with the Pick tool, and clicking the Snap To Grid button on the Property Bar.

Displaying or hiding the rulers and the grid

You can choose to display or hide rulers and the grid. If your screen space is limited, for example, you might choose to hide the rulers and display them only when you need them. Or, if you want to view your drawing so that it looks more like it will when you print it, you might want to hide the grid and display it later. Whether you hide or display them, the rulers and grid will maintain their settings to help you draw with accuracy and consistency.

To display or hide the rulers using the Rulers command

- Choose View, Rulers.

If no check mark appears next to the command name, the rulers are hidden. If a check mark appears, the rulers are displayed.

To display or hide the grid using the Grid command

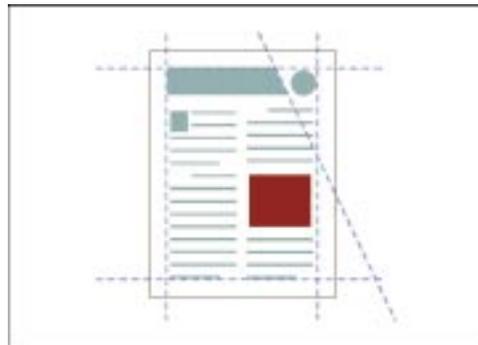
- Choose View, Grid.

If no check mark appears next to the command name, the grid is hidden. If a check mark appears, the grid is displayed.

Working with guidelines

Guidelines are lines that you can place anywhere in the Drawing Window to help you align and position objects. You can create any number of horizontal, vertical, and slanted guidelines and have CorelDRAW save them with your drawing. You can also enable snapping to guidelines so that objects automatically align with the guidelines when moved or drawn nearby.

Use guidelines to help you create, align, and position objects in the Drawing Window.



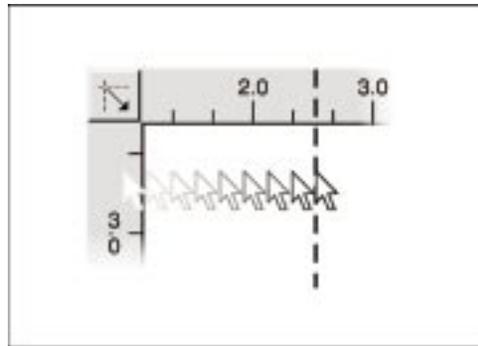
Guidelines are also objects that you can select, rotate, nudge, duplicate, and delete as you would any other object. When you select a guideline, it changes color; unselected guidelines are blue, and selected guidelines are red. You can also hide the guideline layer using the Object Manager. For more information about Object Manager, see “Using the Object Manager” on page 275.

By default, guidelines do not appear in printed copies of your work, however, you can choose to print guidelines. For more information see, “Enabling and disabling the printing of a layer” on page 284.

Adding guidelines

You can set up precise horizontal, vertical, and slanted guidelines based on the horizontal or vertical distance from the 0 point on the appropriate ruler. You set up slanted guidelines based on either two specific ruler coordinates or one coordinate and an angle. For example, if you choose Angle And 1 Point, you’ll be required to set coordinates in the X and Y boxes and an angle in the Angle box. The guideline you create will pass through that coordinate at the angle you set.

.....
You can create horizontal and vertical guidelines by dragging from a ruler to the Drawing Window.
.....



To add a horizontal or vertical guideline

1. Choose Layout, Guidelines Setup.
2. Choose the Horizontal or Vertical tab.
3. Type a location for the guideline (relative to the 0 point on the horizontal or vertical ruler) in the box provided.

If you want to put the guideline below or to the left of the 0 point (for horizontal or vertical guidelines, respectively), type a negative number.

4. Choose a unit of measurement from the pop-up menu.
5. Click the Add button.



- You can open the Guidelines Setup dialog box by double-clicking a guideline.
 - You can also add a horizontal or vertical guideline by clicking the horizontal or vertical ruler with the Pick tool, and dragging the guideline to the Drawing Window.
-

To add a slanted guideline based on two ruler coordinates

1. Choose Layout, Guidelines Setup.
2. Choose the Slanted tab.
3. Choose 2 Points from the Specify pop-up menu.
4. In the X and Y boxes, type the endpoint coordinates relative to the 0,0 point on the rulers.
5. Click the Add button.

To add a slanted guideline based on one ruler coordinate and an angle

1. Follow steps 1 and 2 from the previous procedure.
2. Choose Angle And 1 Point from the Specify pop-up menu.
3. In the X and Y boxes, type the endpoint coordinates relative to the 0,0 point on the rulers.
4. Type an angle value in the Angle box.



- Any guidelines you add appear on every page of a multipage document.
-



- You can slant a horizontal or vertical guideline by clicking a guideline twice to display the rotation and skewing handles, and dragging one of the rotation handles (the corner two-way arrows) clockwise or counterclockwise.
 - You can also slant a guideline interactively by selecting it with the Shape tool, and dragging one of the character nodes, which appear at each end of the guideline.
-

Positioning guidelines

You can move a guideline to a position that better suits your needs. When you select a guideline, it changes color (from blue to red) to indicate that it's been selected.

To position horizontal or vertical guidelines

1. Choose Layout, Guidelines Setup.
2. Choose the Horizontal or Vertical tab.
3. Choose a guideline from the list at the left side of the dialog box.
CorelDRAW lists the guidelines by their location in the Drawing Window.
4. Type a new location relative to the 0 point on the horizontal or vertical ruler.
5. Click the Move button.



- You can move the guideline to the left of or below the 0 point (for a vertical or horizontal guideline, respectively) by typing a negative number.
 - You can choose a different unit of measurement from the pop-up menu.
-

To position a slanted guideline

1. Choose Layout, Guidelines Setup.
2. Choose the Slanted tab.
3. Choose a guideline from the list at the left side of the dialog box.
The guidelines are listed according to the way they're created: with two points or with an angle and one point.
4. Choose a method of moving the guideline from the Specify pop-up menu.
No matter how the guideline was set, you can move it by specifying two points or an angle and one point.
5. Type the endpoint coordinates relative to the 0,0 point on the rulers in the X and Y boxes.
6. Type an angle in the Angle box, if required.
7. Click the Move button.



- The Angle box appears when you select Angle And 1 Point from the Specify pop-up menu.
-



- You can also position a guideline by selecting the guideline with the Pick tool, and dragging it to a new position.
 - You can select all guidelines in the Drawing Window, by choosing Edit, Select All, Guidelines.
 - You can select multiple guidelines by holding down Shift as you select guidelines with the Pick tool.
-

Using Snap To Guidelines

The Snap To Guidelines feature can help you align objects precisely. When you enable Snap To Guidelines, objects you move or draw near any guideline automatically snap so that they line up with the guideline. With horizontal and vertical guidelines, an object snaps so that the edge of its selection box aligns with the guideline. Horizontal edges align with horizontal guidelines; vertical edges align with vertical guidelines.

With slanted guidelines, an object snaps so that it aligns with the guideline at the point that it's dragged with the mouse pointer. For example, if you move the mouse pointer over the center of a polygon and drag it toward a slanted guideline, the center point snaps to the guideline.

To have objects snap to guidelines

- Choose Layout, Snap To Guidelines.

The command is enabled when a check mark appears beside the command name.



- You can have objects snap to guidelines by clicking a blank space in Drawing Window, and clicking the Snap To Guidelines button on the Property Bar.
-

Displaying guidelines

You can display or hide guidelines at any time. You'll find it best to have guidelines showing when you're drawing and positioning objects. However, you might find it useful to hide guidelines when you want your drawing to look more like it will when you print it.

Because guidelines have their own layer, you can also show and hide guidelines using the Object Manager. For more information about the Object Manager, see “Showing and hiding a layer” on page 283.

To display guidelines

- Choose View, Guidelines.

The command is enabled when a check mark appears beside the command name.



- You can display guidelines by choosing Layout, Guidelines Setup and enabling the Show Guidelines check box.
-

Locking and unlocking guidelines

By locking or unlocking a guideline, you prevent or allow its movement. When a guideline is locked, it cannot be selected, moved, or deleted.

Because guidelines have their own layer, you can also lock guidelines using the Object Manager. For more information about the Object Manager, see “Locking and unlocking a layer” on page 283.

To lock a guideline

1. Select a guideline.
2. Choose Arrange, Lock Object.

To unlock a guideline

1. Select a guideline.
2. Choose Arrange, Unlock Object.



- You can also lock and unlock a guideline by holding down Control, clicking the guideline, and choosing Lock Object or Unlock Object.
-

Deleting guidelines

You can delete one, some, or all of the guidelines in the active document. If you remove a guideline from a multipage document, it is removed from all pages.

To delete a guideline

1. Choose Layout, Guidelines Setup.
2. Choose the Horizontal, Vertical, or Slanted tab.
3. Choose a guideline.
4. Click the Delete button.



- You can quickly delete a guideline by selecting the guideline you want to delete with the Pick tool and choosing Edit, Clear.
-

To delete all horizontal, vertical, or slanted guidelines

1. Follow steps 1 and 2 from the previous procedure.
2. Click the Clear button.

To delete all guidelines

1. Follow steps 1 and 2 from the “To delete a guideline” procedure.
2. Click the Clear All button.



- You can't delete a locked guideline. To unlock a guideline, hold down Control, click the guideline, and choose Unlock Object.
-

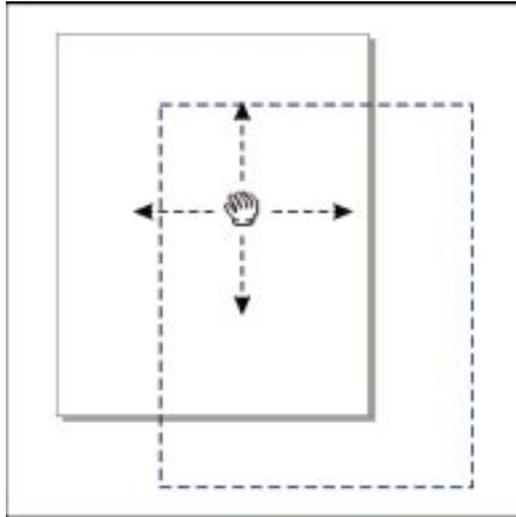
Viewing your work

The view controls in CorelDRAW let you view your drawing the way that suits you best. These controls consist of the Zoom flyout and View Manager, as well as various menu commands. You can use these controls to change the way CorelDRAW displays objects, to magnify or reduce your view, or to save specific views for future use.

Changing your view

The Zoom flyout gives you quick access to tools that let you reduce or magnify the view of your drawing. The Zoom tool lets you zoom in or out so that you can get a more detailed or general view. The Pan tool, on the other hand, lets you change your view by moving your drawing within the Drawing Window.

.....
The Pan tool lets you
position the Drawing
Page within the
Drawing Window.
.....



If you prefer, you can access the zoom controls through the Property Bar. The Property Bar provides the Zoom tool and Pan tool, as well as tools that let you zoom to virtually any level of magnification.

You can also use the View Manager to zoom in and out. The View Manager serves two functions. First, it provides a complete set of tools for adjusting your view. Second, it gives you the ability to save any view of a specific Drawing Page so that you can revert to it whenever you want.

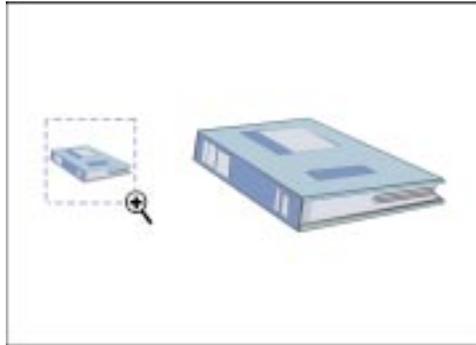


- Zooming and panning have no effect on the drawing, only your view of it.

Magnifying and reducing your view using the Zoom tool

The Zoom tool makes it easy to change your view of any drawing. The Zoom tool serves two functions: zooming in to get a closer look at an area of your drawing, and zooming out to get a view of a larger area. You can also draw a marquee box to magnify a portion of the Drawing Window.

To zoom in on a specific object, use the Zoom tool to enclose an object in a marquee box.



To zoom in



1. Open the Zoom flyout, and click the *Zoom tool*.
2. Click the Drawing Window.

To zoom out

1. Open the Zoom flyout, and click the Zoom tool.
2. Hold down Option, and click the Drawing Window.

To zoom in on a portion of the drawing

1. Open the Zoom flyout, and click the Zoom tool.
2. Drag diagonally in the Drawing Window to create a marquee box around the area you want to magnify.



- You can choose from various zoom options by holding down Control, clicking the Drawing Window, and choosing a zoom option.

Moving the View within the Drawing Window

Use the Pan tool to move the Drawing Page within the Drawing Window to get the view you want. Using the Pan tool is much like using your hand to move a piece of paper on the top of a desk.

To move the drawing within the Drawing Window



1. Open the Zoom flyout, and click the *Pan tool*.
2. Drag the document to place it within the Drawing Window.



- You can have the Drawing Window scroll automatically when you drag beyond its borders. To do this choose Edit, Preferences, and from the list of categories choose Workspace, Display, and enable the Auto-panning check box.

Magnifying and reducing your view using the Property Bar

When you click the Zoom tool or Pan tool in the Toolbox, the Property Bar displays a new set of controls. These controls include the Zoom tool and the Pan tool, as well as tools for changing your view generally or specifically. You'll also find a button that opens the View Manager so that you can save and delete specific views.

To change your view using the Property Bar

To see ...	Click the ... button on the Property Bar
A magnified view of the drawing	2X Zoom
More of the drawing	Zoom Out
Objects at actual size	Zoom Actual Size
All selected objects	Zoom To Selected
All objects	Zoom To All Objects
The entire Drawing Page	Zoom To Page
The width of the Drawing Page	Zoom To Page Width
The height of the Drawing Page	Zoom To Page Height
The View Manager	View Manager



- The Zoom tool and the Pan tool on the Property Bar work the same way as those in the Toolbox.
- These controls are only visible on the Property Bar when you click the Zoom tool or Pan tool in the Toolbox.

Magnifying and reducing your view using the View Manager

The View Manager provides a full range of tools for changing your view of a drawing. These tools allow you to modify your view generally or specifically. For example, you can use the Zoom In and Zoom Out tools to get a better

view of a general area, or you can use the Zoom To Selected or Zoom To Page Width tools to look at a specific area.

To open the View Manager, choose Tools, View Manager. If you have selected the Zoom tool or the Pan tool, you can open the View Manager by clicking the View Manager button on the Property Bar.

To see ...	Click the...
A magnified view of the drawing	Zoom In button, then drag a marquee box around the area you want to magnify
More of the drawing	Zoom Out button
All selected objects	Zoom To Selected button
All objects	Zoom To All Objects button

Saving, using, and deleting specific views

In addition to providing four view-changing tools, the View Manager gives you the ability to save different views of a document so that you can easily switch between them. For example, you can save a 230% magnification level on page 2 of a document and revert to that exact page and view at any time using the View Manager. If you no longer need a specific view, you can easily remove it from the list.

To save a specific view

1. Choose Tools, View Manager.
2. Use the zoom tools on the View Manager to get the view you want.
3. Click the *Add Current View button*.



The new view is given a default name, for example, View 1.

4. Click the default name and type a new name for the view.

To switch to a saved view

1. Choose Tools, View Manager.
2. Choose the view from the list on the View Manager.
3. Click , and choose Switch to View.

To delete a saved view

1. Choose Tools, View Manager.



2. Click a view.
3. Click the *Delete Current View button*.



- If you are working with multipage documents, use the icons on the left side of the View Manager to change the way you use a saved view. Disable the page icon to revert to the magnification level only, not the page. Disable the magnifying glass icon to revert to the page only, not the magnification level.
- You can use additional commands on the View Manager to add, delete, and rename views, as well as hide and show the View Manager's toolbar.

Customizing zoom controls

You can customize the Zoom tool's behavior by using an alternate Zoom flyout and making the Zoom tool operate relative to real-world distance.

Additionally, you can set the real-world value by calibrating the on-screen rulers. For example, instead of having measurements relative to the monitor, you can calibrate the on-screen rulers to make one inch on the screen look like one inch in real-world distance.

Setting Zoom tool defaults

You can customize the default settings for the Zoom tool. You can use the default Zoom flyout, or you can use the traditional Zoom flyout. Also, you can make the Zoom tool operate relative to real-world distance. You can specify the real-world distance by calibrating the rulers. For more information about calibrating the rulers see, "Matching world distance to screen distance" on page 78.

To use the alternate Zoom flyout



1. Hold down Control, open the Zoom flyout, click the *Zoom tool*, and choose Properties.
2. Enable the Use Traditional Zoom Flyout check box.

To have the Zoom tool operate relative to the real-world distance

1. Hold down Control, open the Zoom flyout, click the Zoom tool, and choose Properties.
2. Enable the Zoom Relative To 1:1 check box.

Matching world distance to screen distance

You can calibrate rulers so that one inch on your screen equals one inch of “real” distance. You’ll find this useful when you are drawing in 1:1 Zoom mode because you can use actual world distances as opposed to relative distances that depend on screen resolution.

To perform this procedure, you need a clear plastic ruler to compare real-world and on-screen distances. Your ruler and the units of measurement set in the Grid And Ruler Setup dialog box should be the same. For more information, see “Using the rulers and grid” on page 59.

To match on-screen distance to real-world distance

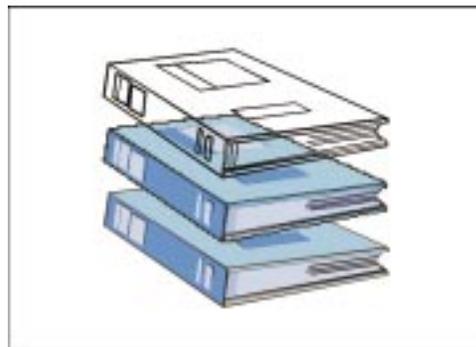


1. Hold down Control, open the Zoom flyout, click the *Zoom tool*, and choose Properties.
2. Click the Calibrate Rulers button.
3. Place your plastic ruler under the on-screen horizontal ruler.
4. Type a value in the Horizontal box to match one unit of measurement on the on-screen ruler to one unit of measurement on the plastic ruler.
5. Place your ruler beside the on-screen Vertical ruler.
6. Type a value in the Vertical box to match one unit of measurement on the on-screen ruler to one unit of measurement on the plastic ruler.

Setting the view quality

The View menu provides commands for changing the view quality — the way CorelDRAW displays the objects in a drawing. These view qualities display drawings using complexity levels ranging from outlines to all fills, outlines, and bitmaps.

.....
The view quality settings control how you view objects in the Drawing Window.
.....



Simple Wireframe view

The Simple Wireframe view hides fills, extrusions, contours, drop shadows, and intermediate blend shapes. Only the outline of the object is displayed. This view quality shows monochrome bitmaps.

Wireframe view

The Wireframe view hides fills and displays monochrome bitmaps, extrusions, contours, drop shadows, and intermediate blend shapes.

Draft view

The Draft view shows uniform fills and low-resolution bitmaps. It displays lenses and fountain fills as solid colors. The fountain fill is represented by a blend of the first and last fill color. The Draft view displays unique patterns to represent fills. The following list outlines the fill each pattern represents:

- The Checker board pattern represents two-color fills.
- The two-way arrow pattern represents full color fills.
- The hatched line pattern represents bitmap fills.
- The PS pattern represents PostScript fills.

Normal view

The Normal view displays all fills (except PostScript) all objects, and high-resolution bitmaps.

Enhanced view

The Enhance view uses anti-aliasing to provide the best possible display quality. It is the only view that displays PostScript fills.

Choosing a view quality

The View menu gives you quick access to the five view qualities in CorelDRAW. These qualities give you the ability to control how CorelDRAW displays a drawing on the screen. If you have a fast computer or want to see the closest approximation to what a drawing will look like when it's printed, you can use the Normal view or the Enhanced view. If, on the other hand, you have a slower computer or just want to speed up redrawing of a complex drawing, you can use the Simple Wireframe or Wireframe view.

To view a document in ...	Choose View, ...
---------------------------	------------------

Simple Wireframe view	Simple Wireframe
-----------------------	------------------

Wireframe view	Wireframe
Draft view	Draft
Normal view	Normal
Enhanced view	Enhanced



- Changing the view quality has no effect on the drawing's content; it affects only the way it is displayed on the computer screen.

Using full-screen previews

The View menu provides commands that display a full-screen preview of a page of your drawing. This lets you see what your drawing will look like before you print it. The Full-Screen Preview command shows all objects on the active page using the Normal or Enhanced view quality (depending on the view quality selected in the Preferences dialog box).

Previewing a drawing

When preview a drawing, you see all the objects, fills, and bitmaps on the active page without any of tools or features around it. You can set the view quality of the full-screen preview to Normal or Enhanced view. When you use the Enhanced view, you can display PostScript fills.

To set the full-screen preview view quality

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Display.
3. Enable one of the following:
 - Use Normal View button — specifies the Normal view quality
 - Use Enhanced View button — specifies the Enhanced view quality
 - Use Enhanced View button and the Show PostScript Fills In Enhanced View check box — display PostScript Fills

To view a full-screen preview of the active page

- Choose View, Full-Screen Preview.

To view a full-screen preview of selected objects only

1. Select the objects you want to preview.

2. Choose View, Preview Selected Only.

The command is enabled when a check mark appears beside the command name.

3. Choose View, Full-Screen Preview.

To return to the Drawing Window from any full-screen preview

- Hold down Control, and press any key.



- Although you can draw anywhere in the Drawing Window, only objects positioned in the printable area of the Drawing Window are printed. To display the printable area, choose View, Printable Area.

Using consistent settings for new documents

When you close a CorelDRAW file, certain settings are automatically retained. These include all current settings in the Preferences dialog box, as well as all toolbar settings. In addition, CorelDRAW retains settings such as which Palette and Color Palette you were using when you closed the drawing.

You can save specific settings so that they are always used when you start a new drawing. The following table outlines each setting type and the individual settings that comprise it.

Setting type	What CorelDRAW saves
General options	The current general document settings
Page options	The current page size and orientation, label settings, print layout, page border, and page background settings
Grid And Ruler options	The current grid, ruler, guideline, snap to, and scale settings
Styles	The current default fill, outline, fill settings, and text properties
Save options	The current advanced file saving settings, including thumbnail, file optimization, textures, blends, and extrusions (accessed by clicking the Advanced button in the Save Drawing dialog box)
Publish To Internet options	The current settings for publishing to the Internet

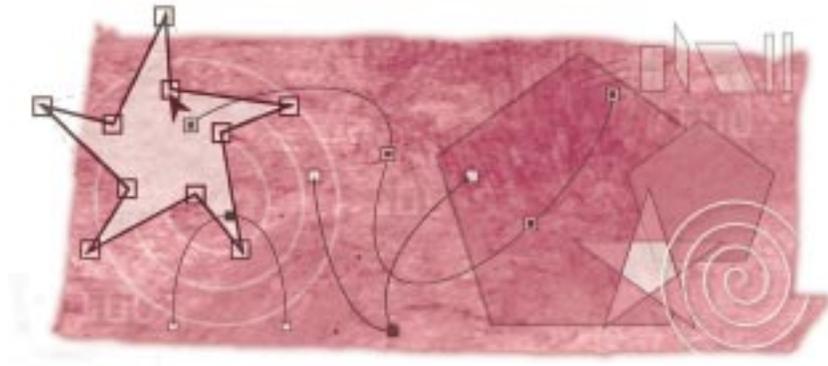
Saving settings for new documents

You can create a basic work environment that is the same every time you create a new drawing or document. CorelDRAW saves settings based on the selections you make on the Document page in the Preferences dialog box and uses them for each new drawing you create. For example, if you most often

create drawings for which you need inches displayed on the rulers as the units of measurement, the Snap To Grid command enabled, and a drawing scale of 1:16, you can enable the Grid And Rulers check box so that these settings are used by default for all new documents.

To apply the active drawing's settings to all new documents

1. Choose Edit, Preferences.
2. From the list of categories, choose Document.
3. Enable the Save Options As Defaults For New Documents check box.
4. Enable the check boxes that correspond to the settings you want to use for each new document.

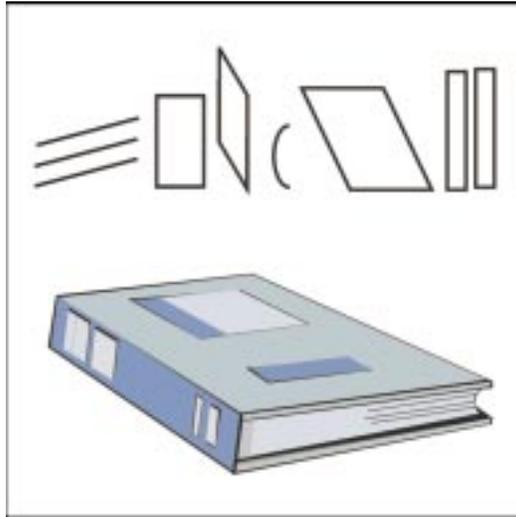


DRAWING AND SHAPING OBJECTS 4

CorelDRAW provides you with drawing and shaping tools to create the illustration you want. Simple shapes like circles, rectangles, polygons, curves, and lines form the basis of every CorelDRAW illustration. These shapes have their own distinctive properties that include size, shape, fill, and outline. While there are other types of objects in CorelDRAW, such as text, and bitmaps, this section provides information about lines, curves, and shapes only.

Once you have an idea for an illustration, you'll probably want to determine the basic shapes you want to use as the framework for your drawing. If you want to draw a book, for example, you might start with some rectangles of different sizes, a curve, and a few lines.

.....
A picture of a book
made from basic
shapes.
.....



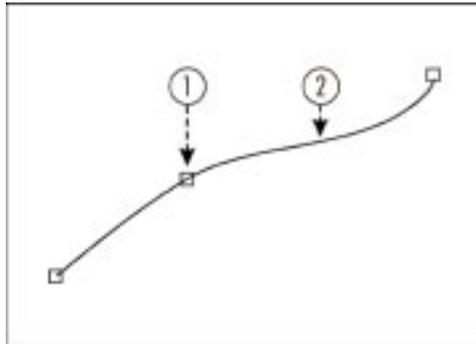
When the basic elements of your illustration are in place, you can start editing them. You can manipulate each object independently, measure them, label, split, and erase them. Before you can edit the shape of an object, however, you'll need to know something about an object's structure.

Understanding the structure of objects

All shapes and lines are constructed from basic elements called paths. You can specify a width, and color to a path, by adding an outline to it. By default, paths are drawn with a thin black outline. This makes paths visible when you first create them. A path without an outline is only visible in wireframe view.

A path consists of nodes and segments. A node is a point on a path at which the path can change direction. A segment is the portion of a path between two nodes. All paths must start and end with a node. You can change the shape of an object, by manipulating its nodes and segments.

.....
A node (1) and a
segment (2) on a
simple path.
.....



There is no limit to how much a shape can be altered, when the shape (including Artistic text) is converted to a curve object.

Drawing basic objects

CorelDRAW provides a full set of tools that let you draw the basic shapes you use to develop your drawing. Each of these tools works the same way. To draw a shape with any of these tools, drag diagonally in any direction until the shape is the size you want. In each case, the Property Bar displays the dimensions of the shape.

Basic drawing tool...	Lets you...
	draw rectangles and squares. Objects you draw with the Rectangle tool use the current default fill, outline width, and outline color attributes.
	draw ellipses and circles. Objects you draw with the Ellipse tool use the current default fill, outline width, and outline color attributes.
	draw polygons and stars. Objects you draw with the Polygon tool use the current default fill, outline width, and outline color attributes.
	draw symmetrical and logarithmic spiral shapes. Objects you draw with the Spiral tool use the current default fill, outline width, and outline color attributes.
	draw a grid that resembles graph paper. These grids consist of grouped rectangles or squares arranged in rows and columns. Objects you draw with the Graph Paper tool use the current default fill, outline width, and outline color attributes.

Drawing rectangles and squares

The Rectangle tool lets you draw rectangles and squares. You can create a rectangle or a square from the center or any other part of your drawing page. For more information about creating a rectangle or a square from the center, see “Drawing a shape from the center” on page 89.

To draw a rectangle



1. Click the *Rectangle tool*.
2. Position the cursor where you want the rectangle to appear.
3. Drag diagonally to draw the rectangle.

To draw a square

1. Click the Rectangle tool.

2. Hold down Command and drag diagonally.

Ensure that you release the mouse button before releasing Command.



- Double-click the Rectangle tool to draw a rectangle that covers the entire Drawing Page. You can then fill this rectangle to create an interesting background for your document.
-

Drawing ellipses and circles

The Ellipse tool lets you draw ellipses and circles. If you want to create an ellipse or circle from the center, see “Drawing a shape from the center” on page 89.

To draw an ellipse



1. Click the *Ellipse tool*.
2. Position the cursor where you want the ellipse to appear.
3. Drag diagonally to draw the ellipse.

To draw a circle

1. Click the Ellipse tool.
2. Hold down Command and drag diagonally.

Ensure that you release the mouse button before releasing Command.

Drawing polygons and stars

The Polygon tool lets you create two basic shapes: polygons and stars. A polygon is a closed shape that can have from 3 to 500 sides. A star is similar to a polygon, but instead of drawing lines from corner to corner around the outside of the shape, the corners are connected with lines drawn across the inside of the shape.

Polygons can also be star-shaped, but the lines from which they are made do not cross the inside of the shape. A star-shaped polygon is called a “polygon as star.”

If you want to create a polygon or a star from the center, see “Drawing a shape from the center” on page 89.

To draw a polygon



1. Open the Object flyout, and click the *Polygon tool*.

2. Position the cursor where you want the polygon to appear.
3. Drag diagonally to draw the polygon.

To draw a star

1. Open the Object flyout, and click the Polygon tool.

If a polygon or star is selected, press Esc to deselect it, otherwise step 2 will apply to the selected polygon or star.



2. Click the *Polygon/Star button* on the Property Bar.
3. Position the cursor where you want the polygon to appear.
4. Drag diagonally to draw the star.

To draw a star-shaped polygon

1. Open the Object flyout, and click the Polygon tool.

If a polygon or star is currently selected, press Esc to deselect it, otherwise step 2 will apply to the selected polygon or star.



2. Click the Polygon/Star button on the Property Bar to select the polygon option.
3. Move the *Sharpness slider* on the Property Bar to the right or left to increase or decrease the sharpness of the polygon's points (a polygon without sharpness is not star-shaped).
4. Drag diagonally to draw the polygon.



- If you change any of the settings for a polygon or star on the Property Bar while no polygon is selected, those settings become the default settings for the Polygon tool.



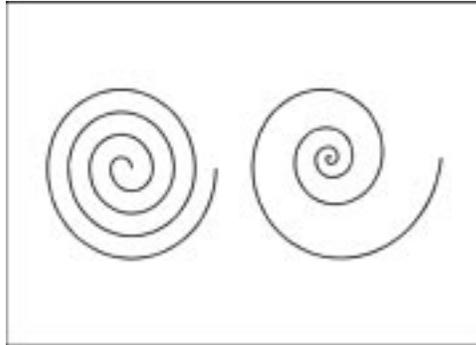
- Hold down Command and drag to draw a polygon or star with equal sides. Release the mouse button before you release Command.

Drawing spirals

The Spiral tool lets you draw spiral shapes. There are two types of spirals: symmetrical spirals and logarithmic spirals. In a symmetrical spiral, the distance between each revolution of the spiral is constant. In a logarithmic spiral, this distance increases as the spiral progresses outwards. The default

setting of a spiral is four revolutions. The settings you select remain until you change them.

A symmetrical spiral (left) and a logarithmic spiral (right).



If you want to create a spiral from the center, see “Drawing a shape from the center” on page 89.

To draw a symmetrical spiral



1. Open the Object flyout, and click the *Spiral tool*.



2. Type a number in the *Spiral Revolutions* box on the Property Bar to indicate the number of revolutions you want for the spiral. The spiral appears tighter when you use more revolutions.



3. Click the *Symmetrical Spiral button* on the Property Bar.

4. Position the cursor where you want the spiral to appear.

5. Drag diagonally to draw the spiral.

To draw a logarithmic spiral

1. Follow steps 1 and 2 from the previous procedure.



2. Click the *Logarithmic Spiral button* on the Property Bar.



3. Move the *Spiral Expansion Factor* slider to the right to increase the amount by which the spiral expands as it progresses outward. Move the slider to the left to decrease this amount.

4. Position the cursor where you want the spiral to appear.

5. Drag diagonally to draw the spiral.

To draw a spiral with equal horizontal and vertical dimensions

1. Follow steps 1 to 4 from the “To draw a symmetrical spiral” procedure.

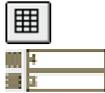
2. Hold down Command, drag diagonally to draw the spiral.
3. Release the mouse button then release Command.

Drawing grids

The Graph Paper tool lets you draw a grid pattern. This pattern is formed by a series of grouped rectangles arranged in rows and columns. The default setting is four columns and three rows. The settings you select remain until you change them. For more information about changing the default settings of the Graph Paper tool, see “Changing the default settings of a drawing tool” on page 125.

If you want to create a grid from the center, see “Drawing a shape from the center” on page 89.

To draw a grid



1. Open the Object flyout, and click the *Graph Paper tool*.
2. In the *Graph Paper Columns And Rows box* on the Property Bar, type the number of columns you want, press Tab, and type the number of rows you want, then press Return.
3. Drag diagonally to draw the grid.

To draw a square grid

1. Follow steps 1 and 2 from the previous procedure.
2. Hold down Command, drag diagonally.
3. Release the mouse button, then release Command.

Drawing a shape from the center

By default, the place you click to start drawing the shape becomes the corner of its bounding box. This corner remains stationary as you create the shape. However, the place you click to start drawing the shape can also be the center of the object. In other words, the shape expands outward, while the center point remains stationary. You can also draw an object of equal horizontal and vertical dimensions from the center outwards.

To draw a shape from the center

1. Click the drawing tool you want to use.
2. Hold down Option and position the cursor where you want the center of the shape.

3. Drag diagonally to draw the shape.
4. Release the mouse button to finish drawing the shape, then release Option.

To draw a shape with equal sides from the center

1. Click the drawing tool you want to use.
2. Hold down Option and Command.
3. Position the cursor where you want the center of the shape.
4. Drag diagonally to draw the shape.
5. Release the mouse button to finish drawing the shape, then release Option and Command.

Shaping basic objects

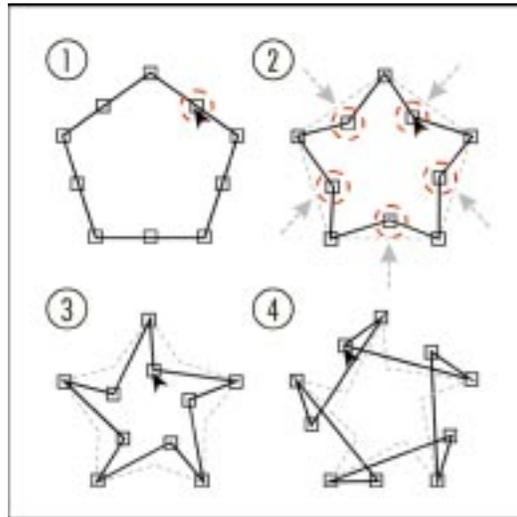
 The Shape tool lets you shape basic objects such as rectangles, ellipses, polygons, stars, grids and spirals. You can round all the corners of a rectangle simultaneously or, shape an ellipse into an arc or a pie-shape. Rectangles and ellipses maintain their basic shape, even when you shape them. For example, you can round the corners of a rectangle and then easily make them sharp again.

The shape of a polygon can be changed to a star and vice versa. If you don't want lines crossing inside the shape while converting a polygon to a star, you can choose the option called "polygon as star." Further, the sharpness level of a star or "polygon as star" can be adjusted to intensify or minimize the points of its shape.

The Shape tool also lets you shape a polygon using a process called Mirror editing. Mirror editing lets you shape a polygon or a star in many of the same ways that you shape a curve object. The difference between mirror editing and other node editing is that mirror editing lets you maintain the symmetry of a polygon as you manipulate its nodes. The polygon maintains its symmetry because each node of a polygon is associated with all of its corresponding nodes. When you alter a node, therefore, all of its associated nodes reflect the change.

For example, a pentagon has 10 nodes — one at each corner and one on each side. All the corner nodes are associated and all the side nodes are associated. If you drag a side node towards the center, all the side nodes move towards the center. Also, if you add a node to a pentagon, five nodes are added (one on each side).

Mirror editing a polygon.



The Graph Paper tool creates a grid that is formed by a set of rectangles which are grouped. Once you ungroup the grid, you can round the corners of each rectangle.

If you want more freedom to change the shape of an object, you can convert it to a curve object. Keep in mind, however, that when you convert an ellipse or a rectangle to a curve object, you can no longer make a pie shape from an ellipse with a single mouse drag or round all the corners of a rectangle simultaneously. When you convert a polygon to a curve object, you can no longer mirror edit it. However, you can manipulate it with fewer restrictions (for e.g., breaking a path).

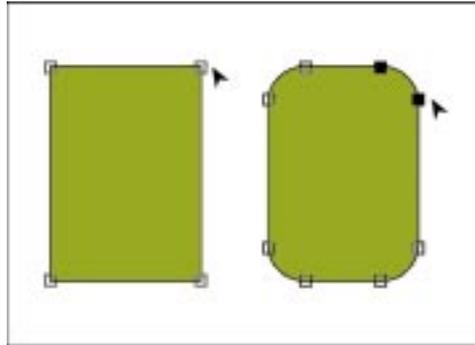
You must ungroup a grid before you edit its shape in curves. A spiral is already a curved object. Therefore, once you create a spiral, you can immediately treat it as such.

The ease with which you are able to shape these objects saves you time and guarantees precision.

Rounding the corners of a rectangle or square

You can use the Shape tool to round all the corners of a rectangle (or square) at the same time. A rectangle has a node at each corner. When you round one corner, the other three corners also change. The amount of rounding is displayed on the Status Bar.

A rectangle (left) and a rectangle with rounded corners (right).



To round the corners of a rectangle or a square



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select a rectangle or a square.
3. Drag one of the corner nodes along the outline of the rectangle or square.
You can drag in a clockwise or counter-clockwise direction. As you drag, the four corner nodes each divide into two nodes with an arc forming in between. As you continue to drag, the corners become increasingly round.

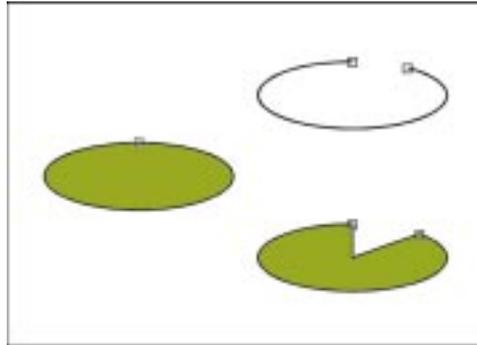


- You can also round the corners of rectangles and squares using the Pick tool or any of the basic drawing tools. Select the object with the Pick tool and position the cursor over the node (the cursor changes to the Shape tool) and drag the cursor as necessary.
- You can quickly change the roundness of a rectangle by selecting it and moving the Rectangle Corner Roundness slider on the Property Bar.

Changing an ellipse to an arc or a pie shape

You can use the Shape tool to turn an ellipse or a circle into an arc or a pie shape. A simple ellipse has one node, but when you create an arc or pie shape, CorelDRAW splits this node in two.

.....
An ellipse (left), an
arc (top), and a
pie-shape (bottom
right).
.....



You control the appearance of the arc or the pie shape by moving these two new nodes. You can also change the direction in which CorelDRAW draws arcs and pie shapes.

To create an arc or pie shape from an ellipse (or circle)



1. Open the Shape Edit flyout, click the *Shape tool*, and select an ellipse.
2. Do one of the following:



- Drag the node by keeping the cursor inside the perimeter of the ellipse to create a *pie shape*.



- Drag the node by keeping the cursor outside the perimeter of the ellipse to create an *arc*.

To change the direction in which arcs or pie shapes are drawn

1. Open the Shape Edit flyout, click the Shape tool, and select an arc or a pie shape.



2. Click the *Clockwise/Counterclockwise Arcs Or Pies button* on the Property Bar.



- You can also change ellipses to arcs and pie shapes using the Pick tool or any of the basic drawing tools. As you position the cursor over the node, the cursor changes to the Shape tool cursor.
- When dragging nodes you can constrain their position to 15-degree increments by holding down Command.
- You can quickly convert an arc to a pie shape and vice versa by selecting the shape and clicking the Pie button or the Arc button on the Property Bar. You can also quickly convert an arc or pie shape back to an ellipse by clicking the Ellipse button on the Property Bar.

Changing the properties of a polygon or star

You can change the properties (e.g., number of points) of a shape created with the Polygon tool after the shape is placed. In addition, you can use the Shape tool or Pick tool to change the shape of the polygon or star.

A polygon, a star, and a star shaped polygon.



You can control which corners are connected to which by adjusting the sharpness level. Further, as you increase the sharpness level, the points on the star become more pronounced.

If you want the changes you make to one node be reflected on its associated nodes, you can mirror edit the shape of a polygon or star. When mirror editing, you can move, add, and remove segments and nodes. Nodes can be changed to smooth, cusped, or symmetrical, and segments can be straight or curved.

To change a polygon to a star or a star to a polygon



1. Select the polygon or star with the *Pick tool*.
2. Click the *Polygon/Star button* on the Property Bar.

To change the number of sides of a polygon or points of a star



1. Select the polygon or star with the Pick tool.
2. Type a number in the *Number of Points on Polygon box* on the Property Bar, then press Return.

To change the sharpness of a star



1. Select the star with the Pick tool.
2. Move the *Sharpness slider* on the Property Bar to the right to increase the sharpness, or move the slider to the left to decrease it. To access the Sharpness slider, a star must have at least seven points. The sensitivity of the slider increases with the number of points.



- You can also adjust the sharpness of polygon objects by double-clicking the Polygon/Star tool. You can only adjust the sharpness of a star or a polygon as star but not a regular polygon.

To mirror edit a polygon or star



1. Select the polygon or star with the Pick tool.
2. Open the Shape Edit flyout, and click the *Shape tool*.
3. Position the Shape tool over the node you want to edit.
4. Drag the node in the direction that you want.

The associated nodes follow the node that you are dragging.

Shaping parts of a grid

The grid is created by using the Graph Paper tool and is a set of grouped rectangles. This object must be ungrouped entirely before making any changes to its shape. Once you ungroup the grid object, it becomes a set of individual rectangles. You can then proceed to individually select and shape any of these rectangles.

To ungroup a grid



1. Select the grid with the *Pick tool*.
2. Choose Arrange, Ungroup All.

To round the rectangle corners of a grid



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Drag one of the corner nodes along the outline of the rectangle.

You can drag in a clockwise or counter-clockwise direction. As you drag, the four corner nodes each divide into two nodes with a round corner forming in between. As you continue to drag, the corners become increasingly round.



- Once the grid becomes a set of individual rectangles, the shaping properties of the rectangle object becomes applicable to them. For more information about shaping rectangles, see “Rounding the corners of a rectangle or square” on page 91.

Changing objects to curves

To shape an object without restriction, you must first convert it to a curve object. When you convert an ellipse or rectangle to a curve object, it looks the same but you can shape it by editing its nodes and segments.

To shape a polygon or star without mirror editing, you must first convert it to a curve object. When you convert a polygon or star to a curve object, it looks the same but you can shape it by editing each node and segment individually.

The grid, created by the Graph Paper tool, is formed with a series of grouped rectangles. It must be ungrouped before it can be edited in curves.

To convert an ellipse or rectangle to a curve object



1. Select an ellipse, or a rectangle with the *Pick tool*.
2. Choose Arrange, Convert To Curves.

To convert a polygon or a star to a curve object

1. Select a polygon or a star with the Pick tool.
2. Choose Arrange, Convert To Curves.

To convert a grid to a curve object

1. Select the grid with the Pick tool.
2. Choose Arrange, Ungroup All.
3. Choose Arrange, Convert To Curves.



4. Open the Shape Edit flyout, click the *Shape tool*, and select a rectangle.
5. Drag one of the corner nodes of the rectangle.



- Objects created with the Spiral tool are curve objects. Once you create a spiral, you can immediately shape it without restriction.



- You can convert an equal sided object to a curve object by selecting the equal sided object and following the procedures related to its shape.
- You can also convert an object to a curve object by selecting the object and clicking the Convert To Curves button on the Property Bar.

Drawing lines, curves, and irregular shapes

CorelDRAW provides three tools for drawing lines, curves, and irregular shapes: the Freehand tool, the Bezier tool, and the Natural Pen tool.



The Freehand tool provides the most straightforward method for drawing. It lets you drag the mouse cursor across the page like a pencil on paper. This method is closest to traditional drawing, but the results are often imprecise and rough. You can improve these results by adjusting the Drawing settings or by editing the curve after you have drawn it.



The Bezier tool lets you draw smooth, precise curves node by node. When you use the Bezier tool, each click of the mouse places a node, and each node is connected to the previous node by a segment. When you place a node, you can control the curvature of the segment or segments that extend from it by positioning the node's control points (dotted lines that extend in opposite directions from the node). By using control points and by placing each node individually, you can create precise lines and curves.



The Natural Pen tool lets you draw shapes that look like thick curves and curves with a varied thickness. The Natural Pen tool works like the Freehand tool but with some fundamental differences. Most significantly, the Natural Pen tool doesn't create a simple path as you draw; it creates a shape with a closed path. This means that you can create a curve that appears to have varied thickness along its length. Further, you can change the tool's properties so that you can create curves that simulate effects like pressure-sensitive pens, calligraphic pens, and wood carving tools. You can apply fills to objects you create with the Natural Pen tool just as you would any other object.

The individual segments of objects created with the Natural Pen tool can be edited like any other curve object.

Drawing lines and curves with the Freehand tool

The Freehand tool lets you draw lines and curves by dragging the mouse like a pencil on paper.

To draw a curve with the Freehand tool



1. Open the Curve flyout, and click the *Freehand tool*.
2. Position the cursor where you want the curve to start.
3. Drag along the desired path.

To draw a straight line with the Freehand tool

1. Open the Curve flyout, and click the Freehand tool.
2. Click where you want the line to begin.
3. Move the mouse and click where you want the line to end.



- You can limit the line to 15-degree increments by holding down Command.
- You can specify a different angle using the controls in the Preferences dialog box. For more information, see “Setting the constrain angle” on page 126.

To draw a curve or a straight line connected to another

- Draw a curve or a straight line starting from the end point of another curve or line.



- You must click within five pixels of the end point or the two curves will not join.



- You can adjust the five-pixel threshold by double-clicking the Freehand tool, and typing a value in the Autojoin box.

To draw a closed shape with the Freehand tool

1. Open the Curve flyout, and click the Freehand tool.
2. Draw a curve or a series of connected straight lines that begin and end at the same point.



- You can draw lines that have both straight and freehand sections with the Freehand Pen tool by using Tab to toggle between straight and freehand mode as you drag the mouse.
- If you’re drawing a series of connected straight lines, double-click to create a node and, click the starting point to close the shape.
- If you’re drawing a closed curve, drag over the starting point, and release to close the shape.

Drawing lines and curves with the Bezier tool

The Bezier tool lets you draw lines and curves by placing each node with the mouse. As you place each node, it is connected to the previously placed node by a line or curve. This connect-the-dots method lets you create complex, irregular shapes quickly and easily and gives you precise control over the position and number of nodes that form a curve.

To draw a curve with the Bezier tool



1. Open the Curve flyout, and click the *Bezier tool*.
2. Drag from the point at which you want to place the first node, and click once again at the end point. A segment appears between the two nodes you've created.



- As you drag, two more control points appear. The position and angle of the control points affect the shape of the segment you've just created and the next segment you add.

To draw a straight line with the Bezier tool

1. Open the Curve flyout, and click the Bezier tool.
2. Click where you want to place the first node.
3. Click where you want to place the next node.
4. Repeat step 3 for each node you want to add.

To draw a closed shape with the Bezier tool

1. Open the Curve flyout, and click the Bezier tool.
2. Draw a series of curves and lines that begin and end at the same node.



- As you drag, two control points move in opposite directions from the node. The distance between the control points and the node determines the height or depth of the segment that you are drawing. The angle of the control points determines the slope of the segment.



- Hold down Command as you position the control points to move in 15-degree increments. You can specify a different angle of constraint using

the controls in the Preferences dialog box, see “Controlling the behavior of the Freehand and Bezier tools” on page 126.

- Holding down Option while drawing with the Bezier tool lets you reposition the last node you created. Holding down C changes the last node to a cusp node, while holding down S changes the last node to a smooth node.

Drawing curves with the Natural Pen tool

The Natural Pen tool lets you draw closed paths that look like curves. You can use any of the Natural Pen’s four modes. The Fixed Width mode draws curves that are the same thickness along their entire length. The Pressure mode draws curves that change thickness based on feedback from a pressure-sensitive pen or keyboard input.

The Calligraphic mode draws curves that change thickness based on the direction of the curve. This creates an effect similar to that of a calligraphic pen. Finally, the Preset mode draws curves that change thickness based on preset line shapes you can choose from a pop-up menu on the Property Bar.

You can select the type of Natural Pen you want to use by clicking the appropriate button on the Property Bar. You must first click the Natural Pen tool to display its Property Bar controls.

To draw a curve in Fixed-Width mode



1. Open the Curve flyout, and click the *Natural Pen tool*.
2. Click the *Fixed Width Natural Pen Type button* on the Property Bar.
3. Type a width in the *Natural Pen Width box* on the Property Bar, then press Return.
4. Position the cursor where you want the curve to start.
5. Drag along the desired path.

To draw a curve in pressure-sensitive mode



1. Open the Curve flyout, and click the Natural Pen tool.
2. Click the *Pressure Natural Pen Type button* on the Property Bar.
3. Position the cursor where you want the curve to start.
4. Drag along the desired path.



- If you are using the mouse, press the Up Arrow or the Down Arrow to vary the pen pressure. The Up Arrow increases the pressure effect, making the curve wider and the Down Arrow decreases this effect.

To draw a curve in Calligraphic mode



1. Open the Curve flyout, and click the Natural Pen tool.
2. Click the *Calligraphic Natural Pen Type button* on the Property Bar.
3. Type a width in the Natural Pen Width box on the Property Bar, then press Return.



4. Type an angle in the *Natural Pen Nib Angle box* on the Property Bar, then press Return.
5. Place the cursor where you want the curve to start.
6. Drag along the desired path.



- Type "0" if you want the pen Nib to be horizontal, "90" if you want the nib to be vertical. If you want the pen nib to be slanted, type any other value between 0 and 360.

To draw a curve in Preset mode



1. Open the Curve flyout, and click the Natural Pen tool.
2. Click the *Preset Natural Pen Type button* on the Property Bar.
3. Type a width in the Natural Pen Width box on the Property Bar, then press Return.
4. Choose a preset curve shape from the Natural Pen Presets pop-up menu.
5. Position the cursor where you want the curve to start.
6. Drag along the desired path.



- You can draw a straight line with the Natural Pen tool by positioning the cursor where you want the line to start, and clicking where you want the line to end.
- You can draw lines that have both straight and freehand sections with the Natural Pen tool by using Tab to toggle between straight and freehand mode as you drag the mouse. Holding down Command constrains the line to 15-degree increments.

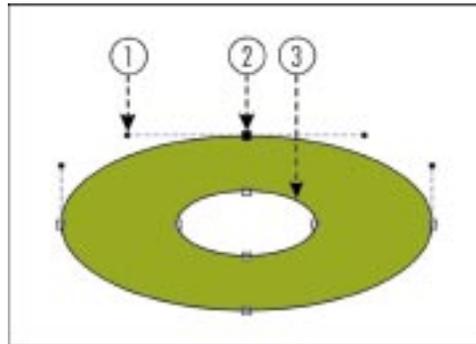


- The width you set here represents the curve's maximum width, no matter what shape it is.

Shaping lines, curves, and curve objects

You can change the shape of all curve objects by editing their nodes and segments. A curve object can be any line, curve, or shape that you create with the Freehand tool, the Bezier tool, the Natural Pen tool, or the Spiral tool. Also, any rectangle, ellipse, polygon, or text object can be a curve object if you convert it to curves.

A control point (1), a node (2), and the inner ellipse is a subpath.



Segments

A segment is the portion of a curve that lies between two nodes. A curve object can have two types of segments: curved or straight. You can bend a curved segment by dragging it or dragging its end nodes. A straight segment will never bend regardless of the position of its nodes. If you want to bend a straight segment, you must convert it to a curved segment.

Nodes

When you select a curve object with the Shape tool, CorelDRAW displays all of the object's nodes. You can shape a curve object by moving a node or by moving the control points that appear when you select a node.

Control points determine the curve of a segment as it passes through a node. You can control the curve of a segment by varying the control point's angle and its distance from the node. Each node has one control point for each segment for which it's the last node.

Therefore, a node at the end of a path will only have one control point, and a node in the middle will have two control points. However, because straight segments don't bend, a node at the end of a straight segment won't have a control point for that segment.

Subpaths

A single curve object can consist of more than one curve or shape, and each of these curves or shapes is called a subpath. A curve object with subpaths is often created when text is converted to curve objects. For example, the letter "O" is usually made up of two ellipses. You can tell whether an object has subpaths by selecting it with the Shape tool. If nodes appear on more than one curve or shape, then each of these curves or shapes is a subpath of a single curve object.

One of the simplest reasons for creating an object with a subpath is that you can create objects with holes in them. For instance, the center of the letter "O" is a subpath, and, as a result, you can see objects underneath it.

Selecting nodes and segments

You must select a node or a segment before you can manipulate it or change its properties. Selected nodes become highlighted in one of two ways: hollow, if the associated segment is a straight segment; solid, if the segment is curved. The Status Bar shows which type of node (smooth, cusped, or symmetrical) and segment (line or curve) you've selected.

Before you can select a segment, you must select a curve object with the Shape tool. You can select a node using the Pick tool or any of the basic drawing tools.

To select a single node or segment on a curve object



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Click the node or segment.

To select multiple nodes

1. Open the Shape Edit flyout, and click the Shape tool.
2. Hold down Shift, and click the nodes.

You can also drag a marquee box around the nodes to select them.

To select all nodes

1. Open the Shape Edit flyout, and click the Shape tool.
2. Hold down Command and Shift.
3. Click any node on the object.

To deselect one or more nodes

1. Open the Shape Edit flyout, and click the Shape tool.
2. Hold down Shift, and click the nodes.

You can also hold down Shift and drag a marquee box around the nodes that you want to deselect. This method also selects any nodes inside the marquee box that are not selected.

To deselect all of the nodes, click outside of the curve's outline.

To disable node tracking

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Display.
3. Disable the Enable Node Tracking check box.



- If the selected curve has too many nodes to display, the Pick tool's node editing feature is automatically disabled.
 - You can add nodes to shape a path if you can't shape it with its existing nodes. If, on the other hand, you want to smooth the shape of an object, you can remove unwanted nodes.
-



- You can use the Pick tool, or any of the basic drawing tools (Rectangle, Ellipse, Polygon, etc.), to edit nodes. To do this, position the drawing tool over the node you want to edit. The drawing tool changes to the Shape tool.
 - You can hold down Z and position the Pick tool over an object to enable the node editing properties on the Property Bar.
-

Adding nodes

Adding more nodes to a curve object is necessary if the existing nodes are not giving you the results you want.

To add a single node to a curve object using the Pick tool



1. Click the *Pick tool*.
2. Hold down Z and double-click the object where you want to add the node.

To add a single node to a curve object using the Shape tool



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Double-click the curve where you want to add the node.

To add several nodes at once to a curve object

1. Open the Shape Edit flyout, and click the Shape tool.
2. Select the nodes between which you want to add nodes.
3. Click the *Add Node(s) button* on the Property Bar.



- You can also use the Shape tool to add a single node to a curve object by clicking a location where you want to add the node, and clicking the Add Node(s) button on the Property Bar.
-

Removing nodes

Removing nodes from an object reduces the redrawing and printing time and can also make the object appear smoother. You can select the nodes that you want to remove yourself, or you can use the Auto-Reduce feature and automatically remove unnecessary nodes. The Auto-Reduce feature removes excess nodes that are within a specified distance of each other. You can set this distance in the Preferences dialog box. As the setting increases, more nodes are removed.



To remove a single node from a curve object using the Pick tool

1. Click the *Pick tool*.
2. Hold down *Z*, and double-click the node you want to remove.



To remove a single node from a curve object using the Shape tool

1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Double-click the node you want to remove.

To remove several nodes at once from a curve object

1. Open the Shape Edit flyout, click the Shape tool, and select the nodes you want to remove.



2. Click the *Delete Node(s) button* on the Property Bar.

To simplify a curve object using Auto-reduce

1. Open the Shape Edit flyout, and click the Shape tool.
2. Select all the nodes in the portion of the object that you want to simplify.
3. Click the *Auto-reduce button* on the Property Bar.



To change the Auto-reduce level

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox, and choose Shape tool.
3. Change the setting in the Auto-reduce box.



- You can also use the Shape tool to remove a single node from a curve object by clicking the curve, and clicking the Delete Node(s) button on the Property Bar.

Joining nodes

You can close an open path by joining its two end nodes. You can also join end nodes on separate paths if the paths are all subpaths of the same object; but, you can't join nodes of two separate objects. For example, if you draw two curves and later decide that you want to join them, you must first combine them into a single curve object, then join the two end nodes.

Before you can join nodes, you must first select a curve object with the Shape tool.

To join two nodes



1. Open the Shape Edit flyout, click the *Shape tool*, and select the nodes you want to join.



2. Click the *Join Two Nodes button* on the Property Bar.

If you join nodes that are not in the same location, a joined node is placed between the positions of the original two nodes.

To join two nodes with a line

1. Open the Shape Edit flyout and click the Shape tool.

2. Hold down Shift, and select the nodes you want to join.



3. Click the *Extend Curve To Close button* on the Property Bar.

Shaping nodes and segments

You can change the shape of a curve object by moving its segments, nodes, and control points. Normally, you move the segments and nodes to make coarse adjustments, then fine tune the shape by moving the control points of the nodes. By holding down Command as you drag a node or control point, you can force it to move on a straight horizontal or vertical path (from its starting point).

You can edit a curve object's nodes using the Pick tool or any drawing tool. To edit a curve object's segments and control points you must select it with the Shape tool.

To shape a curve object by moving its segments



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve.

2. Drag a segment.



- You can only move curved segments.

To shape a curve object by moving its nodes



1. Select the curve object with the *Pick tool* or any drawing tool.

2. Drag a node.

As you drag, the segments on either side of the node move. If the node is on a curved segment, the control points also move so that the angles at which the curve enters and leaves the node remain unchanged.

To shape a curve object by moving several nodes at once



1. Open the Shape Edit flyout, click the Shape tool, and select the nodes.
2. Enable the *Elastic Mode button* on the Property Bar.
3. Drag any of the selected nodes.

To shape a curve object by moving its control points

1. Open the Shape Edit flyout, click the Shape tool, and select a node.

Control points only extend from the selected node and from those nodes on either side of the selected node if it is on a curved segment.

2. Drag the control points.



- The control points move differently depending on whether the node they are associated with is smooth, cusped, or symmetrical. This, in turn, affects the shape of the curve.



- To move a control point hidden under its node, deselect all nodes on the curve object, hold down Shift, and drag the control point out from under the node.

Aligning nodes and control points

You can align two or more nodes that form part of the same curve object. You can also align the control points that are associated with these nodes. Nodes and control points can be aligned horizontally or vertically.

To align nodes and control points



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve.
2. Hold down Shift, and select the nodes.



3. Click the *Align Nodes button* on the Property Bar.



- You can also select nodes by marquee selecting.

Transforming parts of a curve object

You can change the shape of an object by applying basic geometric transformations (such as scaling) to selected nodes. You might want to do this if, for example, you need to enlarge a portion of an object.

To stretch or scale parts of a curve object



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve.
2. Select the nodes along the curve that you want to transform.
3. Click the *Stretch And Scale Nodes button* on the Property Bar.



The sizing handles appear.

4. Drag the corner handles to scale the selected nodes, or drag the side handles to stretch the selected nodes.

To rotate or skew parts of a curve object



1. Follow steps 1 and 2 from the previous procedure.
2. Click the *Rotate And Skew Nodes button* on the Property Bar.

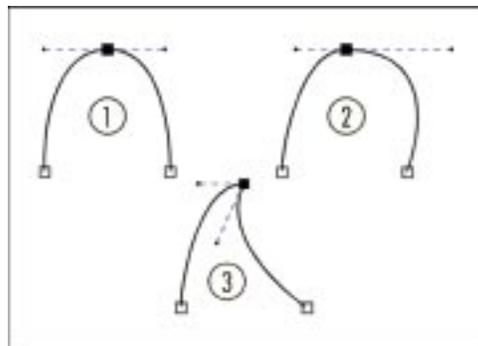
The rotation and skewing handles appear.

3. Drag the corner handles to rotate the selected nodes, or drag the side handles to skew the selected nodes.

Changing a node's properties

There are three types of nodes: cusp, smooth, and symmetrical. The control points of each node type behave differently.

A symmetrical node (1), a smooth node (2), and a cusp node (3).



Node type

Properties

Cusp

The control points of a cusp node move independently from one another. A curve that passes through a cusp node can bend at a sharp angle.

Smooth	The control points of a smooth node are always directly opposite each other. When you move one control point, the other moves also. Smooth nodes produce a smooth transition between line segments.
Symmetrical	The control points of a symmetrical node are always directly opposite each other. Also, the control points are always equal lengths apart. Symmetrical nodes produce the same curvature on both sides of the node.

Unless a curve changes direction sharply as it passes through a node, changing the node type does not noticeably affect the curve's shape. However, it affects the way that you can reshape a curve.

To make a node smooth, cusped, or symmetrical



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve.
2. Click a node.
3. Click one of the following buttons on the Property Bar:
 - Smooth
 - Cusp
 - Symmet



- If you select more than one node, you can change all of the nodes simultaneously.

Changing a segment's properties

There are two types of segments: straight and curved. If you click on a node with the Shape tool, the Status Bar displays the type of segment entering the node and the node type itself. The Convert Line To Curve and Convert Curve To Line buttons make it easy to turn straight segments to curved segments and vice versa. When you convert a straight segment to a curved segment, the change is not immediately apparent. However, if you select a node at either end of the segment, control points appear, indicating that the segment is now curved.

To make a segment straight or curved



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve object.
2. Click the segment you want to change.
3. Click one of the following buttons on the Property Bar:

- Convert Curve To Line — makes a segment straight
- Convert Line To Curve — makes a segment curved



- If you prefer, you can select a node on the end of the segment you want to change instead. Also, if you select several segments at once, you can change them simultaneously.

Breaking a path

You can turn a closed curve object into an open one by breaking its path at any point. You can also break an open path into one or more subpaths or into separate objects.

When you break a path, any subpaths and nodes that are created remain a part of the original object.

To break a path



1. Open the Shape Edit flyout, click the *Shape tool*, and select a curve object.
2. Click where you want to break the path.



3. Click the *Break Curve button* on the Property Bar.



- You can select multiple nodes to break the path at several different places.

To extract a path from an object

1. Follow all the steps from the previous procedure.
2. Select a segment, node, or group of nodes that represents the portion of the path that you want to extract.



3. Click the *Extract Subpath button* on the Property Bar.



- When you break a path in an object it still remains as one object. When you extract a subpath two separate objects are created.



- If you are having problems selecting a node while trying to extract a subpath, you can press Tab until the node you want is selected.

Drawing dimension and connector lines

Dimension lines

Dimension lines are extremely useful for creating technical diagrams, floor plans, or any drawing where exact measurements and scale are important. You can use dimension lines to measure the size of objects or the distance between them. A dimension line can be attached to an object so that when the object is moved, the dimension line moves with it. This feature makes dimension lines very flexible, especially when combined with dynamic dimensioning.

Dynamic dimensioning automatically displays the length of the dimension line, guaranteeing that your drawing will be accurate. Also, dynamic dimension lines automatically change as you change your drawing. If you prefer to specify your own approximate measurements or other text, you can turn off dynamic dimensioning. However, all dimension lines start as dynamic dimension lines.

When you use dimension lines to label objects, you might need to change the scale of your drawing to reflect the actual size of the objects that you are labeling. The scale determines the ratio between your drawing and the real world. By default, the scale is 1:1; therefore, one inch in your drawing equals one inch in the real world. However, if you want to create a floor plan for your living room, a scale of 1:12 (one inch equals one foot) might be more appropriate.

Callout lines



The Callout tool lets you draw lines that label and point to objects in a drawing. When you draw a callout line, a text cursor appears at the end of the line. This cursor indicates the place where you can enter text that describes the object at the other end of the callout line. You can format this text just as you would format Artistic text. You can also alter the format of the callout line — for example, by changing its width using the Outline tool.

Connector lines



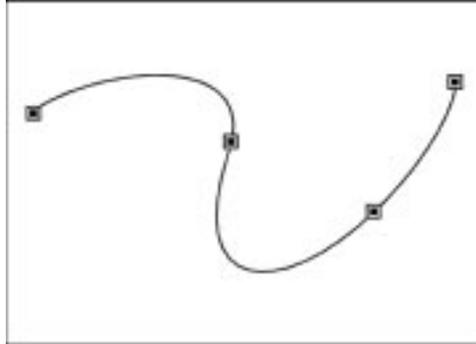
The Connector Line tool lets you connect two objects with a line. A connector line is attached to both objects so that if you move either or both objects, the line is adjusted accordingly. If a connector line is not connected to any objects, it becomes a plain line. If only one end of a line is connected to an object, the other end is fixed to the page. You can only move a connector line by moving the objects to which it is attached. You can customize the style, thickness and end points of connector lines using the Property Bar.

Linking dimension and connector lines to objects

For dimension and connector lines to be effective, they must be linked to the objects that you label. When you use the Dimension tool or the Connector tool, special points on each object, called snap points, are activated. When the mouse passes over a snap point, the point becomes visible. Dimension and connector lines can only be linked to objects at these snap points.

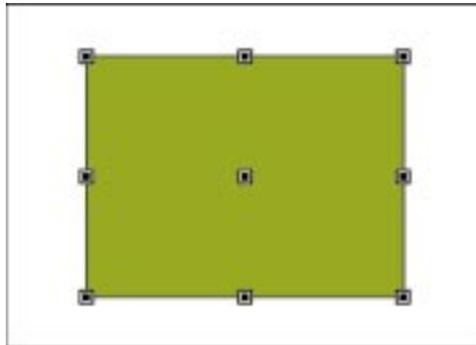
Curve objects have snap points at each node.

Curve object



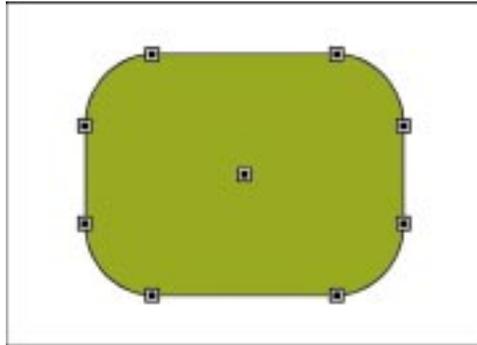
Simple rectangles with non-rounded corners have nine snap points — one at each corner, one at the midpoint of each side, and one at the center of the rectangle.

Rectangle



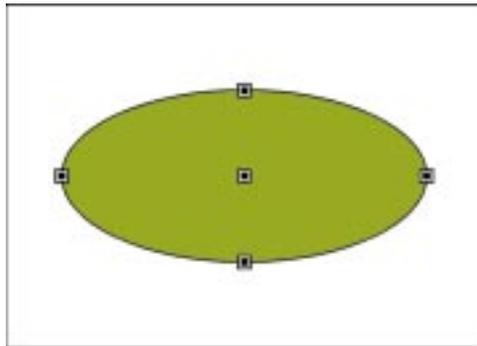
Rectangles with rounded corners also have nine snap points — one at each end of each corner's arc and one at the center of the rectangle.

.....
Rectangle with
rounded corners
.....



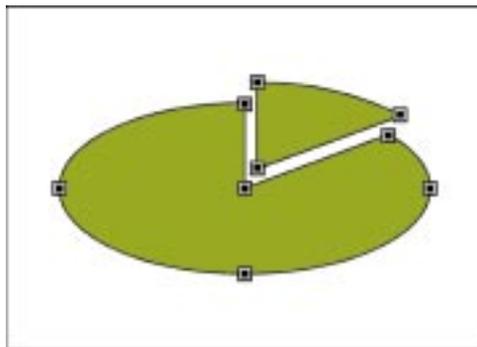
Simple ellipses have five snap points — one at the top, one at the bottom, one on the left, one on the right, and one at the center. If the ellipse is rotated, the snap points also rotate (e.g., the top snap point may no longer be at the top).

.....
Ellipse
.....



Pie shaped ellipses or arcs can have three to seven snap points. Like simple ellipses, pie shapes and arcs have a snap point in the center. Also, if the path of a pie shape or an arc intersects a point where a simple ellipse would have a snap point, the pie shape or the arc will also have a snap point there. In addition, pie shapes and arcs have snap points at each end of their arc.

.....
Pie-shaped ellipses
.....



Drawing dimension lines

The Dimension tool lets you draw vertical, horizontal, slanted, and angular dimension lines. Vertical and horizontal dimensions are restricted to the vertical and horizontal axes; slanted dimensions can be drawn at any angle.

Angular dimension lines measure angles. An angular dimension consists of two lines extending from a single point. An arc and label between the two lines indicate the angle between the two lines in degrees, gradient, or radians.

To draw a vertical, horizontal, or slanted dimension line



1. Open the Curve flyout, and click the *Dimension tool*.
2. Click one of the following on the Property Bar:



- *Vertical Dimension tool*
- *Horizontal Dimension tool*
- *Slanted Dimension tool*

3. Click where you want to begin measuring.

If you want the dimension line to be linked to an object, click one of the object's snap points.

4. Click where you want to finish measuring.



5. Click where you want to place the *dimension text*.

To draw a dimension line using the Auto Dimension Tool



1. Open the Curve flyout, and click the Dimension tool.
2. Click the *Auto Dimension tool* on the Property Bar.
3. Click where you want to begin measuring.

If you want the dimension line to be linked to an object, click one of the object's snap points.

4. Press Tab to toggle the Auto Dimension tool between creating vertical, horizontal, or slanted dimension lines.
5. Follow steps 4 and 5 from the previous procedure.

To draw angular dimension lines



1. Open the Curve flyout, and click the Dimension tool.
2. Click the *Angular Dimension tool button* on the Property Bar.
3. Click where you want the two lines that measure the angle to intersect.

4. Click where you want the first line to end.

If you are measuring an angle between two objects and you want the dimension line to change when the objects move, place the end of each line on a snap point.

5. Click where you want the second line to end.
6. Click where you want the angle's label to appear.

To display snap points

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Display.
3. Enable the Show Snap Location Marks check box.



- The dimension text value is expressed in the same units as the horizontal ruler, unless you have specified otherwise on the Property Bar. (The rulers use the units specified for horizontal units in the Ruler dialog box accessed through the Preferences dialog box.)



- If you are drawing a slanted dimension line, hold down Command while you drag to constrain the angle to 15-degree increments, or to the value you specified for the Constrain Angle setting in the Preferences dialog box.

Drawing callouts

The Callout feature lets you create callouts for labeling your drawing. For callouts to be effective, they must be linked to the objects they are labeling. Callouts use snap points to link to objects.

CorelDRAW lets you customize the text in callouts in the same way you can edit all text in CorelDRAW. For more information see “Working with text” on page 289.

To draw a one-segment callout



1. Open the Curve flyout, and click the *Dimension tool*.
2. Click the *Callout button* on the Property Bar.
3. Click where you want the first callout segment to start.
4. Double-click where you want to place the callout text.
5. Type the callout text.

To draw a two-segment callout

1. Follow steps 1 to 3 from the previous procedure.
2. Click where you want the first segment to end and where you want the second segment to start.
3. Click where you want to place the callout text.
4. Type the callout text.

Drawing connector lines

The Connector Line tool lets you draw lines that connect objects in your drawing. For connector lines to be effective they must be linked to the objects they are labeling. Connector lines use snap points to link to objects. When a connector line is linked to an object, it moves when you move the object. You can only move connector lines by moving either or both of the objects they connect.

You can change the outline of connector lines as well as customize connector line styles and arrowheads. For more information see “Filling and outlining objects” on page 169.

To draw a connector line between two objects



1. Open the Curve flyout, and click the *Connector Line tool*.
2. Click a snap point on the first object.
The snap point is highlighted when the cursor is positioned over it.
3. Click a snap point on the second object.

To change the width of a connector line



1. Select a connector line with the *Pick tool*.
2. Choose a width from the Outline Width pop-up menu on the Property Bar.

To change the style of a connector line

1. Select a connector line with the Pick tool.
2. Choose a line style from the Outline Style Selector pop-up menu on the Property Bar.

To create a custom connector line style

1. Select the connector line with the Pick tool.

2. Choose Other from the Outline Style Selector pop-up menu on the Property Bar.
3. Drag the line style slider to specify the amount of space between dots.
4. Click the squares to the left of the slider to customize the line style.



- The preview window shows how your custom line style will appear.

To change the arrowhead style of a connector line

1. Select the connector line with the Pick tool.
2. Choose an arrowhead style from the Start Arrowhead, or End Arrowhead Selector pop-up menu on the Property Bar.



- If the Lock To Connector Node button on the Property Bar is disabled, the connector line draws the shortest line between the two objects. If the button is enabled, the connector line remains fixed to the nodes to which you originally specify.



- You can double-click on the Connector tool to set its default setting by enabling the Snap To Closest Node or the Lock To Connector Node button.
- You can create a custom arrowhead. For more information see “Applying line-ending shapes” on page 216.

Linking dimension lines to objects

When you alter the position of those objects that have dimension lines linked to them, the dimension lines, depending on the type, can also be affected. The following table gives you information on how a certain dimension line is affected, when the position of the object it is linked to is altered:

When you...an object	The...
Rotate	horizontal and vertical dimension lines remain horizontal and vertical regardless of the object's orientation. Slanted dimension lines rotate with the objects that they label. If you plan to rotate an object, you may find the slanted dimension lines more useful than the horizontal and vertical dimension lines.

Skew	dimension line does not get skewed. However, CorelDRAW updates the dimension text to reflect changes in measurement.
Stretch	dimension line is stretched as well. CorelDRAW updates the dimension text to reflect the new measurement.
Delete	dimension line which is attached to the deleted snap point is also deleted.
Duplicate	dimension line that is linked to the object does not get duplicated. However, if you select and duplicate an object and any linked dimension lines, CorelDRAW duplicates the object and its linked dimension lines.
Separate	link between the dimension line and the object is broken. Once separated, a link can only be reestablished by choosing Edit, Undo. If you exceed the maximum number of Undo levels available, you must delete and reconstruct the dimension line.
Node edit	dimension lines that are connected to the edited node are affected.



- You can transform an object from its center by holding down Option as you scale, skew, stretch or rotate.

Customizing dimension text

When you have finished measuring an object using the Dimension tool, a text block displays the object's measurement units and value. This text block is called the dimension text and CorelDRAW lets you customize its display options.

You can choose the style, font, and position in which to display the dimension text. You can also choose a unit of measurement appropriate to the needs of your drawing and specify the number of decimal places for the measurement.

The option of adding a prefix and suffix to the dimension text can help you keep track of the various measurements of your drawing. You can also select the dimension text and type custom text. At this point, you might have removed the measurements when typing the custom text. You can go back to the default dimension text that contains the measurement by enabling the Dynamic Dimensioning button on the Property Bar.

Changing dimension text

You can change the units for dimension text and add a prefix and a suffix to the text. If you want to change what the dimension text says you can turn off dynamic dimension lines and type any text you choose. However, the dimension text will no longer display the true dimension of the line. You can

always restore the true dimension by selecting the dimension line and enabling the Dynamic Dimensioning button on the Property Bar.

To specify how dimension units are displayed



1. Select the dimension line with the *Pick tool*.
2. If you want the units displayed next to the value on the dimension line, click the *Show Units For Dimension* button on the Property Bar.
3. Choose a style from the Dimension Style pop-up menu on the Property Bar.
4. Choose the precision level from the Dimension Precision pop-up menu on the Property Bar.
5. Choose a unit of measurement from the Dimension Units pop-up menu on the Property Bar.

To add a prefix or a suffix to dimension text

1. Select a dimension line with the Pick tool.
2. Type in the Prefix For Dimension or Suffix For Dimension pop-up menu on the Property Bar, and press Return.

To type custom text on a dimension line



1. Select the dimension line with the Pick tool.
2. Disable the Dynamic Dimensioning button on the Property Bar.
3. Click the *Text tool*.
4. Select the text you want to change and type new text.

Changing the dimension text font

You can change the font and size of dimension text after you have created the dimension line.

To change the size and font of dimension text



1. Select the *dimension text* with the Pick tool.
2. Type a size in the Font Size pop-up menu on the Property Bar.
3. Choose a font from the Font pop-up menu on the Property Bar.



- If the dimension line is already selected, click a blank space on the Drawing Window before you try to select the dimension text.

Positioning dimension text

You can specify how dimension text is positioned relative to the dimension line, and you can move the text to a different position on the page.

To specify the position of dimension text relative to the dimension line



1. Select the dimension line with the *Pick tool*.
2. Click the *Text Position Drop Down button* on the Property Bar.
3. Specify where you want to place the dimension text relative to the dimension line.

- Click  to place it above the line.
- Click  to place text within the line.
- Click  to place it below the line.

4. Click  to have the text placed horizontally.

This option places the text horizontally even if the dimension line is diagonal or vertical. If you don't choose this option, CorelDRAW places the dimension text at the same angle as the dimension line.

5. Click  to have the text centered relative to the dimension line.

This option centers the text on the dimension line. If you don't choose the Center option, CorelDRAW places the dimension text where you last clicked when you drew the dimension line.

To change the position of dimension text

- Select the dimension text with the Pick tool, and drag it to a new location. The dimension line changes accordingly.

Splitting and erasing portions of objects

Splitting an object



The Knife tool lets you quickly cut objects in two or create two subpaths from one path. You can also reshape objects by redrawing their paths. The Knife tool automatically breaks a path in an object at the point you select and converts the object to curves.

Erasing portions of an object

If you've ever wanted to use only a portion of an object, you know that separating one part of an object from another can involve careful node editing. Now, you can use the Eraser tool to remove unwanted portions of objects. The Eraser tool removes the parts of a selected object that it passes over and closes any affected paths. If you erase connecting lines, the eraser tool does not create new objects, it simply creates separate subpaths.

Whenever you use the Eraser tool on an object, the object automatically becomes a curve object.

Erasing portions of an object

The Eraser tool removes the portions of selected objects that you drag it over and closes any affected paths. The Eraser tool automatically reduces the number of nodes on a curve it is erasing, but you can disable this function on the Property Bar.

Remember that as soon as you use the Eraser tool on an object, it becomes a curve object.

To erase portions of an object



1. Open the Shape Edit flyout, and click the *Eraser tool*.
2. Select an object.
3. Drag the eraser over the object.

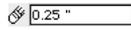
To erase a portion of a curve as you draw with the Freehand tool

- Draw a straight line or a curve and, without releasing the mouse, hold down Command and drag backwards along the portion of the curve.

When you are finished erasing, release Command and resume drawing.

To change the Eraser's size

1. Open the Shape Edit flyout, and click the Eraser tool.
2. Type a value in the *Eraser Thickness box* on the Property Bar, and press Return.



Splitting an object with the Knife tool

The Knife tool lets you do the obvious — split an object in two — and much more. It also lets you completely reshape an object by redrawing its path, or create subpaths in an object.

By default, the Knife tool automatically closes open paths when it cuts them, but you can change this if you wish.

Remember, as soon as you use the Knife tool on an object, it becomes a curve object.

To split an object along a straight line using the Knife tool



1. Open the Shape Edit flyout, and click the *Knife tool*.
2. Position the knife cursor where you want to start cutting.
The cursor snaps upright when it's ready to cut.
3. Click once.
4. Move the cursor to where you want to stop cutting.
5. Click once.

To split an object along a freehand line using the Knife tool

1. Follow steps 1 and 2 from the previous procedure.
2. Drag the mouse from where you want the cut to start to where you want the cut to end.

To reshape an object by redrawing a path

1. Follow steps 1 and 2 from the “To split an object along a straight line using the Knife tool” procedure.
2. Drag the mouse from where you want the cut to start to where you want the cut to end. Do not release the mouse.
3. Press Tab once or twice to toggle to the choice of cut you want.
4. Release the mouse.

To set the Knife tool to split an object into two subpaths or objects using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox, and choose Knife tool.
3. Do one of the following:
 - Enable the Leave As One Object check box to split the object into two subpaths.
 - Disable the Leave As One Object button on the Property Bar to split the object into two objects.



- You can also set the Knife tool to split an object into two subpaths or two separate objects by enabling the Leave As One Object button on the Property Bar. Disabling this button splits the objects into two separate objects.
-

To set the Knife tool to automatically close paths using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox and, choose Knife tool.
3. Do one of the following:
 - Enable the Automatically Close Object check box to automatically close open paths after they are cut.
 - Disable the Automatically Close Object check box to leave new paths open.



- You can also set the Knife tool to automatically close paths by enabling the Auto-Close On Cut button on the Property Bar. Disabling this button leaves new paths open after splitting an open path.
 - Holding down Shift while redrawing an object with the Knife tool puts you in Bezier curve mode. Holding down Shift and Command puts you in Bezier curve mode with the curve constrained by increments of 15 degrees.
-

Setting tool preferences

CorelDRAW lets you control the default settings of your drawing tools. The options of the Freehand and Bezier tools such as Auto-join, Freehand and Autotrace tracking, Corner and Straight Line Threshold, can be preset only through the Preferences dialog box. The Auto-join option determines how close two end nodes must be to join automatically.

The Freehand Tracking option determines how closely a freehand curve matches the movement of the mouse. The Autotrace Tracking sets the accuracy of the Freehand and Bezier tools' bitmap autotrace function.

The Corner Threshold option sets the limit at which a corner node is cusped (as opposed to smooth). Through the Straight Line Threshold option, you can set the amount at which a line can deviate from a straight path and still be treated as straight.

CorelDRAW also gives you options that help you pay attention to the details of your drawing. It lets you measure your values up to six decimal places. You can preset the constrain angle at which the object turns per rotation. When using dimension lines in your drawing, you can set the scale to measure distances that represent real world distance values.

Thus, the tool preferences described above give you the freedom to specify values that help you create the drawing you want.

Changing the default settings of a drawing tool

The default settings of a drawing tool determine its behavior when you use it to create an object. If you want a drawing tool to behave differently, you can change its default settings through the Preferences dialog box.

If no objects are selected and you select a drawing tool, any changes you make to the related settings on the Property Bar become the default settings. The changes you make using the Property Bar are applied to the selected object except in the case of the Spiral and Graph Paper tools. When using these tools you must always preset the values before using them. If you want to deselect all objects while a drawing tool is active, press Esc.

To change the default settings of a drawing tool using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox, and choose the tool you want to change from the list.
3. Change the settings.

To change the default settings of a drawing tool using the Property Bar

1. Click the drawing tool you want to change.
2. Press Esc to ensure that no objects are selected.
3. Change the settings on the Property Bar.

Controlling the behavior of the Freehand and Bezier tools

You can change the way that the Freehand tool and Bezier tool behave by changing their properties on the Toolbox page in the Preferences dialog box. Lower numbers for the Freehand Tracking option produce more accurate matches, whereas higher numbers produce less. In the Autotrace Tracking option, lower values produce more accurate tracing, whereas higher values produce less. In the Straight Line Threshold option, if you set the threshold to a high value, you don't need to be as accurate in your freehand drawing to produce a straight line. Keep in mind that in the Corner Threshold option, a node is more likely to be cusped if the value is lower.

To set Freehand and Bezier tool properties

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox, and choose Freehand/Bezier tool.
3. Change any of the property settings by typing a value (in pixels) in the appropriate box. In each case, you can set a value from 1 to 10.

To disable the Fill Open Curves setting

1. Choose Edit, Preferences.
2. In the list of categories double-click Document, and choose General.
3. Disable the Fill Open Curves check box.



- Double-click the Freehand tool or the Bezier tool to display the Toolbox page in the Preferences dialog box.
-

Setting the constrain angle

The Preferences dialog box provides the controls you need to change the constrain angle. The constrain angle represents the increment by which control points, lines, and objects rotate when you hold down Command as you use the mouse to draw or rotate them. For example, if you set the

constrain angle to 14 degrees, an object will rotate in 14-degree increments if you hold down Command as you drag one of its rotation handles.

To set the constrain angle

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. Type the number of degrees in the Constrain Angle box.

Setting measurement precision for a drawing

You can specify the number of decimal places displayed in measurements and coordinates by changing the drawing precision. This setting does not affect the drawing itself, it only affects how the numbers are displayed in dialog boxes, on the Property Bar, and on the Status Bar.

To set drawing precision

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. Type the desired number of decimals in the Drawing Precision box.

Drawing dimensions to scale

If you are using dimension lines to measure distances, you will probably need to set the scale in CorelDRAW. It is necessary to set the scale when distances in your drawing represent greater or lesser distances in the real world. For example, if you want to illustrate the size of the head of a pin, you may want a centimeter in your drawing to represent one thousandth of a centimeter in the real world.

To choose a preset drawing scale

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Rulers.
3. Click the Edit Scale button.
4. Choose a drawing scale from the Typical Scales pop-up menu.

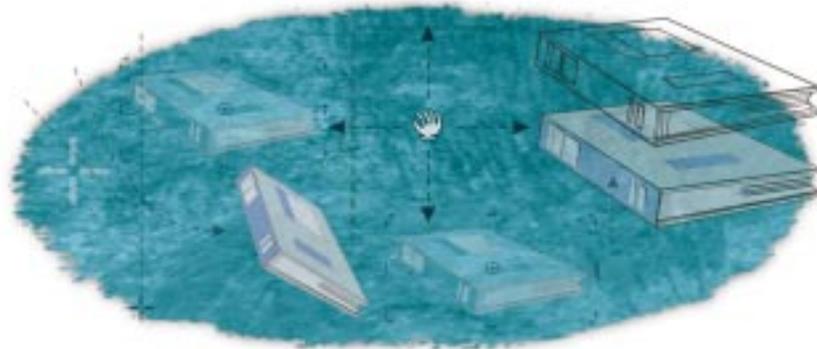
To set a custom drawing scale

1. Follow steps 1 to 3 from the previous procedure.
2. Choose Custom from the Typical Scales pop-up menu.

3. Type a value in the Page Distance box.
4. Choose a unit for the page distance from the pop-up menu provided.
5. Type a value in the World Distance box to set the actual distance you want represented by each unit of page distance.



- If you want to change the World Distance units, change the horizontal ruler units. If the drawing scale is set to anything other than 1:1, the vertical ruler units will always be the same as the horizontal ruler units. For more information about changing ruler units, see “Setting ruler units” on page 62.
-



SELECTING AND TRANSFORMING OBJECTS

5

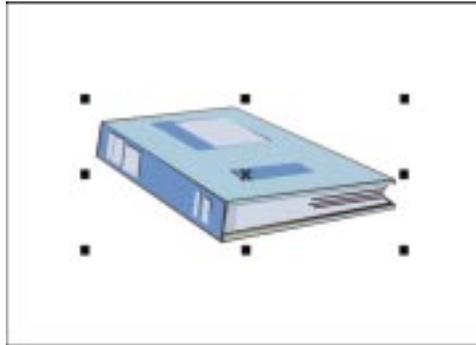
To work with an object in CoreIDRAW, the first thing you must do is select it. An object remains selected until you select another object, click a blank space in the Drawing Window, or press Esc. The quickest way to select objects is to use the Pick tool. You can also select an object using the keyboard or by dragging a marquee selection box around the object. When an object is hidden behind other objects, you can select it using Option in combination with the mouse.

One of the many things you can do in CoreIDRAW is apply transformations to selected objects. Using the transformation tools, you can change the orientation or appearance of an object without altering its basic shape. These tools allow you to position, size, stretch, rotate, scale, mirror, and skew objects. You can perform multiple transformations on a single object, multiple selected objects, combined, or grouped objects. Keep in mind that you can use the transformation tools alone or successively.

Selecting objects

In CoreIDRAW, you must select an object before performing an operation on the object. When an object is selected, an X appears in the center of the object and eight selection handles appear at the corners and midpoints of an otherwise invisible rectangle, called the selection box. Selecting more than one object lets you apply the same commands to all of them at once. When you select multiple objects, a single selection box encloses all of the objects and the X appears in the center of the selection box.

.....
Eight selection
handles appear and
an X appears in the
center of a selected
object.
.....



If the Edit Across Layers option is enabled in the Object Manager, you can select objects on any layer that isn't locked. If the Edit Across Layers option is disabled, you can only select objects on the active layer. For more information about layers, see "Using layers to organize your drawing" on page 279.

Additionally, single objects can be locked on a layer. If you select a locked object, the selection handles appear as padlocks. You can't apply any operation to a locked object. For more information, see "Locking and unlocking objects" on page 265.

Selecting by clicking

The quickest way to select a single object is to use the Pick tool to click the object. You can select multiple objects by holding down Shift as you click the objects you wish to select. When an object is hidden behind another object, or when hidden objects are grouped, you can press Option, or Option and Command as you click to select the hidden object.

You can also select an object using one of the drawing tools (i.e., the Rectangle tool, the Ellipse tool, the Polygon tool, the Spiral tool, and the Graph Paper tool).

Selecting by dragging

Another way of selecting objects is to drag the marquee box around the entire object or objects you wish to select using the Pick tool. Holding down Option as you marquee select allows you to select all objects touched by the marquee, even those that are not completely enclosed.

Selecting using the keyboard

A third way of selecting objects is using the keyboard keys if you prefer typing to using the mouse.

Using these simple techniques, you can select single or multiple objects and groups. You can then begin manipulating the selected objects.

Selecting using menu commands

You can select all objects, all text objects, or all guidelines in the Drawing Window using Select All commands in the Edit menu.

Selecting an object by clicking

Clicking an object with the Pick tool is the quickest way to select a single object. Remember that you can select a group just as you would select a single object. You can also select several objects by holding down Shift as you click single objects, groups, and multiple groups of objects.

To select an object



- Using the *Pick tool*, click the object you want to select.



- If you're using another tool, press Spacebar to select the Pick tool.
- You can select a single object within a group by holding down Command as you click.
- You can also select objects using one of the drawing tools.

Selecting hidden objects by clicking

When you have objects that are positioned one on top of another, objects are partially or completely hidden. You can select a single hidden object within a series or within a group without disturbing the other objects. By holding down Option as you click, you can select a single object from within a series. By holding down Option and Command as you click, you can select a single object from within a group. Each time you click, you move from the top-most object that you selected down to the next object in the stack. An X, which appears in the center of the selected object, and selection handles indicate which object is selected.

You can also select multiple hidden objects within a series. By holding down Option and Shift as you click, you select each object on which you click. When you select the bottom-most object, the cursor moves to the top-most object you selected in the series. You may find it useful to refer to the Object Manager to see which objects are selected.

Keep in mind that the cursor must be positioned over the bottom-most and top-most objects for them to be included in the selection.



To select an object hidden below a series of objects

- Hold down Option, and click the top-most object using the *Pick tool* until the object you want is selected.

To select multiple objects hidden below a series of objects

1. Using the Pick tool, click the top-most object in the series that you want to include in the selection.
2. Hold down Option and Shift, and click to add the next object to the selection.
3. Click until you add all of the objects you want to your selection.

When you select the bottom-most object, the cursor moves to the top-most object in the stack and deselects it.

To select a hidden object within a group

- Hold down Command and Option, and click the top-most object with the Pick tool until the object you want is selected.



- When you select an object from within a group, an X appears in the center of the object and eight round selection handles appear at the corners and the midpoints of the object.
- The Simple Wireframe view and Wireframe view make it easier to identify the objects you select.
- You can also select hidden objects with the drawing tools.

Selecting by dragging

The easiest way to select several objects in your drawing is to drag the outline that appears when you drag in the Drawing Window with the Pick tool. This outline is called a marquee box.

You need to surround the marquee box entirely around the objects you wish to select. However, you can select objects even if they aren't surrounded entirely by holding down Option as you select.



To marquee select several objects

- Using the *Pick tool*, drag diagonally until a marquee box encloses all objects.

To marquee select objects without entirely surrounding all objects

1. Click the Pick tool.
2. Hold down Option, and drag diagonally until the marquee box touches the objects you want to select.

Selecting using the keyboard

You might find it convenient to use the keyboard keys to select objects in your drawing instead of using the mouse.

To ...	Do this ...
Select the next object	Click the Pick tool. Press Tab until the object you want is selected.
Select the previous object	Click the Pick tool. Press Shift and Tab until the object you want is selected.

Selecting all objects using menu commands

You can select all objects, all text, or all guidelines in the Drawing Window. When you select all objects, you select all text and graphics objects, not guidelines. When you select all text, you select Text, you select all Paragraph text and Artistic text.

To select all objects

- Choose Edit, Select All, Objects.



- You can also select all objects by double-clicking the Pick tool.

To select all text

- Choose Edit, Select All, Text.

To select all guidelines

- Choose Edit, Select All, Guidelines.

Selecting an unfilled object by its outline

By default, when you select an object with no fill, you can click anywhere inside the object. By disabling the Treat All Objects As Filled option, you must select the object by its outline. You may find this useful when you're working with unfilled and filled objects that overlap.

The Treat All Objects As Filled option only affects objects with closed paths and curved lines — i.e., objects that can be filled. Curves can be filled provided the Auto-fill Open Curves check box is enabled. For more information, see “Setting the Fill Open Curves option” on page 208.

Keep in mind that when this option is disabled, you can only select an object with no fill using the Pick tool.

To select unfilled objects using their outlines using the Property Bar



1. Click a blank space in the Drawing Window to deselect any objects.
2. Disable the *Treat As Filled* button on the Property Bar.

The button is disabled when it appears raised.

To select unfilled objects using their outlines using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Toolbox, and choose Pick Tool.
3. Disable the Treat All Objects As Filled check box.

Deselecting objects

When you select an object, you indicate that you want your next action to apply to that object. When you deselect an object, you indicate that you want to stop manipulating it and move on to another task.

To deselect all objects

- Click a blank space in the Drawing Window.



- You can also deselect all objects by pressing Esc.
-

To deselect an object from several selected objects

- Hold down Shift, and click anywhere on the object’s fill or outline.



- If you’re not sure which object is selected, refer to the Status Bar, or the Object Manager which display the current information.
-

Transforming objects

The transformation tools allow you to alter the physical position, size, and appearance of an object without changing its basic shape. You can transform objects using the mouse, and the Property Bar. The mouse and the Free Transform tools on the Property Bar let you transform objects interactively. The Free Transform tools allow you to manipulate objects more fluidly than the mouse. The controls on the Property Bar give you the advantage of precision.

You can transform all graphics and text objects in the following ways:

- position
- size
- stretch
- scale
- rotate
- skew
- mirror

Undoing transformations

If you apply a transformation and change your mind, you can use the Clear Transformations command to remove any transformations made to the object, except for changes to position. The Clear Transformations command applies to transformations performed using the mouse, or the Property Bar.

Applying transformations to duplicates

If you want to see the effect of a transformation and keep the original intact, you can transform a copy of the object. If you decide that you'd rather keep the original, you can simply delete the copies.

Changing the position of objects

Dragging is the quickest way of moving objects in your drawing. Using the Pick tool, you can move an object interactively by dragging it anywhere in your drawing and releasing the mouse button at the desired location.

If you need to position objects with precision, you can do so using the Property Bar. The Property Bar contains the basic tools required to change an object's position in the drawing, according to the horizontal and vertical ruler coordinates. In addition to placing objects at specific ruler coordinates, you can also move objects by a specific distance, change the object's anchor point, and move a copy of the object using the Position Palette.

CorelDRAW also lets you nudge objects in increments using the keyboard. By changing the nudge distance, you can set the increment to any value you want.

Moving objects interactively

By dragging an object, you can place it at a new location quickly while viewing the movements you make on the screen. When you drag an object to its new position, you can display either the object's outline or fill (i.e., the entire object). For more information, see "Displaying the object's fill when dragging" on page 136.

To move an object interactively



1. Select an object with the *Pick tool*.
2. Drag the object to a new place in your drawing.



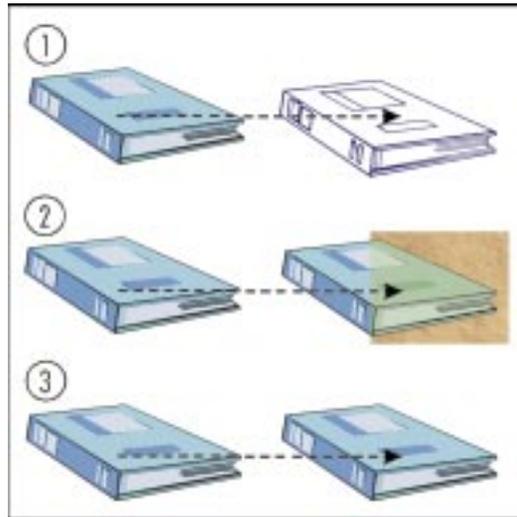
- You can also use the drawing tools to select an object. However, you must click the center X to drag the object.
- While you are dragging the object, refer to the Status Bar to see the distance the object has moved from its previous position. The value labeled "DX" represents the distance the object has moved horizontally, and the value labeled "DY" represents the distance the object has moved vertically.
- To constrain the object to horizontal or vertical movements only, hold down Command as you drag the object.

Displaying the object's fill when dragging

You can display the outline, transparent fill, or opaque fill of an object as you position it in the Drawing Window. By default, CorelDRAW displays the outline of a graphic object when you drag graphic objects. You can change the default to display the graphic object's transparent fill by holding the mouse button for a few seconds before you start to drag. You can also switch between the three displays by pressing Tab as you drag.

When you drag text objects, CorelDRAW displays the opaque object's fill by default. Similar to graphic objects, you can change the default to display the text object's transparent fill by holding down the mouse button before you start to drag. You can also use Tab to switch between the outline, transparent fill, and opaque fill displays.

.....
Display the object's
(1) outline (2)
transparent fill or
(3) opaque fill when
dragging.
.....



For complex objects, you can display a rectangle with a dashed border or a rectangle enveloping the objects' outline when you pause (i.e., hold the mouse button and refrain from dragging). By default, CorelDRAW displays a rectangle when you drag complex objects. You can change the default to display the objects' outline by enabling the Redraw Complex Objects option.



To display an object's transparent fill before you drag

1. Using the *Pick tool*, position the cursor over an object.
2. Click and hold the mouse button.
The cursor changes to a four-way cursor.
3. Drag the object to the desired location.

To display the object's fills as you drag using the keyboard

1. Press Tab as you drag the object to display the object's transparent fill.
2. Press Tab again to display the object's opaque fill.
Pressing Tab a third time returns the display to the object's outline.

To display the outline of complex objects when you pause

1. Hold down Control, click the *Pick tool*, and click Properties.
2. Enable the Redraw Complex Objects check box to display the outline of the objects.
3. Type a value in the Delay box to specify the redraw speed of the outline.

4. Click OK.
5. Drag the objects, then pause to display the objects' outline.



- You can also use the drawing tools to select an object. However, you must click the center X to drag the object.

Positioning objects with precision

When you position an object in CorelDRAW, you specify the horizontal and vertical coordinates of where you want to place the object on the ruler. Whereas, when you move an object, you move it a specified distance from its current position. For more information, see “Moving objects a specified distance” on page 139. To position an object, you must disable the Relative Position check box on the Position Palette.

You can quickly move an object to a specific location using the Property Bar. The values you type in the X and Y Object(s) Position boxes specify the coordinates of the new location where you want to place the object, relative to the origin (0,0 coordinates) of the rulers. Positive values move the object up and to the right; negative values move it down and to the left.

By default, when you position an object, the object moves according to its center anchor point. Consequently, the center of the object moves to specific ruler coordinates. However, you can assign a new anchor point using the Position Palette. The anchor points correspond to the object's selection handles. By changing the anchor point, you move the object according to that anchor point to specific ruler coordinates.

To position an object using the Property Bar



1. Select an object with the *Pick tool*.



2. Open the Shape Edit flyout, and click the *Free Transform tool*.



3. Disable the *Relative To Object button* on the Property Bar.

The button is disabled when it appears raised.



4. Type values in the X (horizontal) and Y (vertical) *Object(s) Position boxes* on the Property Bar.
5. Keep the cursor in the X or Y box, and press Return.

To position an object using the Position Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Position.

3. Disable the Relative Position check box.
4. Type values in the H (horizontal) and V (vertical) boxes to specify a new location in your drawing.
5. Click the Apply button.

To position an object using a different anchor point using the Position Palette

1. Follow steps 1 to 4 from the previous procedure.
2. Click the Down Arrow to display the entire Position Palette.
3. Click a button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center.

4. Click the Apply button.



- The Property Bar positions an object relative to the center anchor point regardless of the anchor point setting in the Position Palette.
- When you disable the Relative Position check box on the Position Palette, the H and V boxes identify the ruler coordinates of the anchor point.



- Use the ruler as a guide when you're specifying coordinates. You can place the ruler's point of origin (0,0) anywhere in your Drawing Window to help you reposition the selected object. To change the ruler's origin, click the corner where the horizontal and the vertical rulers meet. Drag the ruler outlines to the new position.

Moving objects a specified distance

When you move an object in CorelDRAW, you move it a specified distance from its current position. Whereas when you position an object, you specify the horizontal and vertical coordinates of where you want to place the object on the ruler. For more information, see "Positioning objects with precision" on page 138. To move an object, you must enable the Relative To Object button on the Property Bar or enable the Relative Position check box on the Position Palette.

You can quickly move an object precisely using the Property Bar. The values you type in the X and Y Object(s) Position boxes specify the distance you

want to move the object, relative to its current location. Positive values move the object up and to the right; negative values move it down and to the left.

By default, when you move an object, it moves relative to its center anchor point, which is also the center of the object. However, you can specify a different anchor point using the Position Palette. The anchor points correspond to the object's selection handles. By changing the anchor point, you move the object the specified distance relative to that anchor point.

To move an object a specified distance using the Property Bar



1. Select an object with the *Pick tool*.
2. Open the Shape Edit flyout, and click the *Free Transform tool*.
3. Enable the *Relative To Object button* on the Property Bar.
The button is disabled when it appears pressed.
4. Type values in the X (horizontal) and Y (vertical) *Object(s) Position boxes* on the Property Bar.
5. Keep the cursor in the X or Y box, and press Return.

To move an object a specified distance using the Position Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Position.
3. Enable the Relative Position check box.
The values in the H (horizontal) and V (vertical) boxes both change to 0.
4. Type values in the H and V boxes to specify the distance you want to move the object.
5. Click the Apply button.

To move an object a specified distance using a different anchor point

1. Follow steps 1 to 3 from the previous procedure.
2. Click the Down Arrow  to display the entire Position Palette.
3. Click a button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center.

4. Type values in the H and V boxes to specify the distance you want to move the object.

5. Click the Apply button.

The object moves relative to the new anchor point.



- The Property Bar moves an object relative to the center anchor point regardless of the anchor setting on the Position Palette.
- When you enable the Relative Position check box on the Position Palette, the H and V boxes identify the position of the center anchor point as 0,0. When you specify a different anchor point, the values in the H and V boxes represent that anchor point's position relative to the center anchor point (0,0).

Resetting the position anchor

By default, you position or move an object according to its center anchor point, which is also the center of the object. If you change the anchor point using the Position Palette, you can reset it later.

To reset the anchor point to an object's center



1. Select an object with the *Pick tool*.
2. Choose Arrange, Transform, Position.
3. Click the Down Arrow  to display the entire Position Palette.
4. Click the button that represents the object's center.

Moving objects in increments

The Arrow keys on the keyboard allow you to nudge an object in any direction. By default, objects move in 0.1-inch increments. You can change this increment using the settings on the Edit page in the Preferences dialog box or the Property Bar. For more information, see “Changing the nudge and super nudge distance” on page 142.

To nudge an object



1. Select an object with the *Pick tool*.
2. Press the Arrow key(s).

To move an object in larger increments (super nudge)

1. Select an object with the *Pick tool*.
2. Hold down Shift, and press an Arrow key.



- You can leave a copy of an object behind as you nudge, by pressing + on the numeric keypad before you press the Arrow key.
 - Holding down an Arrow key moves an object continuously.
-

Changing the nudge and super nudge distance

When you nudge an object using the keyboard keys, the object moves according to a specified value. You can change this value to suit your needs. CorelDRAW calculates the super nudge value as a percentage of the nudge value.

To specify the nudge or super nudge distance

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. Do one of the following:
 - Type a value in the Nudge box.
 - Type a value in the Nudge and Super Nudge boxes.
4. Choose a unit of measurement from the Units pop-up menu, if required.



- You can also specify the nudge distance using the Property Bar. Click a blank space in the Drawing Window to deselect any objects, type a value in the Nudge Offset box, and press Return.
-

Sizing and stretching objects

The sizing and stretching tools in CorelDRAW let you opt for speed or precision. You can use the mouse to transform objects quickly, or you can use the Property Bar or the Size Palette to transform objects by precise amounts. Sizing changes an object's dimensions by specific values (as opposed to scaling). Scaling changes an object's dimensions by a specified percentage. For more information, see "Scaling objects" on page 146.

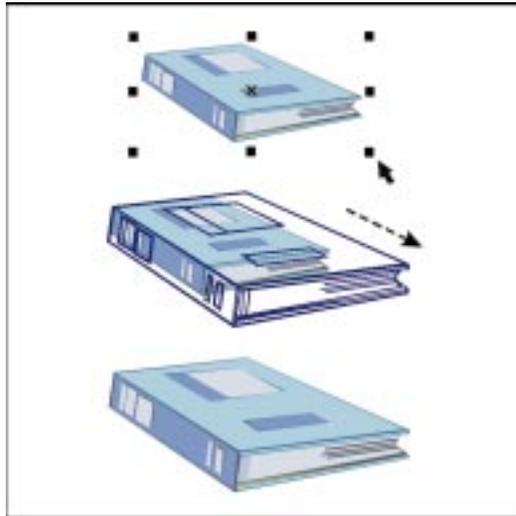
You can size an object horizontally and vertically while maintaining the object's aspect ratio. When you maintain the aspect ratio, you preserve the relationship between the height and the width of the object.

When you stretch an object, you change its horizontal and vertical dimensions to alter the object's proportions. By dragging one of the object's side selection handles, you can stretch objects vertically or horizontally.

Sizing objects using the mouse

The easiest way to size objects is to drag the corner handles of the selection box using the mouse. CorelDRAW displays the object's outline while you drag, so you can preview the effects of the size. You can also refer to the Status Bar to see the new dimensions of the object as you size it.

You can use the corner selection handles to increase the size of an object proportionally.



To size an object using the mouse



1. Select an object with the *Pick tool*.
The object's selection box appears.
2. Drag one of the corner selection handles inward to decrease the size or outward to increase its size.

To size an object from its center

1. Select an object with the *Pick tool*.
The object's selection box appears.
2. Hold down *Option*, and drag one of the corner selection handles.



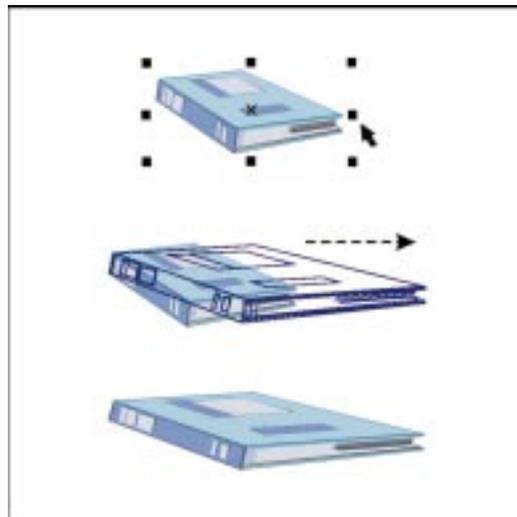
- You can hold down *Command* while dragging to increase the size of an object in increments of 100%.
- You can hold down *Command* and *Option* while dragging a handle to increase an object's size in increments of 100% from its center.

- You can hold down Shift while you drag a corner handle to size an object horizontally and vertically simultaneously.
- You can also use the drawing tools to size an object.

Stretching objects using the mouse

When you stretch an object, you are resizing the horizontal and vertical dimensions of an object unproportionally. You can stretch objects interactively by dragging a selection handle. To stretch an object vertically and horizontally at the same time, hold down Option as you drag one of the corner selection handles.

You can use the selection handles to stretch an object.



Keep in mind that the Status Bar shows the percentage by which the object is stretched. The percentage shown in the Status Bar is preceded by the letter X or Y, indicating a horizontal or vertical stretch, respectively.

To stretch an object horizontally or vertically using the mouse



1. Select an object with the *Pick tool*.
The object's selection box appears.
2. Drag one of the side selection handles inward to decrease the size of the object or outward to increase its size.

To stretch an object horizontally and vertically simultaneously

1. Select an object with the *Pick tool*.

The object's selection box appears.

2. Hold down Shift, and drag a corner selection handle.

To stretch an object from its center

1. Select an object with the Pick tool.

The object's selection box appears.

2. Hold down Option, and drag one of the side selection handles.



- To stretch an object in increments of 100%, hold down Command as you drag a side selection handle.
- You can also use the drawing tools to stretch an object interactively.

Sizing and stretching objects with precision

Sizing means to change an object's dimensions horizontally and vertically while maintaining the object's proportions. Stretching means to increase an object's size either horizontally or vertically. You can quickly size objects precisely using the Property Bar. If you want more options, use the Size Palette.

To change the units of measurement, use the Rulers page in the Preferences dialog box.

To size an object using the Property Bar



1. Select an object with the *Pick tool*.



2. Enable the *Nonproportional Sizing button* on the Property Bar.

The Nonproportional Sizing button is enabled when it appears pressed.



3. Type a horizontal value in the top portion or a vertical value in the lower portion of the *Object(s) Size boxes* on the Property Bar.

4. Keep the cursor in one of the Object(s) Size boxes, and press Return.

To size an object using the Size Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Size.
3. Enable the Proportional check box to maintain the proportion of width to height.

4. Do one of the following:
 - Type a value in the H (horizontal) box to specify the object's width.
 - Type a value in the V (vertical) box to specify the object's length.As you change one value, the other value automatically changes in proportion to the original dimensions.
5. Click the Apply button.

To stretch an object using the Property Bar

1. Select an object with the Pick tool.
2. Disable the Nonproportional Sizing button on the Property Bar.
The Nonproportional Sizing button is disabled when it appears raised.
3. Type a horizontal value in the top portion and a vertical value in the lower portion of the Object(s) Size box on the Property Bar.
4. Keep the cursor in one of the Object(s) Size boxes, and press Return.

To stretch an object using the Size Palette

1. Follow steps 1 and 2 from the “To size an object using the Size Palette” procedure.
2. Disable the Proportional check box to specify an unproportional value for the length and width.
3. Type a value in the H (horizontal) box, V (vertical) box, or both to specify the object's length or width.
4. Click the Apply button.



- You can also type different units of measurement in the Object Size boxes on the Property Bar and CorelDRAW automatically converts them to the current units.
-

Scaling objects

The tools for scaling in CorelDRAW let you opt for speed or precision. You have four options for scaling objects: scale objects interactively using the mouse or the Free Scale tool, scale objects with precise values using the Property Bar, or the Scale & Mirror Palette. When you scale an object in CorelDRAW, you change its horizontal or vertical dimensions without altering its basic shape.

Scaling changes an object's dimensions by a specified percentage (as opposed to sizing). Sizing changes an object's dimensions by a specified amount.

You can scale by either a horizontal or a vertical factor or maintain the aspect ratio.

Scaling objects using the mouse

You can increase the size of an object in increments of 100%.

To scale an object in increments of 100%



1. Select an object with the *Pick tool* to display its selection box.
2. Hold down Command and drag one of the corner selection handles.

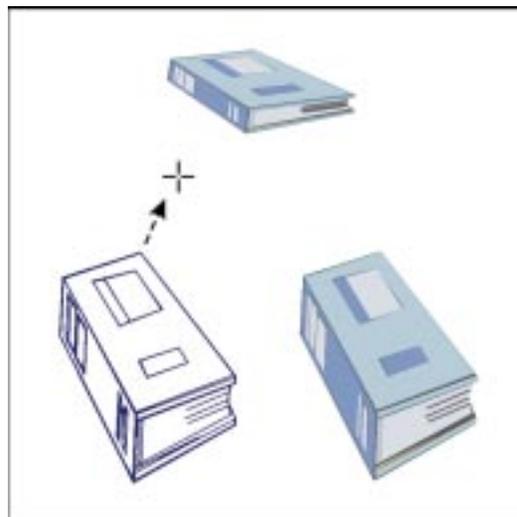


- You can scale an object in increments of 100% from its center by holding down Option and Command as you drag.
- You can also use the drawing tools to scale an object interactively.

Scaling objects using the Free Scale tool

The Free Scale tool on the Property Bar allows you to scale an object along the horizontal and vertical axis simultaneously. In addition, this tool enlarges and reduces an object relative to its anchor points — a point that remains fixed while you scale. You can set an anchor point anywhere in the Drawing Window by clicking.

The Free Scale tool scales an object along the horizontal and vertical axis simultaneously.



By clicking inside an object, you can scale the object from its center. By clicking outside of an object, you can scale and position the object according to the distance and direction you drag. CorelDRAW displays the object's outline as you drag, so you can preview the affects of the scale.

To scale an object using the Free Scale tool



1. Open the Shape Edit flyout, and click the *Free Transform tool*.
2. Click the *Free Scale tool* on the Property bar.
3. Click the object you want to scale.
4. Click anywhere in the Drawing Window to fix an anchor point.
5. Drag to scale the object.



- Hold down Command while you drag to maintain the horizontal and vertical proportions of the object.
- You can maintain better control by clicking close to the object, and dragging slowly. If you the object moves off the Drawing Window, you can Zoom out to retrieve it.

Scaling objects with precision

You can change an object's size using specific values. Scaling changes an object's dimensions by a specified percentage whereas sizing changes an object's dimensions by specific values. For example, a value of 100% leaves the object unchanged, 200% doubles the size of the object, 50% halves the size of the object. You can scale by a horizontal or a vertical factor. Additionally, you can maintain the aspect ratio when you scale.

By default, CorelDRAW scales an object from its center.

To scale an object using the Property Bar



1. Select an object with the *Pick tool*.
2. Enable the *Nonproportional Sizing button* on the Property Bar.
The Nonproportional Sizing button is disabled when it appears pressed.
3. Type a horizontal value in the top portion and a vertical value in the lower portion of the *Scale Factor boxes* on the Property Bar.
4. Keep the cursor in one of the Scale Factor boxes, and press Return.

To scale an object using the Scale & Mirror Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Scale And Mirror.
3. Type a percentage value in the H (horizontal) and V (vertical) boxes.
4. Click the Apply button.

To maintain the aspect ratio while scaling using the Property Bar

1. Select an object with the Pick tool.
2. Disable the Nonproportional Sizing button on the Property Bar.
The Nonproportional Sizing button is disabled when it appears raised.
3. Follow steps 2 and 3 from the “To scale an object using the Property Bar” procedure.

To maintain the aspect ratio while scaling using the Scale & Mirror Palette

1. Follow steps 1 and 2 from the “To scale an object using the Scale & Mirror Palette” procedure.
2. Enable the Proportional check box.
3. Type a percentage value in the H (horizontal) box or the V (vertical) box.
As you change one value, the other value changes automatically to maintain the original proportions of the object. If you specify a different value in the H and V boxes, CorelDRAW uses the last number you typed as the scale factor.
4. Click the Apply button.

Setting the scale anchor point

You can scale an object from a handle on its selection box by using one of the anchor points on the Scale & Mirror Palette. Enabling an anchor points defines a point that remains fixed when you scale the object. As a result, you scale the object around that point. This option is useful for scaling a number of objects whose alignment you want to maintain.

To set an object’s scale anchor point



1. Click an object with the *Pick tool*.
2. Choose Arrange, Transform, Scale And Mirror.
3. Click the Down Arrow  to display the entire Scale And Mirror Palette.

4. Click a button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center. When you scale the object, the anchor point you select remains stationary.

5. Click the Apply button.

To reset the scale anchor point to its center

1. Follow steps 1 to 3 from the previous procedure.
2. Click the button that represents the object's center.
3. Click the Apply button.

Rotating objects

Like the other transformation tools, the rotation tools are effective, flexible, and easy to use. You can rotate an object around any point in your illustration in one of four ways.

Dragging an object's rotation handles is a quick and simple way of rotating objects. By dragging one of the rotation handles in circular motions, you can rotate an object around its current position interactively to view the changes you make on the screen.

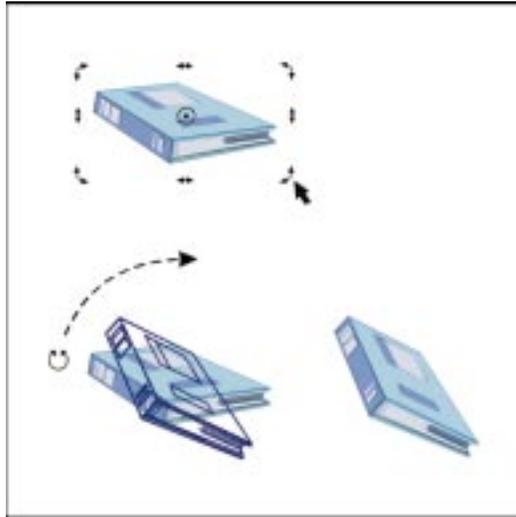
The Free Rotation tool on the Property Bar is also interactive. You can rotate an object around a fixed point, called the center of rotation, which you specify by clicking anywhere in the Drawing Window.

The Property Bar and the Rotation Palette, on the other hand, give you the advantage of precision. You can use the rotation controls to pivot an object by a precise amount around its center of rotation. You can also rotate the object around a different coordinate in your illustration.

Rotating objects using the mouse

You can rotate an object interactively by dragging its rotation handles. You can also skew or size an object while you rotate.

.....
You can rotate an
object clockwise.
.....



By default, an object rotates around its center of rotation. You can move the center of rotation to any location in your drawing to rotate around that point.

To rotate an object using the mouse



1. Double-click an object with the *Pick tool*.

The rotation and skewing handles appear as two-way arrows. The center of rotation marker appears in the middle of the selection box.

2. Drag one of the rotation handles (the corner two-way arrows) in a clockwise or counterclockwise direction.

To skew or size an object while you rotate an object using the mouse

1. Double-click an object with the Pick tool.

The rotation and skewing handles appear as two-way arrows. The center of rotation marker appears in the middle of the selection box.

2. Do one of the following:
 - Hold down Shift, and drag one of the rotation handles in a clockwise or counterclockwise direction to skew and rotate the object simultaneously.
 - Hold down Option, and drag one of the rotation handles in a clockwise or counterclockwise direction to size and rotate the object simultaneously.

To rotate an object around a different location using the mouse

1. Double-click an object with the Pick tool.
2. Drag the center of rotation marker to the desired location, anywhere inside or outside the object.
3. Click one of the corner rotation handles, and move it in a clockwise or counterclockwise direction.



- When you rotate a line, curve, or a closed curve, select the object with the Pick tool. Click the object to display the rotation handles, and drag one of the rotation handles.
- Clicking an object once displays its selection box.
- Choose Layout, Snap To Objects to have the center of rotation snap to various points of other objects in your drawing.

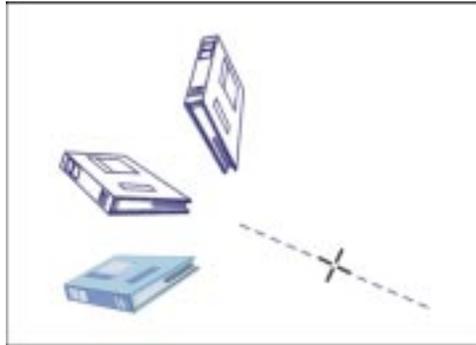


- You can hold down Command while dragging to rotate an object in 15-degree increments. To change the increment value, choose Edit, Preferences, and click Workspace, Edit. Type a value in the Constrain Angle box.
- You can use the drawing tools to rotate an object interactively. To display the rotation handles, double-click the X in the center of the object.

Rotating objects using the Free Rotation tool

The Free Rotation tool on the Property Bar makes it easy to rotate an object around another object or any point in the Drawing Window. You can set the center of rotation with a simple click of the mouse — wherever you click becomes the center of rotation. When you start to drag the mouse, an outline of the object and a line of rotation — dashed blue line that extends beyond the Drawing Page — appear. The line of rotation indicates the angle at which you are rotating the object from the center of rotation. The object's outline allows you to preview the effects of the rotation.

The Free Rotation tool lets you quickly rotate an object around any point in the Drawing Window.



To rotate an object using the Free Rotation tool



1. Open the Shape Edit flyout, and click the *Free Transform tool*.
2. Click the *Free Rotation tool*.
3. Select the object you want to rotate.
4. Click in the Drawing Window to specify the center of rotation.
5. Drag the line of rotation to rotate the object.

The closer you move the cursor to its center of rotation, along the line of rotation, the more sensitive the rotation is to mouse movement. The further you move the cursor along the line of rotation, the smoother the rotation.



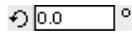
- You can hold down Command while dragging to rotate an object in 15-degree increments. To change the increment value, choose Edit, Preferences, and click Workspace, Edit. Type a value in the Constrain Angle box.
- You can refer to the Status Bar for the angle of rotation, as well as horizontal and vertical coordinates.

Rotating objects with precision

The Property Bar and the Rotation Palette allow you to rotate objects by a specific number of degrees. You can quickly rotate an object with precision using the Property Bar. However, if you want to rotate the object around any of its selection handles, you can quickly change the center of rotation using the Rotation Palette. You can reposition the object's center of rotation anywhere in the Drawing Window using the Property Bar and the Rotation Palette. For more information, see “Setting the center of rotation with precision” on page 154.

As you rotate an object, keep in mind that a positive value rotates the object counterclockwise and a negative value rotates it clockwise from its current position.

To rotate an object using the Property Bar



1. Select an object with the *Pick tool*.
2. Type a value in the *Angle Of Rotation box* on the Property Bar to specify the number of degrees by which you want to rotate the object.
3. Press Return.

To rotate an object using the Rotation Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Rotate.
3. Type a value in the Angle box to specify the number of degrees by which you want to rotate the object.
4. Click the Apply button.

To rotate an object around one of its selection handles

1. Follow steps 1 to 3 from the previous procedure.
2. Click the Down Arrow to display the entire Rotation Palette.
3. Click a button to assign a rotation point.

The buttons correspond to the eight selection handles and the object's center.

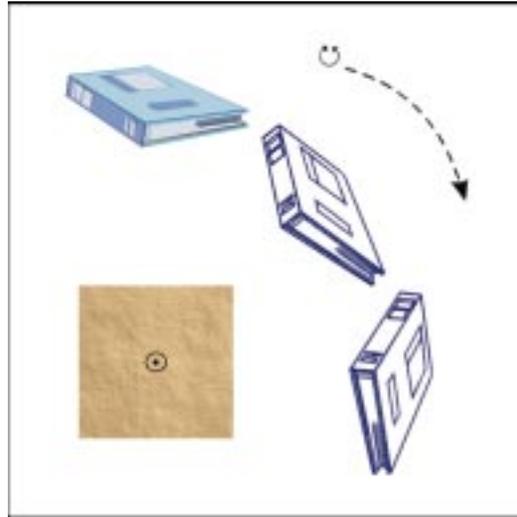
4. Click the Apply button.

Setting the center of rotation with precision

When you rotate an object, it revolves around its center by default. You can move an object's center of rotation anywhere in the Drawing Window. When you rotate the object, it turns around that point. The Property Bar and the Rotation Palette allow you to specify a new center of rotation precisely.

The Relative To Object button on the Property Bar and the Relative Center check box on the Rotation Palette allow you to move the center of rotation to a specific ruler coordinate or by a specific distance, before the rotation.

.....
You can change the
center of rotation to
rotate an object
around another
object.
.....



Keep in mind that negative (-) values rotate the object clockwise and positive (+) values rotate it counterclockwise.

To rotate an object around a specified ruler coordinate using the Property Bar



1. Select an object with the *Pick tool*.
2. Open the Shape Edit flyout, and click the *Free Transform tool*.
3. Disable the *Relative To Object* button on the Property Bar.

The Relative To Object button is disabled when it appears raised.



4. Type values in the X (horizontal) and Y (vertical) *Center Of Rotation Position boxes* on the Property Bar.
5. Type a value in the Angle box on the Property Bar, and press Return.

To rotate an object around a specified ruler coordinate using the Rotation Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Rotate.
3. Disable the Relative Center check box to specify that you want to move the center of rotation to a specific ruler coordinate before the rotation.
4. Type values in the H (horizontal) and V (vertical) boxes to specify the coordinates around which you want to rotate the object.

5. Type a value in the Angle box.
6. Click the Apply button.

To rotate an object around a point relative to the current position using the Property Bar

1. Follow steps 1 and 2 from the “To rotate an object around a specified ruler coordinate using the Property Bar” procedure.
2. Enable the Relative To Object button on the Property Bar.
The Relative To Object button is enabled when it appears pressed.
3. Type values in the X (horizontal) and Y (vertical) Center Of Rotation Position boxes on the Property Bar.
4. Type a value in the Angle box, and press Return.

To rotate an object around a point relative to the current position using the Rotation Palette

1. Follow steps 1 and 2 from the “To rotate an object around a specified ruler coordinate using the Rotation Palette” procedure.
2. Enable the Relative Center check box.
The values in the H (horizontal) and V (vertical) boxes both change to 0.
3. Type the H (horizontal) value in the X box and the V (vertical) value in the V box to specify the distance that you want to move the center of rotation before the rotation.
4. In the Angle box, type (-) before a value to rotate the object clockwise from its current position, or type a positive value to rotate the object counterclockwise from its current position.
5. Click the Apply button.



- You can move the center of rotation without rotating an object by typing values in the H (horizontal) and V (vertical) boxes, and typing 0 in the Angle box.
 - Moving the center of rotation to a specific coordinate is useful for rotating a number of objects while maintaining their alignment.
-

Resetting the center of rotation

By default, an object rotates around a point (called the center of rotation) in the middle of its selection box. If you move the center of rotation, you can reset it to the center again using the Property Bar, the Rotation Palette, or the mouse.

The eight buttons around the center button on the Rotation Palette correspond to the eight handles on the object's selection box. The center button corresponds to the center of the object.

To reset the center of rotation using the Property Bar



1. Select an object with the *Pick tool*.



2. Open the Shape Edit flyout, and click the *Free Transform tool*.



3. Enable the *Relative To Object button* on the Property Bar.

The Relative To Object button is enabled when it appears pressed.



4. Type 0,0 in the X (horizontal) and Y (vertical) *Center Of Rotation Position boxes*.

5. Keep the cursor in the X or Y box, and press Return.

To reset the center of rotation using the mouse



1. Double-click the object with the *Pick tool*.

The rotation and skewing handles appear as two-way arrows. The center of rotation marker appears in the middle of the box.

2. Hold down Command, and drag the center of rotation marker towards the middle of the object.

3. Release the mouse button to snap the marker to the object's center.



- When you reset the center of rotation for a line, curve, or a closed curve, select the object with the Pick tool. Click the object to display the rotation handles, hold down Command, and drag the center of rotation towards the middle of the object.

To reset the center of rotation using the Rotation Palette

1. Select an object with the Pick tool.

2. Choose Arrange, Transform, Rotate.

3. Click the Down Arrow  to display the entire Rotation Palette.

4. Click the button that represents the center of rotation.
5. Type 0 in the Angle box.
6. Click the Apply button.

Skewing objects

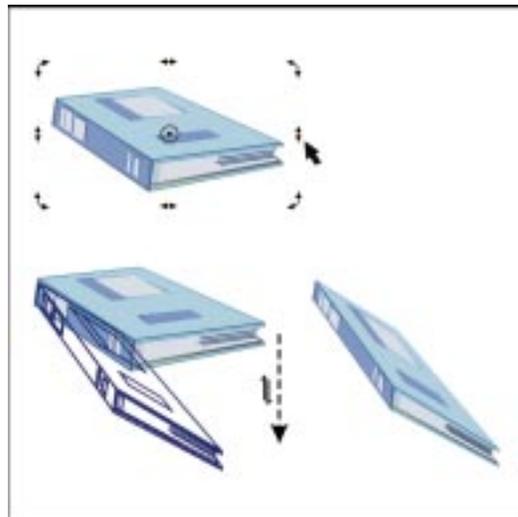
Like the other transformation tools, the skewing tools are effective, flexible, and easy to use. CorelDRAW lets you choose between speed and precision when you skew objects in your drawings.

Dragging an object's skewing handles is the easiest way to add a slant to objects in your illustration. The Free Skew tool allows you to skew the horizontal and vertical dimensions at the same time. The Skew Palette, on the other hand, gives you the advantage of precision. You can use the skewing controls to skew an object by a precise amount around any coordinate in your illustration.

Skewing objects using the mouse

You can skew objects interactively by dragging the skewing handles — the straight horizontal and vertical arrows which appear at the mid-points of the object. You can also skew an object along its horizontal and vertical dimensions simultaneously. When you skew along both dimensions at the same time, keep the cursor close to the object to maintain control over the object. You also can limit the object's motion when you skew.

.....
Skewing an object
horizontally and to
the right.
.....



To skew an object using the mouse



1. Double-click an object with the *Pick tool*.

The object's rotation and skewing handles appear.

2. Do any of the following:

- Drag a horizontal skewing handle to skew the object left or right.
- Drag a vertical skewing handle to skew the object up or down.

To skew an object horizontally and vertically

1. Double-click an object with the Pick tool.

The object's rotation and skewing handles appear.

2. Hold down Shift, and drag a skewing handle.

To constrain an object's movement when skewing

1. Double-click an object with the Pick tool.

The object's rotation and skewing handles appear.

2. Hold down Command while dragging one of the skew arrows to skew in 15-degree increments.



- When you skew a line, curve, or a closed curve, select the object with the Pick tool. Click the object to display the skewing handles, and drag one of the skewing handles.

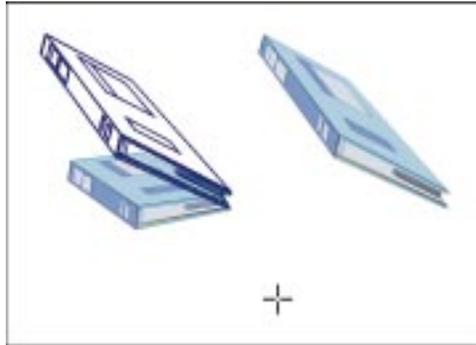


- To change the constrain angle, choose Edit, Preferences, and from the list of categories, choose Workspace, Edit. Type a value in the Constrain Angle box.
 - You can also use the drawing tools to skew an object interactively. To display the skewing handles, double-click the X in the center of the object.
-

Skewing objects using the Free Skew tool

The Free Skew tool on the Property Bar slants the horizontal and vertical lines of an object simultaneously around a fixed point, called an anchor point. You can quickly set an anchor point by clicking anywhere in the Drawing Window. The skew is relative to the anchor point. For example, if you click inside the object, you can skew from its center. If you click outside the object, you skew according to the anchor point you set, to the distance between the object and the anchor point, and to the direction and the distance you drag. The Free Skew changes the slant and the position of the object.

The Free Skew tool lets you slant an object around any point in the Drawing Window.



CorelDRAW displays the object's outline as you drag, so you can preview the affects of the skew.

To skew an object using the Free Skew tool



1. Open the Shape Edit flyout, and click the *Free Transform tool*.
2. Click the *Free Skew tool* on the Property Bar.
3. Click the object you want to skew.
4. Click anywhere in the Drawing Window to fix an anchor point.
5. Drag to skew the object.



- Hold down Command while dragging to maintain the horizontal and vertical proportions of the object.
- To maintain control when you click outside of an object, click close to the object and drag away from the object slowly. If you find that the object is moving off the Drawing Window, you can *Zoom out* to retrieve it.

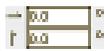
Skewing objects with precision

The Property Bar and the Skew Palette allow you to skew objects by a specific amount. By default, the skew anchor point is the middle of the object. However, the Use Anchor Point check box on the Skew Palette lets you change the anchor point. Keep in mind that the anchor point maintains its position so that you skew the object around that point.

To skew an object with precision using the Property Bar



1. Select an object with the *Pick tool*.
2. Open the Shape Edit flyout, and click the *Free Transform tool*.



3. Type a horizontal value in the top portion and a vertical value in the lower portion of the *Skew Angle boxes* on the Property Bar.
4. Keep the cursor in one of the Skew Angle boxes, and press Return.

To skew an object with precision using the Skew Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, Skew.
3. Type the number of degrees by which you want to skew the object in the H (horizontal) and V (vertical) boxes.

Negative values skew the object to the right of its current position; positive values skew the object to the left of its current position.

4. Click the Apply button.

To change an object's skew anchor point

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Use Anchor Point check box.
3. Click the Down Arrow  to display the entire Skew Palette.
4. Click a button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center.

5. Click the Apply button.

Resetting the skew anchor to an object's center

By default, an object skews around an anchor point in the middle of its selection box. If you move the skew anchor point, you can reset it to the center later on, using the Skew Palette.

To reset the skew anchor point to an object's center using the Skew Palette



1. Select an object with the *Pick tool*.
2. Choose Arrange, Transform, Skew.
3. Click the Down Arrow  to display the entire Skew Palette.
4. Enable the Use Anchor Point check box.

The Use Anchor Point check box allows you to use one of the eight handles and the center X as an anchor — a point that remains fixed when the object is skewed.

5. Click the button that represent the object's center.

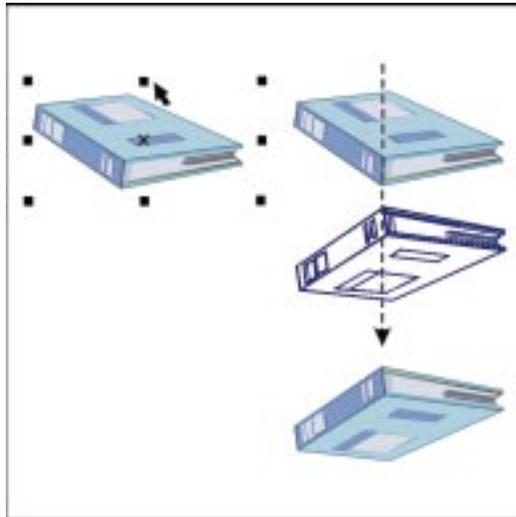
Mirroring objects

The mirror options let you make a reflection of any object in an illustration. When you use the mouse, the Property Bar, and the Scale & Mirror Palette, you can mirror an object either horizontally or vertically. Mirroring an object horizontally flips it from left to right or vice versa. Similarly, mirroring an object vertically flips it from top to bottom or vice versa. You can use the Free Angle Reflection tool on the Property Bar to mirror an object both horizontally and vertically.

Mirroring objects using the mouse

You might find it easier to mirror an object using the mouse. You can mirror an object horizontally, vertically, or diagonally.

Mirroring an object vertically.



To mirror an object using the mouse



1. Select an object with the *Pick tool*.
2. Do one of the following:
 - To mirror an object horizontally, hold down Command, and drag one of the side handles to the opposite side of the object — left to right if you clicked the left side of the object, or right to left if you clicked the right side of the object.

- To mirror an object vertically, hold down Command, and drag either the top or bottom handle of the object's selection box to the opposite side.
- To mirror an object diagonally, hold down Command, and drag one of the corner handles of the object's selection box to the opposite side.

A blue outline of the object appears when you reach the opposite side of the object.

3. Release the mouse button, then release Command.

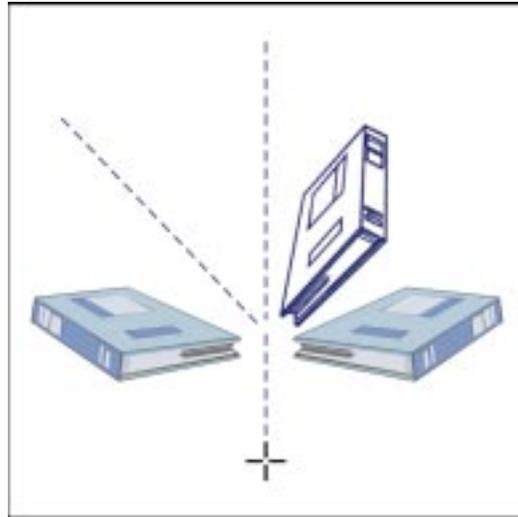


- You can also use the drawing tools to mirror an object interactively.

Mirroring objects using the Free Angle Reflection tool

The Free Angle Reflection tool on the Property Bar mirrors an object in the Drawing Window according to the angle you specify. You can set the anchor point by clicking the mouse. When you start to drag the mouse, an outline of the object and a dashed blue line that intersects the anchor point and extends beyond the Drawing Page appear. This dashed blue line is called line of reflection. Where you set the anchor point determines the distance between the object and the line of reflection. The line of reflection indicates the angle at which you are mirroring the object from the anchor point. Drag the line of reflection to set the angle.

The Free Angle Reflection tool mirrors an object at any angle.



To create a reflection



1. Open the Shape Edit flyout, and click the *Free Transform tool*.



2. Click the *Free Angle Reflection tool* on the Property Bar.
3. Click the object you want to mirror.
4. Click anywhere in the Drawing Window to fix an anchor point.
5. Drag to the line of reflection.

The closer you move the cursor to the object along the line of reflection, the more sensitive the mouse is to movement. The further you move the mouse from the object, the smoother the movement.



- To constrain the angle at which you mirror an object, hold down Command while you drag. By default, the constrain angle value is 15. To change the constrain angle, choose Edit, Preferences, and from the list of categories, choose Workspace, Edit. Type a value in the Constrain Angle box.

Mirroring objects with precision

The Property Bar allows you to mirror objects with precision. By default, the mirror anchor point is in the middle of the object. Consequently, a symmetrical object doesn't appear to move when you mirror it. You can change the anchor point using the Scale & Mirror Palette to specify the direction you want to mirror the object.

To mirror an object using the Property Bar



1. Select an object with the *Pick tool*.
2. Do one of the following:



- Click the *Horizontal Mirror button* on the Property Bar to mirror an object horizontally.



- Click the *Vertical Mirror button* on the Property Bar to mirror an object vertically.

To mirror an object horizontally or vertically using the Scale & Mirror Palette

1. Select an object with Pick tool.
2. Choose Arrange, Transform, Scale And Mirror.
3. Click one of the following buttons:
 - Horizontal Mirror — mirrors an object horizontally
 - Vertical Mirror — mirrors an object vertically

4. Click the Down Arrow  to display the entire Scale & Mirror Palette.
5. Click a side button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center. By clicking a button, you specify the direction which you want to mirror the object.

6. Click the Apply button.

To mirror an object diagonally using the Scale & Mirror Palette

1. Follow steps 1 and 2 from the previous procedure.
2. Click the Horizontal Mirror and Vertical Mirror buttons.
3. Click the down arrow  to display the entire Scale & Mirror Palette.
4. Click a corner button to assign an anchor point.

The buttons correspond to the eight selection handles and the object's center. By clicking a button, you specify the direction which you want to mirror the object.

5. Click the Apply button.

Undoing transformations

When you work on a drawing, CorelDRAW keeps track of the operations and commands you perform. If you make a mistake or change your mind about the transformation actions, you can clear them easily.

If you want to remove all transformations performed on an object or a group of objects, use the Clear Transformations command to clear all transformations, except for changes to the object's position.

Clearing transformations

You can reverse all transformations (i.e. rotate, size, stretch, scale, rotate, skew, and mirror) applied to an object or group of objects. If you select a group, only the transformations performed on the group are cleared; those performed on the objects before they were grouped remain unchanged. The Clear Transformations command clears all transformations, except for changes to the position.

To undo all transformations applied to an object



1. Select an object with the *Pick tool*.
2. Choose Arrange, Clear Transformations.

To redo all cleared transformations

1. Select an object with the Pick tool.
2. Choose Edit, Undo Clear Transformations.

Applying transformations to duplicates

If you want to see the effect of a transformation and keep the original intact, you can transform a copy of the object. CorelDRAW creates a copy of the object and transforms the copy while the original remains unaffected. If you decide that you'd rather keep the original, you can simply delete the copies.

Transforming duplicates

Each Transform Palette contains an Apply To Duplicate button that lets you apply transformations to a copy of the object. The Apply To Duplicate button applies transformations to a copy of the object when you are using the controls on the Property Bar. You can also apply a transformation to a duplicate using the keyboard.

To apply a transformation to a duplicate using the Property Bar



1. Select an object with the *Pick tool*.
2. Open the Shape Edit flyout, and click the *Free Transform tool*.
3. Click the *Apply To Duplicate button* on the Property Bar.
4. Apply the transformation by using the Property Bar.

To apply a transformation to a duplicate using a Transform Palette

1. Select an object with the Pick tool.
2. Choose Arrange, Transform, and choose one of the Transform Palettes (Position, Rotate, Scale & Mirror, Rotation, Size, or Skew).
3. Specify the settings you want to apply on the Transform Palette.
4. Click the Apply To Duplicate button.

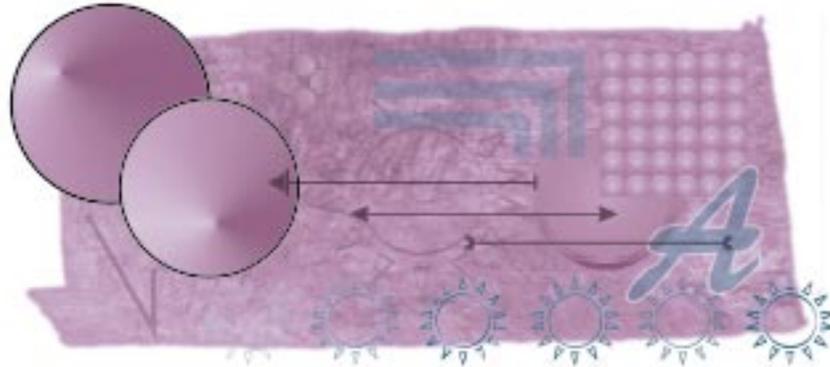
You can then choose to keep the new object and delete the original, delete the new object and keep the original, or keep both.

To apply a transformation to a duplicate using the keyboard

- Follow the steps for transforming an object interactively, and press + on the numeric keypad before you release the mouse button.



- When you move an object, you can hold down Option as you drag to leave a duplicate.
 - When you size, scale, skew, rotate, or mirror an object, you can press the Spacebar to leave a duplicate.
-



FILLING AND OUTLINING OBJECTS 6

When you add an object to your drawing, it's given a default outline attribute, a default fill attribute, or both. The object's outline is the line or curve that surrounds the object. The fill is the contents of the object (i.e., the color or pattern contained by the object). These attributes can be changed using the Outline Tool and Fill Tool flyouts.

Using the Fill and Outline flyout tools you can define objects.



With CorelDRAW you can apply a fill and outline to both open and closed objects. Text objects are considered to be closed paths, so you can specify both fill and outline. Normally, however, text objects are filled, but have no outline properties. You can assign additional properties to text, including font and style, point size, interline spacing, and more.

Fills

The fill attribute can produce a solid color, a fountain fill, a pattern fill, a texture fill, or a Postscript fill. If you like, you can turn either the fill or outline off and leave the other visible. Turning off a rectangle's fill for example, makes it transparent, allowing objects behind it to show through.

Outlines

Every object you create has an outline that you can manipulate in a variety of ways. You can think of each object as being drawn with a nib of adjustable size, shape, and color. These nib attributes can apply to a particular object or to all objects you add to your drawing.

Color styles

Color styles make it easy to incorporate color design changes in one simple step. You can also use color styles to create a series of two or more similar solid colors linked together to form a “parent-child” relationship. The link between parent and child colors is based on a common hue. You create the different color shades by adjusting levels of saturation and brightness. The Pantone Matching System, the Pantone Hexachrome, and UserInks produce child colors based on a common ID. Different shades of child colors are created by adjusting the tint. The resulting style is a family of similar colors.

Filling objects

You can change the appearance of any object using a fill. By filling an object, you apply colors or patterns to the area inside its borders. When you fill open curves, CorelDRAW fills the object by drawing an imaginary line from the first point to the last point drawn, and then applies the fill. If you leave an object without a fill, or remove its fill, the object becomes transparent. CorelDRAW includes Uniform fills, Fountain fills, Pattern fills, Texture Fills, and PostScript fills. In all cases, you can apply fills to specific objects, or set defaults so that every object you draw has the same fill. You can also customize and manage your fountain fills, pattern fills, and textures.

Working with uniform fills

Uniform fills are even-colored, solid fills that can be applied to any object. CorelDRAW provides you with various tools to apply uniform fills. You can quickly fill an object with a solid color using the on-screen Color Palette. You can choose between color models, palettes, and color mixers for filling objects with solid colors. (The default display is the CMYK color model and the custom Color Palette.)

You can apply fill attributes using the same techniques on the Object Manager. For more information, see “Using the Object Manager” on page 275.

You can also create color styles based on uniform colors. For more information, see “Working with color styles” on page 222.

Applying a uniform fill

Applying a uniform fill using the Uniform Fill dialog box allows you to exercise more control over the fill that is applied. Applying a Uniform fill using the Interactive Fill tool allows you to apply the fill quickly and easily. The Property Bar allows you to select a specific color model or palette, adjust the color displayed.

To apply a uniform fill using the Uniform Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fill Color Dialog*.
3. Choose a color from the Color Bar that appears along the right of the dialog box and from the visual selector.
4. Click the More button to display the details of the selected color.

To apply a uniform fill with the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Uniform Fill from the Fill Type pop-up menu on the Property Bar.
4. Choose a color model from the Uniform Fill Type pop-up menu.
5. Type values in the appropriate boxes, then press Return.

To apply a uniform fill using the Color Selection Palette



1. Select the object with the Pick tool.
2. Open the Fill Tool flyout, and click *Color Selection Palette*.
3. Choose a Color Model from the pop-up menu.
4. Choose a color from the Color Bar that appears along the right of the Palette and from the visual selector.
5. Click the Fill button.



- If you want to select a color from a specific color model, see “Working with color” on page 231.

Applying a uniform fill using the Color Palette

You can apply a uniform fill quickly using the on-screen Color Palette. CorelDRAW also lets you mix colors in a solid fill using the Interactive Fill tool in conjunction with the on-screen Color Palette. For more information about the on-screen Color Palette, see “Working with color” on page 231.

To View the Color Palette

- Choose Window, Color Palette, and choose a Color Palette from the list.

To apply a uniform fill using the Color Palette



1. Select the object with the *Pick tool*.
2. Choose a color you want from the *Color Palette*.

To apply a uniform fill by dragging

- Drag a color from the Color Palette to any object.

As the cursor moves over the object, it changes shape to show where the color will be applied. This allows you to apply colors to objects without having to select them first. Holding down Shift while you drag over an object applies only the fill attributes to the object.

To mix a color using the Color Palette

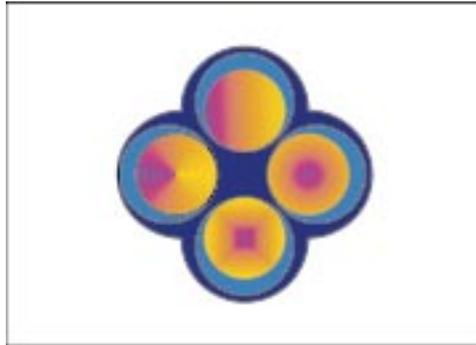
1. Select the object with the Pick tool.
2. Hold down Command, and choose a color from the Color Palette. Release the mouse button before Command.

You can also hold Command and drag a color from the on-screen Color Palette to an object. As the cursor moves over the object, it changes shape to indicate that the color will be mixed by 10%. This allows you to mix the object’s colors without having to select them first.

Working with fountain fills

A fountain fill — also known as a gradient fill or a ramp fill — is a progression of colors through the Color Wheel following a Linear, Radial, Conical, or Square path.

Fountain fills can follow a linear, radial, conical, or square path.



There are two types of fountain fills — two-color and custom. Two-color fountain fills have a direct blend from one color to another. Custom fills, however, allow you to create a cascade of many colors. You can use preset fountain fills included with CorelDRAW to simulate the appearance of neon tubes, metal cylinders, and a variety of other real-life objects. You can also customize fountain fills by changing the direction of the fill, adding intermediate colors, or changing the angle of the fill. CorelDRAW also lets you mix colors in a fountain fill using the Interactive Fill tool in conjunction with the on-screen Color Palette.

Applying a two-color fountain fill

A fountain fill is a fill that flows smoothly from one color to another. The fill can flow in a straight line across the object (linear), in concentric circles from the center of the object (radial), in rays from the center of the object (conical), or in concentric squares from the center of the object (square).

Adding fountain fills allows you to add depth and color to your drawings. You can see how your fill appears in the Preview window found in the Fountain Fill dialog box.

The Interactive Fill tool allows you to apply fountain fills using the mouse. The Property Bar allows you to create custom fountain fills by adding intermediate colors and adjusting various controls for the fountain fill.

To apply a two-color fountain fill using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. In the Color Blend section, enable the Two Color button.
4. Choose the type of fountain fill you want from the Type pop-up menu.
You can choose a linear, radial, conical, or square fountain fill.



5. Click the From *color picker*, and choose the color you want to start of the fountain fill's color progression.

Click the Other button in the color list to create or choose a custom color.

6. Click the To color picker, and choose the color you want to end of the fountain fill's color progression.

Click the Other button in the color list to create or choose a custom color.

7. Move the Mid-Point slider to set the mid-point between two colors.

8. Click one of the following buttons:



- *Direct* — determines the intermediate fill colors according to hue and saturation changes along a straight line, beginning at the From color and continuing across the Color Wheel to the To color



- *Clockwise Color Path* — blends colors along a clockwise path around the Color Wheel



- *Counterclockwise Color Path* — blends colors along a counterclockwise path around the Color Wheel

To apply a two-color fountain fill using the Interactive Fill tool

1. Select the object with the Pick tool.



2. Click the *Interactive Fill tool*.
3. Choose Fountain Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the button on the Property Bar that corresponds to the type of fountain fill you want to apply.

You can choose a linear, radial, conical, or square fountain fill.

5. Click the object where you want the fill to start, then drag to where you want the fill to end.

As you drag, the fill arrow shows you the direction of the fill.



- To constrain the angle of the arrow to 15-degree intervals, hold down Command while dragging.

Applying a preset fountain fill

CorelDRAW comes with a number of preset fountain fills that you can use to simulate the appearance of neon tubes, metal cylinders, and a variety of other real-life objects. You can see how your fill appears in the Preview window found in the Fountain Fill dialog box.

To apply a preset fountain fill

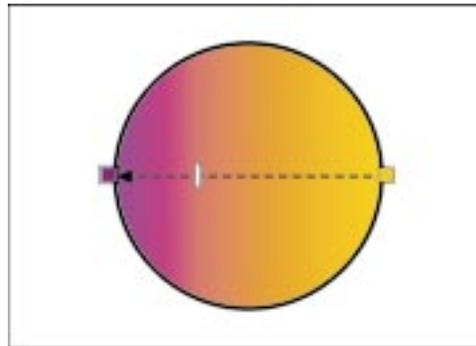


1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Choose a preset fountain fill from the Presets pop-up menu in the Fountain Fill dialog box.

Creating and applying custom fountain fills

CorelDRAW allows you to customize your fountain fills by adding intermediate colors using the Preview Ribbon. You can also specify where you want the intermediate colors to appear by moving the markers that appear above the Preview Ribbon or by entering a value in the Position box. You can add up to 99 intermediate colors to your fountain fill.

Custom Fountain Fills are created by adding intermediate colors and adjusting the fill slider.



To apply a custom fountain fill using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. In the Color Blend section, enable the Custom button.
4. Double-click the Preview Ribbon to add a color marker.
5. Adjust the marker by typing a placement value in the Position box.
You can move existing markers by dragging them along the Preview Ribbon and delete them by double-clicking.
6. Choose a color from the Color Palette to assign it to the marker.
You can change the color of an existing marker by selecting it and choosing a new color from the Color Palette.
7. Repeat steps 4 to 6 until you achieve the desired effect.

To apply a custom fountain fill using the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Fountain Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the button on the Property Bar that corresponds to the type of fountain fill you want to apply.

You can choose a linear, radial, conical, or square fountain fill.

5. Click the object where you want the fill to start, then drag to where you want the fill to end.

As you drag, the fill arrow shows you the direction of the fill.



6. Drag a color from the on-screen *Color Palette* to any spot along the line that appears inside the object.

As the cursor moves over the line that represents the fill's direction, a plus sign appears to indicate where the color is applied.



7. You can move existing colors by dragging them along the *vector* inside the object, and delete them by holding down Control and clicking.



- To constrain the angle of the arrow to 15-degree intervals, hold down Command while dragging.

Saving custom fountain fills

Once you've created a unique custom fountain fill, you may want to save it so that you can use it again.

To save a custom fountain Fill



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Type a name for the new fountain fill in the Presets box.
4. Click the *Add button* to save the custom fountain fill.

New fountain fills are added to the pattern list and placed in alphabetical order.

Customizing fountain fills

Customizing fountain fills can affect the way they appear on screen as well as the way they print. There are a number of ways to determine how fountain fills are printed and displayed. You can improve the appearance of fountain fills by controlling the display, controlling the printing, or adjusting by the overall quality of the fountain fill.

You can also change a fountain fill's color, center point, mid-point, angle, direction, and edge pad. These options vary depending on the type of fountain fill.

Controlling the display of fountain fills

You can change the number of steps used to display fountain fills in your drawings. Using fewer steps to display fountain fills can improve the redraw speed of your screen. This setting has no effect on the number of bands that are printed and will not affect printing speed.

To control the display of fountain fills

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Display.
3. Type the number of steps in the Preview Fountain Steps box.

Controlling the printing of fountain fills

Printing proofs of a drawing with fountain fills can take less time if you reduce the number of steps the printer uses to create them. When you are ready to print the final version of your drawing, reset the number of steps so that the fountain fills print the way you want. It is recommended that you increase the number of steps for the default setting (i.e., 128 for PostScript printers and 64 or higher for non-PostScript printers). If you are printing at a resolution over 1200 dpi or using a large fountain fill, you may want to use more than two hundred steps to maintain a smooth fill.

To control the printing of fountain fills

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Type the number of steps in the Fountain Steps box.



- If you've specified a different number of steps in the Fountain Fill dialog box, it overrides any values you set in the Preferences and Print dialog boxes. For more information about printing fountain fills, see "Printing" on page 523.

Adjusting a fountain fill's quality

When you create a fountain fill, the space required to blend the colors is divided by the number of fountain steps displayed in the Steps box. By default, CorelDRAW displays each object with the same number of fountain steps, making small objects seem more detailed than larger ones. By unlocking the Steps option, you can override all other settings. You can then increase the number of steps used in larger objects, making them appear the same as fills displayed in smaller objects. The number of steps specified in the Fountain Fill dialog box overrides those in the Preferences and Print dialog boxes.

To adjust the quality of a fountain fill using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Click the Padlock icon that appears to the right of the Steps box to unlock the Steps box.

When the Steps box is locked, the fill prints with the number of steps specified in the Print dialog box and displays on screen with the number of steps specified in the Preferences dialog box.

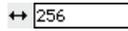
4. Type a value in the Steps box to change the number of steps used to display and print the fountain fill.

To adjust the quality of a fountain fill using the Property Bar



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Fountain Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the *Fountain Step Lock/Unlock button* on the Property Bar to unlock the Steps box. (The Steps box is unlocked when the button appears pressed.)

When the Steps box is locked, the fill prints with the number of steps specified in the Print dialog box and displays on screen with the number of steps specified in the Preferences dialog box.



5. Type a value in the *Fountain Step box* to change the number of steps used to display and print the fountain fill.

Changing colors in a two-color fountain fill

Once you have created a two-color fountain fill, you may want to change its appearance without altering its pattern. You can change its appearance by changing the colors used to create the fountain fill. When using the Fountain Fill dialog box you can see how your fill appears in the Preview window.

To change the colors of a two-color fountain fill



1. Select a two-color fountain fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Click the From *color picker*, then choose a color to start the fountain fill's color progression.

Click the Other button to create or choose a custom color.

4. Click the To color picker, then choose a color to end the fountain fill's color progression.

Click the Other button to create or choose a custom color.

To change the colors of a two-color fountain fill using the Interactive Fill tool



1. Select a two-color fountain fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Do one of the following to change the color used for the start of the fountain fill's color progression:



- Drag a color from the on-screen Color Palette to the *start fill handle* that appears at the beginning of the fountain fill.
- Click the First Fill picker on the Property Bar, then choose a color from the palette.

4. Do one of the following to change the color used for the end of the fountain fill's color progression:

- Drag a color from the on-screen Color Palette to the end fill handle box that appears at the end of the fountain fill.
- Click the Last Fill picker on the Property Bar, then choose a color from the palette.

To mix colors in a two-color Fountain Fill using the mouse

1. Select a two-color fountain fill object with the Interactive Fill tool.
2. Hold down Command, and choose a color from the on-screen Color Palette. Release the mouse button before you release Command.

To apply a mix to a single color swatch, click the Interactive Fill tool, hold down Command and drag a color from the on-screen Color Palette to a color swatch. As the cursor moves over the object, it changes shape to indicate that the color will be mixed by 10%.

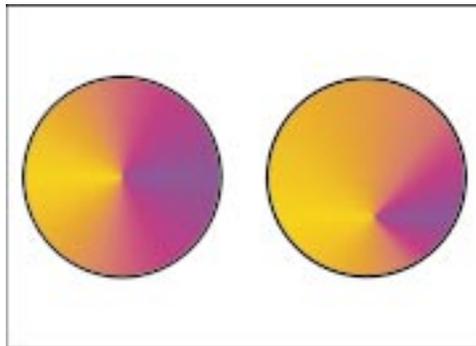


- To change the color of custom fountain fills, see “Creating and applying custom fountain fills” on page 175.

Changing a fountain fill’s center point

Most fountain fills radiate from a point that appears in the center of the fill. Radial and square fountain fills progress in a series of concentric circles or squares, from the center of the object outward. Conical fountain fills progress in a circular path, from the center of the object outward. Linear fountain fills, however, do not have a center point.

Adjusting the center-point alters the appearance of radial, square and conical fills.



Repositioning the center point so that it doesn’t appear at the center of the object allows you to alter the appearance of the fountain fill. Negative values shift the center to the left, positive values shift the center to the right.



To change the center point using the Fountain Fill dialog box

1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Choose the type of fountain fill you want from the Type pop-up menu.
You can choose a radial, conical, or square fountain fill.
4. Type a value in the Horizontal box until the center of the fill is where you want it.
A value of -50% places the center on the left edge of your object; a value of 50% places it on the right edge.
5. Type a value in the Vertical box until the center of the fill is where you want it.
A value of -50% places the center on the bottom edge of your object; a value of 50% places it on the top edge.



- You can also drag the mouse in the Preview window to change the center point.

To change the center point using the mouse

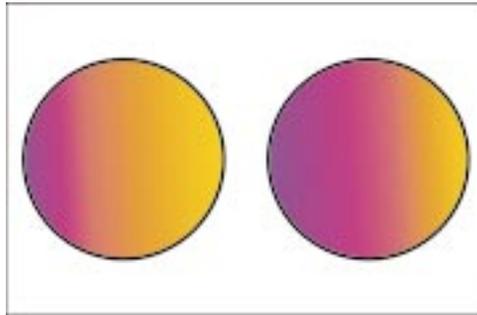


1. Select a fountain fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Drag the start point of the *vector* inside the object to change the center of the fill.
To constrain the angle of the arrow to 15-degree intervals, hold down Command while dragging.

Changing a fountain fill's mid-point

The mid-point is an imaginary line between two colors in a fountain fill. The value of the mid-point represents the position of the mid-point in relation to two fountain fill colors. By adjusting this value, you can set the point at which two colors in a fountain fill converge. For example, in a two-color fountain fill using the colors black and white, a value of 50 positions the mid-point in the center of the fill so that half of the fill is black and half is white. Increasing the mid-point value to 99 results in a fountain fill dominated by black; decreasing the mid-point value to 1 results in a fountain fill dominated by white.

Adjusting the mid-point of a fountain fill adjusts the point at which two colors in a fountain fill converge.



To change the mid-point using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Move the Mid-point slider to change the start and end color proportions.

To change the mid-point using the Property Bar



1. Select a fountain fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Move the *Fountain Fill MidPoint slider* that appears on the Property Bar.



- You can also adjust the mid-point by typing a specific value in the Fountain Fill MidPoint box on the Property Bar. You can specify a value from 1 to 99.

To change the mid-point using the mouse

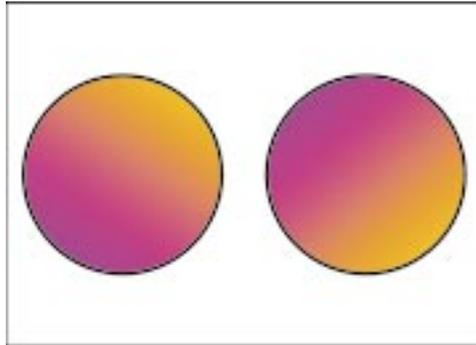


1. Follow steps 1 and 2 from the previous procedure.
2. Drag the *mid-point slider* that appears inside the object.

Changing a fountain fill's angle

You can change the angle of linear, conical, and square fountain fills. Changing the angle of gradation affects the slant of the fountain fill. Positive values rotate the fill counterclockwise; negative values rotate it clockwise. Radial fountain fills, however, progress in a series of concentric circles, so you can't change their angle.

Adjusting the angle of gradation affects the slant of linear, conical, and square fountain fills.



To change the angle using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Type a value in the Angle box until the fill is oriented the way you want it.

To change the angle using the Property Bar



1. Select a fountain fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Type a value in the top portion of the *Fountain Fill Angle And Edge Pad box* on the Property Bar, then press Return.

To change the angle using the mouse

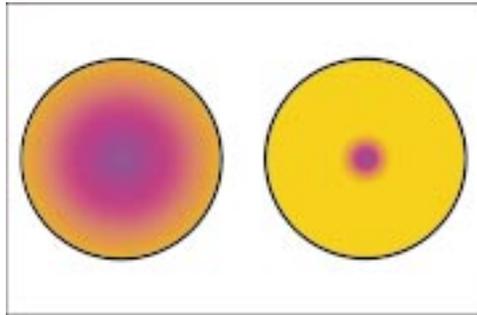


1. Follow steps 1 and 2 from the previous procedure.
2. Drag one of the end point handles of the *vector* inside the object in a circular direction.

Changing a fountain fill's edge pad

The edge pad value determines how long the beginning and ending colors remain as solid colors before they start blending with the next color in the fountain fill. Higher values allow the colors to remain solid longer before blending, causing the colors to spread more quickly. Lower values result in a smooth transformation between the two colors. The maximum setting is 49%. The edge pad option is not available for conical fills.

Adjusting the edge pad value determines how long the beginning and ending colors remain as solid colors before they start blending with the next color in linear, radial, and square fountain fills.



To change the edge pad using the Fountain Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.
3. Type a value in the Edge Pad box to set the amount of the fill taken up by the progression's beginning and ending colors.

To change the edge pad using the Property Bar



1. Select a fountain fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Type a value in the bottom portion of the *Fountain Fill Angle And Edge Pad box* on the Property Bar, then press Return.

To change the edge pad using the mouse

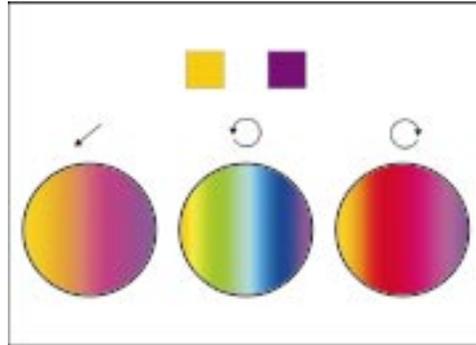


1. Follow steps 1 and 2 from the previous procedure.
2. Drag one of the end point handles of the *vector* inside the object in an inward or outward direction.

Changing a fountain fill's direction

Using the direction buttons (located to the left of the Color Wheel in the Fountain Fill dialog box), you can change the direction of a fountain fill. By default, fountain fill colors progress along a straight line, through the Color Wheel. This relationship is illustrated in the Color Wheel, which shows a straight line blending the beginning color with the ending color as it passes through the color spectrum.

Adjusting the direction of a fountain fill lets you blend colors directly through the color wheel, or in a clockwise or counterclockwise direction.



You can also blend the colors in a clockwise or counterclockwise direction. This allows you to include the spectrum of colors between those colors in your blend. The Counterclockwise Rotation button allows you to blend from one color to the other in a counterclockwise direction. This is illustrated in the Color Wheel by an elliptical line, showing the path the blend uses to travel around the color spectrum. The Clockwise Rotation button allows you to blend from one color to the other in a clockwise direction.

To change the blend direction in a two-color fountain fill



1. Select the object with the *Pick tool*.



2. Open the Fill Tool flyout, and click *Fountain Fill Dialog*.



3. Click one of the following buttons:

- *Direct* — determines the intermediate fill colors according to hue and saturation changes along a straight line, beginning at the From color and continuing across the Color Wheel to the To color



- *Clockwise Color Path* — to have colors blend along a clockwise path around the Color Wheel



- *Counterclockwise Color Path* — to have colors blend along a counterclockwise path around the Color Wheel

Working with pattern fills

Pattern fills are pregenerated, symmetrical images that are repeated over and over, making them extremely useful for creating tiles. You can fill an object completely with one image, but typically you would use a series of repeated images to form a tiled fill. You can import bitmaps or vector graphics for use as pattern fills or create simple two-color bitmap patterns.

The effect you create is similar to the one you create by applying wallpaper to a wall. There are three types of pattern fills: two-color, full-color, and bitmap. CorelDRAW also lets you mix colors of a two-color pattern fill using the Interactive Fill tool in conjunction with the on-screen Color Palette.

Working with two-color pattern fills

A two-color bitmap is a simple picture composed of only “on” and “off” pixels. The only colors included in the bitmap are the two that you assign.

Choose from a variety of two-color pattern fills included with CorelDRAW.



You can choose a two-color bitmap from a variety of existing patterns that are included with CorelDRAW, create a bitmap pattern using the Bitmap Pattern Editor, or import your own 1-bit bitmap. The pregenerated patterns are designed so that they interlock to fill an object with seamless tiles.

If you want to import a multicolored pattern, see “Working with bitmap pattern fills” on page 192.

Applying a two-color pattern fill

You can fill objects with a pattern composed of repeating bitmap images. CorelDRAW supplies a collection of black-and-white bitmap patterns that you can use as is or change to suit your needs. You can change the colors used, the size of the tiles, and the offset of the tiles. The Interactive Fill tool allows you to apply two-color bitmap pattern fills using the mouse. The Property Bar allows you to change the colors used for the pattern’s foreground and background, change the size of the pattern’s tile, and access the Pattern Fill dialog box, which contains more precise controls.

To apply a two-color pattern fill using the Pattern Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the 2-color button.
4. Click the *Pattern picker*, then choose the pattern you want from the pop-up menu.
5. Click the Front *color picker*, then choose a color for the bitmap pattern’s foreground.

Click the Other button in the color list to create or choose a custom color.

6. Click the Back color picker, then choose a color for the bitmap pattern's background.

Click the Other button in the color list to create or choose a custom color.

To apply a two-color pattern fill with the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the *Two-color Bitmap Pattern Fill button*.
5. Click the First Fill picker, and choose the pattern you want from the pop-up menu.



6. Click the Front Color picker, then choose a color for the bitmap pattern's background.

Click the Other button in the color list to create or choose a custom color.

7. Click the Back Color picker, then choose a color for the bitmap pattern's foreground.

Click the Other button in the color list to create or choose a custom color.

To mix colors in a two-color pattern fill using the mouse

1. Select the two-color pattern fill object with the Interactive Fill tool.



2. Hold down Command, and choose a color from the on-screen *Color Palette*. Release the mouse button before you release Command.

Creating two-color pattern fills

If you don't find a preset bitmap fill that you like, you can create your own pattern from scratch or modify an imported bitmap. New and imported patterns are added to the end of the list of preset patterns.

To create a new two-color pattern fill



1. Select the object with the *Pick tool*.



2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Click the Create button.
4. Enable one of the following Bitmap Size buttons in the Two-Color Pattern Editor to set the resolution of the pattern:

- 16 x 16 — changes the resolution of the Edit Grid to 16 x 16 squares
 - 32 x 32 — changes the resolution of the Edit Grid to 32 x 32 squares
 - 64 x 64 — changes the resolution of the Edit Grid to 64 x 64 squares
5. Enable one of the following Pen Size buttons to determine how many squares in the drawing area are filled when you click with the mouse:
 - 1 x 1 — changes the pen size to a 1 grid square
 - 2 x 2 — changes the pen size to a 2 x 2 square
 - 4 x 4 — changes the pen size to a 4 x 4 square
 - 8 x 8 — changes the pen size to an 8 x 8 square
 6. Do one or both of the following to create a pattern:
 - Click over the grid to fill squares.
 - Hold down Control and click over the grid to erase squares.

To create a two-color pattern fill from an imported image

1. Follow steps 1 and 2 from the previous procedure.
2. Click the Load button.
3. Locate the folder where the file is stored.
4. Click the filename, and click Open.



- For best results, import graphics with only two colors.
-

Creating two-color pattern fills using the Create Pattern command

You can create pattern fills based on imported bitmap graphics. A pattern created from a color bitmap is converted to a dithered black-and-white image. This means that if the bitmap contains a lot of detail, much of it will be lost in the conversion. Once converted, the graphic is tiled so that it forms a pattern inside any path to which it is applied.

To create a two-color pattern using the Create Pattern command

1. Choose Tools, Create, Pattern.
2. Enable the Two Color button.
3. Specify a resolution by enabling one of the following buttons:
 - Low — creates a low-resolution, two-color pattern

- Medium — creates a medium-resolution, two-color pattern
- High — creates a high-resolution, two-color pattern

4. Click OK.

The cursor changes to cross hairs.

5. Drag a marquee box around the graphic or portion of the graphic that you want to make into a pattern.

The new pattern appears at the bottom of the Pattern picker list available from the Property Bar and Pattern Fill dialog box.

To create a two-color pattern using the Property Bar



1. Using the *Pick tool*, select an object that contains a two-color pattern fill.



2. Click the *Interactive Fill tool*.

3. Click the Select Pattern button on the Property Bar.

4. Follow steps 2 to 5 from the previous procedure.

Removing a two-color bitmap pattern fill

You may want to remove a pattern fill to conserve disk space or to shorten your list of two-color bitmap pattern fills.

To remove a two-color bitmap pattern fill



1. Select any object with the *Pick tool*.



2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.



3. Click the *Pattern picker*.

4. Choose the pattern you want to delete from the pop-up menu.

5. Click the Delete button.

Working with full-color pattern fills

A full-color pattern is a picture composed of lines and fills, instead of dots of color like a bitmap. These vector graphics are smoother and more complex than bitmap images and are generally easier to manipulate.

Choose from a variety of full-color pattern fills included with CorelDRAW.



You can choose a full-color pattern from a variety of pregenerated patterns that are included with CorelDRAW, or import any CorelDRAW file to use as a full-color pattern. Unlike two-color and bitmap patterns, there is no limit to the number of colors that can be included in a full-color pattern.

Applying a full-color pattern fill

You can fill objects with a pattern composed of repeating vector images. CorelDRAW supplies an extensive selection of full-color pattern fills that you can use as is, or change to suit your needs. The Interactive Fill tool allows you to apply full-color pattern fill using the mouse. The Property Bar allows you to change the pattern displayed in the fill, change the size of the pattern's tiles, and access the Pattern Fill dialog box, which contains more precise controls.

To apply a full-color pattern fill using the Pattern Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the Full Color button.
4. Click the *Pattern picker* and choose the pattern you want from the pop-up menu.

To apply a full-color pattern fill with the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the *Full-color Pattern Fill button*.
5. Click the First Fill picker and choose the pattern you want from the pop-up menu.

Creating full-color pattern fills

If you don't find a preset full-color pattern fill that you like, you can import a graphic. Imported patterns are added to the end of the list of preset patterns. You can also create full-color pattern fills based on full color objects. The graphic is then tiled to form a pattern inside any path to which it is applied.

To create full-color pattern fills from imported images



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the Full Color button.
4. Click the Load button.
5. Locate the folder where the file is stored.
6. Click the filename, and click Open.

To create a full-color pattern using the Create Pattern command

1. Choose Tools, Create, Pattern.
2. Enable the Full Color button.
3. Click OK.
The cursor changes to cross hairs.
4. Drag a marquee box around the graphic or portion of the graphic that you want to make into a pattern.
5. Click OK.
6. Type a name for the pattern, and click the Save button.

The new pattern appears at the bottom of the Pattern picker pop-up menu.

To create a full-color pattern using the Property Bar



1. Using the Pick tool, select an object that contains a full-color pattern fill.
2. Click the *Interactive Fill tool*.
3. Click the Select Pattern button on the Property Bar.
4. Follow steps 2 to 6 from the previous procedure.

Removing a full-color pattern fill

You may want to remove a pattern fill from the list to conserve disk space or to shorten your list of full-color pattern fills.

To remove a full-color pattern



1. Select any object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the Full Color button.
4. Click the *Pattern picker*, then choose the pattern you want to delete from the pop-up menu.
5. Click the Delete button.

Working with bitmap pattern fills

A bitmap is a regular color picture (like you might get with an electronic photograph). Bitmaps can vary in complexity, and it is best to use less complex bitmaps for fill patterns, as complex ones are memory-intensive and slow to display. The complexity of a bitmap is determined by its size, resolution, and bit depth. For more information about using bitmaps in CorelDRAW, see “Working with bitmaps” on page 445.

You can choose a bitmap from a variety of pregenerated patterns that are included with CorelDRAW, create your own bitmap pattern using the Bitmap Pattern Editor, or import an existing bitmap.

.....
Choose from a
variety of bitmap
pattern fills included
with CorelDRAW.
.....



If you want to import a simple two-color or black-and-white bitmap, see “Working with two-color pattern fills” on page 186.

Applying a bitmap pattern fill

You can fill objects with a pattern composed of repeating bitmap images. CorelDRAW supplies an extensive selection of bitmap pattern fills that you can use as is or change to suit your needs. You can change the colors, the size of the tiles, and the offset of the tiles. The Interactive Fill tool allows you to apply bitmap pattern fills using the mouse. The Property Bar allows you to change the pattern displayed in the fill, change the size of the pattern’s tiles, and access the Pattern Fill dialog box, which contains more precise controls.



To apply a bitmap pattern fill using the Pattern Fill dialog box

1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the Bitmap button.
4. Click the *Pattern picker* and choose the pattern you want from the pop-up menu.



To apply a bitmap pattern fill with the Interactive Fill tool

1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Click the *Bitmap Pattern Fill button*.
5. Click the First Fill picker and choose the pattern you want from the pop-up menu.

Creating bitmap pattern fills

If you don't find a preset bitmap pattern fill that you like, you can import a graphic. Imported patterns are added to the end of the list of preset patterns.



To create full-color pattern fills from imported images

1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable the Bitmap button.
4. Click the Load button.
5. Locate the folder where the file is stored.
6. Click the filename, and click Open.

Removing a bitmap pattern fill

You may want to remove a pattern fill from the list to conserve disk space or to shorten your list of bitmap pattern fills.



To remove a bitmap pattern

1. Select any object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.



3. Enable the Bitmap button.
4. Click the *Pattern picker*, then choose the pattern you want to delete from the pop-up menu.
5. Click the Delete button.

Customizing pattern fills

Customizing your pattern fill lets you adjust the tile size, rotate, skew, and change the center of the pattern. You can adjust two-color, full-color, and bitmap pattern fills interactively by using the pattern fill tiling vector.

Changing a pattern fill's tile size

You can change the dimensions of the pattern tile used to fill an object. By decreasing the size of a pattern tile, you increase the pattern's density. The pattern fill displayed can be resized manually, using the tiling handles, or precisely using the Pattern Fill dialog box.

To set the size of bitmap pattern tiles using the Pattern Fill dialog box



1. Select the pattern fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap

4. In the Size section, type a value in the Width and Height box.

The maximum tile width and height is 15 inches. The minimum tile width is 0.1 inches.

To set the size of bitmap pattern tiles using the Property Bar



1. Select the pattern fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Type a Width value in the top portion of the *Edit Tiling Of Pattern box* on the Property Bar, then press Return.

The maximum tile width is 15 inches. The minimum tile width is 0.1 inches.

5. Type a Height value in the bottom portion of the Edit Tiling of Pattern box on the Property Bar, then press Return.

The maximum tile height is 15 inches. The minimum tile height is 0.1 inches.

To set the size of bitmap pattern tiles using the Interactive Fill tool

1. Select the pattern fill with the Pick tool.
2. Click the Interactive Fill tool.
3. Drag the square handles of the *tiling vector* to size the pattern.



- To change the size of the tiles quickly, enable the Small Tile for Pattern (25% of width and height or 4x4), Medium Tile for Pattern (50% of width and height or 2x2), or Large Tile for Pattern (100% of width and height or 1 tile) buttons on the Property Bar.

Setting the tile origin of a pattern fill

By setting the tile origin in a pattern fill, you can specify exactly where the patterns begin. When you adjust the horizontal or vertical position of the first pattern relative to the top of the object, your adjustments affect the rest of the pattern. The Preview window in the Pattern Fill dialog reflects the changes of any offset.

To set the tile origin of a pattern using the Pattern Fill dialog box



1. Select the object with a pattern fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
4. In the Origin section, type a value in the X box to set the amount of horizontal offset.

Increasing the value in the X box enlarges the tile size horizontally; decreasing the value reduces the tile size horizontally.

5. In the Origin section, type a value in the Y box to set the amount of vertical offset.

Increasing the value in the Y box enlarges the tile size vertically; decreasing the value reduces the tile size vertically.

To set the tile origin of a pattern using the Interactive Fill tool

1. Select the object with a pattern fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Drag the center handle of the *tiling vector* that appears on the object to the location that you want to set as the origin.



Rotating a pattern fill

You may want to skew or rotate a pattern fill to create a unique effect. CorelDRAW allows you to skew and rotate a pattern fill easily using the Interactive Fill tool or by adjusting the settings in the Pattern Fill dialog box.

To rotate a pattern fill using the Pattern Fill dialog box

1. Select the object with a pattern fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
4. In the Transform section, type an angle value in the Rotate box.



To rotate a pattern fill using the Interactive Fill tool

1. Select the pattern fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Drag the circular rotate handle on the *tiling vector* and rotate the pattern in a clockwise or counterclockwise direction.



Skewing a pattern fill

You may want to skew a pattern fill to create a unique effect. CorelDRAW allows you to skew a pattern fill easily using the Interactive Fill tool or by adjusting the settings in the Pattern Fill dialog box.



To skew a pattern fill using the Pattern Fill dialog box

1. Select the pattern fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
4. In the Transform section, type an angle value in the Skew box.

To skew a pattern fill using the Interactive Fill tool



1. Select the pattern fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Drag one of the square skew handles on the *tiling vector* to skew the pattern.

Setting the Transform Fill with objects option for pattern fills

You may want to transform the pattern fill when you transform your object. The Transform Fill With Object option enables the pattern to rotate, scale, and skew while transforming an object.

To set the transform option using the Pattern Fill dialog box



1. Select the pattern fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
4. Enable the Transform Fill With Object check box.

To set the transform option using the Property Bar



1. Select the pattern fill with the Pick tool.
2. Click the *Interactive Fill tool*.

3. Choose Pattern Fill from the Fill Type pop-up menu on the Property Bar.
4. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
5. Click the Transform Fill With Object button on the Property Bar.
The button is enabled when it appears pressed.

Offsetting tiles in a pattern fill

By offsetting the tiles in a pattern fill, you can specify exactly where the patterns begin. When you adjust the horizontal or vertical position of the first pattern relative to the top of the object, your adjustment affects the rest of the pattern. The Preview window reflects the changes of any offset.

To offset rows or columns of pattern tiles using the Pattern Fill dialog box

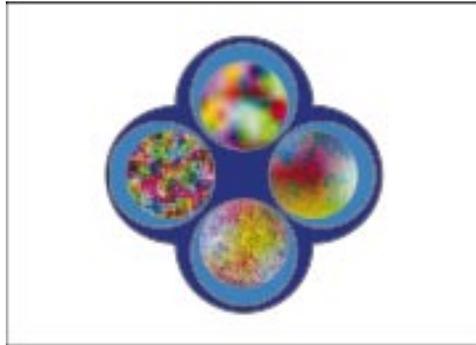


1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Pattern Fill Dialog*.
3. Enable one of the following buttons:
 - Two-color
 - Full-color
 - Bitmap
4. In the Row or column offset section, enable one of the following:
 - Row button — to offset rows
 - Column button — to offset columns
5. Type the amount of offset in the % Of Tile Size box.

Working with texture fills

A texture fill is a random, fractally generated fill that you can use to give your objects a natural appearance. Texture fills significantly increase the size of your file and the time it takes to print. Therefore, you may want to use these fills sparingly, especially with larger objects.

Choose from a variety of texture fills included with CorelDRAW.



You can use colors from any color model or palette for texture fills, however, all colors are converted to RGB. Since texture fills can only hold RGB colors, however, this may cause a color shift when displaying or printing the files.

Applying a texture fill

Texture fills are fills that look like clouds, water, gravel, minerals, and dozens of other natural and fabricated substances. CorelDRAW provides more than 300 pregenerated textures, and each texture has a set of options that you can change to create millions of variations. The Interactive Fill tool allows you to apply Texture fills using the mouse. The Property Bar allows you to change the pattern displayed in the fill, regenerate the texture, and access the Texture Fill dialog box which contains more precise controls.

To apply a texture fill using the Texture Fill dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Choose the library containing the texture you want from the Texture Library pop-up menu.
4. Choose a texture you want from the Texture list.

The Preview window inside the dialog box displays the fill attributes that are assigned to the selected object.

5. Adjust the style options to customize the texture as required.
Click the Preview button to see the results of your modifications.
6. Click the Options button to adjust the bitmap resolution and texture size.

To apply a texture fill with the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.

3. Choose Texture Fill from the Fill Type pop-up menu on the Property Bar.
4. Choose the library containing the texture you want from the Texture Library pop-up menu.
5. Choose the *First Fill picker*, and choose the texture you want from the pop-up menu.
6. Click the Texture Options button on the Property Bar, to adjust the bitmap resolution and texture size limit.
7. Click the Regenerate Texture button on the Property Bar, to regenerate the texture fill, creating a totally new look.



Creating custom texture fills

When you create a unique custom texture fill, you may want to save it so that you can use it again. You can't save or overwrite textures in the Styles library. You can, however, modify a texture in the Styles library and save it to another library.

To create a custom texture fill



1. Select the shape or texture with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Make sure the texture you want to save is displayed in the *Pattern picker* of the Texture Fill dialog box.
4. Modify the texture settings in the Texture Name section. Use the Preview button to view your changes before saving a custom texture fill.

To save a customized texture

1. Select the shape or texture with the Pick tool.
2. Open the Fill Tool flyout, and click Texture Fill Dialog.
3. Make sure the texture you want to save is displayed in the Pattern picker of the Texture Fill dialog box.
4. Click the *Add button*.
5. Type a name in the Texture Name box of the Save Texture As dialog box.
The name can be up to 32 characters long, including spaces. You can overwrite an existing texture by typing its name.
6. Do one of the following:



- Choose a sample library in which you want to save the texture in the Library Name list.
- Type the name of a new library in the Library Name box.

To delete a customized texture

1. Select the shape or texture with the Pick tool.
2. Open the Fill Tool flyout, and click Texture Fill Dialog.
3. Make sure the texture you want to delete is displayed in the Pattern picker of the Texture Fill dialog box.
4. Click the *Delete button*.



Customizing texture fills

Customizing your texture fill lets you adjust the tile size and rotate, skew, and change the center of the texture. You can adjust texture fills interactively using the texture fill tiling vector.

Changing a texture fill's tile size

You can change the dimensions of the texture tile used to fill an object. By decreasing the size of a texture tile, you increase the texture's density. The texture fill displayed can be resized manually using the tiling handles, or precisely using the Texture Fill dialog box.

To set the size of texture tiles using the Texture Fill dialog box



1. Select the texture fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Click the Tiling button.
4. In the Size section, type a value in the Width and Height box.

The maximum tile width and height is 15 inches. The minimum tile width is 0.1 inches.

To set the size of texture tiles using the Interactive Fill tool



1. Select the texture fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Drag the square *tiling vector* to size the pattern.

Setting the origin of a texture fill

By setting the origin in a texture fill, you can specify exactly where the textures begin. When you adjust the horizontal or vertical position of the first texture relative to the top of the object, your adjustments affect the rest of the texture. The Preview window in the Texture Fill dialog reflects the changes of any offset.

To set the origin of a texture using the Texture Fill dialog box



1. Select the texture fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Click the Tiling button.
4. In the Origin section, type a value in the X box to set the amount of horizontal offset.

Increasing the value in the X box enlarges the tile size horizontally; decreasing the value reduces the tile size horizontally.

5. In the Origin section, type a value in the Y box to set the amount of vertical offset.

Increasing the value in the Y box enlarges the tile size vertically; decreasing the value reduces the tile size vertically.

To set the origin of a texture using the Interactive Fill tool



1. Select the texture fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Texture Fill from the Fill Type pop-up menu on the Property Bar.
4. Drag the center handle of the *tiling vector* that appears on the object to the location that you want to set as the origin.

Rotating a texture fill

You may want to rotate a texture fill to create a unique effect. CorelDRAW allows you to rotate a texture fill easily using the Interactive Fill tool or by adjusting the settings in the Texture Fill dialog box.

To rotate a texture fill using the Texture Fill dialog box



1. Select the texture fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.

3. Click the Tiling button.
4. In the Transform section, type an angle value in the Rotate box.

To rotate a texture fill using the Interactive Fill tool



1. Select the texture fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Texture Fill from the Fill Type pop-up menu on the Property Bar.
4. Drag the circular rotate handle on the *tiling vector* and rotate the texture in a clockwise or counterclockwise direction.

Skewing a texture fill

You may want to skew a texture fill to create a unique effect. CorelDRAW allows you to skew a texture fill easily using the Interactive Fill tool or by adjusting the settings in the Texture Fill dialog box.

To skew a texture fill using the Texture Fill dialog box



1. Select the texture fill with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Click the Tiling button.
4. In the Transform section, type an angle value in the Skew box.

To skew a texture fill using the Interactive Fill tool



1. Select the texture fill with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose Texture Fill from the Fill Type pop-up menu on the Property Bar.
4. Drag one of the square skew handles on the *tiling vector* to skew the texture.

Setting the Transform Fill with object option for texture fills

You may want to transform the texture fill when you transform your object. The Transform Fill With Object option enables the texture to rotate, scale, and skew while transforming an object.

To set the transform fill with object option



1. Select the texture fill with the *Pick tool*.



2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Click the Tiling button.
4. Enable the Transform Fill With Object check box.

Offsetting tiles in a texture fill

By offsetting the tiles in a texture fill, you can specify exactly where the patterns begin. When you adjust the horizontal or vertical position of the texture relative to the top of the object, your adjustment affects the rest of the texture. The Preview window reflects the changes of any offset.

To offset rows or columns of texture tiles



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Texture Fill Dialog*.
3. Click the Tiling button.
4. In the Row or column offset section, enable one of the following:
 - Row button — to offset rows
 - Column button — to offset columns
5. Type the amount of offset in the % Of Tile Size box.

Working with PostScript textures

A PostScript texture is a special type of texture fill designed using PostScript language. CorelDRAW represents PostScript fills on screen with the letters “PS,” rather than the actual texture (unless you are in Enhanced view).

.....
 Choose from a
 variety of Postscript
 texture fills included
 with CorelDRAW.



The PostScript Texture dialog box contains a box where you can preview your texture. Simply choose your texture, adjust your options, and, if the Preview Fill check box is enabled, view the effects in the Preview window.

PostScript textures created in CorelDRAW can be exported in Encapsulated PostScript (EPS) format for use in other programs.

Applying a PostScript texture pattern

PostScript textures are fills that you can change by altering a set of variables. The Interactive Fill tool allows you to apply PostScript texture fills using the mouse. The Property Bar allows you to change the pattern displayed in the fill and access the PostScript Texture dialog box, which contains more precise controls. These patterns don't appear on screen. Instead, you see a pattern containing the letters "PS". To preview the texture with the current settings, enable Enhanced view (click View, Enhanced), or click File, Print Preview.

To apply a PostScript texture fill using the PostScript Texture dialog box



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *PostScript Fill Dialog*.
3. Choose the name of the texture you want from the list.
4. In the Parameters section, adjust the various settings to customize the texture as required.
5. Enable the Preview Fill check box to preview the texture with the current settings.
6. Click the Refresh button to update the image after changing the options.

To apply a PostScript texture fill with the Interactive Fill tool



1. Select the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose PostScript Fill from the Fill Type pop-up menu on the Property Bar.
4. Choose the name of the texture you want from the PostScript Fill Textures pop-up menu.
5. Click the Edit button to access the PostScript Texture dialog box, then adjust the various settings to customize the texture as required.



- The settings listed in the Parameters section of the PostScript Texture dialog box vary depending on the type of PostScript texture fill selected.

Managing fills

In addition to filling objects with a wide variety of colors and patterns, CorelDRAW gives you the ability to leave objects unfilled or transparent. You can also copy fills from one object to another, eliminating the need to recreate complex fills. Once you create a fill that you like, you can make it the default fill so that it is automatically applied to all new objects. You can also remove a fill from an object. CorelDRAW lets you fill open curves automatically with the default fill.

Copying fills

Once you apply a fill to an object, you can copy the same fill to another object. This allows you to use the same fill on several objects, without having to recreate it each time. Copying an object's properties to another object will copy the fill, outline, and text attributes.

To copy another object's fill properties



1. Using the *Pick tool*, select the object to which you want to copy the properties.
2. Choose Edit, Copy Properties From.
3. Enable one or more of the following check boxes in the Copy Properties dialog box:
 - Outline Pen — copies the outline pen attributes from one object to another
 - Outline Color — copies the outline color attributes from one object to another
 - Fill — copies the fill attributes from one object to another
 - Text Properties — copies the text attributes from one text object to another
4. Click OK.
The cursor changes to a large arrow.
5. Click the object that contains the properties you want to copy.

Setting the default uniform fill

Whenever you create a new object, CorelDRAW fills the object with a default fill. Unless you have modified this setting, the default fill setting is no fill. These default settings are not saved automatically when you exit CorelDRAW. To save these setting for future CorelDRAW sessions, see “Using consistent settings for new documents” on page 81.

When you draw open curves, CorelDRAW fills the object with a default fill if one exists. Filling open curves automatically can be disabled to allow you to draw basic curves. For more information, see “Setting the fill open curves option” on page 208.

To change the default fill for new objects using the Fill Color dialog box



1. Click a blank space in the Drawing Window to deselect any objects.
2. Open the Fill Tool flyout, and click *Fill Color Dialog*.
3. Enable one or more of the following check boxes in the Uniform Fill dialog box:
 - Graphic — changes the default fill attributes associated with new graphics
 - Artistic Text — changes the default fill attributes associated with new Artistic text
 - Paragraph Text — changes the default fill attributes associated with new Paragraph text
4. Click OK.
5. Set the appropriate fill attributes in the second Uniform Fill dialog box.

To change the default fill for new objects using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Styles.
3. From the list, choose Default Graphic.
4. Select a fill type from the Fill pop-up menu.
5. Click the Edit button to open the associated dialog box.
6. Choose a new default fill from the dialog box.

To change the default fill for new objects using the mouse



1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose a color from the on-screen *Color Palette*.
3. Enable one or more of the following check boxes in the Uniform Fill dialog box:
 - Graphic — changes the default fill attributes associated with new graphics.

- Artistic Text — changes the default fill attributes associated with new Artistic text
- Paragraph Text — changes the default fill attributes associated with new Paragraph text

These attributes are now applied to any new object you create. You can, however, change the fill of any individual object.



- CorelDRAW allows you to modify any of the fill types. Using the Preferences dialog box, you can adjust the defaults to display your favorite fill.
-

Removing fills

You may want to remove an object's fill so that objects behind it show through. You can remove the default fill several different ways. If you want to reset a default fill, see “Setting the default uniform fill” on page 206.

To remove an object's fill using the Fill Tool flyout



1. Select the object with the *Pick tool*.
2. Open the Fill Tool flyout, and click *No Fill*.

To remove an object's fill using the mouse



1. Select the object with the Pick tool.
2. Choose *No Color* from the on-screen Color Palette.

Setting the fill open curves option

CorelDRAW lets you fill open curves. You may want to draw curves without filling them and maintain the default fill color. The Fill Open Curves option allows you disable the default fill in order to draw basic lines.

To disable the fill open curves setting

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose General.
3. Disable the Fill Open Curves check box.

To enable the fill open curves setting

1. Follow steps 1 and 2 from the previous procedure.
2. Enable the Fill Open Curves check box.

Outlining objects

Every object you create can have an outline that you are able to manipulate in a variety of ways. You can think of each object as being drawn with a nib of adjustable size, shape, and color. These nib attributes can apply to a particular object or to all objects you add to your drawing.

In addition to the size, shape, and color of the nib, you can also change the shape of an outline end. Lines or objects with open paths can have ends that are rounded, square, cropped, or tipped with arrowheads and other line-ending shapes. Objects with closed paths (i.e., squares, polygons) naturally have no end-points, but you can still choose from pointed, rounded, or truncated corners.

You can apply outline attributes using the same techniques in the Object Manager. For more information, see “Using the Object Manager” on page 275.

Working with uniform outlines

Uniform outlines are solid outlines that can be applied to most objects. In addition to specifying the outline’s color, you can change its width and style. As well, you can apply line-ending shapes, such as arrowheads, to the line or curve.

Applying outline colors

Every object you create has outlines that you can manipulate in a variety of ways. You can think of each object as being drawn with a pen that changes size, shape, and color. In addition, you can apply these formats to a particular object or to all objects you add to your drawing. You can apply an outline color quickly using the Color Palette.

Applying an outline using the Outline Color dialog box allows you to exercise more control over the outline color that is applied. Applying an outline using the Outline Pen dialog box allows you to exercise more control over the outline thickness, style, and corner shapes that is applied.

To apply an outline color using the mouse



1. Select the object with the *Pick tool*.
2. Hold down Option and choose a color from the on-screen *Color Palette*.

To apply an outline color by dragging

1. Select the object with the Pick tool.
2. Drag a color from the on-screen Color Palette to the object's edge.
As the cursor moves over the object, it changes shape to show where the color will be applied.

To apply an outline color using the Outline Color dialog box

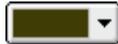


1. Select the object with the Pick tool.
2. Open the Outline Tool flyout, and click *Outline Color Dialog*.
3. Choose a color from the Color Bar that appears along the right of the dialog box and from the visual selector.
4. Click the More button to display the details of the selected color.



- If you want to select a color from a specific color model, see “Working with color” on page 231.

To apply an outline color using the Outline Pen dialog box



1. Select the object with the Pick tool.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Click the Color *picker*, then choose the color from the Color Palette that appears.

Click the Other button to create or choose a custom color.



- This allows you to apply colors to objects without having to choose them first. Holding down Option while you drag over an object applies only the outline attributes to the object.

Adjusting an outline's width

The width of an outline determines the thickness of the line in points. Changing the thickness of an object's outline changes the appearance of the object. You can change an outline's color using a number of different techniques. For more information, see “Applying outline colors” on page 209.

To adjust the width using the Outline Pen dialog box



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Choose a unit of measure from the Units pop-up menu.
4. Type the new line width in the Width box.

To adjust the width using the Property Bar



1. Click the object with the Pick tool.
2. Click the *Interactive Fill tool*.
3. Choose a width from the Outline Width pop-up menu on the Property Bar.



- A number of preset outline widths are also available from the Outline Tool flyout. Options include: Hairline, 1/2 Point, 2 Point (Thin), 8 Point (Medium), 16 Point (Medium-Thick), and 24 Point (Thick).

Setting the corner shape

Setting the corner shape can greatly affect the appearance of lines and curves, especially if the object has a particularly thick line weight or the object is particularly small.

Choose one of the Corner Styles: Bevelled, Rounded, or Mitered corners.



To set an object's corner shape



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable one of the following Corner Style buttons:
 - *Mitered Corners*

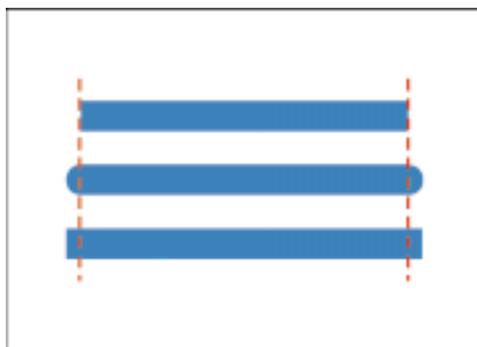


- *Beveled Corners*
- *Rounded Corners*

Setting the line cap shape

The line cap style affects the appearance of the endpoints of open paths. Setting the line cap shape to *Rounded* or *Extended* actually makes the line slightly longer.

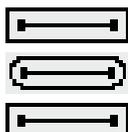
Choose one of the
Line Cap Styles:
Square, Rounded, or
Extended corners.



To set an object's line cap shape



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable one of the following Line Caps Style buttons:



- *Square Line Caps*
- *Rounded Line Caps*
- *Extended Square Line Caps*

Applying line styles

CorelDRAW comes with more than 20 different outline styles. Outline styles are preset lines that have different attributes, such as dotted lines, dashed lines, and more. Applying a line style does not change the shape of the line or the amount of space it occupies. You can also edit an existing line style to meet your needs.

To apply a dashed outline using the Outline Pen dialog box



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Choose a line style from the *Line Style selector*.





- You can also choose a line style from the Outline Style Selector on the Property Bar.
-

Editing line styles

CorelDRAW comes with more than 20 different outline styles. You can edit any of the preset lines included in the Styles list.

To edit a line style using the Outline Pen dialog box



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Click the Edit Style button.
4. In the Edit Line Style dialog box, do any of the following:
 - Click the squares to turn dots on or off.
 - Adjust the line end by moving the bar to the right.
5. Click the Add button to add the line style to the bottom of the list.
6. Click the Replace button to replace a style that was previously added to the list.

Behind Fill

Use the Behind Fill option when you want to apply an outline to a stylized font such as a script font. Normally outlines are applied after the fill is applied. Half of the outline lies inside the object, the other half lies outside the object. When you enable the Behind Fill check box, the outline is drawn first, then the fill is placed on top of the outline. Consequently, half of the outline is covered by the fill.

The Behind Fill option allows you to apply an outline to a stylized font.



To enable the Behind Fill option

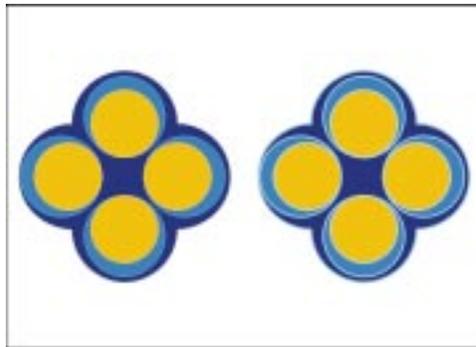


1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable the Behind Fill check box.

Scaling With Image

Scaling the image specifies whether the thickness of the object's outline remains the same or changes in proportion to the object's size. If the Scale With Image option is enabled, the outline thickness increases when the object is enlarged (either by scaling or stretching) and decreases when the object is made smaller.

Scaling an image determines whether the outline thickness remains the same or scales with the image.



To enable the Scale With Image option

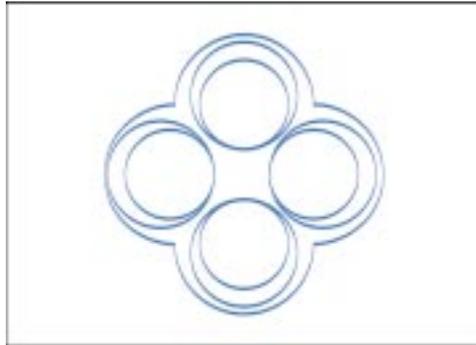


1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable the Scale With Image check box.

Creating calligraphic outlines

You can give an object a hand-drawn look using the Calligraphy settings in the Outline Pen dialog box. By adjusting these settings, you can vary the thickness of an object's outline.

.....
Calligraphy settings
let you give an object
a hand-drawn
appearance by
varying the thickness
of its outline.
.....



To create a calligraphic outline



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable one of the Corner Style buttons.

The first and third options make the nib square; the second option makes it round.

4. Type a value in the Stretch box.

Lowering the value makes a square nib rectangular and a round nib oval, creating a more pronounced calligraphic effect.

5. Type a value in the Angle box.

The angle controls the orientation of the pen in relation to the drawing surface.



- You can adjust the Stretch and Angle values interactively by dragging in the Nib Shape box. Experiment to find the shape you want.
- To change line widths after creating the calligraphic outline, change the value in the Width box.
- Click the Default button to return to the original settings.

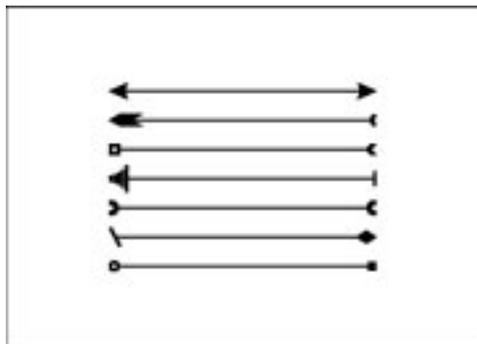
Applying and editing line-ending shapes

You can create arrowheads from scratch or modify a shape using the Edit Arrowhead dialog box. New line-ending shapes are added to the bottom of the list of line styles.

Applying line-ending shapes

CorelDRAW provides an assortment of arrowheads and other line-ending shapes that you can apply to the ends of an open path.

Choose from a variety of line-ending shapes included with CorelDRAW.



To apply line-ending shapes using the Outline Pen dialog box



1. Select a line or curve with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Click the left Arrowhead selector, then choose the shape you want for the start of the line.
4. Click the right Arrowhead selector, then choose the shape you want for the end of the line.

To apply line-ending shapes using the Property Bar



1. Select a line or curve with the Pick tool.
2. Click the Start *Arrowhead selector* on the Property Bar, then choose the shape you want for the start of the line.
3. Click the End Arrowhead selector on the Property Bar, then choose the shape you want for the end of the line.



- Use the Outline Style selector to select another outline style.

Switching line-ending shapes

If you change the direction of a line or curve, you can switch arrowheads from one end of the line to the other. You can also remove the arrowheads from the end of a line or curve.

To switch arrowheads from one end of the line to another



1. Select a line or curve with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Click one of the *Arrowhead selectors*, then choose the shape you want for the line.
4. Choose Options, Swap.

To remove an arrowhead

1. Follow steps 1 to 3 from the previous procedure.
2. Choose Options, None.

Creating line-ending shapes

If you don't find a preset arrowhead that you like, you can create your own. New arrows appear at the bottom of the arrowhead list in the Outline Pen dialog box and the Property Bar.

The arrow you create can be any size — you can adjust the size later using the Edit Arrowhead dialog box. There are two limitations, however. First, the number of arrowheads is limited to 100. If you already have this many and want to create new ones, you must delete some of the existing ones. Second, if the arrowhead consists of more than one object, all objects must be combined using the Combine command.

To create arrowheads and other line-ending shapes using the Create Arrow command

1. Draw an arrowhead.

The arrowhead shape assumes the fill and outline attributes of the line to which it is applied.



2. Click the arrowhead shape with the *Pick tool*.
3. Choose Tools, Create, Arrow.

The new arrowhead appears at the bottom of the Arrowhead selector.

To create arrowheads using the Outline Pen dialog box



1. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
2. Under the arrowhead you want to edit, choose Options, New.

This opens the default arrowhead in the Edit Arrowhead dialog box.

3. Drag the side handles along the arrowhead's box to stretch vertically or horizontally, or drag the corner handles to change the size of the arrowhead.
4. Drag the hollow nodes along the arrowhead's outline.



- To get a closer view of the arrowhead, enable the 4X Zoom check box.
-

Editing line-ending shapes

When you apply an arrowhead to a path, its size is determined by the thickness of the path's outline. If you increase the thickness, the arrowhead size increases proportionately. To create a larger arrowhead without changing the outline of the path, use the Edit Arrowhead dialog box to stretch the arrowhead. You can also use this dialog box to adjust the arrowhead's position relative to the end of the path, to center the arrowhead, or to flip it horizontally or vertically.

To stretch an arrowhead or line-ending shape



1. Select a line or curve with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Under the arrowhead you want to edit, choose Options, Edit.

This opens the Edit Arrowhead dialog box.

4. Drag the side handles along the arrowhead's box to stretch vertically or horizontally, or drag the corner handles to change the size of the arrowhead.

To move an arrowhead or line-ending shape

1. Follow steps 1 to 3 from the previous procedure.
2. Drag the hollow nodes along the arrowhead's outline.

To center an arrowhead or line-ending shape

1. Follow steps 1 to 3 from the "To stretch an arrowhead or line-ending shape" procedure.
2. Do one of the following:

- Click the Center In X button to center the arrowhead vertically on the line. The letter “X” refers to the horizontal axis.
- Click the Center In Y button to center the arrowhead horizontally on the line. The letter “Y” refers to the vertical axis.

To flip an arrowhead

1. Follow steps 1 to 3 from the “To stretch an arrowhead or line-ending shape” procedure.
2. Do one of the following:
 - Click the Reflect In X button to flip the arrowhead vertically on the line. The letter “X” refers to the horizontal axis.
 - Click the Reflect In Y button to flip the arrowhead horizontally on the line. The letter “Y” refers to the vertical axis.



- To get a closer view of the arrowhead, enable the 4X Zoom check box.

Deleting line-ending shapes

If you don’t like the arrowhead that you created, you can delete it.

To delete arrowheads



1. Select a line or curve with the *Pick tool*.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Choose the arrowhead that you want to delete.
4. Under the arrowhead you want to edit, choose Options, Delete.

Managing outlines

CorelDRAW lets you copy outlines from one object to another or create your own custom-defined outlines. Once you have created an outline that you like, you can make it the default style so that it is automatically applied to new objects. You can also change the default settings for the outline, remove the outline, and adjust the miter limit for line ends.

Copying outlines

Once you apply an outline to an object, you can copy the same outline to another object. This allows you to reuse the same outline on several objects, without having to recreate it each time.



To copy another object's outline properties

1. Using the *Pick tool*, select the object to which you want to copy the outline attributes.
2. Choose Edit, Copy Properties From.
3. Enable one or more of the following check boxes in the Copy Properties dialog box:
 - Outline Pen — copies the outline pen attributes from one object to another
 - Outline Color — copies the outline color attributes from one object to another
 - Fill — copies the fill attributes from one object to another
 - Text Properties — copies the text attributes from one text object to another
4. Click OK.

The cursor changes to a large arrow.
5. Click the object that contains the properties you want to copy.

Setting the default outline

Whenever you create a new line or curve, CorelDRAW applies the default outline properties specified in the default text and graphic styles.

To change the default outline for new objects using the Outline Pen dialog box



1. Click a blank space in the Drawing Window to deselect any objects.
2. Open the Outline Tool flyout, and click *Outline Pen Dialog*.
3. Enable the Graphic checkbox to change the default outline attributes associated with new graphics, and click OK.
4. Set the appropriate outline attributes.

These attributes are now applied to any new objects you create. You can, however, change the outline of any individual object.

To change the default outline for new objects using the mouse



1. Click a blank space in the Drawing Window to deselect any objects.
2. Hold down Option and choose a color from the on-screen *Color Palette*.

3. Enable Graphic to change the default outline attributes associated with new graphics.

These attributes are now applied to any new object you create. You can, however, change the outline of any individual object.

Removing outlines

You can remove any object's outline using the Outline Tool flyout or the on-screen Color Palette.

To remove an object's outline using the Outline Tool flyout



1. Select the object with the *Pick tool*.
2. Open the Outline Tool flyout, and click *No Outline*.

To remove an object's outline using the mouse

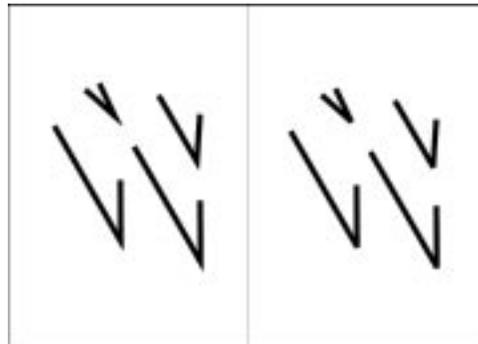


1. Select the object with the Pick tool.
2. Hold down Option and choose *No Color* from the on-screen Color Palette.

Setting the miter limit

When two lines meet at a sharp angle and form a spike that extends beyond the intersection of the lines, the miter limit controls when the program switches from a mitered (pointed) joint to a beveled (squared-off) joint.

Setting the miter limit determines the end shape of two intersecting lines.



To set the miter limit

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. Type a value between 5 and 45 degrees in the Miter Limit box.



- Any corner that is less than the Miter Limit will have a beveled (squared-off) point. Corner joints above the limit will come to a mitered (sharp) point. This limit prevents corners that extend far beyond the actual corner at small angles, such as when a text character comes to a spike, as in the letter “M.”

Changing the outline options

CorelDRAW lets you modify any of the outline settings. Using the Preferences dialog box you can adjust the defaults to display your favorite outline.

To change the default outline for new objects using the Preferences dialog box

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Styles.
3. From the list, choose Default Graphic.
4. Click the Edit button associated with the Outline section.
5. Choose a new default outline from the Outline Pen dialog box.

Working with color styles

Color styles reduce layout time and make it easier to create drawings with a consistent look. Color styles also make it easier to incorporate a number of design changes in one step. If you change your mind about a color used in your drawing, you can edit the color styles to update all objects to which the style has been applied.

Color styles can also be used to create a “family” of colors. A family of colors is a series of two or more similar solid colors linked together to form a “parent-child” relationship, in which the child colors represent varying shades of the parent colors. The link between parent and child colors is based on a common hue. The Pantone Matching System, the Pantone Hexachrome, and UserInks produce child colors based on a common ID. Different child color shades are created by adjusting the Tint. You create different child colors by adjusting levels of saturation and brightness. The result is a family of similar colors.

By understanding this parent-child relationship, combined with the ability to apply these color styles to objects in your document, you can begin to see the power of color styles. For example, changing the parent color automatically changes all child colors — not just in the Color Palette, but in your drawing

as well. This means that if you define a color style based on a green parent color then decide to change it to red, you don't have to redefine all of the shades. Instead, CorelDRAW does it for you. Using this example, light and dark green child colors become light and dark red child colors.

.....
Changing the parent
color redefines all
the shades.
.....



In addition, you can create a parent color using a specific color model, color palette, or color blend. You can create and apply a new color in the same way that you adjust these attributes for uniform fills. For more information, see “Working with uniform fills” on page 170.

Why use color styles?

Color styles are especially useful if your drawing contains multiple shades of a particular color. You can use color styles to create a series of parent and child colors automatically. This, in turn, provides a valuable resource for creating any drawing that requires multiple shades of a particular color.

You can also open a CorelDRAW drawing, or a Clipart image, and use the Auto-Create feature to convert all of your drawing colors into color styles. Once this is done, you can experiment with changing the hues of the parent color styles. It is important to note that the Auto-Create feature will change the fill and outline colors in your document. This allows you to control all of your red objects, for example, with one parent color or to have a number of different parent colors, each representing a different hue of red.

Like graphic and text styles, color styles are saved with the drawing and can be copied to other drawings and documents.

Creating a parent color

With Color Styles you can create styles based on colors and link colors together in a “parent-child” relationship. Then, if you decide to change the parent color, all child colors change as well.

You can create parent colors quickly and easily by dragging colors from your image. You can also have CorelDRAW scan your image and change your colors to create parent colors automatically.

To create a parent color using the mouse

1. Choose Tools, Color Styles.
2. Drag a color from the on-screen *Color Palette* to the Color Styles Palette.



To create parent colors from an object

1. Choose Tools, Color Styles.
2. Drag the object containing the color you want to the Color Styles Palette.

To create parent colors from an image automatically

1. Choose Tools, Color Styles.
2. Select the object with the *Pick tool*.
Double-clicking the Pick tool selects all objects.
3. Click the *Auto Create Color Styles button*.
4. Enable one or more of the following check boxes in the Automatically Create Color Styles dialog box:
 - Use Fill Colors — to create color styles based on the fill colors in the selected image
 - Use Outline Colors — to create color styles based on the outline colors in the selected images
 - Automatically Link Similar Colors Together — to link similar colors together under their appropriate parent colors, based on hue tolerance
5. Move the Parent Creation Index slider to determine the number of parent colors created.
Moving the slider to the right creates only a few parent colors; moving the slider to the left creates many parent colors.
6. Enable the Convert Child Palette Colors To CMYK checkbox to convert non CMYK non-tintable colors.



- Colors are only converted to CMYK if their hue is different from the parent color. If the color already has the same hue as the parent, the color is not converted. Once you have converted colors to CMYK, they cannot be converted back to their original format.

- The Auto-Create feature changes the fill and outline colors in your document, since child color styles have the same hue as their parents.
- If your selection contains shades of gray and you're using the Auto Create feature, CorelDRAW groups these colors together under a parent color called Grayscale. The child colors associated with Grayscale represent each of the grayscale values found in your drawing. You can apply this color style just as you would any other Color style.



- The graphic tree in the Auto-Create feature allows you to switch between graphics to create child color styles easily.

Creating a child color

A child color is based on the hue of the parent color. The Pantone Matching System, the Pantone Hexachrome, and UserInks produce child colors based on a common ID. Different child color shades are created by adjusting the Tint. Adjusting the saturation and brightness of child colors allows you to create hundreds of variations. You can create child colors one at a time, based on specific settings, or you can create a series of shades automatically.

For example, if the parent color is navy blue, the colors that are available to use as child colors would be limited to different shades of blue. If you change the parent color to red, the child colors automatically change to different shades of red.

When creating child colors, colors added from a specific color-matching system are converted to CMYK, so they can be grouped into appropriate parent-child groups automatically.

Colors are only converted to CMYK if their hue is different from the parent color. If the color already has the same hue as the parent, the color is not converted. Once you have converted colors to CMYK, they cannot be converted back to their original format.

To create a child color

1. Choose Tools, Color Styles.
2. Select the name of the parent color to which you want to link the child color.
3. Click the *New Child Color button*.
4. From the Create A New Child Color dialog box, choose a color from the Color Palette.



5. Type a name in the Color Name box.

You can also choose a child color by typing values in the Saturation and Brightness boxes.

To create a series of child colors automatically

1. Choose Tools, Color Styles.
2. Select the name of the parent color to which you want to link the child color.



3. Click the *Create Shades button*.
4. Type a value in the Create box of the Create Shades dialog box.

You can automatically create up to 20 child colors.

5. Enable one of the following Shades buttons:
 - Lighter Shades — creates child colors that are lighter than the parent
 - Darker Shades — creates child colors that are darker than the parent
 - Light And Darker Shades — creates an equal number of light and dark colors

6. Move the Shade Similarity slider to determine how similar the shade of the child colors will be relative to the parent color.

Higher values create shades that are very similar, resulting in the creation of only a few carefully matched child colors; lower values create shades that are less similar, resulting in the creation of many less carefully matched child colors.



- You can also create a child color by holding down Control and clicking on the name of the parent color, and choosing Create A Child Color.
- You can also create a series of child colors automatically by holding down Control and clicking on the name of the parent color, and choosing Create Shades.

Editing color styles

When you change the hue of the parent color, the child colors that are linked to the parent also change. This color change is made based on the hue of the new parent color. The saturation and brightness values assigned to the child color remain constant.

To edit a parent color

1. Choose Tools, Color Styles.
2. Select the name of the parent color you want to edit.
3. Click the *Edit Color Style button*.
4. Choose a color from the Color Palette in the Edit Color Style dialog box.



- You can also edit a parent color by typing values in the Saturation and Brightness boxes.
- You can also edit a parent color by holding down Control and clicking on the name of the parent color you want to edit and choosing Edit Color.

Deleting and renaming colors in a color style

You can delete color styles from the Colors Styles Palette if you find that you no longer need them. You can also rename colors in a color style if the nature of your project changes or if this makes them easier to identify.

To delete a color

1. Choose Tools, Color Styles.
2. Hold down Control and click the name of the color you want to delete, and choose Delete.

To rename a color

1. Choose Tools, Color Styles.
2. Hold down Control and click the name of the color you want to rename, and choose Rename.
3. Type a new name for the color, then press Return.



- You can also rename a color by clicking twice on the name of the color you want to rename, typing the new name, and pressing Return.

Sorting colors

You can sort your color styles in alphabetical order by name, or have all parent colors with child colors listed first.

To sort colors by name

1. Choose Tools, Color Styles.
2. Hold down Control and click the name of the color you want to reorder, and choose Sort, By Names.

This sorts the colors in the list alphabetically.

To sort colors by links

1. Choose Tools, Color Styles.
2. Hold down Control and click the name of the color you want to reorder, and choose Sort, By Color Styles With Children.

This moves all parent colors with child colors to the top of the list.

Applying color styles

Once you create a color style, you can apply it to objects in your drawing with the Colors Styles Palette.

To apply a color style



1. Select the object with the *Pick tool*.
2. On the Colors Styles Palette, double-click the name of the style you want to apply.

To apply a color style using drag and drop

1. Using the Pick tool, choose the name of the color style from the Colors Styles Palette.
2. Drag a color style from the Colors Styles Palette to an object.

As the cursor moves over the object, the cursor changes shape to indicate whether the color is applied as a fill or an outline.



- You can also apply a color style to a fountain fill, an outline, or a monochrome bitmap.

Moving a color style under another parent

You can move a color style (parent or child) and make that style a child of another parent. If the color style has child colors, both the parent and its child colors become child colors of the selected color style. If the color style has no

child colors, the order that the colors are listed on the Colors Styles Palette is changed.

To move a color from one parent to another

1. Choose Tools, Color Styles.
2. Hold down Control, click the name of the color you want to switch and choose Make Child Of An Existing Color.

The cursor changes to a large arrow.

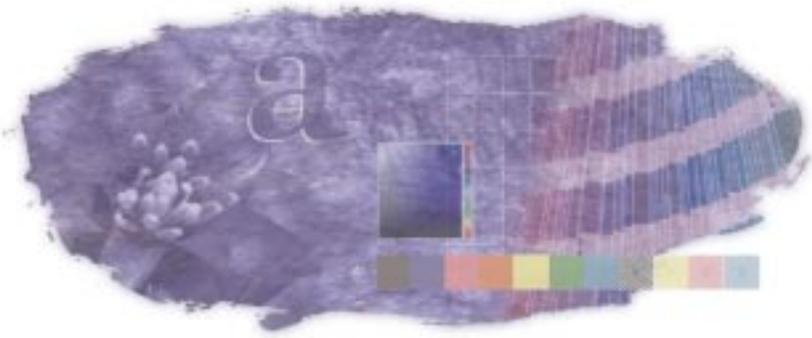
3. Click the new parent color to which you want to assign the selected color.

Press Esc or click outside the Color Styles Palette to cancel this movement.

To move a color from one parent to another using the mouse

1. Choose Tools, Color Styles.
2. Choose the color with the *Pick tool*.
3. Drag a color style and move it to another location on the Color Styles Palette.





WORKING WITH COLOR

7

There are a wide variety of ways for you to choose the colors for a project. You can choose a color from a palette or create your own color using one of several methods. You can assemble your own custom palettes or use one of the palettes included with this product. The range of colors from which you can choose is extremely large.

Because there are so many color variations, a precise method for defining each color is required. For example, once you've found the perfect shade of light orange, you need to be able to reproduce that color and possibly tell others how to reproduce it. Color models let you accurately define colors by breaking them down into color components.

Color models

Your computer's monitor produces colors by combining red, green, and blue light. This means that the millions of colors that your monitor produces can all be described as amounts of red, green, and blue. These three color components form the basis for the RGB (Red, Green, and Blue) color model. Each of the three colors that make up the RGB color model can have values from 0 to 255.

Because the RGB model is based on colors of light, higher RGB values correspond to greater quantities of light. Consequently, higher RGB values result in lighter colors. When all three color components are at the maximum value, the resulting color is white. Because the RGB model creates colors by adding light, it is called an additive color model.

When the colors you see on your monitor are reproduced on paper, they are reproduced using ink instead of light. The most common method of reproducing color images on paper is by combining cyan, magenta, yellow, and black inks. These four colors are the color components of the CMYK (Cyan, Magenta, Yellow, and black) color model. Usually, each of the colors that make up the CMYK color model are described as percentages (from 0 to 100).

Inks produce color by reflecting certain colors of light while absorbing others. Darker inks absorb more light. Because the CMYK color model is based on colors of ink, higher percentages of color result in darker colors. In theory, when 100% cyan, 100% magenta, and 100% yellow are combined, the resulting color is black. In reality, black ink must be added to the color model to compensate for the limitations of inks. Because the CMYK color model creates colors by absorbing light, it is called a subtractive color model.

The RGB and CMYK color models are both based on practical methods of reproducing color. There are other color models that aren't based on color reproduction methods but offer different ways of working with color. There are several of these alternate color models available for you to use. The most common of these is the HSB color model.

The HSB color model is based on values of hue, saturation and brightness. Hue is the basic color. Saturation is the strength of the color or the color's distance from gray. Brightness is the amount of white that a color contains. A color with a saturation of 0 is a shade of gray (from white to black). A color with a brightness of 0 is black, and a color with a brightness of 100 is white. Because the HSB color model is not based on mixing colors, finding the color you want might be easier when using this model.

Reproducing colors accurately

Each piece of equipment used to produce a document — from scanners to printers — handles color differently. If you don't take these differences into account, the colors you see on screen may not match the colors on the printed page. For more information, see “Reproducing colors accurately” on page 249.

Choosing colors

The quickest way to choose a color is by using the on-screen Color Palette. However, if the on-screen Color Palette doesn't contain quite the right color, then you can use one of the other methods of choosing colors. Each method offers different ways of working with colors to find the perfect color. In most cases, the method you choose should be based on how you prefer to work.

Choosing a color using a color viewer

The color viewers offer a visual representation of the full spectrum of colors. You can change the color by manipulating the controls associated with the color viewer. For example, when you use the default color viewer, you can change the hue (the color) by moving a slider.

Choosing a color by blending or mixing colors

The color blender and color mixer let you choose colors by combining other colors. The color blender displays a grid of colors that it creates from the four base colors that you select. The color mixer uses a bitmap as a palette on which you can paint and mix colors.

Choosing a color using color harmonies

Color harmonies are most useful when you're selecting several colors for a project. By using color harmonies, you are guaranteed that the colors you choose look good together. Color harmonies work by superimposing a shape — such as a square or a triangle — over a color wheel. As you move one corner of the shape around the wheel the other corners also move. The colors at each corner are always complimentary, contrasting, or harmonious, depending on the shape you select.

Choosing a color from a color palette

There are two types of color palettes from which you can choose colors: fixed color palettes and custom color palettes. Don't confuse these types of color palettes with the on-screen Color Palette. The on-screen Color Palette is used to display and select colors from both fixed and custom color palettes.

Fixed color palettes are provided by third-party manufacturers and are most useful when accompanied by a color swatch book. A swatch book is a collection of color samples that shows exactly what each color looks like when it is printed. The best reason for using a color from a fixed color palette is having the opportunity to see how that color appears when it's printed correctly. Swatch books are available at most art supply stores or directly from the swatch book manufacturer.

.....
An example of a
swatch book
.....



Several of the fixed color palettes are collections of spot color inks. If you select a color from one of these palettes, then that color requires its own color separation. For more information about spot colors and color separations, see “Creating color separations” on page 557.

Custom color palettes are collections of colors saved as a color palette file. For more information about custom color palettes, see “Customizing color palettes” on page 245.

Choosing a color from the on-screen Color Palette

Using the onscreen Color Palette is the quickest way to add colors to an object. One feature that is unique to the Color Palette is that it lets you augment the current color of an object with a new color. For example, you can add some red to a yellow object to create an orange object.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:
 - Choose a color from the on-screen Color Palette to change the uniform fill color.
 - Hold down Control, and choose a color from the on-screen Color Palette to change the outline color.

To augment the current uniform fill or outline color of an object

1. Select the object with the Pick tool.

2. Do one of the following:
 - Hold down Command, and choose a color from the on-screen Color Palette to change the fill color.
 - Hold down Command + Control, and choose a color from the on-screen Color Palette to change the outline color.
3. Repeat step 2 to add more color.



- Spot colors in the on-screen Color Palette are marked by a dot in the bottom left corner of the color swatch.



- You can also change the uniform fill or outline color of an object by dragging the color swatch from the on-screen Color Palette to the outline or fill of the object.
- Position the cursor on a color, and hold down the mouse button to view a grid of neighboring colors.

Choosing a color from the color viewer

The default color viewer is based on the HSB color model. The slider at the right represents the hue, the x-axis represents the saturation, and the y-axis represents the brightness. You can select different color models for the color you're choosing, but the color viewer remains based on the HSB model. You can select other color viewers if you don't want to use the HSB color viewer. For more information about color models, see "Working with color" on page 231.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.



2. Do one of the following:

- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Color Viewers button*.

4. Move the color slider up or down to change the range of colors displayed in the color selection area on the left.
5. Drag the small box in the color selection area to the color you want to use.

To use an alternative color viewer

1. Follow steps 1 to 2 from the previous procedure.
2. Click the Color Viewers button.
3. Choose an alternative color viewer.

Each color viewer lets you use a slider and a color selection area to choose a color.

To change the color model used in the color viewer

1. Follow steps 1 to 3 from the “To choose the uniform fill or outline color of an object” procedure.
2. Choose a color model from the Model pop-up menu.

Choosing a color by blending other colors

You can only blend colors that are in your current on-screen Color Palette. If you want to blend other colors, change the current on-screen Color Palette. You can view more or fewer blended colors by changing the grid size of the color selection area.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click and hold the *Mixers button* to display the mixers list.
4. Choose Color Blend.
5. Open each of the four color pickers, and choose a color.
6. Choose the color you want to use from the color selection area.

To change the grid size of the color selection area

1. Follow steps 1 to 4 from the previous procedure.

2. Click the More button if the dialog box isn't expanded.
3. Click the Options button, choose Grid Size, and choose the size you want to use.

Choosing a color using color harmonies

Each of the options in the Hues pop-up menu corresponds to a shape that is superimposed on the color wheel. As you move the corner of the shape that is covered by a black circle, the grid of colors below the color wheel fills with new colors. Based on color theory, all the colors in this grid look good together. Since color harmonies are most useful when you are selecting several colors, try using color harmonies when working with custom palettes. See “Customizing color palettes” on page 245 for more information.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.
- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Mixers button* to display the mixers list.
4. Choose Color Harmonies.
5. Drag the black circle around the color wheel to change the color swatches below the wheel.
6. From the color grid below the color wheel, choose the color swatch you want to use.

To change the relationship between the colors on the color wheel

1. Follow steps 1 to 4 from the previous procedure.
2. Choose a hue option from the Hues pop-up menu.

Each hue option corresponds to a different configuration of circles on the color wheel. Experiment to find the configuration that provides the color set you prefer.

To change the appearance of colors in the color swatches

1. Follow steps 1 to 4 from the “To choose the uniform fill or outline color of an object” procedure.

2. Choose a color variation from the Variations pop-up menu.
3. Type a number in the Number box to change the number of swatches in the color grid.

Choosing a color by mixing colors

The color mixer lets you select colors from the bitmap in the color selection area and then paint on the bitmap to create colors. You can use the preset bitmap, or you can load a different bitmap. You can save the bitmap that appears in the color selection area for future use.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.



2. Do one of the following:

- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Mixers button* to display the mixers list.

4. Choose Mixing Area.



5. Click the *Pick Color button*.

6. Choose the color you want to use from the color selection area.

To mix colors in the color selection area

1. Follow steps 1 to 4 from the previous procedure.



2. Click the *Paint button*.

3. Drag in the color selection area to paint inside the color selection area.

The color you paint is the current color. To change the color follow the steps in the “To choose the uniform fill or outline color of an object” procedure.

You can vary the amount of color that you place in the color selection area by moving the Blend slider. Move the slider to the left to add more color or move it to the right to add less.

To change the properties of the paint brush

1. Follow steps 1 to 4 from the “To choose the uniform fill or outline color of an object” procedure.

2. Click the More button if the dialog box isn't expanded.
3. Click the Options button, choose Brush Size, and choose the size you want to use.
4. Click the Options button, choose Brush Type, and choose the type you want to use.

To change the bitmap in the color selection area

1. Follow steps 1 to 4 from the “To choose the uniform fill or outline color of an object” procedure.
2. Click the More button if the dialog box isn't expanded.
3. Click the Options button, and choose Load Bitmap.
4. Choose the filename of the bitmap you want to use.
5. Click Open.



- If you want to use an empty color selection area, click the Options button and choose Clear Bitmap.
- If you want to save the bitmap in the color selection area, click the Options button and choose Save Bitmap.

Choosing a color from a fixed color palette

The PANTONE MATCHING SYSTEM fixed color palettes is a spot color; the Focoltone, TOYO COLOR FINDER, and DIC fixed color palettes can be treated as spot colors or as composite colors. If you create color separations when you print, each color from any of these palettes requires a separate printing plate. This can significantly increase the cost of your print job. While the Focoltone, TOYO COLOR FINDER, and DIC fixed color palettes can be treated as spot colors or as composite colors, the PANTONE MATCHING SYSTEM color palettes, can be converted from spot colors to process colors when you print. See “Creating color separations” on page 557 for more information.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Fixed Palettes button*.
4. Choose a palette from the Type pop-up menu.
5. Click the color scroll bar to change the range of colors displayed in the color selection area on the left.
6. Choose the color you want to use.

To hide or display the names of the colors

1. Follow steps 1 to 4 from the previous procedure.
2. Click the More button if the dialog box isn't expanded.
3. Click the Options button, and choose Show Color Names from the pop-up menu.

A check mark beside the command name indicates that the option is enabled.



- You have the option of changing the Focoltone, TOYO COLOR FINDER, and DIC fixed color palettes from spot colors to composite colors. To change any or all of the palettes from spot colors to composite colors, choose Edit, Preferences, Global, General and disable the check boxes that correspond to the palette you want to convert.
- If a fixed color palette supports tints for each of its colors, you can change the tint by typing a value in the Tint box.

Choosing a color from a custom color palette

A custom color palette can include colors from any color model or fixed color palettes.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Custom Palettes button*.
4. Choose a palette from the Type pop-up menu.
5. Click the color scroll bar to change the range of colors displayed in the color selection area on the left.
6. Choose the color you want to use.

To display or hide the names of the colors

1. Follow steps 1 to 4 from the previous procedure.
2. Click the More button if the dialog box isn't expanded.
3. Click the Options button and choose Show Color Names from the pop-up menu.

A check mark beside the command name indicates that the option is enabled.



- Only the currently loaded palettes are displayed in the Type pop-up menu. You can load another palette by choosing Open Palette from Window, Color Palette, Palette Editor and specifying a folder and filename.
- The User Defined Inks are all custom spot colors. If you create color separations when you print, each color from this palette 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, then you can convert spot colors to process colors when you print. See "Creating color separations" on page 557 for more information.

Choosing a color by setting numeric values

You can change a color by changing the values of its color components. The color components you can change depend on the color model being used to define the color. See "Working with color" on page 231 for more information about color models.

To choose the uniform fill or outline color of an object



1. Select the object with the *Pick tool*.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Color Viewers button*.
4. Click the More button if the dialog box isn't expanded.
5. Choose a color model from the Model pop-up menu.

The color model you choose will determine the color values that you can change. For example, if you choose RGB, then the color values are Red, Green, and Blue. If you choose HSB, then the values are Hue, Saturation, and Brightness.

6. Type values in the color value boxes.

The range of acceptable values varies from color model to color model.

To view RGB, CMYK, HSB, or Lab color values

1. Follow steps 1 to 4 from the previous procedure.
2. Click the Options button, choose Value 1, and choose a color model.
3. Click the Options button, choose Value 2, and choose a color model.



- You can also change the color model and numeric color values of an object by selecting it with the Interactive Fill tool, then changing the color component values on the Property Bar.

Choosing the default fill and outline colors

You can change the default fill and outline colors of Graphic objects, Artistic text, and Paragraph text by choosing a color when no object is selected. A dialog box prompts you to select the types of object for which you want to change the default color.

To choose the default fill or outline color

1. Ensure that no object is selected.
2. Do one of the following:



- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.
3. Enable any or all of the following check boxes:

- Graphic
- Artistic Text
- Paragraph Text

Previewing new colors

The top half of the color swatch at the top right corner of the Color dialog box displays the reference color. The bottom half displays the new color that you have chosen. The reference color is the current color of the object unless you swap the new color with the reference color.

To compare the new color of an object with the current color



1. Select the object with the *Pick tool*.



2. Do one of the following:

- Open the Fill Tool flyout, and click the *Fill Color Dialog button* to change the uniform fill color.



- Open the Outline Tool flyout, and click the *Outline Color Dialog button* to change the outline color.



3. Click the *Color Viewers button*.

4. Click the More button if the dialog box isn't expanded.

To swap the reference color with the new color

1. Follow all the steps from the previous procedure.
2. Click the Options button, and choose Swap Color.

Working with the on-screen Color Palette

The on-screen Color Palette provides quick access to the colors you use most. You can display any fixed or custom color palettes in the on-screen Color Palette. The on-screen Color Palette can either be docked to one edge of the Screen or be made to float as a separate screen. You can also change the appearance and size of the on-screen Color Palette to suit your needs.

Changing the colors in the on-screen Color Palette

You can change the on-screen Color Palettes to an entirely different color palettes. If you want to change individual colors, see “Customizing color palettes” on page 245.

To change all the colors in the on-screen Color Palette

- Choose Window, Color Palette, and choose the color palette you want to use.

To load a new color palette in the on-screen Color Palette

1. Choose Window, Color Palette, and choose Palette Editor.
2. Click Open.
3. Locate the folder where the palette is stored from the Look In list.
4. Select the filename and click open.



- Spot colors in the on-screen Color Palette are marked by a dot in the bottom left corner of the color swatch.
-

Changing the position and size of the on-screen Color Palette

The on-screen Color Palette behaves like a toolbar. You can dock or undock it and change its size.

To undock the on-screen Color Palette

- Drag the gray area (outside the color swatches) of the on-screen Color Palette away from the edge of the Screen.

To dock the on-screen Color Palette

- Drag the on-screen Color Palette to any edge of the Screen.

To specify the number of rows in a docked on-screen Color Palette

1. Hold down Control, and click the gray area of the on-screen Color Palette, and choose Properties.
2. Type a value in the Maximum Number Of Rows While Docked box.

Customizing the on-screen Color Palette

Change the appearance and behavior of the on-screen Color Palette to match the way you work.

To use large swatches

1. Hold down Control, click the gray area of the on-screen Color Palette, and choose Properties.
2. Enable the Large Swatches check box.

To display a “No Color” color swatch

1. Hold down Control, click the gray area of the on-screen Color Palette, and choose Properties.
2. Enable the Show “No Color” Well check box.

Customizing color palettes

Custom color palettes are collections of colors saved as a color palette file. These palettes can contain both spot colors and colors created using any color model. This product includes many set custom palettes that you can use or you can create new palettes from scratch. Custom palettes are useful when you use the same colors often or when you want to work with a set of colors that all look good together.

Editing an existing custom color palette

Color palettes that are currently loaded appear in the Color Palette pop-up menu. It is possible for several custom color palettes to be loaded at once, but only one color palette can be displayed on the on-screen Color Palette at a time.

To open an existing custom color palette

1. Choose Window, Color Palette, Palette Editor.
2. Click Open.
3. Choose a Palette filename.

To edit a color palette that is currently loaded

1. Choose Window, Color Palette, Palette Editor.
2. Choose the color palette from the Palette pop-up menu.

Creating a custom color palette

When you create a custom color palette, the color palette starts out empty and ready for you to choose the colors you want to include in it. You can also

create a custom color palette by creating a color palette that contains all the colors in a selection or all the colors in the current document.

To create a color palette

1. Choose Window, Color Palette, Palette Editor.
2. Click the New button.
3. Specify a filename.

To create a palette from a selection

1. Choose Tools, New Palette From Selection.
2. Specify a filename.

To create a new palette from the current document

1. Choose Tools, New Palette From Document.
2. Specify a filename.



- If you want to include a description of the color palette, type a description in the text box.
-

Saving a custom color palette

If you don't save a custom color palette before you exit the Palette Editor, your changes will be lost.

To save a color palette

1. Choose Window, Color Palette, Palette Editor.
2. Click Save.

To save a color palette with a new filename

1. Choose Window, Color Palette, Palette Editor.
2. Click Save As.
3. Specify a filename.

Changing the colors in a custom color palette

The methods for choosing colors in the Palette Editor are identical to the methods available in the Uniform Fill dialog box. See “Choosing colors” on page 232 for information about choosing a color.

To add a color to a custom color palette

1. Choose Window, Color Palette, Palette Editor.
2. Choose a color from the color selection area.
3. Choose a color from the palette area to specify the position of the new color.

The color is added in the position before the selected color swatch.

4. Click the Add button.

To add multiple colors to a custom color palette

1. Choose Window, Color Palette, Palette Editor.
2. Hold down Shift and choose the colors that you want to add to the palette from the color selection area.

You can only add multiple colors when you choose colors using the blend color grid, color harmonies, fixed color palettes, or other custom color palettes. You can only select groups of colors that appear consecutively.

3. Click the Add button.



- If the current on-screen Color Palette is a custom color palette, then you can add a color to that palette from the Uniform Fill and Outline Color dialog boxes by clicking the Add To Palette button. The color is placed at the end of the palette.
 - From the Uniform Fill and Outline Color dialog boxes, you can add all the colors in a blended colors grid or a color harmonies grid to the current on-screen Color Palette. Add the entire grid by clicking the Options button and choosing Add All Grid Colors To Palette. The colors are placed at the end of the palette.
-

To replace a color in a custom palette

1. Follow steps 1 to 3 from the “To add a color to a custom color palette” procedure.
2. Click the Replace button.

To remove a color from a custom palette

1. Choose Window, Color Palette, Palette Editor.
2. Choose a color in the palette area.
3. Click the Remove button.

To remove multiple colors from a custom palette

1. Choose Window, Color Palette, Palette Editor.
2. Hold down Shift and choose the color swatches that you want to remove from the palette.
You can only select groups of colors that appear consecutively.
3. Click the Remove button.



- The Remove button is disabled when you use User Defined inks because User Defined inks are referenced based on their position in the palette rather than by the colors themselves.



- If you want to know if a color similar to the one you have selected in the color selection area is already in the custom palette, click the Find Closest button. This button finds the color in the current custom palette that is closest to the color you have selected.
- Click the Reset button to return the palette to the state it was in when you began making changes.
- You can change the order of colors in a custom color palette by clicking the Sort button and choosing an option. You can also move individual colors by dragging them to a new position in the palette area. The Sort button is disabled when you use User Defined inks.

Naming colors in a custom color palette

Naming colors helps you to keep track of the colors in a custom color palette.

To name a color

1. Choose Window, Color Palette, Palette Editor.
2. Choose a color from the palette area.
3. Type a name in Name box.

To display or hide the names of the colors in a custom color palette

1. Choose Window, Color Palette, Palette Editor.
2. Hold down the Control key, click the color swatch area, then choose Show Color Names from the Options pop-up menu.

A check mark beside the command name indicates that the option is enabled.

Reproducing colors accurately

Each piece of equipment used to create a document — from scanners to printers — handles color differently. If you don't take these differences into account, the colors you see on screen may not match the colors on the printed page. For example, a monitor displays a different range of colors, or color gamut, from the range of colors that can be reproduced on a printing press. This means that your document might include colors that appear accurate on your monitor but can't be reproduced on paper. Furthermore, different monitors, scanners, printers, and other types of equipment all have slightly different color gamuts. For colors to be accurately translated from device to device, you have to account for the differences between the color gamuts of each device. The process of managing colors from original images to final output is referred to as color workflows.

Color workflows

Using color profiles to take different color gamuts into account helps you manage color as you create a document. A color profile is a file containing a description of a device's color handling capabilities and characteristics. Accurate color profiles of your scanner, monitor, and printer make it possible for colors to be corrected so that the colors you see on screen match the colors you see in the final output.

Color profiles are used to correct on-screen colors so that each color is displayed as accurately as possible, based on its color values. Color profiles are also used to display colors on screen as they will appear when they are printed and can warn you when a color you have selected is outside of the printer's color gamut. You can also apply a color profile to a file when you import it into a CorelDRAW application.

The International Color Consortium (ICC) has defined a standard format for color profile files. Corel's color management system uses ICC profiles. Corel software can use ICC profiles embedded in RGB TIFF images to map the image's colors to Corel software's internal color gamut. Also, you can embed a color profile in TIFF images using the ColorSync Plug-ins provided with ColorSync 2.5. However, Corel's RGB data is in sRGB profile (the RGB color

space for Corel products), therefore, in order to save disk space and make RGB TIFF files smaller and easier to share, we recommend that you not embed the color profiles when saving an RGB TIFF.



- CMYK graphics and images created in or imported into Corel applications are not modified by CMYK profiles because CMYK images include many print-specific characteristics, such as GCR, total ink coverage, and maximum black.

ColorSync 2.5

ColorSync 2.5 is a color management system that works in conjunction with the Macintosh operating system. When using the ColorSync 2.5 color management system, first change the ColorSync color profiles in the Monitors & Sound control panel. The system profile in the ColorSync control panel is identical to the monitor profile in the Corel application. Changing the ColorSync color profile in the Monitors & Sound control panel lets you select a profile for each monitor in a multiple monitor setup; however, Corel's color management system only recognizes one monitor profile. Therefore, always use the primary monitor to check color accuracy.



- When color correction is enabled, on-screen colors might look duller than they did before you selected color correction. Although this may seem like a disadvantage, keep in mind that the brighter colors you selected before couldn't be reproduced in the final printed output.

Correcting color

Color correction adjusts screen colors so that they are displayed as accurately as possible. If you only color correct display colors, then the on-screen colors are adjusted according to your monitor's color profile. If you also display colors as they will print then the on-screen colors are adjusted according to your monitor's color profile and your printer's color profile. The color matching mode determines how colors are adjusted when corrections are necessary.

To color correct display colors

1. Choose Edit, Preferences.
2. From the list of categories, double-click Global, Color Management.
3. Enable the Calibrate Colors For Display check box.

To display colors as they will print

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Display Simulated Printer Colors check box.
3. Do one of the following:
 - Click the Simulate Composite Printer button to display colors as they will print on a composite printer.
 - Click the Simulate Separations Printer button to display colors as they will print on a printer that uses color separations.

To change the color matching mode

1. Follow steps 1 and 2 from the “To color correct display colors” procedure.
2. From the list of categories, choose General.
3. Choose Automatic, Illustration, or Photographic from the Color Matching Mode pop-up menu.

Illustration mode only changes colors that are out of gamut. This means that two colors that look different before you enable color correction may look identical afterwards. This happens because the out-of-gamut color is adjusted, but the other color is not.

Photographic mode shifts all the colors in an image so that the range of colors lies within the color gamut. This ensures that the relationship between each color is unchanged. In this case, two colors that look different before you enable color correction will still look different afterwards, but the colors themselves may shift.

Automatic mode uses either illustration mode or photographic mode, depending on the type of object. Bitmaps use photographic mode, text and graphics use illustration mode. Automatic mode is the default.



- You won't see the effects of changing the color mode on screen if color correction is not enabled.
-

Viewing out-of-gamut colors

When enabled, the gamut alarm overlays out-of-gamut colors with a warning color.

.....
The bright green
portions of the
sunflower represent
out-of-gamut colors.
.....



To enable the gamut alarm

1. Choose Edit, Preferences.
2. In the list of categories, double-click Global, Color Management.
3. Enable the Calibrate Colors For Display check box.
4. Enable the Highlight Colors Out Of Printer Gamut check box.

To change the warning color

1. Follow all the steps from the previous procedure.
2. Choose a color from the Warning Color color picker.
3. Move the transparency slider to the right to make the warning color more transparent. Move the slider to the left to make the warning color less transparent.

To view out-of-gamut colors in the Color dialog box

1. In the Color dialog box, click the More button to expand the dialog box.
2. Click the Options button, and choose Gamut Alarm.



- A picture of a printer with a red line through it is displayed next to the color preview swatch in the Color dialog box when the current or new colors are outside the printer's color gamut. Click the right side of the color preview swatch to change the color on the left to the closest color within the color gamut.
-

Setting color profiles

Setting color profiles properly is required for accurate color reproduction. When setting up your color profile make sure to calibrate the profile for the printer you are using for best results. If color profiles are not available, try to obtain a professionally created profile from the manufacturer of the device. Color profiles are also often available through the Internet.

To set the appropriate color profiles

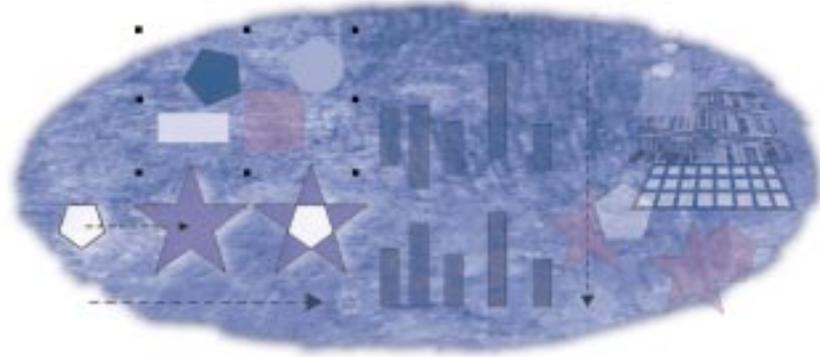
1. Choose Edit, Preferences.
2. In the list of categories, double-click Global, Color Management, and choose Profiles.
3. Choose a profile from the Monitor, Scanner, Composite Printer, and Separations Printer pop-up menus.

To apply a color profile during import

1. Choose File, Import.
2. Choose the bitmap image you want to import.
3. Enable the Apply Selected Profile check box.



- Only RGB bitmap images can have a color profile applied during import. CMYK bitmaps are always imported without change.
 - An alert will appear when importing an RGB TIFF file with an embedded color profile in a CorelDRAW application, asking if you want to use the embedded color profile.
 - Many of the supplied printer color profiles were created using ColorBlind color management software. For more information about ColorBlind and color profiles, contact Color Solutions, Inc. at <http://www.color.com>.
-



ORGANIZING OBJECTS

8

CorelDRAW provides many powerful tools to help you arrange and organize the objects in your drawings. These tools let you accomplish virtually any organizational task, from simple operations, like copying, locking, grouping, and combining objects, to using the advanced features of the Object Manager to help you organize an entire document. You can control the vertical order of objects in any drawing using the ordering commands and align or distribute objects to get the exact arrangement you want. The Weld, Trim and Intersect features let you create unique objects using any of the basic drawing shapes.

Copying, duplicating, and clearing objects

Using the Clipboard you can use Cut, Copy, and Paste commands to create copies of objects. The Duplicate command copies an object directly on screen, placing the duplicate slightly offset from the original object. The duplicate has all the original object's attributes but has no lasting connection to it. Duplicating is the quickest way to make copies of objects.

The Clone command also copies selected objects directly on screen. Unlike duplicating, however, cloning creates a connection between the original object (the master) and the new object (the clone). This connection means that most changes you make to the master object are also applied to the clone. You can also change the offset distance for the duplicate and clone object. To remove an object from your drawing quickly, without placing a copy of it on the Clipboard, you can use the Clear command.

Using the Clipboard to copy objects

You can use the Clipboard as a temporary storage area to copy text and graphics between applications. You can also use it to copy objects within or between CorelDRAW files.

To copy an object



1. Select the object with the *Pick tool*.
2. Choose Edit, Copy.

A copy of the object is placed on the Clipboard.

To cut an object

1. Select the object with the Pick tool.
2. Choose Edit, Cut.

The object is removed from the drawing and placed on the Clipboard.

To paste an object from the Clipboard

- Choose Edit, Paste.

The contents of the Clipboard are placed in the Drawing Window. If the object was cut or copied from CorelDRAW, it is placed at the same location from which it was cut or copied.



- You can access the Cut, Copy, and Paste commands by holding down Control and clicking on an object in the Drawing Window.
-

Duplicating objects

You can use the Duplicate command to create a copy of an object. This command creates a duplicate of an object and places it up and to the right of the original object with an offset of 0.25 inches (or the equivalent in other units of measurement). After you move a duplicate object, you can use the Duplicate command again to create another copy of the object. The new duplicate is placed the same distance from the first duplicate as the first duplicate is from the original. This type of duplication is called “smart duplication.” For information about changing this offset distance, see “Changing the offset for duplicated and cloned objects” on page 258.



To duplicate an object

1. Select the object with the *Pick tool*.
2. Choose Edit, Duplicate.

To duplicate an object using smart duplication

1. Follow steps 1 and 2 from the previous procedure.
2. Select the duplicate with the Pick tool, and move it to another location in the Drawing Window.
3. Choose Edit, Duplicate.

The new duplicate is placed the same distance from the first duplicate as the first duplicate is from the original.



- Smart duplication is reset to the default once you deselect the object, select another object, or change tools. The Smart Duplicate maintains the relative stretch, skew, and rotation of the last duplicate.



- You can also duplicate an object by dragging the object then holding down Option. When cursor changes, position the duplicate object and release the mouse button before releasing Option.

Cloning objects

You can use the Clone command to create an offset copy of an object that remains linked to the original object. With cloning most changes you make to the original object (called the “master”) are automatically applied to the copy (called the “clone”).

To clone an object



1. Select the object with the *Pick tool*.
2. Choose Edit, Clone.

To determine a clone’s master object

- Hold down Control, click the clone object, and choose Select Master.

To determine a master object's clones

- Hold down Control, click the master object, and choose Select Clones. The Select Clones option is only available when a clone and master are on the same page.

To revert to a clone's master object

1. Select the modified cloned object with the Pick tool.
2. Hold down Control, click the object, and choose Revert to Master.
3. In the Revert To Master dialog box, enable any of the following:
 - Clone Fill — to return to the master fill
 - Clone Outline — to return to the master outline
 - Clone Path Shape — to return to the master shape
 - Clone Transformations — to return to the master shape and size
 - Clone Bitmap Color Mask — to return to the master color settings



- By default, clones are placed on top of master objects and offset 0.25 inches (or the equivalent in other units of measurement) up and to the right. For information about changing this offset distance, see “Changing the offset for duplicated and cloned objects” on page 258.



- For more information about special effects and cloning, see “Creating special effects” on page 363.

Changing the offset for duplicated and cloned objects

You can specify the offset distance of an object copied with the Duplicate and Clone commands. Positive values result in right and upward offsets; negative values result in left and downward offsets. You can change the offset using the Preferences dialog box or the Property Bar.

To change the offset for duplicated and cloned objects

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. In the Duplicate Placement section, type offset values in the Horizontal and Vertical boxes.

To change the offset using the Property Bar



1. Using the *Pick tool*, click a blank area of the Drawing Window to deselect objects.



2. Type X and Y offset values in the *Duplicate Distance box* on the Property Bar, and press Return.



- If you specify an offset in a unit of measurement that is different from the default unit of measurement you've set for your drawing, CorelDRAW automatically converts the offset to the default unit of measurement.

Clearing objects

You can use the Clear command to remove an object from the Drawing Window without placing a copy of it on the Clipboard.

To clear an object



1. Select an object with the *Pick tool*.
2. Choose Edit, Clear.



- You can only retrieve the object using the Undo command. As a result, you may find it more useful to use the Cut command to remove an object, since it places a copy on the Clipboard. Then, if you decide that you need the object, you can use the Paste command to retrieve it.

Ordering objects

On its most basic level, a CorelDRAW drawing consists of a series of objects stacked on top of one another. The vertical order of these objects — the stacking order — helps determine their positional relationship and, therefore, the appearance of the drawing.

The stacking order is most evident in drawings that contain overlapping objects with contrasting properties. If the objects do not overlap, the stacking order may not be evident. In all cases, however, the stacking order is determined by the order in which you add objects to the drawing (or, more specifically, to the layer). The first object you draw occupies the bottommost position, whereas the last object you draw occupies the topmost position.

.....
 The stacking order is most obvious when you have objects that overlap.



The Order commands let you change the stacking order of objects on any given layer. For example, if you select the bottom object on a layer and choose the To Front command, CorelDRAW places the object on top of all other objects on the layer. The topmost object becomes the second object, the second becomes the third, and so on.

The In Front Of and Behind commands let you place objects at precise positions in the stacking order. For example, if you have 10 overlapping objects, you can use the Behind command to place the top object behind the third object. To restore the previous order, you would use the In Front Of command, to place the object back on top. In addition, you can select multiple objects and use the Reverse Order command to reverse their relative vertical positions.

Changing the order of objects on a layer

The Order commands make it easy to change the stacking order of objects on a layer.

Remember to select the object first with the Pick tool.

To move an object...	Do this...
To the front of its layer	Choose Arrange, Order, To Front.
To the back of its layer	Choose Arrange, Order, To Back.
Forward one position	Choose Arrange, Order, Forward One.
Back one position	Choose Arrange, Order, Back One.

In front of a specific object

Choose Arrange, Order, In Front Of, then choose the appropriate object.

Behind a specific object

Choose Arrange, Order, Behind, then choose the appropriate object.

To reverse the stacking order of objects on a layer



1. Select the objects whose order you want to reverse with the *Pick tool*.
2. Choose Arrange, Order, Reverse Order.

The Reverse Order command affects the selected objects only; other objects in the drawing are not affected.



- Grouping objects puts them in the same position in the stacking order. If you select more than one object and choose any of the Order commands (except the Reverse Order command), the objects move together and keep the same order relative to one another.



- You can also access the Order commands by holding Control and clicking an object on the Drawing Window or on the Object Manager. The To Front and To Back commands are also available on the Property Bar when an object is selected.

Aligning objects

Having objects line up can be an important requirement for virtually any type of drawing. To this end, CorelDRAW provides controls that allow for precise alignment of any series of objects. These controls let you choose how you want the objects to line up and where you want them aligned in your drawing.

You can use the Align options to have objects line up horizontally or vertically.



You use the controls in the Align and Distribute dialog box to specify whether you want the objects to line up horizontally or vertically (or both) using their

edges or center points. Once you've indicated how you want to align the objects, you need to indicate where you want to line them up. You can align your objects to the edge of the page, the center of the page, and the edge or center of the "target object," which is determined by the way you select the objects. For maximum precision, you can also choose to align the objects to the grid line nearest to the alignment point you selected.

The Snap To commands can also help you align objects. These commands let you make the grid, guidelines, and stationary objects behave like magnets. With snapping enabled, objects are attracted to the grid, guidelines, and other objects for exact alignment. For more information about setting up the grid and guidelines, see "Using the rulers, grid, and guidelines" on page 59.

Aligning objects horizontally and vertically

The Align page controls use the imaginary boxes — called selection boxes — that surround objects when you select them. For example, enabling Right aligns the right edges of the objects' selection boxes.

To align a series of objects horizontally



1. Select the objects with the *Pick tool*.
2. Choose Arrange, Align and Distribute.
3. Choose the Align tab.
4. Enable the Top, Center, or Bottom check box to indicate how you want the objects to line up horizontally.
5. Do one of the following:
 - Enable Edge of Page or Center of Page — to indicate where you want alignment to occur. Leave both boxes disabled if you want alignment to occur at the target object
 - Enable Align To Grid — to line up the objects with the grid

To align a series of objects vertically

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Left, Center, or Right check box to specify how you want the objects to line up vertically.
3. Do one of the following:
 - Enable Edge of Page or Center of Page — to indicate where you want alignment to occur. Leave both boxes disabled if you want alignment to occur at the target object
 - Enable Align To Grid — to line up the objects with the grid



- You can use the Preview button to view the alignment settings in the Drawing Window.



- You can also open the Align And Distribute dialog box by selecting the objects you want to align and clicking the Align button on the Property Bar.

Aligning objects using the Snap To commands

The Snap To commands make precise alignment easy by forcing objects to line up with the grid, with guidelines, or with objects when you drag them nearby.

When the Snap To Guidelines command is enabled, objects snap so that the edges of their selection boxes “snap” to line up with horizontal and vertical guidelines. With slanted guidelines, objects snap so that the point you’re using to drag them snaps to the guideline. This point is indicated by a blue square.

When the Snap To Grid command is enabled, objects snap so that they always line up vertically and horizontally with the nearest grid marker.

The Snap To Objects command aligns objects so that the point you’re using to drag lines up with “snap points” on stationary objects. These snap points are located at each of an object’s nodes and are displayed as blue squares when alignment occurs. You can see an object’s nodes by clicking it with the Shape tool.

For more information about the Snap To commands see “Using the rulers, grid, and guidelines” on page 59.

To enable...	Do this...
Snap To Guidelines	Deselect all objects, then click the Snap To Guidelines button on the Property Bar.
Snap To Grid	Deselect all objects, then click the Snap To Grid button on the Property Bar.
Snap To Objects	Deselect all objects, then click the Snap To Objects button on the Property Bar.

Distributing objects

Even spacing of objects can play an important role in many types of drawings. An organizational chart, for example, is often most effective when its columns and components are distributed evenly on the page. By placing

objects at equal intervals, you can give your drawings a polished, professional look.

The object distribution controls help meet the need for even spacing. These controls allow you to arrange objects so that their center points or specific edges (for example, top or right) are separated by equal intervals. You can also use these controls to distribute objects so that they sit an equal distance apart. Once you've indicated how you want the objects distributed, you can choose the area over which you want the objects distributed. In each case, you can choose to distribute the objects to the extent of the length or width of the selection box or to the Drawing Page.

.....
You can use the
Distribute options to
create equal
horizontal or vertical
spacing of objects.
.....



Distributing objects horizontally and vertically

The Distribute page provides all the controls you need to distribute any selection of objects or guidelines evenly either horizontally or vertically. In creating this distribution, CorelDRAW uses the objects' selection boxes. Before applying your distribution you can preview the result in the Drawing Window.

To distribute a series of objects horizontally



1. Select the objects with the *Pick tool*.
2. Choose Arrange, Align and Distribute.
3. Choose the Distribute tab.
4. Enable the Left, Center, Spacing, or Right check box to specify how you want to distribute the objects horizontally.
5. Enable Extent of Selection or Extent of Page to indicate the area over which you want to distribute the objects.

To distribute a series of objects vertically

1. Follow steps 1 to 3 from the previous procedure.

2. Enable the Top, Center, Spacing, or Bottom check box to specify how you want to distribute the objects vertically.
3. Enable Extent of Selection or Extent of Page to indicate the area over which you want to distribute the objects.



- You can use the Preview button to view the distribution settings in the Drawing Window.

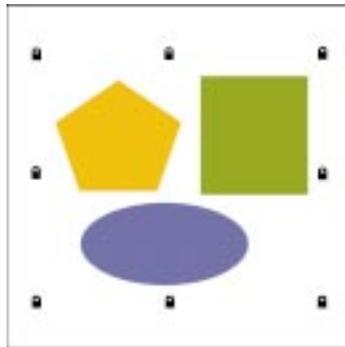


- You can also open the Align And Distribute dialog box by selecting the objects you want to distribute and clicking the Align button on the Property Bar.
-

Locking and unlocking objects

CorelDRAW lets you anchor, or lock, an object on the Drawing Page using the Lock Object command. You can lock single objects, multiple objects, or grouped objects. Locking prevents any object from being modified accidentally. When a locked object is selected the selection handles appear as locks. You can also unlock objects to resume making changes to the object.

When objects are locked you are unable to modify them.



Locking objects

The Lock Object command allows you to anchor an object to a specific location. When you lock an object to the Drawing Page it can't be moved, sized, transformed, cloned, filled or modified in any way. You can lock a single object, multiple objects, or objects in a group.



To lock an object

1. Select the object with the *Pick tool*.
2. Choose Arrange, Lock Object.

To lock multiple objects or groups of objects

1. Hold down Shift, and select the objects with the Pick tool.
2. Choose Arrange, Lock Object.



- The Lock Object command is unavailable for control objects, such as objects in a blend, text, and objects fit to a path, objects with extrusions, objects with contours, and objects with drop shadows.



- You can also access the Lock Object command by holding Control and clicking the objects on the Drawing Page or on the Object Manager.

Selecting locked objects

When an object is locked the selection handles appear as small locks. Selecting multiple locked objects is the quickest way to unlock objects in order to modify them. You can also select locked objects that are hidden behind other objects.

To select locked objects



- Select the locked object with the *Pick tool*.

To select multiple locked objects

- Hold down Shift, and select the locked objects with the Pick tool.

To select hidden locked objects

- Hold down Option, and click to select the hidden locked object.

Unlocking objects

The Unlock Object and Unlock All Objects commands lets you remove the lock anchor of an object or multiple objects. After you remove the lock from an object, it returns to its normal state and you can modify it in any way.



To unlock an object

1. Select the locked object with the *Pick tool*.
2. Choose Arrange, Unlock Object.

To unlock multiple or groups of object

- Choose Arrange, Unlock All Objects.



- You can also access the Unlock Object and Unlock All Objects commands by holding down Control and clicking the objects on the Drawing Page or on the Object Manager.

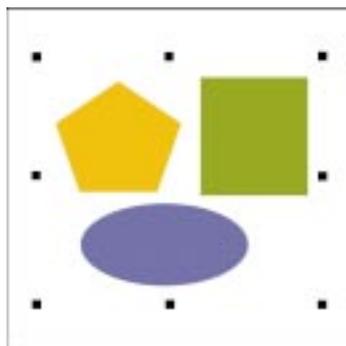
Grouping and ungrouping objects

The Group command binds objects together so that you can manipulate them as a single unit. Grouping is particularly effective for protecting and maintaining connections and spatial relationships between objects. For example, you can group all the objects that make up the background or framework of a drawing and move them without disturbing their relative positioning. After creating a group of objects you can select individual objects within a group. If you want to separate a group, you can do so using the Ungroup command.

Grouping objects

The Group command lets you create a single unit consisting of multiple objects. Each object in the group maintains its original properties. You can also create nested groups — groups composed of several objects or groups of objects (or both). You'll find nested groups particularly effective for drawings that contain many complex elements.

Grouping objects creates a single object based on multiple objects.





To group objects

1. Select the objects with the *Pick tool*.
2. Choose Arrange, Group.

To create a nested group

1. Using the Pick tool, select two or more groups (or one or more groups and one or more individual objects).
2. Choose Arrange, Group.



- You can also access the Group command on the Property Bar or by holding down Control and clicking the objects on the Drawing Page.
- You can also drag and drop objects on the Object Manager to group objects. For more information about grouping using the Object Manager see “Grouping objects using the Object Manager” on page 279.

Selecting an object that is part of a group

CorelDRAW lets you select and edit individual objects within a group or nested group. This eliminates the need to ungroup a group of objects to make changes to individual objects.

To select an individual object in a group or nested group



1. Click the *Pick tool*.
2. Hold down Command, and click the object.
If the object is part of a nested group, the entire group is selected and is surrounded by a selection box. If only the individual object is selected, the selection box appears only around it.
3. Repeat step 2 until only the individual object is selected.



- When you select an object that is part of a group, the handles on its selection box are displayed as circles instead of squares.

Ungrouping objects

The Ungroup command splits a group into its component objects. If you have nested groups (groups inside a group), you’ll need to repeat the ungrouping process until you get to the group level you want. If you have nested groups

and want to end up with just the original objects, use the Ungroup All command.

To ungroup objects



1. Using the *Pick tool*, select any object in the group you want to ungroup.
2. Choose Arrange, Ungroup.

To ungroup all objects

- Choose Arrange, Ungroup All.



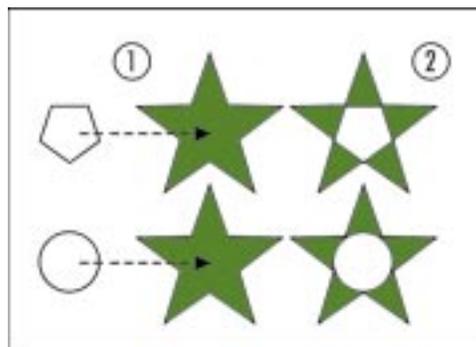
- You can also access the Ungroup and Ungroup All commands on the Property Bar or by holding down Control and clicking the grouped objects on the Drawing Page or on the Object Manager.

Combining objects

The Combine command lets you fuse multiple curves, lines, and shapes to create a completely new shape with common fill and outline attributes. If the original objects overlap, the overlapping areas are removed to create clipping holes that allow you to see what's underneath. If the objects don't overlap, they still become part of a single object but maintain their spatial separation.

If you combine rectangles, ellipses, polygons, stars, spirals, graphs, or text, CoreIDRAW converts them to curves before converting them to a single curve object. When text is combined with other text, however, the text objects are not converted to curves but to larger blocks of text. If you want the Combine command to affect the shape of an Artistic text object, you can use the Convert To Curves command to make it a curve object. You can't convert Paragraph text to curves.

The Combine command creates clipping holes where objects overlap.



The Break Apart command performs a function directly opposite to that of the Combine command. Break Apart allows you to separate objects that have been joined using the Combine command. Once you break apart clipart or any combined object, you can change the attributes and properties of any of its individual components.

If you use the Break Apart command on an object that has been created by combining Artistic text, the text breaks apart first into separate lines, then into words (if you choose the command a second time). Paragraph text, on the other hand, breaks into separate paragraphs. Both Artistic and Paragraph text can be recombined to their original state.

Combining two or more objects

The Combine command creates one object from two or more objects. This command has many applications, including creating clipping holes and joining line or curve segments. In all cases, the object that is produced is a curve that can be manipulated just like any other curve in CorelDRAW.

To combine objects



1. Select the objects with the *Pick tool*.
2. Choose Arrange, Combine.



- If you marquee select the objects you want to combine, the combined object assumes the outline and fill attributes of the bottommost object. If you select the objects using multiple selection, the combined object will use the attributes of the object you selected last.



- You can also access the Combine command on the Property Bar or by holding down Control and clicking the objects on the Drawing Page or on the Object Manager.
- Choose Arrange, Order, To Front or Forward One to place the combined object on top of other objects. You'll be able to see the objects through the clipping holes.

Breaking apart combined objects

The Break Apart command divides a combined object into its component objects. You can break apart any object that has been created using the Combine command. You can access the Break Apart command from the Arrange menu or the Property Bar.

You can also break apart Artistic text using the Break Apart command; however, you must first convert the text to curves by clicking Arrange, Convert To Curves.

To break apart combined objects



1. Select the combined object with the *Pick tool*.
2. Choose Arrange, Break Apart.

To break apart combined objects using the Property Bar



1. Select the combined object with the Pick tool.
2. Click the *Break Apart button* on the Property Bar.



- If the object or clipart image hasn't been created using the Combine command, the Break Apart command is grayed out.



- You can also access the Break Apart command by holding down Control and clicking the objects on the Drawing Page or on the Object Manager.

Welding, trimming, and intersecting objects

The Weld, Trim, and Intersect commands let you use the shape and position of multiple objects to create an entirely new shape.

Welding several overlapping objects binds them together to create one object. This object uses the welded objects' perimeter as its outline. All intersecting lines disappear.

When you trim an object, you remove any areas that are overlapped by other selected objects. These areas are cut away, creating an entirely new shape. Trimming is a good way to create irregularly shaped objects very quickly.

The Intersect command creates an object using the area where two or more objects overlap. The shape of this new object can be simple or complex, depending on the type of shapes you intersect.

Welding objects

The Weld command lets you bind two or more objects together to create a single object. If you weld overlapping objects, they join to create an object with a single outline. If you weld objects that do not overlap, they form a "weld group" that also acts as a single object. In both cases, the object takes

on the fill and outline attributes of the target object — the object to which you welded the selected objects.

You can weld any number of objects at one time. You can also weld objects on different layers. In this case, the welded object resides on the same layer as the target object.

.....
You can use the Weld
command to merge
overlapping objects
to create a single
object with one
outline.
.....



The Weld command can be used with almost any object you create using CorelDRAW, however, you cannot weld with Paragraph text, dimension lines, guidelines, Internet objects, or masters of clones. You can, however, use clones to weld with other objects. You can also weld single objects with intersecting lines. In this case, the object breaks into several subpaths, while its appearance remains the same. Delete the interior subpaths to remove any holes created during welding.

Welding two or more objects

The Weld command creates a single curve object out of two or more objects. You can access the Weld command from the Arrange menu and the Property Bar.

To weld objects



1. Using the *Pick tool*, select the objects that you want to weld together.
2. Choose Arrange, Weld.

To weld objects using the Property Bar



1. Select the objects with the Pick tool.
2. Click the *Weld button* on the Property Bar.



- If you marquee select the objects, the welded object assumes the outline and fill properties of the bottommost selected object.
- If you use multiple selection, the welded object takes on the properties of the object you selected last.

Trimming objects

The Trim command lets you reshape an object by removing the area that overlaps (or is overlapped by) other objects. The object you trim, called the target object, retains its fill and outline attributes. For example, if you trim a star that is overlapped by a polygon, you remove the area of the star that was covered by the polygon to create a new, irregular shape.

You can use the Trim command to remove areas from an object.



The Trim command can be used with almost any object you create using CoreIDRAW, however, you can't trim with Paragraph text, dimension lines, guidelines, Internet objects, or masters of clones. You can, however, use clones to trim with other objects.

Trimming an object

Before you use the Trim command, you need to decide which object you want to trim (the target object) and which object(s) you want to use to trim it. The objects you use to trim must overlap (or be overlapped by) the target object. You can access the Trim command from the Arrange menu, and the Property Bar.

To trim an object



1. Using the *Pick tool*, select all the objects you want to use to trim the target object.
2. Choose Arrange, Trim.

To trim an object using the Property Bar

1. Using the Pick tool, select the object you want to trim and the object(s) you want to use to trim it.
2. Click the *Trim button* on the Property Bar.



- If you marquee select the objects, CorelDRAW trims the bottommost selected object.
- If you use multiple selection, CorelDRAW trims the object you selected last.

Intersecting objects

The Intersect command lets you create an object using the area common to two or more overlapping objects. This new object is the size and shape of the overlapping area. The new object's fill and outline attributes depend on the object you define as the "target object." The new object uses the fill and outline attributes of this object.

You can use the Intersect command to create an object out of a area shared by overlapping objects.



You can't create intersections that involve Paragraph text, dimension lines, guidelines, Internet objects, or masters of clones. You can, however, use clones to intersect with other objects. In addition, you can't intersect objects that don't overlap.

Creating an intersection

The Intersect command creates a new object out of an area where two or more objects overlap. You can access the Intersect command from the Arrange menu, and the Property Bar.

To intersect objects



1. Select the overlapping objects with the *Pick tool*.
2. Choose Arrange, Intersect.

To intersect objects using the Property Bar



1. Select the overlapping objects with the Pick tool.
2. Click the *Intersect button* on the Property Bar.



- If you marquee select the objects, the intersected object takes on the properties of the bottommost selected object.
- If you use multiple selection, the intersected object takes on the properties of the object you selected last.
- You can also intersect grouped objects.

Using the Object Manager

The Object Manager displays the hierarchical structure of objects, layers, and pages in the active document. This hierarchy shows the stacking order, i.e., the vertical order of the objects and layers on each page in the document. For each object in the document, the Object Manager displays a small icon and a brief description of the object's basic fill and outline properties. After opening the Object Manager you can set the display options for the pages, layers and objects.

You can modify the objects in your drawing using features or controls on the Object Manager. The Object Manager lets you order objects (within layers and between layers on the same page), edit objects' outline and fill colors, drag-and-drop styles (color, graphics, and text), and group and ungroup objects.

The use of layers in the Object Manager lets you create, rename, and edit layers to organize your drawing. Setting the layer properties can assist you with managing the display, print, and edit of objects on layers.

When you select an object in either the Drawing Window or on the Object Manager, it's automatically highlighted in the other. In addition, changes to objects (for example, fills and outlines) are automatically reflected on the Drawing Window and on the Object Manager.

Opening and setting up the Object Manager

The Object Manager displays the hierarchical structure of the pages, layers, and objects in the active document. The Object Manager lets you add, remove, and rename pages in your document quickly and easily.

To open the Object Manager

- Choose Tools, Object Manager.

To add pages in your drawing

1. Hold down Control, and click a Page name.
2. Choose Insert Page After or Insert Page Before.

To remove pages in your drawing

1. Hold down Control, and click a Page name.
2. Choose Delete Page.

To rename pages in your drawing

1. Hold down Control, click a Page name, and choose Rename.
2. In the Rename Page dialog box, type a new name.



- You can also access the Rename command by clicking the name on the Object Manager and typing in a new name in its place.
-

Setting up the Object Manager

The Object Manager displays the hierarchical structure of the pages, layers, and objects in the active document. Buttons on the Object Manager's toolbar let you add layers, display or hide properties, and edit across layers.



To display object properties

- Click the *Show Object Properties button*. Click the button again to hide object properties.

To display pages and layers

- On the Object Manager, click  , and choose Show Pages And Layers.

To display pages only

- On the Object Manager, click , and choose Show Pages.

To display layer summary

- On the Object Manager, click , and choose Show Layers.

To expand the Object Manager upon object selection

- On the Object Manager, click , and choose Expand To Show Selection.



- You can also access the Show Object Properties, Show Pages, Show Layers, and Show Layers And Pages commands by holding down Control and clicking in the white space of the Object Manager.
-

Editing objects using the Object Manager

The Object Manager lets you edit objects the same way that you would on the Drawing Window. Before you can edit an object you must select it. CorelDRAW lets you group, copy, move, delete objects quickly using the Object Manager.

Selecting objects using the Object Manager

You have to select objects on the Object Manager before you can manipulate, format, or edit them. You can select any object or group of objects using the mouse. Once you've selected an object on the Object Manager, you can use any of the tools and features to change its properties.

To select one object or group of objects

- On the Object Manager, click the object's or group's name tag.

To select multiple objects or groups of objects on a single layer

- Hold down Command, and click each of the name tags of the objects or groups of objects you want to select. Use the Shift to select a series of objects.

To select multiple objects or groups of objects on multiple layers

- You can select multiple objects by holding down Command and selecting objects on the same layer or different layers, providing that the Edit Across Layers option is enabled. For more information about working with multiple layers see “Working with multiple layers simultaneously” on page 286.

Moving and copying objects between layers

The Move To Layer and Copy To Layer commands let you move or copy a selection of objects to a new layer. When you use the Move To Layer command, CorelDRAW moves the object to the layer you select. When you use the Copy To Layer command, CorelDRAW creates a copy of the selection and places it on the layer you select.

If you move or copy an object to a layer below its current layer, the object becomes the top object on its new layer. Similarly, if you move or copy an object to a layer above its current layer, the object becomes the bottom object on its new layer.

To move an object to another layer



1. Select the object with the *Pick tool*.
2. On the Object Manager, click , and choose Move To Layer.
The Object Manager displays the Master Page Layer structure.
3. Click the name of the layer to which you want to move the object.

To move an object to a master page layer

1. On the Object Manager, click the object you want to move.
2. Drag the object to a Master layer.

To copy an object to another layer

1. Select the object with the Pick tool.
2. On the Object Manager, click , and choose Copy To Layer.
The Object Manager displays the Master Page Layer structure.
3. Click the name of the layer to which you want to copy the object.

The object now appears on two separate layers. You'll need to move the top copy of the object if you want to see the other copy (the two objects overlap exactly).



- You can also access the Move To Layer and Copy To Layer commands by holding down Control and clicking in the white space on the Object Manager. Hold down Command to select multiple objects or Shift to select a series of objects to move or copy between layers.
 - You can also move an object to another layer by selecting it with the Pick tool and dragging it to another layer on the same page.
-

Grouping objects using the Object Manager

The Object Manager lets you group objects on one layer quickly.

To group objects on the active layer

- On the Object Manager, click the object name that you want to group and drag over another object. The cursor changes to show that the objects will be grouped. Repeat this step to add more objects to the group.
-



- The Object Manager will list the number of objects that are grouped. To ungroup an object from a group, drag the object to the active layer or parent group.
 - You can't group objects that reside on different layers.
-

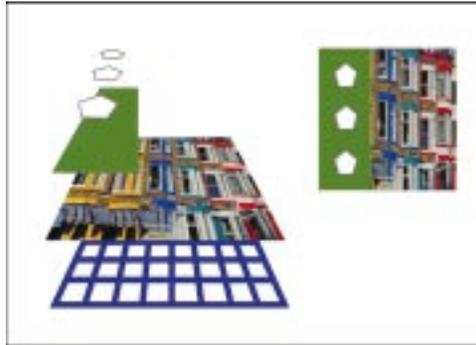


- You can access the Group, Ungroup, and Combine commands by holding down Control and clicking on a selection of objects.
-

Using layers to organize your drawing

The layering feature of the Object Manager gives you added flexibility for organizing and editing the objects in your drawings. Layers let you divide a drawing into multiple planes that each contain a portion of the drawing's contents. For example, if you're creating a poster or a logo, you can put all background objects on the bottom layer and all foreground objects on the top layers. Together, layers act as a hierarchy that helps determine the vertical arrangement of a drawing's components. In this arrangement, called the stacking order, objects on the top layer always overlay objects on the layer below, and so on.

.....
You can use layers to
separate and
organize different
elements in a
complex drawing.
.....



Each new drawing contains four default layers. These include the Master Grid, Master Guides, and Master Desktop layers, and one Layer (called Layer 1) for drawing. The Master Grid, Master Guides, and Master Desktop layers are containers for the grid, guidelines, and any objects outside the borders of the Drawing Page, respectively. You can create an Internet Layer by inserting an Internet object.

The Object Manager lets you create, rename, select, move, and delete layers in your drawing. You can also use the layer properties to view, print, or edit specific layers or combinations of layers. For more information about layer properties, see “Setting layer properties” on page 283.

Creating a layer

Use the Object Manager New Layer command to add new layers to help you organize the objects in your drawing. By default, each new layer has its editing, printing, and display properties enabled and its master layer property disabled. You can change these properties using the controls provided in the Layer Properties dialog box. For more information about layer properties, see “Setting layer properties” on page 283.

To add a new layer

- On the Object Manager, click , and choose New Layer.
The new layer becomes the active layer.

To add a new layer using the New Layer button



- On the Object Manager, click the *New Layer button*.



- You can also access the New Layer command by holding down Control and clicking the white space on the Object Manager.

Renaming a layer

The Rename command lets you assign a name to any layer you create. For example, you can choose a name that indicates a layer's contents, its position in the stacking order, or its relationship with the drawing's other layers.

To rename a layer

1. On the Object Manager, hold down Control, click a layer name, and choose Rename.
2. Type a new name for the layer, and press Return.

To rename a layer using the layer properties

1. On the Object Manager, hold down Control, click a layer name, and choose Properties.
2. In the Layer Properties dialog box, type a new name in the Layer Name box.



- You can't rename the Master Grid, Master Guides, Master Desktop layers and Internet layer.
-



- You can also rename a layer by clicking the highlighted layer name and typing in a new name or by holding down Control and clicking on its name tag and choosing Rename.
-

Changing the active layer

To use a layer in the drawing — for example, to add objects to it — you must first make the layer active. Once active, a layer is ready to receive any new objects you draw, import, or paste onto it. When you start a drawing, the default layer (called Layer 1) is the active layer.

To change the active layer

- On the Object Manager, choose the name of the layer you want to activate.



- You select a layer so that you can change its basic settings, such as making it visible, printable, and editable. As stated above, you activate a layer so that you can add objects to it in the drawing. For more information about setting layer properties, see “Setting layer properties” on page 283.

Reordering layers

The Master Page layer list on the Object Manager shows the order in which the layers are stacked in the active drawing. The first layer in the list is the top layer; the last layer in the list is the bottom layer. By changing the order of the layers in this list, you change their vertical order in the drawing. Accordingly, each layer’s contents move to reflect changes in this order.

To change a layer’s position in the stacking order

- In the layers list, drag the layer’s name tag to the desired position.
As you drag, an arrow indicates the layer’s current position.

Deleting a layer

The Delete command removes the layer that is highlighted on the Object Manager. When you delete a layer, you also delete all of the objects on it. Therefore, if you want to keep certain objects on the layer you’re deleting, you may want to move them to a different layer first.

To delete a layer

1. On the Object Manager, choose the name of the layer you want to delete.
2. Click , and choose Delete Layer.

If a layer contains objects on other pages, click OK to confirm that you want to delete the layer.



- You can’t delete a locked layer or the Master Grid, Master Guides, and Master Desktop layers.



- You can also delete a layer by holding down Control, clicking the layer, and choosing Delete.

Setting layer properties

The layer properties allow you to view, edit, or make a layer printable. They also allow you to place a layer's contents on every page in a multiple-page document. You can show or hide layer properties quickly by enabling or disabling them using the Master layer. You'll also find controls for locking layers to prevent accidental changes, or for overriding the full-color view of a layer so that its contents display as outlines of a specific color.

Showing and hiding a layer

You can choose to show or hide any layer in your drawing. By hiding certain layers, you make it easier to identify and edit the objects on other layers. You also reduce the time CorelDRAW needs to refresh your drawing when you edit it. You'll find this setting particularly effective in drawings that have many objects on multiple layers.

You can show or hide a layer using the Layer Properties dialog box or by clicking its Eye icon. You'll find an Eye icon beside each layer name on the Object Manager. When a layer is hidden, its Eye icon and the objects on that layer appear dimmed.

To show a layer

1. Hold down Control, click the layer, and choose Properties.
2. Enable the Visible check box.

To hide a layer

1. Hold down Control, click the layer, and choose Properties.
2. Disable the Visible check box.



- You can also enable or disable the Visible option by holding down Control and clicking a Layer on the Object Manager.
-

Locking and unlocking a layer

Locking a layer prevents accidental changes to its contents. When a layer is locked, the objects on it can't be selected or edited in any way. When you unlock a layer, you can make changes to any of the objects it contains as long as the objects themselves are not locked.

You can lock or unlock a layer using the Layer Properties dialog box or by clicking its Pencil icon. You'll find a Pencil icon beside each layer name on the

Object Manager. When a layer is locked, its Pencil icon and the objects on that layer appear dimmed.

To lock a layer

1. Hold down Control, click the layer, and choose Properties.
2. Disable the Editable check box.

To unlock a layer

1. Hold down Control, click the layer, and choose Properties.
2. Enable the Editable check box.



- You can lock and unlock individual, multiple or grouped objects using the Arrange menu. For more information see, “Locking and unlocking objects” on page 265.
- You can’t lock or unlock the Grid layer.



- You can also enable or disable the Editable option by holding down Control and clicking a Layer on the Object Manager.
-

Enabling and disabling the printing of a layer

CorelDRAW allows you to print selected layers of your drawing. If you enable a layer’s print setting, the layer and its contents appear in printed copies of the drawing. If you disable a layer’s print setting, the layer and its contents won’t appear when you print the drawing. You’ll find this feature particularly useful if you’re working on an elaborate drawing and you want to print specific layers for proofing.

You can enable or disable the printing of a layer using the Layer Properties dialog box or by clicking its Printer icon. You’ll find a Printer icon beside each layer name on the Object Manager. When printing is disabled for a layer, its Printer icon appears dimmed.

To enable printing for a specific layer

1. Hold down Control, click the layer, and choose Properties.
2. Enable the Printable check box.

To disable printing for a specific layer

1. Hold down Control, click the layer, and choose Properties.
2. Disable the Printable check box.



- If printing is disabled for a layer, the layer's contents will not display in full-screen previews. For information about full-screen previews, see "Using full-screen previews" on page 80.



- You can also enable or disable the Printable option by holding down Control and clicking a Layer on the Object Manager.

Creating a master layer

Master layers are layers whose contents appear on each page of a multi-page document. As a result, objects that occupy a master layer also appear on every page of the document. You'll find master layers particularly useful if you have an object (such as a corporate logo) that you want on each page of the document. By creating a master layer that contains the object, you won't have to place the object on every page manually.

Create a master layer if you want certain objects displayed on all pages of a document.



You can create a master layer by using the Layer Properties dialog box or by using the Layers menu option.

To create a master layer using the Properties dialog box

1. On the Object Manager, click the name of the layer you want to use as a master layer.
2. Hold down Control, click the layer, and choose Properties.
3. Enable the Master Layer check box.

To create a master layer

- Hold down Control, click the name of the layer that you want to use as a master layer and choose Master.

Working with multiple layers simultaneously

If you enable the Edit Across Layers command, you can edit objects on any unlocked layer. You can also move and copy objects between any layers that are unlocked.

If you disable the Edit Across Layers command, you can only work on the active layer and the Master Desktop layer. When you disable this command, you can't select objects or edit on inactive layers. You can, however, move and copy objects from the active layer to inactive layers. To edit objects on another layer when Edit Across Layers is disabled, you need to change the active layer.

To enable or disable the Edit Across Layers option

- On the Object Manager, click , and choose Edit Across Layers.

When enabled, the Edit Across Layers command has a check mark beside it.

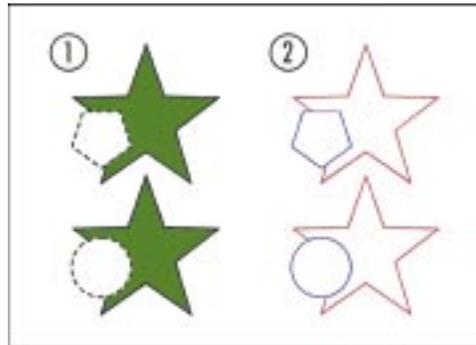


- You can also click the Edit Across Layers button on the Object Manager to enable and disable the editing capabilities.
-

Identifying objects on a layer using color override

When you enable the Override Full Color View check box, CorelDRAW displays the selected layer's contents as colored outlines. This color override doesn't affect the objects' true appearance; it only affects the way they appear on screen. This option is useful for identifying objects on different layers — for example, in a complex technical diagram — or even for changing the colors of the grid and guidelines.

You can use the Override Full-color View option to distinguish between objects on different layers.



To override a layer's fill and outline attributes

1. Hold down Control, click the layer, and choose Properties.
2. In the Layer Properties dialog box, enable the Override Full Color View check box.



3. Click the *Layer Color picker*.
4. Choose the color you want to use for the objects on the selected layer.

When you enable the Override Full Color View check box the object's outline appears in the color you choose.

To redisplay a layer's fill and outline attributes

1. Hold down Control, click the layer, and choose Properties.
2. In the Layer Properties dialog box, disable the Override Full Color View check box.

To change a layer color on a specific page

1. On the Object Manager, double-click the layer's color swatch on a specific page.
2. Choose a color from the list.

To change a layer color on all pages

1. On the Object Manager, double-click the layer's color swatch on a master page.
2. Choose a color from the list.

The layer color changes on all pages.

To apply the color override on a single page

1. Hold down Control, click the layer, and choose Properties.
2. In the Layer Properties dialog box, enable the Apply Layer Changes To The Current Page Only check box.



- In Wireframe or Simple Wireframe views, the object's outline always appears using the color override.
-

Defining master layers setup options

The Master Grid and Master Guides properties allow you to modify the settings for these layers. For more information about grids, rulers, and guidelines, see “Setting up your drawing” on page 37.

To set the Master Grid settings

1. On the Object Manager, click the Master Grid layer.
2. Hold down Control, click the layer, and choose Properties.
3. Click the Setup button.
4. In the Grid & Ruler Setup dialog box, modify the settings as required.

To set the Master Guidelines settings

1. On the Object Manager, click the Master Guides layer.
2. Hold down Control, click the layer, and choose Properties.
3. Click the Setup button.
4. In the Guidelines Setup dialog box, modify the settings as required.



9

WORKING WITH TEXT

The powerful text-handling capabilities in CorelDRAW let you apply both special graphical effects and sophisticated word-processing features to text. With the Text tool, you can create Artistic text for short lines of text to which you can apply graphical effects and create Paragraph text for larger bodies of text with greater formatting requirements.

Editing text

You have two options for editing text: editing in the Drawing Window and editing in the Edit Text dialog box. Other text editing features include spelling, user word lists, and automatic text correction.

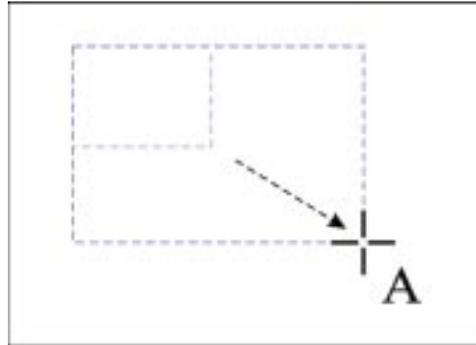
Creating effects with text

Because CorelDRAW treats Artistic text like an object, you can apply special effects to Artistic text such as extrusions, blends, envelopes, perspectives, lenses, PowerClip, and drop shadows.

Adding text

In CorelDRAW, you create both Paragraph text and Artistic text with the Text tool. If you click in the Drawing Window and start typing, you create Artistic text. However, if you add a Paragraph text frame first and then type in text, you create Paragraph text.

To add Paragraph text you must create a Paragraph text frame.



In documents where you plan to add a large amount of text, such as newspapers, brochures, and flyers, using Paragraph text is best. You have more formatting options with Paragraph text. For example, you can add bullets, indents, tabs, and columns. In documents where you plan to add single lines or phrases, such as titles or short descriptions, try using Artistic text. With Artistic text, you have more options for applying graphical effects such as blends, extrudes, and PowerClip objects.

Adding Paragraph text

When you're adding large amounts of text to a document, use Paragraph text. To create Paragraph text, you need to draw a Paragraph text frame first. There are two types of Paragraph text frames: fixed-size and automatically sized. When you add a frame of a fixed size, the frame you draw is the frame's size. If you type more text than the frame can hold, the frame size doesn't alter, and the text is cut off. If you choose to add a frame that sizes automatically, the frame size adjusts vertically according to the amount of text you type in it. Before drawing a frame that sizes automatically, you must enable the Expand And Shrink Paragraph Text Frames To Fit Text check box on the Paragraph page in the Preferences dialog box.

Typing text in the Paragraph text frame.





To add Paragraph text in fixed-sized frames

1. Click the *Text tool*.
2. Click anywhere in the Drawing Window, and drag to create a Paragraph text frame.
3. Type in the Paragraph text frame.



- When you create frames of a fixed size, you can automatically adjust the size of text to fill the frame. For more information see “Fitting text to a Paragraph text frame” on page 335.

To add Paragraph text in frames that expand and shrink as you type

1. Choose Edit, Preferences.
2. In the list of categories, double-click Text, and choose Paragraph.
3. Enable the Expand And Shrink Paragraph Text Frames To Fit Text check box.
4. Click OK.
5. Follow all of the steps from the previous procedure.

The frame increases in height as you type.

Adding Artistic text

You can use Artistic text to add short lines of text to your document, especially if you plan to work with special effects. Artistic text can be manipulated like other graphic objects. For example, you can apply drop shadows and envelopes. For more information about applying special effects to Artistic text, see “Creating effects with text” on page 354.



To add Artistic text

1. Click the *Text tool*.
2. Click anywhere in the Drawing Window, and type.

Converting one text type to another

You can convert one text type to the other type after you create it. You can't convert Paragraph text to Artistic text when

- the frame that contains the Paragraph text is linked to another frame

- the Paragraph text has special effects applied to it
- the Paragraph text overflows the frame that contains it

To convert Paragraph text to Artistic text



1. Select the Paragraph text frame with the *Pick tool*.
2. Choose Text, Convert To Artistic Text.

To convert Artistic text to Paragraph text

1. Select the Artistic text with the Pick tool.
2. Choose Text, Convert To Paragraph Text.



- You can also convert one text type to the other using the Convert Text button on the Property Bar.
- If the Paragraph text overflows the frame, you can change the font size so that the text fits the frame. For information see, “Fitting text to a Paragraph text frame” on page 335.

Changing the appearance of text on-screen

You can alter the appearance of text on your screen by using the Greeking and Smooth Edges Of Screen Font options. Greeking allows you to increase the redraw speed of text by simplifying its on-screen appearance. When you use the Greeking option, text is represented by a series of lines. You can specify the maximum size that your text must be in order to be greeked. You can make text readable again by choosing a higher greeking level or using Zoom.

The Smooth Edges Of Screen Fonts option smoothes the on-screen appearance of characters by filling jagged pixels with intermediate color or shades of gray to increase clarity. This process is also known as anti-aliasing.

To specify the size of text that will be greeked

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Type a value in the in the Greek Text Below box.

This specifies the number of pixels at which you want to start greeking text.



- Greeking does not affect the printed text.

To smooth edges of screen fonts

1. Follow steps 1 and 2 from the previous procedure.
2. Enable the Smooth Edges Of Screen Fonts check box.

Adding symbols

Enhancing your text with special characters, and symbols is easy in CorelDRAW. You can also add symbols as graphics, then create customized images by editing them like other graphic objects, or create background patterns for your document.

When you add symbols to your drawings, they are assigned the default outline and fill properties for graphic objects. You can change the default settings for graphics to suit your needs. For more information about styles, see “Working with styles” on page 50.

Keep in mind that you can make more symbol fonts available by adding them during a custom installation of CorelDRAW.

Adding symbols to your document

You can add symbols as text objects or as graphic objects. When you add a symbol to text, CorelDRAW treats the symbol as text. When you add a symbol as a graphic object, CorelDRAW treats the symbol as a curve; consequently, the symbol is a separate graphic object.

You can add symbols
as text or as a
graphic object.



You can embed graphic objects into Artistic text and Paragraph text. For more information, see “Embedding graphic objects in text” on page 355.



To add a symbol as a text object

1. Select the text (Artistic text or Paragraph text frame) with the *Text tool*.
2. Place the insertion point where you want to add the symbol.
3. Choose Tools, Symbols.
4. Choose a symbol font from the list.
5. Type a value in the Size box to change the symbol height, if required.
6. Double-click a symbol in the Sample window.

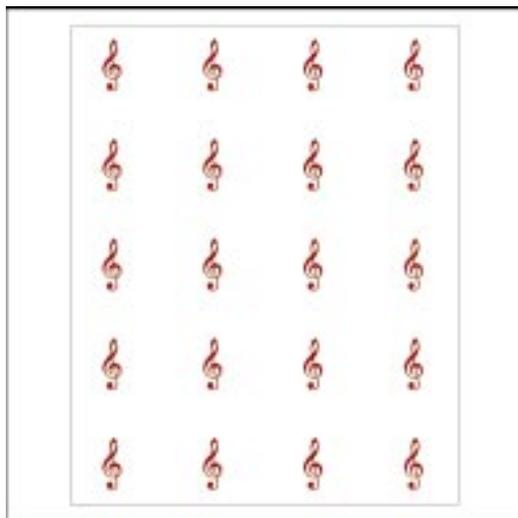
To add a symbol as a graphic object

1. Follow steps 3 to 5 from the previous procedure.
2. Choose a symbol from the Sample window, and drag it to the Drawing Page.

Creating a pattern with symbols

You can create simple background patterns with tiled symbols. Tiled symbols are arranged in rows and columns. You can specify the rows and columns spacing. Keep in mind that each symbol within the pattern is a separate object to which you can apply effects.

.....
You can tile symbols
to create a pattern
on your Drawing
Page.
.....



To create a pattern with symbols

1. Choose Tools, Symbols.
2. Choose a symbol category from the pop-up menu.
3. Choose a symbol from the Sample window.

4. Enable the Tile check box.
5. Drag the symbol to the Drawing Page.

To change the row and column spacing

1. Follow steps 1 to 4 from the previous procedure.
2. Click the Tile Options button.
3. Do one of the following:
 - Type values in the Horizontal and Vertical boxes to specify the spacing between symbols.
 - Enable the Identical Values check box to maintain equal spacing around a symbol.
4. Click OK, and drag the symbol to the Drawing Page.

Selecting text

In CorelDRAW, you need to select text before you perform any operation to it, including formatting, editing, moving, and resizing. The tool you use to select the character, line of Artistic text, or Paragraph text frame varies with the operation you want to perform.

When you select text, eight selection handles appear and an X appears in the center of the text object.

Select with this tool ...	To ...
Text tool	Apply formatting properties to text, change individual characters, and make changes that affect the whole text object
Pick tool	Apply a change that affects the whole text object or multiple text objects and move individual characters
Shape tool	Move individual characters and reshape characters that have been converted to curves

Selecting text with the Text tool

If you want to edit selected characters or paragraphs within a line of Artistic text or a Paragraph text frame, use the Text tool to highlight the characters or paragraphs you want to change. Unselected text remains unchanged.

.....
Selection handles and
a center X appear
when you select text.
.....



When you select a text object, eight selection handles and an X appears in the center of the object. By clicking on the center X, you can transform (i.e., move, size, rotate, skew, and mirror), apply special effects, and make global formatting changes to whole text objects. (For more information about transforming, see “Transforming objects” on page 135.) Special effects you can apply to Artistic text are perspective, envelopes, blends, extrudes, contours, lenses, drop shadows, and PowerClip objects. Special effects you can apply to Paragraph text are envelopes, drop shadows, and PowerClip objects.

To select specific text with the Text tool



1. Click the *Text tool*.
2. Click at the beginning or end of a word or sentence in the Artistic text or Paragraph text frame.
3. Drag the cursor across the text you want to select.

To select a whole text object with the Text tool

1. Click the Text tool.
2. Click the X that appears in the center of the text object.



- You can select a specific word by double-clicking it with the Text tool.
- Using the Pick tool, double-click the text you want to edit to enable the Text tool.

Selecting text objects with the Pick tool

When you select a text object (either a line of Artistic text or Paragraph text) with the Pick tool, you can move, scale, mirror, rotate, skew, and apply

formatting changes to it. For more information, see “Transforming objects” on page 135.

When you select either text types with the Pick tool, CorelDRAW treats them as graphic objects to which you can apply transformations, special effects, and global formatting changes. Special effects you can apply to Artistic text are perspective, envelopes, blends, extrudes, contours, lenses, drop shadows, three-dimensional text, and PowerClip objects. You can apply envelopes to Paragraph text because envelopes only affect the shape of the frame, not the text contained inside it.

Keep in mind that you can select multiple text objects by marquee selecting or holding down Shift as you click. If you select multiple text objects, the Property Bar displays text controls.

To select Artistic text with the Pick tool



- Using the *Pick tool*, click any Artistic text character to select the entire line.

To select Paragraph text with the Pick tool

- Using the Pick tool, click anywhere inside or on the Paragraph text frame to select the frame and its contents.

To select multiple text objects with the Pick Tool

- Do one of the following:
 - Hold down Shift, and click the text.
 - Marquee select the text.



- If you are in Wireframe view, or have a layer with color override enabled, you can only select the Paragraph text frame.

Selecting individual text characters with the Shape tool

When you select a text object (either a line of Artistic text or a Paragraph text frame) with the Shape tool, you can manipulate individual characters separately.

To select single characters with the Shape tool



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the text.

Character nodes appear next to each character.

3. Click the node to the left of a character to select it.

To select multiple characters with the Shape tool

1. Follow steps 1 and 2 from the previous procedure.
2. Do one of the following:
 - Hold down Shift, and click the nodes of each character you want to select.
 - Marquee select the character nodes.



- To constrain characters to the baseline as you move them, hold down Command.
-

Formatting Text

Formatting options for specifying font type, weight, size, spacing, and other character properties are available for both Artistic text and Paragraph text. For Paragraph text, you also have options for adding tabs, indents, bullets, automatic hyphenation, and drop caps.

CorelDRAW provides several ways to format text. You can

- change the default settings of the Text tool to specify formatting options before you begin typing
- change the formatting characteristics of text already included in your document
- use text styles and templates if you're working with a large amount of text and you want to format it quickly and consistently

You can format text using the Property Bar or the Format Text dialog box. Many of the formatting options you use most often are available on the Property Bar. For more advanced options, use the Format Text dialog box.



- You can customize toolbars to add buttons for the commands and options you use frequently. For more information, see “Customizing toolbars” on page 588.
-

Applying character properties

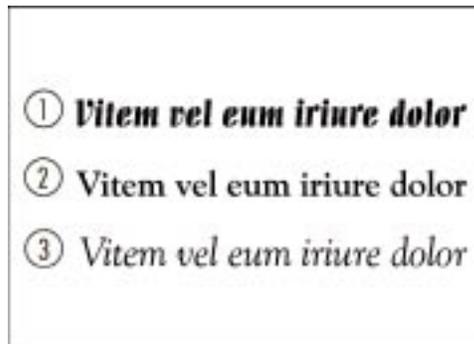
For both Artistic text and Paragraph text, you can specify the following character properties:

- font type, weight, size, and other font properties such as underlining, overscore, and strikethrough
- character, line, and word spacing
- text case
- horizontal justification

Specifying font, size, and weight

You can specify font, size and weight (e.g., italic, bold) properties.

You can change the (1) font type, (2) apply bold, or (3) italics to text.



To specify font, size, and weight

1. Do one of the following:



- Select the text with the *Pick tool* to format the whole text object — a line of Artistic text or all paragraphs in the Paragraph text frame.



- Select the text with the *Text tool* to select specific characters.

2. Choose Text, Format Text.

3. Choose the Font tab.

4. Do one of the following:

- Choose a font type from the Fonts pop-up menu.
- Type a value in the Size box.
- Choose a style from the Style pop-up menu.



- If someone else plans to view your file, each font you use in your document must also be installed on their machine. If these aren't installed, when the document is opened, CorelDRAW substitutes the font using Panose. For more information about Panose, see “Substituting for unavailable fonts” on page 26. To avert this problem, you can save the font with your document by enabling the Embed Fonts Using TrueDoc in the Save Drawing dialog box. Choose File, Save As, and enable the Embed Fonts Using TrueDoc check box.

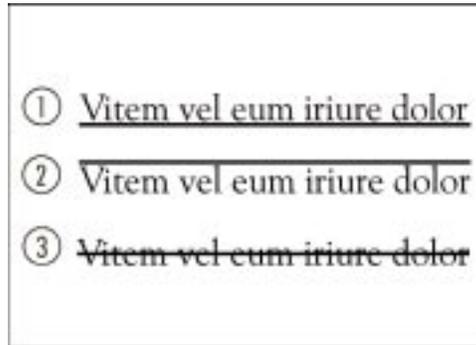


- Because some fonts do not support bold and italic properties, these options are not always available.
- You can also use the Property Bar to change font, size, and weight properties.

Adding and modifying underline, overscore, and strikethrough text formats

You can apply underlines, overscores, and strikethroughs and change any of the line styles.

You can apply (1) underlines, (2) overscores, and (3) strikethroughs to text.



To underline, overscore, and strikethrough

1. Do one of the following:



- Select the text with the *Pick tool* to format the whole text object — a line of Artistic text or all paragraphs in the Paragraph text frame.



- Select the text with the *Text tool* to select specific characters.

2. Choose Text, Format Text.
3. Choose the Font tab.

4. Do one or all of the following:
 - Choose a line style from the Underline pop-up menu.
 - Choose a line style from the Overscore pop-up menu.
 - Choose a line style from the Strikethru pop-up menu.



- You can also underline text using the Underline button on the Property Bar.

To change a preset line thickness

1. Follow steps 1 to 3 from the previous procedure.
2. Click the Edit button next to the line type — Underline, Overscore, or Strikethru.
3. Do one or all of the following:
 - Type a value in the Thickness box to specify the line width.
 - Type a value in the Baseline Shift box to specify the amount of space between the line and text.
 - Choose a unit value from the Units pop-up menu.

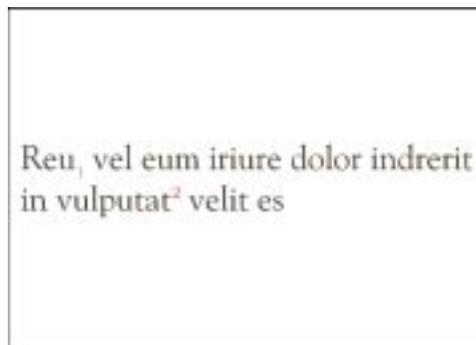
To remove underline, overscore, or strikethrough

1. Follow steps 1 to 3 from the “To underline, overscore, and strikethrough” procedure.
2. Choose None from the Underline, Overscore, or Strikethru pop-up menu.

Making text superscript or subscript

You can make text appear in superscript or subscript for scientific notation and other purposes.

You can apply (1) subscript and (2) superscript to font.



To make text superscript or subscript

1. Do one of the following:



- Select the text with the *Pick tool* to format the whole text object — a line of Artistic text or all paragraphs in the Paragraph text frame.



- Select the text with the *Text tool* to select specific characters.

2. Choose Text, Format Text.

3. Chose the Font tab.

4. Choose Superscript or the Subscript from the Position pop-up menu.

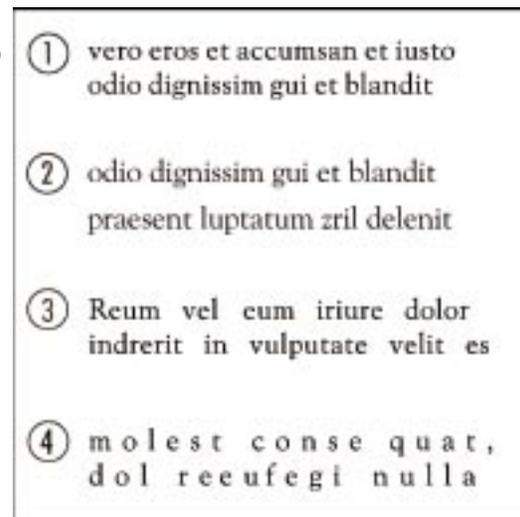


- You can also select character nodes with the Shape tool, and click the Superscript button or the Subscript button on the Property Bar.

Changing case

You can change text case without retyping the text. You can opt for lowercase, uppercase, small caps or variations, which include sentence case, title case, or toggle case.

You can change the case to make text (1) lowercase, (2) all caps, (3) small caps, (4) sentence case, or (5) toggle case.



To change text case



1. Select the text with the *Text tool*.
2. Choose Text, Change Case.
3. Enable one of the following text case buttons:

- Sentence Case — capitalizes the initial letter of the first word in each sentence
- Lowercase — makes all text small letters
- Uppercase — capitalizes all letters
- Title Case — capitalizes the initial letter of every word
- Toggle Case — reverses the case; all capital letters become lowercase and all lowercase letters become uppercase

To make text small caps or all caps



1. Do one of the following:
 - Select the text with the *Pick tool* to format the whole text object — a line of Artistic text or all paragraphs in the Paragraph text frame.
 - Select the text with the Text tool to select specific characters.
2. Choose Text, Format Text.
3. Choose the Font tab.
4. Choose Small Caps or All Caps from the Uppercase pop-up menu.



- By selecting nodes with the Shape tool, you can access the All Small Capitals button or the All Capitals button on the Property Bar.

Aligning Artistic text horizontally

Aligning Artistic text is different from aligning Paragraph text. When you align Paragraph text, you align text with respect to the frame that contains it. (For more information, see “Aligning Paragraph text” on page 320.) However, when you align Artistic text, it is aligned with the point you first clicked when you entered the text. If characters have not been shifted horizontally, applying No Alignment produces the same result as applying Left Alignment.

To align Artistic text using the Format Text dialog box



1. Select Artistic text with the *Pick tool*.
2. Choose Text, Format Text.
3. Choose the Align tab.
4. Enable one of the following buttons in the Alignment section:
 - None

- Left
- Center
- Right
- Full Justify
- Force Justify



- You can only align Artistic text horizontally.
-



- You can also align Artistic text by selecting text with the Text tool and clicking one of the Alignment buttons on the Property Bar.
-

Specifying text spacing

For both Artistic text and Paragraph text, you can specify the patterned spacing between characters, words, and lines with precise values. For Paragraph text, you can also specify spacing between paragraphs.

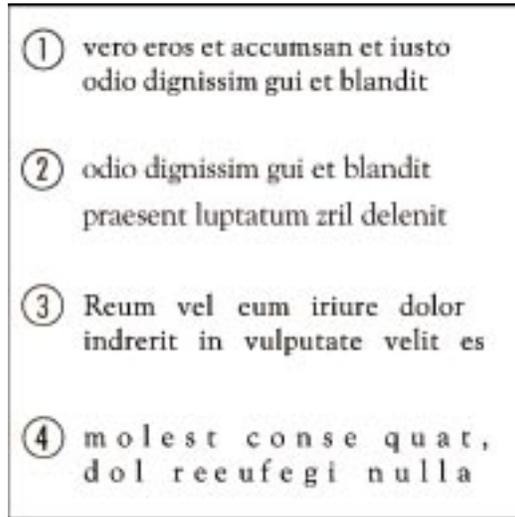
You can also kern Artistic and Paragraph text characters to reduce or enlarge the white space between selected characters. By kerning text, you can balance the optical space with other letters in a word or line. Kerning differs from spacing in that only the white space between the specified characters is affected.

CorelDRAW offers different options for specifying text spacing, depending on the tool you use to select the text. Selecting with the Text tool or the Pick tool enables you to adjust spacing between characters, words, lines, and paragraphs. Selecting with the Text tool also enables you to adjust kerning between a range of characters. Selecting with the Shape tool allows you to specify horizontal and vertical spacing with precise values using the Property Bar.

Specifying character, word, and line spacing with precision

You can change the spacing between characters, words, and paragraphs with precision for both Artistic text and Paragraph text.

.....
You can adjust the
(1) default spacing of
text by changing the
(2) interline, (3)
interword, and (4)
intercharacter
spacing.
.....



When you change line spacing for Artistic text, the spacing applies to lines of text with a carriage return between them. For Paragraph text, the space applies to lines of text within the same paragraph.

When you select a Paragraph text frame and change character spacing, the changes you make apply to all paragraphs in the frame, as well as the interword spacing.

To change the spacing between characters with precision



1. Select the text with the *Pick tool*.
2. Choose Text, Format Text.
3. Choose the Space tab.
4. Type a value for the amount of space that you want to insert between individual characters in the Character box.

This value represents a percentage of the space character (the space inserted when you press Spacebar). The maximum percentage value is 2000; the minimum percentage value is -100.

To change spacing between words with precision

1. Follow steps 1 to 3 from the previous procedure.
2. Type a value for the amount of space that you want to insert between words in the Word box.

This value represents a percentage of the space character (the space inserted when you press Spacebar). The maximum percentage value is 2000; the minimum percentage value is 0.

To change spacing between lines with precision

1. Follow steps 1 to 3 from the “To change the spacing between characters with precision” procedure.
2. Type a value for the amount of space you want to add between the lines of text in the Line box.

This value represents a percentage of the character height. The maximum percentage value is 2000; the minimum percentage value is 0.

If necessary, change the units to Points or Percentage (%) Of Point (Pt.) Size in the pop-up menu beside the Line box.

Specifying character, word, line, and paragraph spacing using the Shape tool

You can adjust the amount of space before and after text characters, words, lines of text, and paragraphs using the Shape tool. When you adjust spacing with the Shape tool, the size of the Paragraph text frame remains the same.

Interactive Spacing arrows allow you to apply spacing to the whole text object. Nodes allow you to adjust the spacing of specified characters.



To adjust character spacing using the Shape tool



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the text — either a line of Artistic text or a Paragraph text frame.
3. Drag the *Interactive Horizontal Spacing arrow* to the right to increase, or to the left to decrease, the spacing between all characters in the text object.

To adjust spacing between words using the Shape tool

1. Follow steps 1 and 2 from the previous procedure.
2. Hold down Command and drag the Interactive Horizontal Spacing Arrow to the right to increase, or to the left to decrease, the spacing between all words in the text object.

To adjust spacing between lines using the Shape tool



1. Follow steps 1 and 2 from the “To adjust character spacing using the Shape tool” procedure.
2. Drag the *Interactive Vertical Spacing arrow* up to decrease, or down to increase, the interline spacing.

To adjust spacing before paragraphs using the Shape tool

1. Open the Shape Edit flyout, and click the Shape tool.
2. Select a Paragraph text frame.
3. Hold down Command, and drag the Interactive Horizontal Spacing arrow down to increase, or up to decrease, the spacing before paragraphs.

Specifying the character, interword, and line spacing using the Pick tool

You can use the Pick tool to alter the spacing between words and characters, as well as between lines in Paragraph text frames. You change the spacing by dragging the interactive spacing arrows that appear when you click the frame. When you drag these arrows, you resize the frame. The amount you space the text is proportional to the amount you size the frame.

The Interactive Horizontal Spacing arrow increases and decreases the spacing between characters and words. The Interactive Vertical Spacing arrow increases and decreases the spacing between lines. This is also called leading.

To adjust spacing between words and characters



1. Select the Paragraph text frame with the *Pick tool*.
2. Drag the Interactive Horizontal Spacing arrow to the right to increase, or left to decrease, the spacing.



- You can adjust the interword spacing by holding down Command, and dragging the Interactive Horizontal Spacing arrow with the Pick tool.

To adjust spacing between all lines

1. Select the Paragraph text frame with the Pick tool.
2. Drag the Interactive Vertical Spacing arrow up to increase, or down to decrease, the spacing.



- You can also use the Text tool to select Paragraph text frames and adjust the leading and spacing between words and characters.



- You can adjust the interparagraph spacing by holding down Command, and dragging the Interactive Vertical Spacing arrow with the Pick tool.

Showing and hiding interactive spacing arrows

The Interactive Horizontal Spacing and Interactive Vertical Spacing arrows are displayed by default when you select Paragraph text frames with the Pick tool or the Text tool. You can change the default setting for the Text tool so that the interactive spacing arrows are hidden when you select frames. However, you can't change the default setting for the Pick tool.

To show or hide the interactive spacing arrows

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Do one of the following:
 - Enable the Show Selection Handles While Editing check box to show the interactive spacing arrows.
 - Disable the Show Selection Handles While Editing check box to hide the interactive spacing arrows.



- You can reposition frames using the Text tool by clicking the center X and dragging. However, when you disable the Show Selection Handles While Editing check box, you also hide the center X. Consequently, you can no longer position the frame with the Text tool.

Using range kerning

Range kerning adjusts the spacing between a selected series of letter pairs to improve their appearance on the printed page. You can apply range kerning to both Artistic text and Paragraph text characters.

To kern text using the Format Text dialog box



1. Using the *Text tool*, select two or more characters of Paragraph text or Artistic text.

2. Choose Text, Format Text.
3. Choose the Font tab.
4. Type a value for the amount of space you want to add between these characters in the Range Kerning box.

This value represents a percentage of the space character (the space inserted when you press Spacebar). The maximum percentage value is 1000; the minimum percentage value is -100.

To kern text interactively using the Shape tool



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the text.
3. Press Command, and select the node to the left of the character you want to kern.
4. Drag the text object to adjust the spacing as required.



- You can also kern Artistic text and Paragraph text characters interactively with the Pick tool. To kern Artistic text, select the text with Pick tool, hold down Z, and drag the node to the left of the character you want to kern. To kern Paragraph text, select the text with the Pick tool, hold down Z, move the cursor over the nodes to display them, and drag the node to the left of the character you want to kern. Nodes are located on the left side of characters, just below the baseline.
- To constrain kerning to the baseline, hold down Shift as you drag the object.

Displaying character outlines when spacing

Using the mouse, you can set the threshold to determine when CorelDRAW shows the outlines of characters kerned. If the number of characters selected is less than or equal to the value specified on the Text page in the Preferences dialog box, CorelDRAW displays their outlines as they are being kerned. The default value is 25 characters.

To specify the number of characters to display during manual kerning

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Type a value in the Display box.

Specifying spacing before and after paragraphs with precision

You can adjust the amount of space before and after paragraphs. You can select only those paragraphs you want to change, or specify the spacing for all paragraphs in a Paragraph text frame.

To specify the amount of space before or after a paragraph with precision

1. Do one of the following:



- Select the frame with the *Pick tool* to format all paragraphs in the frame.



- Select the text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.

3. Choose the Space tab.

4. Do any of the following:

- Type a value in the Before Paragraph box to specify the amount of space you want before each paragraph.
- Type a value in the After Paragraph box to specify the amount of space you want after each paragraph.

This value represents a percentage of character height for the chosen font.



- You can adjust the spacing before and after paragraphs in Paragraph text frames only.



- You may find it useful to turn on the nonprinting paragraph markers to help you identify paragraphs more readily. For more information about nonprinting characters, see “Displaying and specifying options for nonprinting characters” on page 344.
- You can add a soft return by pressing Shift and Return. This moves the cursor to the following line without creating a new paragraph.

Shifting characters horizontally and vertically

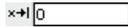
You can adjust the vertical and horizontal spacing of individual or multiple Artistic and Paragraph text objects. If you decide to remove the vertical shift, use the Align To Baseline command to return the text to its original vertical position. Use the Straighten command to return text to its horizontal and vertical position. For more information, see “Returning vertically shifted

characters to the baseline” on page 311 and “Straightening shifted and rotated characters” on page 313.

To shift characters horizontally



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the text.
3. Select the nodes of the characters you want to shift.
4. Type the horizontal shift value (a percentage of the point size) in the *Horizontal Shift box* on the Property Bar, then press Return.



Negative values move the characters to the left; positive values move the characters to the right.

To shift characters vertically

1. Follow steps 1 to 3 from the previous procedure.
2. Type the vertical shift value (a percentage of the point size) in the *Vertical Shift box* on the Property Bar, then press Return.



Positive values move the characters up; negative values move the characters down.



- You can also shift characters vertically by dragging their nodes with the Shape tool.
- You can also shift Artistic text characters horizontally by selecting text with Pick tool, holding down Z, and dragging the nodes to the left of the character.
- You can select multiple characters with the Shape tool or the Pick tool, by holding down Shift as you select each character’s node.

Returning vertically shifted characters to the baseline

You can reposition text which has been vertically shifted to the baseline.

To return a vertically shifted character to the baseline



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the nodes to the left of the character.
3. Choose Text, Align To Baseline.



- If you want to remove both horizontal and vertical shifts, you must straighten the text. For more information, see “Straightening shifted and rotated characters” on page 313.

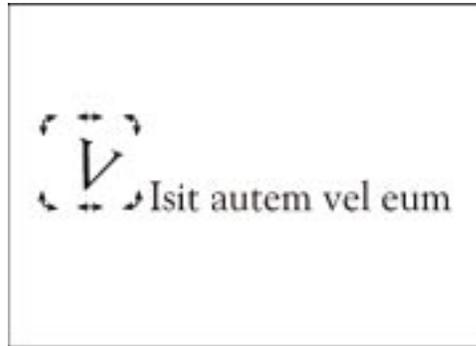


- You can select multiple characters by holding down Shift as you select nodes.

Rotating characters

You can rotate Artistic text and Paragraph text with precision.

Rotating a character adjusts the appearance of text.



To a rotate character



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the text.
3. Select the node to the left of the character you want to rotate.



4. Type a value in the *Angle of Rotation box* on the Property Bar, then press Return.

Negative values rotate characters clockwise; positive values rotate characters counterclockwise.



- If you want to remove the rotation, you must straighten the text. For more information, see “Straightening shifted and rotated characters” on page 313.



- To select multiple characters, hold down Shift as you select nodes.

Straightening shifted and rotated characters

You can revert text characters that you've angled, shifted horizontally, and shifted vertically.

To straighten shifted and rotated characters

1. Do one of the following:



- Select the text with the *Shape tool* on the Shape Edit flyout.



- Select the text with the *Pick tool*.

2. Choose Text, Straighten Text.

Specifying options for font and symbol lists

The Font List pop-up menu on the Property Bar displays the available fonts and symbols. You can specify how you want the pop-up menus of fonts and symbols to appear. For example, you can display all of the available fonts or only those fonts that are applied to the text used in the current document.

Choosing font and symbol display options

Options for displaying fonts and symbols lists include: displaying the contents of fonts and symbols lists, displaying font samples, specifying the number of fonts to display in the pop-up menu, and displaying current fonts only.

To customize the contents of the font list

1. Choose Edit, Preferences.

2. In the list of categories, double-click Text, and choose Fonts.

3. In the Font List Contents section, enable any of the following check boxes for the font and symbol groupings you want displayed in the font pop-up menu on the Property Bar:

- Show TrueType Fonts
- Show Type 1 Fonts
- Show TrueType Symbols
- Show Type 1 Symbols

4. Do any of the following:

- Enable the Show Font Sample In Drop Down Fonts Lists check box to show samples in the fonts pop-up.

- Enable the Show Document Fonts Only check box to show only fonts used in the current document.
- Type a new value in the Display The Most Recently Used Fonts box to specify the number of recently used fonts displayed in the fonts pop-up menu.

To specify the contents of the symbols list

1. Follow steps 1 and 2 from the previous procedure.
2. In the Symbol List Contents section, enable any the following check boxes for the symbol and font groupings you want displayed on the Symbols Palette:
 - Show TrueType Fonts
 - Show Type 1 Fonts
 - Show TrueType Symbols
 - Show Type 1 Symbols

Changing default text settings

Text you add to your documents has a specific set of formatting properties by default. You can change any of these properties and you can change the default formats for text you type in the active document or for all subsequent documents. You can also change the default units of measurement.



- If someone else plans to view your file, each font you use in your document must also be installed on their machine. If these aren't installed, when the document is opened, CorelDRAW substitutes the font using Panose. For more information about Panose, see “Substituting for unavailable fonts” on page 26. To avert this problem, you can save the font with your document by enabling the Embed Fonts Using TrueDoc in the Save Drawing dialog box. Choose File, Save As, and enable the Embed Fonts Using TrueDoc check box.

Changing default formatting properties for the current document

You can change the default formatting properties of Artistic text and Paragraph text for the current document. By changing the default properties of text, you change the default style. As a result, when you add subsequent text, these new properties automatically apply. If you apply various properties to your text, you may want to create a series of new styles.

Additionally, you can change the default format properties for new documents so that your custom styles are available for future sessions. For more information about styles, see “Working with styles” on page 50.

To change default formats for the current document

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Text, Format Text.
3. Enable one or both of the following check boxes to specify the text type for which you want to change default formatting properties:
 - Artistic check box
 - Paragraph check box
4. Click OK.
5. Choose the properties (i.e., the font, size, or weight) that you want to assign as the new defaults.

For more information, see “Specifying font, size, and weight” on page 299.

Changing default formatting properties for new documents

You can use the Graphic And Text Palette to change the default formatting properties for new documents you create in CorelDRAW.

To change text formatting defaults for all new documents

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Text, Format Text.
3. On the Font, Align, and Space pages, choose the properties you want to assign.
4. Click OK.
5. Enable one or both of the following check boxes to specify the text type for which you want to change default formatting properties:
 - Artistic check box
 - Paragraph check box
6. Click OK.
7. Choose Tools, Graphic And Text Styles.
8. On the Graphic And Text Palette, click , Template, Save As Default For New Documents.

Changing default text units

By default, the units of measurement for text is points. You can change this setting for the active and all subsequent documents you create.

To change default text units

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Choose the units of measurement from the Default Text Units pop-up menu.

Customizing Artistic text

You might want to customize characters in a line of Artistic text in a project, such as a logo design.

To modify characters, you need to first convert Artistic text to single line and curve objects with the Convert to Curves command. You can then use the Shape tool to add, delete, or move the nodes that comprise a character to alter the shape. For more information about shaping, modifying, and deleting nodes, see “Drawing and shaping objects” on page 83.

After you convert Artistic text to curves, text commands are no longer available for it. The converted object prints as curves and not as text using your printer fonts.

Converting Artistic text to curves

By converting Artistic text to curves, you can manipulate the individual nodes to change the shape of each character. Converting text to curves ensures that the appearance of the fonts used in your drawing are not compromised when the file is viewed by another user.

To convert Artistic text to curves



1. Select the Artistic text with the *Pick tool*.
2. Choose Arrange, Convert To Curves.



- You can convert Artistic text to curves by selecting text with the Pick tool and clicking the Convert To Curves button on the Property Bar.
 - If you don't want to convert the text to curves, and you want to ensure that other users can view them, you can save the font with your document. Choose File, Save As, and enable the Embed Fonts Using TrueDoc check box.
-

Applying paragraph formatting

With Paragraph text, you can specify all character properties and paragraph formatting options. Paragraph properties include:

- columns
- tabs and indents
- horizontal and vertical alignment
- bullets
- drop caps
- automatic hyphenation
- spacing before and after paragraphs
- additional options for the full and force justify horizontal alignment settings

For more information about applying character properties to Paragraph text, see “Applying character properties” on page 299.

Adding columns in Paragraph text frames

Columns effectively lay out text-intensive documents in a highly accessible format, especially in newspapers, magazines, and newsletters. You can create columns of equal or varying widths and gutters. When you add, edit, or delete columns, you can maintain the width of the Paragraph text frame and resize the columns or you can maintain the width of the columns and resize the frame.

- create columns of equal or varying widths and gutters
- maintain the width of the Paragraph text frame
- maintain the width of the columns

Adding and editing columns of equal widths

With Paragraph text, you can create columns of equal or varying widths and spacing. After you add columns, you can change the column and gutter

widths interactively in the Drawing Window using the Text tool. When you adjust the column width, the gutter width changes proportionately.

You can create columns of equal widths.



To add columns of equal widths



1. Using the *Pick tool*, select the Paragraph text frame to which you want to add columns.
2. Choose Text, Format Text.
3. Choose the Frames And Columns tab.
4. Type a value in the Number Of Columns box.
5. Enable the Equal Column Width button to create columns and gutters of equal widths.

To fix the current frame width while adding or deleting columns

1. Follow steps 1 to 3 from the previous procedure.
2. Click the Maintain Current Frame Width button.
3. Follow steps 4 and 5 from the previous procedure.

When you add or delete columns, the column widths adjust to fit the width of the frame.

To maintain the current column width while adding or deleting columns

1. Follow steps 1 to 3 from the “To add columns of equal widths” procedure.
2. Enable the Automatically Adjust Frame Width button.
3. Follow steps 4 and 5 from the “To add columns of equal widths” procedure.

When you add or delete columns, the current column width remains fixed while the width of the frame adjusts automatically.



To edit columns and gutters of equal widths interactively

1. Select the frame with the *Text tool*.
2. Do one of the following:
 - Position the cursor over a side selection handle to adjust the column and gutters width proportionately.
 - Position the cursor over a frame edge to adjust the column and gutters width proportionately.
 - Position the cursor over a column border inside the frame to alter the gutter width.

The cursor changes to a double-sided arrow.

3. Drag to alter the column and border widths.

Adding columns of varying widths

You can create columns of varying widths and spacing in Paragraph text frames by specifying the width of the columns and gutters in the Format Text dialog box. You can also alter column and gutter widths interactively using the Text tool. When you adjust the column width interactively, you must drag a frame edge or a border inside the frame to adjust the width of a column. If you use a selection handle, all columns are adjusted equally. Keep in mind that when you increase or decrease a gutter width interactively, you also increase or decrease the width of the adjacent column.



To add columns of varying widths

1. Using the *Pick tool*, select the Paragraph text frame to which you want to add columns.
2. Choose Text, Format Text.
3. Choose the Frames And Columns tab.
4. Type a value in the Number Of Columns check box.
5. Disable the Equal Column Width check box.
6. Type a value in the Width box.
7. Type a value in the Gutter box to indicate the amount of space you want between the columns.



- You can edit columns and gutters by dragging a frame edge or a column border with the Text tool.

Adjusting paragraph alignment

Aligning Paragraph text is different from aligning Artistic text. When you align Artistic text, it is aligned according to the point where you started typing. When you align Paragraph text, however, you are lining up text according to the Paragraph text frame. You can align all paragraphs or a select few within a Paragraph text frame horizontally. You can also align all paragraphs in the columns of a selected Paragraph text frame vertically.

Aligning Paragraph text

You can horizontally align all paragraphs, or select paragraphs within a Paragraph text frame. You can also vertically align all columns within a frame.

To align Paragraph text horizontally

1. Do one of the following:



- Select the frame with the *Pick tool* to format all paragraphs in the frame.



- Select the text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.

3. Choose the Align tab.

4. In the Alignment section, enable one of the following buttons:

- No Alignment
- Left Alignment
- Center Alignment
- Right Alignment
- Full Alignment
- Force Full Alignment

To align the columns in a Paragraph text frame vertically

1. Select the frame with the Pick tool.

2. Choose Text, Format Text.

3. Choose the Frames And Columns tab.

4. Choose an option from the Vertical Justification pop-up menu.



- You can also align Paragraph text horizontally using the Property Bar.
- You can align multiple Paragraph text frames by holding down Shift and selecting the frames with the Pick tool. Choose Arrange, Align And Distribute, choose the Align tab, and enable the check box that represents the method of alignment you want to apply.

Applying drop caps to paragraphs

Drop caps — the initial letter of a paragraph is enlarged and inset into the body of text — are an effective way to attract a reader’s eye to the beginning of a chapter or paragraph because they add graphic interest to the page. To make the drop cap call even more attention, you can customize it by changing the font or color or by adding a border.

Adding drop caps

Within a Paragraph text frame, you can effectively create an eye-catching chapter or paragraph by adding a drop cap.

Paragraph text with a drop cap.



To create customized drop caps using the Format Text

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Effects tab.
4. Choose Drop Cap from the Effect Type pop-up menu.
5. Click one of the following in the Indents section:

- Dropped, to wrap text around the dropped letter
 - Hanging Indent, to offset the initial letter away from the body of text
6. Type a value in the Dropped Lines box to specify the number of lines to appear beside the dropped letter.
 7. Type a value in the Distance From Text box to specify the amount of space you want between the dropped letter and the body of text.



- You can add a drop cap by selecting a frame with the Text tool, and clicking the Show/Hide Drop Cap button on the Property Bar.

Applying tabs to paragraphs

Tabs are left-aligned by default. You can change the default tab alignment and set the amount of space that is inserted when you press Tab. In addition, you can set leader tabs. A leader tab automatically creates dots that proceed the tab. Trailing leader tabs are often used in tables and lists, such as tables of contents and indexes.

Adding tabs

Within a Paragraph text frame, you can add center, right, or decimal tab stops. You can also set tabs at regular intervals.

To add tabs

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.

3. Choose the Tabs tab.

4. Click the Add Tab button.

A row is added to the bottom of the list.

5. Click the new cell in the Tabs column, and type a value.



- You can quickly add tabs by selecting the frame with the Text tool, and clicking the horizontal ruler to add a tab at the point you click.

To set tabs at regular intervals

1. Follow steps 1 to 3 from the previous procedure.
2. Type a value in the box beside the Set Tabs Every button.
3. Click the Set Tabs Every button to add tabs at the interval you specified.



- Before you set tabs, you may want to delete all default tab stops. To delete all tabs, click the Delete All button.

Specifying tab alignment and leader tabs

You can set up tabs to ensure straight margins for Paragraph text in your document. By default, tabs are left aligned and are unleaded. You can change the alignment to right, center, or decimal and specify the trailing leader character. Trailing Leader tabs are often used for tables and lists such as a table of contents.

You can set trailing leader tabs.

Visit autem.....	21
in hendrerit.....	22
in vulputate.....	23
Lorem ipsum.....	24
nulla facilisi.....	25
duis autem.....	26

To change the alignment of tabs

1. Do one of the following:
 - Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.
 - Select the Paragraph text with the *Text tool* to select specific paragraphs.
2. Choose Text, Format Text.
3. Choose the Tabs tab.
4. Click a cell in the Alignment column, and choose an alignment option from the pop-up menu.



To add tabs with trailing leader characters

1. Follow steps 1 to 3 from the previous procedure.
2. Enable a check box in the Leadered column.

To change the trailing leader character

1. Follow steps 1 to 3 in the “To change the alignment of tabs” procedure.
2. Do one of the following to specify a leader character:
 - Type a character in the first Character box.
 - Type a value in the second Character box.

To decrease or increase space between trailing leader tab characters

1. Follow steps 1 to 3 in the “To change the alignment of tabs” procedure.
2. Type a value from 0 to 10 in the Spacing box.

Lower values decrease and higher values increase the spacing between leader characters.

Removing tabs

You can remove all or some tabs from a Paragraph text frame or from a selected paragraph.

To remove tabs

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Tabs tab.
4. Click a cell in the Tab column.
5. Do one of the following:
 - Click the Delete Tab button the tab.
 - Click the Delete All button to remove all of the tabs.



- You can remove a tab by selecting the frame with the Text tool and dragging the tab marker from the horizontal ruler to the Drawing Page.

Specifying paragraph indentation

You can adjust the space between a Paragraph text frame and its text by indenting. You can indent an entire paragraph, the first line of a paragraph, or indent all but the first line of a paragraph to create a hanging indent.

Adding indents

Within Paragraph text frames, you can indent the first line of a paragraph, all the lines below the first line of a paragraph, or an entire paragraph. You can also indent an entire paragraph from the right margin.

To indent the first line of a paragraph

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Align tab.
4. Type a value in the First Line box.

To create a hanging indent

1. Follow steps 1 to 3 from the previous procedure.
2. Type a value in the Left box.

To indent an entire paragraph

1. Follow steps 1 to 3 from the “To indent the first line of a paragraph” procedure.
2. Type the same values in the First Line box and the Left box.



- You can indent an entire paragraph by selecting it with the Text tool and clicking the Increase Indent button on the Property Bar.
 - You can indent a paragraph by dragging the indent markers on the horizontal ruler.
-

To right indent all paragraphs

1. Follow steps 1 to 3 from the “To indent the first line of a paragraph” procedure.
2. Type a value in the Right box.

Adjusting and removing indents

You can increase or decrease indents using the Property Bar and the Format Text dialog box. Using the Format Text dialog box, you can apply a precise indent and remove indents.

To increase or decrease an indent

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Align tab.
4. Type the same values in the First Line box and the Left box.

To remove indents

1. Follows steps 1 to 3 from the previous procedure.
2. Type 0 in the First Line, Right, and Left boxes.



- You can adjust indents by selecting Paragraph text and clicking the Increase Indent button and Decrease Indent button on the Property Bar.
-

Adding bullets to paragraphs

Bulleted lists are effective for presenting nonsequential, parallel groups of information in a consistent format. If you are creating several bulleted lists,

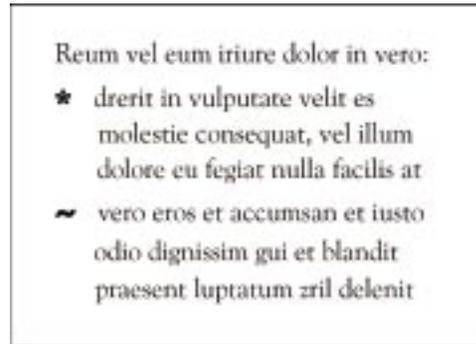
you may want to use one of the predefined Paragraph text bullet styles to format them consistently. If you want to create a unique effect, you can create your own styles and then apply them or customize the bullet formatting.

For more information about creating styles, see “Working with styles and templates” on page 50.

Adding and removing bullets

You can create a bulleted list for all the paragraphs in a Paragraph text frame or selected paragraphs.

Paragraph text with
a bulleted list.



To add a bullet

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.

3. Choose the Effects tab.

4. Choose Bullet from the Effect Type pop-up menu.

5. Choose a font from the Font pop-up menu.

6. Choose a symbol from the Sample window.

You can also choose a bullet by entering its index number in the Symbol # box. Index numbers are listed in the Symbol and Clipart Libraries Catalog.

To remove a bullet

1. Follow steps 1 to 3 from the previous procedure.

2. Choose None from the Effect Type pop-up menu.



- You can also add and remove bullets by selecting text and clicking the Show/Hide Bullet button on the Property Bar.

Customizing bullets

Once you add bullets to paragraphs, you can customize their appearance by changing one or more of the following properties:

- size
- style
- position
- spacing

A bullet's size, style, and position relative to the other text characters are determined by the font of the paragraph. You can change any of these settings to suit your purposes.

To change the bullet size

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Effects tab.
4. Choose Bullet from the Effect Type pop-up menu.
5. Type a value in the Size box.

To raise or lower the position of a bullet

1. Follow steps 1 to 4 from the previous procedure.
2. Type a value in the Baseline Shift box.
Negative values lower the bullet's position; positive values raise it.

To create a bulleted list with a hanging indent

1. Follow steps 1 to 4 from the "To change the bullet size" procedure.
2. Click Hanging Indent in the Indents section.
3. Type a value in the Position box.

To change the space between the bullet and text

1. Follow steps 1 and 2 from the “To change the bullet size” procedure.
2. Choose the Align tab.
3. Type a value for the amount of space you want between the bullet and the text in the First Line box.
4. Type the same value that you specified in step 3 in the Left box.

The space between the frame and the text changes. As a result, the spacing between the bullet and the text changes.

Applying hyphenation to paragraphs

When hyphenation is enabled, CorelDRAW automatically divides words at the end of lines instead of wrapping them to the next line. You may find hyphenation helpful when you work with columns or have limited space for text.

You can apply hyphenation to an entire Paragraph text frame or to selected paragraphs within a frame. You can also set hyphenation options to control when the hyphenation occurs.

Hyphenating text

You can apply automatic hyphenation for selected paragraphs or all paragraphs in a Paragraph text frame. You can also set automatic hyphenation for words with capital letters, and specify the distance from the right margin before you start to hyphenate.

In addition, you can specify the minimum number of letters a word must have in order to be hyphenated, as well as the minimum number of characters that must appear before and after the hyphen.

To set automatic hyphenation for the document

1. Click a blank space in the Drawing Window to deselect any objects.
2. Click the bottom *Default Style To Edit button* on the Property Bar.
Default Paragraph Text appears in the Style pop-up menu.
3. Choose Text, Format Text.
4. Choose the Space tab.
5. Enable the Use Automatic Hyphenation check box, and click OK.
6. Enable the Paragraph text check box.



7. Disable the Artistic text check box.

The existing text in your document remains unaffected. Only subsequent frames you create will use automatic hyphenation.

To set automatic hyphenation for selected Paragraph text

1. Do one of the following:



- Select the Paragraph text with the *Pick tool* to format all the paragraphs in the frame.



- Select the Paragraph text with the *Text tool* to select specific paragraphs.

2. Choose Text, Format Text.
3. Choose the Space tab.
4. Enable the Use Automatic Hyphenation check box.

To enable the hyphenation of words containing capital letters

1. Follow steps all of the steps from the previous procedure.
2. Click the Hyphenation Settings button.
3. Enable the Break Capitalized check box to hyphenate words with initial or all capital letters.

To specify the minimum word and character lengths for hyphenation

1. Follow all the steps from the “To set automatic hyphenation for selected Paragraph text” procedure.
2. Click the Hyphenation Settings button.
3. Do any of the following:
 - Type a value in the Minimum Word Length box to set the minimum number of characters in a word for hyphenation.
 - Type a value in the Minimum Characters Before box to set the minimum number of characters before a hyphen.
 - Type a value in the Minimum Characters After box to set the minimum number of characters after a hyphen.

To specify the right margin for hyphenation

1. Follow all the steps from the “To set automatic hyphenation for selected Paragraph text” procedure.

2. Click the Hyphenation Settings button in the Hyphenation section.
3. Type a value in the Hot Zone box to specify the distance from the right margin at which you want CorelDRAW to start hyphenating words.

Working with text styles

As with many popular word-processing applications, you can create documents with consistent and professional formats using the text styles in CorelDRAW. Text styles store formatting characteristics such as the font type and size to enable you to format faster and incorporate design changes more easily than formatting text objects individually.

A text style is attached automatically to any Artistic text or Paragraph text you add to your document. When you add Artistic text, the text uses the Default Artistic text style attached to it. Likewise, if you add Paragraph text, each paragraph in the frame will use the Default Paragraph text style attached to it. Each time you add text (either Paragraph or Artistic), it displays the formatting properties defined by the default styles until you apply new styles or change the default settings.

For more information about using styles, see “Working with styles” on page 50.



- Each paragraph in a Paragraph text frame can have its own style.
-

Applying text styles

When you apply a style to text, the text takes on the attributes governed by the style.

To apply a style to text using the Graphic And Text Palette

1. Do one of the following:



- Select the text with the *Pick tool* to format the whole text object — a line of Artistic text or all paragraphs in the Paragraph text frame.



- Select the text with the *Text tool* to select specific characters.

2. Choose Tools, Graphics And Text Styles.
3. Choose a style from the Graphic And Text Palette.
4. Click , Apply Style.



- You can apply styles by selecting text with the Text tool and choosing a style from the Style List pop-up menu on the Property Bar.

Working with Paragraph text frames

Before you can create Paragraph text, you need to draw a Paragraph text frame. You can think of Paragraph text frames as containers that hold Paragraph text. By selecting the frame, you can manipulate its contents and apply formatting properties to all paragraphs in the frame at once.

You can add a rectangular Paragraph text frame by using the Text tool, or you can insert a Paragraph text frame inside a closed path. You can also change the frame itself by applying transformations such as rotating and skewing. When you apply transformations, you can wrap the lines of text to accommodate the frame's interior shape or resize the text along with the frame.

For information about creating frames with the Text tool and inserting frames inside objects, see “Adding Paragraph text” on page 290 and “Inserting Paragraph text frames inside objects” on page 332.



- Paragraph text frames are also referred to as “frames.”

Inserting Paragraph text frames inside objects

You can use graphic objects as containers for Paragraph text frames. When you insert a frame inside of an object, the frame is positioned inside of the object's outline. Similar to Paragraph text frames created with the Text tool, you can show and hide frame outlines, apply paragraph formatting (i.e., add columns, bullets, drop caps, tabs, indents, and link frames), and adjust the size of text to fit the frame exactly. However, the size of a Paragraph text frame remains fixed. If you want to adjust the size of the frame, you must resize the object.

Paragraph text frame inside of an object.



To fit text inside an object



1. Select the object with the *Pick tool*.



2. Click the *Text tool*.

3. Hold down Shift, and move the cursor to the object's outline. When the cursor changes to an insertion point, click the object's outline.

A frame appears inside the object.

4. Type inside the frame.

Separating a Paragraph text frame from an object

When you extract a Paragraph text frame from an object the frame retains the shape of the object.

To separate a Paragraph text frame from an object



1. Select the text with the *Pick tool*.

2. Choose Arrange, Separate.

3. Click the outline of the frame, and drag it to a new location.

Showing and hiding Paragraph text frame outlines

Paragraph text frames are shown on the Drawing Page by default. You can change the default to hide frame outlines. Whether you hide or show frames, when you select a frame CorelDRAW displays a solid line to identify the frame border.

To show or hide Paragraph text frame outlines

- Choose View, Text Frames.

If a check mark appears beside the Text Frames command name, frame outlines are displayed. If no check mark appears, frame outlines are hidden.



- You can also show and hide frame outlines by choosing Edit, Preferences, in the list of categories, double-click Text, and choose Paragraph. Enable the Show Text Frames check box to show frames, or disable it to hide frames.

Sizing Paragraph text frames

Paragraph text frames are objects that CorelDRAW treats similarly to other objects in a drawing. You can either size a frame independently of its contents or size the frame and the text it contains proportionately.

If you want to size a Paragraph text frame vertically, you must disable the Expand And Shrink Paragraph Text Frames To Fit Text check box in the Preferences dialog box. If this check box is enabled, only the width of the frame will be resized. For more information, see “Adding Paragraph text” on page 290.

To increase or decrease the frame size

1. Do one of the following:



- Using the *Pick tool*, click anywhere in or on the border of a frame.



- Using the *Text tool*, click anywhere in or on the border of a frame.

2. Drag any selection handle outward to increase or inward to decrease the size of the frame, but not the text inside.

To size Paragraph text and its frame together

1. Choose Edit, Preferences.

2. In the list of categories, double-click Text, and choose Paragraph.

3. Disable the Expand And Shrink Paragraph Text Frames To Fit Text check box.

4. Click OK.

5. Click anywhere in or on the border of a Paragraph text frame with the Pick tool.

6. Hold down Option, and drag one of the corner selection handles to resize the frame and the text inside at the same time.

The text maintains the shape of the original font, but the font size changes.



- When you size a frame with columns of varying widths, you must drag the side selection handles to resize the frame. Dragging the frame border adjusts the width of that column.



- If you're resizing the frame with the Text tool, you can also drag the frame border to resize the frame.

Breaking apart and combining Paragraph text frames

You can divide a Paragraph text frame into multiple frames. When you break apart a frame that contains multiple paragraphs, CorelDRAW creates a frame for every paragraph. When you break apart a frame that contains multiple lines, CorelDRAW creates a frame for every line of text. When you break apart a frame that contains one line of text, CorelDRAW creates a frame for every word.

You can also combine two or more frames to create one frame. Keep in mind that when you select frames by holding down Shift and clicking frames, the text in the first frame you select appears first in the merged frame. This is particularly useful when one of the frames you are combining has columns. If you select the frame with columns first, the merged frame will have columns.

To break apart a Paragraph text frame



1. Select the object with the *Pick tool*.
2. Choose Arrange, Break Apart.

To combine Paragraph text frames

1. Hold down Shift, and select the frames with the Pick tool.
2. Choose Arrange, Combine.



- You can't combine frames with envelopes or when text is fitted to a curve.

Specifying the minimum number of characters per line

You can specify the minimum number of characters permitted in a line of a Paragraph text frame. For example, when you set the minimum width to five, lines must have at least five characters to appear on any given line.

To specify the minimum number of characters per line

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Type a value in the Minimum Line Width box.

Fitting text to a Paragraph text frame

You can adjust the point size of text within a Paragraph text frame until the contents fill the frame exactly. When text doesn't fill a frame, the font size

increases. Conversely, when text overflows a frame, the font size decreases. If the text within a frame is formatted with different point sizes, CorelDRAW maintains the point variation and sizes the text accordingly to fit the frame.

To fit text to a Paragraph text frame



1. Select the frame with the *Pick tool*.
2. Choose Text, Fit Text To Frame.



- When you apply Fit Text To Frame to linked frames, you adjust the size of text in all of the linked frames until the contents fill the frames. For more information about linking frames, see “Linking Paragraph text frames to specify text flow” on page 336.

Moving Paragraph text frames

Like other objects, you can move Paragraph text frames in a drawing. CorelDRAW displays the frame’s outline as you drag, so you can preview the effects of the move. You can also apply other transformations (e.g., rotate, skew, and mirror) to frames. For more information about transformations, see “Transforming objects” on page 135.

To move a frame



1. Using the *Pick tool*, click anywhere in the frame, or click the frame borders.
2. Drag the Paragraph text frame outline to a new location.

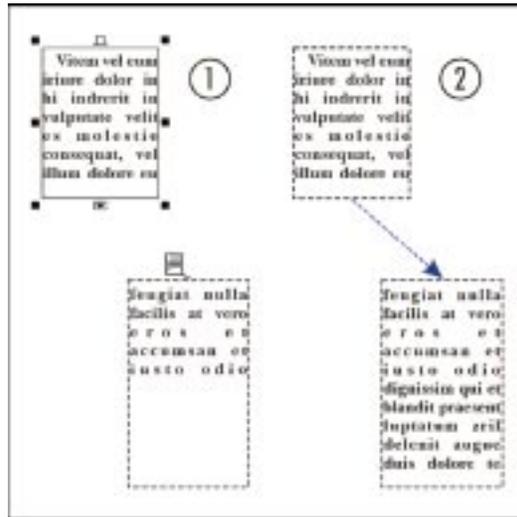


- You can also move a frame by selecting the frame with Text tool, clicking the X in the center of the frame, and dragging it to a new location.
- If you want to align a frame with other frames or objects, you can add guidelines. Click the horizontal or vertical ruler with the Pick tool, and drag the guideline onto the Drawing Window.

Linking Paragraph text frames to specify text flow

If your document has more than one Paragraph text frame, you can link them together to direct the flow of text. When two frames are linked, text flows from one frame into the other if the amount of text is greater than the size of the originating frame.

Graphic 1 shows selecting the frame to contain overflow text. Graphic 2 shows how the linked frames look.



When you shrink or enlarge a linked frame, or change the size of the text, the amount of text in the next frame adjusts automatically. You can always remove links or change the direction of flow if you change your mind at a later point.

You may want to create and link Paragraph text frames before you type the text into the starting frame.

To link frames together



1. Select the starting frame with the *Pick tool*.
2. Click the  text flow tab at the bottom of the frame.

If there is too much text in the frame, the text flow tab contains an arrow .

The cursor changes shape.

3. Click the inside the frame to which you want to create a link.

The  text flow tab and a blue line indicate that the frame is linked.



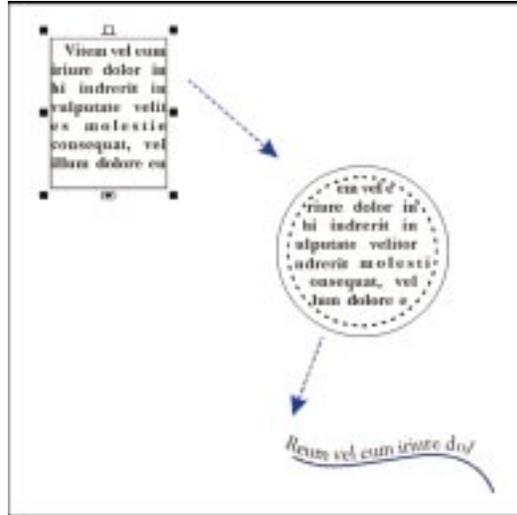
- You can also use the text flow tab at the top of a frame to link to another frame.

Linking Paragraph text frames to objects

You can link a Paragraph text frame to objects with open and closed paths. When you link a frame to an open path (e.g., a line), the text flows onto the

line. When you link a frame to an object with a closed path (e.g., a rectangle), a Paragraph text frame is inserted inside the object.

Linking Paragraph text frames to objects.



You can also insert a frame inside an object with a closed path, then link to other objects and frames. For more information, see “Inserting Paragraph text frames inside objects” on page 332.

To link a Paragraph text frame to an object



1. Select the text frame with the *Pick tool*.
2. Click the □ text flow tab at the bottom of the frame.

If there is too much text in the frame, the text flow tab contains an arrow ▼.

The cursor changes shape.

3. Click the object to which you want to link.

The ▢ text flow tab and a blue line indicate that the frame is linked to the object.

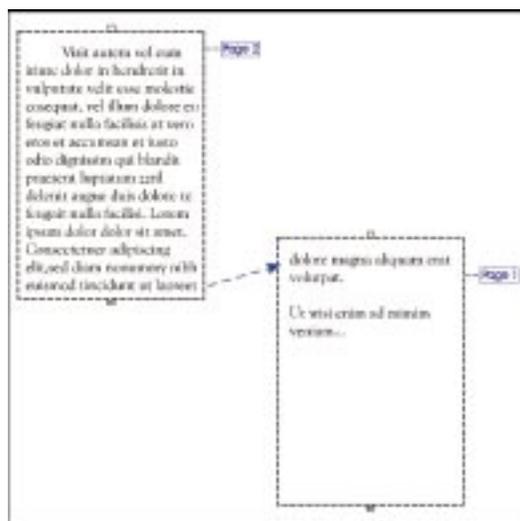


- When you link a frame to an object, you can create links between objects.
- You can shrink or enlarge a linked object or change the size of text. The amount of text in or on the object adjusts automatically.

Linking frames and objects on different pages

You may want to link a Paragraph text frame to a frame or an object on another page. If you are creating a link between objects, you can also link across pages. For more information about linking objects, see “Linking Paragraph text frames to objects” on page 337.

Linking across pages.



To link frames on different pages



1. Select the starting frame with the *Pick tool*.
2. Click the  text flow tab at the bottom of the frame.
If there is too much text in the frame, the tab contains an arrow .
3. Using the Navigator, click the Page tab that contains the second frame.
4. Select the frame into which you want to continue the text flow.
The  text flow tab and a dashed blue line indicate that the frame is linked. The page number to which the frame is linked is also identified.

To link a frame to an object on a different page

1. Using the *Pick tool*, select the frame from which you want the text to flow.
2. Follow steps 2 and 3 from the previous procedure.
3. Select the object into which you want to continue the text flow.

Changing the text flow to another Paragraph text frame or object

You may decide to redirect the flow of text between linked Paragraph text frames or objects. The  text flow tab indicates that the frame or object is linked. To determine the direction of the text flow, select the frame or object. A blue arrow appears indicating the direction of the flow. If the linked frame is on a different page, the page number appears beside the blue arrow.

Text flows from the bottom of the frame or object. Consequently, you must select the bottom  text flow tab of the frame or object whose text flow you want to change, then select the frame or object into which you want the flow to continue.

To change text flow to another frame



1. Using the *Pick tool*, click the  text flow tab at the bottom of the frame whose link you want to change.
2. Select the frame into which you want to continue the text flow.

To change text flow to another object

1. Using the *Pick tool*, click the  text flow tab at the bottom of the object whose link you want to change.
2. Select the object into which you want to continue the text flow.

Removing links between frames or objects

You can remove links between Paragraph text frames and objects by separating the frames or by deleting the frame or object altogether. When you have only two linked frames and you remove the link, the text flows into the remaining frame. When you remove a link between frames or objects and you have a series of links, the text flows into the next frame or object.

To remove links between frames or objects



1. Using the *Pick tool*, select the frames or objects you want to separate.
2. Choose *Arrange, Separate*.

To delete a linked Paragraph text frame or object

1. Using the *Pick tool*, select the frame or object you want to delete.
2. Choose *Edit, Clear*.

Specifying options for frames

You can specify whether you want to apply formatting to all linked Paragraph text frames, selected frames, or selected and subsequently created frames. The formatting attributes that these options affect are attributes that you can only apply to frames (e.g., columns, drop caps, indents, and tabs), as well as general formatting attributes (e.g., font type, size, and weight). Note that color doesn't apply. You must apply color to each linked frame or object separately.

The Show Linking Of Text Frame check box allows you to display the direction of text flow between linked frames.

To choose Paragraph text frame formatting options

1. Choose Edit, Preferences.
2. In the list of categories, double-click Text, and choose Paragraph.
3. Click one of the following buttons:
 - To All Linked Frames — applies the same text formatting to all connected frames
 - To Selected Frames Only — applies the same text formatting only to selected frames
 - To Selected And Subsequent Frames — applies the same text formatting only to selected and succeeding linked frames

To show links between text frames

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Show Linking Of Text Frame check box.

Editing text

You can edit Artistic text and Paragraph text directly in the Drawing Window or in the Edit Text dialog box. You might want to edit in the Drawing Window to display how the text fits into the document's overall design and use the Edit Text dialog box to apply textual changes quickly. You can use the Edit Text dialog box to edit Artistic text that has been rotated, skewed, or otherwise transformed. For more information, see "Transforming objects" on page 135. You must use the Edit Text dialog box to edit Artistic text with the following special effects applied to it: Perspective, Envelope, and Extrude. For more information, see "Creating special effects" on page 363.

You can proof your document at once using the Spell Checker, or you can verify spelling as you type using automatic spell checking. You can also set

options to check for words with numbers, duplicate words, and irregular capitalization.

In addition to spell checking, you can use Type Assist and create user word lists to help you reduce errors in your document. By using Type Assist, you can correct capitalization errors automatically and create shortcuts to frequently used words and phrases.

User word lists are personal vocabulary lists to which you add words or phrases that you commonly misspell. You can also add unknown words or phrases that the Spell Checker identifies as errors.

You also have the ability to check text statistics. You can count text elements including the number of lines, words, characters, and the names of the fonts and styles used in your document.

Editing in the Edit Text dialog box vs. editing in a Drawing Window

For small bodies of text, you might find typing, editing, and formatting directly in the Drawing Window the easiest route. If you have large bodies of Paragraph text, you might find using the Edit Text dialog box more convenient.

You can choose the method that is more comfortable for you. However, you must use the Edit Text dialog box to edit Artistic text with the following special effects applied to it: Perspective, Envelope, and Extrude.

The Edit Text dialog box also has options for editing character properties such as, the font, size, and style, for Artistic text and includes other formatting options such as, indents, tabs, and bullets, for Paragraph text. From the Edit Text dialog box, you can also import text, change text case, and access the Spell Checker and Type Assist.



- Artistic text remains editable in the Edit Text dialog box after transformations are applied to it, as long as it isn't converted to curves.
 - When you format text in the Edit Text dialog box using the Format Text dialog box, the Apply button doesn't appear. To access the Apply button, you must close the Format Text dialog box.
-

Editing in the Edit Text dialog box

You can edit text directly in the Drawing Window or in the Edit Text dialog box. You must use the Edit Text dialog box to edit Artistic text with the following special effects applied to it: Perspective, Envelope, and Extrude.

You can set your options to have the Edit Text dialog box open automatically when you click the Text tool.



To type or edit text in the Edit Text dialog box

1. Select the text with the *Text tool*.
2. Choose Text, Edit Text.
3. Type your changes as required.
4. Click OK to return to the Drawing Window.

To set your options to automatically display the Edit Text dialog box

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Disable the Edit Text On Screen check box.

Finding and replacing text characters in the Edit Text dialog box

You may need to search for text that you want to edit. You can search for, and search and replace specified text in the Edit Text dialog box.

To find text characters in the Edit Text dialog box

1. In the Edit Text dialog box, click the Options button, and choose Find Text.
2. Type the text you want to find in the Find What box.
3. Enable the Match Case check box to find the exact case of the text you specified, if required.
4. Click the Find Next button.

CorelDRAW finds the first text block that contains the characters you specified.

To find and replace text characters

1. In the Edit Text dialog box, click the Options button, and choose Replace Text.
2. Type the text you want to find in the Find What box.
3. Type the replacement text in the Replace With box.
4. Enable the Match Case check box to find the exact case of the text you specified in the Find What and Replace With boxes, if required.

5. Click one of the following buttons:
 - Replace — replaces the first occurrence of the text specified in the Find What box
 - Replace All — replaces all occurrences of the text specified in the Find What box
 - Find Next — finds the next occurrence of the text specified in the Find What box

Editing in the Drawing Window

You can edit Artistic text, blended text, or text fitted to a path directly in the Drawing Window. However, you must use the Edit Text dialog box to make changes to Artistic text with the Perspective, Envelope, and Extrude special effects applied to it.

When you edit Artistic or Paragraph text in the Drawing Window, you can move text within a line of Artistic text or a Paragraph text frame by dragging. However, you must enable drag and drop editing first.

To type or edit text in the Drawing Window

- Do one of the following:
 - Select the text you want to edit with the *Text tool*, and make the required changes.
 - Using the *Pick tool*, double-click the text you want to edit to enable the Text tool. Make the required changes.



To enable drag and drop editing

1. Choose Edit, Preferences.
2. From the list of categories, choose Text.
3. Enable the Drag And Drop Text Editing check box.

To drag and drop text

1. Using the Text tool, select the text you want to move.
2. Drag the text to its new location.

Displaying and specifying options for nonprinting characters

You can display nonprinting characters (i.e., soft returns, hard returns, tabs, and spaces) in the Drawing Window and the Edit Text dialog box. In addition, you can specify which nonprinting characters are displayed.

To display nonprinting characters while editing in the Edit Text dialog box



1. Using the *Pick tool*, select a text object — a line of Artistic text or a Paragraph text frame.



2. Choose Text, Edit Text.

3. Click the *Non-printing Characters button*.

To display the nonprinting characters in the Drawing Window



1. Select the text with the *Text tool*.

2. Enable the Non-printing Characters button on the Property Bar to display nonprinting characters.

The button is enabled when it appears pressed.

To specify which nonprinting characters are displayed

1. Choose Edit, Preferences.

2. From the list of categories, choose Text.

3. Enable or disable the following check boxes in the Non-printing Character box:

- Soft Returns
- Hard Returns
- Tabs
- Spaces

Spell checking your document

You can automatically spell check documents as you type, or you can use the Spell Checker to verify spelling in your document all at once.

If you decide to use the spell checker, you can choose from several options to specify how the Spell Checker verifies and corrects misspelled words.

Using automatic spell checking

The Automatic spell checker verifies the spelling of text as you type. Misspelled text is identified by a red squiggly underline. You can have the automatic spell checker identify errors in all or only selected Paragraph text frames and you can specify the maximum number of errors that are displayed.

You can control the automatic spell checker by holding down Control and clicking. When you hold down Control and click a misspelled word, you can

choose an alternative word, or choose to ignore the error. You can also choose to flag ignored errors. Flagged errors are identified by a blue squiggly underline.

To enable automatic spell checking

1. Choose Edit, Preferences.
2. In the list of categories, double-click Text, and choose Spelling.
3. Enable the Perform Automatic Spell Checking check box.

To show errors in all or selected text frames

1. Follow steps 1 and 2 from the previous procedure.
2. Enable one of the following buttons:
 - Show Errors In All Text Frames
 - Show Errors In Selected Text Frame Only

To show errors you ignore during the spell check

1. Follow steps 1 and 2 from the “To enable automatic spell checking” procedure.
2. Enable the Show Errors Which Have Been Ignored check box.

To ignore an error during a spell check

- Hold down Control, click the misspelled word, and choose Ignore All.



- When you choose an alternate word and the Add Corrections To Type Assist Automatically check box is enabled, the correction is added to Type Assist.
-

To specify the maximum number of automatic spell checking suggestions

1. Follow steps 1 and 2 from the “To enable automatic spell checking” procedure.
2. Type a value in the Display Spelling Suggestions box.

To add your corrections to Type Assist automatically

1. Follow steps 1 and 2 from the “To enable automatic spell checking” procedure.
2. Enable the Add Corrections To Type Assist check box.



- You can remove the Ignore All flag by holding down Control, clicking the ignored errors, and clicking Unignore All.

Using the Spell Checker

The Spell Checker checks documents for misspelled words. You can check a whole document, a paragraph, a word, or specified text. You can use the Spell Checker dialog box to insert corrections, or you can interrupt the spell check by typing corrections directly in the Drawing Window.

The Spell Checker may not recognize words in your document and flag them as errors. You can add these words to a user word list, so that they're recognized in future spell checks. For more information about user word lists, see “Working with user word lists” on page 350.

To spell check the whole document

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Text, Spell Check.

The misspelled word appears in the Not Found box. The most likely correction appears in the Replace With box. A list of other possible replacements appear in the Replacements list.

3. Choose the correct word from the Replacements list to display it in the Replace With box, if required.

If necessary, type your own correction in the Replace With box, and press Return.

4. Click one of the following buttons:
 - Replace — replaces the highlighted word in your document with the word in the Replace With box
 - Auto Replace — replaces all instances of the same error in your document with the word in the Replace With box

- Skip Once — overlooks this occurrence of the word, during this spell check, and moves to the next word
- Skip All — overlooks all occurrences of this word during this spell check

To spell check part of the document



1. Select a text object with the *Pick tool*.
2. Choose Text, Spell Check.
3. Choose an option from the Check pop-up menu.
4. Click the Start or the Resume button.

To spell check selected text



1. Select the specific word or words with the *Text tool*.
2. Choose Text, Spell Check.

To edit text manually in the Drawing Window during a spell check

1. Click the Text tool.
2. Follow steps 1 and 2 from the “To spell check the whole document” procedure.
The misspelled word is highlighted in the document.
3. Select the highlighted text, and type the correction in the Drawing Window.
4. Click the Resume button to continue with the spell check.

To add a word to a user word list during a spell check

1. Follow steps 1 and 2 from the “To spell check the whole document” procedure.
2. Click the Add button when the Spell Checker stops on a word it doesn't recognize.



- The Spell Checker can't correct words used in the wrong context. For example, if you type “she had too apples” instead of “she had two apples,” the Spell Checker doesn't flag the word “too” as an error.



- To check the whole document after a selection is verified, choose Document from the Check pop-up menu.
 - Click the Undo button to go back to the last correction made during the spell check.
-

Specifying options for the Spell Checker

In CorelDRAW, you have several options for how the Spell Checker verifies and corrects misspelled words. By default, the Spell Checker starts automatically when you open it. You can change this setting by disabling the Auto Start option.

During a subsequent spell check, the Spell Checker rechecks only new or changed text since the previous spell check. When you enable the Recheck All Text option, the Spell Checker flags a word as an error, even if you enabled Skip Always for that word.

To specify spell check options

1. Choose Text, Spell Checker.
2. Click the Options button.
3. Enable any of the following options:
 - Auto Start — starts the Spell Checker as soon as you open it
 - Beep on Misspelled — makes CorelDRAW beep when the Spell Checker finds misspelled words
 - Recheck All Text — rechecks the entire text, not just new or modified text, after you have spell checked the document
 - Check Words With Numbers — checks any text containing numbers
 - Check Duplicate Words — checks for duplicate words positioned side-by-side
 - Check Irregular Capitalization — checks any irregular capitalization
 - Prompt Before Auto Replacement — asks you before the Spell Checker automatically replaces text
 - Show Phonetic Suggestions — displays a list of words that sound like the word in the Replace With (or Insert Word) box

A check mark appears beside enabled options.

Changing the spell check language

You can specify the default language the Spell Checker uses.

To change the spell check language

1. Choose Text, Spell Check.
2. Click the Options button, and choose Language.
3. Do one of the following:
 - Choose a language from the Current Language list.
 - Type the abbreviated language name in the Language box.

To save a language as the default spell check language

1. Follow all the steps from the previous procedure.
2. Enable the Save As Default Writing Tool Language check box.

Working with user word lists

A user word list is a personal vocabulary list that you can create and to which you add words or phrases that you commonly misspell, or words or phrases that are not recognized by the Spell Checker. When the Spell Checker detects an unknown word or phrase, it treats the word like an error. You can add such words or phrases to your user word list so that they are recognized.

Creating and activating user word lists

A word list is a list of words or phrases that you create and that CorelDRAW accesses when you run the Spell Checker.

The Spell Checker scans two types of word lists, user word lists and main word lists. You can have ten lists of each type active when you use the writing tools. CorelDRAW first scans the active user word lists. If the word or phrase is not found there, CorelDRAW scans the active word lists in the order they are displayed in the Word Lists list. If your document is written in another language, you can want to create and use a word list for that language.

Alternative words appear in the Replacements or Suggestions list in the Spell Checker.

To create a user word list

1. Choose Text, Spell Check.
2. Click the Options button, and choose User Word Lists.

3. Click the Add List button.
4. Locate the folder where you want to store the file, and type a name in the File Name box.
5. Click the Open button.

To add a word to a user word list

1. Follow steps 1 and 2 from the previous procedure.
2. In the Word Lists list, enable the check box next to the user word list to which you want to add a word.
3. Click the Add Entry button when the Spell Checker stops on a word you want to add.

To enable a user word list

1. Follow steps 1 and 2 from the “To create a user word list” procedure.
2. In the Word Lists list, enable the check box next to the word list.

To select a user word list for another language

1. Follow steps 1 and 2 from the “To create a user word list” procedure.
2. Choose a language from the Language pop-up menu.

Customizing user word lists

You can add words and phrases that you want the Spell Checker to replace and skip. You can also add a list of alternative words or phrasing for the Spell Checker to display. If a user word list contains an error, you can edit the list or delete the entry.

Each document has its own user word list to which you can add words and phrases that pertain specifically to that document. You can create and use multiple user word lists when you spell check a document. If more than one word list is activated, the document user word list is the first list the program scans.

To add a list of alternative words to a user word list

1. Choose Text, Spell Check.
2. Click the Options button, and choose User Word Lists.
3. In the Word Lists list, enable the check box next to the word list.
4. Type the word or phrase in the Word/Phrase box, then type its replacement in the Replace With box.

5. Click the Add Entry button.
6. Repeat steps 3 and 4 for each additional alternative.

To add a replacement word to a user word list

1. Follow steps 1 to 3 from the “To add a list of alternative words to a user word list” procedure.
2. Type the word or phrase in the Word/Phrase box, then type its replacement in the Replace With box.
3. Click the Add Entry button.

To add a word you want skipped to a user word list

1. Follow steps 1 to 3 from the “To add a list of alternative words to a user word list” procedure.
2. Type the word or phrase in the Word/Phrase box.
3. Click the Add Entry button.

To delete a word from a user word list

1. Follow steps 1 to 3 from the “To add a list of alternative words to a user word list” procedure.
2. Choose the word or phrase from the Word/Phrase list.
3. Click the Delete Entry button.

To edit a word or phrase in a user word list

1. Follow steps 1 to 3 from the “To add a list of alternative words to a user word list” procedure.
2. Choose the word or phrase from the Word/Phrase list.
3. Edit the word or phrase in the Replace With box.
4. Click the Replace Entry button.

Disabling and removing user word lists

You can disable or remove a user word list. Removing a user word list does not delete it.

To disable a user word list

1. Choose Text, Spell Check.

2. Click the Options button, and choose User Word Lists.
3. In the Word Lists list, disable the check box next to the word list.

To remove a user word list

1. Follow steps 1 and 2 from the previous procedure.
2. Choose the user word list from the Word Lists pop-up menu.
3. Click the Remove List button.

Checking statistics

You can count text elements including the number of lines, words, characters, and the names of the fonts and styles used. You can either display statistics for selected text objects or for the entire document. If no text objects are selected, all text elements in the document, including tab and space characters, are counted.

Checking text statistics

You can count the number of words and display information about the styles and fonts in your document by checking text statistics.

To count text elements for selected objects



1. Using the *Pick tool*, select a text object — either a line of Artistic text or Paragraph text frame.
2. Choose Text, Text Statistics.
3. Enable the Show Style Statistics check box to display information about the styles used.

To count text elements for your entire document

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Text, Text Statistics.

Making automatic text corrections and changes (Type Assist)

You can correct capitalization errors automatically and create shortcuts to frequently used words and phrases. For example, you can store the phrase “for your information” under the abbreviation “FYI” so that each time you type “FYI” followed by a space, it is replaced with the phrase in full.

Using Type Assist

You can replace text and punctuation marks, and change letter case automatically. When you enable the Correct Two Initial, Consecutive Capitals check box, no change is made when a capital letter is followed by a space or period or if a word contains other capital letters.

Remember that you can also use the Change Case command instead of enabling the Capitalize First Letter Of Sentences check box to change selected text to sentence case. For more information, see “Changing case” on page 302.

To customize Type Assist

1. Choose Text, Type Assist.
2. Enable any of the following check boxes:
 - Capitalize First Letter Of Sentences
 - Change Straight Quotes To Typographic Quotes
 - Correct Two Initial, Consecutive Capitals
 - Capitalize Names of Days
 - Replace Text While Typing, and type the text in the Replace box. Type the replacement text in the With box, and click the Add button

Creating effects with text

You can give text a distinct appearance by applying graphical effects to it. You can apply effects to both Paragraph text and Artistic text. However, some effects are exclusive to Artistic text and others to Paragraph text because CoreIDRAW treats the two text types differently.

Graphical effects that you can apply to Paragraph text frames include applying envelopes, drop shadows, and PowerClip objects, embedding graphics in text, wrapping text around graphic objects, and placing Paragraph text inside objects directly.

You can apply special effects to Artistic text as you do to other objects in CoreIDRAW. Special effects include extrudes, blends, contours, distortions, embedding graphics in text, and applying envelopes, lenses, PowerClip objects, perspectives, and drop shadows.

For more information, see the following:

- “Blending objects” on page 363
- “Distorting objects” on page 379
- “Working with envelopes” on page 386

- “Extruding objects” on page 393
- “Adding drop shadows to objects” on page 408
- “Using the Interactive Transparency tool” on page 413
- “Contouring objects” on page 419
- “Using lenses” on page 425
- “Adding perspective to objects” on page 437
- “Working with PowerClip” on page 440

In addition to applying special effects, you can position Artistic text along the path of a graphic object using the Fit Text To Path command. When you fit text to a path, you have several options for changing the position of text using the Property Bar.

The easiest way to fit Artistic text along a path is typing directly along the path using the Text tool. For more options and flexibility, use the Property Bar.

Using the Property Bar you can

- specify the orientation of characters relative to the path. This allows you to create the impression that letters are standing upright and rotating individual characters to follow the contours of the path
- specify the vertical position and vertical orientation of the text using the characters’ baseline, ascender, descender, or center point
- specify the horizontal position of text along the path

Once fitted together, CorelDRAW treats a text fitted to a path as one object. You can separate the text from the path, however, the text retains the shape of the graphic object to which it was fitted. If you want to undo the shape, you can straighten it to revert the text to its original state.

Embedding graphic objects in text

You can embed graphic objects into Artistic text and Paragraph text. When the graphic object is inserted in text, it is treated as a text character; consequently, you can apply formatting options according to the text type into which you embed the graphic object.

You can apply any special effect to the graphic object (i.e., envelopes, extrude, blends, and distortions) before you embed it in Artistic text or Paragraph text.

To embed a graphic object in text



1. Select the graphic object with the *Pick tool*.
2. Choose Edit, Copy.



3. Select the text with the *Text tool*.
4. Place the Insertion point where you want to place the graphic.
5. Choose Edit, Paste.



- You must save the file as a version 8 file to preserve the graphic object in text.

Wrapping Paragraph text around objects

You'll probably find wrapping text around objects creates an interesting effect, especially if your design closely integrates Paragraph text and graphics.

Wrapping Paragraph text around objects.



To wrap new Paragraph text around an object



1. Hold down Control, click the object with the *Pick tool*, and choose Wrap Paragraph Text.



2. Click the *Text tool*, and create a Paragraph text frame on top of the object.
3. Type in the frame.

The text flows around the object, leaving the space occupied by the object blank.

To wrap existing Paragraph text around an object

1. Hold down Control, click the object with the Pick tool, and choose Wrap Paragraph Text.
2. Drag the Paragraph text frame to the object and position it.

To change the amount of space between the text and an object

1. Hold down Control, click the object with the Pick tool, and choose Properties.
2. Choose the General tab.
3. Enable the Wrap Paragraph Text check box.
4. Type a value in Text Wrap Offset, and change the units of measurement, if necessary.

Fitting text to a path directly

You can place Artistic text along the curve of a graphic object by typing directly along the object's path. If you need to specify values such as the distance between text and object, or change the placement of text along the object's path, you can use the controls on the Property Bar. You can fit Artistic text to the path of objects with open and closed paths.

To fit text to a path directly



1. Click the *Text tool*.
2. Position the cursor near the object.
3. When the cursor changes to the insertion point cursor, click the mouse, and type the text along the object's path.



- You can't fit text to the path of another text object.

Fitting text to an open path

You can place Artistic text along an open path with ease. You can also specify values, such as the distance between the text and the object, or change the placement of text along the object by using the controls on the Property Bar.

Artistic text fit to an open path.



To fit text to an open path object



1. Using the *Pick tool*, select the object with an open path (e.g., a line or spiral).
2. Hold down Shift, and click the Artistic text.
3. Choose Text, Fit Text To Path.
4. From the Text Orientation pop-up menu on the Property Bar, choose an option for the *orientation* of letters on the path.
5. From the Vertical Placement pop-up menu on the Property Bar, choose an option for the *vertical position* of the Artistic text on the object.
6. From the Text Placement pop-up menu on the Property Bar, choose an option for the *horizontal position* of the Artistic text on the object.

ABC

qrst ↓

abc ←



- You can't fit text to the path of another text object.

Fitting text to a closed path

You can place Artistic text along a closed path (e.g., circle, rectangle, polygon). You can specify the distance between the text and the object, or you can change the placement of text along the object. In addition, you can choose the quadrant in which you want the text to appear.

Artistic text fit to a closed path.



To fit text to an object with a closed path



1. Using the *Pick tool*, select the closed path object (e.g., ellipse, box, etc.).
2. Choose Text, Fit Text To Path.
3. From the Text Orientation pop-up menu on the Property Bar, choose an option for the *orientation* of characters on the path.

ABC

qrst ↓

4. From the Vertical Placement pop-up menu on the Property Bar, choose an option for the *vertical position* of the Artistic text relative to the object.
5. From the Text Placement pop-up menu on the Property Bar, choose a quadrant in which you want to place the Artistic text.



- You can't fit text to the path of another text object.

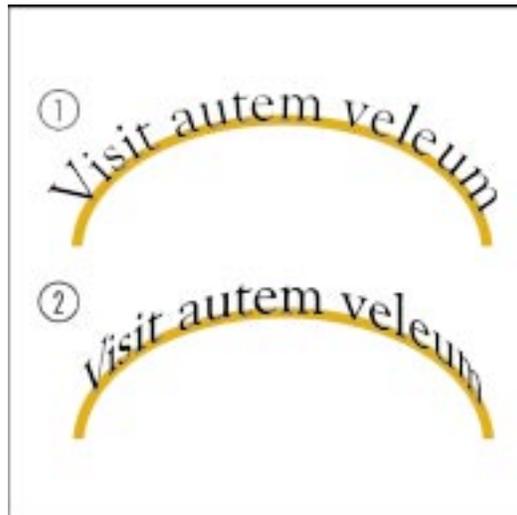


- You can edit Artistic text directly along a path by holding down Command, and clicking the text with the Pick tool.
- You can flip the Artistic text to the opposite side of the path by clicking the Place Text On Other Side button on the Property Bar.

Adjusting the orientation of text fitted to a path

After text is fitted to a path, you have several options for changing the orientation of characters on the path to create interesting effects.

You can adjust the orientation of text fitted to a path.



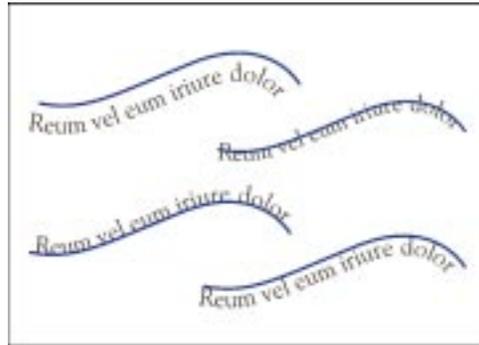
To adjust the orientation of text fitted to a path



1. Select the text fitted to a path with the *Pick tool*.
2. Choose an option from the *Text Orientation* pop-up menu on the Property Bar.



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2. From the Vertical Placement pop-up menu on the Property Bar, choose one of the following :
 - Baseline — aligns the body of the text with the path to which it is fitted
 - Ascender — aligns the top of the text characters with the path to which it is fitted
 - Descender — aligns the bottom of the text characters with the path to which it is fitted
 - Center — places the center of the text on the path to which it is fitted

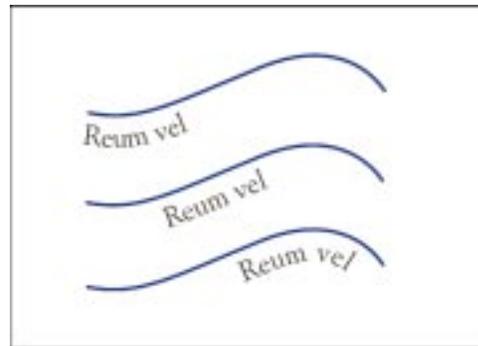


- You can edit Artistic text fitted to paths directly in the Drawing Window.

Changing the position of text fitted to a path

Once you've fitted text to a path, you modify the horizontal position of the text relative to the path. You can also flip text to the opposite side of the path.

You can adjust the horizontal alignment of text fitted to a path.



To specify the horizontal position of text fitted to a path



1. Select the text fitted to a path with the *Pick tool*.
2. Type a value in the *Horizontal Offset box* on the Property Bar.
3. Press Return.



- You can also change the horizontal position of text fitted to a path by dragging character nodes with the Shape tool.

To flip text to the opposite side of the path

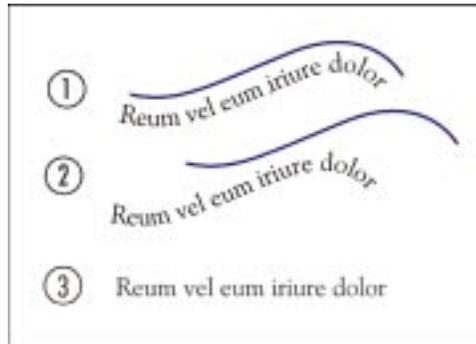
1. Select the text fitted to a path with the Pick tool.
2. Click the Place Text On Other Side button on the Property Bar.

Removing text from a path

When text is fitted to an open or closed path, CorelDRAW treats both the text and the object as one object. You might want to separate the text from the object to manipulate the text characters individually. The Separate command removes Artistic text from the path, resulting in two separate objects.

When you separate text that's fitted to a curved or closed path, the text retains the shape of the object to which it was fitted. If you want to revert the text to its original appearance, use the Straighten Text command.

Removing text from a path.



To separate text from a path



1. Select the text fitted to a path with the *Pick tool*.
2. Choose Arrange, Separate.

The text and graphic object become two individual objects that you can select and manipulate individually.

To straighten text

1. Select the text fitted to a path with the Pick tool.
2. Choose Text, Straighten Text.



CREATING SPECIAL EFFECTS 10

The special effects tools in CorelDRAW let you alter the appearance of objects by distorting them, adding new elements to them, or by changing their relationship to other objects around them. As with other powerful tools provided by CorelDRAW, you have complete control over the way the special effects tools operate.

Effects can be applied to most objects you create using CorelDRAW and, in some cases, objects you import from other programs. Each effect can be copied between objects or removed as required. You can also clone certain effects so that the cloned versions automatically update when you make changes to the original, master object.

Use special effects to add a distinctive, professional look to your illustrations — even if you’re not a professional designer.

Blending objects

A blend is a special effect that you can apply to any two objects you create using CorelDRAW. When you blend two objects, you create a “progression” composed of the two objects and a series of intermediate objects (stacked one on top of another and offset) along a path between them. These intermediate objects show a smooth transition between the shapes and colors (both outline and fill) of the two original objects. For example, blending a red pentagon and a blue star creates intermediate shapes that follow a transition from pentagon to star, as well as from red to blue.

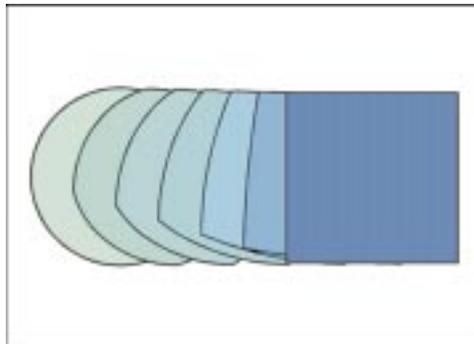
The Blend effect is one of the most powerful and versatile tools in CorelDRAW. Try using blends to enhance word pictures, create highlights, or to create airbrush effects that define the shapes and shadows of an object.

.....
You can use blends
like this to simulate
shading and shape.
.....

Creating basic blends

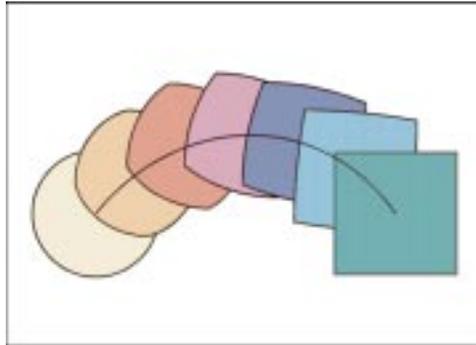
Blends come in three basic forms. By default, CorelDRAW creates a blend in which the intermediate objects follow a direct, straight-line path between the two original objects. If the original objects have fills applied to them, the intermediate objects show a progression through the spectrum between the two colors. Variations on this straight-line format include rotated intermediate objects and “loop” blends that produce shape progressions between the original objects along an arc.

.....
By default, blending
occurs along a
straight line between
the original objects.
.....



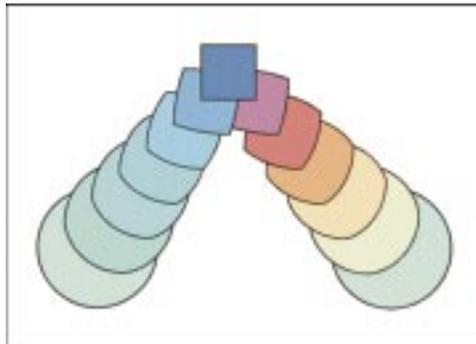
The second type of blend is a blend along a path. You can blend objects along any path you create, including shapes, lines, and text. The blend can progress over the entire path or just part of it, depending on the effect you want to create. You can also set the blend so that the intermediate objects rotate to match the shape of the path.

.....
You can blend objects
along any path you
create with
CorelDRAW's drawing
tools.
.....



The third blend type is a compound blend, which is a blend composed of two or more connected blends. Each component blend in a compound blend shares a start or end object with at least one other component. The result is a chain-like series of blends.

.....
Compound blends are
blends between three
or more objects.
.....

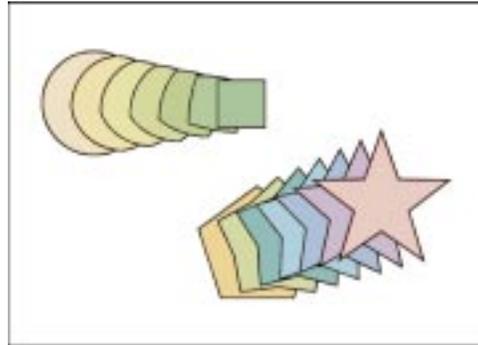


By default, the intermediate objects and colors in a blend progress from the start object (the bottommost of the two selected objects) to the end object (the topmost of the two selected objects).

Blending objects directly

When you blend two objects directly, the intermediate objects follow a straight-line path between the two original objects. (For this reason, direct blends are also referred to as straight-line blends.) At the same time, these objects show a progression in shape and size between the original objects. By default, outline and fill colors progress on a straight-line path across the Color Wheel. Special fills such as, fountain, pattern, and texture fills, show a progression between the objects' fills. The intermediate objects' outlines also show progressions between different thickness and formats.

You can use direct blends to create a variety of effects.



To create a straight-line blend



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*.
2. Position the cursor over one of the objects you want to blend, and drag the end handle to the other object.

The end handle appears after you start dragging the object.

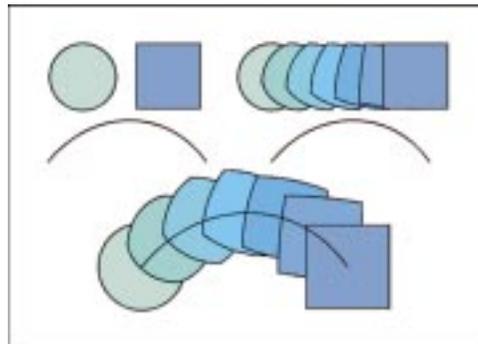


- You can see the outlines of the intermediate objects in the blend before you release the mouse button.

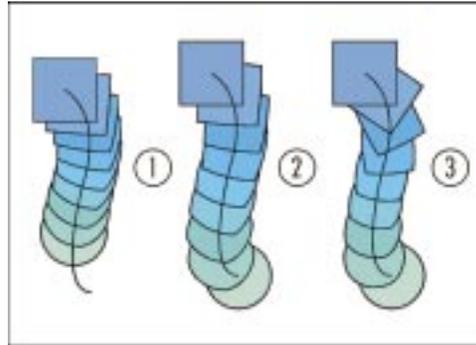
Blending objects along a path

You can blend objects so that the intermediate objects progress along a path including text, symbols, shapes, lines, and curves. By default, the intermediate objects take on the original objects' horizontal and vertical orientation and are attached to the path at their respective centers of rotation. You can choose to have these objects rotate, according to the shape of the path, and to have the blend cover the entire path.

If you have two objects and a path, you can create a blend along a path.



A basic path blend (1) with Blend Along Full Path (2) and Rotate All Objects (3) enabled.



To blend two objects along a path



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*.
2. Position the cursor over one of the objects you want to blend, and drag the end handle to the other object.

The end handle appears after you start dragging the object. This creates a straight-line blend between the two objects.
3. Hold down Control, click the blend, and choose New Path.
4. Using the curved arrow, click the path to which you want to fit the blend.

To blend two objects along a freehand path

1. Open the Interactive Tool flyout, and click the Interactive Blend tool.
2. Hold down Option, and draw a freehand path from one of the objects you want to blend to the other object.

After you draw the freehand path, the end handles, acceleration sliders, and outlines of the intermediate objects appear.



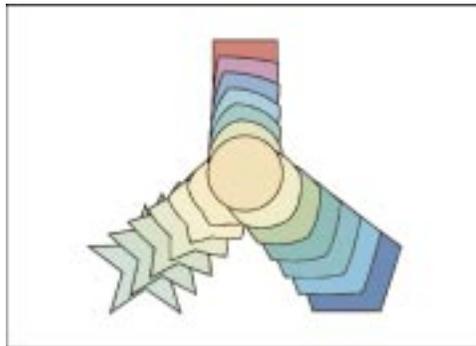
- You can have the intermediate objects follow the entire path by selecting the blend with the Interactive Blend tool, clicking the Miscellaneous Blend Options button on the Property Bar, and enabling the Blend Along Full Path check box.
- You can rotate the intermediate objects to match the shape of the path by selecting the blend with the Interactive Blend tool, clicking the Miscellaneous Blend Options button on the Property Bar, and enabling the Rotate All Objects check box.

Creating a compound blend

Adding one or more objects to an existing blend creates a compound blend. To create a compound blend, you need two components: an existing blend and an additional object you've created using CorelDRAW. Next, you need to decide how you want to connect the existing blend and its new addition. You can connect at the existing blend's start or end object but not at one of its intermediate objects. The object where you connect is shared between the two branches of the compound blend but maintains its relationship (that is, start or end object) with both.

You'll probably find it helpful to experiment with the effects of compound blends. For example, try to create blends that appear to bend around corners. Or, create a complex compound blend using blends along many different paths. Use compound blends to create interesting variations on basic blends.

In this compound blend, the circle is the end object for each of the three component blends.



To create a compound blend



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*.
2. Position the cursor over the object you want to add to an existing blend, and drag the end handle to that blend's start or end object.



- The end handle appears after you start dragging the object. When you drag over the start or end object, the cursor displays a horizontal arrow to indicate that blending can occur. If the cursor is not positioned over the object, blending can't occur.

Copying and cloning blends

By copying and cloning blends, you can quickly create new blends. You can copy a blend's settings to two selected objects. These objects take on all blend-related settings; their outline and fill attributes remain unaffected. The two blends have no connection and can be edited independently.

Cloning also copies blend attributes to two selected objects. The selected objects take on all blend-related settings, while their outline and fill settings remain unaffected. With clones, however, changes made to the original blend (the “master”) afterwards are also applied to the clone.

To copy a blend



1. Hold down Shift, and using the *Pick tool*, select the two objects to which you want to copy a blend.
2. Choose Effects, Copy, Blend From.
3. Using the horizontal pointer that appears, select the blend you want to copy.

CorelDRAW automatically blends the objects you selected in step 1.

To clone a blend

1. Using the Pick tool, select the two objects to which you want to clone a blend.
2. Choose Effects, Clone, Blend From.
3. Using the horizontal pointer that appears, select the blend you want to clone.

CorelDRAW automatically blends the objects you selected in step 1.

Setting basic blend attributes

Once you’ve learned how to create a basic blend, you’ll probably want to start experimenting with the attributes that control a blend’s fundamental appearance. For example, you can change the number, rotation, and color of a blend’s intermediate objects. Or, you can “accelerate” a blend to tip the balance of its color and shape progressions toward its start or end object. If you’re blending objects along a path, you can experiment with precise object spacing and loop effects. You can also control how the intermediate objects progress by mapping nodes on the start and end objects.

Selecting blends

Selecting blends and their start and end objects is a little different from selecting other objects. Learn the following procedures to make editing blends even easier.

To select an entire blend



- Select any of the blend’s intermediate objects with the *Pick tool*.

To select a blend's start or end object

- Select the object with the Pick tool.

Setting the distance between intermediate objects in a blend

There are two ways to control the distance between intermediate objects in a blend. The first way is to set the number of steps in the blend. You can set any number between 1 and 999. Higher numbers result in closer spacing of the intermediate objects. You can specify the number of steps for any type of blend.

The second method of setting the distance between intermediate objects, called fixed spacing, is available only for objects that are blended along a path. Fixed spacing involves specifying a precise distance between the blend's intermediate objects. You can set spacing values from 0.01 to 10 inches (or the equivalent in other units of measurement).

To set the number of steps in a blend



1. Select a blend with the *Pick tool*.
2. On the Property Bar, enable the top portion of the *Use Steps Or Fixed Spacing For Blend* button.
3. On the Property Bar, type the number of steps, or intermediate objects in the top portion of the *Number Of Steps Or Offset Between Shapes* box.
4. Press Return.

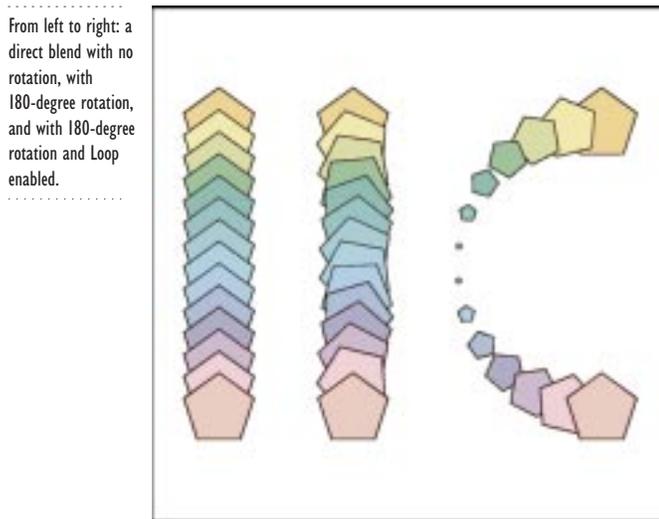
To set precise spacing of intermediate objects in a blend

1. Using the Pick tool, select objects that are blended along a path.
2. On the Property Bar, enable the bottom portion of the Use Steps Or Fixed Spacing For Blend button.
3. On the Property Bar, type a separation value in the bottom portion of the Number Of Steps Or Offset Between Shapes box.
4. Press Return.

Setting the rotation of intermediate objects in a blend

You can rotate a blend's intermediate objects as they progress between the start and end objects. By default, the objects rotate counterclockwise around their own centers of rotation. If you enable the Loop Blend option, the objects rotate around a point halfway between the start and end objects' centers of rotation. You can enter degree values between -360 and 360. Negative numbers rotate the objects clockwise.

For example, entering a rotation value of 180 means that the intermediate objects rotate 180 degrees through the progression from the start object to the end object. If you then enable the Loop Blend option, the shapes also rotate to form an arc.



As with any CorelDRAW tools, try experimenting with the rotation settings to determine what effect you want to create.

To set the rotation of intermediate objects



1. Select a blend with the *Pick tool*.



2. On the Property Bar, type the degree to which you want to rotate the intermediate objects in the *Blend Direction box*.

3. Press Return.



4. Click the *Loop Blend button* to rotate the intermediate objects around a point halfway between the start and end objects' centers of rotation.



- The rotation controls are not applicable to blends that are fit to a path.

Setting color attributes for intermediate objects in a blend

You can set the way outline and fill colors progress between the start and end objects in any blend. CorelDRAW provides three options, each of which produces a distinctive color progression. You can choose a straight, clockwise, or counterclockwise path through the color spectrum.

You can set the color progression for any blend that uses uniform or fountain fills. You can't create color progressions using bitmap, texture, vector pattern, PostScript, or transparent fills.

To set the color progression for intermediate objects



1. Select a blend with the *Pick tool*.
2. On the Property Bar, click one of the following buttons to indicate the type of color progression you want:

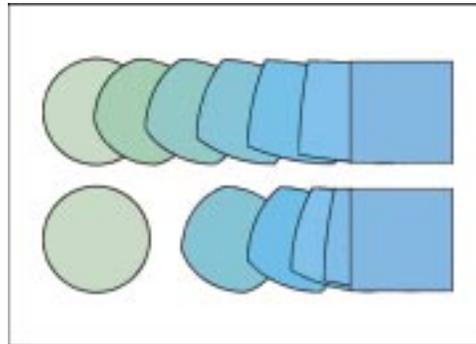


- *Direct Blend*
- *Clockwise Blend*
- *Counterclockwise Blend*

Accelerating the intermediate objects, fills, and outlines in a blend

In a basic blend, the intermediate objects are spaced evenly as they progress between the start and end objects. Similarly, the intermediate colors progress evenly between these objects. You can change these progressions so that they appear to “accelerate” toward the start or end object. When you accelerate objects in one direction, for example, they get closer together as they progress in that direction. Color acceleration operates similarly, moving more quickly through the color spectrum as it progresses.

Accelerating objects and colors towards the end object creates an interesting variation on a direct blend.



To accelerate intermediate objects and colors using the Property Bar



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*.
2. Disable the *Link Blend Accelerations button* on the Property Bar.

This button is disabled when it appears raised.



3. On the Property Bar, move the *Blend Object Acceleration slider* to set the direction and rate of object acceleration.



4. On the Property Bar, move the *Blend Color Acceleration slider* to set the direction and rate of color acceleration.

To accelerate intermediate objects and colors interactively



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*, and select a blend.
2. Double click the object and color acceleration arrows to unlink them.
3. Move the blue color acceleration arrow to set the color acceleration.
4. Move the red object acceleration arrow to set the direction and rate of object.



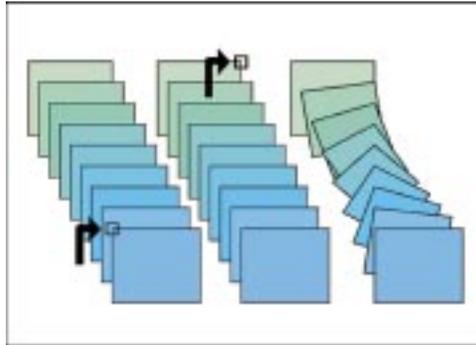
- You can link the rates of object and color acceleration so that you only have to adjust one setting to make both settings the same. You can do this by enabling the Link Blend Accelerations button on the Property Bar, or by double-clicking the sliders directly on the blend.
- You can control whether object size is accelerated at the same time as objects or colors by clicking the Accelerate Sizing for Blend button on the Property Bar.

Mapping nodes to set the progression of objects in a blend

Each time you blend two objects, CorelDRAW searches for the first node on the start and end objects and maps them to each other to create the intermediate objects. This may or may not give you the results you want.

By mapping nodes, you control the way the start object is transformed into the end object. As a result, you have greater control over the appearance of the intermediate blend objects. The Map Nodes option lets you specify the nodes you want CorelDRAW to treat as the start and end objects' first nodes.

Map the nodes shown in the first two examples to produce the rotation in the third example.



To change a blend's appearance by mapping nodes



1. Select a blend with the *Pick tool*.
2. Click the *Miscellaneous Blend Options button* on the Property Bar.
3. Click the Map Nodes button.
4. Using the curved pointer that appears, select the two nodes you want to map.

Nodes are indicated by hollow, black squares on the start and end objects. The nodes on the end object appear only after you click a node on the start object.

Editing blends

In addition to creating basic blends and setting their attributes, the CorelDRAW provides a full set of advanced blend editing tools. These tools make it easy to adjust any blend's basic properties, so that you can create more diverse effects. You can change a blend's properties by:

- changing its start or end object
- splitting it to create a compound blend
- fusing it (if it's a split or compound blend) so that it becomes a single blend
- reversing its direction
- changing the path it uses or removing it from the path altogether
- separating it so that you can experiment with its basic components
- clearing the blend effect so that only the original objects remain

Changing the start and end objects in a blend

You can change a blend's start or end object without having to reblend. When you select a new start or end object, CorelDRAW automatically redirects the blend, using the same settings as the original blend.

To change a blend's start object



1. Open the Interactive Tool flyout, and click the *Interactive Blend tool*.
2. Hold down Control, select a blend, and choose New Start.
3. Using the horizontal pointer that appears, click the new start object.



- The new start object must be layered behind the selected blend's end object.

To change a blend's end object

1. Open the Interactive Tool flyout, and click the Interactive Blend tool.
2. Hold down Control, select a blend, and choose New End.
3. Using the horizontal pointer that appears, click the new end object.



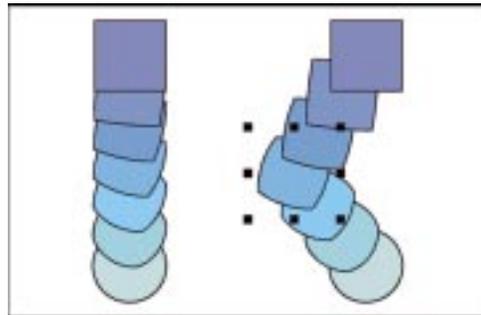
- The new end object must be layered in front of the selected blend's start object.

Splitting a blend

By splitting a blend, you create a compound blend that is composed of two component blends. The object you use to split the original blend becomes the start object in one component blend and the end object in the other. Editing this object — for example, moving or resizing it — changes the appearance of both component blends.

For a better understanding of how compound blends work, try moving the object at which you split the original blend. Notice how the blend's appearance changes when you do this.

Use the Split button to create a compound blend from a single blend.



To split a blend



1. Select a blend with the *Pick tool*.
2. Click the *Miscellaneous Blend Options button* on the Property Bar.
3. Click the Split button.
4. Using the curved pointer that appears, click the intermediate object at which you want to split the blend.
5. Edit the intermediate object as desired.

The blends automatically incorporate your changes.

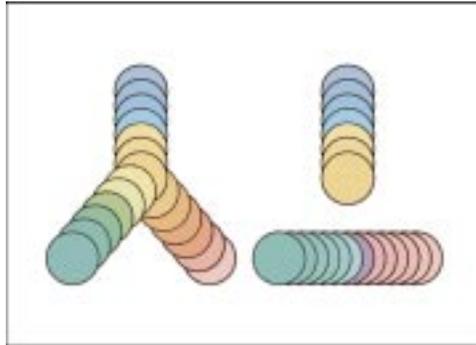


- After you split a blend, you can select one of the component blends and make changes that won't affect the other component(s). For example, you can specify a different number of steps or blend along a path. To select a blend that is part of a compound blend, hold down Command and click any of its intermediate objects.
- You can't split a blend using the intermediate object that is immediately adjacent to the start or end object.

Fusing a split blend

The Fuse Start and Fuse End features allow you to recombine split or compound blends. The terms “start” and “end” refer to the object the two component blends share — the object at which you split the original blend. This object ends one blend (the one that ends with the object on top) and starts another (the blend that starts with the object on the bottom). When you fuse the blend, it re-forms between the original start and end objects.

You can fuse components of a compound blend to create single blends.



To fuse the start or end objects in a split or compound blend



1. Hold down Command, and select one of the blend's components with the *Pick tool*.
2. Click the *Miscellaneous Blend Options button* on the Property Bar.
3. Click the Fuse Start or the Fuse End button.

If the selected blend and at least two of the compound blend's components share the same start or end object, a curved pointer appears. Use this pointer to click an intermediate object in the component blend you want to fuse.

Reversing the direction of a blend

Normally, blends progress from the start object to the end object — that is, from the object on the bottom to the object on top. You can change the order of the objects to reverse the blend.

To reverse the direction of a blend



1. Select a blend with the *Pick tool*.
2. Choose Arrange, Order, Reverse Order.

Editing the blend path

You can have CorelDRAW identify the path along which objects are blended by selecting the path. You can then edit the path using the CorelDRAW tools and features. For example, you can use the Shape tool to change the path's shape or use the on-screen Color Palette to change its color. The blend reforms instantly to reflect any changes you make.

Additionally, you quickly can apply a blend to a new path. The blend retains all of its settings as it follows the shape of the new path.



To show the blend path

1. Open the Interactive Tool flyout, click the *Interactive Blend tool*, and select a blend.
2. Hold down Control, click the blend, and choose Show Path.

To edit the blend path



1. Follow all the steps from the previous procedure.
2. Edit the path using the path editing tools — for example, the *Shape tool*.

To blend along a new path

1. Open the Interactive Tool flyout, click the Interactive Blend tool, and select a blend.
2. Hold down Control, click the blend, and choose New Path.
3. Using the curved pointer that appears, select the path to which you want to apply the blend.



- The new path to which you want to apply the selected blend must already be drawn.

Removing a blend from a path

You can separate a blend from its path. The start and end objects remain stationary, and the intermediate objects revert to their original, straight-line path.

To remove a blend from a path



1. Open the Interactive Tool flyout, click the *Interactive Blend tool*, and select a blend that is blended along a path.
2. Hold down Control, click the blend, and choose Detach From Path.



- If you want to select a blend that is part of a compound blend, hold down Command as you select the blend.

Separating and clearing blends

You can break a blend into four possible components: the start object, the end object, the intermediate objects, and the path if the objects were blended along a path. You can remove the intermediate objects from the selected blend, leaving only the start and end objects and the path (if applicable). These objects are no longer connected.

To separate blended objects



1. Select a blend with the *Pick tool*.
2. Choose Arrange, Separate.



- You can ungroup the intermediate objects by selecting them, and choosing Arrange, Ungroup.

To clear the intermediate shapes in a blend

1. Select a blend with the Pick tool.
2. Choose Effects, Clear Blend.

Distorting objects

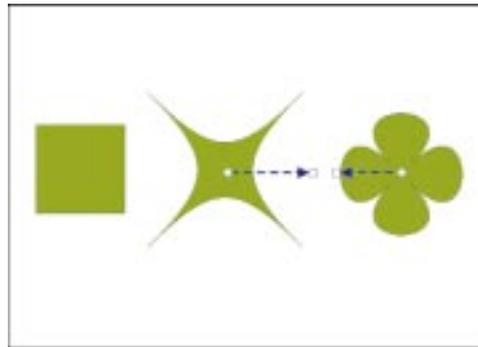
You can quickly alter the appearance of objects in CorelDRAW by using the Interactive Distortion tool. The Interactive Distortion tool provides access to additional Property Bar controls that let you create a wide variety of interesting effects. There are three types of distortion from which you can choose: Push And Pull, Zipper, and Twister. You can alter the appearance of an object by applying a single distortion effect, or you can apply multiple distortions to create a more interesting appearance. In addition, you can define the center of the distortion effect by dragging the diamond-shaped reposition handle with the mouse. The reposition handle is part of the vector controls that let you alter the appearance of a distortion in the Drawing Window. If you're not satisfied with a particular distortion, you can select the distorted object with the Interactive Distortion tool and edit the distortion properties.

You can apply each type of distortion effect to any object you create using CorelDRAW, including shapes, lines, curves, and Artistic text. Try experimenting with the various distortion modes to see what kind of interesting effects you can apply to your objects.

Distorting objects using the Push And Pull tool

You can apply a Push or Pull distortion to any object you create in CorelDRAW. The Push distortion pushes the nodes of the object you're distorting away from the center of the distortion. The Pull distortion pulls the nodes of the object you're distorting towards the center of the distortion. You can also move the center of the distortion by dragging the reposition handle with the mouse. You can use the Push And Pull tool to generate a wide variety of interesting effects quickly.

From left to right: a basic rectangle; with Push distortion; with Pull distortion.



To apply a Push distortion



1. Open the Interactive Tools flyout, click the *Interactive Distortion tool*, and select an object.



2. Enable the *Push And Pull Distortion button* on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the mouse to the right to determine the amount of Push distortion you want to apply.

The point at which you click the object determines the center of the distortion.

To apply a Pull distortion

1. Follow steps 1 and 2 from the previous procedure.
2. Drag the mouse to the left to determine the amount of Pull distortion you want to apply.

The point at which you click the object determines the center of the distortion.



- You can also determine the amount of Push And Pull distortion by typing a value in the Push And Pull Distortion Amplitude box on the Property Bar. You can type values from -200 to 200. Values in the -200 to -1 range apply a Pull distortion, while values in the 1 to 200 range apply a Push distortion.

To move the center of a Push or Pull distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

The diamond-shaped reposition handle determines the center of the distortion.

2. Ensure that the Push And Pull Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the reposition handle to a new location.

To center a reposition handle

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

2. Ensure that the Push And Pull Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Click the *Center Distortion button* on the Property Bar.



To add a new distortion to an existing distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

2. Ensure that the Push And Pull Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Click the Add New Distortion button on the Property Bar.

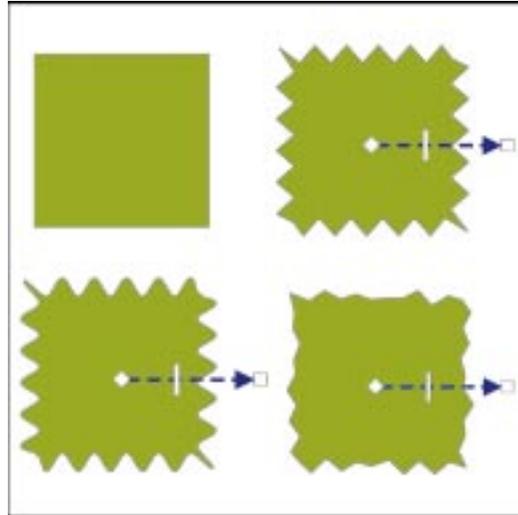
4. Apply the distortion you want.

Distorting objects using the Zipper tool

You can apply a Zipper distortion to any object you create in CorelDRAW to generate a wide variety of interesting effects quickly. In addition, you can use

the controls on the Property Bar to randomize the Zipper distortion, round the points of the zipper, or emphasize the distortion in a specific area of the object.

Clockwise from top-left: a basic rectangle; with standard Zipper distortion; with random Zipper distortion; with round Zipper distortion.



To apply a Zipper distortion



1. Open the Interactive Tools flyout, click the *Interactive Distortion tool*, and select an object.



2. Enable the *Zipper Distortion button* on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the mouse to determine the amplitude of the zipper effect.

The point at which you click the object determines the center of the distortion.

4. In the Drawing Window, move the slider to determine the zipper frequency.



- You can also determine the amplitude of the zipper effect by typing a value in the Zipper Distortion Amplitude box on the Property Bar. You can type values from 0 to 100. High values produce a more pronounced zipper distortion.
- You can also determine the frequency of the zipper points per segment by typing a value in the Zipper Distortion Frequency box on the Property Bar. You can type values from 0 to 100. High values produce a greater zipper frequency.

To move the center of a Zipper distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

The diamond-shaped reposition handle determines the center of the distortion.

2. Ensure that the Zipper Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the reposition handle to a new location.

The distortion effect updates as you drag the reposition handle.

To center a reposition handle

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

2. Ensure that the Zipper Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.



3. Click the *Center Distortion button* on the Property Bar.

To apply a random Zipper distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select an object.

2. Ensure that the Zipper Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.



3. Enable the *Random Distortion button* on the Property Bar.



- To return the Zipper distortion to a uniform pattern, disable the Random Distortion button. The button is disabled when it appears raised.

To round the points of a Zipper distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

2. Ensure that the Zipper Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.



3. Enable the *Smooth Distortion button* on the Property Bar.



- You can return to a pointed Zipper distortion by disabling the Smooth Distortion button. The button is disabled when it appears raised.

To emphasize a Zipper distortion in a specific area of an object

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.
2. Ensure that the Zipper Distortion button is enabled on the Property Bar.
The button is enabled when it appears pressed.
3. Enable the *Local Distortion button* on the Property Bar.
4. Drag the reposition handle to the area of the object where you want the zipper distortion to be more pronounced.



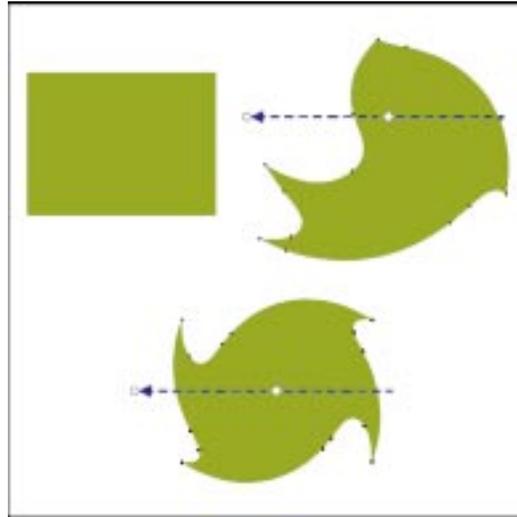
To add a new distortion to an existing distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.
2. Ensure that the Zipper Distortion button is enabled on the Property Bar.
The button is enabled when it appears pressed.
3. Click the Add New Distortion button on the Property Bar.
4. Apply the distortion effect you want.

Distorting objects using the Twister tool

You can apply a Twister distortion to any object you create in CorelDRAW to generate a wide variety of interesting effects quickly.

Clockwise from top-left: a basic rectangle; with Twister distortion off-center; with Twister distortion centered.



To apply a Twister distortion



1. Open the Interactive Tools flyout, click the *Interactive Distortion tool*, and select an object.



2. Enable the *Twister Distortion button* on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the mouse to the right along the X-axis, and up slightly along the Y-axis to apply a small amount of distortion.

The point at which you click the object determines the center of the distortion.



- The Horizontal Line Of Origin that extends from the center of the distortion marks the start of a rotation. After you complete one full rotation (359 degrees), the Complete Rotations box counts one and the Additional Degrees box resumes counting from zero.



- You can also determine the amount of rotation by typing values in the Complete Rotations and the Additional Degrees boxes on the Property Bar. High values create a more pronounced Twister distortion.
- You can toggle between a the direction of the rotation by clicking the Clockwise Rotation and Counterclockwise Rotation buttons on the Property Bar.

To move the center of a Twister distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

The diamond-shaped reposition handle determines the center of the distortion.

2. Ensure that the Twister Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Drag the reposition handle to a new location.

To center a reposition handle

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select a distorted object.

2. Ensure that the Twister Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.



3. Click the *Center Distortion button* on the Property Bar.

To add a new distortion to an existing distortion

1. Open the Interactive Tools flyout, click the Interactive Distortion tool, and select the object to which you want to add a new distortion.

2. Ensure that the Twister Distortion button is enabled on the Property Bar.

The button is enabled when it appears pressed.

3. Click the Add New Distortion button on the Property Bar.

4. Apply the distortion you want.

Working with envelopes

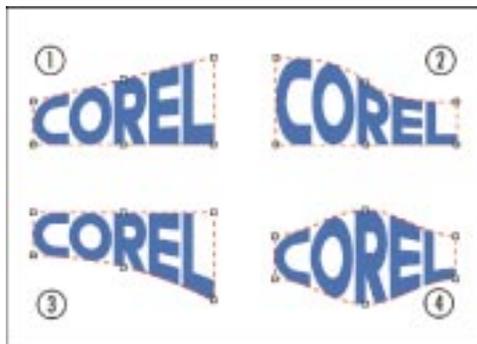
Envelopes provide a powerful and simple way to reshape objects. The Interactive Envelope tool lets you change the shape of objects by using the mouse to move nodes and control points. You start by adding an envelope to the object you want to reshape. This envelope is superimposed on the object and appears as a dotted red line with a series of squares at points along its path. These squares represent the envelope's nodes. By dragging the nodes in any direction, you reshape the envelope. In turn, as the envelope changes shape, the associated object automatically reshapes to conform to the envelope. CorelDRAW reshapes the object, based on the order and position of the envelope's nodes.

Envelopes can produce a variety of effects when applied to shapes and text.



As you use the Interactive Envelope tool, you can access additional controls on the Property Bar. The most important controls are the buttons that activate each of the four editing modes. These modes control the shape of the envelopes and the objects inside them. Three of these modes — Straight Line, Single Arc, and Double Arc — let you drag a node or control point horizontally or vertically to change the shape of one side of the object. The fourth mode — Unconstrained — lets you drag a node in any direction to make more dramatic changes, like fitting text inside an irregular shape. In addition, the Unconstrained mode shows control points for each node, allowing you to make precise adjustments to get the exact envelope shape you want.

The four envelope editing modes: (1) Straight Line, (2) Double Arc, (3) Single Arc, and (4) Unconstrained.



Applying envelopes

Envelopes make it easy to distort an object's appearance. This distortion is controlled by the shape of the envelope and the properties of its nodes, as well as the mapping mode it uses. As with many of the CorelDRAW special effects tools, it's a good idea to experiment with envelopes until you learn how to create the effects you want.

To apply an envelope to an object



1. Open the Interactive Tools flyout, and click the *Interactive Envelope tool*.

2. Select an object.
3. Click one of the following buttons on the Property Bar:



- *Envelope Straight Line Mode*
- *Envelope Single Arc Mode*
- *Envelope Double Arc Mode*
- *Envelope Unconstrained Mode*

4. Drag a node to change the shape of the envelope.
5. Repeat steps 3 and 4 until the envelope is the shape you want.



- CorelDRAW reshapes the selected object after you change the shape of its envelope.



- If you aren't getting the results you want, click the Clear Envelope button on the Property Bar. For more information about mapping modes, see "Changing the way CorelDRAW fits an object to an envelope" on page 390.
- If you're using an editing mode other than Unconstrained, you can hold down Command or Shift as you drag to move the adjacent node an equal distance in the same or opposite direction, respectively. Hold down Command and Shift to have all four corner or side nodes (depending on the type you're dragging) move.
- If you're using Unconstrained editing mode, you can hold down Command to limit node movement horizontally or vertically.

Applying preset envelopes

The Interactive Envelope tool provides access to a set of predrawn envelopes of various shapes. These shapes include polygons as well as irregular and special shapes like hearts, curves, and arrows. You can also adjust the shape of a preset envelope after you apply it to an object.

To apply a preset envelope



1. Select an object with the *Pick tool*.
2. Open the Interactive Tools flyout, and click the *Interactive Envelope tool*.
3. Click the Add Preset button on the Property Bar, and choose the envelope shape you want to apply.

Copying an envelope from one object to another

You can copy an envelope from one object and apply it to another object. You can apply the same envelope effect to several different objects.

To copy an envelope from one object to another



1. Using the *Pick tool*, select the object to which you want to copy the envelope.
2. Choose Effects, Copy, Envelope From.
3. Using the horizontal pointer that appears, select the object that has the envelope you want to copy.

CorelDRAW copies the envelope to the object you selected in step 1.



- You can't copy an envelope if you applied an effect to the object after applying the envelope.

Reshaping an envelope

You can make adjustments to the shape of any envelope. However, if you apply other effects after you apply the envelope, you'll have to clear them before reshaping. If you don't clear these effects, you won't be able to select and move any of the envelope's nodes.

To reshape an envelope



1. Open the Interactive Tools flyout, click the *Interactive Envelope tool*, and select an object with an envelope.
2. On the Property Bar, click one of the following buttons for the editing mode you want:



- *Envelope Straight Line Mode*



- *Envelope Single Arc Mode*



- *Envelope Double Arc Mode*



- *Envelope Unconstrained Mode*

3. Drag the nodes (or the nodes' control points) to attain the desired envelope shape.

To move several envelope nodes at once



1. Open the Interactive Tools flyout, click the Interactive Envelope tool, and select an object with an envelope.
2. Click the *Unconstrained Editing Mode* button on the Property Bar.
3. Marquee select the nodes you want to move.
4. Drag any of the selected nodes.

Each of the selected nodes move the same distance and direction as the node you drag.



- The marquee select works only in unconstrained editing mode.
- CorelDRAW reshapes the selected object after you reshape its envelope.

Changing the way CorelDRAW fits an object to an envelope

The options in the Mapping Mode pop-up menu let you control the way an envelope alters the appearance of an object. The pop-up menu on the Property Bar, provides four mapping modes: Horizontal, Original, Putty, and Vertical. A fifth mode, Text, appears if you're using the envelope to reshape Paragraph text.

By applying a new mapping mode, you change how CorelDRAW fits the object to the envelope, not the shape of the envelope itself.

Horizontal mode

Stretches the object to fit the basic dimensions of the envelope, then compresses it horizontally to fit the shape of the envelope.

Original mode

Maps the corner handles on the object's selection box to the envelope's corner nodes. The other nodes are mapped linearly along the edge of the object's selection box. The nodes' control points are taken into consideration during mapping.

Putty mode

Maps the corner handles on the object's selection box to the envelope's corner nodes only. The other nodes are ignored. Putty mode produces less exaggerated distortions than Original mode.

Vertical mode

Stretches the object to fit the basic dimensions of the envelope, then compresses it vertically to fit the shape of the envelope.

To change the mapping mode



1. Open the Interactive Tools flyout, click the *Interactive Envelope tool*, and select an object.
2. Choose a mapping option from the Mapping Mode pop-up menu.
3. Edit the envelope until it is the shape you want.

Adding and removing envelope nodes

CorelDRAW makes it easy to add or remove envelope nodes using the mouse. Adding nodes to an envelope allows you to make minute adjustments to give the envelope a more complex shape. Removing nodes simplifies the envelope's shape.

To add a node to an envelope



1. Open the Interactive Tools flyout, click the *Interactive Envelope tool*, and select the object that has the envelope you want to edit.
2. Click the *Envelope Unconstrained Mode* editing mode button on the Property Bar.
3. Click the envelope where you want to add a node.
4. Click the *Add Node(s) button* on the Property Bar.



- You can also double-click the envelope where you want to add a node.

To remove a node from an envelope



1. Follow steps 1 and 2 from the previous procedure.
2. Click the node.
3. Click the *Delete Node(s) button* on the Property Bar.



- You can also double-click a node to remove it from the envelope.

Modifying envelope nodes and segments

You can modify envelope nodes similar to the way you modify nodes on an object. By changing a node's type, you change the way the envelope segments on either side pass through the node. This changes the shape of the envelope, which in turn changes the effect it has on the object.

As with object segments, envelope segments can be converted from curves to straight lines or from straight lines to curves.

To change an envelope node's type



1. Open the Interactive Tools flyout, click the *Interactive Envelope tool*, and select an object.



2. Click the *Unconstrained Editing Mode button* on the Property Bar.

3. Click the node you want to change.

4. Click one of the following buttons on the Property Bar:

- Cusp
- Smooth
- Symmet



• You can also hold down Control, click the node you want to change, and choose Cusp, Smooth, or Symmetrical. For more information about node types, see “Drawing and shaping objects” on page 83.

To change an envelope segment to a straight line or curve



1. Open the Interactive Tools flyout, click the *Interactive Envelope tool*, and select the segment you want to change.

2. Click one of the following buttons on the Property Bar:

- Convert Curve To Line
- Convert Line To Curve



• You can also hold down Control, click the envelope segment you want to change, and choose To Line, or To Curve.

Removing an envelope

You can remove envelopes one at a time, starting with the one you applied most recently. If you've applied three envelopes to an object, you'll need to clear them all to return to the original object.

Before clearing an envelope, you have to remove any effects that were applied to the object after you applied the envelope.

To remove an envelope



1. Using the *Pick tool*, select an object with an envelope.
2. Choose Effects, Clear Envelope.



- You can also remove an envelope by selecting the object with the Interactive Envelope tool, and clicking the Clear Envelope button on the Property Bar.

Extruding objects

Extruding an object gives it the illusion of depth. To create this effect, CorelDRAW adds extra surfaces to give an object a three-dimensional look. For example, extruding a square creates the illusion of a cube, while extruding an ellipse creates a cylindrical effect. You can extrude any vector graphics you've created using CorelDRAW, including lines, shapes, and text.

Working with extrusions

The Interactive Extrude tool makes it easy to apply a three-dimensional look to a two-dimensional drawing. When you apply an extrusion to an object, CorelDRAW projects points from the object and joins them to create extruded surfaces. These surfaces are projected toward a vanishing point, adding depth to the original object so that it appears three-dimensional.

When applied, extruded surfaces form a dynamically linked group with the original object (known as the “control object”). This means that the extruded surfaces automatically reflect any changes you make to the control object's properties. For example, if you resize the control object, the extruded surfaces automatically resize to maintain their proportional and positional relationship.

In addition, you can create a beveled extrusion to simulate the effect created by real-life beveling tools. Beveling creates the illusion that an object's edges are cut at an angle other than 90 degrees. You specify the appropriate angle and depth values for the size of the object being “cut.”

Use bevels to create an array of interesting effects.



You can further enhance basic extrusions by using controls on the Property Bar. As you use the Interactive Extrude tool, the Property Bar provides controls that let you define the type of extrusion, vanishing point options, extrusion depth, surface color, and rotation, lighting, and bevel properties.

Creating a basic extrusion

You can quickly extrude an object using the Interactive Extrude tool. There are two types of extrusions, perspective extrusions and parallel extrusions. By default, CorelDRAW creates a perspective extrusion. You can quickly change the perspective type using the Property Bar. For more information, see “Changing an extrusion’s type” on page 397.

To extrude an object



1. Open the Interactive Tools flyout, click the *Interactive Extrude tool*, and select an object.

A small arrow appears beside to the cursor to indicate that you can extrude the object. If you move your cursor to a blank space in the Drawing Window, the small arrow disappears and you cannot extrude the object.

2. Drag the vanishing point marker (represented by “X”) to set the direction of the extrusion.

The vanishing point marker appears after you begin to drag.



- You can place the vanishing point at a precise coordinate by typing values in the X and Y Vanishing Point Coordinate boxes on the Property Bar.

Creating a beveled extrusion

You can enhance basic extrusions by beveling edges. For example, you can create interesting three-dimensional effects by applying bevels to extruded

Artistic text. CorelDRAW automatically applies a suitable bevel depth to text, based on its point size.

You can choose how you want to apply beveled edges to an extrusion using the controls on the Property Bar. The first method involves specifying precise bevel depth and angle values. The second method involves dragging a handle control within the Bevel Preview box. As you drag the handle (indicated by a small white square), you change the bevel depth and angle. These changes are reflected in the Bevel Depth and Bevel Angle boxes.

To create a beveled extrusion with precision



1. Open the Interactive Tools flyout, click the *Interactive Extrude tool*, and select an extrusion.

2. Enable the Bevels button on the Property Bar.

The button is enabled when it appears pressed.



3. Enable the *Use Bevel button* on the Property Bar.

If you want to show the bevel but not the extrusion, enable the Bevel Only button on the Property Bar.



4. On the Property Bar, type a value in the *Bevel Depth box*, and press Return.

You can specify values from 0.001 to 1980 inches (or the equivalent in other units of measurement).



5. On the Property Bar, type a value in the *Bevel Angle box*, and press Return.

You can specify values from 1.0 (a nearly straight bevel) to 89.0 degrees (a high-angle bevel).

To create a beveled extrusion interactively

1. Follow steps 1 to 3 from the previous procedure.



2. Click the *Bevel Preview button* on the Property Bar.

3. Drag the handle control vertically to specify the bevel depth, and horizontally to specify the bevel angle.

Copying and cloning extrusions

You can copy and clone extrusions to create new extrusions. You copy an extrusion's settings to the selected object. The selected object takes on all extrusion-related settings; however, its fill and outline attributes remain unaffected. The two extrusions have no connection and can be edited independently.

When you clone an extrusion, you also copy extrusion attributes to the selected object. The selected object takes on all extrusion-related settings, while its fill and outline settings remain unaffected. With clones, however, changes made to the original extrusion (the “master”) afterward are also applied to the clone. In addition, you can’t edit the cloned extrusion’s settings; any changes must be made to the master object.

To copy an extrusion



1. Using the *Pick tool*, select the object to which you want to copy an extrusion.
2. Choose Effects, Copy, Extrude From.
3. Using the horizontal pointer that appears, select the extrusion you want to copy.

To clone an extrusion

1. Using the Pick tool, select the object to which you want to clone an extrusion.
2. Choose Effects, Clone, Extrude From.
3. Using the horizontal pointer that appears, select the extrusion you want to clone.



- To select the extrusion you want to copy or clone, you must select an extruded surface, not the control object.

Setting basic extrude attributes

After you extrude an object you can adjust its fundamental attributes to accentuate its appearance. For example, you can change the extrusion type to specify the direction of the extrusion in relation to the control object. You can also adjust the depth of an extrusion. By extending the extrusion lines of an ellipse to its vanishing point, you can create a cone. By rotating an extrusion, you can enhance its three-dimensional look.

Selecting an extrusion

The procedures for selecting extrusions and their component objects are slightly different from those you use to select other objects. You can select an entire extrusion, an extrusion’s control object, an extruded surfaces group (i.e., the extruded surfaces and the control object), and a bevel group (i.e., the beveled surfaces and the control object).



To select an extrusion

1. Click the *Pick tool*.
2. Click any of the extruded surfaces of an extrusion.

To select an extruded surfaces group

1. Click the Pick tool.
2. Click the control object.

To select the extrusion component only

1. Click the Pick tool.
2. Hold down Command, and click an extruded surface.

To select a bevel group

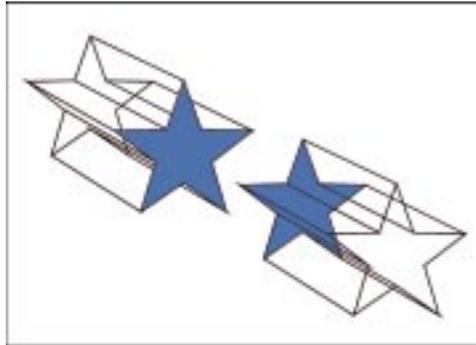
1. Click the Pick tool.
2. Hold down Command, and click a beveled surface.

Changing an extrusion's type

You can create two basic extrusion types: perspective extrusions and parallel extrusions. Perspective extrusions present the illusions of both perspective and depth, as the extruded surfaces appear to recede towards a vanishing point. The vanishing point (located at infinity and represented by an “X” in the Drawing Window) is the point at which the receding lines would meet if extended that far. With parallel extrusions, the lines of the extruded surfaces are drawn parallel to one another and never approach a vanishing point.

The two extrusion types are further characterized by a reference to “front” or “back.” These terms indicate the direction of the extrusion with respect to the control object (the object being extruded). You can also control how far a perspective extrusion extends by setting a depth value. For more information, see “Setting the depth of an extrusion” on page 398.

Extruded surfaces
can project backward
or forward.



To change an extrusion's type



1. Select the extrusion with the *Pick tool*.
2. Choose an extrusion type from the Extrusion Type pop-up menu on the Property Bar.

Setting the depth of an extrusion

You can specify the depth of a perspective extrusion by specifying how far the extrusion extends. The lines of an extruded surface extend between the control object and the vanishing point. When you adjust the depth of a perspective extrusion, you change the length of these lines, and, as a result, the depth of the extrusion.

To set the depth of an extrusion



1. Select the extrusion with the *Pick tool*.
2. On the Property Bar, type a value in the *Depth box*, and press Return.



- You can't change the depth of a parallel extrusion because the lines of the extruded surfaces are drawn parallel to one another and never approach a vanishing point.

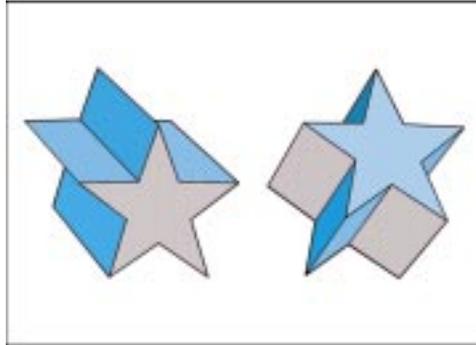


- You can also change the depth of an extrusion by selecting an extrusion with the Interactive Extrude tool and moving the Depth slider.

Rotating an extrusion

You can rotate an extrusion around the x, y, and z axes by specifying precise rotation values (from -100 to 100) or by dragging the extrusion with the mouse.

.....
You can apply three-dimensional rotation to provide a different perspective on an extruded object.
.....



To rotate an extrusion using precise values



1. Select an extrusion with the *Pick tool*.
2. Click the *Extrude Rotation button* on the Property Bar.
3. Type values in the three boxes, and press Return.

To rotate an extrusion using the mouse

1. Using the Pick tool, select an extrusion.
2. Click the extrusion to display the rotation and skewing handles.
3. Drag one of the rotation handles (the corner two-way arrows) in a clockwise or counterclockwise direction to rotate the extrusion.

When you start to drag the mouse, an outline of the object appears. The extrusion's outline allows you to preview the effects of the rotation.

Editing extrusions

In addition to filling and shading an extrusion, there are numerous ways to change its appearance. If you want to change the basic shape of the extrusion, you can edit the nodes of its control object or any of its extruded surfaces. If you still don't have the effect you want, you can break an extrusion down to its basic components and edit each component individually.

You can also move, lock, copy, and share the vanishing point of an extrusion.

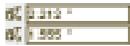
Moving an extrusion's vanishing points

The vanishing point, represented by an X in the Drawing Window, appears when you select an extruded object. If you are working with a parallel extrusion, you can change its depth by moving the vanishing point. If you are working with perspective extrusions, you control its perspective through the vanishing point.

To move an extrusion's vanishing point



1. Open the Interactive Tools flyout, click the *Interactive Extrude tool*, and select an extrusion.



2. On the Property Bar, type horizontal and vertical coordinates (relative to the 0,0 point of the control object) in the *Vanishing Point Coordinate boxes*, and press Return.



• You can also move the vanishing point by dragging it to a new location with the Interactive Extrude tool.

Locking an extrusion's vanishing point

You can lock an extrusion's vanishing point to the page or to the control object. If you lock the vanishing point to the page, it remains fixed in its position relative to the page. If you move the control object, the vanishing point maintains its position. The extrusion is redrawn based on the control object's new position.

If you lock the vanishing point to the control object, it remains fixed in its position relative to the control object. If you move the control object, the vanishing point moves with it. By default, all new extrusions use the VP Locked To Object setting.

To lock an extrusion's vanishing point



1. Select an extrusion with the *Pick tool*.

2. Choose one of the following from the Vanishing Point Properties pop-up menu on the Property Bar:

- VP Locked To Object — to have the vanishing point maintains its position relative to the control object, even if you move the control object
- VP Locked To Page — to have the vanishing point maintains its position as you move the control object

Copying and sharing vanishing points

You may find it useful to have multiple extrusions use the same vanishing point. When you copy an extrusion's vanishing point to another object, a new vanishing point is created on top of the existing vanishing point. As a result, both objects appear to recede toward the same point. The two vanishing points cannot be edited independently.

You can also have multiple extrusions share a common vanishing point. Unlike when you copy vanishing points, the extrusions all share one vanishing point. Changes to the vanishing point's position affect all the extrusions that share that point.

An extrusion you've rotated using the Property Bar can't share a vanishing point with another extrusion. You can however, share the vanishing point of an extrusion that hasn't been rotated with a rotated extrusion. If you apply a rotation to an extrusion using the Pick tool (rotation handles) or the Rotation Palette you can share it's vanishing point.

To copy the vanishing point from one extrusion to another



1. Using the *Pick tool*, select the extruded object to which you want to copy a vanishing point.
2. Choose Copy VP From from the Vanishing Point Properties pop-up menu on the Property Bar.
3. Select the extruded object from which you want to copy the vanishing point.

To have two extrusions share one vanishing point

1. Using the Pick tool, select the extrusion with the vanishing point you want to change.
2. Choose Shared Vanishing Point from the Vanishing Point Properties pop-up menu on the Property Bar.
3. Select the extrusion that has the vanishing point you want shared.

Changing the shape of an extrusion's control object

Most control objects can be edited using the Shape tool. The Shape tool can help you accomplish tasks as varied as changing the basic shape of the control object to adjusting the space between extruded characters of Artistic text.

In some situations, you won't be able to use the Shape tool to edit a control object. These include perspective extrusions that have been rotated using the tools on the 3D Rotation page and extrusions that have been altered

using the Add Perspective or Envelope effects. In each case, you'll have to clear the effect before you shape it.

For more information about shaping objects, see "Drawing and shaping objects" on page 83.

To change the shape of the control object in an extrusion



1. Open the Shape Edit flyout, click the *Shape tool*, and select the control object.
2. Drag the object's nodes one at a time to change its shape.

When you release the mouse button, the extruded surfaces reshape to reflect your changes.



- If you're working with a text extrusion, try double-clicking one of the text nodes using the Shape tool. This opens the Format Text dialog box. You can use the controls in this dialog box to change the formatting properties extruded text.

Increasing the printing and display speed of extrusions

You can control the facet size used when CorelDRAW renders and prints illustrations containing extrusions. Facet size represents the minimum size of the polygonal surfaces used to create the extrusions. Each facet consists of a unique color, therefore, smaller facets create smoother color transitions and larger facets create blockier color transitions on lighted extrusions.

To increase the printing speed of extrusions

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, Edit.
3. In the Minimum Extrude Facet Size box, type a value between 0.001 inches and 36 inches (or equivalent) to set the facet size used when CorelDRAW renders and prints extrusions.



- For best results, set the minimum extrude facet size to a value from 0.001 and 0.5 inches. A higher value (0.5 inches) will reduce screen refresh time. For high-quality output, decrease the facet size when you are ready to print your illustration.

To save the facet size with your document

1. Follow steps 1 and 2 from the previous procedure.
2. Enable the Save Facet Size With Document check box.

Separating and clearing extrusions

Extrusions are dynamically linked objects, which means that the extruded surfaces are linked to the control object. In addition, the extruded surfaces form a group of objects. Therefore, if you want to split up an extrusion so that you're left with all the objects in a separate state, you need to separate it and then ungroup its extruded surfaces. On the other hand, if you want to remove all the extruded surfaces, you can click the Clear Extrude command.

To separate an extrusion



1. Select an extrusion with the *Pick tool*.
2. Choose Arrange, Separate.

To ungroup extruded surfaces

1. Select the extruded surfaces with the Pick tool.
2. Choose Arrange, Ungroup.

To clear an extrusion

1. Select an extrusion with the Pick tool.
2. Choose Effects, Clear Extrude.

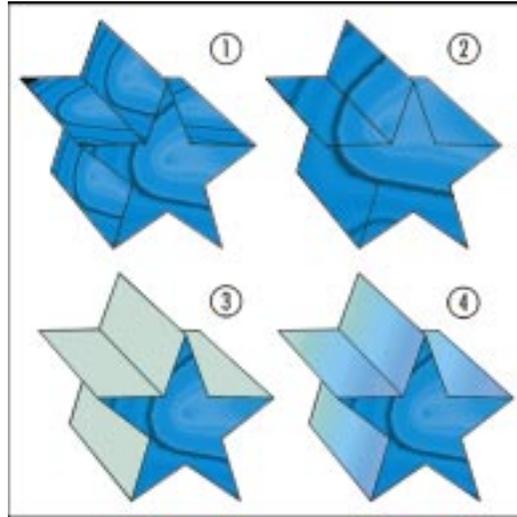
Filling extrusions

You can fill extrusions using your choice of three options. The first option, Use Object Fill, applies the control object's current fill to all its extruded surfaces. This option is best for uniform fills, fountain fills, two-color and full-color patterns, texture fills, and bitmap fills.

The second option, Solid Fill, fills extruded surfaces with whatever solid color you choose. The control object maintains its fill properties, while the extruded surfaces take on the color you specify.

The third option, Shade, blends two colors of your choice along the length of the extruded surfaces. The result is similar to the effect created by a linear fountain fill.

.....
 Fill options for
 extrusions: (1) Use
 Object Fill, (2) Use
 Object Fill With
 Drape Fill, (3) Solid
 Fill, and (4) Shade
 Fill.



In addition, you can choose the fill you want for beveled surfaces. These surfaces include object, solid, and shade fills, like extruded surfaces, or you can use their own unique fill. If you use object or shade fills on an extrusion that uses beveling, the fill applies to the extruded and beveled surfaces independently.

Applying an object's fill to its extruded surfaces

You can apply the control object's fill to its extruded surfaces. If the fill is a fountain fill, pattern fill, texture fill, or PostScript fill (i.e., not a solid fill), you can drape the fill around the object, instead of applying a copy of the fill to each extruded surface.

Additionally, you can apply the extrusion's fill to beveled surfaces, or apply a solid color to beveled surfaces.

To apply an object's fill to its extruded surfaces



1. Select an extrusion with the *Pick tool*.



2. Click the Color button on the Property Bar.



3. Click the *Use Object Fill button* on the Property Bar.

4. Do one of the following:

- Enable the *Drape Fills button* on the Property Bar to wrap the fill around the object.
- Disable the *Drape Fills button* on the Property Bar to copy the fill to every extruded surface.

5. Click a blank space in the Drawing Window.

To apply an extrusion's fill or a solid color to beveled surfaces

1. Follow steps 1 to 4 from the previous procedure.
2. Do one of the following:



- Enable the *Use Extrude Fill For Bevel button* on the Property Bar to have beveled surfaces use the same fill as the extruded surfaces.
- Disable the *Use Extrude Fill For Bevel button* on the Property Bar, and choose a color from the *Bevel Color picker*.

Applying solid colors to extruded surfaces

You can apply any solid color to an object's extruded or beveled surfaces and you can apply any color to these surfaces without affecting the control object. You can also apply a different fill (from the extrusion) to beveled surfaces.

To apply a solid fill color to extruded surfaces



1. Select an extrusion with the *Pick tool*.
2. Click the *Color button* on the Property Bar.



3. Click the *Use Solid Color button* on the Property Bar.
4. Click the *Solid/Shade From Extrude Color picker* then choose a color for the extruded surfaces.

To apply the same or a different solid fill color to beveled surfaces

1. Follow steps 1 to 4 from the previous procedure.
2. Do one of the following:



- Enable the *Use Extrude Fill For Bevel button* on the Property Bar to have beveled surfaces use the same fill as the extruded surfaces.
- Disable the *Use Extrude Fill For Bevel button* on the Property Bar, and choose a color from the *Bevel Color picker* to use a different fill from the extruded surfaces.

Applying gradient fills to extruded surfaces

You can apply a gradient fill — a fill that shows a progression between two colors — to an object's extruded or beveled surfaces. This type of fill can use any two colors and has no effect on the control object. Additionally, you can apply a solid fill or the same gradient fill to beveled surfaces.

To apply a gradient fill to an object's extruded surfaces



1. Select an extrusion with the *Pick tool*.



2. Click the Color button on the Property Bar.
3. Click the *Use Color Shading button* on the Property Bar.
4. Click the Solid/Shade From Extrude Color picker, and choose a color for the start of the gradient fill's color progression.
5. Click the Shade To Extrude Color picker, then choose a color for the end of the gradient fill's color progression.

To apply a gradient or a solid color fill to an object's beveled surfaces

1. Follow all the steps from the previous procedure.
2. Do one of the following:



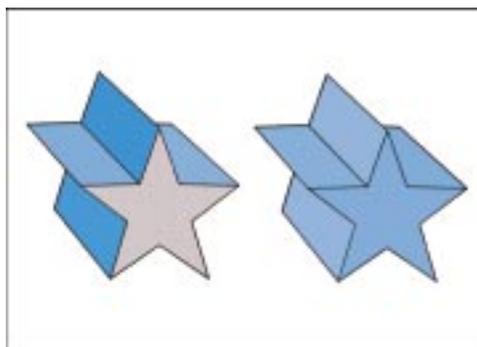
- Enable the *Use Extrude Fill For Bevel button* on the Property Bar to have beveled surfaces use the same fill as the extruded surfaces.
- Disable the Use Extrude Fill For Bevel button on the Property Bar, and choose a color from the Bevel Color picker.

Lighting extrusions

The Lighting controls on the Property Bar provide tools that let you add a lighting effect to any extrusion. This effect is produced by creating and applying simulated white light sources. You can create up to three light sources that project toward the extruded object from any direction with varying intensity. Light sources enhance both the three-dimensional effect created through extrusion and the effect of the fill you apply.

The intensity setting controls the amount of light originating from the selected light source. Creating multiple light sources with high intensity settings, for example, causes extruded surfaces to appear very light in color.

Applying light sources gives an extrusion a more realistic look.



Light sources always strike the control object directly and affect extruded surfaces to a lesser degree. Therefore, if the control object is partially hidden

from view because it has been rotated, the change in light source direction or intensity may not be readily apparent.

Applying light sources to an extrusion

You can apply light sources to an extrusion to enhance its effects and fill attributes. You position the light sources by moving them within the Preview box. The Preview box contains a sphere icon and a wireframe box. The sphere icon represents the selected extrusion; the surrounding wireframe box represents a three-dimensional grid on which you position the light sources. You can only position light sources where lines intersect on this wireframe box.

To apply light sources to an extrusion



1. Select an extrusion with the *Pick tool*.
2. Click the Lighting button on the Property Bar.



3. Click the *Extrude Lighting button* on the Property Bar.
4. Click up to three of the Light Source buttons to apply one, two, or three light sources. These light sources appear as numbered circles in the Preview box.
5. Position each light source by dragging its corresponding circle in the Preview box.

Adjusting the intensity of a light source

You can adjust the properties of light sources you apply to an extrusion using the controls provided on the Property Bar. The Intensity slider controls the intensity of each light source. By moving the slider to the left, you decrease the intensity, thereby darkening the extrusion's colors. By moving the slider to the right, you increase the intensity, which makes these colors appear lighter. A light source's intensity is indicated by the numbered circle to which it corresponds. Low-intensity light sources (those closest to 0) appear dark gray; high-intensity sources (those closest to 100) appear lighter.

You can also combine light and dark shades (brightness and saturation) to create a more realistic extrusion.

To adjust the intensity level of a light source



1. Select an extrusion with the *Pick tool*.
2. Click the Lighting button on the Property Bar.



3. Click the *Extrude Lighting button* on the Property Bar.

4. In the Preview box, click the light source (represented by a numbered circle) you want to adjust.
5. Move the Intensity slider to set the desired level of light intensity.

To make shading appear more realistic



1. Follow steps 1 and 2 from the previous procedure.
2. Enable the *Use Full Color Range* button on the Property Bar.
The button is enabled when it appears pressed.



- If you disable this button, CorelDRAW uses a more basic shading process.

Removing a light source from an extrusion

You can quickly remove a light source from an extruded object. When you remove a light source, the object loses the shading provided by that light. If you remove all the light sources, the object loses its shading and returns to its original state.

To remove a light source from an extrusion



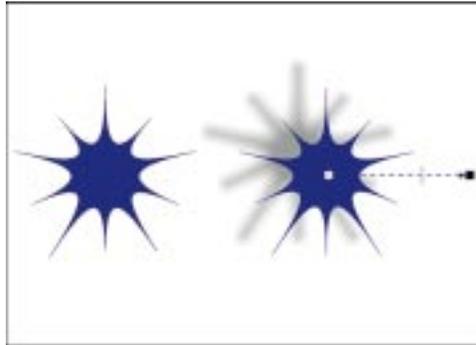
1. Select an extrusion with the *Pick tool*.
2. Click the Lighting button on the Property Bar.
3. Disable the light source button that corresponds to the light you want to remove.

A light source button is disabled when the button appears raised.

Adding drop shadows to objects

You can enhance the appearance of your work by using the Interactive Drop Shadow tool to add drop shadows to objects in your drawing. Drop shadows create the illusion of depth between objects. After you add a drop shadow to an object, you can adjust its feathering properties and its opacity, and change its edge style and its color by using the controls on the Property Bar or the controls in the Drawing Window. You can also reposition the drop shadow.

The object on the right shows a drop shadow added to the object on the left.



You can add drop shadows to most objects (or groups of objects) you create using CorelDRAW, including Artistic text, Paragraph text, and bitmap images. However, you cannot add drop shadows to linkgroups such as blended objects, contoured objects, beveled objects, extruded objects, or other drop shadows.

If you like a drop shadow effect you've added to an object, you may want to take advantage of the effect-copying and effect-cloning capabilities of CorelDRAW. The Copy Drop Shadow From and Clone Drop Shadow From commands let you add identical drop shadows to one or more objects in your drawing. In many cases, this can help give your drawing a consistent and effective look.

If you don't like a drop shadow effect that you've added, you can remove it by selecting the drop shadow and choosing Effects, Clear Drop Shadow. You can also remove a drop shadow by choosing Edit, Undo Drop Shadow. If you haven't performed any other operations on the object since you added the drop shadow. You can undo as many drop shadows as you've added.

Adding a drop shadow to an object

You can add drop shadows to most objects (or groups of objects) you create using CorelDRAW, including Artistic text, Paragraph text, and bitmap images.

To add a drop shadow to an object



1. Open the Interactive Tools flyout, and click the *Interactive Drop Shadow tool*.
2. Select an object, and drag the *end fill handle* to position the drop shadow.

The end fill handle appears after you start dragging. You can see the outline of the drop shadow as you drag the end fill handle beyond the object's bounding box.



- You can't add drop shadows to linkgroups such as blended objects, contoured objects, beveled objects, extruded objects, or other drop shadows.

Changing the position of a drop shadow

You can change the position of a drop shadow by specifying the horizontal and vertical coordinates on the ruler.

To change the position of a drop shadow



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.
2. On the Property Bar, type values in the X (horizontal) and Y (vertical) Drop Shadow Offset boxes, and press Return.



- You can also reposition a drop shadow by selecting the object with the Interactive Drop Shadow tool and dragging the end fill handle to a new location.

Changing the drop shadow color

You can change the default color of the drop shadow using the Property Bar.



To change the color of a drop shadow



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.
2. Click the Drop Shadow Color pop-up menu on the Property Bar.
3. Choose the color you want to use.



- You can also change the color of a drop shadow by selecting it with the Interactive Drop Shadow tool, and dragging a color from the on-screen Color Palette to the end fill handle.

Adjusting the opacity of a drop shadow

The level of opacity you specify determines the degree to which you can see through the drop shadow, as well as the intensity of its color. Low values

create a less opaque drop shadow, while high values create a more opaque drop shadow.

To adjust the opacity of a drop shadow



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.
2. Type a value in the Drop Shadow Opacity box on the Property Bar, and press Return.



- You can also adjust opacity of a drop shadow by selecting the object with the Interactive Drop Shadow tool, and dragging the slider. Drag the slider towards the drop shadow's anchor to decrease the drop shadow's intensity, or drag the slider towards the end fill handle to increase the intensity.

Changing the edge style of a drop shadow

You can quickly change the edge style of a drop shadow.



To change the edge style of a drop shadow



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.
2. Choose one of the following options from the Drop Shadow Direction pop-up menu on the Property Bar:
 - Inside
 - Middle
 - Outside
3. Choose an edge style from the Drop Shadow Edges pop-up menu on the Property Bar.

Changing feathering properties

You can change the drop shadow's feathering properties to make it appear sharper or softer. You can also change the direction in which the drop shadow is feathered.



To adjust the feathering properties of a drop shadow



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.

2. Type a value in the Drop Shadow Feathering box on the Property Bar.

You can type a value between 0 and 100. Low values create a more subtle feathering effect, while high values create a more pronounced effect.

3. Choose a feathering direction from the Drop Shadow Direction pop-up menu on the Property Bar.

You can feather the drop shadow toward the inside from the shadow's edges, toward the outside of the shadow's edges, or toward the average of the two directions.

Copying and cloning drop shadows

If you like a drop shadow effect that you've added to an object, you can use the Copy Drop Shadow From and Clone Drop Shadow From commands to add identical drop shadows to one or more objects in your drawing.

To copy a drop shadow from one object to another



1. Using the *Pick tool*, select the object to which you want to copy a drop shadow.
2. Choose Effects, Copy, Drop Shadow From.
3. Using the horizontal pointer that appears, select the drop shadow that you want to copy.

CorelDRAW automatically applies a drop shadow to the object you selected in step 1.

To clone a drop shadow from one object to another

1. Using the Pick tool, select the object to which you want to clone a drop shadow.
2. Choose Effects, Clone, Drop Shadow From.
3. Using the horizontal pointer that appears, select the drop shadow that you want to clone.

CorelDRAW automatically clones the drop shadow to the object you selected in step 1.



- Clicking the drop shadow selects both the drop shadow and its parent object. If you click the object, the drop shadow won't be included in your selection.
- You can't edit a cloned drop shadow. However, any changes you make to the original drop shadow are applied to its clone.

Removing a drop shadow from an object

If you don't like a drop shadow effect that you've added to an object, you can remove it by selecting the drop shadow and choosing Effects, Clear Drop Shadow. You can also remove an object and keep the drop shadow by separating them.

To remove a drop shadow from an object



1. Select a drop shadow with the *Pick tool*.
2. Choose Effects, Clear Drop Shadow.

To remove a drop shadow but continue editing



1. Open the Interactive Tools flyout, click the *Interactive Drop Shadow tool*, and select a drop shadow.
2. Choose Effects, Clear Drop Shadow.

To remove an object but not its drop shadow

1. Select an object's drop shadow with the Pick tool.
2. Choose Arrange, Separate.
3. Select the object.
4. Press Edit, Clear.



- Clicking the drop shadow selects both the drop shadow and its parent object. If you click the object, the drop shadow won't be included in your selection.

Creating transparencies

The Interactive Transparency tool lets you apply uniform, fountain, pattern, or texture transparencies to objects, using the mouse. Although it appears

that you are applying a fill to the object, you are actually applying a grayscale mask on top of the object's current fill.

As well, since the transparency is applied on top of any other attributes that are applied to the object, any fill properties that were applied before the transparency will show through the transparency.

The direction and position of the transparency is controlled using transparency arrows, which you can drag across the surface of the selected object. The opacity of the beginning and end of the transparency is controlled using the Property Bar.

Working with uniform transparencies

Uniform transparencies are even-colored, or solid, transparencies that can be applied to any object you create using CorelDRAW.

In addition, you can apply a transparency color using a specific color model, Color Palette, color blend, or you can create and apply a transparency color in the same way that you adjust these attributes for uniform fills. For more information, see “Working with uniform fills” on page 170.

Applying a uniform transparency

Uniform transparencies are the basic CorelDRAW transparencies. You can quickly fill an object with a solid color transparency using the Interactive Transparency tool. If you want more control over the transparency, click the Edit Transparency button on the Property Bar.

To apply a uniform transparency



1. Select an object with the *Interactive Transparency tool*.
2. Choose Uniform from the pop-up menu on the Property Bar.
3. Choose a color from the on-screen Color Palette.



4. Move the *Starting Transparency slider* on the Property Bar to change the opacity.

Lower values (less than 20) produce a more opaque effect. Higher values (over 80) produce a more transparent effect.



- You can display the on-screen Color Palette by choosing Window, Color Palette, and choose color palette you want to use.

Managing transparencies

In CorelDRAW, you can fill objects with a wide variety of colors, patterns, and transparencies. You can copy transparency properties from one object to another, thus eliminating the need to recreate complex transparencies. You can also remove transparency properties from an object.

Copying transparencies

Once you apply a transparency to an object, you can quickly copy the same transparency to another object.

To copy an object's transparency to another object



1. Using the *Pick tool*, select the object to which you want to copy the transparency.
2. Choose Effects, Copy, Lens From.
3. Using the horizontal pointer that appears, select the object from which you want to copy the transparency.

Removing transparencies

You can remove an object's transparency. When you move a transparency from an object, objects behind it are hidden.

To remove an object's transparency



1. Select a transparent object with the *Interactive Transparency tool*.
2. Click the Remove Transparency button on the Property Bar.

Working with fountain transparencies

A fountain transparency — also known as a “gradient” transparency or a “ramp” transparency — is a progression of colors following a Linear, Radial, Conical, or Square path.

Applying a fountain transparency

A fountain transparency is a transparency that flows smoothly from one color to another. The transparency can flow in a straight line across the object (linear), in concentric circles from the center of the object out (radial), in rays from the center of the object out (conical), or in concentric squares from the center of the object out (square).

To apply a fountain transparency using the Interactive Transparency tool



1. Using the *Interactive Transparency tool*, select the object to which you want to apply a fountain transparency.
2. Choose Fountain from the Transparency Type pop-up menu on the Property Bar.
3. Enable one of the following buttons on the Property Bar:



- *Linear Fountain Transparency*



- *Radial Fountain Transparency*



- *Conical Fountain Transparency*



- *Square Fountain Transparency*

4. Click the object where you want the transparency to start, then drag to where you want the transparency to end.

As you drag, the transparency arrow appears showing you the direction of the transparency. If you hold down Command while dragging, the angle of the arrow will be constrained to 15 degree intervals.

Customizing fountain transparencies

Customizing fountain transparencies can affect the way that they appear on screen, as well as the way that they print. As with fountain fills, there are a number of ways to determine how fountain transparencies are printed and displayed.

In addition, you adjust a transparency's quality, color, center point, mid-point, angle, direction, and edge pad the same way that you adjust these attributes for fountain fills. For more information, see "Customizing fountain fills" on page 177.

Attributes that are specific to transparencies include the level of transparency and the ability to freeze the contents of a fountain fill.

Adjusting the opacity of a transparency

You can specify the opacity of a transparency object. Lower values (less than 20) produce a more opaque effect. Higher values (over 80) produce a more transparent effect.

To change the opacity of a fountain transparency



1. Select the transparent object with the *Interactive Transparency tool*.

2. Choose Fountain Transparency from the Transparency Type pop-up menu on the Property Bar.



3. Move the *Transparency Midpoint slider* on the Property Bar.

Freezing a transparency

You can freeze a transparency to fix its contents. You can then move the transparency anywhere you want without changing its appearance. Once frozen, the contents of the object no longer interact with other objects on the screen (i.e., a transparency is no longer applied to objects that appear beneath the frozen transparency).

To freeze a transparency



1. Select the transparent object with the *Interactive Transparency tool*.



2. Click the *Freeze button* on the Property Bar.

Working with pattern transparencies

Pattern transparencies are pregenerated, symmetrical images that are repeated over and over, making them extremely useful for creating tiles. You can fill an object completely with one image, but you would more often use a series of repeated images to form a tiled fill. The effect is similar to applying wallpaper to a wall.

You can import bitmaps or vector graphics to use as pattern transparencies, and you can create simple two-color bitmap pattern transparencies.

There are three types of pattern transparencies: two-color bitmap, full-color bitmap, and vector pattern. These three pattern transparencies are applied in the same way as you apply pattern fills. For more information, see “Working with pattern fills” on page 185.

If you want more control over the pattern transparency, click the Edit Transparency button on the Property Bar to access the Pattern dialog box.

Working with texture transparencies

A texture transparency is a random, fractally generated transparency that you can use to give your objects a natural appearance. The three transparency handles let you control the block of fractal texture that controls the transparency of the object. One handle moves the entire fractal and the other two scale, skew and rotate it. Texture transparencies add significantly to the size of your file and the time it takes to print. Therefore, you may want to use these transparencies sparingly, especially with large objects with texture transparencies.

Texture transparencies are applied the same way you apply texture fills. For more information, see “Working with texture fills” on page 198.

Working with merge modes

Merge modes determine how the color of a transparency is combined with the color of objects that appear below the transparency. The effect is dependent upon the colors that are contained within the transparency and the object. CorelDRAW offers 19 different merge modes for you to experiment with.

Applying Merge modes

Merge modes determine how the color of a transparency is combined with the color of objects that appear below the transparency. Merge modes are available for fountain, pattern, and texture transparencies. Try applying each merge mode (listed below) to your transparency until you achieve the desired result.

To apply merge modes



1. Select the object(s) with the *Interactive Transparency tool*.
2. Choose Fountain, Pattern, or Texture from the first pop-up menu on the Property Bar.
3. Choose one of the merge modes listed below from the Transparency Operation pop-up menu on the Property Bar.

Merge mode	combined
Normal	Applies the transparency color on top of the base color (default mode).
Add	Creates a result color by adding the values of the transparency color and the base color.
Subtract	Creates a result color by adding the values of the transparency color and the base color together, then subtracting 255.
Difference	Creates a result color by subtracting the transparency color from the base color and multiplying by 255. If the transparency color value is 0, the result will always be 255.
Multiply	Creates a result color by multiplying the base color by the transparency color, then dividing by 255. This has a darkening effect, unless you are painting on white. Multiplying black with any color results in black. Multiplying white with any color leaves the color unchanged.
Divide	Creates a result color by dividing the base color by the transparency color, or vice versa, depending on which color has a higher value.

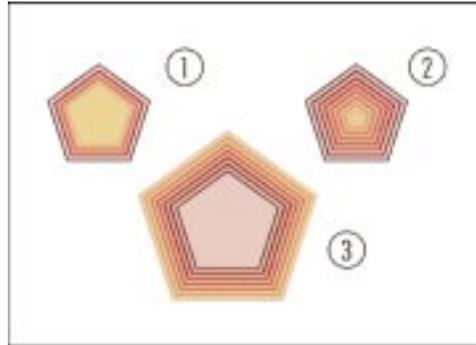
If Lighter	Replaces any base pixels that are a darker color with the transparency color. Base pixels that are lighter than the transparency color are not affected.
If Darker	Replaces any base pixels that are a lighter color with the transparency color. Base pixels that are darker than the transparency color remain unchanged.
Texturize	Creates a result color by converting the transparency color to grayscale, then multiplying the grayscale value by the base color.
Hue	Creates a result color using the hue of the transparency color and the saturation and lightness of the base color. If you are painting on a grayscale image, there will be no change, because the colors are desaturated.
Saturation	Creates a result color using the lightness and hue of the base color and the saturation of the transparency color.
Lightness	Creates a result color using the hue and saturation of the base color and the lightness of the transparency color.
Invert	Creates a result color using the transparency color's complementary color. If a transparency color value is 127, there will be no change, because the color value falls in the center of the Color Wheel.
Logical AND	Converts the transparency and base colors to binary values, then applies the Boolean algebraic formula AND to these values.
Logical OR	Converts the transparency and base colors to binary values, then applies the Boolean algebraic formula OR to these values.
Logical XOR	Converts the transparency and base colors to binary values, then applies the Boolean algebraic formula XOR to these values.
Red	Creates a result color by applying the transparency color to the red channel of RGB images.
Green	Creates a result color by applying the transparency color to the green channel of RGB images.
Blue	Creates a result color by applying the transparency color to the blue channel of RGB images.

Contouring objects

When you apply contours to an object, you create an effect like that created by contour lines on a topographical map. The Contour feature lets you add a new dimension to an object by adding a series of concentric lines or “steps” that radiate inside or outside its borders. This series (called a “contour group”) can contain up to 999 lines separated by any distance from 0.000 to 300.000 inches (or the equivalent in other units of measurement). To help

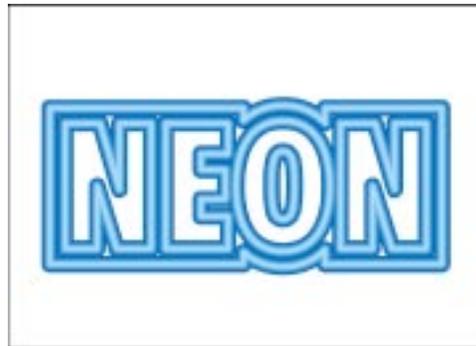
accentuate the impact of adding contour lines, CorelDRAW also lets you add a progression of colors between the original object and the final contour line. This progression can follow a straight, clockwise, or counterclockwise path through the color spectrum.

.....
You can add contour lines (1) inside, (2) to the center of, (3) or outside an object.
.....



You can apply contours to any object you create using CorelDRAW, including shapes, lines, and curves. In addition, you'll find that you can create an array of interesting effects by applying contours to Artistic text.

.....
This effect was created using the Contour and Blend features.
.....



Contouring to the center of an object

You can add contour lines that progress to the center of a selected object. These lines are created based on the size of the object and the value displayed in the Offset box. By changing this value, you can vary the number of contour lines created. No matter what value you set, CorelDRAW will add as many evenly spaced lines as possible, given the size of the original object.

To add contour lines to the center of an object



1. Select an object with the *Pick tool*.
2. Choose Effects, Contour.
3. On the Contour Palette, choose Steps from the pop-up menu.

4. Enable the To Center button.
5. Type a value in the Offset box to specify the space you want between the contour lines.

You can type values from 0.000 to 300.000 inches (or the equivalent in other units of measurement). The valid range depends on the size of the selected object.

6. Click the Apply button.



- The Steps box appears dimmed when contouring to the center of an object.



- You can apply the To Center option to an existing contoured object using the Property Bar.
-

Contouring inside an object

You can add evenly spaced contour lines inside a selected object. These lines are created based on the values in the Offset and Steps boxes. For example, if you set an offset value of 0.1 and a steps value of 3, CorelDRAW will add three contour lines spaced 0.1 inches apart inside the original object. Although you can add up to 999 steps, the number of steps you set is limited by the offset and the size of the object. If the object is too small to accommodate your settings, CorelDRAW inserts the maximum number of steps that fit between the object's outline and center.

To add contour lines inside an object



1. Select an object with the *Pick tool*.
2. Choose Effects, Contour.
3. On the Contour Palette, choose Steps from the pop-up menu.
4. Enable the Inside button.
5. Type a value in the Offset box to specify the space you want between the contour lines.

You can type a value from 0.000 to 300.000 inches (or the equivalent in other units of measurement). The valid range depends on the size of the selected object.

6. Type a value in the Steps box to specify the number of contour lines you want inside the object.
7. Click the Apply button.



- You can apply the Inside option to an existing contoured object using the Property Bar.
-

Contouring outside an object

You can add contour lines outside the selected object. These lines are created based on the values in the Offset and Steps boxes. For example, if you set an offset value of 0.25 and a steps value of 8, CorelDRAW will add eight contour lines spaced 0.25 inches apart outside the original object.

To add contour lines outside an object



1. Select an object with the *Pick tool*.
2. Choose Effects, Contour.
3. On the Contour Palette, choose Steps from the pop-up menu.
4. Enable the Outside button.
5. Type a value in the Offset box to specify the space you want between contour lines.

You can specify offset values from 0.000 to 300.000 inches (or the equivalent in other units of measurement).

6. Type a value in the Steps box to specify the number of contour lines you want outside the object.

You can add up to 999 contour lines.

7. Click the Apply button.



- You can apply the Outside option to an existing contoured object using the Property Bar.
-

Setting color progressions in a contoured object

You can change the color scheme of any contoured object, and you can control the colors of the contour shape that is furthest from the original object. Additionally, you can determine how the outline and fill colors

progress through the contour — a straight, clockwise, or counterclockwise path through the color spectrum.

To set color progressions using the Contour Palette



1. Select a contoured object with the *Pick tool*.
2. Choose Effects, Contour.
3. On the Contour Palette, choose Steps from the pop-up menu.



4. Click the *Outline color picker*, then choose the color you want at the end of the outline progression.



5. Click the *Fill color picker*, then choose the color you want at the end of the fill progression.

If the original object has a fountain fill, a second color picker appears. Use this control to have a fountain fill at the end of the fill progression.

6. Click one of the following buttons to indicate how you want the outline and fill colors to progress through the color spectrum:



- *Direct*



- *Clockwise*



- *Counterclockwise*

The black line on the Color Wheel shows the selected path.

7. Click the Apply button.



- You can also use the Property Bar to access the Outline Color picker, and Fill Color picker, as well as the Linear Contour Colors, Clockwise Contour Colors, and Counterclockwise Contour Colors buttons.
- You can change the outline and fill colors of the original object just as you would with any other object. For more information, see “Filling Objects” on page 170 or “Outlining objects” on page 209.

Editing a contoured object

When you apply contour lines to an object, the object becomes attached to these lines. In this state, all changes you make to the original object — for example, reshaping with the Shape tool or changing fill colors — also affect the contour lines. The Separate command allows you to separate the original object from its contour lines. You can then make changes to the original object without altering the contour lines.

If you use the Separate command on a contoured object, you are left with two units: the original object and its contour lines. Use the Ungroup command to turn the lines into a series of individual objects. You can then edit each object separately.

To separate an object from its contour lines



1. Select a contoured object with the *Pick tool*.
2. Choose Arrange, Separate.

The contoured object is now two units: the original object and the group of contour lines.

To ungroup the contour lines

1. Follow all the steps from the previous procedure.
2. Select the contour lines with the Pick tool.
3. Choose Arrange, Ungroup.



- You can also ungroup contour lines by clicking the Ungroup button on the Property Bar.

Copying and cloning contours

The Copy Contour From and Clone Contour From commands provide quick ways to create contours. The Copy Contour From command lets you copy a contoured object's settings to another object. The object takes on all contour-related settings; its outline and fill attributes remain unaffected. The two objects have no connection and can be edited independently.

The Clone Contour From command also copies contour attributes to the selected object. The selected object takes on all contour-related settings, while its outline and fill settings remain unaffected. With clones, however, changes made to the original contour (the "master") afterwards are also applied to the contour. In addition, you can't edit the clone's contour settings; any changes must be made to the master object.

To copy a contour



1. Using the *Pick tool*, select the object to which you want to copy the contour.
2. Choose Effects, Copy, Contour From.
3. Using the horizontal pointer that appears, select the contour you want to copy.

To clone a contour

1. Using the Pick tool, select the object to which you want to clone the contour.
2. Choose Effects, Clone, Contour From.
3. Using the horizontal pointer that appears, select the contour you want to clone.

Using lenses

The Lens feature simulates the effects created by certain types of camera lenses. Like their real-life counterparts, the CorelDRAW lenses change the appearance of objects viewed through them. The type of change produced depends on the type of lens you create. Lens effects can be applied to virtually any closed shape that you create using CorelDRAW.



- Applying lenses to objects in your drawing increases the size of your file which results in slower printing.

Creating lenses

The Lens Palette provides all the controls you need to create interesting lens effects. When you apply a lens to an object, you change the object's appearance and — more significantly — the way you perceive the objects behind it, not the object's actual properties and attributes. To this end, you can choose any of 12 types of lenses, each producing distinctive results. These results range from color alteration (as produced by heat map, inverting, and brightening lenses) to distortion (as produced by magnifying and fish eye lenses).

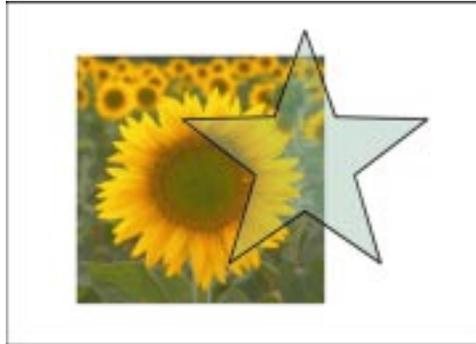
You can create lenses using any closed-path object including ellipses, rectangles, and polygons, as well as objects you draw with the Freehand and Natural Pen tools. You can create lenses using open-ended lines and curves, Paragraph text, Artistic text, or objects imported from other applications — for example, bitmaps.

You cannot create lenses using objects that have extrude, contour, or blend effects applied to them. If you create a lens using a group, the lens applies separately to each of the group's component objects (as long as they fit the requirements above).

Creating a Transparency lens

You can create a Transparency lens to make objects underneath the lens take on the appearance of a piece of tinted film or glass. A Transparency lens can be any color. When you place the lens over other objects, these objects take on the lens tint. The Rate setting controls the lens' level of transparency. Rates closer to 100% create lenses that are more transparent, while those closer to 0% create lenses that are more opaque.

Transparency lenses
apply a color tint to
objects behind them.



To create a Transparency lens



1. Select an object with the *Pick tool*.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Transparency from the pop-up menu.
4. Type a percentage value from 0 to 100 in the Rate box to specify the rate of transparency.

As you increase the value, the object becomes more transparent. At 100%, the lens fill disappears.

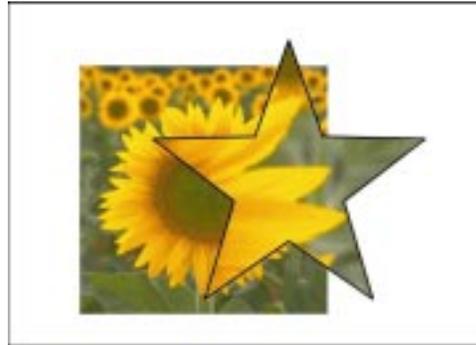


5. Click the *color picker*, then choose the fill color you want for the lens.
You can also leave the default color that is already displayed on the color picker.
6. Click the Apply button.

Creating a Magnify lens

You can create a magnify lens which produces an effect similar to that of a magnifying glass. The Magnify lens overrides the original object's fill (if any), so that it appears transparent. Objects beneath the lens appear magnified by the amount you specify in the Amount box. You can specify magnification values from 0.1 to 100.0.

Magnify lenses
enlarge areas of
objects behind them.



To create a Magnify lens

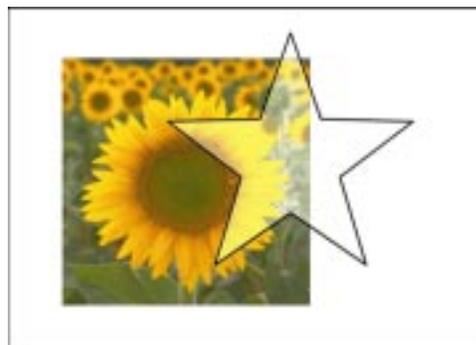


1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Magnify from the pop-up menu.
4. Type a value from 0.1 to 100.0 in the Amount box to indicate the amount of magnification you want.
5. Click the Apply button.

Creating a Brighten lens

You can create a Brighten lens to add brightness or darkness to the objects underneath the lens. The Rate setting controls the amount of brightness or darkness created by the lens. The range of 0 to 100% increases the level of brightness, while the range of 0 to -100% increases the level of darkness. You'll find the Brighten lens particularly effective for applying brightness or darkness to a bitmap image.

Brighten lenses add
brightness or
darkness to any
object or image
behind them.



To create a Brighten lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.

2. Choose Effects, Lens.
3. On the Lens Palette, choose Brighten from the pop-up menu.
4. Type a percentage value from -100 to 100 in the Rate box.

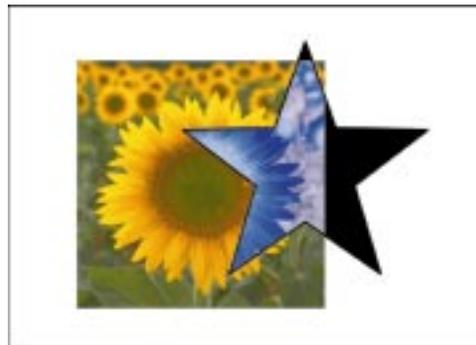
This value specifies the amount by which you want the lens to brighten or darken any colors that appear behind the lens.

5. Click the Apply button.

Creating an Invert lens

You can create an Invert lens to make all colors underneath it to appear as their complementary CMYK color. Complementary colors are colors that appear opposite one another on the Color Wheel. For example, when an Invert lens is applied to a photo bitmap, the result simulates a photographic negative.

.....
 Invert lenses display
 colors as their
 complementary CMYK
 colors.



To create an Invert lens

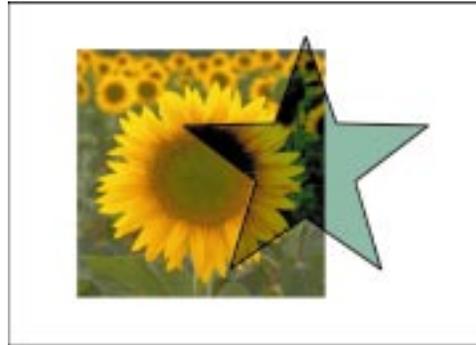


1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Invert from the pop-up menu.
4. Click the Apply button.

Creating a Color Limit lens

You can create a Color Limit lens which works much like a color filter lens on a camera, allowing only black and the lens color itself to show through. White and light colors in objects beneath the lens are converted to the lens color. For example, if you place a green Color Limit lens over a bitmap, all colors except green and black are filtered out within the lens area.

Color Limit lenses filter out all colors except the lens color and black.



To create a Color Limit lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Color Limit from the pop-up menu.
4. Type a percentage value from 0 to 100 in the Rate box to indicate the filter strength you want.

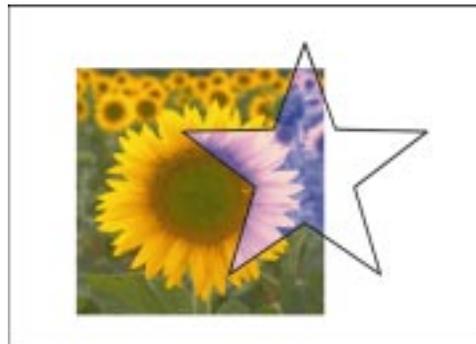


5. Click the *color picker*; then choose the fill color you want for the filter lens.
6. Click the Apply button.

Creating a Color Add lens

You can create a Color Add lens which simulates an additive light model. Imagine shining three spotlights — one red, one blue, and one green — on a black background. Where the three spotlights combine, the result is white light. The intermediate colors are magenta, cyan, and yellow. When you create a Color Add lens, the colors of the objects beneath the lens are added to the color of the lens as if you were mixing colors of light.

Color Add lenses add the lens color to the colors of objects behind them.



The Rate value controls the extent of color addition. A rate of 0% results in no color addition and the lens appears to have no fill. A rate of 100% defines

maximum color addition. You can choose the color you want to add to the lens on the Lens Palette.

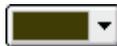
Because white light contains all colors of the spectrum, creating a colored lens and placing it over a white object or a white page turns the lens white. Adding a color to white light produces white light. To see the effects, the background or object beneath the lens cannot be white.

To create a Color Add lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Color Add from the pop-up menu.
4. Type a percentage value from 0 to 100 in the Rate box to indicate the rate of color addition.

A rate of 100% represents maximum color addition.

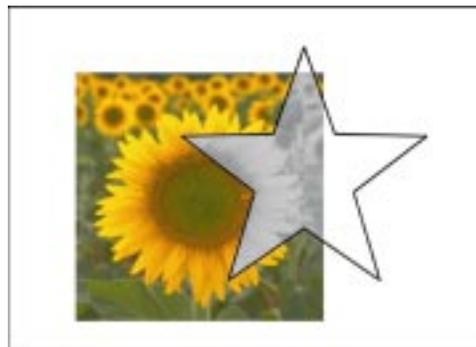


5. Click the *color picker*; then choose the fill color you want for the filter lens.
6. Click the Apply button.

Creating a Tinted Grayscale lens

You can create a Tinted Grayscale lens to change the colors of objects underneath it to their grayscale equivalents. The lens color becomes the darkest color in any object under the lens. All other colors in the object become lighter shades of the lens' color. You'll find Tinted Grayscale lenses particularly effective for creating sepia-tone effects. For example, if you place a brown grayscale lens over a color photograph, the photograph takes on a sepia-tone look. You can also turn a color photograph into a black-and-white photograph by placing a black grayscale lens over the photograph.

Tinted Grayscale lenses convert colors behind them to their grayscale equivalents.



To create a Tinted Grayscale lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Tinted Grayscale from the pop-up menu.



4. Click the *color picker*, then choose the color you want for the lens.
5. Click the Apply button.

Creating a Heat Map lens

You can create a Heat Map lens to produce an effect similar to that of an infrared image. This lens uses a limited Color Palette of white, yellow, orange, red, blue, violet, and cyan to illustrate the “heat” levels of colors in objects underneath the lens. By adjusting the value in the Palette Rotation box, you control which colors are “hot” and which colors are “cool.” Hot colors beneath the lens appear as red or orange, while cool colors appear as violet or cyan. Rotation values of 0 or 100% cause cool colors under the lens to change to white and cyan. A setting of 50% causes cool colors to appear as red tones.

Heat Map lenses let you map hot and cool colors to simulate the appearance of an infrared image.



To create a Heat Map lens

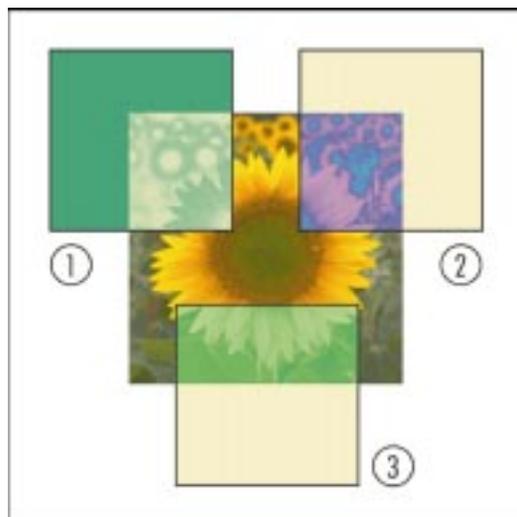


1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Heat Map from the pop-up menu.
4. Type a percentage value from 0 to 100 in the Palette Rotation box to indicate the amount you want to rotate the Heat Map lens.
5. Click the Apply button.

Creating a Custom Color Map lens

You can create a Custom Color Map lens to change the colors of objects underneath it to display a range of colors you specify. You specify the range's start and end colors, as well as the route or progression between these two colors. You can map colors using a progression that follows a direct, forward or backward route through the spectrum between the two colors you've selected. Areas of the lens that do not cover other objects are filled with the color at the end of the color map.

Use the Direct Palette (example 1), Forward Rainbow (example 2), and Reverse Rainbow (example 3) settings to create different effects with a Custom Color Map lens.



To create a Custom Color Map lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Custom Color Map from the first pop-up menu.
4. From the second pop-up menu, choose one of the following lenses:
 - Direct Palette
 - Forward Rainbow
 - Reverse Rainbow



5. Click the *From color picker*, then choose the color you want at the start of the color map.



6. Click the *To color picker*, then choose the color you want at the end of the color map.
7. Click the Apply button.

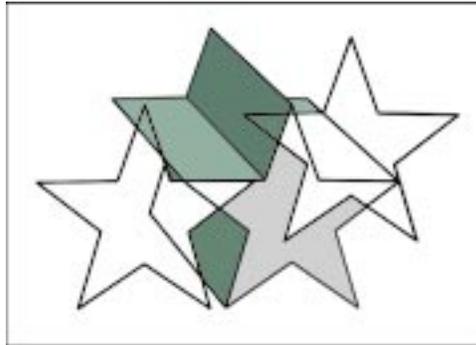


- You can switch the From and To colors by clicking the Switch button.

Creating a Wireframe lens

You can create a Wireframe lens to display the objects behind lens with the outline or fill of your choice. For example, if you set red for the outline and blue for the fill, all objects (or parts of objects) behind the lens appear to have red outlines and blue fills.

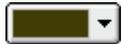
Wireframe lenses display objects behind them using specific fill and outline colors.



To create a wireframe lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Wireframe from the first pop-up menu.
4. Click the *Outline color picker*, then choose the outline color you want.
5. Click the *Fill color picker*, then choose the fill color you want.
6. Click the Apply button.



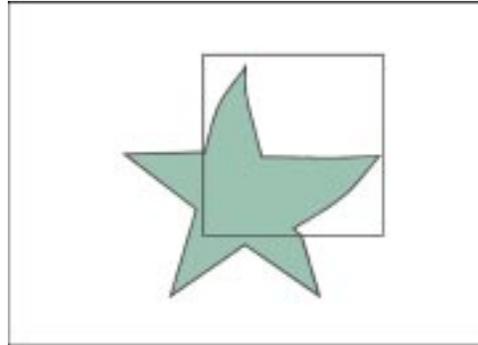
- If you don't want the lens to affect the outline or fill, disable the appropriate check box.

Creating a Fish Eye lens

You can create a Fish Eye lens to distort the objects underneath it. Depending on the percentage value you specify in the Rate box, the Fish Eye lens either distorts and magnifies, or distorts and shrinks the object behind it. Lenses with positive rates distort and magnify objects by increasing amounts as their rate settings progress from 1 to 1000. Lenses with negative rates shrink and distort objects by increasing amounts as their rate settings

progress from -1 to -1000. A rate of 0 results in no change to the appearance of objects behind the lens.

.....
Fish Eye lenses
distort the size and
shape of objects
behind them.
.....



To create a Fish Eye lens



1. Using the *Pick tool*, select the object to which you want to apply the lens.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Fish Eye from the first pop-up menu.
4. Type a value from -1000 to 1000 in the Rate box to indicate the percentage by which you want the lens to distort the underlying objects.
5. Click the Apply button.

Adjusting, copying, and removing lenses

In addition to applying basic settings for each lens, you can make advanced adjustment settings, copy a lens, or remove a lens altogether. Advanced settings help you get the exact effect you want for any type of lens. The first of these settings, Frozen, captures the lens' current contents so that you can move the lens without disturbing its appearance. The second advanced setting, Viewpoint, allows you to use the mouse to change the area covered by the lens. You can move the viewpoint to display a specific part of a drawing through a lens without having to move the lens. The third setting, Remove Face, allows you to show a lens only where it covers other objects.

The remaining options — copying and removing lenses — allow you to make quick duplicates of lens effects or remove an object's lens effect completely.

Freezing a lens's current view

You can freeze the contents of a lens to move it without changing what's displayed through the lens. Changes you make to the objects seen through the lens have no effect on the lens' contents.



To freeze a lens's current view

1. Select the lens with the *Pick tool*.
2. Choose Effects, Lens.
3. Enable the Frozen check box.
4. Click the Apply button.

To undo the Frozen effect

1. Follow steps 1 and 2 from the previous procedure.
2. Disable the Frozen check box.
3. Click the Apply button.

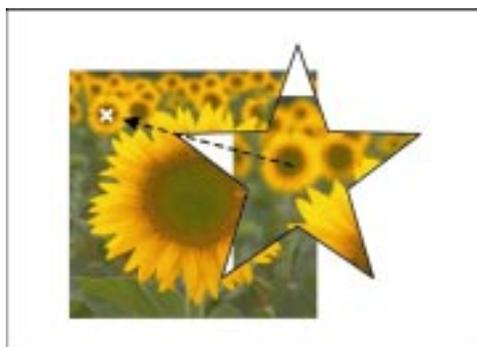


- Frozen lenses redraw more quickly than non-frozen lenses.

Moving a lens's viewpoint

You can display any portion of a drawing through a lens without actually having to move the lens itself. The viewpoint represents the center point of what is being viewed through the lens. This point is indicated by an "X" in the Drawing Window that can be moved using the mouse. You can position the lens anywhere in the drawing, but it always shows the area around its viewpoint marker. For example, you can use the viewpoint marker on a Magnify lens to enlarge part of a map without obscuring any part of the map.

Move the viewpoint (X) to show a different part of the drawing without moving the lens.



To move a lens's viewpoint



1. Select the lens with the *Pick tool*.
2. Choose Effects, Lens.
3. On the Lens Palette, choose Enable the Viewpoint check box.

The Edit button appears to the right of the check box.

4. Choose Edit to display the viewpoint marker (represented by an “X”) in the Drawing Window.
5. Drag the viewpoint marker to the desired position.
6. Click the End button.
7. Click the Apply button.

Displaying a lens only where it covers other objects

You can show a lens only where it overlaps other objects. As a result, the effect is not seen where the lens covers blank space in your drawing. You can further enhance the effect by removing the outline from the lens object (see “Outlining objects” on page 209), thereby creating an “invisible” lens.

To display a lens only where it covers other objects



1. Select the lens with the *Pick tool*.
2. Choose Effects, Lens.
3. Enable the Remove Face check box.
4. Click the Apply button.



- The Remove Face option isn’t available for Fish Eye and Magnify lenses.

Copying a lens

You can copy a lens to another object. The lens type and any rotation, rate, or magnification settings are also copied to the selected object.

To copy a lens from one object to another



1. Using the *Pick tool*, select the object to which you want to copy the lens.
2. Choose Effects, Copy, Lens From.
3. Using the horizontal pointer that appears, select the object from which you want to copy the lens.

Removing a lens

You can remove the lens attributes from an object to return the object to its original state.



To remove a lens

1. Select the lens with the *Pick tool*.
2. Choose Effects, Lens.
3. On the Lens Palette, choose No Lens Effect from the pop-up menu.
4. Click the Apply button.

Adding perspective to objects

The Add Perspective command lets you add another dimension to your drawings by creating the illusion of distance and depth. Although objects in a drawing appear on a two-dimensional page, you can use the Add Perspective command to simulate one-point and two-point perspective. By creating one-point perspective, you can make an object look like it's receding from view in one direction. By creating two-point perspective, on the other hand, you can make the object look like it's receding from view in two directions. The Add Perspective command lets you apply these effects to any object (or group of objects) you create using CorelDRAW, including Artistic text. You can't apply perspective to Paragraph text or bitmap images.

.....
The Add Perspective
command makes it
easy to add a sense
of perspective to
your drawings.
.....

To create the illusion of perspective, you just need to drag the mouse. The Add Perspective command adds a nonprinting grid box on top of the selected object. Movable nodes occupy each of the box's four corners. You create the effect of perspective by dragging these nodes.

As you drag a node, you'll notice an "X" — or two, if you're working with two-point perspective — that moves as the node moves. This symbol indicates the vanishing point — the point at which a side of the grid box (and, therefore, the object below it) will disappear. If you drag the node so that it meets another node or the vanishing point marker, the grid box reverts back to its original shape. You can also make adjustments to the perspective by dragging the vanishing point marker.

If you like the perspective effect you add to an object, you may want to take advantage of the effect-copying capabilities of CorelDRAW. The Copy Perspective From command lets you apply the same perspective to one or more objects in your drawing. In many cases, this can help give your drawing a consistent, effective look.

Conversely, the Clear Perspective command lets you eliminate changes you've made to an object's perspective without having to delete the object and start over again.

Creating one-point and two-point perspective

The Add Perspective command makes it easy to create the illusion of perspective in your drawings. By applying perspective to objects in your drawing, you can create a three-dimensional effect on a two-dimensional page. Perspective is created by shortening one or two sides of an object. For one-point perspective, you shorten one side of an object so that it appears to recede in one direction. By shortening two sides, you get two-point perspective — the object appears to recede in two directions.

.....
Examples 2 and 3
show one-point and
two-point perspective
applied to the object
in example 1.
.....

To add a one-point perspective effect to an object



1. Select the object with the *Pick tool*.
2. Choose Effects, Add Perspective.

A grid box with four nodes (at the corners) appears around the object. The Shape tool is now selected.

3. Hold down Command, and drag one of the nodes horizontally or vertically.

By holding down Command, you constrain the node's motion to its horizontal or vertical axes to create a one-point perspective. Hold down Command and Shift as you drag to move opposing nodes the same distance in opposite directions.

To add a two-point perspective effect to an object

1. Select the object with the Pick tool.
2. Choose Effects, Add Perspective.
3. Drag one of the grid box nodes diagonally toward or away from the object's center.
4. Repeat step 3 using the other nodes until you create the perspective effect you want.

Editing an object's perspective

The Shape tool lets you make changes to the perspective effect you've applied to an object. When you select the object with the Shape tool, the object's perspective grid and nodes reappear. From here, you just drag the nodes or vanishing point markers to get the exact effect you want. The skills you use to edit are exactly the same as those you used to create the effect in the first place.

To edit an object's perspective effect by moving nodes



1. Open the Shape Edit flyout, click the *Shape tool*, and select the object.
2. For a one-point perspective effect, hold down Command, and drag the appropriate nodes to adjust the perspective. Hold down Command and Shift to move opposing nodes the same distance in opposite directions.

For a two-point perspective effect, drag the nodes horizontally toward or away from the center point.

To edit an object's perspective effect by moving a vanishing point

1. Open the Shape Edit flyout, click the Shape tool, and select the object.
2. Drag the vanishing point marker or markers (represented by "X") to create the desired perspective effect.

Copying an object's perspective effect

The Copy Perspective From command copies the perspective effect from one object to another. You can copy perspective to any object — Paragraph text

excepted — you've created using the CorelDRAW tools and features. However, you can only copy an object's perspective if perspective is the most recent effect applied. For example, if you add perspective to an object and then extrude the object, you can't copy the perspective effect. To copy the perspective in this case, you need to clear the extrusion first.

To copy an object's perspective effect



1. Using the *Pick tool*, select the object to which you want to copy the perspective effect.
2. Choose Effects, Copy, Perspective From.
3. Using the horizontal pointer that appears, select the object with the perspective you want to copy.

Removing the perspective effect

The Clear Perspective command removes the perspective effect from the selected object and restores the object to its original state. If you've applied the perspective effect more than once, you must click Clear Perspective the same number of times to get back to the object's original shape.

If you've applied an effect to the object since you applied perspective, you need to clear that effect before clearing perspective. For example, if you apply perspective to an object and then extrude the object, you'll need to clear the extrusion before clearing the perspective.

To remove an object's perspective effect

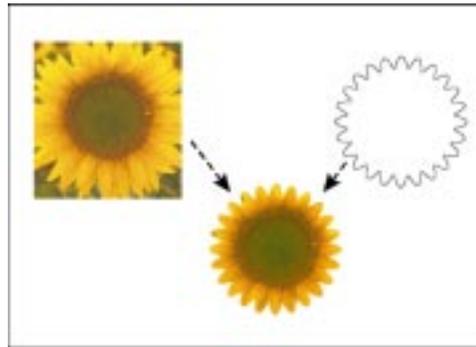


1. Select the object with the *Pick tool*.
2. Choose Effects, Clear Perspective.

Working with PowerClip

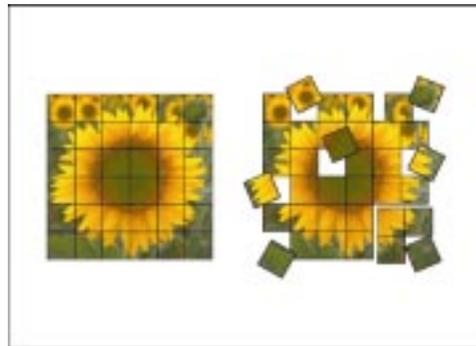
The PowerClip command lets you put an object inside another object or group of objects. One object becomes the contents while the other becomes the container. You can create a container from any object you create using CorelDRAW, including shapes, lines, curves, Artistic text, and groups. A contents object, on the other hand, can be any object you create using CorelDRAW or import from another program.

Use the PowerClip effect to place objects inside of other objects.



The container object can be compared to a window. Just as a window's frame represents the limits of what you can see behind it, a container object lets you see only the portion of a contents object (or group of objects) that fits inside the container's boundaries. If the size of the contents object exceeds that of its container, CorelDRAW automatically crops the contents object. You see only the portion of the contents object that fits inside the container.

You can create original effects by using the PowerClip effect on an object inside a group.



You'll find the PowerClip command particularly useful for placing photo files (like bitmaps) inside containers of different shapes, including Artistic text. You can create more complex PowerClip effects by placing a container object into another container object to produce a nested PowerClip object. Nested PowerClip objects can have up to five editable levels.

Creating a PowerClip object

Before you create a PowerClip object, you'll need to decide which object you want to use as its container and which object you want to use as its contents. Containers can be created using a path, a group of objects, or Artistic text. Contents can be any object you create or import using CorelDRAW. By placing additional PowerClip objects inside a container, you create a nested PowerClip object.



To create a PowerClip object

1. Using the *Pick tool*, select the object you want to use as the contents.
2. Choose Effects, PowerClip, Place Inside Container.
3. Using the horizontal pointer that appears, select the object you want to use as the container.

The contents object is placed inside the container object. The contents and container now become a single unit.

To create nested PowerClip objects

- Repeat the previous procedure using the same container.
A PowerClip object can have up to five nested levels.



- You can't use a bitmap as a container for PowerClip objects.

Editing a PowerClip object

The Edit Contents command temporarily separates the contents and container objects of a PowerClip object. This allows you to make changes — for example, fill and outline properties, transformations, and more — to the contents object. During editing, the container object appears in Wireframe mode and can't be selected. When the contents object has the look you want, use the Finish Editing This Level (Effects menu) command to reunite the contents and the container.

To edit the contents of a PowerClip object



1. Select the PowerClip object with the *Pick tool*.
2. Choose Effects, PowerClip, Edit Contents.

The contents object appears in its entirety, while the container object appears in Wireframe mode.

3. Make the desired changes to the contents object or add new objects as needed.
4. Choose Effects, PowerClip, Finish Editing This Level.



- You can also edit the contents of a PowerClip object by holding down Control, clicking the PowerClip object, and choosing Edit Contents. Edit the contents object, then hold down Control, click the PowerClip object, and choose Finish Editing This Level.

Locking and unlocking a PowerClip object's contents

The Lock Contents To PowerClip command controls the interaction between the contents and container objects of a PowerClip object. When enabled (the default setting), this command locks the contents object to its container. As a result, when the PowerClip object is moved, rotated, or resized, both the contents and container objects undergo the same changes. When the Lock Contents To PowerClip command is disabled, the contents object is locked to the page and remains stationary even if you move or rotate its container. Disabling the Lock Contents To PowerClip command is especially useful for repositioning the container over its contents.

To edit a container object without editing its contents

1. Hold down Control and click the PowerClip object, and click Lock Contents To PowerClip.

This disables the Lock Contents To PowerClip command. When enabled, a check mark appears beside the command name.

2. Edit the container object as required.

To lock a contents and a container object

- Hold down Control and click the container object, and click Lock Contents To PowerClip.

Changing the default placement of a PowerClip contents object

By default, CorelDRAW automatically centers PowerClip contents objects inside their containers. However, the Preferences dialog box lets you change this setting so that contents objects maintain their original placement when placed inside a container. You can use this feature to create PowerClip objects in which the contents are offset from the center. If the contents and container objects do not overlap, the contents don't appear in the PowerClip object.

This setting applies to all documents, not just the active document.

To change the default placement of a contents object

1. Choose Edit, Preferences.

2. From the list of categories, choose Workspace, Edit.
3. Disable the Auto-center New PowerClip Contents check box.

Copying a PowerClip object's contents

The Copy PowerClip From command allows you to create a new PowerClip object using the contents of an existing PowerClip object. This command copies a contents object to a new container. The new container's outline and fill settings are not affected when they receive the new contents.

To copy the contents of a PowerClip object to another PowerClip object



1. Using the *Pick tool*, select the object to which you want to copy the contents of a PowerClip object.
2. Choose Effects, Copy, PowerClip From.
3. Using the horizontal pointer that appears, select the PowerClip object that contains the contents you want to copy.

Extracting a PowerClip object's contents

The Extract Contents command removes the contents object (or objects) from the selected PowerClip object. The objects that made up the PowerClip object become separate objects again. If you created nested PowerClip objects and want to extract all contents objects in succession, you'll need to use this command for each nested level.

To extract the contents of a PowerClip object



1. Using the *Pick tool*, select the PowerClip object whose contents you want to extract.
2. Choose Effects, PowerClip, Extract Contents.



- You can also extract the contents of a PowerClip object by holding down Control as you click the PowerClip object and choosing Extract Contents.



WORKING WITH BITMAPS

11

Bitmaps are graphics composed of pixels — dots on a computer screen that combine to form an image. Unlike vector graphics, where shapes are represented as a series of lines and curves that can be easily resized without loss of quality, bitmaps have a fixed resolution. In other words, a bitmap looks best when you display or print it at its original size. Enlarging the bitmap appears to enlarge each pixel because extra pixels are added, making the graphic look jagged and distorted. Reducing the size of the bitmap results in the elimination of pixels to shrink the bitmap to its new size.

Vectors, on the other hand, are defined mathematically as a series of points joined by lines. Graphical elements in a vector file are called objects. Each object is a self-contained entity with properties such as color, shape, outline, and size included in its definition.

Since a bitmap is created as a collection of arranged pixels, its parts cannot be manipulated (e.g., moved) individually. The color and shape appear continuous when viewed from a greater distance. Once you import the bitmap, the Bitmap Color Mask Palette lets you choose the specific colors that you want to hide or show. You can resample your image after importing it by adjusting the image size and resolution. CoreIDRAW also provides numerous bitmap effects that allow you to enhance or customize your image.

Importing, cropping, and manipulating bitmaps

Although CoreIDRAW is a vector-based program, you can import bitmaps and incorporate them into your illustrations. Importing allows you to use a file that was not created in CoreIDRAW.

Cropping a bitmap reduces its visible area. This can be done during the import process or after the bitmap has been imported.

Before you can manipulate a bitmap in CorelDRAW, you must first select it. The method you use to select bitmaps depends on the view in which you are working. You can also rotate and skew bitmaps just as you would any other CorelDRAW object.

Importing and cropping a bitmap

To use a bitmap in a CorelDRAW graphic, you must import the bitmap. CorelDRAW accepts many different bitmap file formats for import, such as CPT, TIFF, BMP, and GIF.

Before you import a bitmap, you can crop it. Cropping involves cutting away unwanted areas without affecting the resolution of what remains. When you crop a bitmap using the Crop Bitmap dialog box, the imported bitmap consists only of the area in the cropping frame. This helps keep your file size more manageable.

To import a bitmap

1. Choose File, Import.
2. Choose a file format from the Format pop-up menu.
3. Locate the folder where the file is stored.
4. Choose the filename.
5. Click Open.
6. Position the *import placement start cursor* at the desired location, and do one of the following:
 - Click to place the bitmap in its original size.
 - Drag to place the bitmap. Use the *import placement end cursor* to position the image.
 - Hold down Shift, then drag to create a nonproportional bitmap. Remember to release the mouse button before you release Shift.



To crop a bitmap before importing

1. Choose File, Import.
2. Choose Crop from the pop-up menu that appears to the right of the Format pop-up menu.
3. Follow steps 2 to 4 from the previous procedure.
4. In the Crop Image dialog box, do one of the following:

- Drag a corner handle on the cropping frame to crop in two directions (i.e., horizontally and vertically).
 - Drag a side handle to crop in one direction (i.e., horizontally or vertically).
5. Choose a unit type from the Units pop-up menu.
 6. Type values in the Top and Left or Width and Height boxes if you want your cropping to be more precise.
 7. Click OK.
 8. Position the import placement cursor at the desired location, and do one of the following:
 - Click to place a bitmap in its original size.
 - Drag to place the bitmap. Use the import placement end cursor to position the image.
 - Hold down Shift then drag to create a nonproportional bitmap. Remember to release the mouse button before you release Shift.



- To recrop the bitmap, click the Select All button in the Crop Image dialog box.
 - To link a bitmap, enable the Link Bitmaps Externally check box.
-

Cropping bitmaps after importing

You can crop bitmaps after importing them into CorelDRAW. This feature is very powerful, as you can add nodes, remove nodes, convert lines to curves, and more, creating all kinds of interesting effects. For more information, see “Drawing and shaping objects” on page 83.

.....
You can crop bitmaps
using the Shape tool
by adding nodes,
removing nodes, and
converting lines to
curves.
.....

To crop a bitmap after you import it



1. Open the Shape Edit flyout, and click the *Shape tool*.
2. Select the bitmap with the Shape tool.
3. Drag the bitmap's nodes to change the shape of its outline.

Hold down Command while you drag a node to allow only horizontal or vertical movement from the node's original location.

To recrop the bitmap

- Delete all of the nodes on the outline path by selecting the nodes with the Shape tool and pressing Delete. CorelDRAW automatically recreates the original bitmap outline.



- You can select all the nodes by pressing Shift and Command and clicking one of the nodes.
-

Selecting bitmaps

You must select a bitmap before you can manipulate it. The method you use to select bitmaps depends on the view in which you are working. For example, Enhanced mode displays what the bitmap will look like when it's printed; Simple Wireframe, on the other hand, shows only an outline of the bitmap.

To select a bitmap...**Do this...**

In Draft, Normal, or Enhanced mode Using the Pick tool, click anywhere on the bitmap.

In Simple Wireframe or Wireframe view Using the Pick tool, click the outline box that encloses the bitmap.



- You can marquee select a bitmap in any mode.

Rotating and skewing bitmaps

You can rotate and skew bitmaps just as you would any other object. To ensure fast screen redrawing times, CorelDRAW displays the bitmap as a gray rectangle in Wireframe view and Simple Wireframe view. In Draft mode the bitmap displays at a lower resolution (128 x 128 pixels per inch), which helps to increase the screen's redrawing speed. In Normal mode and Enhanced mode, the bitmap is displayed at a higher resolution, which may increase the time required to redraw the bitmap on screen.

To rotate and skew bitmaps



1. Select the bitmap with the *Pick tool*.
2. Click the bitmap again to display the rotating and skewing handles.
The Center Of Rotation marker appears in the middle of the box.
3. Do any of the following:
 - Drag one of the corner arrows in a circular motion, to rotate the bitmap.
 - Drag one of the horizontal skew arrows (the straight vertical arrows that appear at the midpoints of the object) left or right, to skew the bitmap horizontally.
 - Drag one of the vertical skew arrows (the straight horizontal arrows that appear at the mid-points of the object) up or down, to skew the bitmap vertically.



- Hold down Command while dragging or skewing to constrain movement to 15-degree increments. Release the mouse button before releasing Command to maintain the increments.

Tracing bitmaps

Bitmaps are images made up of a series of individual dots (pixels). The major drawback with bitmaps is their fixed resolution — a limitation that can result

in the deterioration of image quality when bitmaps are scaled to different sizes. Vector graphics, on the other hand, can be modified with no loss of quality. For this reason, you can create vector copies of your bitmap images by tracing the bitmaps.

There are three ways to trace imported bitmaps in CorelDRAW: using a program called CorelTRACE™, by automatic tracing using the Autotrace feature, or by manual tracing using the Freehand or Bezier tools.

CorelTRACE lets you automatically trace bitmaps at high speeds and save them in a vector format that is suitable for CorelDRAW.

CorelDRAW provides an autotracing feature that creates vector shapes from portions of a bitmap. With autotracing, you can trace an imported bitmap by clicking an area of high contrast within the bitmap using the Freehand tool. You can set the autotrace feature to create an outline that matches the edge of contrasting colors in a bitmap tightly (producing many nodes along the path) or loosely (producing a less accurate path with fewer nodes).

.....
Tracing bitmaps lets
you turn bitmaps
into vectors.
.....

You can also trace imported bitmaps manually using the Freehand or Bezier tools. Manual tracing is faster and easier than autotracing if the imported bitmap contains multiple subjects with no abrupt changes in brightness levels or colors from one pixel to the next. You don't have to be an experienced draftsman to trace a bitmap precisely; with CorelDRAW, you trace the bitmaps the way you trace objects using tracing paper. By magnifying the areas you trace and adjusting the Curve settings in the Preferences dialog box, you can trace quickly and still achieve accurate results.

Tracing bitmaps automatically

The autotracing feature in CorelDRAW lets you turn bitmaps into vector graphics that you can edit, scale, and print without distortion. In most cases, traced bitmaps do not look the same as the original bitmap. Many subtle details are lost in the process of converting them to vector objects. For more complex bitmap tracing use CorelTRACE.

Because of the way that bitmaps are constructed, many cannot be autotraced. If the cursor changes to cross hairs with a thin straight line on the right side of the horizontal cross hair, you can use the Autotrace feature. If a small wavy line accompanies the cross hairs, you cannot use the Autotrace feature. In such instances, you can trace all or portions of the image manually. For more information, see “Tracing bitmaps manually” on page 451.

You can change the way the tracing tools respond by changing the properties in the Preferences dialog box. For more information, see “Controlling the behavior of the Freehand and Bezier tools” on page 126.

To trace a bitmap automatically



1. Select the bitmap with the *Pick tool*.



2. Open the Curve flyout, and click the *Freehand tool* or *Bezier tool*.

Notice that the pointer changes to a wand-like cursor. This is called the Autotrace pointer.

3. Position the wand of the Autotrace pointer on the bitmap and click.

A closed curve object appears, completely enclosing the contours of the bitmap.

4. Repeat step 3 until all the desired areas of the bitmap are selected.

5. With the Pick tool, click the bitmap outside one of the closed curves.

6. Choose Edit, Clear to remove the bitmap and view your work.

Autotrace produces a rough approximation of your bitmap.

Tracing bitmaps manually

You don't have to be an experienced draftsman to trace a bitmap with precision in CorelDRAW. Using the Zoom tool to magnify the areas you trace and adjusting the Curve settings in the Preferences dialog box (accessed by double-clicking the Freehand or Bezier tool), you can trace quickly and still achieve accurate results.

To see the paths more clearly, switch to Wireframe view or Simple Wireframe view.

To trace a bitmap manually

1. Click a blank space in the Drawing Window to deselect any bitmaps.

This prevents the Freehand or Bezier tool from changing to the Autotrace pointer.

2. Open the Curve flyout, and click the Freehand tool or the Bezier tool.

3. Do one of the following:



- With the *Bezier tool*, position the cursor anywhere along the outline of a closed area, then trace in a series of small joined segments, placing a node every time the angle of the curve changes. This “connect-the-dots” approach avoids the jaggedness that can occur when you try to trace large areas with a single sweep of the mouse.



- With the *Freehand tool*, position the cursor anywhere along the outline of a closed area, then trace using a smooth motion the way you move a pencil on paper.

4. Do one of the following to optimize your tracing further:

- Click each spot where the object being traced curves or changes direction.



- Use the *Shape tool* to manipulate the nodes and line segments to customize the trace.



- If you make a mistake while tracing, you can erase portions of the curve before you release the mouse button by pressing Command as you drag the mouse backward over the line you’ve just drawn. Once you release the mouse button, however, this will not work.

Coloring bitmaps

Some bitmaps are imported into CorelDRAW as monochrome bitmaps. “Monochrome” means that the pixels have only two colors: black and white. Changing the color of the pixels in a monochrome bitmap is a quick and easy way to change the appearance of bitmaps. You can also change the appearance of bitmaps by applying halftone screens to them.

Using bitmap color masks

The Bitmap Color Mask Palette lets you specify which colors in a bitmap you want to hide and which colors you want to show. When you hide colors, you let objects or backgrounds show through from behind the bitmap, thereby changing the bitmap’s appearance. Hiding a color can also appear to alter the bitmap’s shape. For example, if you have a bitmap with the image of a person on a black background, you can use the Bitmap Color Mask Palette to hide the background. As a result, the bitmap appears to take on just the shape of the person.

You can select the colors using the on-screen Color Palette or by selecting them directly from the bitmap using the Color Selector on the Bitmap Color Mask Palette. You can also adjust the tolerance for each color selected. If you

increase the tolerance, CorelDRAW shows or hides a broader range of colors. For example, if you hide baby blue and increase the tolerance, CorelDRAW may also hide powder blue and navy blue.

Coloring monochrome bitmaps

You can change the color of the pixels in a monochrome bitmap quickly using the on-screen Color Palette.

To color a monochrome bitmap



1. Select the bitmap with the *Pick tool*.
2. Hold down Control and choose a color from the *Color Palette* to change the color of the foreground (black) pixels.
3. Choose a color from the Color Palette to change the color of the background (white) pixels.

Applying a PostScript halftone screen to a bitmap

You can apply screens to bitmaps in your drawing if you're printing to a PostScript printer. The screens can create interesting special effects or ensure clearer printing. The screen's effect on the bitmap is only apparent when you print the bitmap.

While you can set PostScript screens to color bitmaps, if you are printing color separations you will want to set your screen and screen angles in the Print dialog box. For more information, see "Setting the halftone screen frequency" on page 555.

To apply a screen to a bitmap



1. Select the bitmap with the *Pick tool*.
2. Open the Fill Tool flyout, and click *Fill Color Dialog*.
3. Click the *Fixed Palettes button*.
4. Choose PANTONE MATCHING SYSTEM from the Type pop-up menu.
5. Click the More button
6. Choose PostScript Options from the Options pop-up menu.
7. Choose one of the options from the Type list to set the shape of the screen.
8. Type a value in the Frequency box to set the number of lines (or other shape selected above) that appear in every inch of the screen.
9. Type a value in the Angle box to set the angle of the lines (or other shapes) that appear on the screen.

Hiding bitmap colors

Bitmaps, especially color bitmaps, can slow down the redraw speed of your screen — that is, the speed by which objects are rendered on the screen. Hiding the colors that are contained in a bitmap can increase the redraw speed.

Use Hide Colors to remove specific colors from your image.

To hide certain colors in a bitmap



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Bitmap Color Mask.
3. Choose Hide Colors from the pop-up menu to remove a color.
4. Enable the check box next to the color(s) that you want to hide in the bitmap.
5. Move the Tolerance slider to specify the color tolerance for each color.

As you increase the tolerance, CorelDRAW removes a broader range of colors around the color you select. For example, if you select baby blue and increase the tolerance, CorelDRAW removes pastel blue, electric blue, and so on.



6. Click the *Color Selector*.
7. Point to the bitmap and click the color that you want to hide. The color appears on the Bitmap Color Mask Palette.
8. Click the Apply button.

Displaying bitmap colors

When you display certain colors in a bitmap, you change the bitmap's appearance. Displaying a specific color lets you see where a given color has been applied.

.....
Use Show Colors to
display a specific
color in your image.
.....

To display certain colors in a bitmap



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Bitmap Color Mask.
3. Choose Show Colors from the pop-up menu to display a color.
4. Enable the check box next to the color(s) you want to display in the bitmap.
5. Move the Tolerance slider to specify the color tolerance for each color.

As you increase the tolerance, CorelDRAW shows a broader range of colors around the color you select. For example, if you select baby blue and increase the tolerance, CorelDRAW shows pastel blue, electric blue, and so on.



6. Click the *Color Selector*.
7. Point to the bitmap and click the color you want to display. The color appears on the Bitmap Color Mask Palette.
8. Click the Apply button.

Opening, saving, and editing bitmap color masks

The Bitmap Color Mask Palette allows you to mask as many as 10 colors in a bitmap. You can also save Bitmap color masks for future use.

To open a bitmap color mask

1. Choose Bitmaps, Bitmap Color Mask.
2. Click , and choose Open Color Mask.
3. Locate the folder where the file is stored.
4. Choose the filename, and click Open.

To save a color mask

1. Choose Bitmaps, Bitmap Color Mask.
2. Click , and choose Save Color Mask.
3. Locate the folder where you want to save the file.
4. Specify a filename, and click Save.

To change the color of the color mask

1. Choose Bitmaps, Bitmap Color Mask.
2. Choose a color from the list of colors displayed.
3. Click , and choose Edit Color.
4. Use the controls in the Select Color dialog box to edit the color.
5. Click OK to close the Select Color dialog box.
6. Click the Apply button.



- You can access the Bitmap Color Mask Palette by selecting the bitmap with the Pick tool and clicking the Bitmap Color Mask Palette button on the Property Bar.
-

Correcting or adjusting the tones in your image

The Color Adjustment tools, found in the Effects menu of CorelDRAW, can be used to control the relationship between the shadows, midtones, and highlights for objects in your drawing, as well as to adjust the brightness, intensity, lightness, and darkness of your colors. Use these tools to restore the detail lost in shadows or highlights, to correct underexposure or overexposure, and to generally improve the quality of your image.

Color adjustments are carried out using filters. Filters are software applications that work within CorelDRAW to carry out conversion tasks. However, these filters will not work with objects that contain colors from the PANTONE Matching System.

Brightness-Contrast-Intensity

Adjusts the brightness, contrast, and intensity of the tones in your drawing using HSB values.

Color Balance

Shifts your drawing values between colors arranged in complementary pairs of the primary (RGB) and secondary (CMY) colors. This is useful for correcting color casts.

Gamma

Picks up details in low contrast drawings without significantly affecting the shadows or highlights. It does affect all the values in your image, but is curve-based so that the changes are weighted toward the midtones.

Hue-Saturation-Lightness

Adjusts the colors in your image using HLS values. This is useful for changing the intensity of your colors or for changing their hue entirely.

Invert

Makes a negative of your image by converting all color values to their opposites: blacks become white, blues become yellow, etc.

Posterize

Converts color ranges in your image to solid blocks of color.

Adjusting the brightness, contrast, and intensity

The Brightness-Contrast-Intensity option adjusts the brightness, contrast, and intensity of the tones in your drawing using HSB values.

To adjust brightness, contrast, and intensity



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Brightness-Contrast-Intensity.
3. Move the sliders to adjust the levels of brightness, contrast, and intensity:
 - The Brightness slider — shifts all pixel values up or down the tonal range. When you adjust the brightness, you are lightening or darkening all colors equally
 - The Contrast slider — adjusts the distance between your lightest and darkest pixels

- The Intensity slider — brightens the lighter areas of your drawing without washing out the dark areas



4. Click the *Preview Eye button* to enable automatic previewing of the effect on the vector or bitmap in the Drawing Window. Click the Reset button to restore the default settings.



- You can access the Brightness-Contrast-Intensity dialog box by selecting the vector or bitmap with the Pick tool and clicking the Adjusts Brightness, Contrast, and Intensity button on the Property Bar.
- Contrast and intensity usually go hand-in-hand, because an increase in contrast sometimes washes out detail in shadows and highlights, and an increase in intensity can bring it back.

Adjusting the color balance

The Color Balance option allows you to shift the colors in your drawing between CMY and RGB color values. For example, in an RGB image, you can increase or decrease the amount of red, green, or blue tones. This filter lets you shift the colors in your image between CMY color values and RGB color values. This is useful for correcting color casts and changing the hue values for the entire drawing or a selected area.

To shift the color balance of your drawing



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Color Balance.
3. Enable one or more of the following check boxes:
 - Shadows — adds color correction to the shadow areas of the drawing. When Shadow is disabled, the color correction does not affect these areas
 - Midtones — adds color correction to the midtone areas of the drawing. When Midtones is disabled, the color correction does not affect these areas
 - Highlights — adds color correction to the highlight areas of the drawing. When Highlights is disabled, the color correction does not affect these areas

- Preserve Luminance — maintains the luminance level of the drawing under the effects of color correction. This ensures that the drawing retains its original brightness level. When Preserve Luminance is disabled, the color correction affects the luminance level, i.e., the drawing is darkened
4. Move the following Color Channel sliders to set color levels:
 - Cyan-Red — adds cyan or red to the drawing to correct for any color imbalance. Move the slider to the left to add cyan and to the right to add red
 - Magenta-Green — adds magenta or green to the drawing to correct for any color imbalance. Move the slider to the left to add magenta and to the right to add green
 - Yellow-Blue — adds yellow or blue to the drawing to correct for any color imbalance. Move the slider to the left to add yellow and to the right to add blue
-  5. Click the *Preview Eye button* to enable automatic previewing of the effect on the vector or bitmap in the Drawing Window. Click the Reset button to restore the default settings.



- You can access the Color Balance dialog box by selecting the bitmap with the Pick tool and clicking the Balances Bitmap Colors button on the Property Bar.

Adjusting gamma

Gamma is a method of tonal correction that takes the human eye's perception of neighboring values into account. For example, if you were to place a 10 percent gray circle on a black background and an identical gray circle on a white background, the circle surrounded by black appears lighter to the human eye than the circle surrounded by white, regardless of the fact that the brightness values are identical.

The Gamma effect lets you pick up detail in a low contrast drawing without significantly affecting the shadows or highlights. It affects all the values in your drawing but is curve-based so that the changes are weighted toward the midtones.

To adjust midtones using the Gamma effect



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Gamma.

3. Move the Gamma slider to set a gamma curve value.

Higher values brighten midtones, while lower values darken them.



4. Click the *Preview Eye button* to enable automatic previewing of the effect on the vector or bitmap in the Drawing Window. Click the Reset button to restore the default settings.



- You can access the Color Balance dialog box by selecting the bitmap with the Pick tool and clicking the Adjusts Gamma button on the Property Bar.

Adjusting the hue, saturation, and lightness

The Hue-Saturation-Lightness option allows you to adjust the colors in your drawing using HLS values. This is useful for changing the intensity of your colors or even for changing their hue entirely.

To adjust hue, saturation and lightness



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Hue-Saturation-Lightness.
3. Enable a Channels button. You can choose from Master, Red, Yellow, Green, Cyan, Blue, Magenta, or Grayscale.
4. Move the Hue slider to redistribute the colors in your drawing.

The way the original colors relate to their new hues can be somewhat confusing when using the Hue slider for the first time. Click the Preview button to see how the original drawing compares with the adjusted values.

5. Move the Saturation slider to set the strength of the colors in your drawing.

A setting of -100 results in a grayscale (black-and-white) drawing, while a setting of 100 produces vibrant, but unnatural colors.

6. Move the Lightness slider to determine the amount of white (positive values) or black (negative values) in the drawing.
7. Repeat steps 3 through 6 for each channel button.



8. Click the *Preview Eye button* to enable automatic previewing of the effect on the vector or bitmap in the Drawing Window. Click the Reset button to restore the default settings.



- You can access the Hue, Saturation & Lightness dialog box by selecting the bitmap with the Pick tool and clicking the Adjusts Hue, Saturation and Lightness button on the Property Bar.

Inverting colors in your drawing

The Invert option makes a negative of your drawing by converting all color values to their opposites: blacks become white, blues become yellow, etc.

To invert colors in your drawing



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Invert.

Posterizing your image

The Posterize option converts color ranges in your image to solid blocks of color. This process simplifies the image by removing tonal gradations to create larger areas of flat color.

To posterize your image



1. Select the object with the *Pick tool*.
2. Choose Effects, Color Adjustment, Posterize.
3. Move the Level slider to determine the level at which posterization begins.

The slider values range from 2 to 32. A level of 2 results in the most drastic posterization; a level of 32 has no effect at all on most drawings.



4. Click the *Preview Eye button* to enable automatic previewing of the effect on the vector or bitmap in the Drawing Window. Click the Reset button to restore the default settings.

Resampling bitmaps

A resampled bitmap is a bitmap that has been changed either in size or resolution. You can resize the bitmap using absolute or percentage values, change the horizontal and vertical bitmap resolution (dpi), choose the processing quality of the resampled bitmap, and correct any possible bitmap distortion when you resample.

You can also choose the processing quality of the resampled bitmap. The Anti-Alias option creates a smooth, clear bitmap by removing the jagged edges from the original. The Maintain Original Size option lets you change

the bitmap resolution and processing quality of the bitmap without affecting its size.

Resampling bitmaps

CorelDRAW allows you to resample bitmaps in two ways: by increasing or decreasing its size, and by changing its resolution.

You can resize the bitmap using absolute or percentage values. Enabling the **Maintain Aspect** check box before resizing the bitmap maintains its original proportions. It is best to adjust the width or the height separately. In fact, if you want to maintain the integrity of the bitmap, its size should never be increased. To ensure that you don't accidentally change the bitmap's size, enable the **Maintain Original Size** check box.

Changing the resolution of a bitmap can be done using one of three techniques: by changing the horizontal and vertical bitmap resolution (dpi), by choosing the processing quality of the resampled bitmap, or by correcting for any possible bitmap distortion when you resample.

To change the size of a bitmap



1. Select the object with the *Pick tool*.
2. Choose **Bitmaps, Resample**.
3. Choose a unit of measurement from the **Units** pop-up menu.
4. Type values in the **Width** and **Height** boxes in the **Image Size** section.

To change the resolution of a bitmap

1. Follow steps 1 and 2 from the previous procedure.
2. Enable the **Maintain Original Size** check box.
3. Type values in the **Horizontal** and **Vertical** boxes in the **Resolution** section.
If you have enabled the **Maintain Aspect Ratio** check box, type one value; the other value adjusts automatically.
4. Disable **Maintain Aspect Ratio** and the **Identical Values** check boxes to enter different values for the **Resolution**.
5. Enable **Anti-Alias** to produce a smoother bitmap.



- To return the original size and resolution values, click the **Reset** button.



- You can access the Resample dialog box by selecting the bitmap with the Pick tool and clicking the Resamples the Bitmap button on the Property Bar.

Inflating bitmaps

CorelDRAW automatically inflates your bitmap to ensure that the effect covers the entire image. Removing the automatic inflate option will truncate effects on your image. For example, if you apply a blur effect to a rectangle, the corners will be cut off. You can also manually inflate a bitmap by setting the edge value or percentage that surrounds the image.

Inflating bitmaps automatically or manually

CorelDRAW allows you to inflate bitmaps automatically or manually. When you inflate bitmaps automatically CorelDRAW adds a default border to the bitmap. To set your own border size use the manual inflation option.

To set the auto inflate bitmap option



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Inflate Bitmap, Auto Inflate Bitmap.

A check mark appears next to the Auto Inflate Bitmap indicating that the option is enabled. Repeat step 2 to disable the Auto Inflate Bitmap option.

To inflate a bitmap manually

1. Select the bitmap with the Pick tool.
2. Choose Bitmaps, Inflate Bitmap, Manually Inflate Bitmap.
3. Type values in the Width and Height boxes or enter a percentage of the inflated bitmap in the boxes. You can use the original bitmap size as reference.

Enable the Maintain Aspect Ratio box to inflate the bitmap proportionally.

Converting Bitmaps

If you don't have a bitmap to import in to CorelDRAW, you can convert vector objects to bitmaps to access the various effects. Once you have a bitmap object in your drawing you can convert it to various color modes.

A bitmap can be converted with respect to the color mode. You can select from Black and White (1-bit), Grayscale (8-bit), Duotone (8-bit), Paletted

(8-bit), RGB color (24-bit), LAB color (24-bit) or CMYK color (32-bit) color modes. When converting a bitmap the active color mode appears dimmed.

Converting vectors to bitmaps

CorelDRAW lets you convert a vector image to a bitmap. After you convert your image you can apply a variety of effects to give your drawing a unique look. When you convert a vector image to bitmap you can select the color mode, resolution and anti-aliasing options. When converting a vector image to a bitmap CorelDRAW also provides you with a projected uncompressed file size based on the current conversion settings.

Converting vectors to bitmaps

You can convert vector objects created in CorelDRAW to bitmaps quickly and easily. Using the convert to bitmap dialog box lets you set the color mode, resolution and anti-aliasing options. Before converting your object to a bitmap you can review the projected uncompressed file size which appears in the dialog box.

To convert a vector object to a bitmap



1. Select the object with the *Pick tool*.
2. Choose Bitmaps, Convert To Bitmap.
3. Choose the color mode to be saved with the bitmap from the Color pop-up menu.
4. Enable any of the following check boxes:
 - Dithered — to improve the transition between colors
 - Transparent Background — to make the background of the bitmap transparent
 - Use Color Profile — to apply the current color profile
5. Choose a resolution from the Resolution pop-up menu.
6. Enable one of the following buttons in the Anti-Aliasing section to smooth the edges of the bitmap:
 - None — disables anti-aliasing

- Normal — filters a bitmap and removes jagged edges. Jagged pixels are filled in with intermediate colors or shades of gray, thereby smoothing transitions between colors
- Super-sampling — increases the size of the vector image, then decreases its resolution to smooth jagged edges. As a result, it is much more time-consuming and memory intensive than the Normal option but also provides much better results

Converting your bitmap to a different color mode

CorelDRAW lets you convert your bitmap to black-and-white, Grayscale, Duotone, RGB, CMYK or LAB color mode. You can also convert your bitmap to Paletted color mode. For more information about Converting to Paletted color mode, see “Converting images to the Paletted color mode” on page 473.

Common controls

The convert to black-and white, duotone and paletted options include the following common controls:

Control	Description
	Enable to preview the effect on screen.
	Enable to display a single, large Result window, or to disable the on-screen preview.
	Enable to display Original and Result windows.
	Click to preview your image. If the On-Screen Preview button is disabled, click the large Preview button.
	Enable to automatically update the preview as you make adjustments to the settings.

You can also pan around your bitmap using the Hand tool that appears when you move your cursor over the Original window (or the Drawing Window if the On-Screen Preview button is enabled). Zoom in to your bitmap by clicking in the Drawing Window; hold down Option and click to zoom out.

Converting to Black-and-White

Converting a bitmap to the Black-and-White color mode is much different from converting a bitmap to Grayscale. The Black-and-White color mode is a 1-bit color mode that stores images as two solid colors — usually black and

white — with no gradations. This mode is useful for line art and simple graphics.

Converting to Grayscale

Each pixel in a grayscale image has a brightness value ranging from 0, which is black to 255, which is white. The Grayscale color mode uses these 256 shades of gray to represent a bitmap.

Converting to Duotone

A bitmap in the Duotone color mode is simply a grayscale image that has been enhanced with one to four additional colors. Use the Duotone color mode to add a touch of color to grayscale images or to create interesting effects using tone curve settings. A duotone bitmap can be monotone, duotone, tritone, or quadtone.

Converting to RGB

This converts your bitmap to a 24-bit (RGB) color mode. The RGB color mode uses percentages of three colors (red, green and blue) to create colors. Each component has 100 levels of intensity ranging from black to the component's full intensity. RGB is the most commonly used color model.

Choose RGB Color to create high-quality photographic color bitmaps, and when printing to an RGB or CMY printer.

Converting to Lab

The Lab color mode creates color based on luminance or lightness (L) and two chromatic components: “a” and “b”. The “a” component consists of colors that range from green to red and the “b” component consists of colors that range from blue to yellow. This mode is useful when you are working with Photo CD images or when you want to edit the luminance and color values of an image independently. You can also use the Lab color mode to move images between systems and for printing to PostScript Level 2 printers.

Converting to CMYK

Use the CMYK color mode when preparing a bitmap to be printed using process colors. When you convert a bitmap to CMYK color mode, each pixel in the original bitmap is assigned a percentage value for each of the corresponding process inks. The lightest colors are assigned small percentage values and darker shades are assigned higher percentage values.

The CMYK color model is device-dependent which means that its color space is based on the characteristics of a printer. If you convert a bitmap to a device-dependent color mode, such as the CMYK color mode, the color

values used to produce the bitmap may differ from one device to another. Consequently, before you convert bitmaps to CMYK, it's important to calibrate your system correctly.

Converting bitmaps to Black-and-White color mode

You can convert a bitmap to a 1-bit black-and-white bitmap. There are four black-and-white conversion options: Line Art, Ordered, Error Diffusion, and Halftone.

.....
An image is
converted from the
RGB color mode to
the Black-and-White
color mode.
.....

Line Art

Line Art produces a high-contrast, black-and-white bitmap. The value you type in the Threshold box specifies that all colors below that value turn to black and that all colors above that value turn to white. There are no intermediate steps between the two values. No halftone is applied to the bitmap.

Error Diffusion

Error Diffusion produces a black-and-white bitmap with screen dithering applied. This option is used to improve the quality of the displayed bitmap for monitors with less than 256-color capabilities. Error Diffusion provides the best results by spreading color approximations over several pixels.

Ordered

Ordered produces a black-and-white bitmap with screen dithering applied. This option is used to improve the quality of the displayed bitmap for monitors with less than 256-color capabilities. Ordered dithering is performed at a higher rate than Error Diffusion by approximating pixel values, using fixed dot patterns.

Halftone

Halftone produces a bitmap with simulated continuous tones, similar to a photograph, for printing to a black-and-white laser printer.

To convert a bitmap to black and white

1. Choose Bitmaps, Convert To, Black And White (1-bit).
2. Enable the Line Art, Error Diffusion, Ordered, or Halftone button in the Conversion Method section.
3. If you enable the Line Art button, type a value in the Threshold box.
4. If you enable the Halftone button, do the following:
 - Choose a screen type from the Screen Type pop-up menu.
 - Choose a unit from the pop-up menu and type a value in the Lines per box to control the line frequency.
 - Type a value in the Degrees box to control the screen angle.

Converting bitmaps to Grayscale color mode

You can convert a bitmap to grayscale. A grayscale bitmap is converted to a range of 0 — 255 shades of gray, which produces a bitmap that resembles a traditional black-and-white photograph.

.....
An image is
converted from the
RGB color mode to
the Grayscale color
mode.
.....



To convert a bitmap to grayscale



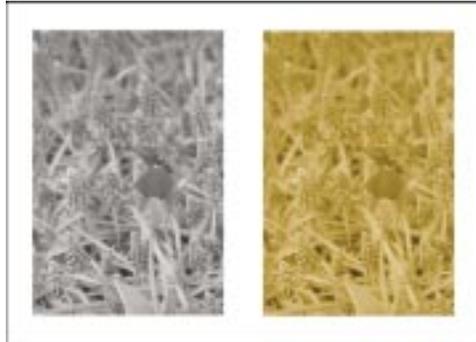
1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Convert To, Grayscale (8-bit).

Converting a grayscale bitmap to Duotone color mode

A bitmap in the duotone color mode is simply a grayscale image that has been enhanced with one to four additional colors. Use the duotone color

mode to add a touch of color to grayscale images or to create interesting effects using tone curve settings. A duotone image can be monotone, duotone, tritone, or quadtone.

.....
A grayscale image is converted to the duotone color mode and enhanced with four colors (quadtone).
.....



After you choose a duotone type and customize the tone curves for the inks that will be used in the bitmap conversion, you can save the settings for use on other bitmaps. The next time you want to convert a bitmap to the Duotone color mode, you can load the saved inks directly in the Duotone dialog box.

Tone curves

When you convert a grayscale image to the duotone color mode, the tone curve grid displays the dynamic ink curves that will be used throughout the conversion. The horizontal plane or x-axis displays the 256 possible shades of gray in a grayscale image (0 is black; 255 is white). The vertical plane or y-axis illustrates the intensity of an ink (from 1 to 100 percent) that is applied to the corresponding grayscale values. For example, a grayscale pixel with a color value of 25 will be printed with a 25 percent tint of the ink color.

Over Prints

Once you have adjusted the tone curves for your duotone conversion, you can customize the colors that will be used to display your image further by choosing Over Print colors. Over Print colors are the colors that appear on your image when two or more colors overlap. The Over Prints displays all possible instances when the colors that you have chosen for your duotone conversion can overlap. Associated with each instance is the color that is produced by the overlap. You can choose new Over Print colors by double-clicking the color swatch and adjusting the shade in the Select Color dialog box.

To convert a grayscale bitmap to duotone color mode



1. Select the bitmap with the *Pick tool*.

2. Choose Bitmaps, Convert To, Duotone (8-bit).
3. In the Duotone dialog box, choose an ink type from the Type pop-up menu.
 - Monotone — creates a grayscale image that is printed with a single ink
 - Duotone — creates a grayscale image that is printed with two inks. In most cases, one ink is black and one is colored
 - Tritone — creates a grayscale image that is printed with three inks. In most cases, one ink is black and the others are colored
 - Quadtone — creates a grayscale image that is printed with four inks. In most cases, one ink is black and the others are colored

The corresponding inks are displayed in the Type window. You can select an ink to display the duotone curve on the grid.

4. Select an ink color from the Type window.
5. Click the ink tone curve on the grid to create a node.

This node adjusts the percentage of color at that point on the curve.
6. Position your pointer over the node that you want to edit.

A hand icon appears when the node is in edit mode.
7. Drag the node to adjust the curve.

To specify how overprint colors display onscreen

1. From the Duotone dialog box, choose the Overprint tab.
2. Enable the Use Overprint check box.
3. Double-click the color that you want to edit.
4. In the Select Color dialog box, choose a new color from one of the models.

You can verify the original color and the new color in the Reference Color and New Color boxes at the top of the Select Color dialog box.

To save inks for duotone conversion

1. Choose Bitmaps, Convert To, Duotone (8-bit).
2. Choose the Curves tab.
3. Click the Save button.
4. Locate the folder where you want to save the duotone file.
5. Type a filename, and click Save.

To load inks for duotone conversion

1. Follow steps 1 and 2 from the previous procedure.
2. Click the Load button.
3. Locate the folder where the file is stored.
4. Click the filename, and click Open.



- You can edit the settings of your Duotone image by choosing Bitmaps, Color Transform, Edit Duotone.

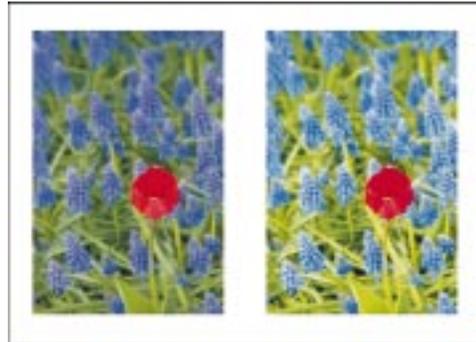


- Enable the Show All box in the Duotone dialog box to display all of the ink tone curves on the grid at once.
- Click the Null button to return all ink tone curves to their default position on the grid.

Converting bitmaps to RGB Colors color mode

You can convert a bitmap to 24-bit (RGB) color. The RGB color model uses percentages of three colors (red, green, and blue) to create colors. Each component has 256 levels of intensity, ranging from zero to full intensity. RGB is the most commonly used color model.

An image in the CMYK color mode is converted to the RGB color mode.



To convert a bitmap to an RGB color format



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Convert To, RGB Color (24-bit).



- Use the RGB color format to create high-quality photographic color bitmaps, and when you print to an RGB or CMY printer.

Converting bitmaps to Lab Colors color mode

You can convert a bitmap from one color mode to 24-bit Lab color. Use the Lab color format to create device-independent bitmaps that encompass the color gamuts of both the CMYK and the RGB color models.

An image is converted from the RGB color mode to the Lab color mode.



To convert a bitmap to an LAB color format

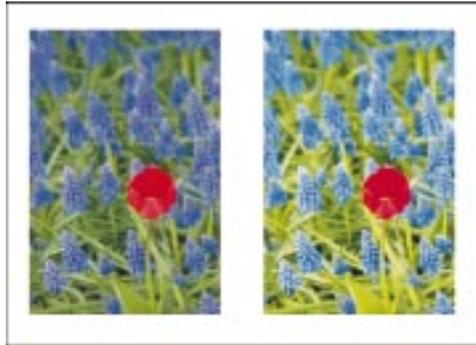


1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Convert To, Lab Color (24-bit).

Converting bitmaps to CMYK Colors color mode

You can convert a bitmap to 32-bit (CMYK) color. The CMYK model consists of four colors, based on the colors of the inks that are used in four-color printing. By combining percentages of cyan, magenta, yellow, and black, you can produce virtually any color you want. Use the CMYK color format to create professional-quality bitmaps and when you are printing to prepress or to a CMYK printer.

.....
An image is
converted from the
RGB color mode to
the CMYK color mode.
.....



The CMYK color model is the standard model for most full-color commercial printing.

Converting to the CMYK color model is different from converting to other models. Because it is used to produce full-color separations, CMYK is a device-dependent color space. This means that it uses information from a CMYK output device to build bitmap colors suited to that device. You cannot, however, convert to CMYK unless you have activated a color profile for a separations printer.

To convert a bitmap to a CMYK color format



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Convert To, CMYK Color (32-bit).



- Any conversion involves some loss of information, because when you convert you are shifting your bitmap to another color space. This is especially true when converting to CMYK, which is a smaller color space than RGB. The color of your RGB bitmap will probably change noticeably when converted to CMYK. These changes cannot be recovered.

Converting images to the Paletted color mode

The Paletted color mode is an 8-bit color mode that stores and displays bitmaps using up to 256 colors. You can convert a complex bitmap to the Paletted color mode to reduce file size — which is especially important for Internet publications — and to allow more precise control over the colors used throughout the conversion process.

When you convert a bitmap to the Paletted color mode, you can use one of a number of different color palette types. Choose a predefined palette or create your own, customized palette based on the colors displayed in your bitmap. For more precise control over the colors contained in the palette, you can

specify the number of colors and the range sensitivity to apply throughout the conversion.

Smoothing

When you smooth a bitmap, CorelDRAW analyses the color differences around each pixel in your bitmap and blends the color transitions where abrupt color changes occur. Smoothing creates a softly blurred appearance on the bitmap but can help to produce a more accurate palette.

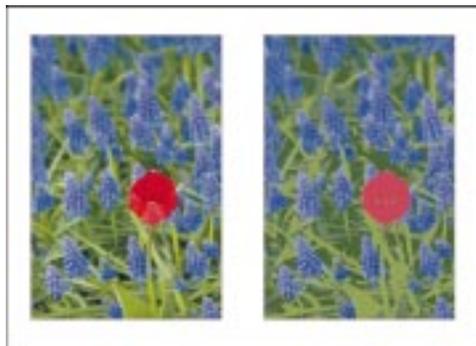
Dithering

Dithering places pixels with specific colors or values in ordered or unordered positions, relative to other pixels of a specific color. The relationship of one colored pixel to another helps to create the appearance of additional colors; that do not actually exist in the palette. There are two types of dithering: error diffusion and ordered dithering. Error diffusion scatters pixels irregularly, making edges and colors softer. Ordered dithering places pixels in an orderly arrangement on the page so that solid colors are emphasized and edges are harder.

Range sensitivity

When you convert a bitmap to the Paletted color mode you can specify a range sensitivity color. This color acts as a target color for the conversion which means that more colors in the specified color's range are used in the conversion. You can also determine how much emphasis is placed on this color (and others related to it). You can then preview the palette on the Processed Palette page. The colors displayed there are used to convert your bitmap.

.....
An image is
converted to the
Paletted color mode.
Range sensitivity is
set for the blue
colors in the image.
.....



Because all conversions result in some loss of information, it's a good idea to preview the conversion before you close the Convert To Paletted dialog box. Previewing lets you alter the conversion options that you want to apply without permanently affecting the bitmap.

Batch conversion

You can convert multiple files to the Paletted color mode by setting batch conversion options. You can specify which files you want to convert and preview each bitmap before applying the conversion. All the bitmaps that you include in the batch are converted using the palette and conversion options that you specify.

Converting a bitmaps to the Paletted color mode

You can convert bitmaps to the Paletted color mode by choosing one of ten possible palette types.

To convert a bitmap to Paletted



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Convert To, Paletted (8-bit).
3. From the Convert To Paletted dialog box, choose the Options tab.
4. Choose a palette type from the Palette pop-up menu.
 - Uniform — provides a range of 256 colors with equal parts of red, green, and blue
 - Standard VGA — provides the Standard VGA 16-color palette
 - Adaptive — samples the image and uses the first 256 colors to create the palette
 - Optimized — contains colors centered on the image's spectrum of colors. You can also select the Color Range Sensitivity To check box and choose a color from the Color Palette
 - Black Body — contains colors that are based on temperature, e.g., black (cold), red, orange, yellow, and white (hot)
 - Grayscale — provides 256 shades of gray, ranging from black (0) to white (255)
 - System — contains the predefined palette of colors used by your operating system
 - Microsoft Internet Explorer — contains the predefined Microsoft Internet Explorer colors
 - Netscape Navigator — contains the predefined Netscape Navigator colors

- Custom — allows you to add colors to create your own customized color palette. If you choose Custom, click the Open button beside the Palette list box, locate the custom palette in the Open Palette dialog box, and click Open
5. Choose a dithering option from the Dithering pop-up menu.
 - None — disables dithering
 - Ordered — approximates color blends using fixed dot patterns. This dithering type applies more quickly than Error Diffusion but is less accurate
 - Error Diffusion — provides the best dithering results by spreading the dithering across a wider area and tailoring the dithering pattern to the transition being simulated

Saving and loading conversion options for the paletted bitmap

After you choose a palette and set the dithering and range sensitivity for the conversion, you might want to save your settings for use with other bitmaps. You can add and remove preset conversion options directly in the Convert To Paletted dialog box.

To save your conversion options

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. Select the conversion options you want.
3. Click the *Add button*.
4. Type a name in the Save New Preset As box in the Save Preset dialog box.



The palette, dithering, smoothing, and color sensitivity options are saved as a preset that you can use in future CorelDRAW sessions.

To load preset conversion options

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. Choose a preset sequence of options from the Presets pop-up menu.

The palette, dithering, smoothing, and color sensitivity options stored in the preset are applied to the current image.

3. Preview the conversion in the Result window.

To load a custom color palette

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. Click the Open button.

3. Locate the folder where the color is stored.
4. Click the filename, and click Open.



- To remove a preset that you have saved in the Presets list box in the Convert To Paletted dialog box, choose the name from the Presets pop-up menu and click the Remove button.

Choosing a range sensitivity color for a paletted bitmap

Specify range sensitivity when you want to customize the palette that you've chosen for the conversion. When you specify range sensitivity, you choose a color that acts as the focus color for the paletted conversion. You can also adjust the color and specify how important that color is in the bitmap that you are converting. Range sensitivity is only available when you choose the Optimized palette type.

To choose a range sensitivity for a paletted bitmap

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. From the Convert To Paletted dialog box, choose the Options tab and choose Optimized from the Palette pop-up menu.
3. Enable the Color Range Sensitivity To check box.
4. Do one of the following:
 - Click the *Eyedropper tool* and click a color on the image.
 - Click the Color Range Sensitivity To color picker, and choose a color.
 - Click the Other button at the bottom of the Color Range Sensitivity To color picker to see more colors or to create your own.
5. Choose the Range Sensitivity tab.
6. On the Range Sensitivity page, do any of the following:
 - Move the Importance slider to change the default importance value. This determines how much emphasis is placed on this color (and others related to it) in the conversion. Higher importance values mean that more shades of this color (and those related to it) are included in the color palette — to the point where other colors in the image are excluded. The conversion is concentrated on the areas of the image that are displayed in that color.



- Move the Lightness slider to adjust the tolerance sensitivity of the conversion process to the lightness component of the range sensitivity color.
 - Move the A (Green Red Axis) slider to adjust the tolerance sensitivity of the conversion process to the green/red component of the range sensitivity color.
 - Move the B (Blue Yellow Axis) slider to adjust the tolerance sensitivity of the conversion process to the blue/yellow component of the range sensitivity color.
7. Choose the Processed Palette tab to view the range of colors that you've chosen for your palette.



- You can view the range sensitivity changes on your bitmap by clicking the Preview button.
-

Saving the processed palette

After you create and customize a palette for your conversion, you can save it as a custom palette file for use with other applications.

To save the processed palette

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. In the Convert To Paletted dialog box, choose a palette and set conversion and range sensitivity options.
3. Choose the Processed Palette tab to view the colors in your palette.
4. Click Save.
5. Locate the folder where you want to save the file.
6. Type a filename, and click Save.

Resetting the range sensitivity options

At any time throughout the conversion process, you can reset the range sensitivity color and options that you've set in the Convert To Paletted dialog box. When you reset the range sensitivity color on the Options page, CorelDRAW resets to the color which appears most frequently in the bitmap.

To reset the Color Palette

1. Choose Bitmaps, Convert To, Paletted (8-bit).

2. From the Convert To Paletted dialog box, choose the Options tab.
3. Click the Reset button.



- The Reset button on the Options page is only available if you have set the color range sensitivity for an Optimized palette.

To reset range sensitivity options

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. From the Convert To Paletted dialog box, choose the Range Sensitivity tab.
3. Click the Reset button beside the range sensitivity option that you want to reset.

Converting multiple files

You can convert multiple bitmaps to the Paletted color mode at once on the Batch page in the Convert To Paletted dialog box. Before you can convert the bitmaps, they must be open in CoreIDRAW. All the bitmaps that you include in the batch are converted using the palette and conversion options that you specify on the Options page in the Convert To Paletted dialog box.

To convert multiple files

1. Choose Bitmaps, Convert To, Paletted (8-bit).
2. Choose the Batch tab in the Convert To Paletted dialog box.

The name of the active file(s) in the Drawing Window appears in the right column on the Batch page with an asterisks in front. The names of all other open files are listed in the left column.

3. Select the files that you want to convert.
4. Click the Add button.

The selected files are moved to the right column for conversion.

To preview an image in the batch conversion

- Choose an image from the Preview Image pop-up menu.



- Batch conversion is not available if you choose Optimized from the Palette pop-up menu on the Options page in the Convert To Paletted dialog box.



- To include all open files in the batch conversion, click the Add All button on the Batch page in the Convert To Paletted dialog box.
- You can remove files from the batch by clicking the Remove button on the Batch page in the Convert To Paletted dialog box. The Remove All button removes all files from the batch.

Applying special effects to bitmaps

CorelDRAW has a wide range of professional-quality effects filters you can use to enhance or customize bitmaps. These filters can completely change the look and feel of your bitmaps.

Throughout this chapter you will see this bitmap with various sample effects applied to it.



How effects filters work

Effects filters are small programs that execute a predefined series of commands to produce a specific effect when applied to a bitmap. They automatically calculate the values and characteristics of every pixel in your bitmap and then alter the pixels according to new values. For example, if you apply the Motion Blur effect to a bitmap, the effect analyzes all pixel values, then “smears” the values in a specified direction, creating the illusion of motion.

Common controls

The effects filters include the following common controls:

Control	Description
	Enable to preview the effect on screen.
	Enable to display a single, large Result window, or to disable the on-screen preview.



Enable to display Original and Result windows.



Click to preview your image.

If the On-Screen Preview button is disabled, click the large Preview button.



Enable to automatically update the preview as you make adjustments to the settings.

You can also pan around your image using the Hand tool that appears when you move your cursor over the Original window (or the Drawing Window if the On-Screen Preview button is enabled). Zoom in to your bitmap by clicking in the window; hold down Control and click to zoom out.

Setting the Bitmaps Effects preferences

The Preferences dialog box lets you set the preview type and last used options for all bitmap effect dialog boxes.

To set the bitmap effects preferences

1. Choose Edit, Preferences.
2. In the list of categories, double-click Global, and choose Bitmap Effects.
3. In the Initial Preview Method section enable one of the following:
 - On Screen — displays a preview of the effect on screen
 - In Dialog — displays the Original and Results windows in the effect dialog
 - Last Used — displays the last used dialog, either On Screen or In Dialog
4. Enable the Prefill dialogs with last used values check box to display the previously entered effect settings.

To set the bitmap effects undo level

1. Choose Edit, Preferences.
2. From the list of categories, choose Workspace, General.
3. Type the number of undo levels in the Bitmap Effects box.

Applying two-dimensional effects

CorelDRAW comes with five different two-dimensional special effects that can be applied to bitmaps. These include:

- Edge Detect, which adds different outline effects to a bitmap
- Offset, which shifts the bitmap according to specific values
- Pixelate, which adds a block-like appearance to the bitmap
- Swirl, which rotates the bitmap
- Wet Paint, which causes the bitmap to appear as though it has been freshly painted

Applying the Edge Detect effect to a bitmap

The Edge Detect effect finds the edges of elements in your bitmap, then converts them to lines on a background of a single color, allowing you to add a variety of outline effects to your bitmap. For best results, use the Edge Detect effect on high-contrast bitmaps that include text. This filter supports all color models except Paletted and Black-and-White.

To highlight edges



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 2D Effects, Edge Detect.
3. Enable one of the following buttons from the Background Color section to fill all non-transparent areas of the bitmap that are not a part of the bitmap's outline:

- White — applies a white fill to all areas of the bitmap that are not a part of the outlined bitmap
- Black — applies a black fill to all areas of the bitmap that are not a part of the outlined bitmap
- Other Color — applies a color that you specify to all areas of the bitmap that are not a part of the outlined bitmap (using a *Color Palette*)



4. Use the *Eyedropper* to select a color from your image.

5. Move the Sensitivity slider to determine the amount of edge enhancement.
Higher values (set by moving the slider to the right) result in more enhanced edges.

Applying the Offset effect to a bitmap

The Offset effect “shifts” the entire bitmap according to the values you specify. When the bitmap is shifted, an empty area is produced where the bitmap was previously positioned. Use the Offset dialog box options to fill the empty area, or another part of the bitmap, with another color. This filter supports all color models except Black-and-White.

To offset your bitmap



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 2D Effects, Offset.
3. Move the Horizontal and Vertical sliders to control the amount of bitmap shifting along the horizontal and vertical plane.
Enable the Shift value as % of dimensions box to set the sliders.
4. Enable one of the following buttons from the Fill Empty Areas With section:
 - Wrap Around — wraps another part of the bitmap around the edges of the window when shifted, creating a tiling effect. With this option enabled, you can check the edges of a bitmap you want to tile for use as a custom texture or wallpaper for a Web page or your desktop
 - Repeat Edges — fills the space left by the shifted bitmap with the color(s) currently appearing along the edge of the bitmap to produce a stretched effect
 - Other — lets you select a color from the color picker that fills the space left by the shifted bitmap

Applying the Pixelate effect to a bitmap

The Pixelate effect divides your bitmap into square, rectangular, or circular cells. Use the Square or Rectangular options to create a blocky, exaggerated digital appearance or the Circular option to create a spider web effect. Experiment with the settings until you achieve the desired effect. This filter supports all color models except Paletted and Black-and-White.



To apply a pixelated effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 2D Effects, Pixelate.
3. Enable one of the following buttons in the Pixelate Mode section to change the size and opacity of the blocks to vary the effect:
 - Square — maintains equal Height and Width settings
 - Rectangular — allows you to set Height and Width individually
 - Circular — builds pixels out from the center in a radial pattern
4. Move the Width and Height sliders to control the width and height of the pixel blocks.

The effects of pixel-block size are dependent on the bitmap size. A value of 10 in a small bitmap produces large pixel blocks. A value of 10 in a large bitmap produces small pixel blocks.

5. Move the Opacity slider to set the transparency of the pixels.

Higher values result in a blocky appearance; lower values result in a more transparent appearance.

Applying the Swirl effect to a bitmap

The Swirl effect distorts your bitmap according to the direction and angle you select. The image swirls around a fixed center point in either a clockwise or

counterclockwise direction, completing the number of whole rotations you set. A lower value in the Whole Rotations box will result in a swirling effect, while a higher value will result in a concentric, whirlpool effect. This filter supports all color models except Black-and-White.

To apply a swirl effect



1. Select the bitmap with the *Pick tool*.

2. Choose Bitmaps, 2D Effects, Swirl.



3. Click the *Set Center button*.

4. Position your cursor over the Drawing Window, and click to set a center point around which the image swirls.

5. Enable the Clockwise or Counter-Clockwise button to set the direction of the rotation.

6. Move the Whole Rotations slider to set the number of rotations the swirl completes.

7. Move the Additional Degrees slider to set additional degrees of rotation more precisely. For example, a value of 90 rotates the bitmap an additional quarter turn.

Applying the Wet Paint effect to a bitmap

The Wet Paint effect creates the illusion that your bitmap is a painting that is still wet. This effect can create illusions ranging from subtle changes in the luminescence of colors to wet paint dripping down your bitmap. You set the percentage and degree of wetness.

Try applying successive combinations of positive and negative wetness values to the same bitmap to produce some interesting effects. For example, if you apply a negative Wetness value to a bitmap, it appears to have a shadow that smears down the page. This filter supports all color models except Paletted and Black-and-White.



To apply a wet paint effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 2D Effects, Wet Paint.
3. Move the Percentage slider to set the size of the drips.
4. Move the Wetness slider to determine which colors drip.

Negative values cause the darker colors to drip; positive values cause the light colors to drip. The value you select also determines the range of light and dark pixels that drip. If you choose a lower value (e.g., -5 or 5) fewer colors drip, but if you use a higher value, more colors drip and the effect is more pronounced.

Applying three-dimensional effects

CorelDRAW comes with six different three-dimensional special effects that give your bitmaps the illusion of three-dimensional depth. These include:

- 3D Rotate, which rotates the bitmap
- Emboss, which creates a three-dimensional relief effect
- Page Curl, which creates the illusion that a corner of the paper has been rolled over another part of the bitmap
- Perspective, which applies a three-dimensional look (Perspective) or holds the original size and shape (Shear)
- Pinch Punch, which causes the bitmap to appear as if it has been pulled out or pushed in from the center
- Map To Object, which creates the illusion of the bitmap being wrapped around the surface of an object

Applying the 3D Rotate effect to a bitmap

The 3D Rotate effect rotates the bitmap horizontally and vertically according to the limits you set. The rotation is applied as if the bitmap were one side of a three-dimensional box. This filter supports all color models except Black-and-White.

To rotate your bitmap in three dimensions



1. Select the bitmap with the *Pick tool*.

2. Choose Bitmaps, 3D Effects, 3D Rotate.



3. Move the Vertical and Horizontal sliders to rotate and position the *3D model*. The Preview window shows how the values affect the rotation.

Enable the Best Fit check box to ensure that the bitmap stays within the boundary of the Drawing Page.

Applying the Emboss effect to a bitmap

The Emboss effect creates a three-dimensional relief effect, which means that details in the bitmap appear to become three-dimensional ridges and crevices on a flat surface. The Emboss effect has its most dramatic effect on bitmaps that have medium to high contrast.

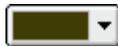
A spherical model shows the location of the light source relative to the bitmap (theoretically located at the center of the circle), to determine the angle of the highlights and shadows. Several effects can be used in combination with the Emboss effect to produce photo-realistic effects. This filter supports all color models except Paletted and Black-and-White.

To apply a three-dimensional relief effect



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 3D Effects, Emboss.
3. Enable one of the following buttons in the Emboss Color section to set the color of the embossed bitmap:

- Original Color — suppresses the color in the bitmap area and outlines the bitmap with the colors in the original bitmap
- Gray — suppresses the color in the bitmap area and outlines the bitmap with gray. This produces an overall gray bitmap with moderate, embossed highlights
- Black — suppresses the color in the bitmap area and outlines the bitmap with black. This produces an overall black bitmap with high-contrast, embossed highlights
- Other Color — suppresses the color in the bitmap area and outlines the bitmap with a color you choose from the *color picker*



4. Move the Depth slider to control the depth of the embossing effect so that areas of the bitmap appear raised in relief.

Move the slider to the right to increase the effect.

5. Move the Level slider to set the amount of background color the relief contains.



6. Type a value in the Direction box, or use the *Direction dial* to indicate the direction of movement. Click on a point along the edge of the Direction dial to choose the location of the light source relative to the bitmap (theoretically in the center of the circle) used for the embossing effect or enter a value.

Applying the Page Curl effect to a bitmap

The Page Curl effect gives the impression that a corner of your bitmap has rolled in on itself. Controls in the Page Curl dialog box let you select a corner of the bitmap, the orientation and size of the curl, and its transparency level. You choose colors for the curl as well as for the background that becomes visible as a result of the image curling away. This filter supports all color models except Paletted and Black-and-White.

To curl a corner of the page over a bitmap



1. Select the bitmap with the *Pick tool*.



2. Choose Bitmaps, 3D Effects, Page Curl.

3. Click a *Page Corner button* in the Adjust section to select a corner to curl.

4. Enable one of the following buttons:

- Vertical — to begin the curl at the top or bottom edge of the bitmap
- Horizontal — to begin the curl at the left or right edge of the bitmap

5. Move the Width % and Height % sliders to determine the curl size.

6. Choose a color for the Curl and Background by doing one of the following:

- Choose a color from the color picker.
- Use the *Eyedropper* to choose a color from the Drawing Window.



7. Enable one of the following buttons:

- Opaque Curl — to make the curl to be a solid color
- Transparent Curl — to make the underlying bitmap visible through the curl

Applying the Perspective effect to a bitmap

The Perspective effect gives your bitmap a sense of three-dimensional depth, as if the bitmap is receding into the distance.

There are two Perspective modes : Perspective and Shear. Perspective applies a three-dimensional look to the bitmap according to the movement of the four nodes in the dialog box. Shear also applies perspective, but the original size and shape of the bitmap are maintained. This filter supports all color models except Black-and-White.

To apply a perspective effect



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 3D Effects, Perspective.
3. Enable one of the following buttons in the Type section:
 - Perspective — allows you to move two nodes at a time toward or away from each other
 - Shear — maintains the distance between the nodes, while allowing you to skew the bitmap



4. Drag one of the nodes that appears in the *Preview window*. The Preview window shows how dragging the nodes affects the perspective of the bitmap.

Enable the Best Fit check box to ensure that the bitmap stays within the boundary of the Drawing Page.

Applying the Pinch Punch effect to a bitmap

The Pinch Punch effect warps your bitmap by either “pinching” the bitmap away from you or “punching” it toward you. This filter supports all color models except Black-and-White.

To apply a pinch punch effect



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 3D Effects, Pinch Punch.



3. Click the *Set Center button*.
4. Position your cursor over the Drawing Window, and click to set a center point around which the pinch/punch originates.
5. Move the Punch/Pinch (-/+) slider to set the intensity of the effect.

Positive values (set by moving the slider to the right) apply a Pinch effect; negative values (set by moving the slider to the left) apply a Punch effect.

Applying the Map To Object effect to a bitmap

The Map To Object effect creates the illusion that the bitmap has been wrapped around a sphere or a vertical or horizontal cylinder. For best results with the horizontal and vertical cylinders, try using a high Percentage setting. This filter supports all color models except Black-and-White.



To wrap your bitmap around an object

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, 3D Effects, Map To Object.
3. Enable one of the following buttons in the Mapping Mode section to choose an object type:
 - Spherical — wraps the bitmap around a spherical model
 - Horizontal — Cylinder wraps the bitmap around a horizontal cylinder model
 - Vertical Cylinder — wraps the bitmap around a vertical cylinder model
4. Move the Percentage slider to determine the direction and amount of the effect wrapping.

Negative values wrap the bitmap toward the back (concave); positive values wrap the bitmap toward the front (convex). For most applications, values between 15 and 30 percent provide the best effects.
5. Choose a Quality type from Quality pop-up menu.

Applying Blur effects

CorelDRAW comes with three different blur effects that allow you to alter the pixels of your bitmaps to soften, smooth edges, blend, or create motion effects. These blur effects are:

- Gaussian Blur, which produces a hazy effect, blurring the bitmap according to a gaussian distribution
- Motion Blur, which creates the illusion of movement in a bitmap
- Smooth, which tones down differences between adjacent pixels, resulting in only a slight loss of detail

Applying the Gaussian Blur effect to a bitmap

The Gaussian Blur effect produces a hazy effect, blurring the bitmap according to a gaussian distribution, which spreads the pixel information outward using bell-shaped curves. This effect can improve the quality of bitmaps with sharp edges. This filter supports all color models except Paletted and Black-and-White.



To apply a Gaussian Blur effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Blur, Gaussian.
3. Move the Radius slider to set the intensity of the effect.
Higher values result in a more blurred bitmap.

Applying the Motion Blur effect to a bitmap

The Motion Blur effect creates the illusion of movement in a bitmap. The direction of motion is selected using the Direction dial. The intensity of the effect is controlled using the Speed slider. Higher values create a greater blurring effect. This filter supports all color models except Paletted and Black-and-White.



To give the appearance of speed through blurring



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Blur, Motion.
3. Move the Distance slider to set the intensity for the blur effect.
4. Type a value in the Direction box, or use the *Direction dial* to indicate the direction of movement. Click on a point along the edge of the Direction dial to choose an angle or type the angle directly in the Direction box.
5. In the Off-Imaging Sampling section enable one of the following buttons:
 - Ignore Pixels Outside Image — ignores pixels that fall outside of the image
 - Use Paper Color — starts the blurring with the paper color
 - Sample Nearest Edge Pixel — starts the blurring with the colors at the edge of the image

Applying the Smooth effect to a bitmap

The Smooth effect tones down differences between adjacent pixels, resulting in only a slight loss of detail while smoothing the bitmap. The Smooth effect is very subtle; in fact, you may have to zoom in to see its impact. You can set the intensity of the effect and you can apply it several times. This filter supports all color models except Paletted and Black-and-White.

To smooth rough edges in your bitmap



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Blur, Smooth.
3. Move the Percentage slider to set the intensity of the smoothing effect.

Higher values (set by moving the slider to the right) increase the intensity of the effect.

Applying Noise effects

CorelDRAW comes with two different noise effects that create, control, and eliminate noise. Noise refers to the graininess of a bitmap, when random pixels on the surface of a bitmap resemble static on a television screen. These noise effects are:

- Add Noise, which creates a granular effect that adds a texture to a flat or overly blended bitmap
- Remove Noise, which softens the bitmap and reduces the speckled effect caused by scanning or capturing images from video

Applying the Add Noise effect to a bitmap

The Add Noise effect creates a granular effect that adds a texture to a flat or overly blended bitmap. There are three options available: Gaussian, Spike, and Uniform. This filter supports all color models except Paletted and Black-and-White.



To add noise to your bitmap

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Noise, Add Noise.
3. Move the Level slider to set the intensity and value range of the noise.
Higher values (set by moving the slider to the right) increase the intensity of the effect.
4. Move the Density slider to set the amount of noise pixels per inch.
Higher values (set by moving the slider to the right) increase the intensity of the effect.
5. Enable one of the following buttons in the Noise Type section:
 - Gaussian — prioritizes colors along a Gaussian curve. Most colors added by the effect will closely resemble the original colors. The results are increased light and dark pixels, producing a more pronounced effect
 - Spike — uses colors that are distributed around a narrow curve (spike). It produces a thinner, lighter colored grain
 - Uniform — provides an overall granular appearance. Use this option to apply noise randomly



- To add a randomly colored noise texture, enable the Color Noise check box.

Applying the Remove Noise effect to a bitmap

The Remove Noise effect softens the bitmap's appearance and reduces the speckled effect that can occur during the scanning or video capturing process. The Remove Noise effect compares each pixel to surrounding pixels and calculates an average. Each pixel with a brightness value that exceeds the average (based on the threshold you set) are removed. This filter supports all color models except Paletted and Black-and-White.



To apply the Remove Noise effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Noise, Remove Noise.
3. Do one of the following:

- Enable the Auto check box to calculate the noise reduction level required to improve the bitmap quality automatically.
- Disable the Auto check box to adjust the threshold manually. Move the Threshold slider to determine the level (the pixel value) at which noise is removed. Higher values cause less noise removal; lower values cause greater noise removal.

Applying Sharpness effects

CorelDRAW comes with two different effects that sharpen the pixels of your bitmap to focus and enhance edges. These sharpening effects are:

- Sharpen, which adjusts the edges of the bitmap by finding the edges and allows you to set a tolerance level for the background pixels
- Unsharp Mask, which accentuates edge detail and sharpens some smooth areas in the bitmap

Applying the Sharpen effect to a bitmap

The Sharpen effect accentuates the edges of the bitmap by finding the edges and increasing the contrast between adjacent — or background — pixels. This filter supports all color models except Paletted and Black-and-White.

To apply the Sharpen effect



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Sharpness, Sharpen.
3. Move the Edge Level(%) slider to trace the edges of forms in your bitmap.
Higher values (set by moving the slider to the right) increase the intensity of the effect.
4. Enable the Intensity Only check box to apply the convolution only on the intensity portion of the image.
5. Move the Threshold slider to determine how much of the bitmap remains after edge detection.
Higher values (set by moving the slider to the right) produce more pronounced effects.

Applying the Unsharp Mask effect to a bitmap

The Unsharp Mask effect accentuates edge detail and focuses some blurred areas in the bitmap. This filter supports all color models except Paletted and Black-and-White.



To apply the Unsharp Mask effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Sharpness, Unsharp Mask.
3. Move the Percentage slider to determine the degree of edge accentuation and the degree of sharpening applied to smooth areas in a bitmap.

Higher values (set by moving the slider to the right) produce more pronounced effects.
4. Move the Radius slider to control the number of pixels that are successively selected and evaluated.

Higher values (set by moving the slider to the right) produce more pronounced effects.
5. Move the Threshold slider to determine how much of the bitmap remains after edge detection.

Higher values (set by moving the slider to the right) produce more pronounced effects.

Applying Artistic effects

CorelDRAW comes with three different artistic special effects that allow you to add some creative touches to your bitmap. These Artistic effects are:

- Glass Block, which mimics the effect of viewing an image through a number of blocks of glass
- Impressionist, which gives your bitmap the look of an impressionist painting by converting it to dabs of solid color
- Vignette, which creates a frame around your bitmap

Applying the Glass Block Effect to a bitmap

The Glass Block effect mimics the effect of viewing an image through a number of blocks of glass. You can set the dimensions of individual blocks; since Width and Height values are set in pixels, smaller values will produce a low level pixelation effect, while larger numbers produce a diamond glass pattern. You will achieve the best results using values between 25 and 75. This filter supports all color models except Black-and-White.



To apply a glass block effect

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Artistic, Glass Block.
3. Move the Horizontal and Vertical sliders to set block dimensions.

Higher values result in fewer, large blocks, creating a diamond-glass pattern; lower values result in an increased number of small blocks, creating a low-level pixelated effect that is hardly visible.

4. Enable the Square Blocks box to set the block shape.

Applying the Impressionist Effect to a bitmap

The Impressionist effect gives a bitmap the look of an impressionist painting by converting it to dabs of solid color. This filter supports all color models except Black-and-White.



To apply impressionist-style brush strokes

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Artistic, Impressionist.

3. Move the Horizontal and Vertical sliders to determine the number of pixels that are displaced horizontally and vertically.

By increasing the value, you increase the effect of blurring on the original bitmap to the point where the bitmap can become unrecognizable. The range (between 1 and 100) is measured in pixel displacement. For example, a setting of 10 for the vertical displacement diffuses the bitmap over a 10-pixel vertical region.

4. Enable the Identical Values box to set the horizontal value equal to the vertical value.

Applying the Vignette Effect to a bitmap

The Vignette effect creates a frame around your bitmap. A vignette can have a soft or hard edge, can be one of four shapes, and can be virtually any color. Use a vignette to create dreamy, nostalgic effects, or give an old photo an elliptical frame. This filter supports all color models except Paletted and Black-and-White.

To apply a frame to bitmaps



1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Artistic, Vignette.
3. Enable one of the following buttons from the Color section to choose a color for the frame:
 - Black — applies a black frame around the bitmap
 - White — applies a white frame around the bitmap
 - Other Color — applies a frame with the color of your choice around the bitmap
4. Enable one of the following buttons from the Shape section to choose a shape for the frame:

- Ellipse — applies an ellipse shape to the bitmap
 - Circle — applies a circle frame to the bitmap
 - Rectangle — applies a rectangle frame to the bitmap
 - Square — applies a square frame to the bitmap
5. Move the Offset slider to set the size of the center of the frame.
- Higher values (set by moving the slider to the right) decrease the size of the frame; lower values (set by moving the slider to the left) increase the size of the frame.
6. Move the Fade slider to create a smooth transition between the frame and the bitmap.
- Higher values (set by moving the slider to the right) result in a greater fade (or feathering) along the edges of the frame; lower values (set by moving the slider to the left) result in no fade.

Applying Color Transform effects

CorelDRAW comes with two Color Transform effects that allow you to change the colors in your bitmap. These Color Transform effects are:

- Psychedelic, which changes the colors in your bitmap to bright, electric colors
- Solarize, which transforms colors so that they appear like those of a photographic negative

Applying the Psychedelic effect to a bitmap

The Psychedelic effect changes the colors in your bitmap to bright, electric colors such as orange, hot pink, cyan, lime green, and others. Use low values to achieve some interesting effects. This filter supports all color models except Paletted and Black-and-White.



To apply psychedelic colors

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Color Transform, Psychedelic.
3. Move the Level slider to set the intensity of the effect.

Higher values (set by moving the slider to the right) result in a more radical change; lower values (set by moving the slider to the left) result in more subtle changes.

Applying the Solarize effect to a bitmap

The Solarize effect transforms colors so that they appear like those of a photographic negative. This effect is more pronounced when applied to color bitmaps.

In photographic terms, solarization is a darkroom technique in which a sudden flash of light is used to darken unfilled areas of a print. You can control the intensity of the effect to achieve different results. This filter supports all color models except Black-and-White.



To create solarized (variably negative) bitmaps

1. Select the bitmap with the *Pick tool*.
2. Choose Bitmaps, Color Transform, Solarize.
3. Move the Level slider to set the intensity of bitmap solarization.

Higher values (set by moving the slider to the right) apply more light to the bitmap; lower values (set by moving the slider to the left) apply less light.



CREATING DOCUMENTS FOR THE **12** WORLD WIDE WEB

CorelDRAW gives you the tools to create professional-looking, single-page or multipage Web documents. With the increasing popularity of communication and commerce on the World Wide Web, you can make your mark by using CorelDRAW to create documents that visually clarify concepts and that are easy to navigate.

Creating a Web document in CorelDRAW differs somewhat from creating a standard print-media document. However, if you follow a few simple design principles, you can create a Web document to which your visitors will enjoy returning.

Before you create your Web document, you should take some time to plan and map out your document's structure. Decide which elements in your document you want to emphasize and how you want visitors to move around within the document. Remember, you want to create a Web document that gets your message across, that is easy and intuitive to navigate, and that is enjoyable to visit.

When creating your Web document, ensure that you use a file format that can best display your document. The JPEG and GIF are standard bitmap file formats that most Web browsers can read and display. Small image and file sizes ensure that your document downloads quickly and responds quickly as it's navigated. For more information about which format to use to publish your document to the Internet, see "Choosing the appropriate file format" on page 515.

CoreIDRAW provides a variety of Internet objects that you can insert in your HTML Web document. These Internet objects are user interface (UI) controls that assist you in performing tasks such as searches and data collection.

CoreIDRAW lets you convert objects to hypergraphics by linking them to objects within your document or to another Web document. You can assign Uniform Resource Locators (URLs) and bookmarks as well as determine the position of HTML-compatible text. In addition, CoreIDRAW lets you check for HTML object conflicts prior to publishing your document. This ensures that your document meets conditions such as appropriate CGI script addresses. Any errors are listed and some can be automatically fixed.

When you're satisfied with the construction of your Web document, you can publish your document directly to HTML or publish it as a single image.

Creating HTML text

You can make Paragraph text HTML compatible so that the text becomes editable in a Web browser. If you don't convert Paragraph text to HTML text before you publish your document to the Internet, the text is converted to a bitmap when published, and cannot be edited in a browser.

CoreIDRAW provides you a choice of fonts and sizes for the HTML text. The default HTML font is used automatically unless you override it with another font. Even if you choose to override it, the default font is used if visitors to your site don't have the same font installed on their computers. The usual text styles, including bold, italic, and underline, are also available. In addition, you can apply uniform fills, but not outlines, to HTML text.

You cannot transform HTML text by rotating it, skewing it, or scaling it nonproportionally. Also, you cannot fit HTML text to a path, wrap it inside graphic objects (HTML text and graphic objects reside on separate layers), or link it to non-HTML text frames.

You can create hyperlinks in HTML text by assigning Uniform Resource Locators (URLs) and bookmarks to any part of the text. You can identify hyperlink HTML text in your Web browser by the link properties (for example, underlining and color) or by the default browser properties.

Converting Paragraph text to HTML text

You can convert Paragraph text to HTML text so that you can edit text directly in a Web browser. For more information about Paragraph text, see "Adding Paragraph text" on page 290.

To convert Paragraph text to HTML text



1. Select the Paragraph text object with the *Pick tool*.
2. Choose Text, Make Text HTML Compatible.



- Ensure that the HTML text does not intersect or overlap other Internet objects or extend beyond the boundaries of your drawing page; otherwise the text will be converted to a bitmap and it will lose its Internet properties.
- Artistic text cannot be converted to HTML text and will always be converted to a bitmap.



- You can also convert Paragraph text to HTML text by holding down Control, clicking the Paragraph text object, and choosing Make Text HTML from the pop-up menu.

Formatting HTML text

After you convert a Paragraph text object to HTML text, you can use the Property Bar and the Format Text dialog box to change its font, font size, and style.

To format HTML text using the Property Bar



1. Select an HTML text object with the *Pick tool*.
2. Choose a font from the Font list box.
3. Choose a font size from the Font Size list box.
4. Apply any style attributes, for example, italic or underline.

To format HTML text using the Format Text dialog box

1. Select an HTML text object with the Pick tool.
2. Choose Text, Format Text.
3. Click one of the following tabs:
 - Internet Text
 - Align

- Frames And Columns tab
4. Apply the formatting properties you want.



- The HTML text sizes, numbered 1 through 7, correspond to particular point sizes between the 8-point and 36-point range.
-

Inserting Internet objects

CorelDRAW provides you with a set of Internet objects with their functions already specified. All Internet objects, embedded Java applets, and HTML text objects in your Web document are placed on a separate layer that resides above all other graphics layers in CorelDRAW. This layer is called the Internet layer. The Internet layer is generated automatically when you create an Internet object or import an object that must be placed on the layer. Graphical objects to which you assign URLs reside on the graphics layers and use image maps to store their Internet properties.

You can customize Internet objects and place them anywhere in the document as long as they don't overlap one another. If they do intersect or overlap, they will be combined and treated as one large bitmap image with the URL properties retained in an image map. Leaving space around Internet objects helps to ensure that these will function correctly in a browser and helps to keep the appearance of your document clean and attractive. However, Internet objects can overlap non-Internet objects in your document because non-Internet objects reside on the graphics layers beneath the Internet layer.

Inserting an Internet object in your document

You can insert a variety of Internet objects, such as Java applets, radio buttons, submit buttons, check boxes, text edit boxes, pop-up menus, and more, in your HTML document.

To insert an Internet object

- Choose Edit, Insert Internet Object, and choose the object you want to insert.



- Except for Java applets and Embedded files, all other Internet objects require a CGI Script address. Otherwise, these Internet objects might not function properly in your document once it is published to the Web. For more information about CGI Script address, see “Adding a CGI Script address” on page 520.
 - Internet objects must not intersect or overlap one another.
-



- For more information about customizing Internet objects, see “Customizing an Internet object” on page 507.
-

Customizing an Internet object

You can customize each type of Internet object to create special UI controls that suit your needs. You can use the controls on the Object Properties Palette to make the modifications you want, or you can use the tools on the Property Bar.

To customize an Internet object using Object Properties

1. Choose Edit, Properties.
2. Choose Internet object’s name from the pop-up menu.
3. Modify the attributes of the Internet object.
4. Click the Apply button.

To customize an Internet object using the Property Bar



1. Select an Internet object with the *Pick tool*.
2. Use the controls on the Property Bar to modify the attributes of the Internet object.

Creating hyperlinks

In CorelDRAW, you can create hypergraphics that act as hyperlink navigation tools for your HTML documents. By creating hyperlinks, you can connect to any object in your document that is assigned a bookmark or to any document published on the Internet by using that document’s Uniform Resource Locator (URL).

What is a hyperlink?

A text or graphical hyperlink (hypertext or hypergraphic) is used to jump to a specific address that's defined by a URL. In addition to the URL, a hypergraphic consists of a hotspot. The hotspot is part of the image map and is the area of the object that you can click to jump to the address specified by the object. It appears with a foreground cross-hatch pattern and a background fill color. You can change the colors of the cross-hatch pattern and the background fill. You decide whether the hotspot follows the contours of the object, whether it is limited to the same areas as the object's fill, or whether the hotspot fills the object's entire bounding box.

What is a bookmark?

A bookmark is a unique name that you can assign to text or graphics in your document. A bookmark acts as an address, or URL, for the object to which it is assigned. Any bookmarked object can be accessed from within the same document or from an external HTML document by using a hyperlink to that bookmark. For information about bookmarking text or graphics, see "Assigning a bookmark" on page 510.

The Internet Bookmark Manager is a Palette that contains a list of all the bookmarks you've assigned throughout your document. Each bookmark is listed by name and by the page on which it's located.

In the Internet Bookmark Manager, you can rename a bookmark, and create a hyperlink from an object in your document to the bookmarked object you choose from the Bookmark list. You can also scroll automatically and select the bookmark you've chosen from the list. If the bookmarked object isn't on the current page, the document switches to the correct page. The Internet Bookmark Manager also lets you clear a bookmark from the Bookmark list. Only the bookmark is cleared from your document, not the object to which it was assigned.

What is a Uniform Resource Locator?

A Uniform Resource Locator (URL) is a unique address you assign that defines where a document is found on the Internet, such as <http://www.corel.com/visitors/welcome.htm>. The first portion, "http," identifies the type of Internet resource that's being requested, such as the World Wide Web (http), FTP, or Gopher. The next portion, "www.corel.com," identifies the server where the document is located and is followed by the folder structure, "visitors." The last part of the URL, "welcome.htm," is the filename.

To successfully connect an Internet object in your published Web document, and another document on the Internet, each URL component must exactly match the URL address to which you want to connect. To connect to a page,

or to a specific location on a page within the document you're browsing, you only need to type the specific page or location address.

Defining a hypergraphic's hotspot

Each hypergraphic has an area called a hotspot. You can define the object's hotspot by using the tools on the Internet Objects toolbar or the controls on the Object Properties Palette.

To assign a hotspot using the Internet Objects toolbar



1. Select the hypergraphic with the *Pick tool*.
2. On the Internet Objects toolbar, enable one of the following buttons:



- *Use Object Shape To Define Hotspot*



- *Use Bounding Box To Define Hotspot*



- The Use Object Shape To Define Hotspot and Use Bounding Box To Define Hotspot buttons are enabled when they appear pressed.

To assign a hotspot using Object Properties

1. Select the hypergraphic with the Pick tool.
2. Choose Edit, Properties.
3. Choose Internet from the pop-up menu.
4. In the Link Extent section, enable one of the following buttons:
 - Use Object Bounding Box button
 - Use Object Shape button

Identifying hypergraphics in your document

CorelDRAW lets you identify the hypergraphics you create in your document. You can determine the color of the hypergraphic's cross-hatch pattern and background fill. If you select a hypergraphic first and then change the foreground and background hotspot colors, the change applies to the selected object only. If you change the hotspot colors with no object selected, the default colors are changed for this document and for future sessions of CorelDRAW.

To assign a foreground color



- On the Internet Objects toolbar, click the *Foreground Color Of Hotspot color picker*, and choose a color.

To assign a background color



- On the Internet Objects toolbar, click the *Background Color Of Hotspot color picker*, and choose a color.

To display hypergraphics in your document



- On the Internet Objects toolbar, enable the *Show Hotspots button*.



- The Show Hotspots button is enabled when it appears pressed.
- Web browsers such as Netscape Navigator and Microsoft Internet Explorer each use their own 256-color palette to display images. Both these palettes contain identical colors and are available in CorelDRAW. To ensure that the colors you use in your Web document display correctly in a browser, you should design using either palette. For more information about color, see “Working with color” on page 231.

Assigning a bookmark

You can assign a new or used bookmark to any text or graphic object in your Web document by using the Internet Objects toolbar or the Internet page under the Object Properties Palette.

To display the Internet Objects toolbar

- Choose Window, Toolbar, Internet Objects Toolbar.

To assign a bookmark using the Internet Objects toolbar



1. Select an object with the *Pick tool*.
2. In the Internet Bookmark box, type the name you want to assign to the object.
3. Press Return.

To assign a bookmark using Object Properties

1. Select an object with the Pick tool.
2. Choose Edit, Properties.

3. Choose Internet from the pop-up menu.
4. Type the name you want to assign to the object in the Bookmark box.
5. Click the Apply button.



- You can rename any of your bookmarks by typing in the appropriate box on the Internet Objects toolbar or the Internet page on the Object Properties Palette.
- You cannot assign the same bookmark name to more than one object per document page. After you assign a bookmark to an object, you can create a hyperlink to that object from within the same document or from an external HTML document.
- Objects to which bookmarks are already assigned have bullets beside their name in the Internet Links submenu.



- You can assign an used bookmark to an object by holding down Control and clicking the object, and choosing Internet Links. You can choose from the first 10 bookmarks listed. The bookmarks are sorted by the page on which they're located. Any additional bookmarks can be accessed by clicking the More button.

Using the Internet Bookmark Manager

Using the Internet Bookmark Manager, you can create a hyperlink to an object that has been already bookmarked. You can also manage bookmarks by selecting, removing or renaming them.

To create a hyperlink to a bookmarked object



1. Select an object with the *Pick tool*.
2. Choose Tools, Internet Bookmark Manager.
3. From the Bookmark list, choose the bookmark to which you want to link the object.
4. Click the Link button.



- You cannot hyperlink a bookmark to itself.
-

To select a bookmarked object in your document

1. Choose Tools, Internet Bookmark Manager.
2. Choose the object's bookmark from the Bookmark list.
3. Click the Select button.

To remove a bookmark from an object

1. Choose Tools, Internet Bookmark Manager.
2. Choose the bookmark from the Bookmark list.
3. Click the Remove button.



- You can also choose the page on which the object's bookmark is located from the Page list.
-

To rename a bookmark

1. Choose Tools, Internet Bookmark Manager.
2. Choose the bookmark you want to rename from the Bookmark list.
3. Type the new name.

Assigning a Uniform Resource Locator

You can create a hyperlink from any text or graphic object in your Web document to another document published on the World Wide Web by assigning that document's Uniform Resource Locator (URL) to the selected object. You can assign a URL to the selected object using the Internet Objects toolbar or the Object Properties Palette.



To assign a URL using the Internet Objects toolbar

1. Select an object with the *Pick tool*.
2. In the Internet Address list, type the URL to which you want to create a link.
3. Press Return.

To assign a URL using Object Properties

1. Select an object with the Pick tool.
2. Choose Edit, Properties.

3. Choose Internet from the pop-up menu.
4. In the Location (URL) list, type the URL to which you want to create a link.



- Objects to which URLs are already assigned have bullets beside their name in the Internet Links submenu.



- You can assign a used bookmark to an object by holding down Control clicking the object, and choosing Internet Links. You can choose from the last 10 assigned URLs. Any additional URLs can be accessed by clicking the More button.
- You can also link an object to an existing URL.
- You can edit a URL by typing in the appropriate box on the Internet Objects toolbar or the Internet page on the Object Properties Palette.

Checking your document for HTML object conflicts

You can ensure that your Web document publishes to the Internet successfully by performing conflict verification tests on the document. You can determine the type of object conflict to be verified.

Setting HTML object conflict verification preferences

CorelDRAW lets you determine what you want tested in the HTML object conflict verification process. You can choose your preferences that pertain to your document.

To set HTML object conflict verification preferences

1. Choose Tools, HTML Object Conflict.
2. Click the *Analyzer Options* button.
3. On the HTML Conflicts page, enable the check boxes that correspond to the HTML object conflicts you want to verify.



- You can also access the HTML Conflicts page by choosing Edit, Preferences.
-

Scanning your document for HTML object conflicts

You can scan your Web document before you publish it to the Internet to ensure that there are no conflicts between Internet objects. You can scan the current page or the entire document for HTML object conflicts. Any HTML object conflicts that are verified in your document are listed on the HTML Object Conflict Analyzer Palette.

To scan the current page of your document for HTML object conflicts



1. Choose Tools, HTML Object Conflict.
2. Click the *Rescan The Current Page* button.

To scan your entire document for HTML object conflicts



1. Choose Tools, HTML Object Conflict.
2. Click the *Rescan The Document* button.



- As you repair HTML object conflicts, you can rescan individual pages or your entire document to update the conflict list. For information about repairing HTML object conflicts, see “Repairing HTML object conflicts” on page 514.

Repairing HTML object conflicts

You can use the HTML Object Conflict Analyzer Palette to identify conflicts between Internet objects in your Web document. Some object conflicts can be repaired automatically by using the controls on the Palette, while other conflicts will require you to repair them manually.

To open the HTML Object Conflict Analyzer Palette

- Choose Tools, HTML Object Conflict.

To scroll up to an error or warning message in the object conflict list



- Click the *Move To Previous Error* button.

To scroll down to an error or warning message in the object conflict list



- Click the *Move To Next Error* button.



To locate the conflicting object in your document

- Click the *Select Object From The Current Error* button.



To repair the conflicting object in your document automatically

- Click the *Fix The Current Error* button.



- If the conflicting object cannot be repaired automatically, you'll have to repair the conflict in your Web document manually.

Publishing your document to the Internet

You are now ready to publish your document to the Internet. You can do this by choosing basic Internet publishing preferences or, if you want to choose more specific preferences, you can choose advanced image, text and hyperlink publishing preferences. You can also set HTML object conflict parameters.

You can export your document to the JPEG or GIF file format. You can either publish your document in Hypertext Markup Language (HTML) format or as a single image.

Choosing the appropriate file format

The two most common image file formats for the World Wide Web are Joint Photographic Experts Group (JPEG) and Graphics Interchange Format (GIF).

Before you decide which format to use, you must consider the type of image you are creating, the file size, the image quality, and the display time.

JPEG is the preferred format when saving images with broad tonal ranges, such as photographs or scanned images. The GIF format is considered the best choice for line drawings and graphics with few colors or sharp edges. Read the following descriptions of both formats, and determine the best format for your images by asking the question, "Which format gives me with the best image quality in the smallest file size and displays best on screen?"

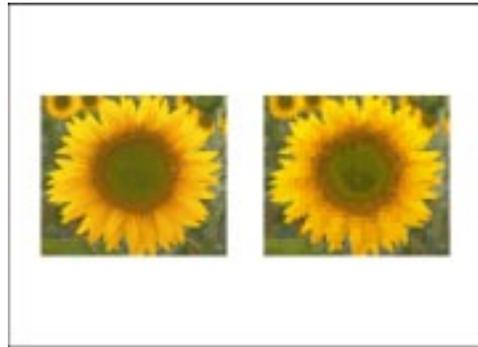
JPEG file format

JPEG was developed as a compression scheme specifically for computer graphics. JPEG supports up to 32-bit color (16.7-million colors), and is an excellent option for photographs and scanned images.

JPEG files support lossy compression (i.e., unnecessary information that does not impede visual perception is lost), providing high-quality images with a high level of compression. You can choose the display quality — from high-quality to very low-quality reproductions. The higher the image quality,

the larger the file size. JPEG images do require some time to decompress when displaying on screen but can be displayed progressively.

JPEG compression example



The original image size is 1,890 KB

400 KB using high quality 12 KB using low quality

(lowest compression) (highest compression)

GIF file format

The GIF format was developed as a cross-platform graphic standard and is supported by all graphical Internet browsers. GIF supports up to 8-bit color (256 colors), and allows you to store custom palettes with your image. Usually, simple vector files look better when converted to the GIF format if they contain hard outlines or small text objects.

GIF files provide lossless compression, (i.e., the file information is stored with the image), and the GIF file looks almost exactly like the graphic you created, however, some color loss may occur in the compression. Because limited decompression is required, a GIF file displays fairly quickly on screen. However, you can still choose to display GIF images using image interlacing, which is very similar to displaying the images progressively.

Choosing an export file format

When you publish your CorelDRAW document to HTML format, you can export the graphics in your document to the JPEG or GIF image type file format. You can also export your document as a single image in either of these file formats. For more information about the JPEG and GIF file formats, see “Choosing the appropriate file format” on page 515.

To choose an export file format

1. Choose Edit, Preferences.

2. In the list of categories, double-click Document, Publish To Internet, and choose Image.
3. Choose the preferences you want to use to export the images in your Web document.



- You can also click the Preferences button on the Publish To Internet dialog box to access the Preferences dialog box.
 - If you choose to export your images to the JPEG file format, enable the JPEG Options button to set additional JPEG-specific preferences.
-

Publishing to HTML format or as single images

When you publish your document to HTML format, CorelDRAW creates an HTML document that appears identical to the source document when viewed in Web browsers.

You can export the graphics in your document to the JPEG or GIF format when you publish to HTML format. All of these bitmaps are saved in an image folder of your choice; usually a subfolder of the source HTML folder. If you export your graphics to the JPEG format, you can have them display progressively when viewed in a Web browser. If you export your graphics to the GIF format, you can have them display in a Web browser using image interlacing. For more information about exporting a graphic to a JPEG or GIF format, see “Choosing an export file format” on page 516.

For objects in your drawing that are assigned Uniform Resource Locators (URLs), CorelDRAW creates a reference to the object in the HTML document and automatically generates HTML codes that contain all of the information necessary to match the position of a cursor click to a specific URL.

When you publish your document as a single image, CorelDRAW creates an image map. An image map is a hypergraphic that links to different URLs when you view the HTML document with a browser. An image map graphic is made up of a bitmap (the image) and a series of coordinates describing the location of the hotspots on the bitmap (the map). Therefore, when you click an image map, the HTML document to which it is linked appears.

In addition, whether you publish your document to HTML format or as a single image, you can specify an Internet object’s CGI script address.

Publishing a document to HTML format or as a single image

CorelDRAW documents that are published to HTML format appear identical to the source document when viewed in Web browsers. CorelDRAW assigns an HTM extension to documents you publish to HTML format. By default,

HTM files share the same name as the CorelDRAW source file. The HTM files are saved in the last folder you used to place exported Web documents. You can also add details such as a page title and filename to your Internet file.

When you publish your document as a single image, CorelDRAW creates an image map. When you click on a hotspot in an image map, the HTML document to which it is linked appears.

For more information about publishing a single image in an appropriate file format, see “Choosing an export file format” on page 516.

To publish a document using the Template Wizard

- Choose File, Publish To Internet.
Follow the instructions of the Template Wizard.

To publish a document to HTML format

1. Choose File, Publish To Internet.
2. Click the Use Internet Dialog button.
3. In the Publish To Internet dialog box, enable the HTML button.
4. From the HTML Folder pop-up menu, choose the folder in which you want to save your published document.

The HTML Folder list box keeps a history of the last folder used (default), the folder containing your CorelDRAW source file, and the default CorelDRAW folder. However, you can click the Select button to choose a different folder.

5. In the Image Folder box, type the name of the folder in which you want to save the bitmaps.

The image folder is a subfolder of the HTML folder. If you leave the Image Folder box blank, the bitmaps are saved in a folder that has the same name as the HTML document. To save the bitmaps in the HTML folder, type a dot (.).

To add details to your HTML file

1. Click a blank space in the Drawing Window to deselect any objects.
2. Choose Edit, Properties.
3. Choose Page from the pop-up menu.
4. Type a name in the Page Title box

This name is displayed when you view your document in a Web browser.

5. In the Page Information section, type a filename in the HTML File box.
6. Type details of your file in the Name and Content columns.

To publish a document as a single image

1. Follow steps 1 to 3 from the “To publish a document to HTML format” procedure.
2. Enable the Single Image button in the Publish To Internet dialog box.
3. Follow steps 5 and 6 from the previous procedure.



- You can enable the View Page In Browser check box to view your document in a Web browser.
- You can click the Export All Pages button if you want to publish an entire multipage Web document. Enable the individual check boxes, if you want to export only specific pages of the multipage Web document.
- If you want CorelDRAW to automatically overwrite existing files with the corresponding files you’ve updated, enable the Replace Existing Files check box. If you don’t enable the Replace Existing Files check box, CorelDRAW will ask for permission before overwriting any existing files.
- You can edit the title and filename of each page in your Web document in the Page List section of the Publish To Internet dialog box.



- When your Web document is added to the Favorites or Bookmarks of the Web browser section, the name you type in the Page Title box is displayed in the browser’s title bar.

Choosing HTML export preferences

You can choose additional export preferences while publishing your document to the Internet.

To choose HTML export preferences

1. Choose Edit, Preferences.
2. In the list of categories, double-click Document, and choose Publish To Internet.
3. On the Publish To Internet page, enable the button for the type of HTML layout you want to use when you export your document to the Internet.

4. Type values in the following boxes for the HTML layout you choose:
 - Position Tolerance
 - Image White Space
 - Position White Space
5. In the list of categories, double-click Publish To Internet, and choose Text.
6. Enable one of the following buttons to choose the method with which you want to export the text in your Web document:
 - Export HTML-compatible Text As Text
 - Export All Text As Images
7. In the list of categories, double-click Publish To Internet and, choose Links.
8. Enable the check boxes to apply underline and color properties to any text that is assigned a URL in your Web document.

The link colors you set in the Preferences dialog box will override the default link colors used in your Web browser, eliminating any conflict between link color and your document's page background color.



- On the Publish To Internet page, in the HTML Layout section, Layers and Styles create simpler and smaller files than the HTML Tables option. However, if you want your document to be compatible with most Web browsers, enable the HTML Tables button.



- You can access the Preferences dialog box by clicking the Options button in the Publish To Internet dialog box.

Adding a CGI Script address

If your document has form related Internet objects, you need a CGI script address to enable these Internet objects to work better once your document is published to the Internet. Except for Java applets and Embedded files, the rest of the Internet objects which CorelDRAW provides are form related.

You can specify a method for sending the CGI script address to the server. You can also choose a frame type in which to display your Web document.

To type the CGI Script address of the Internet object

1. Choose Edit, Properties.

2. Choose Form from the pop-up menu.
3. Type the CGI Script address in the URL Of CGI Script box.
4. Click the Apply button.

To choose a method for sending the CGI Script address to the server

1. Follow steps 1 and 2 from the previous procedure.
2. Choose a method from the Method list box.
3. Click the Apply button.

To choose a frame type

1. Follow steps 1 and 2 from the “To choose a method for sending the CGI Script address to the server” procedure.
2. Choose a frame type from the Target list box.
3. Click the Apply button.



PRINTING

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Corel provides extensive printing options designed for both desktop and commercial printing. You have control over what you print, the size and position of a print job, and the order and orientation of the pages of a print job. You can preview a print job to see how it will look when you print. Most of the printing features that are provided are not required to print simple documents on a desktop printing device. If you are looking for basic printing instructions, see “Setting up a print job” on page 523.

If you are using a PostScript printing device and are having trouble printing, see “Using PostScript to optimize a print job” on page 537. You can also fix certain problems by adjusting settings, as explained in “Fine-tuning a print job” on page 544. We recommend that you do not adjust these settings unless you are having trouble printing.

If you plan to print a document on a commercial printing press, see “Commercial printing” on page 545. This section contains information about creating printing plates, preparing images for printing on commercial printing presses, and other issues of which you should be aware.

Setting up a print job

It is essential that you check your printer settings in Page Setup before you print, making sure that you have selected the correct printer. Consult the printing device manufacturer’s instructions, the Macintosh documentation, or the service bureau or printing shop that will be printing the work to find out how best to set up the printing device driver.

When setting up a printing device, it is important that you know the size of the paper on which you are printing. If the print job is larger than the paper on which you are printing, you can “tile” the work so that it is spread across several pieces of paper. You can then assemble the separate pages to create a single sheet.

Corel print options offer a great deal of control over what parts of a document you wish to print. You can print specific pages, objects, or layers. You can also specify the number of copies you want to print and whether you want the copies collated. Collating is useful when you are printing multipage documents. If you enable the Collate check box, a complete copy of each document is printed before the next copy is printed. If collating is disabled, all the copies of the first page are printed before copies of the second page are printed, and so on.

Printing a document

Once your printing device is properly installed and configured, you may often find that you can print without changing any of the default settings.

To print a document

1. Choose File, Print.
2. Click the Print button.

Selecting and configuring a printing device

Because printing device installation is controlled by the Mac OS and every type of printing device has different device properties, refer to the printing device manufacturer’s documentation and the Macintosh documentation for more information about installing and setting up a printing device.

By default, if you try to print a print job with an orientation different from that specified in the device properties, a message warns you and asks if you want to adjust the printing device paper orientation. You can disable this warning so that the paper orientation is automatically adjusted.

To set the Page Setup properties

1. Choose file, Print.
2. Click the Page Setup button.
3. Choose the desired page setup settings

To set the printer properties

1. Choose File, Print.

2. Click the Printer button
3. Choose the desired printer settings.

To disable the Page Orientation Warning

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Special Settings section, choose Page Orientation Warning from the Options list and choose Off from the Setting list.



- For detailed information on how to select a printing device refer to the Mac OS documentation or the printing device manufacturer's documentation.
- Any duplicate settings that exist in the Printer Settings dialog box should be set up in the Print Option dialog box. Otherwise, the printer settings will either not function properly or have adverse affects on the print job.

Using a printing device color profile

A printing device color profile helps to ensure accurate color reproduction. This feature can be enabled or disabled when you print.

To enable the current printing device color profile

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Enable the Use Color Profile check box.

To choose a printing device color profile

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Click the Set Profiles button.
4. Choose a color profile from one of the following pop-up menus:
 - Composite Printing device — if you are not printing color separations
 - Separations Printing device pop-up menu — if you are printing color separations

Printing multiple copies

You can print multiple copies of the same document. If you are printing a document with multiple pages, you can collate the copies.

Collating allows you to print one full set of the selected pages before printing the second full set (for example, a set of pages 1 to 10 prints before a second set of pages 1 to 10 prints, and so on).

To print multiple copies

1. Choose File, Print.
2. Type the number of copies you need in the Copies box.
3. Enable the Collate check box if you want the copies collated.

Specifying the pages to print

You can set up a print job so that all the pages print or only some of the pages print.

To print all pages

1. Choose File, Print.
2. Enable the All button.

To print only the current page

1. Choose File, Print.
2. Enable the Current Page button.

To print specific pages

1. Choose File, Print.
2. Enable the Range button.
3. Choose one of the following from the Pages pop-up menu:
 - Even And Odd
 - Odd Pages
 - Even Pages
4. In the Pages box, type the pages you want to print.
 - A dash (-) between numbers defines a range of sequential pages (for example, 1-5 prints pages 1 to 5).

- A comma (,) between numbers defines a series of nonsequential pages (for example, 1, 5 prints pages 1 and 5 only).
- Any combination of dashes and commas is supported (for example, 1-3, 5, 7, 10-12 prints the following pages: 1, 2, 3, 5, 7, 10, 11, and 12).
- A tilde (~) between two numbers causes those two pages plus every second page in between to print. For example, 1~6 prints the following pages: 1, 3, 5, and 6. If you type 2~6, pages 2, 4, and 6 print.

Specifying the objects or layers to print

You can set up a print job so that every object in a drawing prints or only the selected objects print. Also, you can prevent layers in a drawing from printing if you do not want them to appear in the final work. For example, the guidelines layer does not print by default, but you can print the guidelines by changing the appropriate setting.

To print only selected objects

1. Select the objects.
2. Choose File, Print.
3. Click the Selection button.

To print only vectors, bitmaps, or text

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Proofing Options section, enable any of the following check boxes
 - Vectors
 - Bitmaps
 - Text
4. Enable the Print All Text In Black check box if you want to print text in black instead of in color.

To print only certain layers

1. Choose Tools, Object Manager.
2. Enable the Printable option (the picture of a printer) for each layer you want to print.



- If you do not want to print a layer, disable the Printable option.

Printing large print jobs as tiles

If the print job you want to print is larger than the paper on which it is to be printed, you can choose to print it as tiles. Portions of each page of the print job are printed on separate sheets of paper that you can assemble into one large sheet.

To print large print jobs as tiles

1. Choose File, Print.
2. Choose the Layout tab.
3. Enable the Print Tiled Pages check box.
4. Type a value (for example, .25 inches) or a percentage of the page size in the Tile Overlap box to specify by how much you want the tiles to overlap.

To print large print jobs as tiles from the Print Preview window

1. Choose File, Print Preview.
2. Choose Settings, Layout.
3. Follow steps 3 and 4 from the previous procedure.

Using preset printing options

A print style is a set of saved printing options. Print styles are useful because they let you avoid setting all the printing options each time you print.

To select a print style

1. Choose File, Print.
2. Choose a print style from the Print Style pop-up menu.

To create a print style

1. Choose File, Print.
2. Choose the desired settings, and click the Apply button.
3. Click the Save As button in the General tab.
4. Type a name for the style in the Save Print Style As box.

To edit a print style

1. Choose File, Print.
2. Choose a print style from the Print Style pop-up menu.
3. Follow steps 2 to 4 from the previous procedure.

To delete a print style

1. Choose File, Print Preview.
2. Choose a print style from the Print Style pop-up menu.
3. Choose File, Delete Print Style.



- When you save a print style, a dialog box opens that includes a section called Settings To Save In Style. The settings in this section correspond to the printing options you've already selected. You can specify which settings to include in a print style in this section of the dialog box.



- You can select, edit, save, and delete print styles from the Print Preview window.
- If you close the Print dialog box before you print, all of the changes you have made to the print options are discarded. If you do not want to lose these changes and you need to close the dialog box (that is, you need to change the work before you print), save the settings as a print style, or click the Apply button before you click the Cancel button.

Printing multiple pages on a single printed sheet

If each page of a document is smaller than the sheet of paper on which it is printed or if you shrink the pages of a document, then you can print several pages on a single sheet of paper. There are two methods for printing multiple pages of a document on a single printed sheet: using signature layout styles and using N-up formats. Although these methods are similar, each one is appropriate for different tasks.

Signature layout styles let you determine the order and orientation of each page on the printed sheet. This allows you to arrange the pages of a document on the printed sheet for folding, trimming, and binding. Use signature layout styles if you are creating documents that require folding, such as greeting cards or newsletters. Also, you can create custom signature layout styles for magazines, books, and any other type of document that requires that you arrange several smaller pages on a large sheet of paper.

N-up formats let you arrange several signature layouts on a single printed sheet or print multiple copies of the same signature layout on a single printed sheet. This is useful if you are printing on paper that can fit more than one copy of a signature layout or if you want to print thumbnail proofs of a document.



- For advanced imposition considerations such as, shingling, and bottling, full featured imposition applications like Imation PressWise or ScenicSoft Preps are ideal. These programs will accept Document Structuring Conventions conforming PostScript files from CorelDRAW.
-

Choosing signature layout styles

The default signature layout style reflects the layout of the document you are printing. You can choose a different signature layout style in the Print dialog box. This will not effect the original document, only the way it is printed. For example, if you have a four-page document set up as full page but would like to print it as a top-fold or side-fold card, you can choose the appropriate card style in the Print dialog box.

To choose a signature layout style

1. Choose File, Print.
2. Choose the Layout tab
3. Choose a signature layout style from the Signature Layout pop-up menu.

Creating custom signature layout styles

You can create a custom signature layout style in the Print Preview window. Creating a custom signature layout style lets you arrange the pages of a document on a printed sheet in whatever way you choose. The ability to customize signature layout styles is useful if you need to arrange the pages of large documents, such as books or magazines, on large sheets of paper for folding and trimming. After you have created a custom signature layout style, you can save it for future use. Use the Property Bar to change the signature layout options.

To edit a signature layout style in the Print Preview window

1. Choose File, Print Preview.
2. Choose the *Signature Layout tool*.



3. Type the number of pages to include on each printed page in the Pages Across/Down boxes.
4. Type the size of the gutters in the Gutter Spacing boxes.

The top box controls horizontal gutter spacing — space between side-by-side pages — and the bottom box controls vertical gutter spacing — space between pages positioned above or below each other.

5. Choose each numbered box in the Print Preview window, and choose a page number and an angle.

The page number determines which page of the document is printed in that position. The angle determines whether the page is printed top up (0 degrees) or top down (180 degrees).



6. Enable the *Double Sided Layout* button if you are printing on both sides of the paper.
7. Choose the Signature Layout tabs at the bottom of the Print Preview window to view each side of a double-side layout.
8. Choose File, Close Print Preview.



- When you enable the Double Sided Layout button and you print on a nonduplex printing device, a wizard automatically provides instructions on how to insert the paper into the printing device.

To save a layout style in the Print Options dialog box



1. Follow the steps from the previous procedure, and click the *Save Signature Layout* button .
2. Type a name for the signature layout style in the Save As box.

To delete a layout style in the Print Options dialog box



1. Follow all the steps from the “To choose a signature layout style in the Print Preview window” procedure.
2. Choose the *Delete Signature Layout* button.

Using N-up formats

You can use a preset N-up format or create one by using the N-Up Format tool. You can also print several pages on a single sheet of paper using the N-Up Format tool. When you use this tool, each page is placed into a single frame that is defined by the intersection of one row and column in the N-up format. The first page is placed in the frame at the top left of the sheet of

paper and each subsequent page is placed from left to right and top to bottom. Use the Property Bar to change the N-up format options.

If you use an N-up format with a signature layout style that already places several pages on a single sheet of paper (for example, tent-card), then the signature layout is placed in one frame.

To use a preset N-up format



1. Choose File, Print Preview.
2. Choose the *N-up Format tool*.
3. Choose a preset N-up format from the N-Up Format pop-up menu.
4. Choose File, Close Print Preview.

To create an N-up format

1. Choose File, Print Preview.
2. Choose the N-Up Format tool.
3. Type the number of rows and columns you want to print on each sheet of paper in the Rows/Columns boxes.
4. Disable the Auto Margins button and type the size of the margins in the Top/Left Margins, Bottom/Right Margins boxes to manually set the margins.
5. Enable the Equal Margins button if you want the left and right margins to be equal, and you want the top and bottom margins to be equal.
6. Disable the Auto Gutter Spacing button, and type the size of the gutters in the Gutter Spacing boxes to manually set the gutters.
7. Enable the Clone Frame button if you want all the frames on each sheet of paper to contain the same printed page.

For example, if there are nine frames on a printed sheet of paper, then page one appears nine times on the first sheet of paper, page two appears nine times on the second sheet, and so on. In this way you can print multiple copies of one page on a single sheet.

8. Enable the Maintain Document Page Size button if you want each frame to be the same size as the page size specified in the document.

For example, if you create a document on an 8.5 by 11 inch sheet of paper, the frames are constrained to that size. Thus, if you print on an 11 by 17 inch sheet of paper and specify two rows by two columns, some of the frames will not fit on the page.

To save an N-up format



1. Follow the steps the from the previous procedure.
2. Click the *Save N-up format button*.
3. Type a name for the settings in the Save As box.

To delete an N-up format



1. Follow steps 1 and 2 from the “To create an N-up format” procedure.
2. Choose an N-up format from the N-up Format pop-up menu.
3. Click the *Delete N-up format button*.

Previewing, sizing, and positioning a print job

The Print Preview window lets you see how the print job appears when printed. It shows you the position and size of the print job on the paper. You can also see printers’ marks, such as crop marks and color calibration bars.

If you are using a Full Page or Manual signature layout style, you can change the position and size of the print job on the printed page. If you are printing bitmaps, use caution when sizing print jobs. Enlarging bitmaps may cause the output to appear jagged or pixelated.

Previewing a print job

The Print Preview window lets you see what the print job looks like when printed.

To preview a print job

- Choose File, Print Preview.

To move from page to page in the Print Preview window

- Choose one of the Page Navigation Tools, located on the Page Navigation Control Bar at the bottom of the Print Preview window. The button pointing left flips back through the pages and the button pointing right flips forward through the pages. The arrow buttons are only accessible when print options are set for more than one page, not when print options are set to print the current page only.



- The Go To dialog box provides an alternative method for moving from page to page. To open the Go To dialog box, click View, Go To.

To print the page being previewed

- Choose File, Print This Sheet Now.

To magnify the page being previewed

1. Choose View, Zoom.
2. Do one of the following:
 - Choose one of the preset zoom levels.
 - Enable the percent button, and type a value in the Percent box.

To preview individual color separations

1. Choose View, Preview Separations, Separations.

You can only view individual color separations if you have enabled the Print Separations check box in the Print dialog box.

2. Choose the appropriate tab at the bottom of the Print Preview window to view each color separation.



- You can zoom in on an area of the print job in the Print Preview window by using the Zoom tool. To zoom in, click the Zoom tool and click the area you want to magnify. To zoom out, hold down Control, click the object and choose Zoom Out.
 - The Auto (Simulate Output) preview type (View menu, Preview Separations) automatically sets the preview type to the settings that match the printing device driver. For example, if you are printing to a black-and-white printing device, the preview is grayscale. The Auto (Simulate Output) preview type is enabled by default. If you change the preview settings, then Auto (Simulate Output) is disabled. You can revert to the automatic settings by clicking View, Auto (Simulate Output).
-

Customizing the print preview

If you want to increase the speed of the print preview, you can hide the print job. You can also specify a color or a grayscale preview.

To hide the print job

1. Choose File, Print Preview.

2. Choose View, and disable Show Image.

When Show Image is disabled, the print job is represented by a bounding box that you can use to position and size it.

To specify a color or grayscale print preview

1. Choose File, Print Preview.
2. Do one of the following:
 - Choose View, Preview Color, Color.
 - Choose View, Preview Color, Grayscale.



- Displaying individual color separations in grayscale instead of color can be helpful when you are studying color distribution. Yellow is particularly difficult to see against a white background. Even magenta and cyan, if sparse, are easier to see when displayed in grayscale.

Sizing a print job

You can alter the size of each page of the print job, leaving the original unaffected. The height and width ratio of a print job is known as its “aspect.” If you are sizing or scaling a print job using the Print Preview window, it is a good idea to enable the Maintain Aspect Ratio check box to prevent distortion.

To size the print job

1. Choose File, Print Preview.
2. Using the Pick Tool, click on the object you wish to print.
3. Type values in the Width and Height boxes on the Property Bar.



- You can only size a print job this way when you are using the Full Page layout style, with no rows or columns, or when you are using the Manual layout style.



- You can also size each page of a print job by dragging the handles in the Print Preview window.

To fit the print job to the page

1. Choose File, Print.
2. Choose the Layout tab.
3. Enable the Fit To Page button.

The Fit To Page option might distort the print job if you do not enable the Maintain Aspect Ratio check box.

To maintain the aspect ratio of the print job

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Maintain Aspect Ratio check box.

Positioning a print job

You can alter the position of each page of a print job on the printed page, leaving the original unaffected.

If you select the Manual Signature Layout style, you can place several pages on a single sheet of paper. Each of these pages can be sized and positioned individually.

To position the print job on the printed page

1. Choose File, Print Preview.
2. Using the Pick tool, click on the object you wish to print.
3. Type values in the following boxes:
 - y — specifies the distance from the top of the printable area.
 - x — specifies the distance from the left side of the printable area.



- You can also position each page of a print job by dragging the “X” in the center of the image to the desired position in the Print Preview window.
-

To automatically position the print job on the printed page

1. Choose File, Print.
2. Choose the Layout tab.
3. Enable the Reposition Images To button.
4. Choose one of the following from the pop-up menu beside the Reposition Images To button:

- Center Of Page
- Top Center
- Left Center
- Right Center
- Bottom Center
- Top Left Corner
- Top Right Corner
- Bottom Left Corner
- Bottom Right Corner

Using PostScript to optimize a print job

PostScript is a page description language used to send instructions to a PostScript printing device about how to print each page. All the elements in a print job (for example, curves and text) are represented by lines of PostScript code that the printing device uses to produce the document.

PostScript is not the only method for sending a printing device instructions, and some printing devices are not compatible with PostScript. However, there are several functions that are unavailable if you are not using the PostScript printing device language. For example, without PostScript, you cannot adjust color separations and halftone screens.

There are three levels of PostScript. PostScript 1, the first PostScript language, has certain limitations (see following). Using PostScript 2 greatly reduces potential printing errors. PostScript 3, the latest version of PostScript, is faster than the previous versions of PostScript. If you are using a PostScript 2 or PostScript 3 printing device, make sure that you enable the PostScript 2 or PostScript 3 options on the PostScript page in the Print dialog box.

Limitations of PostScript 1

Certain problems may arise when you use PostScript 1 that have been largely eliminated in PostScript 2 and PostScript 3.

- If a print job contains complex vector objects, then a PostScript 1 printing device may not be able to print it.

To create vector curves, a PostScript device prints a series of short straight lines at varying angles. Each of these lines is considered a segment. Also, any straight line between two nodes is considered a segment. PostScript 1 devices cannot print vector graphics with more

than 1500 segments. This limits the allowable number of nodes in any vector object to approximately 500.

- If you use a complex fill (for example, a texture fill, or a PostScript fill) in an object, the allowable number of nodes is reduced to approximately 300.
- If you fill a text object with a texture fill, then a PostScript 1 device may not print it.
- If you use a texture fill in an object with any subpaths (for example, a donut made from a circle within a circle), a PostScript 1 device cannot print it.

There are several ways to work around these limitations:

- Break complex graphics up into several less complex graphics. This may not be possible if you are using complicated line attributes or complex fills.
- Avoid using complex fills on graphics that are not large enough to warrant intricate detail.
- Avoid using complex fills with complex outlines and using complex fills in text.
- Limit the number of nodes per object.
- Use the PostScript features designed to reduce complexity and warn you of potential printing problems.

Using PostScript 2 or PostScript 3

PostScript 2 and PostScript 3 are more advanced PostScript languages. Using a PostScript 2 or PostScript 3 printing device can reduce printing errors and let you use features that are unavailable if you use a PostScript 1 printing device. If you try to use PostScript 2 or PostScript 3 options and you are not using a PostScript 2 or PostScript 3 device, then the print job will not print properly. If you are not certain whether you will be printing on a PostScript 2 or PostScript 3 device, do not enable these options.

PostScript 2 and PostScript 3 lets you use JPEG compression to compress the bitmaps in a print job to make the file size smaller. Also, PostScript 2 and PostScript 3 uses a faster method for rendering vector graphics.

To use PostScript 2 or PostScript 3

1. Choose File, Print.
2. Choose the PostScript tab.
3. Choose Level 2 or PostScript 3 from the Compatibility pop-up menu.

To compress bitmaps when printing to a file

1. Follow the steps in the previous procedure.
2. Enable the Use JPEG Compression check box.
3. Move the Quality Factor slider to the right to increase compression and reduce the quality of the bitmaps.



- You can access the Print dialog box from the Print Preview window by clicking the Options button on the Property Bar.

Printing a complex print job

Complex print jobs can often cause a PostScript 1 print job to fail. To ensure that your print jobs print properly you can test for complex vector graphics and reduce curve complexity by increasing flatness.

To test for complex vector graphics

1. Choose File, Print.
2. Choose the PostScript tab.
3. Enable the Complex Objects check box.

To reduce curve complexity by increasing flatness

1. Follow steps 1 to 2 from the previous procedure.
2. Type a value in the Set Flatness To box.

This value determines how smooth a curve will appear when printed. As the flatness increases, curves begin to appear as connected straight lines. If you are having problems with complex objects, start by leaving this value at 1.00 and enable the Auto Increase Flatness check box. If this does not achieve the required results, increase the flatness by two and try again.

3. Enable the Auto Increase Flatness check box by increments of two, if you want the printing device to increase the flatness of an object that is too complex.

When the Auto Increase Flatness option is enabled, the maximum allowable flatness value is defined by the value in the Set Flatness To box, plus 10. When the flatness value exceeds this limit and the curve is still too complex, the printing device skips the problematic curve. If the printing device skips a curve, then the curve does not appear in the final output. You will not be informed while you print that this has happened.

The problem only becomes evident when you look at the final output. For this reason, it is important to inspect proofs before you publish the work.

To reduce curve complexity by limiting control points

1. Follow steps 1 to 2 from the “To test for complex vector graphics” procedure.
2. Type a value in the Maximum Points Per Curve box.

Reducing the number of points per curve helps alleviate printing problems caused by curves that are too complex. A lower number of points per curve will not reduce quality, but it will increase printing time.



- You can access the Print Options dialog box from the Print Preview window by clicking the Options button on the Property Bar.
-

Font and spot color warnings

If a print job contains too many fonts or too many spot colors, it may not print properly. You can set the PostScript options so that you are warned if a print job contains more than a set number of spot colors or fonts. You can change the number of spot colors and fonts that trigger the warnings by changing the Spot Color Separations Warning and the Fonts Warning Threshold settings.

To test for too many spot colors

1. Choose File, Print.
2. Choose the PostScript tab.
3. Enable the Too Many Spot Colors check box.

To test for too many fonts

1. Follow steps 1 to 2 from the previous procedure.
2. Enable the Too Many Fonts check box.

To set the Spot Color Separations Warning option

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Special Settings section, choose Spot Color Separations Warning from the Option list and choose one of the settings listed.

To set the Fonts Warning Threshold option

1. Follow steps 1 to 2 from the previous procedure.
2. In the Special Settings section, choose Fonts Warning Threshold from the Option list and choose a number from the Setting list.

Optimizing fountain fills for printing

You can optimize the printing of fountain fills in two ways. First, you can test for and correct fountain fill banding. Banding is the appearance of stripes across a fountain fill and occurs when a fountain fill does not contain enough steps. Second, you can reduce the complexity of fountain fills to decrease printing time.

By enabling both the Auto Increase Fountain Steps and Optimize Fountain Fills options, you can increase the number of fountain steps that require more steps and reduce the number of steps in fountain fills that are too complex.

To test fountain fills for banding

1. Choose File, Print.
2. Choose the PostScript tab.
3. Enable the Banded Fountain Fill check box.
4. Click the print button:

A warning indicates that you must increase or decrease the number of fountain fill steps.

To automatically increase fountain steps

1. Follow steps 1 to 2 from the previous procedure.
2. Enable the Auto Increase Fountain Steps check box.

The Auto Increase option increases the number of steps that are used to render fountain fills. This may increase printing time but will ensure the best possible rendering of fountain fills.

To optimize fountain fills to reduce complexity

1. Follow steps 1 to 2 from the “To test fountain fills for banding” procedure.
2. Enable the Optimize Fountain Fills check box.



- Testing fountain fills for banding applies only to linear fountain fills.
 - These options are available for PostScript devices only.
-

Downloading Type 1 fonts

By default, the printing device driver downloads Type 1 fonts to the printing device. If you disable the Download Type 1 Fonts option, then fonts are printed as graphics (either curves or bitmaps). This may be useful if the file contains a large number of fonts that would take considerable time to download or would fail to download because of their size.

To disable the download Type 1 fonts

1. Choose File, Print.
2. Choose the PostScript tab.
3. Disable the Download Type 1 Fonts check box.



- Downloading Type 1 Fonts option is available for PostScript devices only.
 - If you enable the Download Type 1 Fonts check box, by default the Convert TrueType To Type 1 check box is also enabled. This ensures that TrueType fonts are converted to Type 1 fonts so that they can be downloaded. Only disable this option if the output device has difficulty interpreting Type 1 fonts.
-

Setting bitmap font options

Bitmap versions of TrueType fonts look better at small point sizes and print faster than regular fonts. Because bitmap fonts consume a large amount of PostScript memory, you may need to limit the number of bitmap fonts in a print job to avoid a PostScript printing error.

A bitmap version of a font is created in a PostScript printing device's memory if the font meets the following criteria:

- The printed character size is no larger than the bitmap font size threshold. The default is 75 pixels, which corresponds to 18 points at 300 dpi, 9 points at 600 dpi, and 4.5 points at 1200 dpi. You can change the bitmap font size threshold (see below).
- The text is not scaled or skewed.
- The text does not have an outline or a fill other than a uniform fill.

- The text does not have any nonlinear transformations applied to it.
- The print job is not being printed using the Sizing options or Fit To Page option in the Print dialog box.

To limit the number of bitmap fonts created

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Special Settings section, choose Bitmap Font Limit from the Options list and type a value between 0 and 100 in the Settings list.

To set the bitmap font size threshold

1. Follow steps 1 to 2 from the previous procedure.
2. In the Special Settings section choose Bitmap Font Size Threshold from the Options list and type a value between 0 and 1000 in the Settings list.



- You can access the Print Options dialog box from the Print Preview window by clicking the Options button on the Property Bar.
-

Printing color bitmaps in RGB

PostScript output normally uses the four-color, CMYK (cyan, magenta, yellow, and black) color model to print bitmaps. If you are printing color bitmaps to an RGB (red, green, and blue) or CMY (cyan, magenta, and yellow) printing device, enable the Output Color Bitmaps in RGB check box. RGB devices receive RGB values, instead of CMYK values. CMY printing devices have an easier time converting RGB to CMY (three-color model to three-color model) than converting CMYK to CMY (four-color model to three-color model).

To output color bitmaps in RGB

1. Choose File, Print.
2. Choose the PostScript tab.
3. Enable the Output Color Bitmaps In RGB check box.



- The Output Color Bitmaps in RGB option is available for PostScript devices only.
-



- You can access the Print Options dialog box from the Print Preview window by clicking the Options button on the Property Bar.
-

Fine-tuning a print job

If you encounter a problem printing fonts or bitmaps, the options explained in this section might help to fix the problem. If you are having trouble printing, try to determine what part of the print job is causing the problem. For example, the fonts may not be printing properly, or a bitmap may not print at all. Then, look for a topic that relates to that type of problem.

Setting the number of fountain steps

You can specify the number of steps in the fountain fills in a print job. A low number of steps prints faster, but the transition between shades may be rather coarse, causing what is known as “banding.” A higher value results in a smoother blend, but the printing time is longer.

To specify fountain steps in printing options

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Type a value in the Fountain Steps box.



- You can assign a custom fountain fill to an object in a Corel application. A custom fountain fill overrides the settings in the Print dialog box.
 - Fountain steps set in the Preferences dialog box in the application only affect the way fountain fills display on the monitor, not how they print.
-

Printing color print jobs in black or grayscale

When you print color work on a black-and-white printing device, you can specify whether you want solid colors converted to solid black or to a shade of gray that approximates its hue.

To print color print jobs in black or grayscale

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Enable one of the following options:

- All Colors As Black
- All Colors As Grayscale

Controlling color bitmap conversion to grayscale

By default, color bitmaps are reduced to grayscale if they are sent to a grayscale printing device. Transmission time is much faster this way, and the file size is smaller. If you choose to send bitmaps as color, the printing device converts the bitmaps to grayscale, which results in slower transmission time and a larger file size.

To control bitmap conversion to grayscale

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Special Settings section choose Grayscale Driver Bitmap Output from the Option list and, choose one of the following from the Setting list:
 - Send Color Bitmaps As Grayscale
 - Send Color Bitmaps As Color



- Controlling bitmap conversion to grayscale is available for PostScript devices only.



- If you want to print a document on a color printing device but you want to use a grayscale printing device driver, then choose Send Color Bitmaps As Color from the Miscellaneous tab, Special Settings, Setting list This is useful if you want to proof a document on a composite printing device using an imagesetter's printing device driver.
-

Commercial printing

If you plan on using commercial printing for your print jobs you will most likely deal with a service bureau and/or a printing shop. These two businesses can be separate or affiliated. Some larger establishments may offer both services under one roof. The service bureau will take your file and image it direct to film or direct to plates. The printing shop will use the film from a service bureau to make printing plates.

Film can be created using a camera or an imagesetter. Creating film with a camera usually requires camera-ready output that you've created on a

PostScript laser printing device. Producing film this way may save you money, but do not try to produce complex color material using laser printed output, because desktop printing devices are not precise enough.

An imagesetter creates film directly from a file. There are several different types of files that a service bureau may be able to use. See “Preparing a print job for commercial printing” on page 546 for more information, and ask the service bureau about your options.

The service bureau should provide you with either overlay proofs, blueprints, or laminate proofs made from the film. The type of proof you require depends on the complexity of the print job. Once you are satisfied with the proofs, the film can then be imposed, the plates are burned and the printing plates can be then mounted on the press.

If the service bureau and printing shop are entirely separate, you must ensure that the service bureau provides the film in the form that the printing shop requires (that is, positive or negative film, emulsion up or down, etc.). Also, make sure that the printing shop has proofs of the final product and instructions about the print job (for example, number of copies, type and size of paper). These proofs and your instructions serve as a contract between you and the printing shop.

The press operators will set up and adjust the press so that the printed output matches the contract proofs as closely as possible. When color quality and accuracy are crucial, you may be asked to be present at printing time to approve any color adjustments that need to be made.

For an in depth discussion of commercial printing, see the Corel Commercial Printing Guide included with this Corel application.

Preparing a print job for commercial printing

When you prepare a print job for commercial printing, you can send camera-ready paper output or send the work on disk. 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.

If you are creating a file, the service bureau will need either a PostScript file or a native file from the application you are using. Always provide a final printout of the work to the service bureau, even if it's only a black-and-white representation. This will help them identify and assess any potential problems. You can use the Prepare For Service Bureau wizard to guide you through the process of sending a file to the service bureau.

Print to file

You can exercise full control over prepress settings and save the print job in a 'print to file' file (.PS file). This print file is sent directly to an output device by the service bureau.

The service bureau can often verify or fix a .PS file using a Raster Image Processor (RIP), or an Adobe Distiller depending on the software, however, be sure to review and confirm all settings with them to avoid unnecessary delays in your printing job.

Include a sheet with all the prepress settings that you have specified. You can create this sheet automatically by enabling the Print Job Information Sheet check box from the Miscellaneous tab in the Print dialog box. Alternatively, you can check with the service bureau representatives; they usually have an order form that outlines all the essential prepress settings.

Native file format

If you prefer not to prepare .PS files, service bureaus equipped with the application in which you created your work can take the original files (for example, CorelDRAW files) and apply the required prepress settings. Some service bureaus may actually prefer to handle the prepress settings themselves. Because it is also important to include the fonts used in the original files, CorelDRAW uses TrueDoc, technology that allows you to include your fonts inside Corel applications before sending them to the service bureau.

Using a bleed to extend images to the edge of the page

Most printing presses are unable to print images to the edge of the paper. If you plan for certain areas of the print job to extend to the edge of the page, you need to print on paper that is larger than the size you ultimately want. This larger paper can then be trimmed so that the image extends to the paper's edge. When you use this method for printing to the edge of the page, it is wise to allow for a "bleed." A bleed is the amount that images extend past the edge of the final page size. By bleeding images, you allow for a margin of error during the printing and trimming process.

Printers' marks

Printers' marks provide information about how the work should be printed. You can place printers' marks in .PS file. The available printers' marks are crop marks, registration marks, color calibration bars, densitometer scales, page numbers, and file information. Printers' marks can be selected from the Prepress tab in the Print dialog box.

Using the Prepare For Service Bureau wizard

The Prepare For Service Bureau wizard guides you through the process of preparing a file for output at a service bureau. The Wizard simplifies different processes from creating a PostScript file to gathering together different pieces required for output of a document, copying the original document, any embedded image files and, through integration with Font Reserve any document fonts to a user defined location, such as a removable Zip or Syquest cartridge. The wizard is most effective when the service bureau provides you with a service bureau profile. The profile is created using a separate wizard called the Service Bureau Profiler. The service bureau can include all the information you need to set up the print job so that it will print properly. The profile is a file with the .CSP extension. When you start the Prepare For Service Bureau wizard, it will ask you which profile you want to use. If the service bureau has not provided a profile, Corel offers several generic profiles that are included with CorelDRAW.

To use the Prepare For Service Bureau wizard

- Choose File, Prepare For Service Bureau.

Printing to a file

Printing to a file is required when you want to send the .PS file to a service bureau to be printed on an imagesetter. Make sure you select the appropriate printing device driver when you print to file and consider the following:

- When you are preparing a file for printing on an imagesetter or a platesetter, the page size of the print job (that is, the size of the film or plate on which the document is imaged) must be larger than the page size of the document (that is, the size of the document) to allow for printers' marks.
- If you are printing to a PostScript 2 or PostScript 3 printing device, you can make the print job smaller by using JPEG compression to compress bitmaps.
- The service bureau may require that the .PS file conforms to the Document Structuring Convention (DSC). If this is the case, you must enable the Conform To DSC option in the PostScript tab in the Print dialog box.

If you are unsure about which settings to choose, consult the service bureau.

To print to file

1. Choose File, Print.
2. Click the Printer button.
3. Choose File in the Destination pop-up menu.

4. Click the Save or OK button.
5. In the Print to File dialog box, choose a disk and folder
6. Type a filename in the File Name box.
7. Click the Save button.

The print to file extension (.PS) is appended to the filename.

To compress bitmaps in a .PS file

1. Choose File, Print.
2. Choose the PostScript tab.
3. Choose Level 2 or PostScript 3 from the Compatibility pop-up menu.
4. Enable the Use JPEG Compression check box.
5. Move the Quality Factor slider to the right to increase compression and reduce the quality of the bitmaps.

To conform to DSC

- Follow steps 1 to 3 from the previous procedure. Enable the Conform To DSC check box.

Printing negative film

An imagesetter produces images on film that may need to be produced as negatives depending on which printing device you are using. Consult the service bureau or printing shop to determine whether you can produce images on film. You can set up the print job to produce negative images, but if the service bureau's equipment also produces negatives, the result is positive film.

To print a negative

1. Choose File, Print Preview.
2. Click the *Invert* button.



Do not choose negative film if you are printing to a desktop printing device.

Printing film with the emulsion down

Emulsion is the coating of light-sensitive material on a piece of film. Normally, print jobs printed to a laser printing device are printed with the emulsion up. Other types of reproduction may call for either emulsion up or down.

To print film with the emulsion down

1. Choose File, Print Preview.
2. Click the *Mirror button*.



Setting a bleed limit

When you use a bleed to extend the print job to the edge of the page, you must set a bleed limit. A bleed limit is the extent to which an image can extend beyond the crop marks. Usually, a bleed limit of .125 to .25 inches is sufficient. Any object extending beyond that uses memory needlessly and may cause problems when you print multiple pages with bleeds on a single sheet of paper.

Remember, a bleed requires that the paper you are printing on be larger than the size of paper you ultimately want, and the print job must extend beyond the edge of the final paper size.

Consult the service bureau or printing shop to determine the appropriate bleed limit for the print job.

To set a bleed limit

1. Choose File, Print.
2. Choose the Layout tab.
3. Enable the Bleed Limit check box.
4. Type a bleed limit in the Bleed Limit box.

Printing crop marks and registration marks

Crop marks are printed at the corners of the page and represent the size of the paper. Crop marks can be used as guides for trimming the paper.

If you are printing multiple pages per sheet (for example, two rows by two columns) you can enable the Exterior Crop Marks Only Option if you want the crop marks to print on the outside edge of the page. Enabling this feature will ensure that all crop marks are removed after the cropping process. If you disable this option, crop marks will be placed around each row and column.

Registration marks print on each sheet of a color separation. Registration marks are required to line up the film for proofing the printing plates on a color press. (See “Creating color separations” on page 557.) You can select from several different registration mark styles.

To see crop marks and registration marks, the paper you are printing on is larger by 0.5 inches on all sides, than the page size of the document you are printing.

To print crop marks

1. Choose File, Print.
2. Choose the Prepress tab.
3. Enable the Print Crop Marks check box.

To print exterior crop marks only

1. Follow steps 1 to 3 from the previous procedure.
2. Enable the Exterior Crop Marks Only check box.

To print registration marks

1. Follow steps 1 to 2 from the “To print crop marks” procedure.
2. Enable the Print Registration Marks check box.
3. Choose a registration mark style from the Style pop-up menu.

Printing color calibration bars and densitometer scales

Color calibration bars are color scales that print on each sheet of a color separation. Calibration bars are required to ensure accurate color reproduction. (See “Creating color separations” on page 557.) To see calibration bars, the page size of the print job must be larger than the page size of the work you are printing.

A densitometer scale is a series of gray boxes ranging from light to dark. These boxes are required to test the density of halftone images. (See “Working with bitmaps and halftone screens” on page 553.) You can position the densitometer scale anywhere on the page. You can also customize the levels of gray that appear in each of the seven squares on the densitometer scale.

To print color calibration bars

1. Choose File, Print.
2. Choose the Prepress tab.
3. Enable the Color Calibration Bar check box.

To print a densitometer scale

1. Follow steps 1 to 2 from the previous procedure

2. Enable the Densitometer scales check box.
3. If you want to customize the levels of gray in one of the densitometer scale squares, click the appropriate number in the Densities list (the top of the list is the lightest box) and type a new density for that square.

To position a densitometer scale

1. Choose File, Print Preview.
2. Drag the densitometer scale to its new position.

In most circumstances it is best to position the densitometer scale outside the final printed area.

Printing page numbers and file information

Page numbers are useful when collating material that does not include page numbers in the document or when the page numbers in the document do not correspond to the actual number of pages.

File information includes the color profile you used, the halftone settings, the name of the file, the date and time the work was created, and the plate name and number (which is useful when printing color separations). When you enable the Print File Information option, you can specify a job name (also called a slug line) that will be included with the file information.

To see page numbers and file information, the paper on which you are printing must be larger than the page size of the document you are printing. However, you can print file information inside the document's page by enabling the Position Within Page option.

To print page numbers

1. Choose File, Print.
2. Choose the Prepress tab.
3. Enable the Print Page Numbers check box.

To print a file information

1. Choose File, Print.
2. Choose the Prepress tab.
3. Enable the Print File Information check box.



- You can enable the Position Within Page check box if you want the file information to appear on the document's page.
- You can type a job name in the Job Name/Slug Line if you want the Job Name/Slug Line to be different than the saved name of the graphic.

Positioning printers' marks

You can change the position of all the printers' marks by changing the position of the Marks Alignment Rectangle in the Print Preview window.

To change the position of printers' marks



1. Choose File, Print Preview.
2. Choose the *Marks Placement tool*.
3. Type values in the Marks Alignment Rectangle on the Property Bar.



- You can also change the position of printers' marks by dragging the bounding box in the Print Preview window.

Printing a job information sheet

Including a job information sheet which specifies the print job will help the service bureau or print shop to deal more effectively with any problems that arise with the print job.

To print a job information sheet with the print job

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. Enable the Print Job Information Sheet check box.
4. Click the Information Settings button and specify the categories of information that are to be included and whether the job information is to be saved to a file, printed, or both.

Working with bitmaps and halftone screens

If the document you are sending to the service bureau or print shop contains bitmaps (for example, scanned images or photographs), you will need to set up halftone screens for the bitmaps.

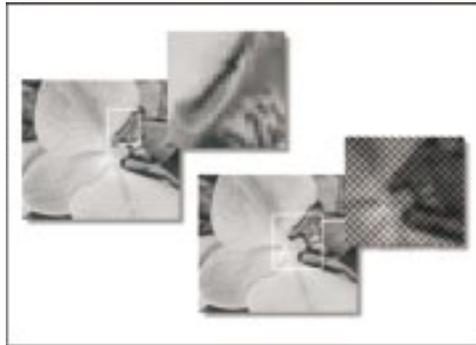
Halftones

Commercial printing presses cannot produce true shading but can create the illusion of shading by printing images made up of tiny dots. In conventional screening, the size of the dots determines the different levels of shading (that is, the bigger the dots, the darker the shade). In Stochastic screening, it is the frequency of the dots that determines the different levels of shading (the more dots in an area, the darker is the shade). A halftone screen is necessary to convert images with true shading to images made up of tiny dots.

Originally, a halftone screen was an opaque screen with thousands of tiny holes. An image with shading was photographed through this screen using special photographic paper or film. The resulting image consisted entirely of dots. This image was then used to create printing plates.

Now, however, you can create halftone images without using screens or cameras. To ensure that the bitmaps print correctly, you must set the halftone screen frequency and bitmap resolution correctly.

The image on the left shows a close-up of a bitmap. The image on the right shows a close-up of a halftone.



Halftone screen frequency

The halftone screen frequency determines the number of dots used to create the image. The screen frequency is measured in lines per inch (lpi). This measurement refers to the number of rows of dots per inch.

When you choose a screen frequency, remember that the higher the screen frequency, the sharper the image. However, there are limits to screen frequency that are determined by the type of printing press on which you are printing and the type of paper you are using. In general, a screen frequency of 85 lpi works on newsprint, and a frequency of 133 lpi works on bond and glossy paper. If possible, consult the service bureau or printing shop to find out the screen frequency you should use.

Bitmap resolution

When you create a halftone image, the bitmaps resolution, measured in dots per inch (dpi), should be no more than twice the halftone screen frequency.

For example, if you use a 150 lpi screen, the bitmap should have a resolution of at least 300 dpi. A longer file size will result in longer files, slower print jobs, and lack of improvement in bitmap quality.

Setting the halftone screen frequency

If you are printing halftone images, the default settings should be used after selecting the proper printing device. There are cases when you may need to set the screen frequency properly. Consult the service bureau to determine the appropriate screen settings.

To set the screen frequency

1. Choose File, Print.
2. Choose the PostScript tab.
3. Choose a value (in lines per inch) from the Screen Frequency pop-up menu.
Consult the service bureau for the optimum setting for the job.



- When the screen frequency is set to Default, the image is printed using the default screen frequency of the output device.
 - The screen frequency setting is available for PostScript devices only.
-

Using Open Prepress Interface

Corel offers Open Prepress Interface (OPI) support. OPI is a way for you to include high-resolution scanned images in the work without dramatically increasing the file size. To accomplish this, the service bureau scans the images on a high-end scanner. They keep the high-resolution version of the scans and give you low-resolution equivalents. You import the low-resolution images into the document, using them for position only (FPO). Working with FPO images keeps the document size smaller and speeds up screen redrawing time. When you send the print job back to the service bureau for final imaging to film, the high resolution images are automatically substituted.



- You must import FPO images correctly or they will not be replaced at print time.
 - You can only scale, crop, rotate mirror and clip FPO images. You cannot apply any other effects.
-

Maintaining OPI and DCS links

Open Prepress Interface (OPI) lets you use low-resolution images as placeholders for the high-resolution images that appear in the final work. To use OPI links, you must enable the Link To High Resolution File For Output using the OPI option when importing the .TIF (or .CT) files, unless you are using a .EPS file as a placeholder. These images become known as OPI images. When the service bureau receives the print file, the OPI server substitutes the high-resolution images for the low-resolution images. If there are no OPI images in the file, the Maintain OPI Links option will not be available at print time.

If you import the bitmaps correctly, the Maintain OPI Links option is enabled automatically. To proof a file that contains OPI images on a device that does not have the high-resolution files (for example, the desktop printing device), disable the Maintain OPI Links option.

The service bureau may also send you a Desktop Color Separation (DCS) file to act as the low-resolution placeholder. If they do this, make sure you find out whether the service bureau wants you to let them resolve the DCS links. If they want to resolve the links themselves, then you will have to disable the Resolve DCS Links option.

To maintain OPI links

1. Choose File, Print.
2. Choose the PostScript tab.
3. Enable the Maintain OPI Links check box.

To let the Service bureau resolve DCS links

1. Follow all the steps from the previous procedure
2. Disable the Resolve DCS Links check box.



- Maintain OPI links is available for PostScript devices only.
 - You can reduce your work time by using OPI and print management server solutions such as, Imation Color Central. The OPI solution releases your workstation instantly while the file is being processed by the server. Low resolution samples can be automatically created from the high resolution originals and can be placed into CorelDRAW. These files contain their own OPI comments that the Imation Color Central server will recognize when it receives the job, and will then substitute the low resolution version of the file for the high resolution version.
-

Creating color separations

If you send color work to a service bureau or printing shop, either you or the service bureau will need to create color separations.

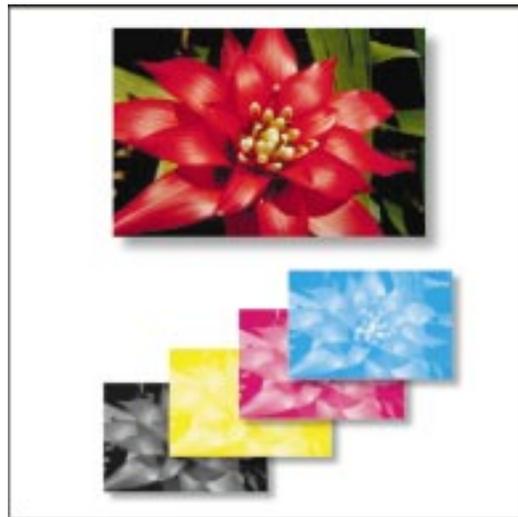
Color separations are necessary because a typical printing press applies only one color of ink to a sheet of paper at a time. A color separation is created by first isolating each color element in a print job. Each color element is then used to create a sheet of film or plate. Each sheet of film or plate represents one color of ink applied to the sheet of paper.

Printing presses produce color using either process color or spot colors. The number of colors you plan to use will be the main factor in deciding which method to use.

Process color

If the project requires full color (for example, it contains scans of color photographs), then you need to use process color. Process color (known as CMYK) is a method of producing virtually any color using only four ink colors: cyan, magenta, yellow, and black. The final colors are produced by mixing percentages of these four inks. Process color only requires four color separations.

.....
An example of
process color
separations
.....



Corel now supports Pantone Hexachrome, a new type of printing process that increases the range of printable colors. Pantone Hexachrome color uses six different ink colors (cyan, magenta, yellow, black, orange, and green) to produce full color. To use Pantone Hexachrome color effectively, use the Pantone Hexachrome color palette. Pantone Hexachrome color is sometimes called high-fidelity color. Talk to the service bureau about whether you should use Pantone Hexachrome color.

Spot color

If the project makes use of only one, two, or three colors (including black) then you'll probably use spot colors, such as those offered by PANTONE. Spot colors use a different ink for each color, and each color requires its own color separation. If your budget is limited, consider

- obtaining a two-color look by printing on colored paper and using only one spot color
- using tints (percentages) of spot colors to create shadows or highlights, thus giving the impression of a broader color range

Both process and spot color

Some projects require both process and spot colors. For example, a marketing brochure may require the use of a spot color to faithfully render the corporate color and the use of process color to reproduce scans of photographs. Remember, though, that each additional spot color requires extra film, plates, ink — and a five or six color printing press adding to the cost of printing.

Consistency of color when printing

Corel uses ICC (International Color Consortium) profiles to convert RGB colors to CMYK colors. ICC profiles provide Corel applications with the information to convert, display, and print colors accurately. Specifically, ICC profiles provide information on color capabilities and characteristics of your computer systems' components (scanner, monitor, and printing device) to maintain consistency and accuracy when printing.

A word about palettes

You can work on different elements of the document from different palettes and different color models. Ultimately, however, all colors must be printed with process and spot color inks. Colors defined in the RGB or HSB models are translated automatically into CMYK (process) when printing values. As for spot colors, you can convert them to CMYK at printing time. For more information, see “Working with color” on page 231.



- Pay close attention to the number of colors used, especially if you are importing clipart. Make sure you only use the colors available in the method you have chosen (that is, process color or spot color).
-

Printing color separations

When printing color separations to file, you can create a .PS file that includes all separations, one separation only, or any combination of separations, depending on the complexity of the print job.

Generally, you should be able to save all the color separation information in one .PS file. However, if the print job contains special effects and several color separations (for example, CMYK and a number of spot colors), saving all color-separation information in one .PS file might result in an unacceptably large file. In this case, create a .PS file for each separation. Include the separation name in the filename for easier file identification.

When printing color separations, you can produce a sheet of paper, film, or plate even when there is nothing on it (for example, there may be only yellow and black on a page, but the cyan and magenta plates will be printed anyway). Normally, you would leave this option disabled to avoid wasting costly film. However, there may be instances when you want to force plates that are blank to print.

To print color separations

1. Choose File, Print.
2. Choose the Separations tab.
3. Enable the Print Separations check box.

To print color separations from the Print Preview window

1. Choose File, Print Preview.
2. Enable the Enable Color Separations button from the Property bar.

To use Hexachrome process color

1. Follow steps 1 to 3 in the “To print color separations” procedure.
2. Enable the Hexachrome Plates check box.

To select specific color separations

1. Follow steps 1 to 3 from the “To print color separations” procedure.
2. Enable the check boxes for the color separations to be printed from the Color Separations list at the bottom of the dialog box.



- To print separations in color, enable the Print Separations In Color check box.
 - If you are printing on a device that uses high solid ink density, then enable the High Solid Ink Density check box, however, this option works only when using the Hexachrome color palette. Consult the service bureau to determine whether you need to enable this option.
-

Converting spot colors to process colors

If a document contains spot colors but you want to print using process color, you can convert the spot colors to process colors. If you do not convert the colors, each spot color is printed on a different color separation. Changing the spot colors to process colors when you print does not affect the document itself, only the way it is printed.

FOCOLTONE, TOYO, and DIC colors are now treated as spot colors by default. You can treat any of these color palettes as process colors if you prefer.

To convert spot colors to process colors

1. Choose File, Print.
2. Choose the Separations tab.
3. Enable the Print Separations check box.
4. Enable the Convert Spot Colors To CMYK check box.

To treat FOCOLTONE, TOYO, and DIC colors as process colors

1. Choose Edit, Preferences.
2. In the Global category, choose Color Management, General.
3. Disable any of the following check boxes:
 - Treat FOCOLTONE Colors As Spot Inks
 - Treat TOYO Colors As Spot Inks
 - Treat DIC Colors As Spot Inks

Ensuring predictable color when printing

Accurate and consistent color rendition from device to device is essential when printing in color. All components of a computer system (scanner, monitor, and printing device) must exchange color information in a manner that ensures a predictable result.

For the colors on the screen to approximate the colors on the printed page as closely as possible, enable the color correction options. For more information, see “Working with color” on page 231.

To simulate the color output of a printing press on a composite printing device

1. Choose Edit, Preferences.
2. Choose Global, Color Management, General.
3. Enable the Composite printer simulates color output of separations printer check box.

Printing color halftones

If you are printing process color halftones, you need to use a halftone screen for each different color separation. See “Working with bitmaps and halftone screens” on page 553 for more information.

Screen angle

Because each halftone screen consists of a regular pattern of shapes, it creates a pattern on the printed image. When the separations are combined, the patterns created by each separate halftone screen interact. This interaction can create an undesirable effect, called a moiré pattern.

In most cases moiré patterns can be avoided by using the default settings. However, Pantone colors and duotones, made up of spot colors and combined with other inks may cause printing problems. Refer to your service bureau for further consultation.

Keep in mind that when you print color separations, the screen angles are set automatically. If you change these settings incorrectly, the print job might not print properly.

Screen technology

When setting up advanced separations settings, in most instances the default settings should be used. However, if you are using an Imagesetter, the screen technology should be set to match the type of imagesetter the service bureau will be using. Talk to the service bureau to determine the correct setting.

Halftone type

The halftone type refers to the type of dot that is being used to create the halftone. Typically, a halftone screen consists of rows of evenly spaced round or diamond-shaped dots. However, it is possible to use halftone screens that have dots that are shaped differently. In fact, halftone screens can even use

straight lines instead of dots to create an image. You can experiment with different halftone types to create interesting effects.

Customizing a halftone screen

The default settings should be used when setting the halftone screens to print color separations. Otherwise, screens can be improperly set and result in undesirable moiré patterns and poor color reproduction. Consult the service bureau before you change any of these settings.

To customize a halftone screen

1. Choose File, Print.
2. Choose the Separations tab.
3. Enable the Print Separations check box.
4. Enable the Use Advanced Settings check box.
5. Click the Advanced button.
6. From the pop-up menus change any of the following settings:
 - Screening technology
 - printing device or imagesetter resolution
 - Halftone type (for example, Line or Diamond)
 - the screen frequency and angle of any or all of the color separations.



- You can set the screen frequency, screen angle, and overprint options for spot colors as well as process colors. For example, if you have a fountain fill made up of two spot colors, you can now set one to print at 45 degrees and the other at 90 degrees.
-

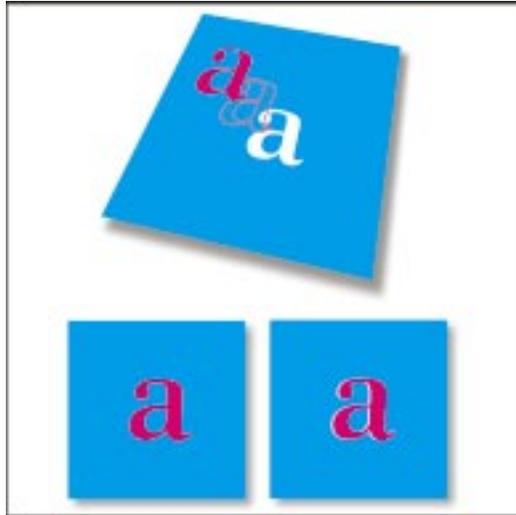
Color trapping

Color trapping is necessary to compensate for poor color registration which occurs when the printing plates used to print each color, called color separations, are not aligned perfectly. Poor registration causes unintentional white slivers to appear between adjoining colors. Trapping is accomplished by intentionally overlapping colors so that minor problems with alignment will not be noticed.

The print job needs color trapping if two colors touch. Many service bureaus prefer to create color traps themselves by using specialized trapping

programs. Consult the service bureau about trapping if you are unfamiliar with the process.

.....
An example of an
image printed with
and without color
trapping
.....



Color trapping is achieved by overprinting. Normally, portions of an object that are obscured by another object are not printed. However, if the top object is set to overprint, the obscured portions of any underlying objects print anyway, causing an overlap. This makes white gaps between different colors unlikely to occur. Overprinting works best when the top color is much darker than the underlying color; otherwise, an undesirable third color might result (for example, red over yellow might result in an orange object).

Depending on the color trapping options you choose, overprinting might only affect an object's outline or its fill. This means that if an object with a red outline is set to overprint its outline only, then any portions of another object that are obscured by the first object's outline are printed. This overlap creates a color trap.



- Although CorelDRAW is capable of basic trapping, specialized trapping applications such as Imation TrapWise can provide you with a more complete trapping solution.

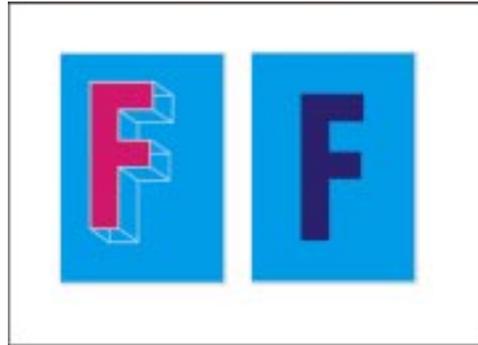
Color trapping by overprinting selected objects

You can set specific objects to overprint before you open the Print dialog box. You can overprint each object's fill, outline, or both.

The Overprint Fill option causes obscured portions of objects to print when they are under the overprinted object's fill. The Overprint Outline option

causes obscured portions of objects to print when they are under the overprinted object's outline. When setting the outline thickness, keep in mind that the outline straddles the path that defines the object's shape. Therefore, an outline of 0.30 points actually creates a trap of 0.15 points.

.....
An example of
overprinting
.....



To trap by overprinting selected objects

1. Hold down Control, click the object that requires color trapping, and choose Overprint.
2. Choose one or both of the following options from the pop-up menu:
 - Overprint Fill
 - Overprint Outline

Color trapping by overprinting selected color separations

You can overprint specific color separations. You can specify whether you want to overprint graphics, text, or both. Remember that if you set a light color to overprint, dark colors that would normally be obscured by the lighter color are printed and show through. Therefore, it is best not to overprint a light color separation.

To trap by overprinting selected color separations

1. Choose File, Print.
2. Choose the Separations tab.
3. Enable the Print Separations check box.
4. Enable the Use Advanced Settings check box.
5. Choose the color separation to overprint from the Color list.
6. Choose the Overprint Graphics icon in the Overprint column if you want to overprint graphics on the separation.

The graphic appears darker when the separation is set to overprint.

7. Choose the Overprint Text icon in the Overprint column if you want to overprint text on the separation.

Color trapping automatically

There are two methods for automatically creating color trapping: always overprinting black and auto-spreading.

Always overprinting black creates a color trap by causing any object that contains 95% or more black to overprint any underlying objects. It is a useful option for artwork containing a lot of black text, but it should be used with caution on artwork with a high graphics content. If the service bureau recommends a black threshold value other than 95%, adjust the threshold.

Auto-spreading creates color trapping by assigning an outline to an object that is the same color as the object's fill and having it overprint underlying objects. Auto-spreading is created for all objects in the file that meet these three conditions:

- They do not already have an outline.
- They are filled with a uniform fill.
- They have not already been designated to overprint.

To trap by always overprinting black

1. Choose File, Print.
2. Choose the Separations tab.
3. Enable the Print Separations check box.
4. Enable the Always Overprint Black check box.

To set the Overprint Black threshold

1. Choose File, Print.
2. Choose the Miscellaneous tab.
3. In the Special Settings section choose Overprint Black Threshold from the Options list and type a number in the Settings list.

The number you type represents the percentage of black above which black objects overprint.

To trap by auto-spreading

1. Follow steps 1 to 3 from the “To trap by always overprinting black” procedure.

2. Enable the Auto-Spreading check box.

3. Type a value in the Maximum box.

The amount of spread assigned to an object depends on the maximum trap value and the object's color. The lighter the color, the greater the percentage of the maximum trap value. The darker the color, the smaller the percentage of the maximum trap value.

4. Enable the Fixed Width check box if you want the spread width to be fixed.

The Maximum Value box changes to the Width box when you enable the Fixed Width check box. The value in this box determines the fixed width of the color spread.

5. Type a value in the Text Above box.

This value represents the minimum size to which auto-spreading is applied. If you set this value too low, small text may be rendered illegible when auto-spreading is applied.



IMPORTING AND EXPORTING 14

Importing and exporting are ways of exchanging information between applications. You can import and export information using the Import and Export commands or by cutting, pasting, or dragging information between files. The Import menu lets you import files in formats that are not native to the application in to which you're importing the file. The Export command lets you save files in nonnative file formats that can be used by other applications.

When you import or export a file it is converted by a filter. Import and export filters are small programs that do the conversions. You must have the appropriate import or export filter installed on your computer for each file format you wish to import or export to.

Importing and opening files

When you import a file, you place it into a CorelDRAW document you already have open. When you open a file, it opens as a separate CorelDRAW document. Both the Import and Open commands let you open files in nonnative file formats, but the Import menu gives you a greater choice of file formats.

To import or open files in nonnative file formats, you have to have the appropriate import filter installed. Import filters are programs that convert files in to the native format of the application into which you're importing the file. For example, when you import a BMP file into CorelDRAW and you select the BMP filter from the Format pop-up menu, you activate a filter that converts the file from BMP format to CorelDRAW format.

File formats

Data in a computer file can be stored using several systems. The system that any one file uses is known as its file format. Different types of files, such as bitmap, vector, sound, and text use different formats. Some common file formats are BMP, TIFF, Encapsulated PostScript, and Adobe Illustrator.

Native file formats

When you save a file in a graphics application, the file is saved in the native file format — the proprietary format created specifically for the application. Most native file formats are simply referred to using the application name, e.g., CorelDRAW files or Adobe Illustrator files. CorelDRAW has two native file formats: CorelDRAW and Corel Presentation Exchange.

Importing bitmaps

CorelDRAW gives you a number of options when you import bitmaps. You can

- Apply a color profile — specify a color profile to use for color correction
- Import a low resolution copy of an image — link the low resolution copy to the high resolution original for output using OPI (Open Prepress Interface)
- Resample the image — reduce the number of pixels, eliminate unusable detail, and reduce the file size
- Crop the image — select the exact area and size of the image you want to keep
- Check for Watermarks — be alerted when an image is encoded with a Digimarc watermark, which indicates that there is a copyright claim on the file
- Suppress filter dialogs — bypass the dialog box that contains import options for the selected filter

Linking a bitmap for output using OPI (Open Prepress Interface)

CorelDRAW supports OPI which lets you import a low-resolution version of a TIFF bitmap while maintaining a link to the high-resolution original. The low-resolution image is inserted into your document and used for positioning only (FPO). The high-resolution original is stored on a separate disk. Working with FPO images keeps your document size smaller and reduces the time needed to redraw the screen. When you send your artwork back to the service bureau for final imaging to film, your high-resolution files are positioned in place of the FPO images. The final product is a high-resolution output.

Bitmap files and color depth

Bitmap files have different color depths. A file's color depth affects the quality of the resulting image when you export or save the file. Color depth (also called bit depth) refers to the number of colors that can be supported in a file. To determine the number of color values a given bit depth can produce, calculate 2 raised to the power of the bit depth. For example, an 8-bit depth supports 2 to the power of 8, or 256, colors. An 8-bit grayscale image has 256 increments between black and white. Files that support a higher color depth are larger.

When you save or export a file, you can often specify the image's color depth. If you have only a few colors in your original image, saving to a higher color depth (e.g., 16-color to 256-color) should produce an image whose colors are very similar to the original image. However, if your original image has many colors, and you convert it to a lower color depth (e.g., 16 million colors to 256-color), the application gives you some options for creating a palette of colors. The application dithers the palette colors in the exported image to approximate the range of colors in the original image.

When choosing a file format in which to save a file, you should consider any color limitations of the file format and the application you'll be using with the file. For example, the GIF file format, used commonly for Internet graphics, only supports up to 256 colors. The native Corel file formats support all color depths.



- A file format that supports a large number of colors may not necessarily support all color depths that are below its maximum bit depth. For example, a format may support 24-bit color but not black-and-white.
- When working with a bitmap linked for use with OPI, you can size, rotate, move, or create a PowerClip object with the imported low-resolution image; however, you cannot apply effects from the Effects or Bitmaps menu to the image.

Importing bitmap files

When importing bitmaps, you can use the default settings or you can choose from a number of options. You can apply a color profile, resample or crop the image, open a low resolution copy of the image, detect watermarks, or suppress filter dialogs associated with the image file format.

To import a bitmap using default settings

1. Choose File, Import.

2. Locate the folder in which the bitmap you want to import is stored.
3. Choose a bitmap format from the Format pop-up menu.
4. Choose a filename.
5. Click the Import button.

To apply a color profile

1. Choose File, Import.
2. Locate the folder in which the bitmap you want to import is stored.
3. Choose a bitmap format from the Format pop-up menu.
4. Choose a filename.
5. Enable the Apply Selected Profile check box.
6. Choose a color profile from the pop-up menu.
7. Click the Import button.



- To make profiles available in the pop-up menu, store them in the COLORSYNC PROFILES folder.
-

To resample an image while importing

1. Follow steps 1 to 3 from the “To apply a color profile” procedure.
2. Choose a filename.
3. Choose Resample from the pop-up menu that appears beside the Format pop-up menu.
4. Click the Import button.
5. Do any of the following:
 - Type values in the Width and Height boxes.
 - Type the percentage by which you want to downsample the image in the percentage boxes.
 - Choose a unit of measurement in the Units pop-up menu.
 - In the Resolution section, type values in the Horizontal and Vertical boxes to alter the resolution of the imported image.
 - Enable the Maintain Aspect Ratio check box to maintain equal horizontal and vertical values.

To crop an image while importing

1. Follow steps 1 to 3 from the “To apply a color profile” procedure.
2. Choose a filename.
3. Choose Crop from the pop-up menu that appears beside the Format pop-up menu.
4. Click the Import button.
5. Do any of the following:
 - Type a value in the Top box to specify the number of pixels (or the unit of measurement displayed in the Units box) that you want to remove from the top of the image. Then type a value in the Left box to specify the number of pixels you want to remove from the left edge of the image.
 - Type a value in the Width box to specify the width of the area of the image you want to keep, and type a value in the Height box to specify the height of the area you want to keep.
 - Drag the selection box to the position and size you want.
 - Choose a new unit of measurement in the Units pop-up menu.

To import a low-resolution file for output using OPI

1. Choose File, Import.
2. Locate the folder in which the file is stored.
3. Choose TIFF from the Format pop-up menu.
4. Choose a filename.
5. Enable the Link To High Resolution File For Output Using OPI check box.
6. Click the Import button.



- The Link To High Resolution File For Output Using OPI option is only available when you choose a TIFF file.
-

To detect watermarks when importing

1. Follow steps 1 to 3 from the “To apply a color profile” procedure.
2. Choose a filename.

3. Enable the Check For Watermark button.
4. Click the Import button.

To suppress filter dialogs when importing

1. Follow steps 1 to 3 from the “To apply a color profile” procedure.
2. Choose a filename.
3. Enable the Suppress Filter Dialog button.
4. Click the Import button.



- When you import 16-color bitmaps in CorelDRAW, they are automatically converted to 256 colors.
- You can only remove information from images when resampling. You cannot add to an image, i.e., you cannot increase the image’s width, height, or resolution.
- If you are importing a TIFF file with an embedded color profile, you will get a message asking you if you want to use the embedded profile.
- If you are importing a low-resolution TIFF file created using OPI (Open Prepress Interface), you must enable the Link To High Resolution File For Output Using OPI check box.



- When resampling an image, enable the Maintain Aspect Ratio check box to maintain the original ratio of height to width or the Identical Values check box to keep the Horizontal and Vertical resolution values the same.
- You can also import bitmaps by dragging them onto the Drawing Page from the finder or any application that supports drag and drop.

Importing and opening vector files

You can import or open vector files in nonnative file formats using the Import and Open commands. Use the Import menu to place a vector graphic in to a CorelDRAW document you already have open. Use the Open command to open a vector file as a separate document.

The Maintain Layers And Pages option lets you open the selected file and import the pages and layers contained in the file.

To open a nonnative vector file

1. Choose File, Open.
2. Locate the folder in which the file is stored.
3. Choose a vector filter from the Format pop-up menu.
4. Choose a filename.
5. Click Open.

To import a nonnative vector file

1. Choose File, Import.
2. Locate the folder in which the file is stored.
3. Choose a vector filter from the Format pop-up menu.
4. Choose a filename.
5. Click the Import button.

To maintain layers and pages when importing

1. Choose File, Import.
2. Locate the folder in which the file is stored.
3. Choose a vector filter from the Format pop-up menu.
4. Choose a filename.
5. Enable the Maintain Layers And Pages check box.
6. Click the Import button.



- If you don't need to edit an EPS file, use the Encapsulated PostScript filter to import it. This filter imports only the file header. If you want to edit the file, use the PostScript Interpreted filter to import it. This filter imports the complete EPS file as editable graphics.



- You can also import vector files by dragging them on to the Drawing Page from the finder or from any application that supports drag and drop.
-

Exporting and saving files

The Export command is similar to the Save As command. Both commands let you convert files to other formats. Generally, the Export command gives you a greater choice of file formats.

Using the Save As and Export commands in CoreIDRAW

In CoreIDRAW, use the Save As command to access vector filters only. You can save files to previous versions of CoreIDRAW or with different thumbnail formats.

Use the Export command to access the bitmap filters in addition to the vector filters. You can export files as compressed or uncompressed when file format supports this feature. When you choose either the Export or Save As command you can choose the folder in which you want to save or export the file. You can specify a name for your file and choose a filter.

Exporting images in nonnative file formats

When you export your image to another file format, you can open it directly in a destination application that supports that file format.

To export a file

1. Open the file you want to export.
2. Choose File, Export.
3. Choose an export format from the Format pop-up menu.
4. Type a filename.
5. Click the Export button.
6. In the dialog box for the export format, choose the export options you want.

Saving files in nonnative file formats

You can save files to other vector formats.

To save an image in a nonnative file format

1. Choose File, Save As.
2. Locate the folder in which you want to save the file.
3. Choose a format from the Format pop-up menu.

4. Type a filename.
5. Click Save.

Exporting selected objects and pages

You can export selected objects from your CorelDRAW documents.

To export selected objects



1. Select the objects with the *pick tool*.
2. Choose File, Export.
3. Locate the folder in which you want to save the exported file.
4. Choose an export format from the Format pop-up menu.
5. Type a filename.
6. Enable the Selected Only check box.
7. Click Save.

Copying, pasting and dragging

You can use the Clipboard to exchange objects between documents using the Cut and Paste commands or by dragging objects from one open document to another.

Exchanging information using copy and paste

You can exchange objects between documents by copying and pasting the objects from one document to another.

To exchange objects using copy and paste

1. Open the source file and the destination file.
2. In the source file, select the objects you want to copy.
3. Choose Edit, Copy.
4. Choose the destination file to make it the active file.
5. Choose Edit, Paste.



- You can move objects by using the Cut command instead of the Copy command.

Exchanging information by dragging

You can copy or move objects between documents by dragging the objects from one document to another.

To copy objects by dragging

1. Open the source file and the destination file, and position them so both windows are visible.
2. In the source file, select the objects you want to copy.
3. Hold down Option and drag the objects to the destination file.



- To move objects, do not hold down Option when dragging.
 - If you want to copy an image for later use, you can drag the image to the desktop to create a picture clipping. A picture clipping is a file that you can drag into other applications when you want.
-



CUSTOMIZING COREL APPLICATIONS

15

Corel applications contain customization features that let you create unique Workspaces. You can customize keyboard shortcut keys, menus, color palettes, toolbars, and the Status Bar by changing their appearance, placement on screen, and more.

Once you have your workspace looking how you like it, you can save it using the Workspace page in the Preferences dialog box. You can access your custom settings quickly by loading your saved Workspace.

Customizing Workspace settings

Corel applications let you customize your Workspace settings. You can set up your screen the way you want, choose options in the Preferences dialog box, and then create a custom Workspace to save all your settings. You can customize the tools and operations that you use most including toolbars, menus, shortcuts keys and more. You can access your custom settings by loading your saved Workspace. You can create different Workspace environments for different users or projects. For more information on creating custom Workspaces see “Using multiple workspaces” on page 9.

Customizing keyboard shortcuts

Keyboard shortcuts can help you work more efficiently and productively by providing you with a faster way to access certain commands or actions. You can assign new keyboard shortcuts and modify existing ones. You can delete

shortcuts you no longer need, and you can restore the original settings of default shortcuts. As well, you can save and load keyboard configurations to use with particular projects.

You can also view and print the list of all current keyboard shortcuts and save it as a CSV file, a text file which can be read by other programs.

Assigning keyboard shortcuts

When you change the shortcuts that are assigned to keyboard keys, the changes are saved in a file called an accelerator table. Corel applications come with two accelerator tables: the Main table, containing all non-text related shortcut keys and the Text Editing table containing all the text related shortcut keys. These tables can be customized to suit your work habits.

To assign a keyboard shortcut to a command or tool

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Shortcut Keys.
3. Choose the accelerator table you want to make your changes to from the Table pop-up menu.

Corel applications include two accelerator tables: Main (active when you're in regular drawing mode) and Text Editing (active when you're in text mode).

4. On the Shortcut Keys page, double-click a folder from the list to see a list of available commands or tools.

Some folders may have sub-folders. If so, continue double-clicking until you see the list of available commands or tools.

5. Choose a command or tool from the list.

The Current Shortcut Keys box contains a list of shortcut keys currently assigned to that command or tool.

6. Type the key combination that you want to assign to the command or tool in the Press New Shortcut Key box.

Your shortcut can use up to four different keystrokes. For example, you can assign the key combination Control + Option + Shift + 1 by holding down Control, Option, Shift, and 1.

7. Click the Assign button.

To delete a shortcut

1. Follow steps 1 to 5 from the previous procedure.

2. Choose the keyboard shortcut that you want to remove from the Current Shortcut Keys box.
3. Click the Delete button.



- To avoid assigning the same keyboard shortcut to two commands, enable the Delete Conflicts check box and the Navigate to Conflict check box. The Delete Conflicts check box will delete an existing shortcut when a new shortcut using the same combination is assigned. The Navigate to Conflicts check box will then highlight the command which no longer has a keyboard shortcut, and prompt you to enter a new shortcut in the Press New Shortcut Key box. If you enable the Delete Conflicts check box without enabling the Navigate to Conflicts check box, you are not prompted to enter a new shortcut combination to replace the one being erased. The Navigate to Conflicts check box is only effective when used in conjunction with the Delete Conflicts check box.

Assigning shortcuts to text styles

Assigning keyboard shortcuts to text styles helps you format a document quickly. You can create keyboard shortcuts for items such as bulleted lists and indented paragraphs.

To assign a keyboard shortcut to a text style

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Shortcut Keys.
3. Choose the accelerator table you want to make your changes to from the Table pop-up menu.

Corel applications include two accelerator tables: Main (active when you're in regular drawing mode) and Text Editing (active when you're in text mode).

4. Double-click the Apply Styles folder in the list.
5. Choose a style from the list.

The Current Shortcut Keys box contains a list of shortcut keys currently assigned to that style.

6. Type the key combination that you want to assign to the style in the Press New Shortcut Key box.

Your shortcut can use up to four different keystrokes. For example, you can assign the key combination Control + Option + Shift + 1 by holding down Control, Option, Shift, and 1.

7. Click the Assign button.



- To avoid assigning the same keyboard shortcut to two commands, enable the Delete Conflicts check box and the Navigate to Conflict check box. The Delete Conflicts check box will delete an existing shortcut when a new shortcut using the same combination is assigned. The Navigate to Conflicts check box will then highlight the command which no longer has a keyboard shortcut, and prompt you to enter a new shortcut in the Press New Shortcut Key box. If you enable the Delete Conflicts check box without enabling the Navigate to Conflicts check box, you are not prompted to enter a new shortcut combination to replace the one being erased. You can only enable the Navigate To Conflicts check box if the Delete Conflicts check box is enabled.
-

Printing your keyboard shortcuts

You can print a list of the keyboard shortcuts using the Shortcut Keys page in the Preferences dialog box.

To print your keyboard shortcuts

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Shortcut Keys.
3. Click the View All button.
4. Click the Print button.

Saving your keyboard shortcuts in a format readable by other programs

You can save the keyboard shortcut list as a CSV file. A CSV file is a text file that can be read by applications such as word processors or spreadsheets.

To save your shortcut keys in a format readable by other programs

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Shortcut Keys.

3. Click the View All button.
4. Click the Export To CSV button.
5. Locate the folder in which you want to save the file.
6. Type a filename.
7. Click the Save button.

Customizing menus

Corel customization features let you change the Menu Bar and the menu it contains. For example, you can add commands to existing menus or add new menus to the Menu Bar. You can also remove menu commands or entire menus. Furthermore, you can change the name or order of menus and the commands they contain to give you easy access to the functions you use most often.

Corel online Help is based on the application's default settings. When you customize menus and menu commands, the Help topics associated with them do not change to reflect your changes.

Changing the order of menus

You can use the Menus page in the Preferences dialog box to change the order of menus as they appear on the Menu Bar.

To change the order of menus

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.
3. Choose an item from the Menu pop-up menu.
4. Choose a menu from the list below the Menu pop-up menu.
5. Do one of the following to change the order:
 - Click the Up or Down button until the menu occupies the position you want.
 - Drag the menu to its new position.

Changing the order of menu commands

You can use the Menus page in the Preferences dialog box to change the order in which menu commands are listed.

To change the order of menu commands

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.
3. Double-click the menu name you want to customize in the list on the right side of the Menus page.
4. Choose the name of the command you want to move.
5. Do one of the following to change the order:
 - Click the Up or Down button until the menu command occupies the position you want.
 - Drag the command to its new position.

Adding and removing menus

Corel applications let you customize the Menu Bar by adding new menus for commands or features that you use most often. You can also remove menus that you no longer need.

To add a menu to the Menu Bar

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.
3. Choose Main Menu from the Menu pop-up menu.
4. In the list on the right side of the Menus page, choose the menu beside which you want to add a new menu.
5. Click the Add Menu button.

The new menu appears below the chosen menu in the dialog box, but will appear to the right of the chosen menu in the Menu Bar.

6. Type a name for the new menu.

To remove a menu from the Menu Bar

1. Follow steps 1 to 3 from the previous procedure.
2. From the list on the right side of the Menus page, choose the menu you want to remove.
3. Click the Remove button.

Adding and removing menu commands

You can customize your work environment by choosing which commands appear in a menu. You can also remove commands that you no longer need.

To add a menu command to a menu

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.
3. In the list of menus on the right side of the Menus page, double-click the name of the menu to which you want to add a command.
4. Choose the command name under which you want the new command to appear.
5. In the list of commands and tools on the left side of the Menus page, double-click the folder that contains the command you want to add.
6. Choose the command you want to add.
7. Click the Add button.

To remove a menu command from a menu

1. Follow steps 1 and 2 from the previous procedure.
2. In the list of menus on the right side of the Menus page, double-click the name of the menu from which you want to remove a command.
3. Choose the command name that you want to remove.
4. Click the Remove button.



- You can also add menu commands by dragging them from the Commands box to the box below the Menu box.
-

Adding and removing menu command separators

You can add or remove menu command separators — the horizontal lines between commands in a menu — to create groups of commands.

To add a menu command separator

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.

3. In the list on the right side of the Menus page, double-click the name of the menu to which you want to add a separator.
4. Choose the command below which you want the separator to appear.
5. Click the Separator button.

To remove a menu command separator

1. Follow steps 1 and 2 from the previous procedure.
2. In the list on the right side of the Menus page, double-click the name of the menu from which you want to remove a separator.
3. Click the separator you want to remove.
4. Click the Remove button.

Renaming and restoring menus and menu commands

You can change the names of the menus and menu commands that appear in the Menu Bar, or you can restore the original menu settings.

To rename a menu or menu command

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Menus.
3. In the list on the right side of the Menus page, double-click the name of the menu containing the sub-menu or command you want to rename.
4. Double-click the menu or command name you want to rename.

A text cursor appears in the menu name and a highlighting box appears around the name.

5. Type the new menu name.



- To restore the original menu settings, click the Reset button on the Menus page of the Preferences dialog box.
-

Customizing the Color Palette

You can manipulate the on-screen Color Palette to suit your needs. You can dock the Color Palette at the top, bottom or sides of the main screen, or drag it inside the main screen to create a floating Color Palette.

Create custom color palettes for which you choose the contents, color, and arrangement. With custom color palettes you can group colors in small or

large swatches, and in multiple rows, or save and load the contents of your custom Color Palette for use with specific projects.

Moving the Color Palette

You can move the Color Palette anywhere on the screen. Placing it inside the main screen turns it into a floating Color Palette. Placing it at the top, bottom or side of the main screen docks the Color Palette, making it part of the screen border.

To move the Color Palette

- Click the Color Palette's border, and drag it to a new position.

To dock the Color Palette

- Drag the Color Palette toward the edge of the main screen until the Color Palette outline switches to full-screen size.



- Double-clicking any empty area on the Color Palette when it is floating docks it to its last docked position.
-

Resizing the Color Palette

You can change the size of the Color Palette both when it is floating (separate from the main screen) or when it is docked (attached to the main screen).

To resize a docked Color Palette

1. Hold down Control and click an empty area on the Color Palette, then choose Properties.
2. Type a value in the Maximum Number Of Rows While Docked box.

To resize a floating Color Palette

1. Place the cursor on the bottom right corner of the Color Palette.
2. Drag the Color Palette to the desired size.

To expand the Color Palette

- When the Color Palette is docked, choose  to view more colors.



- The Color Palette displays up to seven rows of colors when docked.

Moving and removing colors on the Color Palette

You can change the order in which the colors appear on the Color Palette, or you can remove colors altogether. However, you cannot move the No Color swatch.

To move a color swatch on the Color Palette

- Drag a color swatch to a new position on the Color Palette.

To remove a color swatch from the Color Palette

1. Choose Window, Color Palette, Palette Editor.
2. Select a color swatch.
3. Click the Remove button.

Using custom color palettes

Corel applications supply several preset process and custom color palettes, along with spot color palettes. You can open a preset color palette or create a new custom color palette by adding, deleting, or rearranging colors. You can save your palette under a new name using the Palette Editor dialog box, or by holding down Control and clicking the Color Palette. For more information about custom color palettes, see “Customizing color palettes” on page 245.

To create a new custom palette

1. Choose Window, Color Palette, Palette Editor.
2. Click the New button.
3. Type a filename for the new palette.
4. Click the Save button (an empty new palette is created.)

To save a palette using a new filename

1. Choose Window, Color Palette, Palette Editor.
2. Click Save As.
3. Type a filename for the new palette.

By default, the application saves all palette configurations in the same directory. You can use the controls in the Save Palette As dialog box to specify a different directory.

4. Click Save.

To open a custom palette

1. Choose Window, Color Palette, Palette Editor.
2. Click Open.
3. Locate the folder where the palette is stored.
4. Choose the palette's filename.
5. Click Open.



- To add a new color to the custom color palette see “Changing the colors in the on-screen Color Palette” on page 243.
-

Changing the appearance of the Color Palette

You can change the appearance of the Color Palette by changing the size of the color swatches or by displaying or hiding the no color swatch.

To change the size of the color swatches

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Color Palette.
3. Do one of the following:
 - Enable the Large Swatches check box to display large color swatches.
 - Disable the Large Swatches check box to display small color swatches.

To display or hide the No Color swatch

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Color Palette.
3. Enable or disable the Show “No Color” Well check box.



- On the Color Palette, the No Color swatch is represented by an “X”.
-

Customizing toolbars

You can control the position and content of the toolbars and the Property Bar. Using the mouse, you can resize or move your toolbars anywhere on the screen. You can also add, remove, and rearrange toolbar controls, or create your own toolbars containing the controls you use most often.



- Corel online Help is based on the application's default settings. When you customize the toolbars, the Help topics associated with them do not change to reflect your changes.

Moving and resizing a toolbar

You can move the toolbar anywhere on the screen. Placing it at the top, bottom or side of the main screen docks the toolbar, making it part of the main screen border. You can also change the size of the toolbar when it is floating but not when it is docked.

To move a toolbar

- Click the toolbar's title bar and drag it to a new position.



- When you drag the toolbar into the main screen, it becomes a floating toolbar.

To dock a toolbar

- Click the toolbar's title bar and drag it toward the edge of the screen until the toolbar's outline changes to full-screen size.

To resize a floating toolbar

1. Place the cursor on the bottom right corner of the toolbar.
2. Drag the toolbar to the desired size.



- Double-clicking empty space on the toolbar when it is floating docks it to its last docked position.

Displaying toolbars

The toolbars that come with your Corel application give you access to a variety of frequently used commands and functions.

To display an existing toolbar

1. Choose Edit, Preferences.
2. In the list of categories, choose Customize.
3. Enable the check box next to the toolbar that you want to display.



- You can also display the Toolbox, Property Bar, Status Bar, Internet Objects Toolbar, and the Standard Toolbar by choosing Window, Toolbars.
-

Creating a custom toolbar

You can create custom toolbars that contain the buttons you use most often. You can delete custom toolbars at any time, unlike the predefined toolbars provided with the application.

To create a custom toolbar

1. Choose Edit, Preferences.
2. In the list of categories, choose Customize.
3. Choose New.
4. Type a name for the new toolbar.

To delete a custom toolbar

1. Choose Edit, Preferences.
2. In the list of categories, choose Customize.
3. Choose the name of a toolbar from the Toolbars list.
4. Click the Delete button.

Configuring toolbars

You can add and remove toolbar items from toolbars, but you cannot add or remove toolbar items from the Toolbox or from any of its flyouts. You can also restore the original configuration of a built-in toolbar.

To ...	Do This ...
Move a toolbar item	Hold down Option, and drag the toolbar item to its new position on the same toolbar or to a new toolbar.
Remove a toolbar item	Hold down Option, and drag the toolbar item off the toolbar.

To add a toolbar item to a toolbar

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Toolbars.
3. In the Commands list, double-click the folder that contains the toolbar item you want to add.
4. Drag the toolbar item from the Preferences dialog box to the toolbar.

To restore the original configuration of a built-in toolbar

1. Choose Edit, Preferences.
2. In the list of categories, choose Customize.
3. Enable the check box next to the toolbar you want to reset.
4. Click the Reset button.

Customizing the Property Bar

You can customize what appears on the Property Bar when you have different items selected. For example, when you select the rectangle tool, the Property Bar displays the default rectangle settings and controls. You can remove these items and add items as needed.

To customize the Property Bar

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Toolbars.
3. Choose the Property Bar you want to customize in the Property Bars pop-up menu.
4. Double-click the folder containing the toolbar item.
5. Drag the toolbar item from the Preferences dialog box to the Property Bar.



- You can also access the Preferences dialog box by holding down Control and clicking the Property Bar, then choosing Customize.

Renaming custom toolbars

You can change the names of custom toolbars at any time, but you cannot change the names of the predefined toolbars provided with the application.

To rename a toolbar

1. Choose Edit, Preferences.
2. In the list of categories, choose Customize.
3. Double-click the name of the custom toolbar you wish to rename.

A text cursor appears in the menu name and a highlighting box appears around the name.

4. Type a new name for the toolbar.

Resizing toolbar items

You can change the size of boxes, pop-up menus, and other toolbar items.

To resize toolbar items

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Toolbars.
3. On the toolbar (i.e., outside the Customize dialog box) click the toolbar item you want to resize.
4. Drag the sides of the toolbar item to resize it.



- You can also access the Toolbars page of the Preferences dialog box by holding down Control and clicking a toolbar, then choosing Customize.
-

Changing the appearance of toolbar buttons

You can change the appearance of toolbar buttons by editing the button's bitmap or by displaying text instead of a bitmap.

To edit the bitmaps on toolbar buttons

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Toolbars.

3. On the toolbar (i.e., outside the Customize dialog box) hold down Control, choose the toolbar item you want to edit and choose Properties.
4. Use the controls to change the appearance of the bitmap.



- You can also access the Toolbars page of the Preferences dialog box by holding down Control and clicking a toolbar, then choosing Customize.
-

Customizing the Status Bar

The Status Bar gives you constant, up-to-date information about your working environment, such as the colors used for fills and outlines and the position of your cursor. You can customize the status bar's position, appearance, and content. You can only drag Status Bar items on to the Status Bar from the Toolbars page of the Preferences dialog box.

Moving or resizing the Status Bar

You can move or resize the Status Bar and you can resize Status Bar items.

To move the Status Bar

- Click the Status Bar's border, and drag it to a new position.

To resize the Status Bar

1. Hold down Control and click the Status Bar.
2. Choose Size, and then choose either One Line or Two Lines.

To resize a Status Bar item

1. Choose Edit, Preferences.
2. In the list of categories, double-click Customize, and choose Toolbars.
3. On the Status Bar, choose the Status Bar item you wish to resize.
A highlighted box appears around the item.
4. Position the cursor on the edge of the highlighted box.
The cursor changes to a two directional arrow.
5. Drag to resize the item.



- You can also access the Toolbars page of the Preferences dialog box by holding down Control and clicking the Status Bar, then choosing Customize.
-

Changing the contents of the Status Bar

You can customize the Status Bar to display various types of information, such as the colors used for fills and outlines and the position of your cursor.

To change the contents of the Status Bar

1. Choose Edit, Preferences.
 2. In the list of categories, double-click Customize, and choose Toolbars.
 3. Double-click the Status Bar folder in the Commands box.
 4. Drag a Status Bar item (on the right) to the Status Bar.
-



- You can also access the Toolbars page of the Preferences dialog box by holding down Control and clicking the Status Bar, then choosing Customize.
-

Hiding or displaying the Status Bar

If you want to enlarge the viewing area of your main screen, you can hide the Status Bar. You can display it again any time you need it.

To display or hide the Status Bar

- Choose Window, Toolbars.
-



- If no check mark appears next to the command name, the Status Bar is hidden. If a check mark does appear, the Status Bar is displayed.
-



- You can also hold down Control and click the Status Bar, then choose Hide Status Bar.
-

Customizing Palettes

Palettes are floating dialog boxes which let you access frequently used functions. Palettes can be grouped together so that a single dialog box gives you access to the commands of several Palettes. Palette groups on the screen support drag and drop, allowing you to group and ungroup Palettes while you work.

Creating Palette groups

You can combine two or more Palettes into a single Palette group. In a group, only one Palette is active at a time.

To create a Palette group on screen

1. Choose Window, Palettes and open the Palettes you want to group together.
2. Using the Palette's tab, drag one Palette onto another.
3. Continue adding Palettes until your group is complete.

Removing a Palette from a Palette group

You can remove individual Palettes from a group.

To remove a Palette from a Palette group

1. Open the Palette group.
2. Using the Palette's tab, drag the Palette out of the group.



MOVING FROM ADOBE ILLUSTRATOR OR MACROMEDIA FREEHAND TO CORELDRAW

Welcome to CorelDRAW, a powerful graphic design program. If you have experience with Adobe Illustrator or Macromedia Freehand, you can easily learn the features of CorelDRAW. Whether you use CorelDRAW as your main graphics application or as one component among many applications, you can benefit from its time-saving features and enhancements.

Adobe Illustrator 7.0, Macromedia Freehand 8.0, and CorelDRAW 8 share many similarities, which makes it easy to move from one application to the other. All are graphics applications and share most basic drawing and design capabilities. Despite the similarities, however, Adobe Illustrator, Macromedia Freehand, and CorelDRAW are distinguished by some differences in terminology, tools, and technology. Understanding these differences lets you make a quick and easy transition from Adobe Illustrator or Macromedia Freehand to CorelDRAW.

Comparing terms and concepts

Many Adobe Illustrator, Macromedia Freehand, and CorelDRAW features are comparable. CorelDRAW occasionally describes these features using different terminology. CorelDRAW also introduces new terms for its unique features. You can operate smoothly between Adobe Illustrator, Macromedia Freehand, and CorelDRAW by previewing their distinctive terms and concepts.

Comparing tools

Although Adobe Illustrator and Macromedia Freehand tools are similar to the CorelDRAW tools, there are some differences. A comparison of the tools identifies these differences and helps you to begin exploring what CorelDRAW has to offer.

Comparing print technology

Adobe Illustrator and CorelDRAW support different printing technologies. Understanding these differences helps you generate higher quality output for your graphic designs.

Comparing terms and concepts

The terms and concepts in Adobe Illustrator, Macromedia Freehand, and CorelDRAW differ for some features. In some cases, features may be similar in all applications, but they are described using different terminology. In other cases, CorelDRAW 8 introduces new terms and concepts that have no equivalent in Adobe Illustrator 7.0 or in Macromedia Freehand 8.0.

Similar features with different terminology

The following Adobe Illustrator terms have some differences in naming and functionality in CorelDRAW:

- Compound
- Distortion
- Gradient fill
- Masks
- Placing images
- Points and paths
- Raster image effects
- Stroke
- Unite

The following Macromedia Freehand terms have some differences in naming and functionality in CorelDRAW:

- Distortion
- Divide
- Graduated fill

- Join
- Lenses
- Magnify
- Masks
- Points and paths
- Raster image effects
- Smudge
- Stroke
- Union

CorelDRAW terms

CorelDRAW also introduces the following terms and concepts:

- Internet support
- Property Bar
- Toolbars
- Workspaces

Compound

Compound in Adobe Illustrator is called Combine in CorelDRAW. Combining objects lets you fuse multiple curves, lines, and shapes to create a completely new shape with common fill and outline attributes. If the original objects overlap, the overlapping areas are removed to create clipping holes that allow you to see what's underneath. If the objects don't overlap, they still become part of a single object but maintain their spatial separation.

For more information about combining objects, see "Combining objects" on page 269.

Distortion

Distortion of an object in Adobe Illustrator and Macromedia Freehand consists of applying various filters or tools to modify the object's appearance. Distortion in CorelDRAW is applied using the Interactive Distortion tool. This tool is actually made up of three different tools; the push and pull, zipper and twister distortion tools. The Push distortion pushes the nodes of the object you're distorting away from the center of the distortion. The Pull distortion pulls the nodes of the object you're distorting towards the center of the distortion. With the Zipper distortion, you can add either a sharp

corner or smooth corner wave to your object. The Twister distortion, twists or spirals the selected object as if it were water spiraling down a drain.

For more information about the distortion tools, see “Distorting objects” on page 379.

Divide

Divide/Punch in Macromedia Freehand is called Trim in Adobe Illustrator and CorelDRAW. Trimming lets you reshape an object by removing the area that overlaps or is overlapped by other objects. The object you trim, called the target object, retains its fill and outline attributes.

For more information about trimming objects, see “Welding, trimming, and intersecting objects” on page 271.

Gradient fill

A gradient fill in Adobe Illustrator or graduated fill in Macromedia Freehand is called a fountain fill in CorelDRAW. A Fountain fill is a progression of colors through the Color Wheel, following a linear, radial, conical, or square path. There are two types of fountain fills — two-color and custom. Two-color fountain fills have a direct blend from one color to another. Custom fills, however, allow you to create a cascade of many colors. You can also apply preset fountain fills that simulate the appearance of neon tubes, metal cylinders, and a variety of other real-life objects.

For more information about fountain fills, see “Working with fountain fills” on page 172.

Graduated fill

See “Gradient fill” on page 598.

Internet support

CorelDRAW includes sophisticated tools for producing documents suitable for viewing on the Internet. You can assign Internet addresses to objects, or you can define clickable regions to create an image map. Documents can be saved in file formats supported by Web browsers.

For more information about Internet support, see “Creating documents for the World Wide Web” on page 503.

Join

Join in Macromedia Freehand is called Combine in CorelDRAW. Combining objects lets you fuse multiple curves, lines, and shapes to create a completely new shape with common fill and outline attributes. If the original objects

overlap, the overlapping areas are removed to create clipping holes that allow you to see what's underneath. If the objects don't overlap, they still become part of a single object but maintain their spatial separation.

For more information about combining objects, see “Combining objects” on page 269.

Lenses

Lenses in Macromedia Freehand are called transparencies or lens effect in CorelDRAW. In CorelDRAW, you can apply a uniform, fountain, pattern, or texture transparency to objects. A transparency is applied on top of any other attributes that are applied to the object; therefore, any fill properties that were applied before the transparency will show through the transparency. CorelDRAW provides two methods for creating transparent objects: the Interactive Transparency tool and the Lens effect.

For more information about the Interactive Transparency tool, see “Creating transparencies” on page 413.

Magnify

Magnify in Macromedia Freehand is called Zoom in Adobe Illustrator and CorelDRAW. The Zoom tool in CorelDRAW lets you zoom in or out so that you can get a more detailed or general view. The Property Bar provides tools that let you zoom to virtually any level of magnification, including zoom out, zoom to full page width, height, and 1:1 ratio.

For more information about the Zoom tool, see “Viewing your work” on page 72.

Masks

Masks in Adobe Illustrator and Macromedia Freehand are called PowerClip objects in CorelDRAW. In CorelDRAW, PowerClip objects let you put an object inside another object or group of objects. One object becomes the contents and the other becomes the container. The container object can be compared to a window. Just as a window's frame represents the limits of what you can see behind it, a container object lets you see only the portion of a contents object (or group of objects) that fits inside the container's boundaries. If the size of the contents object exceeds that of its container, CorelDRAW automatically crops the contents object. You see only the portion of the contents object that fits inside the container.

For more information about PowerClip objects, see “Working with PowerClip” on page 440.

Placing images

Placing images in Adobe Illustrator is called importing in Macromedia Freehand and CorelDRAW. CorelDRAW lets you import files created in different programs and saved in different file formats. In CorelDRAW you can see an on-screen display of the file import cursor and the image file name, and you can specify the location and size of the image when you import it. If you choose not to embed your imported raster images into the CorelDRAW file, you have the option of leaving the graphic as an external file.

For more information about importing images, see “Importing and cropping a bitmap” on page 446.

Points and paths

Points and paths in Adobe Illustrator and Macromedia Freehand are called nodes and segments in CorelDRAW. A segment is the portion of a curve that lies between two nodes. A curve object can have two types of segments: curved or straight. You can bend a curved segment by dragging it or dragging its end nodes. A straight segment will never bend, regardless of the position of its nodes. If you want to bend a straight segment, you must convert it to a curved segment.

When you select a curve object with the Shape tool, CorelDRAW displays all of the object’s nodes. You can shape a curve object by moving a node or by moving the control points that appear when you select a node. Control points determine the curve of a segment as it passes through a node. You can control the curve of a segment by varying the control point’s angle and its distance from the node. Each node has one control point for each segment for which it is the last node.

CorelDRAW provides three tools for drawing lines, curves, and irregular shapes: the Freehand tool, the Bezier tool, and the Natural Pen tool.

For more information about creating points and lines, see “Drawing lines, curves, and irregular shapes” on page 97.

Property Bar

The CorelDRAW Property Bar is a context-sensitive command bar that displays different buttons and options, depending on the selected tool or object. For example, if you select the Zoom tool, the Property Bar will display the various zoom modes that provide you with quick access to the most common magnification controls. If however you select a rectangle, the Property Bar displays the properties of the rectangle, like corner roundness, and width and height settings. The Property Bar provides you with quick and easy access to common controls.

For more information about setting up the Property Bar, see “Using the Property Bar” on page 8.

Raster image effects

Raster images effects in Adobe Illustrator and Macromedia Freehand are called bitmap effects in CorelDRAW. CorelDRAW offers several effects that can be applied to raster images. You can also convert a vector image to a raster image by using the Convert To Bitmap command, you can convert the raster image into different color modes such as grayscale and duotone, also you use most Adobe Photoshop compatible standard plug-in directly within CorelDRAW. These plugin to the existing effects in CorelDRAW and let you apply raster effects, such as blurring, page curl, emboss, and 3D rotation to your raster images without having to launch another raster image editing program.

For more information about image effects, see “Applying special effects to bitmaps” on page 480.

Smudge

Smudge or Shadow in Macromedia Freehand is called drop shadow in Adobe Illustrator and CorelDRAW. Drop shadows create the illusion of depth between objects. In CorelDRAW, the Interactive Drop Shadow tool lets you create a raster drop shadow image from any vector object. This creates a transparent raster image that has been feathered and blurred to give the appearance of a soft drop shadow. The shadow itself is semitransparent, which means that if any other objects are behind the shadow, those objects will be partially visible through it.

For more information about drop shadows, see “Adding drop shadows to object” on page 408.

Stroke

Stroke in Adobe Illustrator and Macromedia Freehand is called an outline in CorelDRAW. Every object you create in CorelDRAW has an outline that you can manipulate in a variety of ways. You can think of each object as being drawn with a nib of adjustable size, shape, and color. These nib attributes can apply to a particular object or to all objects you add to your drawing. Applying an outline in CorelDRAW allows you exercise more control over the outline thickness, style, and corner shapes.

For more information about outlines, see “Outlining objects” on page 209.

Toolbars

In CorelDRAW, you can use toolbars to maximize the efficiency of your work area. A toolbar is a group of buttons that provide quick access to a series of related commands. You can use any combination of the preset toolbars, or you can create your own toolbar that contains the buttons and button arrangements you find most efficient.

Each button on a toolbar represents a command. Some are shortcuts to menu commands; others are commands that are available only as toolbar buttons. You can customize your work area by displaying, hiding, sizing, or docking the toolbars. Toolbars can be docked to any side of the Application Window. You can also arrange toolbars by snapping them to the edges of other toolbars or to the Property Bar.

For more information about toolbars, see “Customizing toolbars” on page 588.

Union

See “Unite” on page 602.

Unite

Unite in Adobe Illustrator or Union in Macromedia Freehand is called Weld in CorelDRAW. Welding several overlapping objects binds them together to create one object. This object uses the welded objects’ perimeter as its outline. All intersecting lines disappear. If you weld objects that do not overlap, they form a “weld group,” which also acts as a single object. You can also weld any number of objects at one time.

For more information about welding, trimming, and intersecting objects, see “Welding, trimming, and intersecting objects” on page 271.

Workspaces

In CorelDRAW, you can customize a workspace. A workspace is a set of customized preferences that let you optimize your personal work area. Although most CorelDRAW commands have predefined default settings that anticipate your actions, you can ensure that the application works exactly the way you want by customizing these settings.

You can also maintain different workspaces for different tasks in CorelDRAW. For example, you can customize the physical location of dialog boxes on your screen. The CorelDRAW workspace settings will make you more productive by allowing you to save different workspace settings and instantly altering your work environment to suit your task by selecting any of your workspaces.

For more information about workspaces, see “Customizing workspace settings” on page 577.

Comparing tools

Adobe Illustrator, Macromedia Freehand, and CorelDRAW make their primary drawing tools available in a toolbox, which is a collection of buttons found on the side of the Drawing Window. In CorelDRAW, the Toolbox works with the Property Bar to place important commands and tool settings at your fingertips.

Although the Adobe Illustrator, Macromedia Freehand, and CorelDRAW toolboxes function in the same way, the specific toolbox items of each application differ. Some tools in Adobe Illustrator, Macromedia Freehand, and CorelDRAW perform the same task but have a different name. Other tools have the same name but may perform the task in a different way.

CorelDRAW also provides some tools that are not found in neither the Adobe Illustrator nor Macromedia Freehand toolbox. Previewing the toolbox differences among the applications helps you make a quicker transition to working with CorelDRAW.

Examining the Adobe Illustrator Toolbox

Although Adobe Illustrator and CorelDRAW have toolboxes, some tools differ in name and function among the applications. The following table lists each Adobe Illustrator toolbox item and describes the corresponding tool or operation in CorelDRAW. For more information about the CorelDRAW Toolbox, see “Using the Toolbox” on page 6.

Adobe Illustrator tool	CorelDRAW tool and description
	In Adobe Illustrator, the Selection tool lets you select and position objects on the Drawing Page. In CorelDRAW you can perform these tasks using the Pick tool.
	In Adobe Illustrator, the Direct selection tool lets you select points or parts of paths within an object. In CorelDRAW you can perform this task using the Shape tool.
	In Adobe Illustrator, the Group selection tool lets you select objects within groups. In CorelDRAW you can perform this task by holding down the Command key and using the Pick tool.
	In Adobe Illustrator, the Pen tool lets you draw curved or straight lines. In CorelDRAW you can perform this task using the Bezier tool.
	In Adobe Illustrator, the Add Anchor Point tool lets you add points to a path. In CorelDRAW you can perform this task using the Shape tool.



In Adobe Illustrator, the Delete Anchor Point tool lets you delete points from a path. In CorelDRAW you can perform this task using the Shape tool.



In Adobe Illustrator, the Convert Direction Point tool lets you change the properties of a point from either smooth to corner. In CorelDRAW you can perform this task using the Shape tool.



In Adobe Illustrator, the Type tool lets you add line or paragraph text framed objects. In CorelDRAW you can perform this task using the Text tool.



In Adobe Illustrator, the Area type tool lets you take any closed path and place or flow text within the perimeter of a closed path. In CorelDRAW you can perform this task using the Text tool.



In Adobe Illustrator, the Path Type tool lets you select any path and type or edit text onto that path. In CorelDRAW you can perform this task using the Text tool.



In Adobe Illustrator, the Ellipse tool lets you draw ellipses and circles. In CorelDRAW you can perform this task using the Ellipse tool.



In Adobe Illustrator, the Centered Ellipse tool lets you draw a centered ellipse. In CorelDRAW you can perform this task by holding down the Option key and using the Ellipse tool.



In Adobe Illustrator, the Polygon tool lets you draw multi sided polygon shapes. In CorelDRAW you can perform this task using the Polygon tool.



In Adobe Illustrator, the Star tool lets you draw a star shape. In CorelDRAW you can perform this task using the Polygon tool.



In Adobe Illustrator, the Spiral tool lets you draw spirals in a clockwise or counterclockwise direction. In CorelDRAW you can perform this task using the Spiral tool.



In Adobe Illustrator, the Rectangle tool lets you draw rectangles. In CorelDRAW you can perform this task using the Rectangle tool.



In Adobe Illustrator, the Rounded Rectangle tool lets you draw rectangles with rounded corners. In CorelDRAW you can use the Rectangle tool to create your rectangle, then move the rectangle's control points to round its corners.



In Adobe Illustrator, the Centered Rectangle tool lets you draw a rectangle from the center outwards. In CorelDRAW you can perform this task by holding down the Option key and using the Rectangle tool.



In Adobe Illustrator, the Centered Rounded Rectangle tool lets you draw a rectangle with rounded corners from the center outwards. In CorelDRAW you can perform this task using the Shape tool or the Rectangle tool to round the rectangle's corners.



In Adobe Illustrator, the Pencil tool lets you draw freehand lines or shapes. In CorelDRAW you can perform this task using the Freehand tool.



In Adobe Illustrator, the Paintbrush tool lets you draw freehand lines of varying thickness. In CorelDRAW you can perform this task using the Natural Pen tool.



In Adobe Illustrator, the Scissors tool lets you cut or split paths or shapes. In CorelDRAW you can perform this task using the Knife Tool.



In Adobe Illustrator, the Knife tool lets you cut objects and paths. In CorelDRAW you can perform this task using the Knife tool or the CorelDRAW Eraser tool.



In Adobe Illustrator, the Rotate tool lets you rotate an object freely. In CorelDRAW you can perform this task using the Free Rotation tool.



In Adobe Illustrator, the Twirl tool lets you twirl an object about a central point. In CorelDRAW you can perform this task using the Interactive Twister Distortion tool.



In Adobe Illustrator, the Scale tool lets you resize a shape freely. In CorelDRAW you can perform this task using the Free Scale tool.



In Adobe Illustrator, the Reshape tool lets you modify a path or portions it without altering its overall shape. In CorelDRAW you can perform this task using the Shape tool.



In Adobe Illustrator, the Reflect tool lets you mirror or flip an object along an axis. In CorelDRAW you can perform this task using the Free Angle Reflection tool.



In Adobe Illustrator, the Shear tool lets you skew an object. In CorelDRAW you can perform this task using the Free Skew tool.



In Adobe Illustrator, the Blend tool lets you blend or create intermediate objects between any two selected objects. In CorelDRAW you can perform this task using the Interactive Blend tool.



In Adobe Illustrator, the Autotrace tool lets you trace a portion of an object. In CorelDRAW you can autotrace raster images using the Freehand tool.



In Adobe Illustrator, the Measure tool lets you measure a distance between any two points. In CorelDRAW, you can perform this task using the Dimension tools.



In Adobe Illustrator, the Gradient tool lets you set the source and destination points of a gradient or fountain fill. In CorelDRAW you can perform this task using the Interactive Fill tool.



In Adobe Illustrator, the Hand tool lets you pan the objects on your page so that they appear in the Drawing Window. In CorelDRAW you can perform this task using the Pan tool.



In Adobe Illustrator, the Zoom tool lets you increase or decrease the magnification over any area in your Drawing Window. In CorelDRAW you can perform this task using the Zoom tool.

Examining the Macromedia Freehand Toolbox

Although Macromedia Freehand and CorelDRAW have toolboxes, some tools differ in name and function among the applications. The following table lists each Macromedia Freehand toolbox item and describes the corresponding tool or operation in CorelDRAW. For more information about the CorelDRAW Toolbox, see “Using the Toolbox” on page 6.

Macromedia Freehand tool	CorelDRAW tool and description
	In Macromedia Freehand, the Pointer tool lets you select and position objects in the Drawing Page. In CorelDRAW you can perform this task using the Pick tool.
	In Macromedia Freehand, the Text tool lets you add line or paragraph text framed objects. In CorelDRAW you can perform this task using the Text tool.
	In Macromedia Freehand, the Rectangle tool lets you draw rectangles. In CorelDRAW you can perform this task using the Rectangle tool.



In Macromedia Freehand, the Pointer tool lets you select and position objects in the Drawing Page. In CorelDRAW you can perform this task using the Pick tool.



In Macromedia Freehand, the Text tool lets you add line or paragraph text framed objects. In CorelDRAW you can perform this task using the Text tool.



In Macromedia Freehand, the Rectangle tool lets you draw rectangles. In CorelDRAW you can perform this task using the Rectangle tool.



In Macromedia Freehand, the Polygon tool lets you draw multi sided polygon shapes and stars. In CorelDRAW you can perform this task using the Polygon tool.



In Macromedia Freehand, the Ellipse tool lets you draw ellipses and circles. In CorelDRAW you can perform this task using the Ellipse tool.



In Macromedia Freehand, the Line tool lets you draw straight lines. In CorelDRAW you can perform this task using the Freehand tool or the Bezier tool.



In Macromedia Freehand, the Freehand tool lets you draw freeform paths. In CorelDRAW you can perform this task using the Freehand tool.



In Macromedia Freehand, the Pen tool lets you draw a bezier path by connecting anchor points. In CorelDRAW you can perform this task using the Bezier tool.



In Macromedia Freehand, the Freeform tool lets you push and pull paths. In CorelDRAW you can perform this task using the Shape tool.



In Macromedia Freehand, the Knife tool lets you cut objects and paths. In CorelDRAW you can perform this task using the Knife tool or Eraser tool.



In Macromedia Freehand, the Rotate tool lets you rotate an object freely. In CorelDRAW you can perform this task using the Free Rotation tool.



In Macromedia Freehand, the Reflect tool lets you mirror or flip an object along an axis. In CorelDRAW you can perform this task using the Free Angle Reflection tool.



In Macromedia Freehand, the Scale tool lets you resize a shape freely. In CorelDRAW you can perform this task using the Free Scale tool.



In Macromedia Freehand, the Skew tool lets you skew an object. In CorelDRAW you can perform this task using the Free Skew tool.



In Macromedia Freehand, the Trace tool lets you trace a portion of an object. In CorelDRAW you can autotrace raster images using the Freehand tool.



In Macromedia Freehand, the Magnification tool lets you increase or decrease the magnification in your Drawing Window. In CorelDRAW you can perform this task using the Zoom tool.

Examining unique CorelDRAW tools

The CorelDRAW Toolbox contains some tools that are not available in either the Adobe Illustrator toolbox, the Macromedia Freehand toolbox or both. The following table describes these tools.

CorelDRAW Toolbox item	Description
	The Dimension tool lets you draw vertical, horizontal, slanted, or angular dimension lines.
	The Connector tool lets you join two objects with a line.
	The Graph Paper tool lets you draw a grid of lines similar to that on graph paper.
	The Interactive Fill tool lets you apply various fills using the mouse.
	The Interactive Transparency tool lets you apply transparencies to objects using the mouse.
	The Interactive Blend tool lets you blend two objects.
	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 that is placed on top of the object.
	The Interactive Extrude tool lets you apply a three-dimensional to objects.
	The Interactive Drop Shadow tool lets you apply a drop shadow to an object.

Comparing print technologies

Adobe Illustrator 7.0 and CorelDRAW 8 provide print options that are designed for both desktop and commercial printing; however, specific printing capabilities differ between the two applications. Some printing features are accessed in different ways, whereas other features (e.g., previewing a print job) operate differently. CorelDRAW also offers some unique printing features that give you more flexibility when generating output for your graphic designs.

Accessing print options

You access print options in Adobe Illustrator and CorelDRAW in different ways. In Adobe Illustrator, the print options are split between: the Print and Separations Setup dialog boxes. In CorelDRAW, all print options are contained in the Print dialog box, whereas the Page Setup dialog box contains only page settings.

The Print dialog box in CorelDRAW has a series of pages; the following list describes these pages and their contents:

- **General** — lets you specify the number of copies, the print range, and the printer setup options.
- **Layout** — lets you specify the page position of the image, tiling, bleed limit, signature layout style, and N-up format.
- **Separations** — lets you print color separations. You can accept default settings, or you can customize the frequency, angle, and overprint settings for each color used. You can also download fonts, convert spot to CMYK, and overprint black using the Separations page.
- **Prepress** — lets you specify print options for file information, page numbers, crop marks, registration marks, and calibration bars. You can also choose the Invert or Mirror options for paper/film settings.
- **PostScript** — lets you specify PostScript settings, including levels of compatibility, bitmap options, and screen frequency. You can also enable a check box to output color bitmaps in RGB.
- **Miscellaneous** — lets you specify color profiles, proofing options, and print job information options.

Previewing your work

Adobe Illustrator and CorelDRAW offer features that let you preview your work. With these features, you can get an idea of how your image will look when printed. These previewing features, however, differ in functionality and scope between the two applications.

Adobe Illustrator offers the Separations Setup dialog box that displays the image's position on the page.

In CorelDRAW, you can choose the Print Preview feature either from the File menu or by clicking the Print Preview button at the bottom of the Print dialog box. The Print Preview window shows you the image's position and size on the page, as well as the printers' marks (e.g., crop marks and color calibration bars). You can move from page to page in the Print Preview window, preview individual color separations, and view composite images.

A Toolbox at the side of the Print Preview window in CorelDRAW lets you view the image in several different modes and adjust the magnification of the page. You can also make changes to the image position with the toolbar at the top of the Print Preview window. For more information about previewing your print job in CorelDRAW, see “Previewing, sizing, and positioning a print job” on page 533.

Examining unique printing features

CorelDRAW provides some unique printing features, such as a highly flexible approach to printing multiple pages on a single sheet. Although any application with a Laser Writer print driver can perform a basic version of this feature, CorelDRAW offers more options and increased flexibility. If each page of your document is smaller than the sheet of paper on which it is printed or if you shrink the pages of a document, you can use the signature layout styles or N-up formats. Signature layout styles let you determine the order and orientation of each page on the printed sheet. N-up formats let you arrange several signature layouts on a single printed sheet or print multiple copies of the same signature layout on a single printed sheet. For more information about signature layout styles and N-up formats, see “Printing multiple pages on a single printed sheet” on page 529.

The Prepress page in the CorelDRAW Print dialog box provides two additional features: different styles of registration marks and densitometer scales. Registration marks are cross hairs or other marks that are used to align the film produced from color separations; CorelDRAW provides five styles of registration marks from which to choose. A densitometer scale is a series of gray boxes ranging from light to dark. These boxes can be used to test the density of halftone images. You can position the densitometer scale anywhere on the page, and you can customize the levels of gray that appear in each of the seven squares on the densitometer scale.

You can also print Hexachrome color separations in CorelDRAW. Hexachrome color is a method of extending the range of the four traditional process inks (cyan, magenta, yellow, and black) by using two additional inks (orange and green). For more information about using Hexachrome color, see “Creating color separations” on page 557.

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