

# COREL® DRAW™

11 WINDOWS®  
MACINTOSH®

also includes:  
Corel R.A.V.E.™ 2



USER GUIDE

## CorelDRAW® 11 and Corel R.A.V.E.™ 2 User Guide

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# Welcome

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

Corel R.A.V.E.™ makes it easy to create a wide range of animated graphics — from animated logos and navigation controls to interactive animated graphics for the Web. The Corel R.A.V.E. application combines the familiar graphics capabilities and user interface of CorelDRAW with a powerful yet easy-to-use set of animation features.

In this section, you'll learn about

- Corel Corporation
- registering Corel products
- customer support
- customer feedback
- documentation conventions
- installing and uninstalling applications
- getting Help
- using CorelTUTOR™
- VBA programming guide
- other resources

## About Corel Corporation

Founded in 1985, Corel Corporation ([www.corel.com](http://www.corel.com)) is a leading technology company that offers software for home and small business users, creative professionals and enterprise customers. With its headquarters in Ottawa, Canada, Corel's common stock trades on the Nasdaq Stock Market under the symbol CORL and on the Toronto Stock Exchange under the symbol COR.

## Registering Corel products

Registering Corel products is important. Registration provides you with timely access to the latest product updates, valuable information about product releases, and access

to free downloads, articles, tips and tricks, and special offers. Also, when you register a product, you are eligible for 30 days of free technical support.

You can register when you install the application, or choose to register at a later date.

You can register using the following methods:

- online — you can launch online registration if you are connected to the Internet when you install the Corel graphics application. If no Internet connection is detected, a list of options displays in a dialog box.
- FTP — you can complete the registration form and it will be sent automatically when an Internet connection is detected
- by phone — you can call the Corel Customer Service Center nearest you

For more information about registering a Corel product, visit [www.corel.com/support/register](http://www.corel.com/support/register).

## Customer support

Corel Support Services can provide you with prompt and accurate information about Corel product features, specifications, pricing, availability, services, and technical support.

### World Wide Web

For information about Corel technical and customer service support, visit [www.corel.com/support](http://www.corel.com/support).

Online service options	Description
Support newsgroups	Let you exchange information, tips and techniques with other users of Corel products
Corel® Knowledge Base	Lets you read, print, and download documents that contain answers to many technical questions or problems
FAQs	Answers common user questions
Downloads	Lets you download service packs, printer drivers, network administration guides, and product information

## Telephone

You can telephone Corel Support Services with your questions. For information about the levels of service that Corel provides, visit [www.corel.com/support](http://www.corel.com/support).

- **North America** — you can call Corel Support Services by calling our 1-800-772-6735 toll-free line. The hours of operation are 8:30 a.m. to 7:30 p.m., Monday to Friday, Eastern Standard Time (EST).
- **Outside North America** — you can call a local authorized Corel Support Services partner from a toll line at +353-1-213-3912.

## Mail, fax, and email

- You can send specific customer-service questions to Corel Support Services representatives by mail, fax, and email.

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

fax: 1-613-761-9176

email: [custserv@corel.com](mailto:custserv@corel.com)

## Customer feedback

If you have any comments or suggestions about CorelDRAW or Corel R.A.V.E., you can send them by email to [drawsuggest@corel.com](mailto:drawsuggest@corel.com).


If you have any comments or suggestions about the user guides, Help, and tutorials, you can send them by email to [drawdoc@corel.com](mailto:drawdoc@corel.com) or by regular mail to the address below. You can check the product Web site for the latest news, tips and tricks, and product upgrade information. Go to [www.corel.com](http://www.corel.com) and follow the links to the product site.

### Creative Products Documentation Manager

Corel Corporation  
1600 Carling Avenue  
Ottawa, Ontario, Canada  
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## Documentation conventions

The table below describes important conventions used in the user guide and Help.

Convention	Description	Examples
Menu ▶ Menu command	Click the menu item followed by the menu command.	Click <b>File ▶ Open</b> .
list box	A list of options that drops down when a user clicks the down arrow button.	Choose a value from the <b>Force field</b> list box on the property bar
Docker™ window (Windows®) palette (Mac® OS)	A window containing available commands and settings relevant to a specific tool or task.	Double-click the name of the group in the <b>Timeline</b> Docker window/palette.
Enter	<b>Enter</b> key (Windows) <b>Return</b> key (Mac OS)	Type a value in the <b>Eraser thickness</b> box on the property bar, and press <b>Enter</b> .
	A note contains information that is important to the preceding steps. It can describe conditions under which the procedure can be performed	You can't copy or clone a compound blend.  If you click the <b>Equal margins</b> button, you must specify values in the <b>Top/left margin</b> boxes.
	A tip contains suggestions for performing the preceding steps. It can present alternatives to the steps, and other benefits and uses of the procedure. You can also create a hyperlink using the <b>Internet</b> toolbar.	Trimming an object can reduce the drawing file size.

## Installing and uninstalling applications

The application's Installer makes it easy to install Corel applications and components. It lets you

- install any Corel applications included in your software package
- add components to a currently installed application
- refresh files and configurations of currently installed applications

## To install an application (Windows)

- 1 Close all applications.
- 2 Insert **Disc 1** in the CD drive.  
If the installation wizard does not start automatically, click **Start** on the Windows taskbar, and click **Run**. Type **D:\Setup**, where **D** is the letter that corresponds to the CD drive.
- 3 Follow the instructions in the installation wizard and enable one of the following options:
  - **Typical** — to install the default applications and components
  - **Compact** — to install the minimum components for the application to operate
  - **Custom** — to choose applications and writing tool components
- 4 Follow the instructions for installing and registering the application.

## To install an application (Mac OS)

- 1 Close all applications.
- 2 Insert **Disc 1** in the CD drive.
- 3 Double-click the CD icon on your desktop and double-click the Installer.
- 4 Enable one of the following options:
  - **Easy install** — to install the default applications and components
  - **Custom install** — to choose applications and components
- 5 Follow the instructions for installing and registering the application.

## To uninstall applications (Windows)

- 1 On the Windows taskbar, click **Start ▶ Control Panel**.  
If your operating system is Windows 2000 or earlier, click **Start ▶ Settings ▶ Control Panel**.
- 2 Double-click **Add/Remove programs**.
- 3 Choose a Corel application from the list, click **Change/Remove**, and enable the **Remove all** option in the dialog box.  
If your operating system is Windows 2000 or earlier, click the **Remove** button.
- 4 Follow the InstallShield® wizard instructions.



You can choose whether the uninstalling process will remove user files such as preference, presets, user-created fills, customized files, and so on.

## To uninstall applications (Mac OS)

- 1 Drag the Corel application folder to the **Trash**.
- 2 Open the **Users\username\Library** folder where you have Mac OS installed. (username is your Mac OS username: for example, jsmith)  
If you do not have a user profile, open **Users\Coreel\ Library**.
- 3 Drag the folder **Preferences\Coreel application Preferences** to the **Trash**. (application is the name of the installed Corel application: for example, **Corel® Graphics Suite 11 Preferences**.)

## Getting help

You can get help from the accompanying user guide or directly from the user interface. You can find topics from the **Help** by using the table of contents and search tool. You can also print a Help topic and display Help topics relevant to the task you are performing.

Help is available through the following tools:

- **User guide** — provides commonly used procedures and information. Chapters ending with **From here** tables contain keywords that direct you to additional topics in the Help.
- **Help** — lets you access Help directly from the user interface and find topics using the contents topic, index, and word/phrase search tool
- **ToolTips** — lets you access tips for using the application's icons and buttons. To view a ToolTip, position the cursor over an icon, button, or other application control.

## To use Help (Windows)

- 1 Click **Help** ► **Help topics**.
- 2 Click one of the following tabs:
  - **Contents** — lets you browse through topics in the Help
  - **Index** — lets you use the index to find a topic
  - **Search** — lets you search the full text of the Help for a particular word. For example, if you are looking for information about RGB color mode, you can type "RGB" to display a list of relevant topics.

## You can also

---

View Help for a dialog box	Click the <b>Help</b> button.
Print a specific Help topic	Open a Help topic, click the frame you want to print, and click <b>Print</b> .

---




You can also launch Help by pressing **F1**.

## To use Help (Mac OS)

- 1 Click **Help** ▶ **Help topics**.
- 2 Choose a section title from the contents list.
- 3 Click a topic title.

## You can also

---

Search for a topic by keyword	Type a keyword and click <b>Ask</b> .
Print a specific Help topic	Click <b>File</b> ▶ <b>Print</b> . Select a printer and printer options, then click <b>Print</b> .
View Help for a dialog box	Click the <b>Help</b> button  .

---



The Help button returns you to the Mac OS Help Center.



To return to the contents page from a procedure or overview topic, click the **Table of contents** button at the bottom of the page.

## Using CorelTUTOR

CorelTUTOR provides a series of project-based tutorials that introduce you to basic and advanced features of CorelDRAW and Corel R.A.V.E.

## To access CorelTUTOR

- Click **Help** ▶ **CorelTUTOR**.



## VBA Programming Guide

The new VBA Programming Guide for CorelDRAW 11 will help you automate tasks and create custom solutions using VBA in CorelDRAW. If you installed CorelDRAW using the Typical install, or a Custom install that included VBA, then the guide is accessible from a link in the CorelDRAW VBA Help.

## Other resources

Corel has training partnerships with other firms and provides professional services for its software products. The Corel Designer Web site contains a wealth of graphics resources.

## Training

### Corel Training Events

- Maximize your skills and attend a Corel® Training Camp — special intensive Training Events held throughout North America on various Corel products. All Training Camps are delivered by a Corel Training Specialist, with hands-on instruction, exercises and practical real-world projects. To look at the training schedule or to register for a course, please visit: [www.corel.com/trainingschedule](http://www.corel.com/trainingschedule).

### Corel Customized Training

- Once you have Corel applications running on your computers, our team of expert Corel Training Specialists can help you make the most of them with customized training, tailored to the specific needs of your work environment. We will help you develop a custom curriculum which is practical and relevant to the needs of your organization. For more information about Corel Customized Training, please visit [www.corel.com/customizedtraining](http://www.corel.com/customizedtraining).

### Corel Training Partners (CTP)

- A Corel® Training Partner is an independent, officially accredited local organization that provides training on Corel products and is located worldwide for your convenience. To find a partner near you, please visit [www.corel.com/trainingpartners](http://www.corel.com/trainingpartners).

### Corel Corporate Services

Corel is committed to getting you up and running quickly with time and money-saving workflow solutions. To simplify the process of deploying Corel applications across your organization, our Corporate Services department offers a

comprehensive range of cost-effective services to meet your technology needs. This group brings together highly skilled experts from across the company who are dedicated to providing top-notch solutions. Our knowledgeable team is ready to offer assistance through all stages of your project, from application development and support to software systems integration and training.

For more information on Corel Corporate Services, please contact [proservices@corel.com](mailto:proservices@corel.com).

### **Designer.com**

Users are encouraged to visit Corel's Designer.com Web site. It contains articles, tips and tricks, free clipart, product news, tutorials, and other graphics resources to inspire, excite, and illuminate. Visit [www.designer.com](http://www.designer.com) to start.



COREL<sup>®</sup>  
**DRAW**<sup>™</sup>





Becoming familiar with the terminology and workspace of CorelDRAW will help you easily follow this user guide's concepts and procedures.

In this section, you'll learn about

- CorelDRAW terminology and concepts
- CorelDRAW application window
- CorelDRAW workspace tools

## CorelDRAW terminology and concepts

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

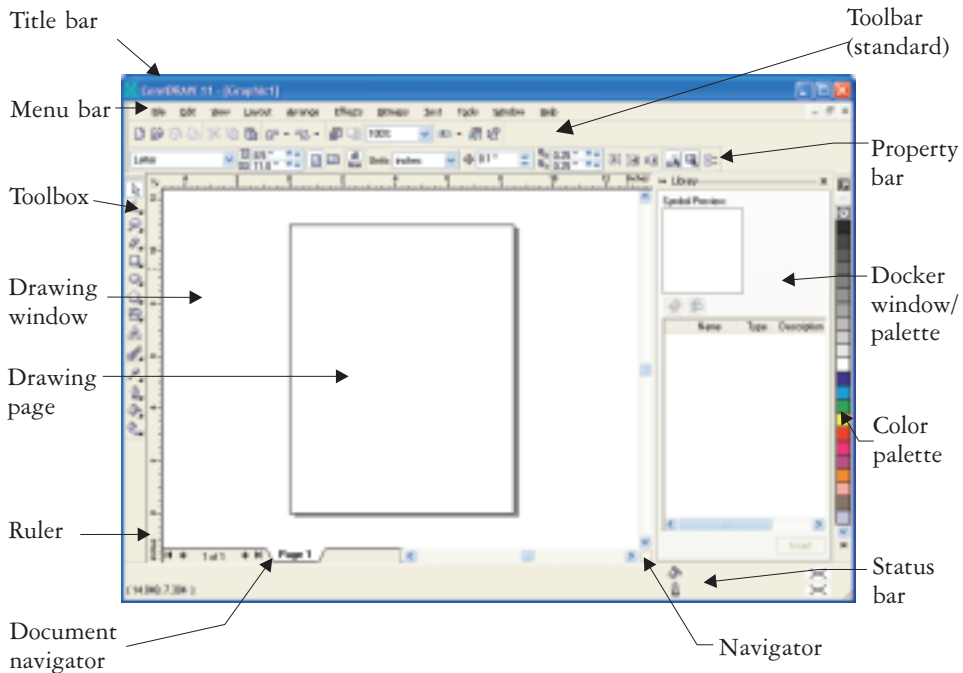
<b>Term</b>	<b>Description</b>
object	An element in a drawing such as an image, shape, line, text, curve, symbol, or layer.
drawing	The work you create in CorelDRAW: for example, custom artwork, logos, posters, and newsletters
Vector graphic	An image generated from mathematical descriptions that determine the position, length, and direction in which lines are drawn.
bitmap	An image composed of grids of pixels or dots
Docker window/palette	A window containing available commands and settings relevant to a specific tool or task
flyout	A button that opens a group of related tools or menu items

Term	Description
Artistic text	A type of text to which you can apply special effects, such as shadows
Paragraph text	A type of text to which you can apply formatting options, and which can be edited in large blocks

## CorelDRAW application window

When you launch CorelDRAW, the application window opens containing a drawing window. The rectangle in the center of the drawing window is the drawing page where you create your drawing. Although more than one drawing window can be opened, you can apply commands to the active drawing window only.

The CorelDRAW application window appears below. A description of its parts follows.



<b>Part</b>	<b>Description</b>
Menu bar	The area containing pull-down menu options
Property bar	A detachable bar with commands that relate to the active tool or object. For example, when the text tool is active, the text property bar displays commands that create and edit text.
Toolbar	A detachable bar that contains shortcuts to menu and other commands
Title bar	The area displaying the title of the currently open drawing
Rulers	Horizontal and vertical borders that are used to determine the size and position of objects in a drawing
Toolbox	A floating bar with tools for creating, filling, and modifying objects in the drawing
Drawing window	The area outside the drawing page bordered by the scroll bars and application controls
Drawing page	The rectangular area inside the drawing window. It is the printable area of your work area.
Color palette	(Windows) A dockable bar that contains color swatches.  (Mac OS) A free floating bar that contains the current color mode
Docker window/palette	A window containing available commands and settings relevant to a specific tool or task



Part	Description
Status bar	An area at the bottom of the application window that contains information about object properties such as type, size, color, fill, and resolution. The status bar also shows the current mouse position.
Document navigator	The area at the bottom left of the application window that contains controls for moving between pages and adding pages
Navigator	A button at the bottom-right corner (Windows) or bottom-left corner (Mac OS) that opens a smaller display to help you move around a drawing



To toggle between displaying and hiding the status bar, click **Window ▶ Toolbars ▶ Status bar**.

To toggle between displaying and hiding the rulers, see “To hide or display the rulers” on page 198.

## CorelDRAW workspace tools

Application commands are accessible through the menu bar, toolbars, toolbox, property bar, and Docker windows (Windows) and palettes (Mac OS). The property bar and Docker windows/palettes provide access to commands that relate to the active tool or current task. The property bar, Docker windows/palettes, toolbars, and toolbox can be opened, closed, and moved around your screen at any time.















You can customize many of these workspace tools to suit your needs. For more information, see “Customizing your application” in the **Help**.

## Standard toolbar

The standard toolbar contains buttons that are shortcuts to many of the menu commands.

On Windows, the standard toolbar displays by default. To display the standard toolbar on Mac OS, see “To customize toolbar position and display” in the **Help**.

For information about customizing the position, contents, and appearance of toolbars, see “Customizing toolbars” in the **Help**.

Click this button	To
	Start a new drawing
	Open a drawing
	Save a drawing
	Print a drawing
	Cut selected objects to the Clipboard
	Copy selected objects to the Clipboard
	Paste the Clipboard contents into a drawing
	Undo an action
	Restore an action that was undone
	Import a drawing
	Export a drawing
	Set a zoom level
	(Windows) Start Corel applications
	(Windows) Launch to Corel Graphics Community Web site

## More about toolbars

In addition to the standard toolbar, CorelDRAW has toolbars for specific kinds of tasks. For example, the **Text** toolbar contains commands relevant to using the **Text** tool. If you use a toolbar frequently, you can display it in the workspace at all times.

For information about customizing the position, contents, and appearance of toolbars, see “Customizing toolbars” in the **Help**.


The table below describes toolbars other than the standard toolbar.

<b>Toolbar</b>	<b>Description</b>
Text	Contains commands for formatting and aligning text
Zoom	Contains commands for zooming in and out of a drawing page by specifying percentage of original view, clicking the <b>Zoom</b> tool, and selecting a page view
Internet	Contains commands for Web-related tools for creating rollovers and publishing to the Internet
Print merge	Contains commands for print merge items that combine text with a drawing such as creating and loading data files, creating data fields for variable text, and inserting print merge fields
Transform	Contains commands for skewing, rotating, and mirroring objects
(Windows) Visual Basic® for Applications	Contains commands for editing, testing, and running VBA commands





(Mac OS) You can add or remove toolbars by clicking **Window** ▶ **Toolbars** ▶ **More toolbars**, and enabling or disabling a toolbar.

## Exploring the toolbox

Flyouts open to display a set of related CorelDRAW tools. A small arrow in the bottom, right corner of a toolbox button indicates a flyout: for example, the **Shape edit** flyout . Clicking a flyout arrow opens a set of related tools. Clicking and dragging the grab handles at the end of the flyout sets the flyout in its expanded form.

The following table provides descriptions of the flyouts and tools in the CorelDRAW toolbox.






## Flyouts

Flyout	Description
Shape edit 	Lets you access the <b>Shape</b> , <b>Knife</b> , <b>Eraser</b> , <b>Smudge brush</b> , <b>Roughen brush</b> , and <b>Free transform</b> tools
Zoom 	Lets you access the <b>Zoom</b> and <b>Hand</b> tools
Curve 	Lets you access the <b>Freehand</b> , <b>Bézier</b> , <b>Artistic media</b> , <b>Polyline</b> , <b>Pen</b> , <b>3 point curve</b> , <b>Dimension</b> , and <b>Interactive connector</b> tools
Rectangle 	Lets you access the <b>Rectangle</b> and <b>3 point rectangle</b> tools
Ellipse 	Lets you access the <b>Ellipse</b> and <b>3 point ellipse</b> tools
Object 	Lets you access the <b>Graph paper</b> , <b>Polygon</b> , and <b>Spiral</b> tools
Perfect Shapes™ 	Lets you access the <b>Basic shapes</b> , <b>Arrow shapes</b> , <b>Flowchart shapes</b> , <b>Star shapes</b> , and <b>Callout shapes</b> tools

## Flyout

## Description

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Interactive tools 	Lets you access the <b>Interactive blend</b> , <b>Interactive contour</b> , <b>Interactive distortion</b> , <b>Interactive envelope</b> , <b>Interactive extrude</b> , <b>Interactive drop shadow</b> , and <b>Interactive transparency</b> tools
Eyedropper 	Lets you access the <b>Eyedropper</b> and <b>Paintbucket</b> tools
Outline 	Lets you access the <b>Color Docker</b> window/palette, <b>Outline pen</b> and the <b>Outline color</b> dialog boxes, and a selection of outlines of various widths
Fill 	Lets you access the <b>Color Docker</b> window/palette, <b>Fill color</b> , <b>Fountain fill</b> , <b>Pattern fill</b> , <b>Texture fill</b> , and <b>PostScript® fill</b> dialog boxes
Interactive fill 	Lets you access <b>Interactive fill</b> and <b>Interactive mesh fill</b> tools

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## Tools

### Tool

### Description



The **Pick** tool lets you select and size, skew, and rotate objects.



The **Shape** tool lets you edit the shape of objects.





























The **Knife** tool lets you cut through objects.













The **Eraser** tool lets you remove areas of your drawing.

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Tool	Description
	The <b>Smudge brush</b> tool lets you distort an vector object by dragging along its outline and distort a bitmap by dragging outside its path.
	The <b>Roughen brush</b> tool lets you distort the outline of a vector object by dragging along the outline.
	The <b>Free transform</b> tool lets you transform an object by using the <b>Free rotation</b> , <b>Angle rotation</b> , <b>Scale</b> , and <b>Skew</b> tools.
	The <b>Zoom</b> tool lets you change the magnification level in the drawing window.
	The <b>Hand</b> tool lets you control which part of the drawing is visible in the drawing window
	The <b>Pen</b> tool lets you draw curves one segment at a time.
	The <b>Polyline</b> tool lets you draw lines and curves in preview mode.
	The <b>Freehand</b> tool lets you draw single line segments and curves.
	The <b>Bézier</b> tool lets you draw curves one segment at a time.
	The <b>3 point curve</b> tool lets you draw a curve by defining the start, end, and center points.
	The <b>Artistic media</b> tool provides access to the <b>Brush</b> , <b>Sprayer</b> , <b>Calligraphic</b> , and <b>Pressure</b> tools.
	The <b>Dimension</b> tool lets you draw vertical, horizontal, slanted, or angular dimension lines.
	The <b>Interactive connector</b> tool lets you join two objects with a line.

Tool	Description
	The <b>Rectangle</b> tool lets you draw rectangles and squares.
	The <b>3 point rectangle</b> tool lets you draw a rectangle by dragging to create the rectangle baseline and clicking to define its height.
	The <b>Ellipse</b> tool lets you draw ellipses and circles.
	The <b>3 point ellipse</b> tool lets you draw an ellipse by dragging to create the center line of the ellipse and clicking to define its height.
	The <b>Polygon</b> tool lets you draw symmetrical polygons and stars.
	The <b>Spiral</b> tool lets you draw symmetrical and logarithmic spirals.
	The <b>Graph paper</b> tool lets you draw a grid of lines similar to that on graph paper.
	The <b>Basic shapes</b> tool lets you choose from a full set of shapes, including hexagram, a smiley face, and a right-angle triangle.
	The <b>Arrow shapes</b> tool lets you draw arrows of various shape, direction, and number of heads.
	The <b>Flowchart shapes</b> tool lets you draw flowchart symbols.
	The <b>Star shapes</b> tool lets you draw ribbon objects and explosion shapes.
	The <b>Callout shapes</b> tool lets you draw callouts and labels.
	The <b>Text</b> tool lets you type words directly on the screen as artistic or paragraph text.

Tool	Description
	The <b>Interactive blend</b> tool lets you blend two objects.
	The <b>Interactive contour</b> tool lets you apply a contour to an object.
	The <b>Interactive distortion</b> tool lets you apply a Push or Pull distortion, a Zipper distortion, or a Twister distortion to an object.
	The <b>Interactive envelope</b> tool lets you distort an object by dragging the nodes of the envelope.
	The <b>Interactive extrude</b> tool lets you apply the illusion of depth to objects.
	The <b>Interactive drop shadow</b> tool lets you apply a drop shadow to an object.
	The <b>Interactive transparency</b> tool lets you apply transparencies to objects.
	The <b>Eyedropper</b> tool lets you select a fill from an object on the drawing window.
	The <b>Paintbucket</b> tool lets you fill an object on the drawing window after selecting a fill using the Eyedropper tool.
	The <b>Interactive fill</b> tool lets you apply various fills.

## Property bar

The property bar displays the most commonly used functions that are relevant to the active tool or to the task you're performing. Although it looks like a toolbar, the property bar content changes depending on the tool or task.

For example, when you click the **Text** tool in the Toolbox, the property bar displays



only text-related commands. In the example below, the property bar displays text, formatting, alignment, and editing tools.

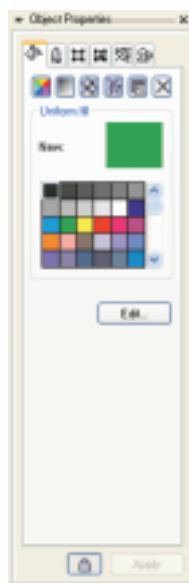


You can customize the contents and position of the property bar to suit your needs. For more information, see “Customizing the property bar” in the **Help**.

## Docker windows and palettes

Docker windows (Windows) and palettes (Mac OS) display the same type of controls as a dialog box, such as command buttons, options, and list boxes. Unlike most dialog boxes, you can keep Docker windows/palettes open while working on a document, so you can readily access the commands to experiment with different effects.

*An example is the **Object properties** Docker window/palette. When this Docker window/palette is open, you can click an object in the drawing window and view formatting, dimensions, and other properties of the object.*



In Windows, Docker windows can be either docked or floating. Docking a Docker window attaches it to the edge of the application window. Undocking a Docker window detaches it from other parts of the workspace, so it can be easily moved around. You can also collapse Docker windows to save screen space.

## Status bar

The status bar displays information about selected objects (such as color, fill type, and outline, cursor position, and relevant commands).

See “Customizing the status bar” in the **Help** for information about customizing the contents and appearance of the status bar.

The graphic below shows some of the information displayed in a status bar.





Drawings are the work that you create and edit in CorelDRAW.

In this section, you'll learn about

- starting and opening drawings
- finding and inserting drawing content
- exploring the basic features of CorelDRAW
- working with templates
- undoing, redoing, and repeating actions
- accessing drawing information
- zooming and panning
- previewing a drawing
- backing up and recovering files
- saving drawings
- closing drawings and quitting CorelDRAW

## Starting and opening drawings

CorelDRAW lets you start a new drawing from a blank page, from a template, or from an existing drawing.

A blank page gives you the freedom to specify every aspect of a drawing.

A template *provides* you with a starting point and leaves the amount of customization up to you. The templates included with CorelDRAW are available under the following categories:

- Full page
- Label
- Envelope
- Side-fold
- Web

For more information about creating and using templates, see “Working with templates” on page 31.

Basing a new drawing on an existing drawing lets you reuse objects and page settings. CorelDRAW lets you open existing drawings saved to a variety of file formats. For information about the file formats you can open in CorelDRAW, see “File formats” in the **Help**.

### To start CorelDRAW (Windows)

- Click **Start** ▶ **All programs** ▶ **Corel Graphics Suite 11** ▶ **CorelDRAW 11**.

### To start CorelDRAW (Mac OS)

- Double-click the CorelDRAW 11 icon in the application’s folder.



You can also start CorelDRAW from the Dock after you have installed the application. To add the CorelDRAW icon to the Dock, drag the icon from the application folder to the left of the line in the Dock.

### To start a drawing

To	Do the following
Start a drawing from a blank page	Click <b>File</b> ▶ <b>New</b> .
Start a drawing from a CorelDRAW template	Click <b>File</b> ▶ <b>New from template</b> , click the tab that corresponds to the template category you want, and choose a template.



You can specify a layout style (template) by clicking **Layout** ▶ **Page setup** (Windows) or **Document setup** (Mac OS), clicking **Layout** in the list of categories, and choosing a layout style from the **Layout** list box.

### To open a drawing

- 1 Click **File** ▶ **Open**.
- 2 Locate the folder where the drawing is stored.
- 3 Click a filename.
- 4 Click **Open**.



You can also open a drawing by clicking the **Open** button on the toolbar. (Windows) If you want to view a thumbnail of the drawing, click the **Preview** check box.

## Finding and inserting drawing content

You can use clipart, photo images, and sounds stored on the Corel content CDs or that are available online. The digital content manual contains pictures of the graphics available on the CD and their folder locations.

In Windows, you can also access online images directly from Corel on the Web through the **Scrapbook™** Docker window.

Mac OS X has a content find-and-search tool, Sherlock®. You can use Sherlock to browse for images using the thumbnail views or use keywords to search for content on the CDs.

## To browse for clipart, photos, and sound files (Windows)

- 1 Click **Window ▶ Dockers ▶ Scrapbook ▶ Browse**.
- 2 Insert a Corel contents CD into the CD drive.
- 3 Double-click an icon in the CD list and navigate to a folder.

### You can also

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Browse for files on your computer or network

Double-click the **Desktop** icon, and navigate to a folder.

Browse for images online

Click the **Content on the Web** button.

---



To browse for images online, you must be connected to the Internet.



To change your browsing view in the **Scrapbook** Docker window, click the flyout arrow, click **View**, and choose a view type.

## To browse for clipart, photos, and sound files (Mac OS)

- 1 Insert a Corel contents CD into the CD drive.
- 2 Double-click the **Sherlock** icon in the Dock.
- 3 Double-click the contents CD icon in the list of disks.
- 4 Choose the folder you want to browse.



When you insert a CD into the CD drive, the CD's icon displays on your desktop. You can double-click it to browse through the content folders inside.

For help on using Sherlock, click **Help** ▶ **Sherlock Help** from the desktop.

## To search for clipart, photos, and sound files (Windows)

- 1 Click **Window** ▶ **Dockers** ▶ **Scrapbook** ▶ **Search**.
- 2 Insert a Corel contents CD into the CD drive.
- 3 Type a keyword in the **Search for text** box.

## To search for clipart, photos, and sound files (Mac OS)

- 1 Insert a Corel contents CD into the CD drive.
- 2 Double-click the **Sherlock** icon in the Dock.
- 3 Enable the CD icon check box in the list of disks.
- 4 Enable the **File names** option.
- 5 Type a keyword.
- 6 Click the magnifying glass button.



For help on using Sherlock, click **Help** ▶ **Sherlock Help**.

## To insert an image or sound file

- Drag the image or sound file to the drawing window.

## Exploring the basic features of CorelDRAW

CorelDRAW has a virtually unlimited number of tools and capabilities to help you create drawings. The following table provides you with the basic features of CorelDRAW so that you can get started.

<b>For information on</b>	<b>See</b>
Drawing lines	“Working with lines, outlines, and brush strokes” on page 43
Drawing shapes	“Drawing shapes” on page 63
Creating and manipulating objects	“Working with objects” on page 73
Adding color to objects	“Filling objects” on page 135
Adding text to a drawing	“Adding and formatting text” on page 215
Creating drawings for use on the World Wide Web	“Publishing to the Web” on page 271
Printing drawings	“Printing” on page 277

## Working with templates

A template is a set of styles and page layout settings that govern the layout and appearance of a drawing. You can use the default template (**CorelDRAW.cdt**) or choose one from a wide variety of preset templates available in the application. For information on starting a drawing from a template, see “Starting and opening drawings” on page 27. If none of the preset templates meets your requirements, you can create a template based on styles you create or styles taken from other templates. For example, if you regularly put together a newsletter, you can save the newsletter’s page layout settings and styles to a template.

When you create a new drawing using a template, CorelDRAW formats the page using the template’s page layout settings and loads the template’s styles in the new file.

You can edit a template by making changes to the styles, page layout settings, or objects. For example, if you like a template but want to make it more versatile, you can add styles that you’ve created or that you’ve taken from another template. For information on setting page layout options, see “Specifying the page layout” on page 193. After you have started a drawing with a template, you can load a different template. When you load a template, you can choose to load just the styles or to load styles, page layout settings, and objects.





*Use a template for drawing designs that you want to reuse.*

## To create a template

- 1 Click **File** ► **Save as**.
- 2 Type a name in the **File name** list box (Windows) or **Save as** box (Mac OS).
- 3 Choose **CDT - CorelDRAW** template from the **Save as type** list box (Windows) or choose **CorelDRAW** template from the **Format** list box (Mac OS).
- 4 Locate the folder where you want to save the template.
- 5 Click **Save**.

## To edit a template

- 1 Click **File** ► **Open**.
- 2 Choose **CDT - CorelDRAW** template from the **Files of type** list box (Windows) or **CorelDRAW** template from the **Show** list box (Mac OS).
- 3 Locate the folder where the template is stored.
- 4 Double-click a template filename.
- 5 In the **Open** dialog box, enable the **Open for editing** check box.



To preview the contents of a template, enable the **Preview** check box.

## To create a new file based on a saved template

- 1 Click **File** ▶ **Open**.
- 2 Choose **CDT - CorelDRAW template** from the **Files of type** list box (Windows) or **CorelDRAW template** from the **Show** list box (Mac OS).
- 3 Locate the folder where the template is stored.
- 4 Double-click a template filename.
- 5 Enable the **New from template** check box in the **Open** dialog box.  
If, in addition to loading the template's styles, you also want to load page settings and objects, enable the **With contents** check box.

## To load styles from another template

- 1 Click **Tools** ▶ **Graphic and text styles**.
- 2 On the **Graphic and text styles** Docker window/palette, click the flyout button and click **Template** ▶ **Load**.
- 3 Locate the folder where the template is stored.
- 4 Click a template whose styles you want to load.
- 5 Click **Open**.



When you use the **Load** command, only the styles are loaded. CorelDRAW does not use the template's page layout settings and does not add objects saved with the template to the page.

## Undoing, redoing, and repeating actions

You can undo the actions you perform in a drawing, starting with the most recent action. If you don't like the result of undoing an action, you can redo it. Reverting to the last saved version of a drawing also lets you remove one or more actions. Certain actions applied to objects, such as stretching, filling, moving and rotating, can be repeated to create a stronger visual effect.

Customizing the undo settings lets you increase or decrease the number of actions that you can undo or redo.

## To undo, redo, and repeat actions

To	Do the following
Undo an action	Click <b>Edit</b> ▶ <b>Undo</b> .
Redo an action	Click <b>Edit</b> ▶ <b>Redo</b> .
Undo or redo a series of actions	Click <b>Tools</b> ▶ <b>Undo Docker</b> (Windows) or <b>Undo palette</b> (Mac OS). Choose the action that precedes all the actions you want to undo, or choose the last action you want to redo.
Revert to the last saved version of a drawing	Click <b>File</b> ▶ <b>Revert</b> .
Repeat an action	Click <b>Edit</b> ▶ <b>Repeat</b> .



When you undo a series of actions, all actions listed below the action you choose are undone.

When you redo a series of actions, the action you choose and all actions listed between it and the last undone action are redone.



You can repeat an action on another object or group of objects by selecting the object or objects and clicking **Edit** ▶ **Repeat**.

You can also undo or redo actions by clicking the **Undo** button or **Redo** button on the **Standard** toolbar.

## To customize the undo settings

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CoreIDRAW 11** ▶ **Preferences**.
- 2 In the **Workspace** list of categories, click **General**.
- 3 Type a value in the **Regular** box.



The value you specify is limited only by your computer's memory resources. The higher the value you specify, the greater the demand on memory resources.

## Accessing drawing information

You can access as you work drawing information such as the number of pages, fonts, text statistics, color models used, and the types of objects the drawing contains. You can also save and print this information.

### To access drawing information

- 1 Click **File** ► **Document info**.
- 2 Enable the check box beside each type of information you want to display.

#### You can also

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Save drawing information	Click <b>Save as</b> , specify a folder and filename, and click <b>Save</b> .
Print drawing information	Click <b>Print</b> .

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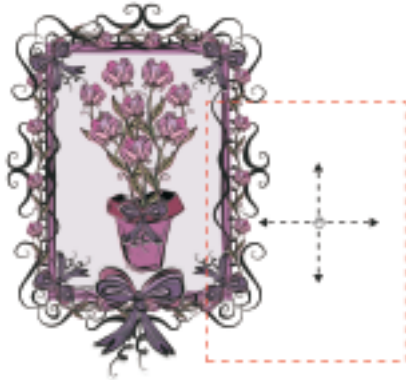
## Zooming and panning

You can change the view of a drawing by zooming in to get a closer look or by zooming out to see more of the drawing. You can experiment with a variety of zoom options to determine the amount of detail you want.

Another way in which you can view specific areas of a drawing is by panning. When you work at high magnification levels or with large drawings, you may not be able to see the whole drawing. Panning lets you view areas that aren't displayed by moving the page around in the drawing window.









While you are panning, you can zoom in and out. While you are zooming, you can pan. This saves you from having to alternate between the two tools.

You can specify zooming and panning settings to zoom in quickly to detailed parts of a drawing and zoom out to the larger context.



*You can use the Hand tool to pan around a large image and view particular areas.*

## To zoom

- 1 Open the **Zoom** flyout, and click the **Zoom** tool .
- 2 On the property bar, click one of the following buttons:
  - **Zoom in** 
  - **Zoom out** 
  - **Zoom to selected** 
  - **Zoom to all objects** 
  - **Zoom to page** 
  - **Zoom to page width** 
  - **Zoom to page height** 




The **Zoom to selected** button is available only when you select one or more objects before you open the **Zoom** flyout.



When you are not editing text, you can also access the **Zoom** tool by pressing the **Z** key.

You can also zoom in by double-clicking or dragging anywhere in the drawing window using the **Hand** tool. To zoom out, double right-click (Windows) or **Control** + double-click (Mac OS) in the drawing window.

## To pan in the drawing window

- 1 Open the Zoom flyout, and click the **Hand** tool  .
- 2 Drag in the drawing window until the area you want to view displays.



When you are not editing text, you can also access the **Hand** tool by pressing the **H** key.

If you want to pan in the drawing window while zoomed in on the drawing, click the **Navigator** button in the bottom-right (Windows) or bottom-left (Mac OS) corner of the drawing window or the **N** key. Drag the cross-haired pointer around in the Navigator pop-up window.

## To establish default settings for zooming and panning

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Toolbox**, and click **Zoom, Hand tool**.
- 3 To specify what you want the **Zoom** or **Hand** tool to do when you right-click (Windows) or **Control** + click (Mac OS) it in the drawing window, enable one of the following options:
  - **Zoom out** — zooms out by a factor of two
  - **Context menu** — displays a menu of commands that you can choose from to zoom to a specific level

## Previewing a drawing

You can preview a drawing to see how it will look when you print and export. When you preview a drawing, only the objects on the drawing page and in the immediate area of the drawing window are displayed, and you can see all layers that are set to print in Object Manager. If you want to get a closer look at specific objects in a drawing, you can select and preview them, too. When you preview selected objects, the rest of the drawing is hidden.

Before you preview a drawing, you can specify the preview mode. The preview mode affects the speed at which your preview displays and the amount of detail that is displayed in the drawing window.

You can also display consecutive pages on the screen at the same time and create objects that span two pages.

## To preview a drawing

- Click **View** ▶ **Full-screen preview**.

Click anywhere on the screen, or press any key, to return to the application window.

## To preview selected objects

- 1 Select the objects.
- 2 Click **View** ▶ **Preview selected only**.
- 3 Click **View** ▶ **Full-screen preview**.  
Click anywhere on the screen, or press any key, to return to the application window.



If **Preview selected only** mode is enabled and no objects are selected, **Full screen preview** displays a blank screen.



You can disable **Preview selected only** mode after you return to the application window by clicking **View** ▶ **Preview selected only**.

## To specify the full screen preview mode

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**
- 2 In the **Workspace** list of categories, click **Display**.
- 3 Enable one of the following options:
  - **Use normal view** — displays the drawing without PostScript fills or high-resolution bitmaps without using anti-aliasing
  - **Use enhanced view** — displays the drawing with or without PostScript fills with anti-aliasing to display a sharper version of your drawing



You can have PostScript fills display when you preview in Enhanced mode by enabling the **Show PostScript fills in enhanced view** check box.

## To view facing pages

- 1 Do one of the following:

- (Windows) Click **Layout** ▶ **Page setup**.
  - (Mac OS) Click **Layout** ▶ **Document setup**.
- 2 In the **Document**, **Page** list of categories, click **Layout**.
  - 3 Enable the **Facing pages** check box.
  - 4 Choose one of the following settings from the **Start on** list box:
    - **Left side** — starts the document on a left-facing page
    - **Right side** — starts the document on a right-facing page



You will be unable to view facing pages if the document uses a Tent card or Top fold card layout style, or if it contains multiple page orientations. The Left side option is only available for the Full page and Book layout styles.

## Backing up and recovering files

CorelDRAW can automatically save backup copies of drawings and prompt you to recover them when you restart the program in the event of a system error.

The auto backup feature saves drawings that you have open and modified. During any working session with CorelDRAW, you can set the time interval for automatically backing up files and specify where you want the files to be saved: by default in your temporary folder or to a specified folder.

You can recover backed-up files from the temporary or specified folder when you restart CorelDRAW. Backup files are stored in either the temporary or the user-specified folder. You can choose not to recover a file; however, that file is automatically erased when you shut down the program normally.

### To specify auto backup settings

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the **Workspace** list of categories, click **Save**.
- 3 Enable the **Auto-backup every** check box, and choose a value from the **Minutes** list box.
- 4 In the **Always back-up to** area, enable one of the following options:
  - **Temporary folder** — lets you save an auto backup file in the temporary folder
  - **Specific folder** — lets you specify the folder for an auto backup file



## You can also

---

Create a backup file every time you save	Enable the <b>Make backup on save</b> check box.
Disable auto backup	Choose <b>Never</b> from the <b>Minutes</b> list box.

---



Auto backup files are named **auto\_backup\_of\_filename** and can be saved in any folder you specify. Backup files created when you save a drawing are named **backup\_of\_filename** and are always stored in the same folder as the original drawing.

All open or modified files other than CorelDRAW file format (.cdr) will be backed up as .cdr files.



You can cancel the creation of an auto backup file by pressing **Esc** while saving is in progress.

## To recover a backup file

- 1 Restart CorelDRAW.
- 2 Click **OK** in the **File recovery** dialog box.
- 3 Save and rename the file in specified folder.



Recovered files are named **GraphicsX.cdr**, where **X** is the numbered increment.

If you click **Cancel**, CorelDRAW ignores the backup file and deletes it when you exit the program normally.

## Saving drawings

CorelDRAW lets you save a drawing as you work.

CorelDRAW offers advanced options that let you assign notes, keywords, and thumbnails to drawings so that you can find them more easily.

By default, drawings are saved to the CorelDRAW file format (.cdr); however, advanced save options let you choose other file formats as well. If you are saving a drawing to use in another application, you must save it to a file format that is supported by that application. You can also save a drawing to a previous version of CorelDRAW. For information about file formats supported by CorelDRAW, see “File

formats” in the **Help**. For information about saving files to other formats, see “Exporting files” on page 313.

A drawing can also be saved as a template, allowing you to create other drawings with the same properties. CorelDRAW lets you save selected objects in a drawing. If you are working on a large drawing, saving only the selected objects reduces the file size, which can decrease the time it takes to load the drawing. For information about saving a drawing as a template, see “Working with templates” on page 31.

## To save a drawing

- 1 Click **File** ► **Save as**.
- 2 Locate the folder where you want to save the file.
  - If you want to save notes or keywords with the file, type them in the corresponding box.
  - If you want to specify advanced settings, click **Advanced**, and specify the settings you want in the **Preferences** (Windows) dialog box or **Options** (Mac OS) dialog box.
- 3 Type a filename in the **File name** list box (Windows) or **Save as** list box (Mac OS).
- 4 Click **Save**.



If you want to save changes made to a previously saved drawing, click **File** ► **Save**.

You can also save a drawing by clicking the **Save** button on the **Standard** toolbar.

## To save only selected objects

- 1 Select the objects.
- 2 Click **File** ► **Save as**.
- 3 Enable the **Selected only** check box.
- 4 Locate the folder where you want to save the file.
- 5 Type a filename in the **File name** list box (Windows) or **Save as** box (Mac OS).
- 6 Click **Save**.

## Closing drawings and quitting CorelDRAW

You can close one or all open drawings at any time before quitting CorelDRAW.

### To close drawings

To close	Do the following
One drawing	Click <b>File</b> ▶ <b>Close</b> .
All open drawings	Click <b>Window</b> ▶ <b>Close all</b> .

### To quit CorelDRAW

- Do one of the following:
  - (Windows) Click **File** ▶ **Exit**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences** ▶ **Quit CorelDRAW 11**.



You can also quit CorelDRAW by pressing **Alt + F4** (Windows) or **Command + Q** (Mac OS).

### From here

For more information about	(Windows) In the Help index, see (Mac OS) In the Help Viewer, type
Working with views	views

# Working with lines, outlines, and brush strokes

---

# 3

CorelDRAW lets you add lines and brush strokes using a variety of techniques and tools. After you draw lines or apply brush strokes to lines, you can format them. You can also format the outlines that surround objects.

CorelDRAW provides preset objects that you can spray along a line.

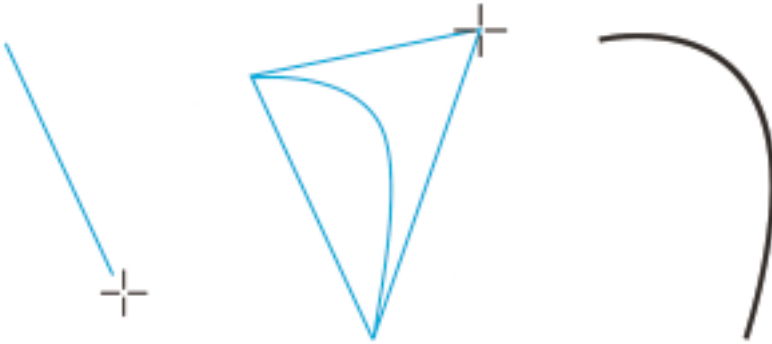
You can create flow and dimension lines in drawings.

In this section, you'll learn about

- drawing lines
- formatting lines and outlines
- closing multiple line segments
- applying brush strokes
- spraying objects along a line
- drawing flow and dimension lines

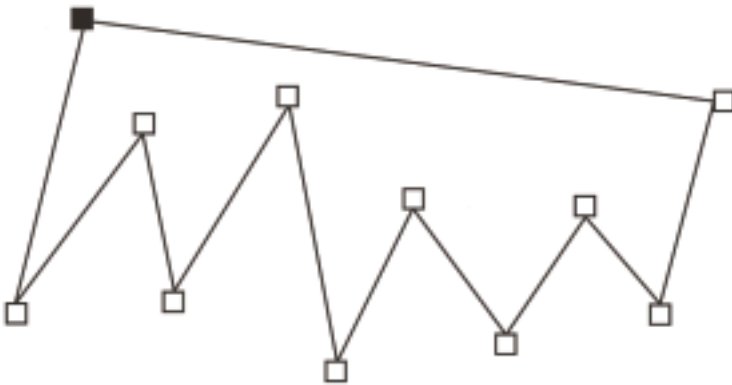
## Drawing lines

CorelDRAW lets you draw all kinds of different lines, from curved or straight lines to calligraphic lines. You can create a line that is drawn as you drag the mouse. You can create segments that are straight and curved in the same line. You can draw straight or curved segments and then add one node at a time. You can also draw a curve by specifying width and height.

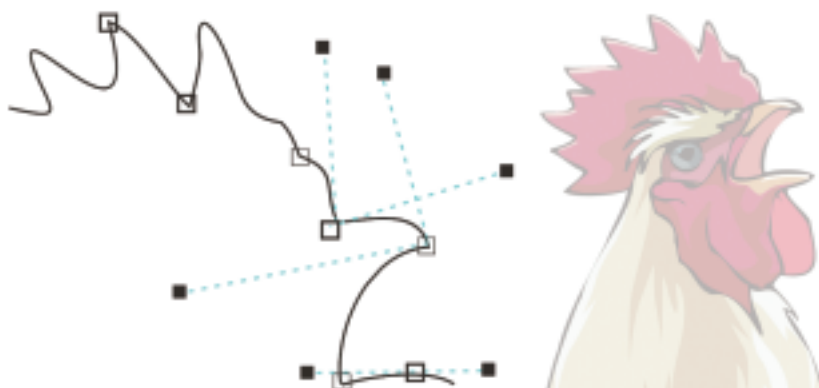


*You can draw a curved line by specifying its width (left), specifying its height (center), and clicking the page (right).*

Some lines have nodes and control points that you can manipulate to shape lines as you draw. For information about node types, see “Working with curve objects” on page 93.



*You can draw multi-segment lines using the Bézier tool, by clicking each time you want the line to change direction.*



*You can draw curves using the Bézier tool, by dragging the control points at the ends of the Bézier curve.*

CorelDRAW also lets you simulate the effect of a calligraphic pen when you draw lines. Calligraphic lines vary in thickness according to the direction of the line and the angle of the pen nib. By default, calligraphic lines display as closed shapes drawn with a pencil. You can control the thickness of a calligraphic line by changing the angle of the line you draw in relation to the calligraphic angle you choose. For example, when the line you draw is perpendicular to the calligraphic angle, the line is at the maximum thickness specified by the pen width. Lines drawn at the calligraphic angle, however, have little or no thickness.



*A calligraphic pen allows you to draw lines of various thicknesses.*

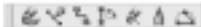

CorelDRAW lets you create pressure-sensitive lines which vary in thickness. You can create this effect using the mouse or a pressure-sensitive pen and graphics tablet. Both methods result in lines with curved edges and varying widths along a path. For information about using a pressure-sensitive pen on a graphics tablet, see the manufacturer's instructions.



*A flower drawn by using three different artistic media lines: calligraphic lines (left); pressure-sensitive lines (center) and the lineflat preset line (right).*


CorelDRAW provides preset lines that let you create thick strokes in a variety of shapes. After you draw a calligraphic or preset line, you can apply a fill to it as you would to any other object. For information about applying fills, see “Filling objects” on page 135.

## To draw a straight line

- 1 Open the Curve flyout  , and click the Freehand tool  .
- 2 Click where you want to start the line, and click where you want to end it.

### You can also


Draw a straight line using the Polyline tool

Open the Curve flyout and click the Polyline tool  . Click where you want to start the line segment, and click where you want to end the line segment. Double-click to end the line.


## You can also

---

Draw a straight line using the **Bézier** tool

Open the **Curve** flyout, and click the **Bézier** tool . Double-click where you want to start the line. Click where you want to end the line. If you want to create a multi-segment line, double-click where you want the new line segment to end. Continue this process until the line has as many segments as you want. Double-click to finish the line.

Draw a straight line using the **Pen** tool

Open the **Curve** flyout, and click the **Pen** tool . Double-click where you want to start the line. Click where you want to end the line. If you want to create a jagged line, double-click where you want the new line segment to end. Continue this process until the line has as many segments as you want. Double-click to finish the line.

Preview a line using the **Pen** tool

Click the **Preview mode** button in the property bar. Click on the drawing page, and release the mouse button. Move the mouse and click to finish the line.

Add line segments to an existing line

Using the **Freehand** tool, click the end node of a selected line, and click where you want the new segment to end.

Create a closed shape from two or more connected lines

Using the **Freehand** tool, click the end node of a line with two segments. Click the first node.



You can constrain a line created with the **Freehand** tool to a straight vertical or horizontal line by holding down **Ctrl** (Windows) or **Shift** (Mac OS) while you drag. You can change the angle of this line by clicking **Tools** ► **Options** (Windows) or clicking **CorelDRAW 11** ► **Preferences** (Mac OS), clicking **Edit** in the **Workspace** list of categories and changing the value in the **Constrain Angle** box.



## To draw a curved line

- 1 Open the **Curve** flyout, and click the **Freehand** tool.
- 2 Click where you want to start the curve, and drag to draw the line.

### You can also

---

Draw a curved line using the **Polyline** tool

Open the **Curve** flyout, and click the **Polyline** tool. Click where you want to start the curve, and drag across the drawing page. Double-click to finish the curve.

---

Draw a curved line using the **Bézier** tool

Open the **Curve** flyout and click the **Bézier** tool. Click where you want to place the first node, and drag the control point in the direction you want the curve to bend. Release the mouse button. Position the cursor where you want to place the next node, and drag the control point to create the curve you want. Double-click to finish the curve.

---

Draw a curved line using the **Pen** tool

Open the **Curve** flyout and click the **Pen** tool. Click where you want to place the first node, and drag the control point in the direction you want the curve to bend. Release the mouse button. Position the cursor where you want to place the next node, and drag the control point to create the curve you want. Double-click to finish the curve.

---




Preview a line using the **Pen** tool

Click the **Preview mode** button in the property bar. Click on the drawing page, and release the mouse button. Move the mouse and click to finish the curve.


---





You can erase a portion of a curved freehand line by holding down **Shift** and dragging backward over the line before releasing the mouse button.

You can close an object with the **Shape** tool  by opening the **Shape** flyout  and selecting a shape. Click on the **Auto-close curve** button  .

## To draw a curve by specifying width and height

- 1 Open the **Curve** flyout, and click the **3 point curve tool**  .
- 2 Click where you want to start the curve, and drag to where you want the curve to end.
- 3 Release the mouse button, and click where you want the center of the curve to be.

## To draw a calligraphic line

- 1 Open the **Curve** flyout, and click the **Artistic media tool**  .
- 2 Click the **Calligraphic** button  on the property bar.
- 3 Type a value in the **Calligraphic angle** box on the property bar.  
If you want to smooth the edges of the line, type a value in the **Freehand smoothing** box on the property bar.
- 4 Drag until the line is the shape you want.  
If you want to set the width of the line, type a value in the **Artistic media tool width** box on the property bar.




The width you set is the maximum line width. The angle of the line you draw in relation to the calligraphic angle determines the line's actual width.



You can also access calligraphic lines by clicking **Effects** ► **Artistic media**, and specifying the settings you want on the **Artistic media** Docker window/palette.

## To draw a pressure-sensitive line

- 1 Open the **Curve** flyout, and click the **Artistic media tool**.
- 2 Click the **Pressure** button  on the property bar.  
If you want to smooth the edges of the line, type a value in the **Freehand smoothing** box on the property bar.
- 3 Drag until the line is the shape you want.  
If you want to change the width of the line, type a value in the **Artistic media tool width** box on the property bar.




The width you set represents the line's maximum width. The amount of pressure you apply determines the line's actual width.



If you are using the mouse, press the **Up arrow** or **Down arrow** to simulate the pen pressure, and, therefore, the width of the line.

You can also access pressure-sensitive lines by clicking **Effects ▶ Artistic media**.

## To draw a preset line

- 1 Open the **Curve** flyout, and click the **Artistic media** tool.
- 2 Click the **Preset** button  on the property bar.
- 3 Choose a preset line shape from the **Preset stroke list** list box.  
If you want to smooth the edges of the line, type a value in the **Freehand smoothing** box on the property bar.
- 4 Drag until the line is the shape you want.  
If you want to set the width of the line, type a value in the **Artistic media tool width** box on the property bar.

## Formatting lines and outlines

You can change the appearance of both lines and outlines. For example, you can specify their color, width, style, corner shape, and cap style. You can also remove a line or outline, and you can create your own line or outline style by adjusting the distance between segments in the line.

CorelDRAW also lets you copy the color of an outline to other objects, convert outlines to objects so that you can apply a fill to them, and create calligraphic outlines. For more information about filling objects, see “Filling objects” on page 135.

You can also add arrowheads to lines and curves. In addition, you can create new arrowhead and edit current or new ones.

Setting the miter limit for outlines lets you specify at what angle a sharp corner is either mitered (pointed) or beveled (squared-off).

## To specify line and outline settings

- 1 Select an object.
- 2 Open the **Outline tool** flyout  , and click the **Outline pen dialog** button  .
- 3 Specify the settings you want.

## You can also

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Create a line style

Click **Edit style**, and move the slider in the **Edit line style** dialog box. By clicking the boxes to the left of the slider, you can specify the placement and frequency of the dots in the new line style you create.

---

Edit a line style





Choose a line style from the **Style** list box, and click **Edit style**. Create a line style in the **Edit line style** dialog box, and click **Replace**.

---



You can change the outline color of a selected object by choosing a color from the color picker in the **Outline pen** dialog box.

## To copy outline color to another object

- 1 Open the **Eyedropper** flyout , and click the **Eyedropper** tool .
- 2 Click the **Eyedropper fill/outline** button  on the property bar.
- 3 Click the edge of the object whose outline you want to copy.
- 4 Open the **Eyedropper** flyout, and click the **Paintbucket** tool .
- 5 Click the edge of the object to which you want to copy the outline.



The color of copied outlines may not exactly match the color of the original outline. In some cases, the closest equivalent RGB color displays.

The outline's thickness is not copied.

## To convert an outline to an object

- 1 Select an object.
- 2 Click **Arrange** ▶ **Convert outline to object**.

## To create a calligraphic outline

- 1 Select an object.
- 2 Open the **Outline** tool flyout, and click the **Outline pen dialog** button.
- 3 In the **Corners** area, enable a corner style option.
- 4 Type a value in the **Stretch** box.
- 5 Type a value in the **Angle** box.

## To remove an object's outline

- 1 Select and object.
- 2 Open the **Outline** tool flyout, and click **No Outline**  .



You can also remove an object's outline by selecting the object and right-clicking (Windows) or holding **Option** and clicking (Mac OS) **No Color** on the color palette.

## To add an arrowhead

- 1 Select a line or curve.
- 2 Open the **Outline** tool flyout, and click the **Outline pen dialog** button.
- 3 In the **Arrows** area, open the **Start Arrowhead** picker, and click a line-ending shape.
- 4 Open the **End Arrowhead** picker, and click a line-ending shape.

### You can also

---

Create an arrowhead

In the **Arrows** area, click **Options** ▶ **New**. Drag the side handles and hollow nodes to shape the arrowhead.

---

Edit an arrowhead

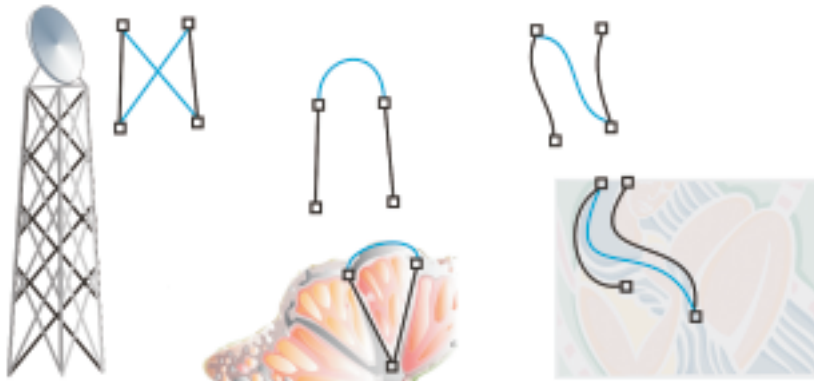
Using the **Pick** tool, select an object with an arrowhead. Click the **Arrowhead Selector** button on the property bar. In the arrowhead picker, click **Other**. In the **Edit** window, drag the side handles and hollow nodes to shape the arrowhead.

---

## Closing multiple line segments


You can quickly create a closed object from line segments by selecting which lines you want to connect and the shape of the connecting line.

You can connect lines using the closest nodes between lines. The connecting line can be either straight or curved. You can also connect lines using the start to end nodes of the lines. The end node of the first selected line connects directly with the starting node of the closest selected line. The connected lines will take on the properties of the first line selected.



*Closing multiple line segments can be the starting point for more complex drawings.*

### To close multiple line segments

- 1 Hold down **Shift**, and select each object using the **Pick tool** .
- 2 Click **Arrange** ► **Close path**, and click one of the following:
  - Closest nodes with straight lines
  - Closest nodes with curvy lines
  - Start to end with straight lines
  - Start to end with curvy lines



Text and blends fitted to a path will be detached from their paths when the paths are closed.



You can also connect the subpaths in a group of objects.

You can also select lines by marquee selecting. If the lines are marquee selected, the properties from the top object on a layer are used. To see which object is the top one, open the **Object manager** Docker window/palette by clicking **Window ▸ Dockers / Palette ▸ Object manager**.

## Applying brush strokes


CorelDRAW lets you apply a variety of preset brush strokes, ranging from strokes with arrowheads to ones that are filled with rainbow patterns. When you draw a preset brush stroke, you can specify some of its attributes. For example, you can change the width of a brush stroke and specify its smoothness.



*The above image was created using different kinds of brush strokes and widths.*

You can also create custom brush strokes using an object or a group of vector objects. When you create a custom brush stroke, you can save it as a preset.

### To apply a preset brush stroke

- 1 Open the **Curve** flyout, and click the **Artistic media** tool.
- 2 Click the **Brush** button  on the property bar.
- 3 Choose a brush stroke from the **Brush stroke** list box.

If you want to smooth the edges of the brush stroke, type a value in the **Freehand smoothing** box on the property bar.


4 Drag until the stroke is the shape you want.

If you want to set the width of the stroke, type a value in the **Artistic media tool width** box on the property bar.



If you have access to a brush stroke that isn't listed in the **Brush stroke** list box, you can apply it by clicking the **Browse** button on the property bar, and locating the brush stroke file.

### To create a custom brush stroke

- 1 Select an object or a set of grouped objects.
- 2 Open the **Curve** flyout, and click the **Artistic media** tool.
- 3 Click the **Brush** button on the property bar.
- 4 Click the object or grouped objects.
- 5 Click the **Save artistic media stroke** button  on the property bar.
- 6 Type a filename for the brush stroke.
- 7 Click **Save**.



You can create custom brush strokes by clicking **Effects** ▶ **Artistic media**, and specifying the settings you want on the **Artistic media** Docker window/palette.

### Spraying objects along a line

CorelDRAW lets you spray a series of objects in a line. Besides graphic and text objects, you can import bitmaps and symbols to spray along a line.

You can control how a sprayed line appears by adjusting the spacing between objects, so they are closer or farther apart from each other. You can also vary the order of objects in the line. For example, if you are spraying a series of objects that includes a star, a triangle, and a square, you can change the spray order so that the square appears first, followed by the triangle and then the star. CorelDRAW also lets you shift the position of objects in a sprayed line by rotating them along the path or offsetting them in one of four different directions: alternating, left, random, or right.

For instance, you can choose a left offset direction to align the objects you spray to the left of the path.







*Objects sprayed along a curved line. The objects and line can be edited after the objects have been sprayed.*


You can also create a new spraylist with objects of your own.

## To spray a line


- 1 Open the **Curve** flyout, and click the **Artistic media** tool.
- 2 Click the **Sprayer** button  on the property bar.
- 3 Choose a spraylist from the **Spraylist file**  list box on the property bar.  
If the spraylist you want is not listed, click the **Browse** button on the property bar to select the folder in which the file is located.
- 4 Drag to draw the line.

### You can also

Adjust the number of objects sprayed at each spacing point

Type a number in the top box of the **Dabs/spacing of objects to be sprayed**  box on the property bar.

Adjust the spacing between dabs

Type a number in the bottom box of the **Dabs/spacing of objects to be sprayed**  box on the property bar.

## You can also

---

Set the spray order	Choose a spray order from the <b>Choice of spray order</b> list box on the property bar.
Adjust the size of spray objects	Type a number in the top box of the <b>Size of objects to be sprayed</b> box on the property bar.
Increase or decrease the size of the spray objects as they progress along the line	Type a number in the bottom box of the <b>Size of objects to be sprayed</b> box on the property bar.
Reset a spraylist to its saved settings	Click the <b>Reset values</b> button on the property bar.


---




Increasing the value for the size of spray objects along the line causes objects to become larger as they are distributed along the path.

Spraylists that have more complex objects use more system resources. CorelDRAW takes longer to produce lines using complex objects, and these objects will increase the file size. Using symbols for each group in the list can help reduce file size and demands on your system. For more information about creating symbols, see “Working with symbols” on page 127.

## To rotate the lines that you spray

- 1 Select the spraylist that you want to adjust.
- 2 Click the **Rotation** button  on the property bar.
- 3 Type a value between zero and 360 in the **Angle** box on the property bar.  
If you want each object in the spray to rotate incrementally, enable the **Use Increment** check box and type a value in the **Increment** box.
- 4 Enable one of the following options:
  - **Path based** — rotates objects in relation to the line.
  - **Page based** — rotates objects in relation to the page.
- 5 Press **Enter**.

## To offset the lines that you spray

- 1 Select a spraylist.
- 2 Click the **Offset** button  on the property bar.
- 3 Enable the **Use offset** check box to offset objects from the path of the line sprayed.  
If you want to adjust the offset distance, type a new value in the **Offset** box.
- 4 Choose an offset direction from the **Offset direction** list box.  
If you want to alternate between the left and right of the line, choose **Alternating**.

## To create a new spray list

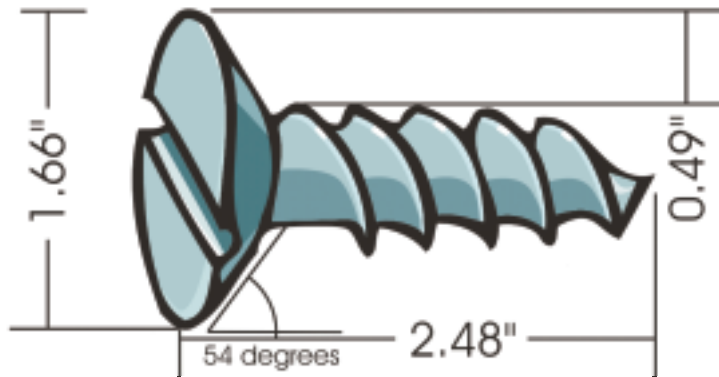
- 1 Click **Effects** ▶ **Artistic media**.
- 2 Select an object, a set of grouped objects, or a symbol.
- 3 Click the **Save** button on the **Artistic media** Docker window/palette.
- 4 Enable **Object sprayer**.
- 5 Click **OK**.
- 6 Type a filename in the **Filename** box.
- 7 Click **Save**.

## Drawing flow and dimension lines

You can draw flow lines in flowcharts and organizational charts to connect chart shapes. Objects stay connected by these lines even when you move one or both objects. For information about drawing flowchart shapes, see “Drawing pre-defined shapes” on page 71.


You can draw callout lines that label and draw attention to objects.

You can also draw dimension lines to indicate the distance between two points in a drawing or the size of objects. Dimension lines and the measurements shown on the lines change with an object. You can also set how dimension lines are displayed.



*Dimension lines can show the sizes of parts of an object.*



## To draw a flow line between two or more objects

To	Do the following
Draw a flow line	Open the <b>Curve</b> flyout, and click the <b>Interactive connector</b> tool  . Drag from a node on one object to a node on another object.
Move a flow line	Select a flow line using the <b>Shape</b> tool, and drag the node you want to move.



You can draw a flow line horizontally or vertically, but not both. All angles in a flow line, therefore, are right angles.

## To draw a callout

- 1 Open the **Curve** flyout, and click the **Dimension** tool .
- 2 Click the **Callout** tool  on the property bar.
- 3 Click where you want the first callout segment to start.
- 4 Click where you want the second segment to start.
- 5 Type the callout text.



When you draw a callout line, a text cursor displays at the end of line, showing where to type a label for the object.

## To draw a dimension line

- 1 Open the **Curve** flyout, and click the **Dimension** tool.
- 2 On the property bar, click one of the following buttons:
  - **Vertical dimension** tool
  - **Horizontal dimension** tool
  - **Slanted dimension** tool
- 3 Click the start and end points of the dimension line.
- 4 Click where you want to place the dimension text.

### You can also


---

Draw an angular dimension line

Open the **Curve** flyout, and click the **Dimension** tool. Click the **Angular dimension** tool button on the property bar. Click where you want the two lines that measure the angle to intersect. Click where you want the first line to end, and click where you want the second line to end. Click where you want the angle's label to appear.

---

## To set how the dimension units are displayed

- 1 Select a dimension line.
- 2 Click the **Show units for dimension** button  on the property bar.
- 3 On the property bar, choose options from the following list boxes:
  - **Dimension style**
  - **Dimension precision**
  - **Dimension units**

## You can also

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Specify the position of the dimension units	Click the <b>Text position drop down</b> button on the property bar, and click a text position.
---	---

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Change the point size and font of the dimension units	Select a dimension line. Click <b>Text ▶ Format text</b> . Choose a font style from the <b>Font</b> list box, and type a value in the <b>Size</b> box.
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## From here

### For more information about

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Setting the miter limit

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**(Windows)** In the **Help index**, see  
**(Mac OS)** In the **Help Viewer**, type

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## Drawing shapes

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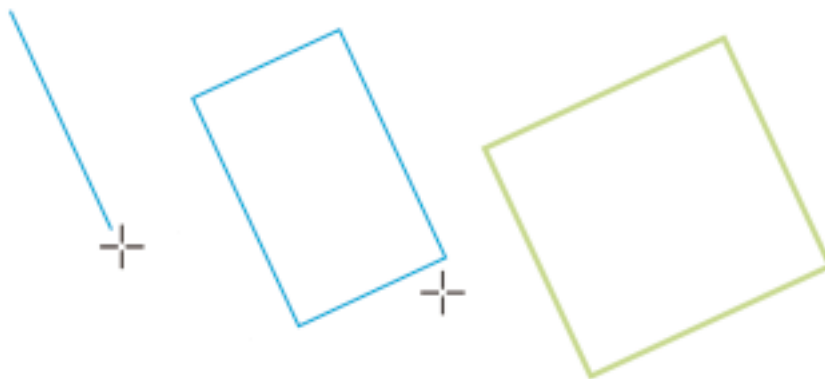
CorelDRAW lets you draw basic shapes, which you can modify using special effects and reshaping tools.

In this section, you'll learn about

- drawing rectangles and squares
- drawing ellipses, circles, arcs, and wedges
- drawing polygons and stars
- drawing spirals
- drawing grids
- drawing predefined shapes

### Drawing rectangles and squares



CorelDRAW lets you draw rectangles and squares. You can draw a rectangle or square by dragging diagonally or draw a rectangle by specifying the width and height. After you draw a rectangle or square, you can reshape it by rounding one or more of its corners.



*You can create a rectangle by drawing its baseline first and then its height.*



## To draw a rectangle or a square by dragging diagonally



To draw	Do the following
A rectangle	Open the <b>Rectangle</b> flyout  , and click the <b>Rectangle</b> tool  . Drag in the drawing window until the rectangle is the size you want.
A square	Open the <b>Rectangle</b> flyout, and click the <b>Rectangle</b> tool. Hold down <b>Ctrl</b> (Windows) or <b>Shift</b> (Mac OS), and drag in the drawing window until the square is the size you want.



You can draw a rectangle from its center outward by holding down **Shift** (Windows) or **Option** (Mac OS) as you drag. You can also draw a square from its center outward by holding down **Shift + Ctrl** (Windows) or **Shift + Option** (Mac OS) as you drag.

You can draw a rectangle that covers the drawing page by double-clicking the **Rectangle** tool.

## To draw a rectangle by specifying height and width

- 1 Open the **Rectangle** flyout , and click the **3-point rectangle** tool .
- 2 In the drawing window point to where you want to start the rectangle, drag to draw the width, and release the mouse button.
- 3 Move the mouse perpendicularly to the first line to draw the height, and click.  
To adjust the size of the rectangle, type values in the **Object(s) size** boxes on the property bar.



Hold down **Ctrl** (Windows) or **Shift** (Mac OS) as you drag to constrain the angle of the baseline to 15 degree increments.

## To round the corners of a rectangle or a square

- 1 Click a rectangle or a square.
- 2 Type values in the **Corner roundness** areas on the property bar.



To apply the same roundness to all corners click the **Round corners together** button on the property bar.

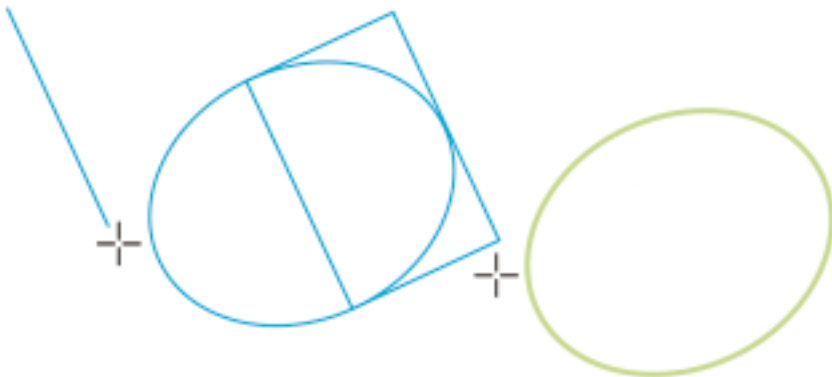
To set default corner roundness do one of the following:

(Windows) Click **Tools** ▶ **Options**, double-click **Toolbox** in the list of categories, click **Rectangle tool**, and move the slider or enter a number.

(Mac OS) Click **CorelDRAW 11** ▶ **Preferences**, double-click **Toolbox** in the list of categories, click **Rectangle tool**, and move the slider or enter a number.

## Drawing ellipses, circles, arcs, and wedges

You can draw an ellipse or circle by dragging diagonally or you can draw an ellipse by specifying its width and height. You can draw an ellipse or circle and change the shape into an arc or wedge.





*You can draw an ellipse by first drawing its centerline and then its height.*

## To draw an ellipse or a circle by dragging diagonally

### To draw

An ellipse

### Do the following

Open the **Ellipse** flyout  , and click the **Ellipse** tool  . Drag in the drawing window until the ellipse is the shape you want.

### To draw

### Do the following


A circle

Open the Ellipse flyout, and click the **Ellipse** tool. Hold down **Ctrl** (Windows) or **Shift** (Mac OS), and drag in the drawing window until the circle is the size you want.



You can draw an ellipse or a circle from its center outward by holding down **Shift** (Windows) or **Option** (Mac OS) as you drag.

## To draw an ellipse by specifying width and height

- 1 Open the **Ellipse** flyout, and click the **3-point ellipse** tool .
- 2 Click in the drawing window, drag to draw the centerline of the ellipse, and release the mouse button.  
The centerline runs through the center of the ellipse and determines its width.
- 3 Move the mouse perpendicularly to the first line to define the height of the ellipse, and click.

## To draw an arc or a wedge

### To draw

### Do the following

An arc

Open the **Ellipse** flyout and click the **Ellipse** tool. Click the **Arc** button on the property bar. Drag in the drawing window until the arc is the shape you want.


A wedge

Open the **Ellipse** flyout and click the **Ellipse** tool. Click the **Wedge** button on the property bar. Drag in the drawing window until the wedge is the shape you want.

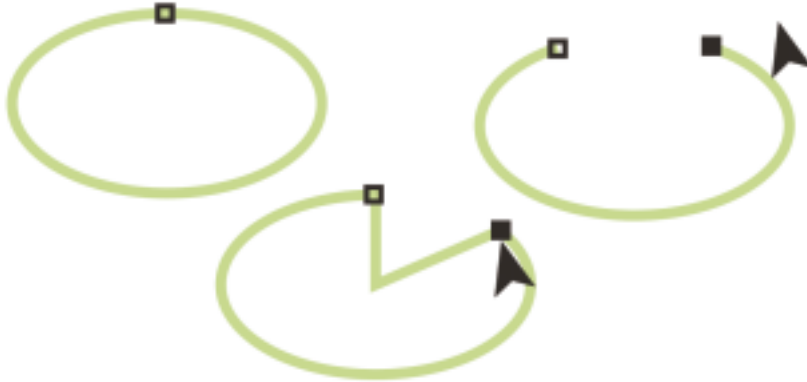


To draw an arc, the ellipse or circle must have an outline.



You can change the direction of a selected arc or a wedge by clicking the Clockwise/counterclockwise arcs or pies button  on the property bar.

You can constrain the movement of the node to 15-degree increments by holding down **Ctrl** (Windows) or **Shift** (Mac OS) as you drag.



*To create a wedge, drag the node of the ellipse (left) to the inside of the ellipse (center). To create an arc, drag the node to the outside of the ellipse (right).*

## Drawing polygons and stars

CorelDRAW lets you draw polygons and stars and then reshape them. For example, you can convert polygons to stars and stars to polygons, change the number of sides on a polygon or the number of points on a star, and sharpen the points of a star.



You can also draw a predefined star shape. For more information, see “To draw a predefined shape” on page 71.

### To draw a polygon or a star

#### To draw

A polygon


#### Do the following

Open the Object flyout  , click the Polygon tool  , and drag in the drawing window until the polygon is the size you want.

## To draw

## Do the following

A star

Open the **Object** flyout, click the **Polygon** tool, drag in the drawing window until the polygon is the size you want, and click the **Star** button  on the property bar.



You can draw a polygon or a star from its center by holding down **Shift** (Windows) or **Option** (Mac OS) as you drag.



You can draw a symmetrical polygon or a star by holding down **Ctrl** (Windows) or **Shift** (Mac OS) as you drag.

## To reshape a polygon or a star

### To

### Do the following

Change a polygon to a star or a star to a polygon

Select a polygon or a star, and click the **Polygon** button  or the **Star** button  on the property bar.

Reshape a polygon or a star

Click the **Shape** tool and click a node on the object. Drag the node to change the object's shape.

Change the number of sides of a polygon or number of points on a star

Select a polygon or star, type a value in the **Number of points on polygon** box on the property bar, and press **Enter**.

Sharpen a star's points

Select a star, and move the **Sharpness** slider on the property bar.



The **Sharpness** slider displays only if the star you select has at least seven points. The sensitivity of the slider increases with the number of points.



You can change a polygon to a star by selecting the polygon, clicking a node on one of the sides, and dragging toward the center of the polygon.




## Drawing spirals

You can draw two types of spirals: symmetrical and logarithmic. Symmetrical spirals expand evenly so that the distance between each revolution is equal. Logarithmic spirals expand with increasingly larger distances between revolutions. You can set the rate by which a logarithmic spiral expands outward.



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

### To draw a spiral

- 1 Open the **Object** flyout, and click the **Spiral** tool .
- 2 Type a value in the **Spiral revolutions** box on the property bar.
- 3 On the property bar, click one of the following buttons:
  - **Symmetrical spiral** 
  - **Logarithmic spiral** 

If you want to change the amount by which the spiral expands as it moves outward, move the **Spiral expansion** slider.

- 4 Drag diagonally in the drawing window until the spiral is the required size.





You can draw a spiral from its center outward by holding down **Shift** (Windows) or **Option** (Mac OS) as you drag.

You can also draw a spiral with even horizontal and vertical dimensions by holding down **Ctrl** (Windows) or **Shift** (Mac OS) as you drag.

## Drawing grids

You can draw a grid and set the number of rows and columns. A grid is a grouped set of rectangles, which you can break ungroup.


### To draw a grid

- 1 Open the **Object** flyout, and click the **Graph paper** tool  .
- 2 Type values in the top and bottom portions of the **Graph paper columns and rows** box  on the property bar.  
The value you type in the top portion specifies the number of columns; the value in the bottom portion specifies the number of rows.
- 3 Point to where you want the grid to display.
- 4 Drag diagonally to draw the grid.



If you want to draw the grid from its center point outward, hold down **Shift** (Windows) or **Option** (Mac OS) as you drag; if you want to draw a grid with square cells, hold down **Ctrl** (Windows) or **Shift** (Mac OS) as you drag.

### To ungroup a grid

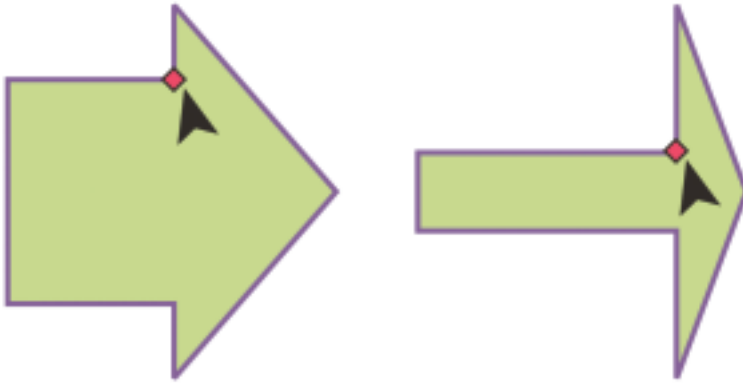
- 1 Select a grid using the **Pick** tool  .
- 2 Click **Arrange** ▶ **Ungroup**.



You can also break apart a grid by clicking the **Ungroup** button on the property bar.

## Drawing predefined shapes







You can draw predefined shapes, such as basic shapes, arrows, stars, and callouts using the Perfect Shapes collection. Basic shapes, arrows shapes, star shapes, and callout shapes have glyphs which let you modify their appearance.



*You can drag a glyph to alter a shape.*

You can add text to the inside or outside of the shape. For example, you might want to put a label inside a flowchart symbol or a callout.

### To draw a predefined shape

- 1 Open the **Perfect Shapes** flyout  , and click one of the following tools:
  - **Basic shapes** 
  - **Arrows shapes** 
  - **Flowchart shapes** 
  - **Star shapes** 
  - **Callout shapes** 
- 2 Open **Perfect Shapes** picker on the property bar, and click a shape.
- 3 Drag in the drawing window until the shape is the size you want.



Perfect Shapes can be modified like any other shapes.





## To modify a predefined shape

- 1 Select a shape with a glyph.
- 2 Drag a glyph until the shape is the form you want.



The right-angle, heart, lightning bolt, explosion, and flowchart shapes do not have glyphs.

## To add text to a predefined shape

- 1 Click the **Text** tool .
- 2 Position the cursor inside the shape's outline until it changes to a **Text cursor** box .
- 3 Type and format the font inside the shape.

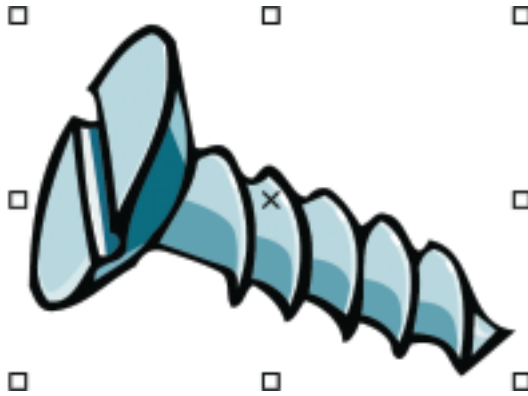
Working with objects is an essential part of creating drawings.

In this section, you'll learn about

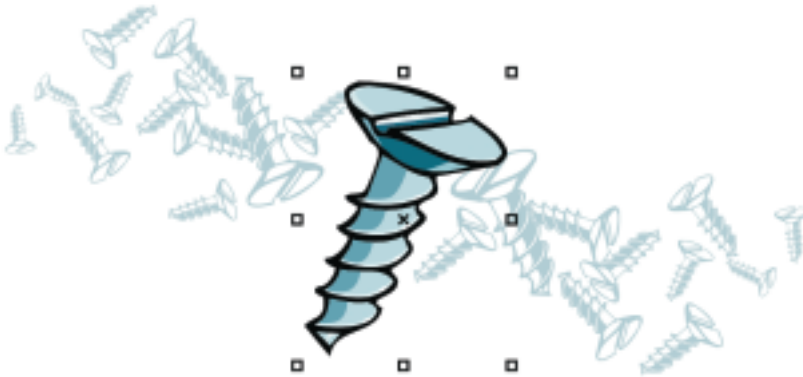
- selecting objects
- copying, duplicating, and deleting objects
- positioning objects
- aligning, distributing, and snapping objects
- changing the order of objects
- sizing and scaling objects
- rotating and mirroring objects
- grouping objects
- combining objects

## Selecting objects

Before you can change an object, you must select it. You can select visible objects, hidden objects, and a single object in a group or a nested group, and each object in the order in which it is created. You can also select all objects at once and deselect objects.



*A bounding box displays around a selected object, and an “X” appears at its center.*



*You can select a single object from a group.*


## To select objects

### To select

An object

Multiple objects

### Do the following

Click an object using the **Pick tool**  .

Hold down **Shift**, and click each object you want to select.

To select	Do the following
An object, starting with the first object created and moving toward the last object created	Press <b>Shift + Tab</b> until a selection box displays around the object you want to select.
An object, starting with the last object created and moving toward the first object created	Press <b>Tab</b> until a selection box displays around the object you want to select.
All objects	Click <b>Edit ▶ Select all ▶ Objects</b> .
An object in a group	Hold down <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS), and click an object in a group.
An object in a nested group	Hold down <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS), and click an object you want to select until a selection box displays around it.
A hidden object	Hold down <b>Alt</b> (Windows) or <b>Option</b> (Mac OS), and click the topmost object until a selection box displays around the hidden object you want to select.
Multiple hidden objects	Hold down <b>Shift + Alt</b> (Windows) or <b>Shift + Option</b> (Mac OS) and click the topmost object until a selection box displays around the hidden objects you want to select.
A hidden object in a group	Hold down <b>Ctrl + Alt</b> (Windows) or <b>Command + Option</b> (Mac OS) and click the topmost object until a selection box displays around the hidden object you want to select.



The status bar displays a description of each hidden object as you select it.



You can also select one or more objects by dragging around the object or objects using the **Pick** tool.

## To deselect objects

To deselect	Do the following
All objects	Click the <b>Pick</b> tool, and click a blank space in the drawing window.
A single object in multiple selected objects	Hold down <b>Shift</b> , and click the object using the <b>Pick</b> tool.

## Copying, duplicating, and deleting objects

CorelDRAW gives you two ways to copy objects. You can cut or copy an object to place it on the Clipboard and paste it into a drawing or you can duplicate an object. Cutting an object to the Clipboard removes it from the drawing; copying an object to the Clipboard leaves the original in the drawing; and duplicating an object places a copy directly in the drawing window, not the Clipboard. Duplicating is also faster than copying and pasting. You can copy entire objects or their properties.

When you no longer need an object, you can delete it.

### To cut or copy an object

- 1 Select an object.
- 2 Click **Edit**, and click one of the following:
  - **Cut**
  - **Copy**



You can also cut or copy an object by right-clicking (Windows) or **Control** + clicking (Mac OS) the object, and clicking **Cut** or **Copy**.


### To paste an object into a drawing

- Click **Edit** ▶ **Paste**.

### To duplicate an object

- 1 Select an object.
- 2 Click **Edit** ▶ **Duplicate**.

## To copy an object's fill properties to another object

- 1 Click the **Pick** tool  .
- 2 Select the object to which you want to copy another object's properties.
- 3 Click **Edit** ▶ **Copy properties from**.
- 4 Enable any of the following check boxes:
  - **Outline pen**
  - **Outline color**
  - **Fill**
  - **Text properties**
- 5 Click **OK**.
- 6 Click the object whose properties you want to copy.



(Windows) You can copy fill or outline properties or both by clicking an object with the right-mouse button, dragging over another object, and choosing **Copy fill here**, **Copy outline here**, or **Copy all properties**.

## To delete an object

- 1 Select an object.
- 2 Click **Edit** ▶ **Delete** (Windows) or **Clear** (Mac OS).



You can also delete an object by right-clicking (Windows) or by **Control** + clicking (Mac OS) the object and pressing **Delete**.

## Positioning objects

You can position objects by dragging them to a new location, by nudging, or by specifying their horizontal and vertical position.

The values you set in super nudging, and micro nudging allow you to move objects into place by increments. By default, you can nudge objects in 0.1-inch increments, but you can change the nudge values to suit your needs.

When you specify the position of an object, you can set horizontal and vertical coordinates that are relative to the object's center anchor point or to another anchor point. You can also position objects by placing them at specific horizontal and vertical coordinates in the drawing window according to the object's anchor point.

## To move an object

- Drag an object to a new position in the drawing.



You can move an object to another page by dragging the object over a page number tab and then dragging over the page.

## To move an object to another page

- 1 Drag the object over a page number tab of the page you want to move the object to.
- 2 Drag the object over the page.

## To nudge an object

To	Do the following
Nudge a selected object by the nudge distance	Press an <b>Arrow</b> key.
Nudge a selected object by a fraction of the nudge distance	Hold down <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS) and press an <b>Arrow</b> key.
Nudge a selected object by a multiple of the nudge distance	Hold down <b>Shift</b> , and press an <b>Arrow</b> key.

## To set nudge distances

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the **Document** list of categories, click **Rulers**.
- 3 Type a value in the **Nudge** box.
- 4 Type a value in one of the following boxes:
  - **Super nudge**
  - **Micro nudge**



You can also set the nudge distance by deselecting all objects and typing a value in the **Nudge offset** box on the property bar.

## To position an object by x and y coordinates

- 1 Select an object.
- 2 On the property bar, type values in the following boxes:
  - x — lets you position the object on the x axis
  - y — lets you position the object on the y axis
- 3 Press **Enter**.

## Aligning, distributing, and snapping objects

CorelDRAW lets you precisely align and distribute objects in a drawing as well as snap objects to one another.

You can align objects to each other and to parts of the drawing page such as the center, edges, and grid. When you align objects to objects, you can line them up by their centers or by their edges.

CorelDRAW lets you align multiple objects to the center of the drawing page horizontally or vertically. Single or multiple objects can also be arranged along the edge of the page and to the nearest point on a grid.

You can distribute objects at equal intervals in a specified area.



*The scattered objects (left) with vertical alignment applied to them (right).*

When you snap one object to another, you select an object and drag it to the second — or target — object. The selected object's nodes or the point at which the cursor has selected the object can be used to snap to one of the following areas in the target object: nodes, areas between nodes, center, or bounding box.



You can choose the distance at which objects will snap to one another by setting the snapping threshold.

## To align an object to an object

- 1 Select the objects.
- 2 Click **Arrange** ► **Align and distribute**, and click one of the following:
  - **Align left**
  - **Align right**
  - **Align top**
  - **Align bottom**
  - **Align centers horizontally**
  - **Align centers vertically**



The object used to align the left, right, top, or bottom edges is determined by the order of creation or order of selection. If you marquee select the objects before you align them, the last object created will be used. If you select the objects one at a time the last object selected will be the reference point for aligning the others.



You can also align objects by selecting them and clicking the **Align and distribute** button on the property bar.

## To align an object to the page center

- 1 Select an object.  
If you want to align multiple objects, marquee select the objects.
- 2 Click **Arrange** ► **Align and distribute**, and click one of the following:
  - **Center to page** — aligns all objects to the page center
  - **Center to page vertically** — aligns objects to the page center along a vertical axis
  - **Center to page horizontally** — aligns objects to the page center along a horizontal axis

## To align an object to the page edge

- 1 Select an object.  
If you want to align an object group, select the group.
- 2 Click **Arrange** ▶ **Align and distribute** ▶ **Align and distribute**.
- 3 Click the **Align** tab.
- 4 Enable the check boxes that correspond to the horizontal and vertical alignment you want.  
If you want to align objects vertically, enable the **Left**, **Center**, or **Right** option.  
If you want to align objects horizontally, enable the **Top**, **Center**, or **Bottom** option.
- 5 In the **Align to** area, enable the **Edge of page** option.



You can also align objects by selecting them and clicking the **Align and distribute** button on the property bar.  
You can align an object to the grid by clicking **Align to grid**.

## To distribute objects

- 1 Select the objects.
- 2 Click **Arrange** ▶ **Align and distribute** ▶ **Align and distribute**.
- 3 Click the **Distribute** tab.
- 4 Enable the check boxes that correspond to the distribution you want.
- 5 In the **Distribute** area, enable a check box that corresponds to the distribution area.

## To snap objects

- 1 Click **View** ▶ **Snap to objects setup**.
- 2 Enable the **Snap to objects** check box.
- 3 Enable one of the following check boxes in the **Object(s) being moved** area:
  - **Use cursor position** — snaps to the spot where you clicked the selected object
  - **Use object nodes** — snaps at any of the selected object's nodes
- 4 Enable one of the following check boxes in **Object(s) in drawing window**:
  - **Snap to nodes** — snaps to any of the target object's nodes
  - **Snap between nodes** — snaps to any point between two nodes on a path

- **Snap to object center point** — snaps to the center of the target object
- **Snap to bounding box** — snaps to the bounding box of the target object



A new node is created when you use **Snap between nodes**. If the new node is deleted, snapping will switch automatically to the nearest node.

An object's center point is identified by an **X** in the bounding box.

## To set snapping threshold

- 1 Click **View** ▶ **Snap to objects setup**.
- 2 Choose one of the following snapping distances from the **Snapping threshold** list box:
  - **Low** — snaps objects at four screen pixels
  - **Medium** — snaps objects at eight screen pixels
  - **High** — snaps objects at 16 screen pixels

## Changing the order of objects

You can change the stacking order of objects on a layer by sending objects to the front or back, or behind or in front of other objects. You can also position objects precisely in the stacking order, as well as reverse the stacking order of multiple objects.



*The four objects (left) are ordered from top to bottom to create the final image (right).*

## To change the order of an object

- 1 Select an object.
- 2 Click **Arrange** ▶ **Order**, and click one of the following:
  - **To front** — moves the selected object to the front of all other objects
  - **To back** — moves the selected object behind all other objects
  - **Forward one** — moves the selected object forward one position
  - **Back one** — moves the selected object behind one position
  - **In front of** — moves the selected object in front of a specific object
  - **Behind** — moves the selected object behind a specific object

## To reverse the order of multiple objects

- 1 Select the objects.
- 2 Click **Arrange** ▶ **Order** ▶ **Reverse order**.

## Sizing and scaling objects

CorelDRAW lets you size and scale objects. In both cases, you change the dimensions of an object proportionally by preserving its aspect ratio. You can size an object's dimensions by specifying values or changing the object directly. Scaling changes an object's dimensions by a specified percentage.

You can change an object's anchor point from its center to any of its eight selection handles.

## To size an object

<b>To</b>	<b>Do the following</b>
Size a selected object	Drag any of the corner selection handles.
Size a selected object from its center	Hold down <b>Shift</b> , and drag one of the selection handles.
Size a selected object to a multiple of its original size	Hold down <b>Ctrl</b> (Windows) or <b>Shift</b> (Mac OS) and drag one of the selection handles.

To	Do the following
Stretch a selected object as you size it	Hold down <b>Alt</b> (Windows) or <b>Command</b> (Mac OS) and drag one of the selection handles.



You can also set a precise size for the object by typing values in the **Object size** boxes on the property bar.

## To scale an object

- 1 Select an object.
- 2 Click **Window** ▶ **Dockers / Palettes** ▶ **Transformations** ▶ **Scale**.
- 3 In the **Transformations** Docker window/palette, type values in the following boxes:
  - **H** — lets you specify a percentage by which you want to scale the object horizontally
  - **V** — lets you specify a percentage by which you want to scale the object vertically

If you want to change the object's anchor point, enable the check box that corresponds to the anchor point you want to set.

If you want to maintain the aspect ratio, disable the **Non-proportional** check box.

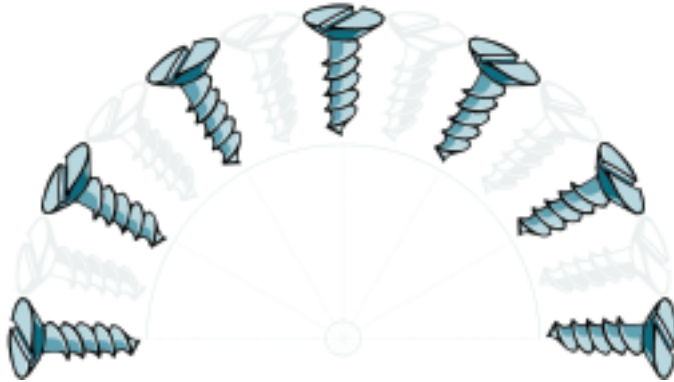


You can also scale an object by dragging a selection handle.

## Rotating and mirroring objects

CorelDRAW lets you rotate and create mirror images of objects.

You can rotate an object in a drawing by specifying horizontal and vertical coordinates. You can move the center of rotation to a specific ruler coordinate or to a point that is relative to the current position of the object.



*Rotating objects around a single point*

Mirroring an object flips it from left to right or top to bottom. By default, the mirror anchor point is in the center of the object.



*Mirroring an object from top to bottom*

## To rotate an object

- 1 Select an object.
- 2 Click **Window** ▶ **Dockers / Palettes** ▶ **Transformations** ▶ **Rotate**.
- 3 Disable the **Relative center** check box in the **Transformations** Docker window/palette.

To rotate an object around a point relative to its current position, enable the **Relative center** check box.

- 4 Type a value in the **Angle** box.

### You can also

---

Specify the point around which you want to rotate the object




Type values in the **H** and **V** boxes to specify the horizontal and vertical positions. Click **Apply**.

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You can also rotate a selected object by dragging a rotation handle clockwise or counterclockwise.

## To rotate an object around a ruler coordinate

- 1 Select an object.
- 2 Open the **Shape edit** flyout, and click the **Free transform** tool .
- 3 Disable the **Relative to object** button  on the property bar.
- 4 Type values in any of the following **Center of rotation position** boxes :
  - **x** — lets you specify the point on the horizontal ruler around which the object will rotate
  - **y** — lets you specify the point on the vertical ruler around which the object will rotate
- 5 Type a value in the **Angle of rotation** box on the property bar.
- 6 Press **Enter**.

## To mirror an object

- 1 Select an object.
- 2 Click **Window** ▶ **Dockers / Palettes** ▶ **Transformations** ▶ **Scale**.
- 3 In the **Transformations** Docker window/palette, click one of the following:
  - **Horizontal mirror**  — lets you flip the object left to right
  - **Vertical mirror**  — lets you flip the object top to bottomIf you want to flip the object on a specific anchor point, enable the check box that corresponds to the anchor point you want to set.
- 4 Click **Apply**.



You can also mirror a selected object by holding down **Ctrl** (Windows) or **Shift** (Mac OS) and dragging a selection handle to the opposite side of the object.

You can open the **Transformations** Docker window/palette by clicking **Arrange** ▶ **Transformations** and selecting an option from the flyout.

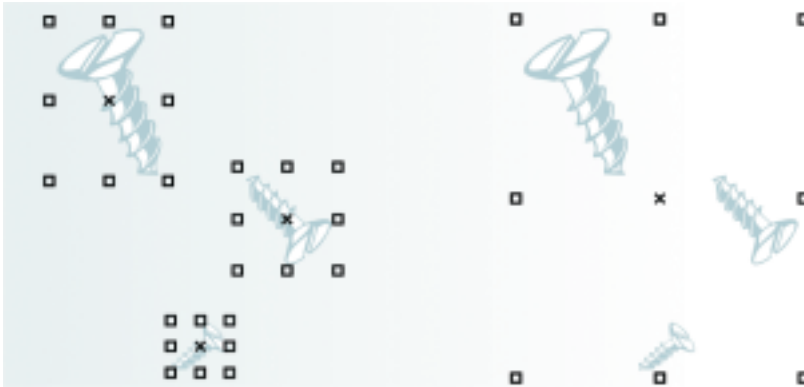
## Grouping objects

You can group objects in CorelDRAW.

When you group two or more objects, they are treated as a single unit. This lets you apply the same formatting, properties, and other changes to all the objects within the group at the same time. CorelDRAW also lets you group other groups to create nested groups.

You can also add and remove objects to and from a group and delete objects that are members of a group. If you want to edit a single object in a group, you can ungroup the objects.





*Single objects retain their attributes when they are grouped.*

## To group objects

- 1 Select the objects.
- 2 Click **Arrange ▸ Group**.

You can create a nested group, by selecting two or more groups of objects and clicking **Arrange ▸ Group**.



You can select objects from different layers and group them; however, once grouped, the objects will reside on the same layer.



You can also group objects by clicking **Window ▸ Dockers / Palettes ▸ Object manager**, and dragging an object's name in the **Object manager** Docker window/palette over the name of another object.

## To add an object to a group

- 1 Click **Window ▸ Dockers / Palette ▸ Object manager**.
- 2 In the **Object manager** Docker window/palette, drag the name of the object to the name of the group you want to add it to.

## To remove an object from a group

- 1 Click **Window ▶ Dockers / Palettes ▶ Object manager**.
- 2 Double-click the name of the group in the **Object manager** Docker window/palette.
- 3 Drag an object from the group to a position outside the group.

If you're removing an object from a group, click the object in the object list, and drag it out of the group.

If you want to delete an object that's in a group, select the object in the object list and click **Edit ▶ Delete**.

## To ungroup objects

- 1 Select one or more groups.
- 2 Click **Arrange ▶ Ungroup**.



You can also ungroup objects by clicking the **Ungroup** button on the property bar.

You can also ungroup all the nested groups in an object by clicking the **Ungroup all** button.

## Combining objects

CorelDRAW lets you combine objects.

Combining two or more objects creates a single object with common fill and outline attributes. You can combine rectangles, ellipses, polygons, stars, spirals, graphs, or text. CorelDRAW converts these objects to a single curve object. If you need to modify the attributes of an object that is combined, you can break the combined object apart.

You can extract a subpath from a combined object to create two separate objects.



*The two objects (left) are combined, so that the target object (the wood screw) adopts the fill and outline properties of the object behind it (right).*

## To combine objects

- 1 Select the objects.
- 2 Click **Arrange** ► **Combine**.



Combined text objects become larger blocks of text.



You can also combine selected objects by clicking the **Combine** button on the property bar.



## To break apart a combined object

- 1 Select a combined object.
- 2 Click **Arrange** ► **Break curve apart**.



If you break apart a combined object that contains artistic text, the text breaks apart into lines first, then into words. Paragraph text breaks into separate paragraphs.

## To extract a subpath from a combined object

- 1 Select a segment, node, or group of nodes on a combined object using the Shape tool  .
- 2 Click the **Extract subpath** button  on the property bar.



After you have extracted the subpath, the path's fill and outline properties are removed from the combined object.

## From here

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

---

Positioning an object using a different anchor point

positioning, using anchor points

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## Shaping objects

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CorelDRAW lets you shape objects in various ways.

In this section, you'll learn about

- working with curve objects
- skewing and stretching objects
- smudging objects
- roughening objects
- applying distortion effects
- shaping objects using envelopes
- splitting and erasing portions of objects
- trimming objects
- welding and intersecting objects
- blending objects
- creating PowerClip™ objects

### Working with curve objects

CorelDRAW lets you shape objects by manipulating their nodes and segments. An object's nodes are the tiny squares that display along the object's outline. The line between two nodes is called a segment. Moving an object's segments lets you make coarse adjustments to the object's shape, while changing the position of its nodes lets you fine tune the shape of the object.

Most objects that are added to a drawing are not curve objects, with the exception of spirals and freehand and Bézier lines. Therefore, if you want to customize the shape of an object, it is recommended that you convert that object to a curve object. By converting objects to curves, you can shape them by adding, removing, positioning, as well as aligning and transforming their nodes.

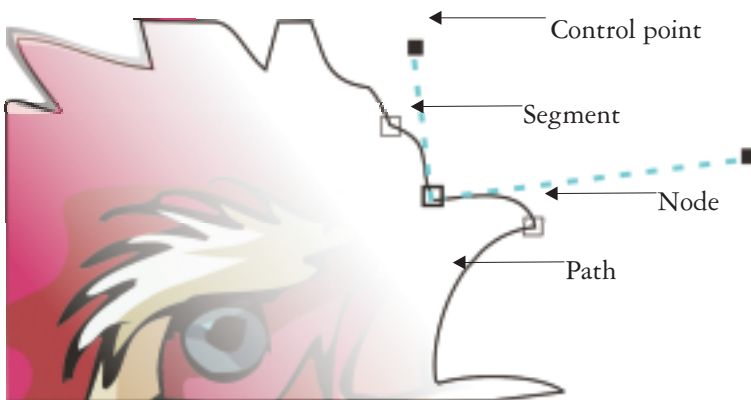
Before you can manipulate an object's nodes, you must select them. When working with curve objects you can select individual, multiple, or all of the object's nodes. Selecting multiple nodes lets you shape different parts of an object simultaneously.

When you add nodes, you increase the number of segments, and therefore the amount of control you have over the shape of the object. You can also remove nodes to simplify an object's shape.

When you create an object, it is made up of one or multiple paths. If you are working on an open object, such as a freehand line, you can join its start and end nodes. When you join the start and end nodes, the two nodes are pulled together to create a closed object. You can add color to the inside of closed paths that you create. For information on applying fills, see “Filling objects” on page 135. If the paths consist of multiple subpaths, you can break paths apart to extract subpaths. For information on breaking paths apart see “Splitting and erasing portions of objects” on page 111.

After you create a curve object, you can align its nodes horizontally or vertically.

You can change the nodes on a curve object to one of four types: cusp, smooth, symmetrical, or line. Cusp nodes make the node's intersecting line take on the shape of a corner or point when you adjust the position of the node's control points. Smooth nodes make the node's intersecting line take on the shape of a curve. Each control point can be shortened or lengthened independently, giving you smaller or larger angles to work with. Symmetrical nodes make the node's intersecting line take on the shape of a curve as well as intersect the node at exactly the same angle. Line nodes let you shape objects by changing the shape of their segments. You can make a curve segment straight or a straight segment curved.



*The components of a curve*

You can also change the direction of a segment by reversing the position of its start and end nodes. The effect is transparent only when the ends of a segment are different.

You can also shape objects by stretching, scaling, rotating, and skewing their nodes. For example, you can scale the corner nodes of a curve object to enlarge the curve object proportionally. Stretching, on the other hand, elongates a curve object so that its shape is distorted. All or parts of a curve object can be rotated in a counterclockwise or clockwise direction. You can also skew nodes to shape a curve object.

## To convert objects to curve objects

- 1 Select the object.
- 2 Click **Arrange** ▶ **Convert to curves**.




You can convert artistic text to curves so that you can shape individual characters.



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.

## To select a node

- 1 Open the **Shape edit** flyout, and click the **Shape** tool  .
- 2 Select a curve object.
- 3 Click a node.

### You can also

Select multiple nodes	Press <b>Shift</b> , and click each node.
Select all nodes on a selected curved	Click <b>Edit</b> ▶ <b>Select all</b> ▶ <b>Nodes</b> .
Deselect a node	Press <b>Shift</b> , and click a selected node.
Deselect multiple nodes	Press <b>Shift</b> , and click each selected node.
Deselect all nodes	Click a blank space in the drawing window.





(Windows) When a curve is selected by using the **Shape** tool, you can select the first node in a curve object by pressing **Home**, or the last node by pressing **End**.

(Mac OS) When a curve is selected by using the **Shape** tool, you can select the first node in a curve object by pressing **Home**. If you have an enhanced keyboard, you can select the last node by pressing **End**.



## To add or remove a node

To	Do the following
Add a node	Open the <b>Shape</b> edit flyout, click the <b>Shape</b> tool, select a curve object, and double-click where you want to add a node.
Delete a node	Open the <b>Shape</b> edit flyout, click the <b>Shape</b> tool, select a curve object, and double-click a node.



You can also add a node on a selected line by opening the **Curve** flyout, clicking the **Pen** tool, and clicking a point between any two nodes.



## To join the end nodes of a single subpath

- 1 Open the **Shape** edit flyout, and click the **Shape** tool .
- 2 Click a subpath.
- 3 Click the **Auto-close curve** button  on the property bar.



You can close multiple subpaths by clicking **Arrange** ► **Close path**. For more information, see “Closing multiple line segments” on page 53.



## To join the nodes of multiple subpaths

- 1 Open the **Shape** edit flyout, and click the **Shape** tool .
- 2 Press **Shift**, and click a node from each subpath.
- 3 Click the **Extend curve to close** button  on the property bar.







If you want to join nodes from separate curve objects, you must first combine them into a single curve object, and then join the end nodes of the new subpaths. For information about combining objects, see “Combining objects” on page 89.

## To align nodes

- 1 Open the **Shape edit** flyout, and click the **Shape tool** .
- 2 Select a curve object.
- 3 Press **Shift**, and select the nodes you want to align.
- 4 Click the **Align nodes** button  on the property bar.


## To make a curve cusp, smooth, or symmetrical

- 1 Open the **Shape edit** flyout, and click the **Shape tool** .
- 2 Click a node.
- 3 On the property bar, click one of the following buttons:
  - **Make node a cusp** 
  - **Make node smooth** 
  - **Make node symmetrical** 



You can also change an existing node from one type to another using shortcut keys. To change a smooth node to a cusp node or a cusp node to a smooth node, click the node using the **Shape tool** and press **C**. To change a symmetrical node to a smooth node or a smooth node to a symmetrical node, click the node using the **Shape tool** and press **S**.

## To manipulate a curve object's segments

- 1 Open the **Shape edit** flyout, and click the **Shape tool** .
- 2 Select a curve object.
- 3 Drag a segment until it's the shape you want.




## You can also

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Straighten a curve segment	Click a curve segment, and click the <b>Convert curve to line</b> button on the property bar.
Curve a straight segment	Click a straight segment, and click the <b>Convert line to curve</b> button on the property bar.
Change the direction of the curve	Click a segment, and click the <b>Reverse curve direction</b> button on the property bar.

---

## To stretch, scale, rotate, or skew nodes

- 1 Open the **Shape edit** flyout, and click the **Shape** tool .
- 2 Select a curve object.
- 3 Select the nodes along the curve you want to transform.
- 4 On the property bar, click one of the following buttons:
  - **Stretch and scale nodes** 
  - **Rotate and skew nodes** 
- 5 Drag a set of handles to transform the nodes.

## Skewing and stretching objects

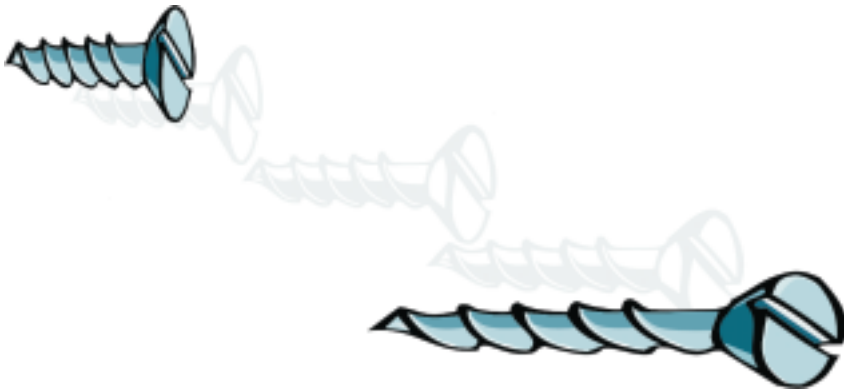
You can skew and stretch objects in CorelDRAW. When you skew an object, you specify the degree by which you want to slant the object.

Stretching changes an object's vertical and horizontal dimensions nonproportionally.

CorelDRAW also lets you change the skew and sizing anchor point of an object from its default center position.



*Skewing an object horizontally*



*Stretching an object horizontally*

### **To skew an object**

- 1 Select an object.
- 2 Click **Arrange** ▶ **Transformations** ▶ **Skew**.
- 3 In the **Transformations** Docker window/palette, type a value in any of the following boxes:

- **H** — lets you specify the number of degrees by which you want to skew the object horizontally
- **V** — lets you specify the number of degrees by which you want to skew the object vertically

If you want to change the object's anchor point, enable the **Use anchor point** check box, and enable the check box that corresponds to the anchor point you want to set.

#### 4 Click **Apply**.



If you move the skew anchor point, you can reset it to the center again.



You can also skew an object interactively by dragging one of its skew handles.

## To stretch an object

- 1 Select an object.
- 2 Click **Arrange** ▶ **Transformations** ▶ **Size**.
- 3 Enable the **Non-proportional** check box.
- 4 In the **Transformations** Docker window/palette, type a value in the following boxes:
  - **H** — lets you specify the width of a selected object
  - **V** — lets you specify the height of a selected object
- 5 Click **Apply**.



The new values that you enter to stretch an object are the basis for a new ratio of the horizontal and vertical dimensions of the object. When you disable the **Non-proportional** check box, any resizing of the object is based on this new ratio. To revert the object to its original one-to-one proportions before transforming it again, you must disable the **Non-proportional** check box and then retype the original values.



You can stretch the sides of an object proportionally by disabling the **Non-proportional** check box, typing a value in either the **H** or **V** box, and pressing **Enter**.

You can also stretch an object from its center by pressing **Shift** (Windows) or **Option** (Mac OS) and dragging a corner selection handle.

You can also stretch an object in increments of 100% by pressing **Ctrl** (Windows) or **Option + Shift** (Mac OS), and dragging a corner selection handle.

## Smudging objects

Smudging lets you distort an object by dragging the outline of an object, a group of objects, or the edge of a bitmap. When applying smudging to an object, you can control the extent and shape of the distortion whether you activate the controls for the graphics tablet stylus or use the settings that apply to a mouse.

The smudging effect responds to both the angle of rotation — or bearing — and the tilt angle of a graphics tablet stylus. Rotating the stylus changes the angle of the smudging effect and tilting the stylus flattens the brush tip and changes the shape of the smudging. If you are using a mouse, you can simulate the bearing and tilt of the stylus by specifying values. Increasing the bearing angle from 0 - 359° changes the angle of the brush stroke. As you decrease the tilt angle from 90° - 1°, you change the smudging shape by flattening the brush tip.

Smudging can respond to the pressure of a stylus on a tablet where the smudging widens with more pressure and narrows with less. If you are using a mouse or want to override stylus pressure, you can enter real values to simulate the pressure of a stylus on a graphics tablet. Negative values to -10 create a narrowing distortion, 0 maintains an even stroke width, and positive values to 10 create an expanding distortion.





*Objects placed in the foreground and background have been shaped by outside smudging (sun's rays and blades of grass) and inside smudging (clouds).*

Whether you are using a stylus or a mouse, you must specify the nib size. The nib size determines the width of the smudging applied to an object.

You can apply the smudging effect to the inside and outside of an object.

## To smudge an object

- 1 Select an object using the **Pick tool**  .
- 2 Open the **Shape edit** flyout, and click the **Smudge brush tool**  .
- 3 Drag around the outline to distort it.

### You can also

Change the size of the brush nib	Type a value in the <b>Size of the nib</b> box on the property bar.
Change the size of the brush nib when using the graphics stylus	Click the <b>Use stylus pressure</b> button on the property bar and apply pressure to the stylus.
Widen or narrow the smudging	Type a value between -10 and 10 in the <b>Add dry out to the effect</b> box on the property bar.



### You can also

Specify the shape of the smudging	Type a value between 1 and 90 in the <b>Enter a fixed value for tilt settings</b> box on the property bar.
Change the shape of the smudging when using the graphics stylus	Click the <b>Use stylus tilt</b> button on the property bar.
Specify the angle of the nib shape for smudging	Type a value between 0 and 359 in the <b>Enter a fixed value for bearing settings</b> box on the property bar.
Change the angle of the nib shape for smudging when using the graphics stylus	Click the <b>Use stylus bearing</b> button on the property bar.
Smudge the inside of an object	Click the outside of an object and drag inwards.
Smudge the outside of an object	Click the inside of an object and drag outwards.



You cannot apply smudging to Internet or embedded objects, linked images, grids, masks, or mesh-filled objects. You cannot apply smudging to objects with blend and contour effects.

To get the minimum and maximum values for the smudging controls, right-click (Windows) or **Control** + click (Mac OS) the control on the property bar and click **Settings**.

## Roughening objects

The roughening effect lets you apply a jagged or spiked edge to objects, including lines, curves, and text. You can control the size, angle, direction, and number of the indentations whether you activate the graphics tablet stylus or apply settings to a mouse.

The roughening effect is determined either by movements of a graphics tablet stylus, by fixed settings, or by automatically applying perpendicular spikes to the line. Tilting the stylus toward and away from the tablet's surface increases and decreases the size of the spikes. If you are using a mouse, you can specify the tilt angle from 1 - 90°. You can determine the direction of the spikes by changing the angle of rotation (or bearing) of the stylus as you apply the roughening effect to an object. When you



are using a mouse, you can set the bearing angle from 0 - 359°. You can also increase or decrease the number of spikes that are applied as you drag.



The roughening effect also responds to the pressure of the stylus on the tablet. The more pressure you apply, the more spikes are created in the roughened area. If you are using a mouse, you can specify values to simulate the stylus pressure.

You can also change the brush nib size.



*Roughening allows you to apply jags or spikes to part of an outline or path.*

## To roughen an object

- 1 Select an object using the **Pick tool** .
- 2 Open the **Shape edit** flyout, and click the **Roughen brush tool** .
- 3 Point to the area on the outline you want to roughen, and drag the outline to distort it.

### You can also

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Specify the size of the roughening spikes

Type a value from .01" to 2" in the **Size of the nib** box on the property bar.

---

Change the number of spikes in a roughened area

Type a value between 1 and 10 in the **Enter a value for frequency of spikes** box on the property bar.

## You can also

---

Change the number of spikes in a roughened area when using a graphics stylus	Click the <b>Use stylus pressure</b> button on the property bar.
Specify the height of the roughening spikes	Type a value between 1 and 90 in the <b>Enter a fixed value for tilt settings</b> box on the property bar.
Increase the number of roughening spikes as you drag	Type a value between -10 and 10 in the <b>Add dry out to the effect</b> box on the property bar.
Change the height of the roughening spikes when using a graphics stylus	Click the <b>Use stylus tilt</b> button on the property bar.
Specify the direction of the roughening spikes	Choose <b>Fixed direction</b> from the <b>Spike direction</b> list box. Type a value between 0 and 359 in the <b>Enter a fixed value for bearing settings</b> box on the property bar.
Change the direction of the roughening spikes when using a graphics stylus	Choose <b>Stylus setting</b> from the <b>Spike direction</b> list box on the property bar.
Create roughening spikes perpendicular to the path or outline	Choose <b>Auto</b> from the <b>Spike direction</b> list box on the property bar.

---



Objects with distortions, envelopes, and perspective applied to them are converted to curve objects before the roughening effect is applied.



To make the tilt angle and bearing angle responsive to the graphics tablet stylus, right-click (Windows) or **Control** + click (Mac OS) the roughened object, and select a command from the submenu.

To get the minimum and maximum values for the roughening controls, right-click (Windows) or **Control** + click (Mac OS) the control on the property bar and click **Settings**.

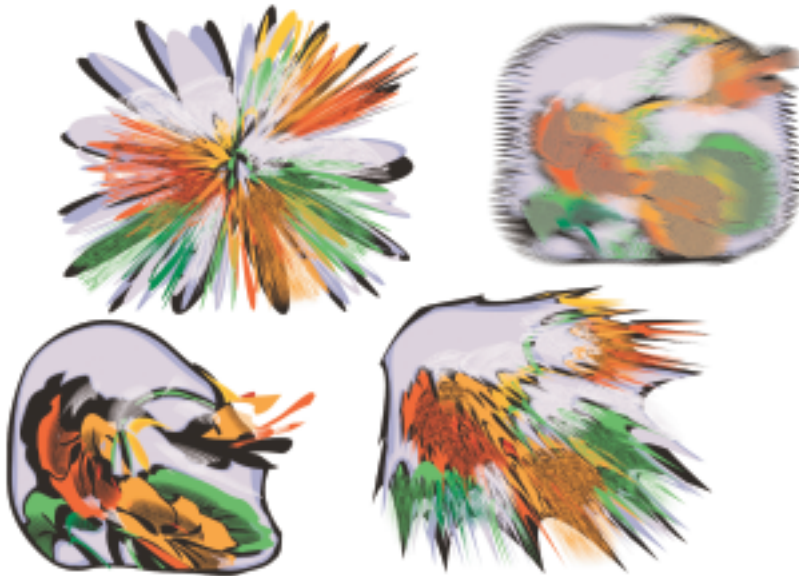
## Applying distortion effects

You can apply three types of distortion effects to shape objects.

<b>Distortion effect</b>	<b>Description</b>
Push and pull	Lets you push the edges of an object in or pull the edges of an object out
Zipper	Lets you apply a saw tooth effect to the edges of the object. You can adjust the amplitude and frequency of the effect.
Twister	Lets you rotate an object to create a swirl effect. You can choose the direction of the swirl, as well as the origin, degree, and amount of rotation.



*Original drawing before any of the four distortion effects are applied to it*




*Clockwise from top left: Push distortion, Zipper distortion, Pull distortion, and Twister distortion*

After you distort an object, you can change the effect by altering the center of distortion. This point is identified by a diamond-shaped handle, around which a distortion appears. It is similar to a mathematical compass, where the pencil moves around a stationary point. You can place the center of distortion anywhere in the drawing window, or choose to center it in the middle of an object so that the distortion is distributed evenly and the shape of the object changes in relation to its center.

You can create an even more dramatic effect by applying a new distortion to an already distorted object. You don't lose the effect of the original distortion if, for example, you apply a zipper distortion on top of a twister distortion. The CorelDRAW application also lets you remove and copy distortion effects.

## To distort an object

- 1 Open the **Interactive** tool flyout, and click the **Interactive distortion** tool  .
- 2 On the property bar, click one of the following buttons and specify the settings you want:
  - **Push and pull distortion**

- **Zipper distortion**
- **Twister distortion**

3 Point to where you want to place the center of distortion, and drag until the object is the shape you want.

### You can also

Change the center of distortion	Drag the diamond-shaped position handle to a new location.
Adjust the number of points on a zipper distortion	Move the slider on the center of the distortion handle.
Apply more than one distortion to an object	Click another distortion type on the property bar, click an object, and drag.



You can reapply the effects to distorted objects.



You can center a distortion by clicking the **Center distortion** button on the property bar.

### To remove a distortion

- 1 Select a distorted object.
- 2 Click **Effects** ▶ **Clear distortion**.



Removing a distortion this way clears the most recent distortion you've applied.



You can also remove a distortion from a selected object by clicking the **Clear distortion** button on the property bar.

### To copy a distortion

- 1 Select the object to which you want to copy a distortion.
- 2 Click **Effects** ▶ **Copy effect** ▶ **Distortion from**.
- 3 Click a distorted object.






## Shaping objects using envelopes

CorelDRAW lets you shape objects, including lines, artistic text, and paragraph text frames by applying envelopes to them. Envelopes are made of multiple nodes that you can move to shape the envelope and, as a result, change the shape of the object. You can apply a basic envelope that conforms to the shape of an object, or you can also apply a preset envelope. After you apply an envelope, you can edit it, or add a new envelope to continue changing the object's shape. CorelDRAW also lets you copy and remove envelopes.

You can edit an envelope by adding and positioning its nodes. Adding nodes gives you more control over the shape of the object contained in the envelope. CorelDRAW also lets you delete nodes, move multiple nodes simultaneously, change nodes from one type to another, and change a segment of an envelope to a line or curve. For more information about the different types of nodes, see “Working with curve objects” on page 93.

You can also change the mapping mode of an envelope to specify how the object fits to the envelope. For example, you can stretch an object to fit the basic dimensions of the envelope, and then apply the horizontal mapping mode to compress it horizontally so that it fits the shape of the envelope.

### To apply an envelope

- 1 Select an object.
- 2 Open the **Interactive tools** flyout, and click the **Interactive envelope** tool  .
- 3 On the property bar, click one of the following buttons:
  - **Envelope straight line mode**  — creates envelopes based on straight lines, adding perspective to objects
  - **Envelope single arc mode**  — creates envelopes with an arc shape on one side, giving objects a concave or convex appearance
  - **Envelope double arc mode**  — creates envelopes with an S shape on one or more sides
  - **Envelope unconstrained mode**  — creates freeform envelopes, that let you change the properties of the nodes, and add and delete the nodes
- 4 Click the object.
- 5 Drag the nodes to shape the envelope.  
If you want to reset the envelope, press **Esc** before releasing the mouse.

### You can also

---

Apply a preset envelope	Click the <b>Add preset</b> button on the property bar and click an envelope shape.
Apply an envelope to an object with an envelope	Click the <b>Add new envelope</b> button on the property bar, and drag the nodes to change the shape of the envelope.
Remove an envelope	Click <b>Effects</b> ▶ <b>Clear envelope</b> .

---



You can prevent the object's straight lines from being converted to curves by enabling the **Keep lines** button on the property bar.


### To copy an envelope

- 1 Select an object to which you want to copy an envelope.
- 2 Click **Effects** ▶ **Copy effect** ▶ **Envelope from**.
- 3 Select the object from which you want to copy the envelope.



You can also copy an envelope by selecting an object, clicking the **Copy envelope properties** button on the property bar, and selecting an object with the envelope you want to copy.

### To edit an envelope's nodes and segments

- 1 Open the **Interactive tools** flyout, and click the **Interactive envelope** tool  .
- 2 Select an object with an envelope.
- 3 Double-click the envelope to add a node or double-click a node to delete it.

### You can also

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Move several envelope nodes at once	Click the <b>Envelope unconstrained mode</b> button on the property bar, marquee select the nodes you want to move, and drag any node to a new position.
Move opposing nodes an equal distance in the same direction	Press <b>Shift</b> , select two opposing nodes, and drag them to a new position.

---

## You can also



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Move opposing nodes an equal distance in the opposite direction

Click the **Envelope unconstrained mode** button on the property bar so that it appears raised, press **Shift**, select two opposing nodes, and drag them to a new position.

---

Change an envelope node type

Click the **Envelope unconstrained mode** button on the property bar so that it appears pressed, and click either the **Make node a cusp** , the **Make node smooth** , or the **Make node symmetrical** button.

---

Change an envelope segment to a straight line or curve

Click the **Envelope unconstrained mode** button on the property bar so that it appears pressed, click a line segment, and click the **Convert curve to line** button or the **Convert line to curve** button.

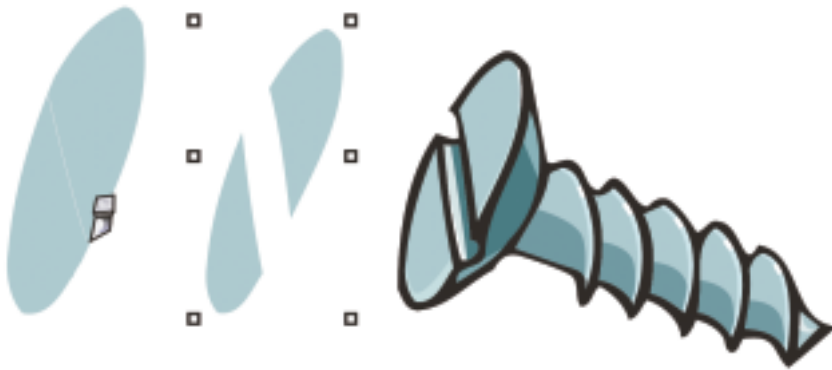
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## Splitting and erasing portions of objects

You can split a bitmap or vector object in two and reshape it by redrawing its path. You can split a closed object along a straight or jagged line. CorelDRAW lets you choose between splitting an object into two objects, or leaving it as one object composed of two or more subpaths. You can specify whether you want to close paths automatically or keep them open.


CorelDRAW lets you erase unwanted portions of bitmaps and vector objects. Erasing automatically closes any affected paths and converts the object to curves. If you erase connecting lines, CorelDRAW creates subpaths rather than individual objects.





*The Knife tool creates two separate objects by cutting the ellipse in half (left). The two objects are separated and used to form the top of the screw (right).*

## To split an object

- 1 Open the **Shape edit** flyout, and click the **Knife** tool  .
- 2 Position the **Knife** tool over the object's outline where you want to start cutting. The **Knife** tool snaps upright when positioned properly.
- 3 Click the outline to start cutting.
- 4 Position the **Knife** tool where you want to stop cutting, and click again.

### You can also

Split an object along a freehand line	Point to where you want to start the cut, and drag to where you want it to end.
Split an object along a Bézier line	Press <b>Shift</b> , click where you want to start cutting an object, and click each time you want to change the direction of the line. If you want to constrain the line by 15-degree increments, press <b>Shift + Ctrl</b> (Windows) or <b>Shift</b> (Mac OS).
Split an object into two subpaths	Click the <b>Leave as one object</b> button on the property bar.




By default, objects are split into two objects and paths are automatically closed.

When you use the **Knife** tool on a selected object, the object becomes a curve object.

## To break a path

To	Do the following
Break a path	Open the <b>Shape edit</b> flyout, and click the <b>Shape</b> tool. Click the <b>Break curve</b> button on the property bar.
Extract a broken path from an object	Open the <b>Shape edit</b> flyout, and click the <b>Shape</b> tool. Right-click (Windows) or <b>Control</b> + click (Mac OS) a path, and click <b>Break apart</b> . Select a segment, node, or group of nodes that represents the portion of the path you want to extract, and click the <b>Extract subpath</b> button on the property bar.

## To erase portions of an object

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

### You can also

Change the size of the eraser nib	Type a value in the <b>Eraser thickness</b> box on the property bar, and press <b>Enter</b> .
Change the shape of the eraser nib	Click the <b>Circle/square</b> button on the property bar.
Maintain all the nodes of the area being erased	Disable the <b>Auto-reduce on erase</b> button on the property bar.



When you erase portions of objects, any affected paths are automatically closed.

You can erase in straight lines by clicking where you want to start erasing, and then clicking where you want to finish erasing. Press **Ctrl** (Windows) or **Command** (Mac OS) if you want to constrain the line's angle.

You can also erase an area of a selected object by double-clicking the area with the **Eraser** tool.

## Trimming objects

Trimming creates irregularly shaped objects by removing object areas that overlap. You can trim almost any object, including clones, objects on different layers, and single objects with intersecting lines. However, you cannot trim paragraph text, dimension lines, or masters of clones.

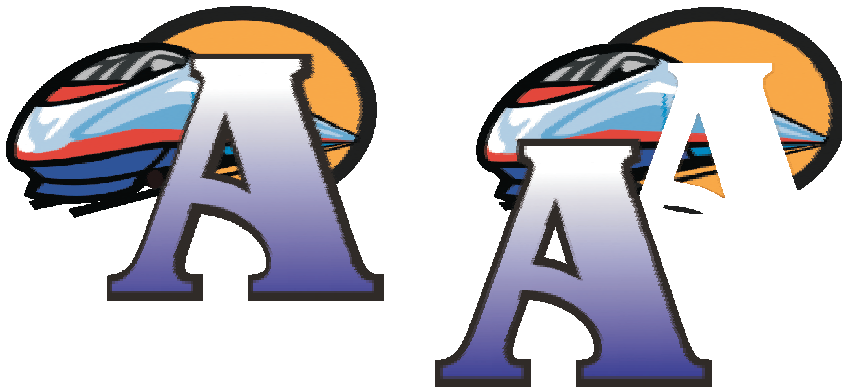
Before you trim objects, you must decide which object you want to trim (the target object) and which object you want to use to perform the trimming (the source object). For example, if you want to create a star-shaped cut out of a square object, the star is the source object because you are using it to trim the square. The square is the target object because it's the object you want to trim. The source object trims the part of the target object it overlaps.

The target object retains its fill and outline attributes. For example, if you trim a rectangle that is overlapped by a circle, the area of the rectangle that was covered by the circle is removed, creating an irregular shape.

CorelDRAW lets you trim objects in different ways. You can use a front object as the source object to trim an object behind it, as well as use the back object to trim a front object. You can also remove hidden areas of overlapping objects, so that only the visible areas remain in the drawing. Removing the hidden areas can reduce file size when you convert vector graphics to bitmaps.



*Trimming can be used to reduce the number of objects in a drawing. Instead of adding eyes and spots to the bug, areas (shown on the left in gray) are trimmed to reveal the black background (right).*



*The letter “A” is the front object used to trim the back object. A partial silhouette of the letter is created in the logo (right).*

### **To trim an object**

- 1 Select the source objects.
- 2 Hold down **Shift** and click the target object.
- 3 Click **Arrange** ▶ **Shaping** ▶ **Trim**.



If you marquee select the objects, CorelDRAW trims the bottom-most selected object. If you select multiple objects individually, the last object selected is trimmed.



You can also trim objects by marquee selecting the source and target objects and clicking the **Trim** button on the property bar.

## To trim front and back objects

- 1 Marquee select the source and target objects.
- 2 Click **Arrange** ▸ **Shaping**, and click one of the following:
  - **Back minus front** — removes the front object from the back one
  - **Front minus back** — removes the back object from the front one



You can trim the control object of a PowerClip object so that the object inside the PowerClip object will assume the new shape of the PowerClip container. For information about PowerClip objects, see “Creating PowerClip objects” on page 124.

Linked objects such as drop shadows, text on a path, artistic media, blends, contours, and extrusions are converted to curve objects before they are trimmed.

## To trim overlapping areas among objects

- 1 Marquee select the objects you want to trim.
- 2 Click **Arrange** ▸ **Shaping** ▸ **Simplify**.



You can trim the control object of a PowerClip object, so that the object inside the PowerClip object assumes the new shape.

Linked objects such as drop shadows, text on a path, artistic media, blends, contours, and extrusions are converted to curve objects before they are trimmed.

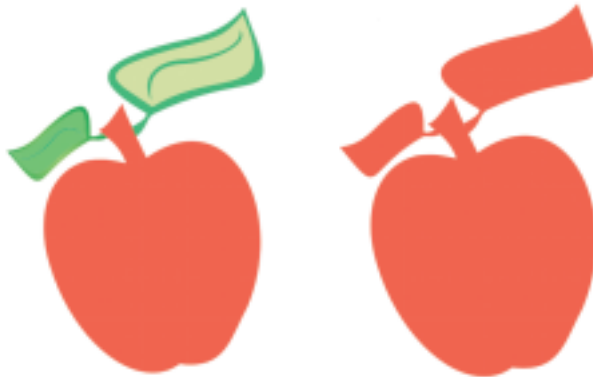
## Welding and intersecting objects

You can create irregular shapes by welding and intersecting objects. You can weld or intersect almost any object, including clones, objects on different layers, and single objects with intersecting lines. However, you cannot weld or intersect paragraph text, dimension lines, or masters of clones.

You can weld objects to create one object with a single outline. The new object uses the welded objects' perimeter as its outline and adopts the fill and outline properties of the target object. All intersecting lines disappear.

You can weld objects regardless of whether they overlap each other. If you weld objects that do not overlap, they form a weld group that acts as a single object. In both cases, the welded object takes on the fill and outline attributes of the target object.

You can weld single objects with intersecting lines so that the object breaks into several subpaths, but its appearance remains the same.



*Welding the leaves to the apple creates a single object outline.*

Intersecting creates an object from the area where two or more objects overlap. The shape of this new object can be simple or complex, depending on the shapes you intersect. The new object's fill and outline attributes depend on the object you define as the target object.

### **To weld an object**

- 1 Select the source object or objects.
- 2 Hold down **Shift**, and click the target object.
- 3 Click **Arrange** ▶ **Shaping** ▶ **Weld**.



You can also weld objects by marquee-selecting the source and target objects and clicking the **Weld** button on the property bar.

## To intersect objects

- 1 Select the source object.
- 2 Hold down **Shift**, and select the target object.
- 3 Click **Arrange** ▶ **Shaping** ▶ **Intersect**.



You can also intersect objects by selecting the source and target objects and clicking the **Intersect** button on the property bar.

## To intersect multiple objects

- 1 Marquee select the source object or objects.
- 2 Hold down **Shift**, and click each target object.
- 3 Click **Arrange** ▶ **Shaping** ▶ **Intersect**.



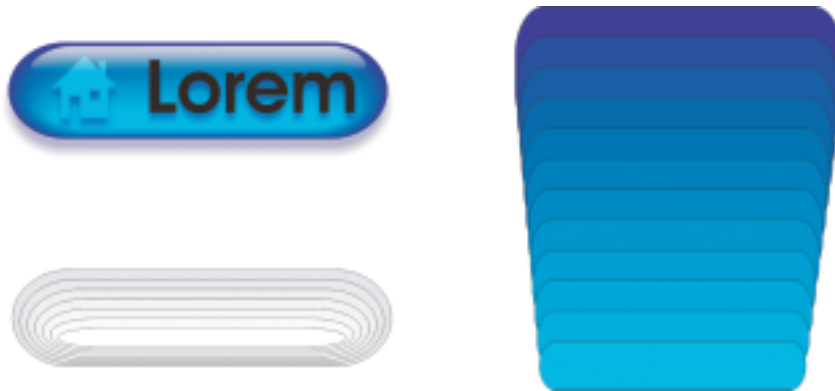
You can also intersect objects by marquee-selecting the source and target objects and clicking the **Intersect** button on the property bar.

## Blending objects

CorelDRAW lets you create blends, such as straight-line blends, blends along a path, and compound blends.

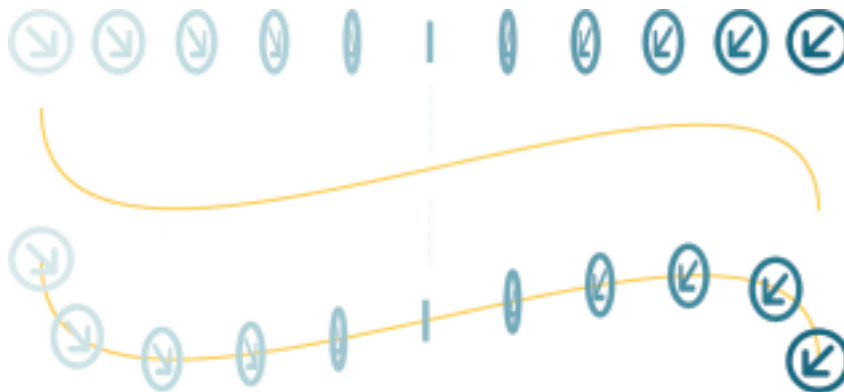
A straight-line blend shows a progression in shape and size from one object to another. The outline and fill colors of the intermediate objects progress along a straight-line path across the color spectrum. The outlines of intermediate objects show a gradual progression in thickness and shape.

After you create a blend, you can copy or clone its settings to other objects. When you copy a blend, the object takes on all the blend-related settings, except for their outline and fill attributes. When you clone a blend, changes you make to the original blend (also called the master) are applied to the clone.



*Straight-line blends can be used to create graphics with a glass-like appearance. The rollover button (left) contains a blend of tightly overlapped blended objects.*

You can fit objects along part or all of a path's shape, and you can add one or more objects to a blend to create a compound blend.



*The straight-line blend (top) is fitted to a curved path (bottom).*

You can change the appearance of a blend by adjusting the number and spacing of its intermediate objects, the blend's color progression, the nodes the blends map to, the

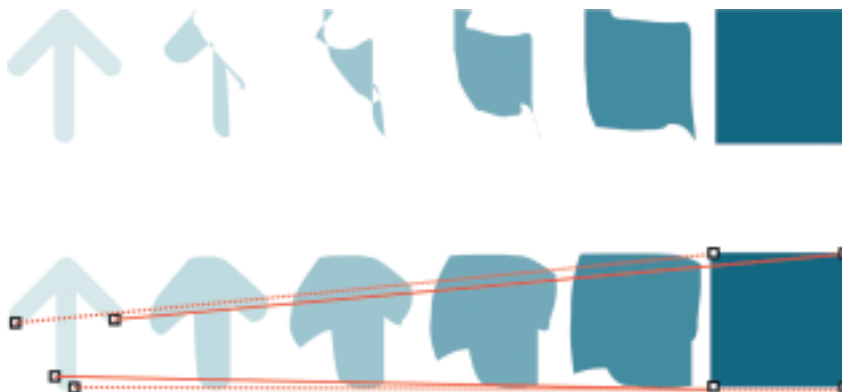


blend's path, and the start and end objects. You can fuse the components of a split or compound blend to create a single object.



*This compound blend consists of three blends.*

You can also split and remove a blend.



*By mapping nodes, you can control the appearance of a blend. Four nodes on the arrow are mapped to the four corners of a square, showing a more gradual transition (bottom).*

## To blend objects

To	Do the following
Blend along a straight line	Open the <b>Interactive tools</b> flyout, and click the <b>Interactive blend</b> tool. Select the first object, and drag over the second object. If you want to reset the blend, press <b>Esc</b> as you drag.
Blend an object along a freehand path	Open the <b>Interactive tools</b> flyout, and click the <b>Interactive blend</b> tool. Select the first object. Hold down <b>Alt</b> (Windows) or <b>Option</b> (Mac OS) and drag to draw a line to the second object.
Fit a blend to a path	Open the <b>Interactive tools</b> flyout, and click the <b>Interactive blend</b> tool. Click the blend. Click the <b>Path properties</b> button on the property bar. Click <b>New path</b> . Using the curved arrow, click the path to which you want to fit the blend.
Stretch the blend over an entire path	Select a blend that is already fitted on a path. Click the <b>Miscellaneous blend options</b> button on the property bar, and enable the <b>Blend along full path</b> check box.
Create a compound blend	Using the <b>Interactive blend</b> tool, drag from an object to the start or end object of another blend.


## To copy or clone a blend

- 1 Select the two objects you want to blend.
- 2 Click **Effects**, and click one of the following:
  - **Copy effect** ▶ **Blend from**
  - **Clone effect** ▶ **Blend from**
- 3 Select the blend whose attributes you want to copy or clone.



You can't copy or clone a compound blend.




## To set the distance for intermediate objects in a blend fitted to a path

- 1 Select a blend.
- 2 Click the **Use steps or fixed spacing for blend** button  on the property bar.
- 3 Type a value in the **Number of steps or offset between blend shapes** box on the property bar.
- 4 Press **Enter**.



You can set object and color acceleration rates by clicking the **Object and color acceleration** button on the property bar and moving the corresponding slider.

## To set the color progression for intermediate objects in a blend

- 1 Select a blend.
- 2 On the property bar, click one of the following:
  - **Direct blend** 
  - **Clockwise blend** 
  - **Counterclockwise blend** 




You can't create color progressions using blended objects filled with bitmaps, texture, patterns, or PostScript fills.



You can set how fast the object's colors transform from the first to the last object by clicking the **Object and color acceleration** button on the property bar and moving the corresponding sliders.

## To map the nodes of a blend

- 1 Select a blend.
- 2 Click the **Miscellaneous blend options** button  on the property bar.
- 3 Click the **Map nodes** button on the property bar.
- 4 Click a node on the start object and on the end object.


## To work with the start or end objects in a blend

To	Do the following
Select the start or end object	Select a blend, click the <b>Start and end object properties</b> button on the property bar, and click <b>Show start</b> , or <b>Show end</b> .
Change the start or end object of a blend	Select a blend, click the <b>Start and end object properties</b> button on the property bar, and click <b>New start</b> , or <b>New end</b> . Click an object outside the blend that you want to use as the start or end of the blend.
Fuse the start or end object in a split or compound blend	Press <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS) and click a start, middle, or end object in a blend. Click the <b>Miscellaneous options</b> button on the property bar. If you have selected the start object, click the <b>Fuse start</b> button. If you have selected the end object, click the <b>Fuse end</b> button.



You can reverse the direction of the blend by clicking **Arrange ▸ Order ▸ Reverse order**.

## To change the blend path

- 1 Select a blend.
- 2 Click the **Path properties** button  on the property bar, and click **New path**.
- 3 Click the path you want to use for the blend.



### You can also

Detach a blend from a path	Click the <b>Path properties</b> button on the property bar, and click <b>Detach from path</b> .
Change the path of a selected freehand blend	Click the blend path with the <b>Shape</b> tool, and drag a path's node.



To select the blend path, click the **Path properties** button and click **Show path**.

## To split a blend

- 1 Select a blend.
- 2 Click the **Miscellaneous options** button  on the property bar.
- 3 Click the **Split** button .
- 4 Click the intermediate object at the point at where you want to split the blend.



You can't split a blend at the intermediate object that is immediately adjacent to the start or end object.

## To remove a blend

- 1 Select a blend.
- 2 Click **Effects** ▶ **Clear blend**.



You can also remove a selected blend by clicking the **Clear blend** button on the property bar.

## Creating PowerClip objects

CorelDRAW lets you place vector objects and bitmaps, such as photos, inside other objects, or containers. A container can be any object, for example artistic text or a rectangle. When you place an object into a container that is larger than the container, the object, called the content, is cropped to fit the form of the container. This creates a PowerClip object.



*Objects before becoming a PowerClip object: artistic text and a bitmap*

You can create more complex PowerClip objects by placing one PowerClip object inside another PowerClip object to produce a nested PowerClip object. You can also copy the contents of one PowerClip object to another PowerClip object.



*In the PowerClip object, the artistic text is the container, and the bitmap forms the contents. The bitmap is shaped to the letters of the artistic text.*

After you create a PowerClip object you can modify the content and the container. For example, you can lock the content, so that when you move the container, the content moves with it. CorelDRAW also lets you extract the content from a PowerClip object, so that you can delete the content or modify it without affecting the container.

### **To create a PowerClip object**

- 1 Select an object.
- 2 Click **Effects** ▶ **PowerClip** ▶ **Place inside container**.
- 3 Click the object you want to use as the container.

If you want to create a nested PowerClip object, drag the PowerClip object inside a container.

### **To copy the content of a PowerClip object**

- 1 Select an object.
- 2 Click **Effects** ▶ **Copy effect** ▶ **PowerClip from**.
- 3 Click a PowerClip object.

## To edit the content of a PowerClip object

- 1 Select a PowerClip object.
- 2 Click **Effects** ▶ **PowerClip** ▶ **Edit contents**.
- 3 Edit the contents of the PowerClip object.
- 4 Click **Effects** ▶ **PowerClip** ▶ **Finish editing this level**.



While you edit, the container displays in Wireframe mode and cannot be selected.

## To lock or unlock the content of a PowerClip object

- Right-click (Windows) or **Control** + click (Mac OS) a PowerClip object, and click **Lock Contents to PowerClip**.



If you move the container while the content is unlocked, the content remains stationary and is not visible until you move the container over it.

## From here

### For more information about

**(Windows)** In the Help index, see  
**(Mac OS)** In the Help Viewer, type

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Changing the mapping mode of an envelope

envelopes, changing mapping modes

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Extracting the content of a PowerClip object

PowerClip objects, extracting contents

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## Working with symbols

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The CorelDRAW application lets you create objects and save them as symbols. Symbols are defined once and can be referenced many times in a drawing. Each time you insert a symbol into a drawing, you create an instance of the symbol. Symbol definitions, as well as information about instances, are stored in the library, which is part of the CorelDRAW (CDR) file. Using symbols for objects that appear many times in a drawing helps to reduce file size.

In this section, you'll learn about

- creating, editing, and deleting symbols
- using symbols in drawings
- sharing symbols between drawings

For information about modifying symbol instances and about unsupported object types, see “Reference: Working with symbols” on page 131.

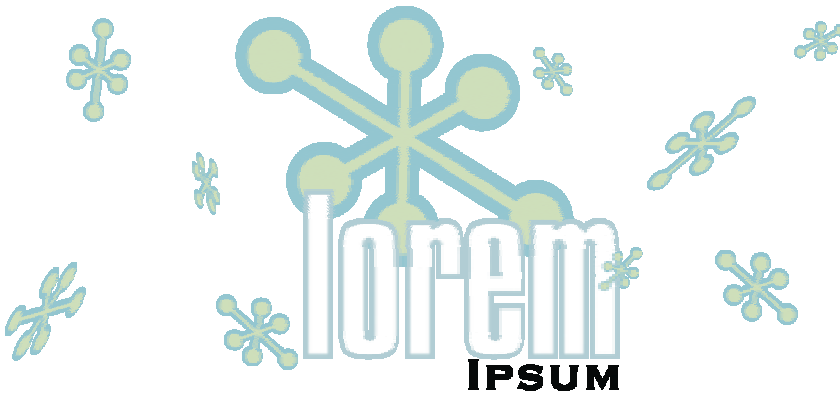
### Creating, editing, and deleting symbols

Symbols are objects that are defined once and can be referenced many times in a drawing. You can have multiple instances of a symbol in a drawing with little impact on file size. Symbols make editing a drawing quicker and easier, as changes made to a symbol are automatically inherited by all instances.

Symbols are created from objects. When you convert an object to a symbol, the new symbol is added to the library, and the selected object becomes an instance. You can



also create a symbol from multiple objects. You can edit a symbol; any changes you make affect all instances in a drawing. You can also delete a symbol from the library.



*Using symbols for objects that appear many times helps to reduce file size.*

## To convert an object to a symbol

- 1 Select an object or multiple objects.
- 2 Click **Edit** ▶ **Symbol** ▶ **New symbol**.




Symbols cannot span layers. If you convert objects on different layers to a symbol, the objects are combined on the topmost object's layer. For more information about layers, see “Working with layers” on page 207.



You can also convert an existing object or objects to a symbol by dragging the object or objects to the **Library** Docker window/palette.

## To edit a symbol

- 1 In the **Library** Docker window/palette, choose a symbol from the **Symbols** list.  
If you want to name or rename the symbol, double-click the symbol's name box, and type a name.


- 2 Click the **Edit symbol** button  .
- 3 Modify the objects on the drawing page.
- 4 Click the **Finish editing symbol** tab in the bottom-left corner of the drawing window.



Changes made to a symbol are automatically made to all instances in the active drawing.


While working in symbol edit mode, you cannot add layers or save a drawing.



You can also edit a symbol by selecting an instance in the drawing window, and clicking the **Edit symbol** button  on the property bar.

While editing a symbol, you can insert an instance of another symbol, which creates a nested symbol. You cannot, however, insert an instance of the same symbol.

## To delete a symbol

- 1 In the **Library Docker** window/palette, choose a symbol from the **Symbols** list.
- 2 Click the **Delete symbol** button  .



When you delete a symbol, it is removed from the library, and all instances of the symbol are removed from the drawing.

## Using symbols in drawings

You can insert a symbol into a drawing, which creates a symbol instance. You can modify certain properties of a symbol instance, such as size and position, without affecting the symbol definition stored in the library. You can revert a symbol instance to an object or objects while preserving its properties. You can also delete a symbol instance.

## To insert a symbol instance

- 1 Open the **Library Docker** window/palette by clicking **Edit** ▶ **Symbol** ▶ **Library**.
- 2 Choose a symbol from the **Symbols** list.
- 3 Click **Insert**.



You can also insert a symbol instance by dragging a symbol from the **Library** Docker window/palette to the drawing window.

## To modify a symbol instance

- 1 Select a symbol instance.
- 2 Make any changes.



If a symbol contains multiple objects, all objects in the symbol instance are treated as if they were a group. You cannot modify individual objects in a symbol instance.

Not all properties of a symbol instance can be modified. For a list of properties that can be modified, see “Modifying symbol instances” on page 132.



When a symbol instance is selected, you can modify many object properties on the property bar.

## To revert a symbol instance to an object or objects

- 1 Select a symbol instance.
- 2 Click **Edit** ▶ **Symbol** ▶ **Revert to object(s)**.



The symbol remains in the library.



You can also revert a symbol instance to an object by right-clicking the symbol instance (Windows) or **Control** + clicking the symbol instance (Mac OS) and clicking **Revert to object(s)**.

## To delete a symbol instance

- 1 Select a symbol instance.
- 2 Press **Delete**.



The symbol remains in the library.

## Sharing symbols between drawings

In CorelDRAW, each drawing has its own library of symbols, which is part of the CorelDRAW (CDR) file. You can share symbols between drawings by copying and pasting. Copying symbols to the Clipboard leaves the originals in the library.

You can also copy and paste instances of a symbol to and from the Clipboard. Pasting a symbol instance places the symbol in the library and also places an instance of the symbol in the drawing. Subsequent pasting will place another instance of the symbol in the drawing without adding to the library. If a modified symbol instance is pasted into a drawing, the new instance maintains the properties of the original instance, and the new symbol definition in the library maintains the properties of the original symbol. Symbol instances are copied and pasted in the same way other objects are. For more information, see “Copying, duplicating, and deleting objects” on page 76.

## To copy or paste symbols

To	Do the following
Copy symbols to the Clipboard	In the <b>Library</b> Docker window/palette, choose the symbol or symbols from the Symbols list, right-click (Windows) or <b>Control</b> + click (Mac OS), and click <b>Copy</b> .
Paste symbols from the Clipboard	In the <b>Library</b> Docker window/palette, right-click (Windows) or <b>Control</b> + click (Mac OS), and click <b>Paste</b> .



If a pasted symbol has the same name as an existing symbol, the new name is appended with an increment number. For example, a pasted symbol named “logo” would be renamed “logo1.”

## Reference: Working with symbols

This reference section contains information on the following:

- modifying symbol instances
- unsupported object types

## Modifying symbol instances

The following object properties can be modified for symbol instances. If a symbol contains multiple objects, all objects in the symbol instance are treated collectively as a single object, just as if they were grouped.

Property	Notes
Position	Can be modified on the property bar. For more information, see “Positioning objects” on page 77.
Size	Can be modified on the property bar. For more information, see “Sizing and scaling objects” on page 83.
Scale	Percentage is relative to the symbol definition. Can be modified on the property bar. For more information, see “Sizing and scaling objects” on page 83.
Skew	See “Skewing and stretching objects” on page 98.
Rotation angle	Can be modified on the property bar. For more information, see “Rotating and mirroring objects” on page 85.
Transparency	Uniform transparency only. (Windows) Click the <b>Symbol effects</b> tab in the <b>Object properties</b> Docker window. (Mac OS) Choose <b>Symbol effects</b> from the list box on the <b>Object properties</b> palette. For more information, see “Applying transparencies” on page 181.
Mirroring	Can be modified on the property bar. For more information, see “Rotating and mirroring objects” on page 85.

Property	Notes
Wrap paragraph text	<p>(Windows) Click the <b>General</b> tab in the <b>Object properties</b> Docker window.</p> <p>(Mac OS) Choose <b>General</b> from the list box on the <b>Object properties</b> palette.</p> <p>Can also be modified on the property bar. For more information, see “Wrapping paragraph text around objects and text” on page 233.</p>
Order	<p>Can be modified on the property bar. For more information, see “Changing the order of objects” on page 82.</p>
Name	<p>The name of an instance is displayed in the <b>Object manager</b> Docker window/palette. Click twice to change it.</p>



## Filling objects

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You can add colored, patterned, textured, and other fills to the inside of objects. You can customize a fill and set it as a default, so that each object you draw has the same fill.



In this section, you'll learn about

- applying uniform fills
- applying fountain fills
- applying pattern fills
- applying texture fills
- applying mesh fills
- working with fills

### Applying uniform fills

You can apply a uniform fill to objects. Uniform fills are solid colors you can choose or create using color models and color palettes. For information about creating colors, see “Working with color” on page 147.

#### To apply a uniform fill

- 1 Select an object.
- 2 Open the **Interactive fill** flyout , and click the **Interactive fill** tool .
- 3 Choose **Uniform fill** from the **Fill type** list box on the property bar.
- 4 Specify the settings you want on the property bar, and press **Enter**.



You can also fill a selected object by clicking a color on the color palette. You can mix colors in a uniform fill by selecting a filled object, pressing **Ctrl** (Windows) or **Command** (Mac OS), and clicking another color on the color palette.



## Applying fountain fills

A fountain fill is a smooth progression of two or more colors that adds depth to an object. There are four types of fountain fills: linear, radial, conical, and square. A linear fountain fill flows in a straight line across the object, a conical fountain fill creates the illusion of light hitting a cone, a radial fountain fill radiates from the center of the object, and a square fountain fill is dispersed in concentric squares from the center of the object.



You can apply preset fountain fills, two-color fountain fills, and custom fountain fills to objects. Custom fountain fills can contain two or more colors, which you can position anywhere in the fill's progression. After you create a custom fountain fill, you can save it as a preset.

When you apply a fountain fill, you can specify attributes for the fill type you choose; for example, the direction of a fill's color blend, the fill's angle, center point, midpoint, and edge pad. You can also adjust the print and display quality of the fountain fill by specifying the number of fountain steps. By default, the fountain step setting is locked so that the print quality of the fountain fill is determined by the value specified in the print settings and the display quality is determined by the default value you set. However, you can unlock the fountain steps setting when you apply a fountain fill and specify a value that applies to both the print and view quality of the fill. For information about setting fountain fill steps for printing, see "Fine-tuning print jobs" in the **Help**.




*There are four types of fountain fills: (left to right) linear, radial, conical, and square.*

## To apply a preset fountain fill

- 1 Select an object.
- 2 Open the **Fill** flyout  , and click the **Fountain fill dialog** button  .
- 3 Choose a fill from the **Presets** list box.
- 4 Specify the settings you want.

## To apply a two-color fountain fill


- 1 Select an object.
- 2 Open the **Interactive fill** flyout, and click the **Interactive fill tool**  .
- 3 Choose a fountain fill from the **Fill type** list box on the property bar.
- 4 Open the **Fill dropdown** picker on the property bar, and click a color.
- 5 Open the **Last fill** picker on the property bar, and click a color.
- 6 Specify the settings you want.



You can mix colors in a two-color fountain fill by selecting one of the interactive vector handles, pressing **Ctrl** (Windows) or **Command** (Mac OS), and clicking a color on the color palette.

You can add a color to a fountain fill by dragging a color from the color palette to an object's interactive vector handle.

## To apply a custom fountain fill

- 1 Select an object.
- 2 Open the **Fill** flyout, and click the **Fountain fill dialog** button  .
- 3 Choose a fountain fill from the **Type** list box on the property bar.
- 4 Enable the **Custom** option.
- 5 Click the box at one end of the area just above the color band, and click a color on the color palette.
- 6 Click the box at the opposite end of the area just above the color band, and click a color.
- 7 Specify the attributes you want.

## You can also

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Add an intermediate color	Double-click between the two ends of the area just above the color band, and click a color on the color palette.
Change a color	Click the vector just above the color band, and click a color on the color palette.
Delete a color	Double-click the vector just above the color you want to delete.
Change the position of a color	Drag the vector just above the color to a new location.
Save the fill as a preset	Type a name in the <b>Presets</b> box, and click the <b>Add preset</b> button.

---



You can also create a custom fountain fill by dragging colors from the color palette in the drawing window onto the object's interactive vector handles.

## Applying pattern fills

You can fill objects with two-color, full-color, or bitmap pattern fills. A two-color pattern fill is composed of only the two colors that you choose. A full-color pattern fill is a more complex vector graphic that can be composed of lines and fills. A bitmap pattern fill is a bitmap image whose complexity is determined by its size, image resolution, and bit depth.

CorelDRAW provides preset pattern fills that you can apply to objects; however, you can also create your own pattern fills. For example, you can create pattern fills from objects that you draw or images that you import.

You can change the tile size of pattern fills. You can also specify exactly where these fills begin by setting the tile origin. CorelDRAW also lets you offset tiles in a fill. Adjusting the horizontal or vertical position of the first pattern, relative to the top of the object, affects the rest of the fill.


You can choose how the pattern fill appears by specifying whether to mirror the fill so that alternating tiles are the reflections of one another. If you want a pattern fill to change according to actions you perform on the filled object, you can specify that you want it to transform with the object. For example, if you enlarge an object filled with

a pattern that transforms, the pattern becomes larger instead of increasing the number of tiles.



*You can apply a pattern of two colors or many colors to an object.*

## To apply a two-color pattern fill


- 1 Select an object.
- 2 Open the **Interactive fill** flyout, and click the **Interactive fill** tool  .
- 3 Choose **Two color pattern** from the **Fill type** list box on the property bar.
- 4 Open the **Fill** dropdown picker, and click a pattern.
- 5 Open the **Front** color picker, and click a color.
- 6 Open the **Back** color picker, and click a color.



You can also mix colors in a two-color pattern fill by pressing **Ctrl** (Windows) or **Command** (Mac OS) and clicking a color on the color palette.

You can mix a color with only one of the colors in the fill by pressing **Ctrl** (Windows) or **Command** (Mac OS) and dragging a color to the interactive handle.

## To apply a full-color or bitmap pattern fill

- 1 Select an object.
- 2 Open the **Interactive fill** flyout, and click the **Interactive fill tool**  .
- 3 Choose one of the following from the **Fill type** list box on the property bar:
  - **Full-color pattern**
  - **Bitmap pattern**
- 4 Open the **Fill dropdown** picker, and click a pattern.



*A bitmap pattern fill allows you to use a bitmap as a pattern fill.*

## Applying texture fills

A texture fill is a randomly generated fill that you can use to give your objects a natural appearance. CorelDRAW provides preset textures, and each texture has a set of options that you can change. You can use colors from any color model or palette to customize texture fills. Texture fills can hold only RGB colors, however, other color models and palettes can be used as reference to select colors. For information about color models, see “Understanding color models” on page 154.


You can change the tile size of texture fills. Increasing the resolution of a texture tile increases the accuracy of the fill. You can also specify exactly where these fills begin by setting the tile origin. CorelDRAW also lets you offset tiles in a fill. Adjusting the horizontal or vertical position of the first tile, relative to the top of the object, affects the rest of the fill.

You can rotate, skew, adjust the tile size, and change the center of the texture to create a custom fill.

If you want a texture fill to change according to the actions you perform on the filled object, you can specify that you want it to transform with the object. For example, if you enlarge an object filled with a texture that transforms, the texture becomes larger instead of increasing the number of tiles.

Texture fills are powerful features that can enhance a drawing. However, they also increase the size of a file and the time it takes to print, so you may want to use them in moderation.

## To apply a texture fill

- 1 Select an object.
- 2 Open the **Fill** flyout, and click the **Texture fill dialog** button  .
- 3 Choose a texture library from the **Texture library** list box.
- 4 Choose a texture from the **Texture** list.

### You can also

---

Create a custom texture fill	Specify the settings you want in the <b>Style name</b> area.
Change the size of texture tiles	Click <b>Tiling</b> , and type values in the <b>Width</b> and <b>Height</b> boxes.
Set the tile origin of a texture fill	Click <b>Tiling</b> , and type values in the <b>X</b> and <b>Y</b> boxes in the <b>Origin</b> area.
Offset the tile origin of a texture fill	Click <b>Tiling</b> , and enable the <b>Row</b> or <b>Column</b> option. Type an amount of offset in the % of tile size box.
Rotate a texture fill	Click <b>Tiling</b> , and type a value in the <b>Rotate</b> box.
Skew a texture fill	Click <b>Tiling</b> , and type a value in the <b>Skew</b> box.
Mirror a texture fill	Click <b>Tiling</b> , and enable the <b>Mirror fill</b> check box.

---



You can modify the texture you choose from the texture library and save it to another library, but you cannot save textures to or overwrite textures in the texture library.



You can save a custom texture fill by clicking the plus sign (+) in the **Texture fill** dialog box, and typing a name in the **Texture name** box.

## Applying mesh fills

When you fill an object with a mesh fill, you can create unique effects. For example, you can create smooth color transitions in any direction without having to create blends or contours.


When you apply a mesh fill, you specify the number of columns and rows in the grid, and you specify the grid's intersecting points.

After you have created a mesh object, you can edit the mesh fill grid by adding and removing nodes or intersections. You can also remove the mesh.

A mesh fill can be applied only to closed objects or a single path. If you want to apply a mesh fill to a complex object, you must first create a mesh-filled object and combine it with the complex object to form a PowerClip object. For more information about working with PowerClip objects, see “Creating PowerClip objects” on page 124.

You can add color to a patch of a mesh fill and to the individual intersection nodes. You can also choose to mix colors for a more blended appearance.

### To apply a mesh fill to an object

- 1 Select an object.
- 2 Open the **Interactive fill** flyout, and click the **Interactive mesh fill** tool .
- 3 Type the number of columns in the top portion of the **Grid size** box on the property bar.
- 4 Type the number of rows in the bottom portion of the **Grid size** box on the property bar, and press **Enter**.
- 5 Adjust the grid nodes on the object.

#### You can also

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Add an intersection

Click once within a grid, and click the **Add intersection** button on the property bar.

---

## You can also

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Add a node	Hold down <b>Shift</b> , and double-click where you want to add the node.
Remove a node or an intersection	Click a node, and click the <b>Delete node(s)</b> button on the property bar.
Shape the mesh fill	Drag a node to a new location.
Remove the mesh fill	Click the <b>Clear mesh</b> button on the property bar.

---




If the mesh object contains color, adjusting the intersection nodes of the mesh affects how the colors blend together.



You can also marquee select or freehand marquee select nodes to shape an entire area of the mesh.

You can add an intersection by double-clicking in a space, or you can add a single line by double-clicking a line.

## To add color to a patch in a mesh fill

- 1 Select a mesh-filled object.
- 2 Open the **Interactive fill** flyout, and click the **Interactive mesh fill** tool .
- 3 Drag a color from the color palette to a patch in the object.

## You can also

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Color an intersection node in a mesh fill	Click an intersection node, and click a color on the color palette.
Mix a color in a mesh fill	Select part of the mesh, press <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS), and click a color on the color palette.

---





You can also drag a color from the color palette to an intersection node.  
You can also freehand marquee select nodes to apply a color to an entire area of the mesh.

## Working with fills

There are a number of tasks that are common to all types of fills. You can choose a default fill color so that every object you add to a drawing has the same fill. You can also remove any fill, copy it to another object, or use it to fill an area surrounded by an open curve.



### To choose a default fill color


- 1 Click a blank area on the drawing page to deselect all objects.
- 2 Open the **Fill** flyout, and click the **Fill color** dialog.
- 3 In the **Uniform fill** dialog box, enable any of the following check boxes:
  - **Graphic** — applies the default fill color to shapes you draw
  - **Artistic text** — applies the default fill color to artistic text you add
  - **Paragraph text** — applies the default fill color to paragraph text you add
- 4 Specify any fill settings.

### To remove a fill

- 1 Select an object.
- 2 Open the **Fill** flyout, and click the **No fill** button  .

### To copy a fill to another object

- 1 Open the **Eyedropper** flyout  , and click the **Eyedropper** tool  .
- 2 On the property bar, click one of the following buttons:
  - **Fill/outline** — lets you choose the color of the object's fill or outline
  - **1X1** — lets you choose the average color in a 1X1 pixel area of the object
  - **3X3** — lets you choose the average color in a 3X3 pixel area of the object
  - **5X5** — lets you choose the average color in a 5X5 pixel area of the object
  - **Selection** — lets you choose the average color in marquee selected areas of the object

- 3 Click the object whose fill you want to copy.
- 4 Open the **Eyedropper** flyout, and click the **Paintbucket** tool  .
- 5 Click the object to which you want to apply the fill.



Fills you copy may not match the original fill. The closest equivalent RGB color is applied.

## From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Changing fountain fill quality	fountain fills, print quality
Setting the display quality for fountain fills	fountain fills, display quality
Creating pattern fills	pattern fills
Applying PostScript texture fills	PostScript
Showing fills in open curves	curves, filling open



## Working with color

---

Your application lets you choose and create colors using a wide variety of industry-standard palettes, color mixers, and color models. You can create and edit custom color palettes to store frequently used colors for future use.

You can also customize how color palettes display on your screen by changing the size of swatches, the number of rows in palettes, and other properties.

In this section, you'll learn about

- choosing colors
- creating custom color palettes
- opening and editing custom color palettes
- understanding color models

### Choosing colors

You can choose fill and outline colors using fixed or custom color palettes, color viewers, color harmonies, or color blends.

For information about applying the colors you choose, see “Applying uniform fills” on page 135 and “Formatting lines and outlines” on page 50.

When you want to use a color that already exists in an object or document, you can sample the color to achieve an exact match. For more information, see “To copy a fill to another object” on page 144.

### Choosing a color using the default color palette

A palette is a collection of color swatches. You can choose fill and outline colors using the default palette, which contains 99 colors from the CMYK color model. The selected fill and outline colors display in the color swatches on the status bar.

### Choosing a color using fixed or custom color palettes

Fixed color palettes are provided by third-party manufacturers. Some examples of these are PANTONE®, HKS Colors, and TRUMATCH®. It may be useful to have on hand a manufacturer's swatch book, which is a collection of color samples that shows exactly what each color looks like when printed.

Some fixed color palettes — PANTONE, HKS Colors, TOYO, DIC, Focoltone, and SpectraMaster — are collections of spot colors. If you create color separations when you print, each color from these color palettes requires a separate printing plate. This can significantly affect the cost of your print job. If you want to use these colors, but you don't want to use spot colors, convert the spot colors to process colors when printing. For more information, see “Printing color separations” on page 293.

Custom color palettes can include colors from any color model or fixed color palette. You can save a custom color palette for future use. For more information about working with custom color palettes, see “Creating custom color palettes” on page 152 and “Opening and editing custom color palettes” on page 153.

### **Choosing a color using color viewers**

Color viewers give a representation of a range of colors using either one-dimensional or three-dimensional shapes. The default color viewer is based on the HSB color model, but you can use this viewer to choose CMYK, CMY, or RGB colors. For information about color models, see “Understanding color models” on page 154.

### **Choosing a color using color harmonies**

Color harmonies work by superimposing a shape, such as a rectangle or a triangle, over a color wheel. Each vertical row in the color grid begins with the color located at one of the points on the superimposed shape.

The colors at each corner of the shape are always complementary, contrasting, or harmonious, depending on the shape you choose. The color harmonies allow you to choose the color model you prefer to use, and are most useful when you're choosing several colors for a project.

### **Choosing a color using color blends**

When you choose a color using color blends, you combine base colors to get the color you want. The color blender displays a grid of colors that it creates from the four base colors you choose.

## **To choose a color using the default color palette**





<b>To</b>	<b>Do the following</b>
Choose a fill color for a selected object	Click a color swatch.

To	Do the following
Choose an outline color for a selected object	Right-click (Windows) or <b>Control</b> + click (Mac OS) a color swatch.
Choose from different shades of a color	Click and hold a color swatch to display a pop-up color picker, and click a color.
View more colors in the default color palette	Click the scroll arrows at the top and bottom of the color palette.



You can display color names by pointing to a swatch.

## To choose a color using a fixed or custom color palette

- 1 Select an object.
- 2 Open one of the following flyouts:
  - the **Fill** flyout  , and click the **Fill** color dialog tool  .
  - the **Outline** flyout  , and click the **Outline** color dialog tool  .
- 3 Click the **Palettes** tab.
- 4 Choose a fixed or custom palette from the **Palette** list box.
- 5 Move the color slider to set the range of colors displayed in the color selection area.
- 6 Click a color in the color selection area.



Each color swatch on a fixed color palette is marked with a small white square.





You should use the same color model for all colors in a drawing; the colors will be consistent and you will be able to predict the colors of the final output more accurately. It is preferable to use the same color model that you are using for the final output. For more information about reproducing colors accurately, see “Managing color for display, input, and output” on page 157.



You can display or hide the names of fixed or custom colors by clicking **Options ▸ Show color names**.

You can swap the **Old** color (of the selected object) and the **New** color (which has been chosen in the color selection area) by clicking **Options ▸ Swap colors**.

## To choose a color using a color viewer

- 1 Select an object.
- 2 Open one of the following flyouts:
  - the **Fill** flyout  , and click the **Fill color dialog tool**  .
  - the **Outline** flyout  , and click the **Outline color dialog tool**  .
- 3 Click the **Models** tab.
- 4 Choose a color model from the **Model** list box.
- 5 Click **Options ▸ Color viewers**, and click a color viewer.
- 6 Move the color slider.
- 7 Click a color in the color selection area.







If you choose a color that is out of the printer's gamut, CorelDRAW displays the closest in-gamut color. This color is displayed in the **Reference** area, in the small swatch beside the **New** color. You can either choose this closest in-gamut color or you can correct the out-of-gamut color. For information about color correction, see “Managing color for display, input, and output” on page 157.

You should use the same color model for all colors in a drawing; the colors will be consistent and you will be able to predict the colors of the final output more accurately. It is preferable to use the same color model that you are using for the final output.



You can swap the **Old** color (of the selected object) and the **New** color (which has been chosen in the color selection area) by clicking **Options ▸ Swap colors**.

## To choose a color using color harmonies

- 1 Select an object.
- 2 Open one of the following flyouts:
  - the **Fill** flyout  , and click the **Fill color dialog tool**  .
  - the **Outline** flyout  , and click the **Outline color dialog tool**  .
- 3 Click the **Mixers** tab.
- 4 Click **Options** ▶ **Mixers** ▶ **Color harmonies**.
- 5 Choose a shape from the **Hues** list box.
- 6 Choose an option from the **Variation** list box.
- 7 Drag the black dot on the color wheel.
- 8 Click a color swatch on the color palette below the color wheel.







If you choose a color that is out of the printer's gamut, CorelDRAW displays the closest in-gamut color. This color is displayed in the **Reference** area, in the small swatch beside the **New** color. You can either choose this closest in-gamut color or you can correct the out-of-gamut color. For information about color correction, see “Managing color for display, input, and output” on page 157.



You can change the number of swatches in the color grid by dragging the **Size** slider.

You can swap the **Old** color (of the selected object) and the **New** color (which has been chosen in the color selection area) by clicking **Options** ▶ **Swap colors**.

## To choose a color using color blends

- 1 Select an object.
- 2 Open one of the following flyouts:
  - the **Fill** flyout  , and click the **Fill color dialog tool**  .
  - the **Outline** flyout  , and click the **Outline color dialog tool**  .



- 3 Click the **Mixers** tab.
- 4 Click **Options** ▶ **Mixers** ▶ **Color blend**.
- 5 Open each color picker, and click a color.
- 6 Click a color in the color selection area.



You can only blend colors that are in the default color palette. If you want to blend other colors, change the default color palette. For information, see “To open a custom color palette” on page 153.



You can change the cell size of the color grid by moving the **Size** slider. You can swap the **Old** color (of the selected object) and the **New** color (which has been chosen in the color selection area) by clicking **Options** ▶ **Swap colors**.

## Creating custom color palettes

Custom color palettes are collections of colors that you save. A number of preset custom color palettes are available; however, you can create color palettes from scratch. Custom color palettes are useful when you frequently choose the same colors, or when you want to work with a set of colors that look good together.

You can create a custom color palette by choosing each color manually, or by using colors in an object or an entire document.

### To create a custom color palette

- 1 Click **Window** ▶ **Color palettes** ▶ **Palette editor**.
- 2 Click **New palette**  .
- 3 Type a filename.
- 4 Click **Save**.

### To create a color palette from an object

- 1 Select an object.
- 2 Click **Window** ▶ **Color palettes** ▶ **Create palette from selection**.
- 3 Type a filename
- 4 Click **Save**.

## To create a color palette from a document

- 1 Click **Window** ▶ **Color palettes** ▶ **Create palette from document**.
- 2 Type a filename.
- 3 Click **Save**.

## Opening and editing custom color palettes

You can open a custom color palette, and you can set it as the default color palette. For more information about customizing color palettes, see “Setting color palette properties” in the **Help** .

When you create a custom color palette, the color palette is empty; however, you can edit it by adding the colors you want to include, as well as changing, deleting, sorting, and renaming colors.

## To open a custom color palette

- 1 Click **Window** ▶ **Color palettes** ▶ **Open palette**.
- 2 Choose the folder where the custom color palette is stored.
- 3 Double-click the filename.

If you want to set the opened custom color palette as the default palette, right-click (Windows) or **Control** + click (Mac OS) anywhere on the edge of the color palette border, and click **Set as default**.



You can close a custom color palette by right-clicking (Windows) or **Control** + clicking (Mac OS) the edge of the color palette, and clicking **Palette** ▶ **Close**.

## To edit a custom color palette

- 1 Click **Window** ▶ **Color palettes** ▶ **Palette editor**.
- 2 Choose a palette from the list box.
- 3 Modify any colors.

---

To	Do the following
Add a color	Click <b>Add color</b> . Click a color in the color selection area, and click <b>Add to palette</b> .

---

<b>To</b>	<b>Do the following</b>
Change a color	In the color selection area, click the color that you want to change, click <b>Edit color</b> , and click the new color in the color selection area.
Delete a color	Click a color in the color selection area, and click <b>Delete color</b> .
Sort colors	Click <b>Sort colors</b> , and click a color sorting method.
Rename a color	Click a color in the color selection area, and type a color name in the <b>Name</b> box.



You can delete multiple colors from a custom color palette by holding down **Shift** or **Ctrl**, and clicking in the color selection area.

## Understanding color models

You need a precise method to define colors. Color models provide various methods to define colors, each model defining colors through the use of specific color components. There are a range of color models to choose from when creating graphics.

### CMYK color model

The CMYK color model defines color using the following components:

- cyan (C)
- magenta (M)
- yellow (Y)
- black (K)

The cyan, magenta, yellow, and black components are the amounts of cyan, magenta, yellow, and black ink that a CMYK color contains and are measured in percent from 0 to 100.

The CMYK color model is a subtractive color model. Subtractive color models use reflected light to display color. Printed materials are produced using the CMYK color model. When you combine cyan, magenta, yellow, and black, so that the value of each component is 100, the result is black. When the value of each component is 0, the result is pure white.

## RGB color model

The RGB color model defines color using the following components:

- red (R)
- green (G)
- blue (B)

The red, green, and blue components are the amounts of red, green, and blue light that an RGB color contains and are measured in values ranging from 0 to 255.

The RGB color model is an additive color model. Additive color models use transmitted light to display color. Monitors use the RGB color model. When you add red light, blue light, and green light together, so that the value of each component is 255, the color white displays. When the value of each component is 0, the result is pure black.

## HSB color model

The HSB color model defines color using the following components:

- hue (H)
- saturation (S)
- brightness (B)

Hue describes the pigment of a color and is measured in degrees from 0 to 359 (for example, 0 degrees is red, 60 degrees yellow, 120 degrees green, 180 degrees cyan, 240 degrees blue, and 300 degrees magenta). Saturation describes the vividness or dullness of a color and is measured in percent from 0 to 100 (the higher the percentage, the more vivid the color). Brightness describes the amount of white that the color contains and is measured in percent from 0 to 100 (the higher the percentage, the brighter the color).

## Grayscale color model

The Grayscale color model defines color using only one component, lightness, and is measured in values ranging from 0 to 255. Each Grayscale color has equal values of the red, green, and blue components of the RGB color model.

## From here

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

---

Setting color palette properties

---

color palettes, customizing

---



# Managing color for display, input, and output

# 10

You may find that the colors displayed on your monitor don't match the colors of a scanned image or of a printer's output. Color management lets you reproduce colors accurately by using color profiles and by correcting colors for display.

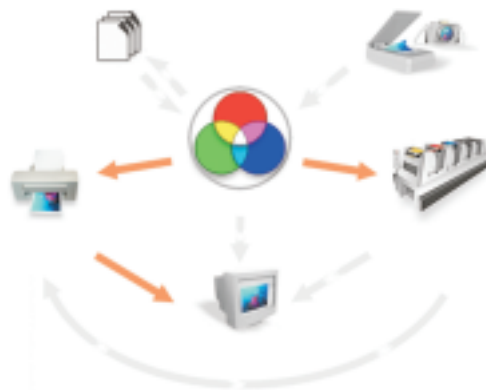
In this section, you'll learn about

- understanding the Color management dialog box
- working with color profiles
- choosing advanced color management settings
- correcting colors for display

## Understanding the Color management dialog box

Color management is the process of matching colors between devices, such as scanners, digital cameras, printers, and monitors. Your application features color management controls designed to help you achieve the best possible color matches.

The Color management dialog box, with its default settings, looks like this



You can activate the following visual elements :

- Scanner/digital camera icon 
- Separations printer icon 
- Monitor icon 
- Composite printer icon 
- Import/export icon 
- Internal RGB icon 
- Arrows 





You can click the **Monitor** icon, the **Import/export** icon, the **Internal RGB** icon, and the **Arrows** to choose color management options and advanced settings.



You can click the caption text under the icons to choose color profiles for each device. You can also get other color profiles from the application CD or online. For more information, see “Working with color profiles” on page 159. To help you choose the appropriate profile, check the manufacturer’s documentation for a device.

In addition, you can click the arrows between device icons to turn the color profiles on or off. The arrows appear orange when on, and grayed and broken when off. You can use the arrows to correct colors between devices, and control how colors are displayed.

The following table contains descriptions of what happens when an arrow is on or off.

When a device is corrected for color, at least two profiles are used — one for each device. For instance, if the printer colors are being corrected using Internal RGB, both the Internal RGB and printer profiles are used. If you use simulation to display colors on your monitor as they are printed, three profiles are used: the Internal RGB, printer, and monitor profiles.

Arrow	On	Off
From the Scanner/digital camera  to Internal RGB 	The scanner/digital camera profile and the Internal RGB profiles are used for color correction.	The profiles are not used.
From Internal RGB to the Monitor 	Colors are calibrated for display using the Internal RGB and monitor color profiles.	The profile is not used.
From Internal RGB to the Composite printer 	The printer and Internal RGB profile are used for color correction.	The profile is not used.

<b>Arrow</b>	<b>On</b>	<b>Off</b>
From the <b>Composite printer</b> to the <b>Monitor</b>	The monitor simulates a composite printer output.	The monitor does not simulate a composite printer output.
From <b>Internal RGB</b> to the <b>Separations printer</b> 	The separations printer and RGB profiles are used for color correction.	The profile is not used. You can override this setting in the <b>Print</b> dialog box.
From the <b>Separations printer</b> to the <b>Monitor</b>	The monitor simulates color separations printer output.	The monitor does not simulate color separations printer output.
From the <b>Separations printer</b> to the <b>Composite printer</b>	The composite printer simulates separations printer display.	The composite printer does not simulate separations printer display.
From <b>Internal RGB</b> to <b>Import/Export</b> 	Internal RGB profiles are embedded.	ICC profiles are not embedded.
From <b>Import/Export</b> to <b>Internal RGB</b>	Embedded ICC profiles are used.	ICC profiles are ignored.

## Working with color profiles

A color management system helps you achieve accurate colors across a variety of devices consistently. The first stage in setting up your color management system is to choose color profiles for your monitor and each of the devices you use, such as scanners, digital cameras, and printers.

### Understanding color management

Each device has a range of colors, or color space, that it uses. For example, a monitor displays a different set of colors than a printer reproduces. So, you may see some colors on the screen that cannot be printed.

You can use a color management system to translate colors from one device to another. Color profiles define the color space for your monitor and for the input and output devices you use.

For more information about using color management in your application, see “Understanding the Color management dialog box” on page 157.



## Choosing color profiles

Different brands and models of monitors, scanners, digital cameras, and printers have different color spaces, and thus require different color profiles. Some widely used profiles are installed with your application.






Standard ICC (International Color Consortium) color profiles are used in your application. You can choose color profiles for a:

- monitor
- scanner/digital camera
- composite printer
- separations printer
- internal RGB color space

## Obtaining additional color profiles

If you need additional profiles or updates, you can get them from the application CD, or you can download them.

## To choose a color profile

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Click a profile name under one of the following icons:
  - **Scanner/digital camera** 
  - **Separations printer** 
  - **Monitor** 
  - **Composite printer** 
  - **Internal RGB** 
- 3 Choose a profile from the list box.



By default, color profiles are stored in the application's **Color** folder.



You can access other color profiles. For more information, see “To copy a color profile from the CD” on page 161 and “To download a color profile” on page 161.

## To copy a color profile from the CD

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Below a device icon, click a color profile list box, and choose **Get profile from disk**.
- 3 Insert the application CD.
- 4 In the **Browse for folder** dialog box, choose the folder where the profiles are located.

If you want to load color profiles that you have stored in a different location, such as on a network or on your hard disk, you can choose the folder where the profiles are located.
- 5 In the **Install from disk** dialog box, choose the color profile you want to copy.
- 6 Click **Choose**.

## To download a color profile

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Below a device icon, click a color profile list box, and choose **Download profiles**.
- 3 In the dialog box, enable the check box for each profile you want to download.
- 4 Click **Download**.
- 5 In the **Save as** dialog box, choose a destination for the color profile.

If you want to store the new color profile with the existing profiles, download it to the application's **Color** folder.

### You can also

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Choose a different profile type

Click the **Profile type** list box, and choose a type.

---

Specify your connection speed

Click the **Connection speed** list box, and choose a speed. The faster your connection speed, the shorter the download time.

---

## You can also

---

Update the profiles list	Click <b>Refresh</b> .
Return to the main Color management dialog box	Click <b>Cancel</b> .

---

## Choosing advanced color management settings

Once you choose color profiles, the color management system uses a Color Matching Module (CMM) to match colors between devices as closely as possible. Your application uses the Kodak® Color Management System by default. You can also choose different rendering intents, which control how the color management system converts colors between different color spaces.


When you import or export graphics, you can embed, or attach, color profiles. By embedding a color profile, you can ensure color integrity; anyone viewing or printing your work will use the same colors that you used.

By enabling the gamut alarm, you can preview which on-screen colors cannot be printed. The colors that cannot be reproduced are highlighted.

In Windows, there are advanced settings for separations and composite printers; you can link a color profile to a specific printer.

Using color styles, you can choose to turn color management off or to optimize the color display.

## To choose a color engine and rendering intent


- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Click on the **Internal RGB** icon .
- 3 In the **Advanced settings** dialog box, from the **Rendering intent** list box, choose one of the following:
  - **Absolute colorimetric** — preserves the white point throughout conversion
  - **Automatic** — default setting, which uses saturation for vector graphics and perceptual for bitmaps
  - **Perceptual** — good for a variety of images, especially bitmaps and photographic images

- **Relative colorimetric** — good for producing proofs on inkjet printers
  - **Saturation** — good for vector graphics (lines, text, and solid colored objects)
- 4 Choose an option from the **Color engine** list box.



(Windows) The Microsoft ICM 2.0 Color Matching Module (CMM) is not available for Windows NT® 4.0.

## To embed color profiles

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Click the **Import/export** icon  .
- 3 In the **Import** area, enable one of the following options :
  - **Use embedded ICC profile**
  - **Always convert using**
  - **Ignore embedded ICC profile**
- 4 In the **Export** area, enable one of the following options:
  - **Embed internal RGB profile**
  - **Always embed using**
  - **Do not embed ICC profiles**




When you enable the **Always convert using** import options, as well as the **Always embed using** export option, you can choose a profile from the list box.

When you enable the **Embed internal RGB profile** or the **Always embed using** export options, certain file formats are exported with an embedded ICC profile. These file formats are: TIFF, encapsulated PostScript (EPS), CorelPHOTO-PAINT (CPT), CorelDRAW (CDR), JPEG, Portable Document Format (PDF), and Adobe® Photoshop® (PSD).

## To enable the gamut alarm

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.

- 2 Click the **Monitor** icon  .
- 3 Enable the **Highlight display colors out of printer gamut** check box.  
If you want to show CMYK in percentages, enable the **Show CMYK in percentages** check box.





You can map spot colors into CMYK gamut by enabling the **Map spot colors into CMYK gamut** check box.

You can change the warning color of the gamut alarm by opening the **Warning color** picker and choosing a color.



*The gamut alarm highlights colors that a printer cannot reproduce.*

## To choose advanced printer settings (Windows)

- 1 Click **Tools** ▶ **Color management**.
- 2 Click one of the following icons:
  - **Composite printer** 
  - **Separations printer** 
- 3 Choose a setting from the list box.



If you choose an advanced setting, that setting overrides the profile that displays under the printer icon in the **Color management** dialog box.

## To use color management styles



- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Color management**.
  - (Mac OS) Click **Edit** ▶ **Color management**.
- 2 Choose one of the following from the **Style** list box:
  - **Color management off**
  - **Default settings**
  - **Optimized for desktop printing**
  - **Optimized for professional output**
  - **Optimized for the Web**
  - **ColorSync® workflow (Mac OS)**



Some color management settings, such as **Default**, **Optimized for desktop printing**, and **Optimized for professional output**, can result in on-screen colors appearing dull. This is due to an on-screen printer simulation of the output. For more information, see “Correcting colors for display” on page 165.

(Mac OS) The ColorSync workflow style affects color management at the system level, and uses the settings from the system preferences’ **ColorSync** dialog box.



You can add or delete a color management style by clicking the **Add preset**  or **Remove preset** buttons  .

## Correcting colors for display






You can correct colors so that they display as accurately as possible on screen. If you correct only the display colors, the colors are shown according to the internal RGB, and monitor color profiles.

If you display colors as they will print, on-screen colors simulate output using the Internal RGB, monitor, and printer color profiles. Simulating printer output may cause on-screen colors to appear dull.

## To correct colors for display

- Do one of the following:
- (Windows) Click **Tools** ▶ **Color management**.

- (Mac OS) Click **Edit** ▶ **Color management**.

To	Do the following
Correct display colors	Click the arrow from the <b>Internal RGB</b> icon  to the <b>Monitor</b> icon  .
Display simulation of a composite printer output	Click the arrow from the <b>Composite printer</b> icon  to the <b>Monitor</b> icon.
Display simulation of a color separations printer output	Click the arrow from the <b>Separations printer</b> icon  to the <b>Monitor</b> icon.
Display simulation of a separations printer on a composite printer	Click the arrow from the <b>Separations printer</b> icon to the <b>Composite printer</b> icon  .



Arrows appear orange when they are turned on, and grayed and broken when they are turned off. For more information about using the arrows for color correction, see “Understanding the Color management dialog box” on page 157.

The display simulation of a separations printer on a composite printer does not affect output.

# Adding three-dimensional effects to objects

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# 11

You can create the illusion of three-dimensional depth in CorelDRAW objects by adding contour, perspective, extrusion, or drop shadow effects.

In this section, you'll learn about

- contouring objects
- applying perspective to objects
- creating vector extrusions
- creating drop shadows

## Contouring objects

You can contour an object to create a series of concentric lines that progress to the inside or outside of the object. CorelDRAW also lets you set the number and distance of the contour lines.

After contouring an object, you can copy or clone its contour settings to another object.

You can also change the colors of the fill between the contour lines and the contour outlines themselves. You can set a color progression in the contour effect, where one color blends into another. The color progression can follow a straight, clockwise, or counterclockwise path through the color range of your choice.







*A center contour has been applied to the above object. The number of contour lines, as well as the distance between lines, can be changed.*



*An outside contour has been applied to the above object. Note that an outside contour projects from the outside edge of the object.*

### **To contour an object**

- 1 Open the **Interactive tools** flyout  , and click the **Interactive contour** tool 
- 2 Click an object or a set of grouped objects, and drag the start handle toward the center to create an inside contour.
- 3 Move the object slider to change the number of contour steps.

## You can also

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Specify the number of contour lines	Click the <b>Inside</b> button on the property bar, and type a value in the <b>Contour steps</b> box on the property bar.
Specify the distance between contour lines	Type a value in the <b>Contour offset</b> box on the property bar.
Accelerate contour line progression	Click the <b>Object and color acceleration</b> button on the property bar, and move the object slider.

---





You can create an outside contour by dragging the start handle away from the center.

## To copy or clone a contour

- 1 Select the object you want to contour.
- 2 Click **Effects** and click one of the following:
  - **Copy effect** ▶ **Contour from**
  - **Clone effect** ▶ **Contour from**
- 3 Click a contour object.

## To set the fill color for a contour object



- 1 Open the **Interactive tools** flyout  , and click the **Interactive contour** tool  .
- 2 Select a contour object.
- 3 Open the **Fill** color picker on the property bar, and click a color.  
If the original object has a fountain fill, a second color picker displays.








You can accelerate the fill color progression by clicking the **Object and color acceleration** button on the property bar.

You can change the contour center's color by dragging a color from the color palette to the end fill handle.

## To specify an outline color for the contour object

- 1 Open the **Interactive tools flyout**  , and click the **Interactive contour tool**  .
- 2 Select a contour object.
- 3 Open the **Outline color picker** on the property bar, and click a color.

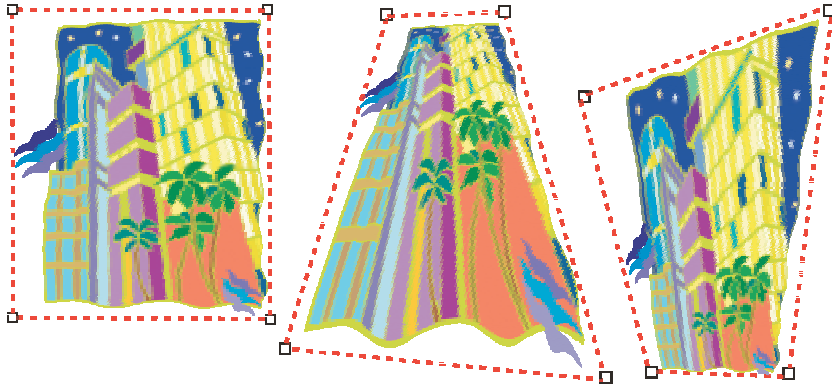
## To set the fill progression

- 1 Open the **Interactive tools flyout**  , and click the **Interactive contour tool**  .
- 2 Select a contour object.
- 3 Click one of the following buttons on the property bar:
  - **Linear contour colors** 
  - **Clockwise contour colors** 
  - **Counterclockwise contour colors** 

## Applying perspective to objects

You can create a perspective effect by shortening one or two sides of an object. This effect gives an object the appearance of receding in one or two directions, thereby creating a one-point perspective or a two-point perspective.

Perspective effects can be added to objects or grouped objects. You can also add a perspective effect to linked groups, such as contours, blends, extrusions, and objects created with the **Artistic media tool**. You can't add perspective effects to paragraph text, bitmaps, or symbols.



*The original graphic (left) with one-point (middle) and two-point (right) perspectives applied to it.*

After you apply a perspective effect, you can copy it to other objects in a drawing, adjust it, or remove it from the object.

## To apply a perspective

### To

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Apply a one-point perspective

Click **Effects** ▶ **Add perspective**. Press **Ctrl** (Windows) or **Shift** (Mac OS) and drag a node.

---

Apply a two-point perspective

Click **Effects** ▶ **Add perspective**. Drag the nodes on the outside of the grid to apply the effect you want.

---



Pressing **Ctrl** (Windows) or **Shift** (Mac OS) constrains the node's movement to the horizontal or vertical axis to create a one-point perspective effect.




You can move opposing nodes the same distance in opposite directions, by pressing **Ctrl + Shift** (Windows) or **Command + Shift** (Mac OS) as you drag.

## To copy an object's perspective effect

- 1 Select an object to which you want to apply a perspective effect.
- 2 Click **Effects** ▶ **Copy effect** ▶ **Perspective from**.
- 3 Select an object whose perspective effect you want to copy.

## To adjust the perspective

- 1 Open the **Shape edit** flyout, and click the **Shape tool** .
- 2 Select an object that has a perspective effect.
- 3 Drag a node to a new position.



You can also adjust the perspective by dragging one or both of the vanishing points.

You can move opposing nodes the same distance in opposite directions by pressing **Ctrl + Shift** (Windows) or **Command + Shift** (Mac OS) while dragging the node.

## To remove an object's perspective effect

- 1 Select an object that has a perspective effect.
- 2 Click **Effects** ▶ **Clear perspective**.

## Creating vector extrusions

You can make objects appear three-dimensional by creating vector extrusions. You can create vector extrusions by projecting points from an object and joining them to create an illusion of three dimensions. CorelDRAW also lets you apply a vector extrusion to an object in a group.

After you create an extrusion, you can copy or clone its attributes to a selected object. Cloning and copying transfer the extrusion attributes of an extruded object to another. However, the cloned extrusion settings cannot be edited independently from the master.

You can change an extruded form by rotating it, changing its direction, and rounding its corners.

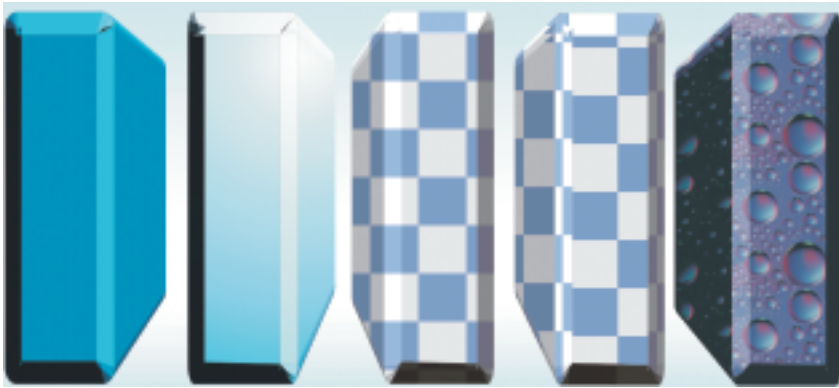
CorelDRAW also lets you remove a vector extrusion.

## Bevels

Another way in which you can give an object a three-dimensional appearance is by applying a beveled edge to an extrusion. A bevel creates the illusion that an object's extruded edges are cut on an angle. You can specify the angle and depth values of the bevel to control the effect.

## Extruded fills

You can apply fills to an entire vector extrusion or to the extruded surfaces of a vector extrusion. You can cover each surface individually with the fill, or you can drape the fill so that it blankets the entire object with no breaks to the pattern or texture.



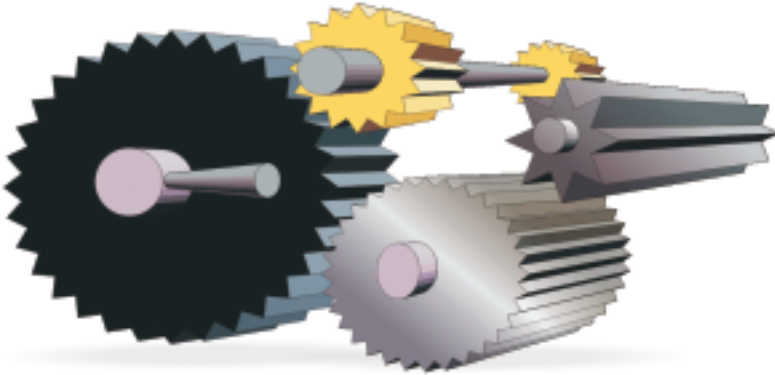
*Extruded fills: (left to right) solid color, solid color with lighting, draped two-color pattern, undraped two-color pattern, draped bitmap*

## Lighting

You can enhance vector extrusions by applying light sources. You can add up to three light sources to project toward the extruded object with varying intensity. When you no longer need light sources, you can remove them.

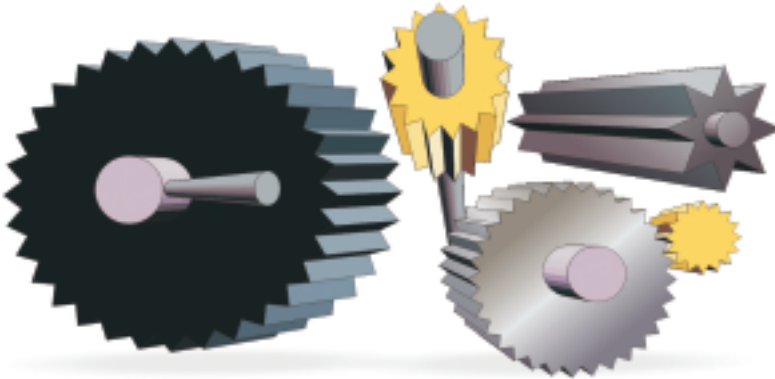
## Vanishing points

You can create a vector extrusion in which the lines of the extrusion converge at a vanishing point. The vanishing point of a vector extrusion can be copied to another object so that both objects appear to recede toward the same point.






*Vector extrusions with the same vanishing point*

You can also give two vector extrusions different vanishing points.



*Vector extrusions with different vanishing points*

## To create a vector extrusion

- 1 Open the **Interactive** tools flyout  , and click the **Interactive extrude** tool  .
- 2 Click the **Vector extrusion mode** button  on the property bar.
- 3 Choose an extrusion type from the **Extrusion type** list box on the property bar.
- 4 Select an object.
- 5 Drag the object's selection handles to set the direction and depth of the extrusion.  
If you want to reset the extrusion, press **Esc** before releasing the mouse button.

### You can also

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Apply preset settings to a vector extrusion

Select an extrude object, click **Interactive extrude** tool, and choose a preset setting from the **Preset** list box on the property bar.

---

## To copy or clone a vector extrusion

- 1 Select the object you want to extrude.
- 2 Click **Effects** and click one of the following:
  - **Copy effect** ▶ **Extrude from**
  - **Clone effect** ▶ **Extrude from**
- 3 Click an extruded object.

## To change a vector extrusion's form

To	Do the following
Rotate an extrusion	Select an extruded object. Click the <b>Extrude rotation</b> button on the property bar. Drag the extrusion in the direction you want.
Change the direction of an extrusion	Click an extrusion twice. Drag in the direction you want.

---



## To

## Do the following

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Round the corners of an extruded rectangle or square

Open the **Shape** edit flyout, and click the **Shape** tool. Drag a corner node along the outline of the rectangle or square.

---






## To remove a vector extrusion

- 1 Select an extruded object.
- 2 Click **Effects** ▶ **Clear extrude**.



You can also remove a vector extrusion by clicking the **Clear extrude** button on the property bar.




## To apply a fill to a vector extrusion

- 1 Select an extruded object with the **Interactive extrude** tool .
- 2 Click the **Color** button  on the property bar.
- 3 Click one of the following buttons:
  - **Use object fill**  — applies the object's fill to the extrusion.
  - **Use solid color**  — applies a solid color to the extrusion
  - **Use color shading**  — applies a gradient fill to the extrusion

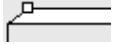


You can apply an unbroken pattern or texture fill to an object by enabling the **Drape fills** check box before you click the **Use object fill** button.

## To apply beveled edges to a vector extrusion



- 1 Open the **Interactive tools** flyout , and click the **Interactive extrude** tool .
- 2 Select an extruded object.
- 3 Click the **Bevels** button  on the property bar.
- 4 Enable the **Use bevel** check box.
- 5 Type a value in the **Bevel depth** box.
- 6 Type a value in the **Bevel angle** box.



You can also set the bevel depth and angle by using the **Interactive display**  box in the bevel list box.

You can show only the bevel and hide the extrusion by enabling the **Show bevel only** check box.

## To add light to a vector extrusion

- 1 Select an extruded object.
- 2 Click the **Lighting** button  on the property bar.
- 3 Click any of the three **Light** buttons  .  
The lights appear as numbered circles in the preview window.
- 4 Drag the numbered circles in the **Light intensity preview** window to position the lights.  
If you want to create more realistic shading, enable the **Use full color range** check box.

### You can also

Adjust the intensity of a light source	Select a light in the <b>Light intensity preview</b> window and move the <b>Intensity</b> slider.
Remove a light source	Click an active <b>Light</b> button.

## To change the vanishing point of a vector extrusion

To	Do the following
Lock a vanishing point	Double-click an extruded object. Choose <b>VP locked to object</b> or <b>VP locked to page</b> from the <b>Vanishing point properties</b> list box on the property bar.
Copy a vanishing point	Double-click an extruded object whose vanishing point you want to change. Choose <b>Copy VP</b> from the <b>Vanishing point properties</b> list box on the property bar. Select the extruded object that has the vanishing point you want to copy.

**To****Do the following**

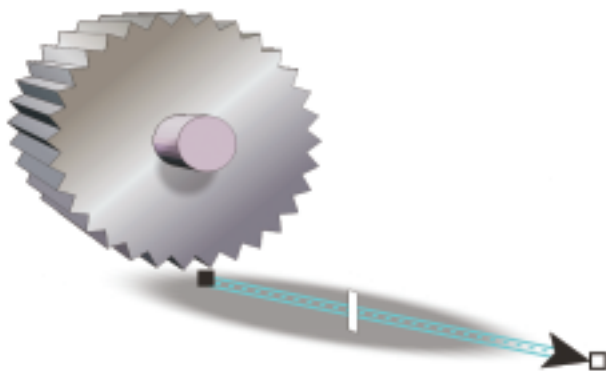
Set one vanishing point for two extrusions

Double-click an extruded object. Choose **Shared vanishing point** from the **Vanishing point properties** list box on the property bar. Select the extruded object that has the vanishing point you want to share.

## Creating drop shadows

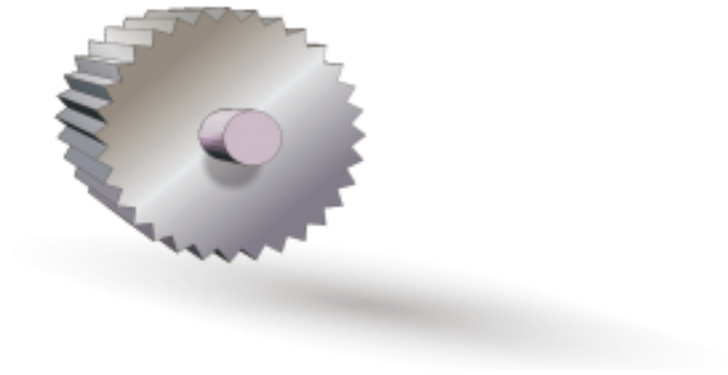
Drop shadows simulate light falling on an object from one of five particular perspectives: flat, right, left, bottom, and top. You can add drop shadows to most objects or groups of objects, including artistic text, paragraph text, and bitmaps.

When you add a drop shadow, you can change its perspective, and you can adjust attributes such as color, opacity, fade level, angle, and feathering.



*A drop shadow applied to an object*

After you create a drop shadow, you can copy it or clone it to a selected object. When you copy a drop shadow, the original and copy have no connection and can be edited independently. With cloning, the master object's drop shadow attributes are automatically applied to its clone.




*The feathered effect softens the edges of a drop shadow*

By separating a drop shadow from its object, you can gain more control over the drop shadow itself. Drop shadows are bitmaps, so any feature or effect that can be used to modify a bitmap can be applied to a drop shadow. You can also set the rendering resolution of a drop shadow.

You can also remove a drop shadow.

### To add a drop shadow

- 1 Open the **Interactive tools** flyout, and click the **Interactive drop shadow** tool  .
- 2 Click an object.
- 3 Drag from the center or side of the object until the drop shadow is the size you want.
- 4 Specify any attributes on the property bar.



You can't add drop shadows to linked groups, such as blended objects, contoured objects, beveled objects, extruded objects, objects created with the **Artistic media** tool, or other drop shadows.

### To copy or clone a drop shadow

- 1 Select the object to which you want to copy or clone a drop shadow.
- 2 Click **Effects** and click one of the following:

- Copy effect ▶ Drop shadow from
  - Clone effect ▶ Drop shadow from
- 3 Click the drop shadow of an object.

### **To separate a drop shadow from an object**

- 1 Select an object's drop shadow.
- 2 Click **Arrange** ▶ **Break drop shadow group apart**.
- 3 Drag the shadow.

### **To adjust the resolution of a drop shadow**

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the **Workspace** list of categories, click **General**.
- 3 Type a value in the **Resolution** box.

### **To remove a drop shadow**

- 1 Select an object's drop shadow.
- 2 Click **Effects** ▶ **Clear drop shadow**.



You can also remove a drop shadow from an object by clicking the **Clear drop shadow** button on the property bar.

You can apply a transparency to an object so that all objects behind it show through. The CorelDRAW application also lets you specify how the color of the transparent object combines with the color of the object beneath it.

In this section, you'll learn about

- applying transparencies
- applying merge modes

### Applying transparencies

When you apply a transparency to an object, you make the objects beneath it partially visible. You can apply transparencies using the same kind of fills you apply to objects; that is, uniform, fountain, texture, and pattern. For more information about these fills, see “Filling objects” on page 135.

By default, CorelDRAW applies all transparencies to the object's fill and outline; however, you can specify whether you want the transparency to apply only to the object's outline or fill.



You can also copy a transparency from one object to another.

When you position a transparency over an object, you can freeze it, making the view of the object move with the transparency.




*Some types of transparencies: uniform, fountain, textured, and patterned*

### To apply a uniform transparency

- 1 Select an object.
- 2 Open the **Interactive tools** flyout , and click the **Interactive transparency** tool .
- 3 On the property bar, choose **Uniform** from the **Transparency type** list box.
- 4 Click a color on the color palette.
- 5 Type a value in the **Starting transparency** box on the property bar, and press **Enter**.

### To apply a fountain transparency

- 1 Select an object.
- 2 Open the **Interactive tools** flyout, and click the **Interactive transparency** tool .
- 3 On the property bar, choose one of the following fountain transparencies from the **Transparency type** list box:
  - Linear
  - Radial
  - Conical
  - Square

- 4 Reposition the interactive vector handles that display, or point to where you want the transparency to start on the object, and drag to where you want the transparency to end.


If you want to reset the transparency, press **Esc** before releasing the mouse button.

- 5 Type a value in the **Transparency midpoint** box on the property bar, and press **Enter**.




You can create a custom fountain transparency by dragging colors, whose shades convert to grayscale, from the color palette onto the object's interactive vector handles . . . .

## To apply a textured transparency

- 1 Select an object.
- 2 Open the **Interactive tools** flyout, and click the **Interactive transparency** tool .
- 3 Choose **Texture** from the **Transparency type** list box on the property bar.
- 4 Choose a sample from the **Texture library** list box on the property bar.
- 5 Open the **First transparency picker** on the property bar and click a texture.
- 6 On the property bar, type values in the following boxes:
  - **Starting transparency** — lets you change the opacity of the starting color
  - **Ending transparency** — lets you change the opacity of the ending color


## To apply a pattern transparency

- 1 Select an object.
- 2 Open the **Interactive tools** flyout, and click the **Interactive transparency** tool .
- 3 From the **Transparency type** list box on the property bar, choose one of the following:
  - **Two-color pattern** — a simple picture composed of “on” and “off” pixels. The only shades included in the picture are the two that you assign.
  - **Full-color pattern** — a picture composed of lines and fills, instead of dots of color like bitmaps. These vector graphics are smoother and more complex than bitmap images and are easier to manipulate.
  - **Bitmap pattern** — a color picture composed of patterns of light and dark or differently colored pixels in a rectangular array.



- 4 Open the **First transparency** picker on the property bar and click a pattern.
- 5 On the property bar, type values in the following boxes:
  - **Starting transparency**
  - **Ending transparency**


### To specify the extent of a transparency

- 1 Open the **Interactive tools** flyout, and click the **Interactive transparency** tool  .
- 2 Select an object to which a transparency has been applied.
- 3 From the **Apply transparency** to list box on the property bar, choose one of the following:
  - **Fill**
  - **Outline**
  - **All**

### To copy a transparency to another object

- 1 Select an object to which you want to apply a transparency.
- 2 Click **Effects** ▶ **Copy effect** ▶ **Lens from**.
- 3 Using the horizontal cursor, select the object with the transparency you want to copy.

### To freeze the contents of a transparency

- 1 Open the **Interactive tools** flyout, and click the **Interactive transparency** tool.
- 2 Select an object to which a transparency has been applied.
- 3 Click the **Freeze** button  on the property bar.



The view of the object beneath the transparency moves with it; however, the actual object remains unchanged.


### Applying merge modes

You can apply a merge mode to a transparency to specify how the color of a transparency is combined with the color of the object behind it.

<b>Merge mode</b>	<b>Description</b>
Normal	Applies the transparency color on top of the base color
Add	Adds the values of the transparency color and the base color
Subtract	Adds the values of the transparency color and the base color together, and then subtracts 255
Difference	Subtracts the transparency color from the base color and multiplies by 255. If the transparency color value is 0, the result will always be 255.
Multiply	Multiplies the base color by the transparency color, and then divides by 255. This has a darkening effect, unless you are applying color to white. Multiplying black with any color results in black. Multiplying white with any color leaves the color unchanged.
Divide	Divides the base color by the transparency color, or conversely, divides the transparency color by the base color, depending on which color has the higher value
If lighter	Replaces any base color pixels that are a darker color with the transparency color. Base color pixels that are lighter than the transparency color are not affected.
If darker	Replaces any base color pixels that are a lighter color with the transparency color. Base color pixels that are darker than the transparency color are not affected.
Texturize	Converts the transparency color to grayscale, and then multiplies the grayscale value by the base color

<b>Merge mode</b>	<b>Description</b>
Hue	Uses the hue of the transparency color, as well as the saturation and lightness of the base color. If you are adding color to a grayscale image, there will be no change because the colors are desaturated.
Saturation	Uses the lightness and hue of the base color and the saturation of the transparency color
Lightness	Uses the hue and saturation of the base color and the lightness of the transparency color
Invert	Uses 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, and then applies the Boolean algebraic formula AND to these values
Logical OR	Converts the transparency and base colors to binary values, and then applies the Boolean algebraic formula OR to these values
Logical XOR	Converts the transparency and base colors to binary values, and then applies the Boolean algebraic formula XOR to these values
Red	Applies the transparency color to the red channel of RGB objects
Green	Applies the transparency color to the green channel of RGB objects
Blue	Applies the transparency color to the blue channel of RGB objects

## To apply a merge mode

- 1 Open the **Interactive tools** flyout, and click the **Interactive transparency tool**  .
- 2 Select an object with a transparency.
- 3 Choose a merge mode from the **Transparency operation** list box on the property bar.



## Using lenses with objects

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Lenses contain creative effects that let you change their appearance without actually changing the object.

In this section, you'll learn about

- applying lenses
- editing lenses

### Applying lenses

Lenses change how the object area beneath the lens appears, not the actual properties and attributes of the objects. You can apply lenses to any vector object, such as a rectangle, ellipse, closed path, or polygon. You can also change the appearance of artistic text, and bitmaps. When you apply a lens over a vector object, the lens itself becomes a vector image. Likewise, if the lens is placed over a bitmap, the lens also becomes a bitmap.

After you apply a lens, you can copy it and use it with another object.



*The lens types applied to the original (far left): (left to right) Heat map, Magnify, and a Custom color map*

The following are the types of lenses you can apply to objects.


Lens	Description
Brighten	Lets you brighten and darken object areas and set the rate of the brightness and darkness
Color add	Lets you simulate a light model by shining three spotlights — red, blue, and green — on a black background. You can choose the color and the amount of color you want to add.
Color limit	Lets you view an object area with only black and the lens color showing through. For example, if you place a green color limit lens over a bitmap, all colors except green and black are filtered out in the lens area.
Custom color map	Lets you change all the colors of the object area beneath the lens to a color ranging between two colors you specify. You can choose the range's start and end colors and the progression between the two colors. The progression can follow a direct, forward, or reverse route through the color spectrum.
Fish eye	Lets you distort, magnify, or shrink the objects beneath the lens, according to the percentage value you specify
Heat map	Lets you create the effect of an infrared image by mimicking the heat levels of colors in object areas beneath the lens
Invert	Lets you change the colors beneath the lens to their complementary CMYK colors. Complementary colors are colors that are opposite one another on the color wheel.
Magnify	Lets you magnify an area on an object by an amount that you specify. The magnify lens overrides the original object's fill, making the object look transparent.

Lens	Description
Tinted grayscale	Lets you change the colors of object areas beneath the lens to their grayscale equivalents. Tinted grayscale lenses are particularly effective for creating sepia-tone effects.
Transparency	Lets you make an object look like a piece of tinted film or colored glass
Wireframe	Lets you display the object area beneath the lens with the outline or fill color you choose. For example, if you set red for the outline and blue for the fill, all areas beneath the lens appear to have red outlines and blue fills.

## To apply a lens

- 1 Select an object.
- 2 Click **Effects** ▶ **Lens**.
- 3 Choose a lens type from the list box in the **Lens Docker** window/palette.
- 4 Specify the settings you want.



You cannot apply the lens effect directly to linked groups such as blended objects, contoured objects, beveled objects, extruded objects, drop shadows, paragraph text or objects created with the **Artistic media** tool .



You can preview the different types of lenses in real-time before auto-applying one to a drawing by clicking the **Lock** button and then choosing a lens and settings to preview. When you find the lens you want to use, click the **Lock** button again, and click **Apply**.

You can apply a lens to a linked group by selecting an unrelated object, applying a lens to that object, and dragging the object over the linked group.



## To copy a lens

- 1 Select an object.
- 2 Click **Effects** ▶ **Copy effect** ▶ **Lens from**.
- 3 Click the object whose lens you want to copy.

## Editing lenses

You can edit a lens to change how it affects the area beneath it. For example, you can change the viewpoint of a lens, indicated by an X in the drawing window, to display any part of a drawing. The viewpoint represents the center point of what is being viewed through the lens. You can position the lens anywhere in the drawing window, but it always shows the area around its viewpoint marker. For example, you can use the viewpoint marker on the Magnify lens to enlarge part of a map.

You can also display a lens only where it overlaps other objects or the background. As a result, the lens effect is not seen where the lens covers blank space (white space) in the drawing window.

Freezing the current view of a lens lets you move the lens without changing what's displayed through it. In addition, changes you make to the areas beneath the lens have no effect on the view.

## To edit a lens

- 1 Select an object.
- 2 Click **Effects** ▶ **Lens**.
- 3 Enable the **Viewpoint** check box on the **Lens Docker** window/palette.  
If you want to display a lens only where it covers other objects, enable the **Remove face** check box.
- 4 Click **Edit** to display the viewpoint marker.
- 5 Drag the viewpoint marker in the drawing window to a new location.
- 6 Click **End**.  
If you want to freeze the current view of a lens, enable the **Frozen** check box.
- 7 Click **Apply**.



The **Remove face** check box is not available for Fish Eye and Magnify lenses.

The CorelDRAW application allows you to specify the size, orientation, unit of scale, and background of the drawing page. You can customize and display page grids and guidelines to help you organize objects and place them exactly where you want. For example, if you are designing a newsletter, you can set the dimensions of the pages and create guidelines for positioning columns and heading text. When you are laying out an advertisement, you can align graphics and advertisement copy along guidelines and arrange graphic elements within a grid. Rulers can help you position grids, guidelines, and objects along a scale using units of your choosing. You can add and delete pages as well.

Page layout settings and tools are fully customizable and can be used as defaults for other drawings.

In this section, you'll learn about

- specifying the page layout
- choosing a page background
- adding, renaming, and deleting pages
- using the rulers
- calibrating the rulers
- setting up the grid
- setting up guidelines
- setting the drawing scale

## Specifying the page layout

You can begin working on a drawing by specifying settings for the size, orientation, and layout style of the page.

There are two options for specifying a page size: choosing a preset page size or creating your own. You can choose from many preset page sizes ranging from legal paper and envelopes to posters and Web pages. If a preset page size does not meet your needs, you can create a custom page size by specifying a drawing's dimensions.

The orientation of the page can be landscape or portrait. With landscape orientation the drawing's width is greater than its height, and with portrait orientation the drawing's height is greater than its width. Any pages you add to a drawing project assume the current orientation; however, you can give single pages in a drawing project a different orientation. The options you choose when specifying the page layout can be used as a default for all new drawings you create. You can also adjust the page size and orientation settings to match the standard paper settings for printing.

## To set the page size and orientation

To	Do the following
Choose a preset page size	Click <b>Layout</b> ► <b>Page setup / Document setup</b> , and choose a paper type from the <b>Paper</b> list box.
Specify a custom page size	Click <b>Layout</b> ► <b>Page setup / Document setup</b> , and choose <b>Custom</b> from the <b>Paper</b> list box, and type values in the <b>Width</b> and <b>Height</b> boxes.
Set the page orientation	Click <b>Layout</b> ► <b>Page setup / Document setup</b> , and enable the <b>Landscape</b> or the <b>Portrait</b> option.
Set the page orientation for an individual page in a multi-page document	Go to the page. Click the bottom half of the <b>Set default or current page size and orientation</b> button on the property bar, and click the <b>Landscape</b> or <b>Portrait</b> button.



To apply page size and orientation settings to all pages in a drawing, select the top half of the **Set default or current page size and orientation** button, and disable the **Resize current page only** check box in the **Size** dialog box.

You can also specify the page size and orientation for individual pages by clicking **View** ► **Page sorter view**, selecting the bottom half on the **Set default or current page size and orientation** button, clicking a page, and specifying your options using the buttons on the property bar.

## To set the default page layout

- 1 Do one of the following:  
(Windows) Click **Tools** ▶ **Options**.  
(Mac OS) Click **CoreIDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, click **Document**.
- 3 Enable the **Save options as defaults for new documents** check box.
- 4 Enable the **Page options** check box.



The next new document is created with the page size and orientation options that were last specified with the **Resize current page only** check box disabled.

## Choosing a page background

You can choose the color and type of background for a drawing. For example, you can use a solid color if you want a uniform background. If you want a more intricate or dynamic background, you can use a bitmap. Some examples of bitmaps include textured designs, photographs, and clipart.

When you choose a bitmap as the background, it is embedded in the drawing by default. This is the recommended option. However, you can also link the bitmap to the drawing so that if you later edit the source image, the change is automatically reflected in the drawing. If you send a drawing with a linked image to someone else, you must also send the linked image.

You can make a background bitmap printable and exportable, or you can save computer resources by exporting and printing a drawing without the background bitmap.

If you no longer need a background, you can remove it.

## To use a solid color as the background

- 1 Click **Layout** ▶ **Page background**.
- 2 Enable the **Solid** option.
- 3 Open the **Color** picker, and click a color.

## To use a bitmap as the background

- 1 Click **Layout** ▶ **Page background**.
- 2 Enable the **Bitmap** option.
- 3 Click **Browse**.
- 4 Choose a file format from the **Files of type** list box (Windows) or **Show** list box (Mac OS).
- 5 Locate the folder where the file is stored.
- 6 Double-click the filename.
- 7 Enable one of the following options:
  - **Linked** — links the bitmap to the drawing so that changes made to the source file are reflected in the bitmap background
  - **Embedded** — embeds the bitmap in the drawing so that changes made to the source file are not reflected in the bitmap background

If you want the background to be printed and exported with the drawing, enable the **Print and export background** check box.

- 8 Enable one of the following options:
  - **Default size** — lets you use the bitmap's current size
  - **Custom size** — lets you specify the dimensions of the bitmap. Type values in the **H** and **V** boxes.

If you want to specify nonproportional height and width values, disable the **Maintain aspect ratio** check box.



If the bitmap is smaller than the drawing page, it is tiled across the drawing page. If it is larger than the drawing page, it is cropped to fit the drawing page.

A background bitmap is not an object and cannot be edited.

## To remove a background

- 1 Click **Layout** ▶ **Page background**.
- 2 Enable the **No background** option.

## Adding, renaming, and deleting pages

CorelDRAW lets you add a page to a drawing, rename it anytime, and delete a single page or an entire range of pages.

You can also change the order of pages after you have created a multi-page drawing.

## To add a page

- 1 Click **Layout** ▶ **Insert page**.
- 2 Type the number of pages you want to add in the **Insert pages** box.
- 3 Enable one of the following options:

- **Before**
- **After**

If you want to insert before or after a page other than the current page, type the page number in the **Page** box.



You can also add pages by clicking the **Add page** button on the Document window, if you're on the first or last page.

You can also choose where to add a page by right-clicking (Windows) or **Control** + clicking (Mac OS) a page tab in the Document window, and clicking **Insert page after** or **Insert page before**.

## To rename a page

- 1 Click **Layout** ▶ **Rename page**.
- 2 Type the name of the page in the **Page name** box.

## To delete a page

- 1 Click **Layout** ▶ **Delete page**.
- 2 In the **Delete page** dialog box, type the number of the page you want to delete.



You can delete a range of pages by enabling the **Through to page** check box and typing the number of the last page to delete in the **Through to page** box.

## To change the order of pages

- 1 Click **View** ▶ **Page sorter view**.
- 2 Drag a page to its new location.

## You can also

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(Windows) Copy a page	Right-click, drag the page to its new location, and choose <b>Copy here</b> from the list box.
(Mac OS) Copy a page	Hold down <b>Command</b> , and drag the page to its new location.
Return to normal view	Double-click a page.

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You can also change the order of pages by dragging the page tabs on the Document Navigator at the bottom of the drawing window.

## Using the rulers

You can display rulers in the drawing window to help you draw, size, and align objects precisely. You can hide the rulers or move them to another position in the drawing window. You can also customize the ruler settings to suit your needs. For example, you can set the ruler origin, choose a unit of measure, and specify how many marks or ticks display between each full unit mark.

By default, CorelDRAW applies the same units used for the rulers to the duplicate and nudge distances. You can change the default so that you can specify different units for these and other settings. For information about nudging, see “Positioning objects” on page 77.

### To hide or display the rulers

- Click **View** ► **Rulers**.

A check mark beside the **Rulers** command indicates the rulers are displayed.

### To move a ruler

- Hold down **Shift**, and drag a ruler to a new position in the drawing window.

## To customize ruler settings

- 1 Click **View** ► **Grid and ruler setup**.
- 2 In the **Document** list of categories, click **Rulers**.
- 3 In the **Units** area, choose a unit of measure from the **Horizontal** list box.  
If you want to use a different unit of measure for the vertical ruler, disable the **Same units for horizontal and vertical rulers** check box, and choose a unit of measure from the **Vertical** list box.
- 4 In the **Origin** area, type values in the following boxes:
  - **Horizontal**
  - **Vertical**
- 5 Type a value in the **Tick divisions** box.



If you change the unit of measure for rulers, the unit of measure for nudge distances automatically changes as well, unless you first disable the **Same units for duplicate distance, nudge and rulers** check box in the **Nudge** area.



You can access ruler settings directly by double-clicking a ruler.  
You can specify nudge settings by typing values in the **Nudge**, **Super nudge**, and **Micro nudge** boxes in the **Nudge** area.

## Calibrating the rulers

You can have one inch on your screen equal one inch of “real” distance. This lets you work using real-world distances as opposed to relative distances that depend on screen resolution. This tool is particularly useful when working with signs, or when drawing in 1:1 zoom mode.

Before you can perform this procedure, you must have a clear plastic ruler for comparing real-world and on-screen distances. This ruler should use the same unit of measurement you set for the CorelDRAW rulers. For information about ruler settings, see “Using the rulers” on page 198.



## To calibrate the rulers to match real-world distance

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Toolbox**, and click **Zoom, hand tool**.
- 3 Click **Calibrate rulers**.
- 4 Place a clear plastic ruler under the on-screen horizontal ruler.
- 5 Click the **Up** or **Down Arrow** on the **Horizontal** box to match one unit of measurement on the on-screen ruler with one unit of measurement on the actual ruler.
- 6 Place the ruler beside the on-screen vertical ruler.
- 7 Click the **Up** or **Down Arrow** button on the **Vertical** box to match one unit of measurement on the on-screen ruler with one unit of measurement on the actual ruler.

## Setting up the grid

The grid is a series of intersecting dashed lines or dots that you can use to precisely align and position objects in the drawing window. You can set the distance between the grid lines or dots by specifying the frequency or spacing. Frequency refers to the number of lines or dots that display between each horizontal and vertical unit. Spacing refers to the exact distance between each line or dot. High frequency values or low spacing values can help you align and position objects more precisely.

You can have objects snap to the grid so that when you move the objects, they jump between grid lines.

## To display or hide the grid

- Click **View** ▶ **Grid**.



A check mark beside the **Grid** command indicates that the grid is displayed.

## To set the distance between the grid lines


- 1 Click **View** ▶ **Grid and ruler setup**.
- 2 Enable one of the following options:
  - **Frequency** — specifies grid spacing as the number of lines per unit of measure

- **Spacing** — specifies grid spacing as the distance between each grid line
- 3 Type values in the following boxes:
- **Horizontal**
  - **Vertical**



The unit of measure used for grid spacing is the same as that used for rulers. For information about ruler settings, see “To customize ruler settings” on page 199.

## To have objects snap to the grid

- 1 Click **View** ▶ **Snap to grid**.
- 2 Move the objects using the **Pick** tool  .

## Setting up guidelines

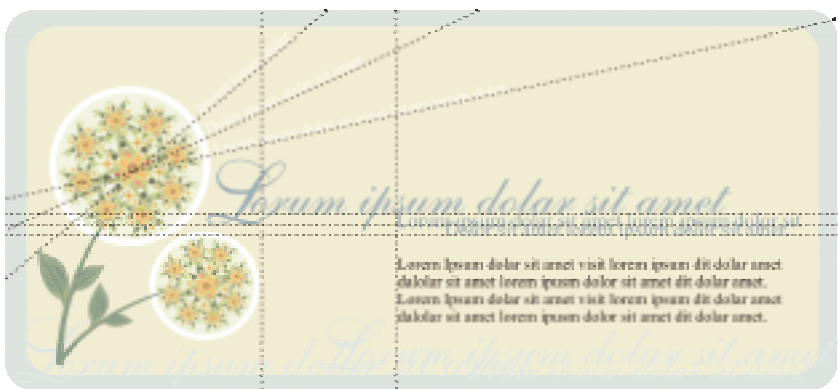
Guidelines are lines that can be placed anywhere in the drawing window to aid in object placement. There are three types of guidelines: horizontal, vertical, and slanted. By default, CorelDRAW displays guidelines you add to the drawing window, but you can hide them at any time.

You can add a guideline wherever you need one; however, you can also choose to add preset guidelines. There are two types of preset guidelines: Corel presets and user defined presets. Examples of Corel presets include guidelines that display at one-inch margins, and guidelines that display at newsletter column borders. User defined presets are guidelines whose location you specify. For example, you can add preset guidelines that display margins at a distance you specify, or that define a column layout or grid.

After you add a guideline, you can select it, move it, rotate it, lock it in place, or delete it.

You can have objects snap to the guidelines so that when an object is moved near a guideline, it can only be centered on the guideline or lined up on either side of the guideline.

Guidelines always use the unit of measure specified for rulers. For information about ruler settings, see “To customize ruler settings” on page 199.



*Guidelines can be placed in the drawing window to aid in object placement.*

## To display or hide the guidelines

- Click **View** ► **Guidelines**.



A check mark beside the **Guidelines** command indicates that the guidelines are displayed.

## To add a horizontal or vertical guideline

- 1 Click **View** ► **Guidelines setup**.
- 2 In the list of categories, click one of the following:
  - **Horizontal**
  - **Vertical**
- 3 Specify the guideline settings you want.
- 4 Click **Add**.



You can also add a guideline by dragging from the horizontal or vertical ruler in the drawing window.

## To modify guidelines

To	Do the following
Select a single guideline	Click the guideline using the <b>Pick</b> tool.
Select all guidelines	Click <b>Edit ▶ Select all ▶ Guidelines</b> .
Move a guideline	Drag a guideline to a new position in the drawing window.
Rotate a guideline	Click a guideline twice using the <b>Pick</b> tool, and rotate it when skewing handles display.
Lock a guideline	Click a guideline using the <b>Pick</b> tool, and click <b>Arrange ▶ Lock object</b> .
Unlock a guideline	Click a guideline using the <b>Pick</b> tool, and click <b>Arrange ▶ Unlock object</b> .
Delete a guideline	Click a guideline using the <b>Pick</b> tool, and press <b>Delete</b> .
Delete a preset guideline	Click <b>View ▶ Guidelines setup</b> , and click <b>Presets</b> in the list of categories. Disable the check box beside the preset guideline you want to delete.



You can also lock or unlock a guideline by right-clicking (Windows) or **Control + clicking** (Mac OS) the guideline, and then clicking **Lock object** or **Unlock object**.

You can access the guidelines setup directly by right-clicking (Windows) or **Control + clicking** (Mac OS) a ruler, and then clicking **Guidelines setup**.

## To have objects snap to the guidelines

- 1 Click **View ▶ Snap to guidelines**.
- 2 Drag the object to the guideline.

If you want to snap the center of an object to a guideline, select the object and move it over the guideline until its center of rotation snaps to the guideline.

## Setting the drawing scale

You can choose a preset or custom drawing scale to relate distances in a drawing to real-world distances. For example, you can specify that one inch in the drawing corresponds to one meter in reality. A preset drawing scale lets you set a typical scale, such as 1:2 or 1:10, while a custom drawing scale lets you set any distance on the page equal to a real-world distance. For example, you can set a more accurate, precise scale that includes decimal numbers, such as 4.5 to 10.6.

Drawing scales are particularly useful if you are creating a technical or architectural drawing with dimension lines. For information about dimension lines, see “Drawing flow and dimension lines” on page 58.



*The checkered effect in this graphic was created using a grid.*

### To choose a preset drawing scale

- 1 Click **View** ► **Grid and ruler setup**.
- 2 In the list of categories, click **Rulers**.
- 3 Click **Edit scale**.
- 4 Choose a drawing scale from the **Typical scales** list box.

## From here

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

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Printing

printing, page settings for

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Adding guidelines

guidelines, adding

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Creating custom drawing scales

scale

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## Working with layers

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You can work with layers in the CorelDRAW application to help you organize and arrange objects in complex illustrations.

In this section, you'll learn about

- creating layers
- changing and moving layers
- moving and copying objects between layers
- printing layers

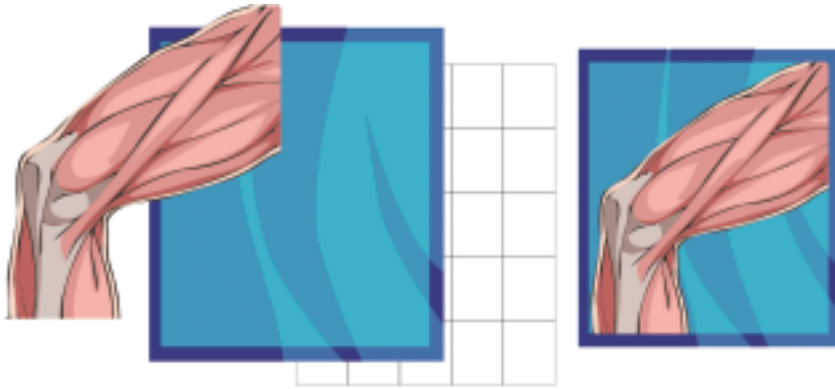
### Creating layers

All CorelDRAW drawings consist of stacked objects. The vertical order of these objects — the stacking order — contributes to the appearance of the drawing. You can organize these objects using invisible planes called layers.

Layering gives you added flexibility when organizing and editing the objects in complex drawings. You can divide a drawing into multiple layers, each containing a portion of the drawing's contents. For example, using layers can help you organize an architectural plan for a building. You can organize the building's various components (for example, plumbing, electrical, structural) by placing them on separate layers. You can display pages only and layers only.

You can also display selected objects. Hiding a layer lets you identify and edit the objects on other layers. You also reduce the time CorelDRAW needs to refresh your drawing when you edit it.






*Drawings can be assembled by placing objects on various levels or layers. Layering lets you change foregrounds and backgrounds independently.*

Each new file has one Master Page that contains and controls three default layers: the Grid, Guides, and Desktop layers. The Grid, Guides, and Desktop layers contain the grid, guidelines, and objects outside the borders of the drawing page. The Desktop layer lets you create drawings you might want to use later. You can specify settings for the grid and guidelines on the Master Page. You can specify settings, for example color, for each layer on the Master Page.

You can add one or more master layers to a Master Page. This layer contains information that you want to display on every page of a multipage document. For example, you can use a master layer to place a header, footer, or static background on every page.

## To create a layer

To	Do the following
Create a layer	Click <b>Tools</b> ► <b>Object manager</b> . Click the flyout button  , and <b>New layer</b> .
Create a master layer	Click <b>Tools</b> ► <b>Object manager</b> . Click the flyout button, and click <b>New master layer</b> .




To use a layer in the drawing, you must first make the layer active. In the **Object manager** Docker window/palette, the active layer is highlighted in

red. When you start a drawing, the default layer (Layer 1) is the active layer.


When you create a master layer, it moves to the Master Page.



You can also add a layer by clicking the **New layer** button  in the **Object manager** Docker window/palette.

You can make any layer a master layer by right-clicking (Windows) or **Control** + clicking (Mac OS) the layer name and clicking **Master**.

## To display or hide a layer

- 1 Click **Tools** ▶ **Object manager**.
- 2 Click the **Eye** icon  beside the layer name.

The layer is hidden when the **Eye** icon is grayed.



You can also display or hide a layer by right-clicking (Windows) or **Control** + clicking (Mac OS) the layer in the **Object manager** Docker window/palette and clicking **Visible**.

## To display pages, layers, and objects

### To

Display pages	Click <b>Window</b> ▶ <b>Dockers / Palettes</b> ▶ <b>Object manager</b> . Click the flyout button and then <b>Show pages</b> .
Display layers	Click <b>Window</b> ▶ <b>Dockers / Palettes</b> ▶ <b>Object manager</b> . Click the <b>Layer manager</b> view button.
Display objects	Click <b>Window</b> ▶ <b>Dockers / Palettes</b> ▶ <b>Object manager</b> . Click the flyout button and then <b>Expand to show selection</b> .

## To delete a layer

- 1 Click **Tools** ▶ **Object manager**.
- 2 Click the name of a layer.
- 3 Click the flyout button, and click **Delete layer**.



When you delete a layer, you also delete all the objects on it. To keep an object on the layer you're deleting, move it to a different layer first.

You can delete any unlocked layer except the three default layers of the Master Page (Grid, Guides, or Desktop). For more information about locking and unlocking layers, see "To set a layer's editing properties" on page 210.

## To specify settings for a layer on the Master Page

- 1 Click **Tools** ▶ **Object manager**.
- 2 Right-click (Windows) or **Control** + click (Mac OS) the layer, and click **Properties**.
- 3 Change the settings and click **OK**.

## Changing layer properties and stacking order

By default, each new layer has its editing, printing, and display properties enabled and its master layer property disabled; however, you can change these properties.


You can set a layer's editing properties to make a layer active, and allow the editing of all layers or the active layer only. When you are making changes to a drawing, you can lock a layer to prevent accidental changes to its objects. When you lock a layer you cannot select or edit it.

Renaming layers can be used to indicate their contents, position in the stacking order, and relationship with other layers.


You can change a layer's place in the stacking order.

## To set a layer's editing properties

To	Do the following
Make a layer active	Click <b>Tools</b> ▶ <b>Object manager</b> . Click the name of a layer.

To	Do the following
Allow editing of all layers	Click <b>Tools</b> ▶ <b>Object manager</b> . Click the flyout button and click <b>Edit across layers</b> .
Allow editing of the active layer only	Click <b>Tools</b> ▶ <b>Object manager</b> . Click the flyout button, and enable <b>Edit across layers</b> .
Lock or unlock a layer	Click <b>Tools</b> ▶ <b>Object manager</b> . Click the <b>Pencil icon</b>  beside the layer name.



If you disable the **Edit across layers** button , you can work on the active layer and the Desktop layer only. You can't select or edit objects on inactive layers.

You can't "lock" or "unlock" the Grid layer.



You can also allow editing of the active or of all layers by enabling or disabling the **Edit across layers** button in the **Object manager** Docker window/palette. Editing across layers is enabled when the button appears pressed.

You can also lock or unlock a layer by right-clicking (Windows) or **Control** + clicking (Mac OS) the layer in the **Object manager** Docker window/palette and clicking **Editable**.

## To rename a layer

- 1 Click **Tools** ▶ **Object manager**.
- 2 Right-click (Windows) or **Control** + click (Mac OS) the layer name, and click **Rename**.



You can also rename a layer by clicking the layer name and typing a new name.

## To change the position of a layer in the stacking order

- 1 Click **Tools** ▶ **Object manager**.
- 2 In the **Layers** list, drag a layer name tag to the new position.

## Moving and copying objects between layers

You can move or copy selected objects to new layers, including layers on the Master Page to another page and back.

Moving or copying an object to a layer below its current layer causes the object to become the top object on its new layer. Similarly, moving or copying an object to a layer above its current layer causes the object to become the bottom object.

### To move or copy an object to another layer

- 1 Click **Tools** ▶ **Object manager**.
- 2 Click an object in the **Object manager**.
- 3 Click the flyout button, and click one of the following:
  - **Move to layer**
  - **Copy to layer**
- 4 Point to the layer to which you want to move or copy the object, and click.



When moving objects to or from a layer, the layers must be unlocked.




You can move and copy an object to another layer by dragging an object to a new layer in the **Object manager** Docker window/palette.

## Printing layers

Enabling the print setting of a layer lets you print the layer and its contents. If you disable a layer's print setting, the layer and its contents won't appear when you print the drawing.

### To enable or disable printing for a specific layer

- 1 Click **Tools** ▶ **Object manager**.
- 2 Click the **Printer** icon  beside the layer name.



Disabling the printing of a layer prevents its contents from displaying in full-screen previews. For information about full-screen previews, see “Previewing a drawing” on page 37.



You can also enable or disable the printing of a layer by right-clicking (Windows) or **Control** + clicking (Mac OS) the layer in the **Object manager** Docker window/palette and clicking **Printable**.



## Adding and formatting text

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The CorelDRAW application lets you use text to create documents or annotate drawings.

In this section, you'll learn about

- adding and selecting text
- changing the appearance of text
- aligning and spacing text
- shifting and rotating text
- finding, editing, and converting text
- moving text
- fitting text to a path
- formatting paragraph text
- combining and linking paragraph text frames
- wrapping paragraph text around objects and text
- embedding graphics and adding special characters

### Adding and selecting text

There are two types of text you can add to drawings — artistic text and paragraph text. Artistic text can be used to add short lines of text to which you can apply a wide range of effects, such as drop shadows. Paragraph text can be used for larger bodies of text that have greater formatting requirements. You can add both paragraph and artistic text directly in the drawing window.

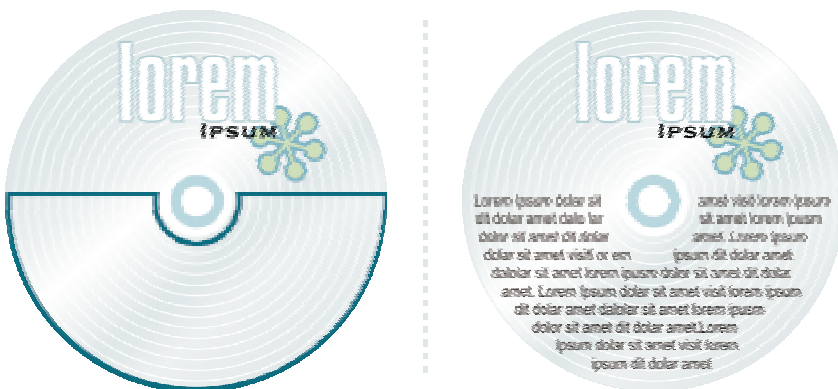
You can add artistic text along an open or closed path. You can also fit existing artistic and paragraph text to a path. For more information, see “Fitting text to a path” on page 226.

When adding paragraph text, you must first create a text frame. By default, paragraph text frames remain the same size regardless of how much text they contain. Any text that continues past the bottom-right border of the text frame is hidden until you either enlarge the text frame or link it to another text frame. You can fit text to a frame, which automatically adjusts the point size of text so that the text fits perfectly in the frame. For information about fitting text to a frame, see “To fit text to a



paragraph text frame” on page 229. You can also have paragraph text frames automatically expand and shrink as you type, so that the text fits perfectly in the frame.

You can insert a paragraph text frame inside a graphic object. This lets you use objects as containers for text so that you can use different shapes for text frames. You can also separate text from an object. When you do, the text retains its shape, and you can move or modify the text and the object independently.



*Paragraph text placed inside an object. The object is made invisible by removing its outline.*



When you import or paste text, you have the option of maintaining formatting, maintaining fonts and formatting, or discarding fonts and formatting. Maintaining fonts ensures that imported and pasted text retains its original font type. Maintaining formatting ensures that formatting information such as bullets, columns, and bold or italic formatting is preserved. If you choose to discard fonts and formatting, the imported or pasted text takes on the properties of the selected text object, or if none is selected, the default font and formatting properties. For more information about importing files, see “Importing files” on page 309. For more information about pasting, see “To paste an object into a drawing” on page 76.

To modify text, you must first select it. You can select entire text objects or specific characters.

### **To add artistic text**

- Click anywhere in the drawing window using the **Text tool**  , and type.

## To add paragraph text

To	Do the following
Add paragraph text	Click the <b>Text</b> tool  . Drag in the drawing window to size the paragraph text frame, and type.
Add paragraph text inside an object	Click the <b>Text</b> tool. Move the pointer over the object's outline, and click the object when the pointer changes to an <b>Insert in object</b> pointer. Type inside the frame.
Separate a paragraph text frame from an object	Select the object using the <b>Pick</b> tool  , and click <b>Arrange</b> ► <b>Break paragraph text inside a path apart</b> .
Have paragraph text frames automatically adjust to fit text	Click <b>Tools</b> ► <b>Options</b> (Windows) or click <b>CorelDRAW 11</b> ► <b>Preferences</b> (Mac OS). In the list of categories, double-click <b>Text</b> , and click <b>Paragraph</b> . Enable the <b>Expand and shrink paragraph text frames to fit text</b> check box.



Enabling the **Expand and shrink paragraph text frames to fit text** check box affects only new text frames. Existing paragraph text frames remain fixed in size.



You can adjust the size of a paragraph text frame by clicking the text frame using the **Pick** tool, and dragging any selection handle.

## To set options for importing and pasting text

- 1 Import or paste the text.
- 2 In the **Importing / pasting text** dialog box, enable one of the following options:
  - **Maintain fonts and formatting**
  - **Maintain formatting only**
  - **Discard fonts and formatting**

If you want to use the same formatting options whenever you import or paste text, enable the **Don't show this warning again** check box.





Clicking **Cancel** will cancel the import or paste operation.

If you choose to maintain fonts and a required font is not installed on your computer, the PANOSE font matching system substitutes the font for you. For more information, see “Substituting unavailable fonts” on page 237.



You can re-enable the **Importing / pasting text** dialog box by clicking **Tools** ▶ **Options** (Windows) or clicking **CorelDRAW 11** ▶ **Preferences** (Mac OS), clicking **Warnings** in the **Workspace** list of categories, and enabling the **Pasting and importing text** check box.

## To select text

To select	Do the following
An entire text object	Click the text object using the <b>Pick</b> tool  .
Specific characters	Drag across the text using the <b>Text</b> tool  .



You can select multiple text objects by holding down **Shift** and clicking each text object using the **Pick** tool.

## Changing the appearance of text

You can change the default text style, so that all new artistic or paragraph text you create has the same properties.


You can enhance artistic text and paragraph text by modifying their character properties. For example, you can change the font type and size or make the text bold or italic. You can also change the position of text to subscript or superscript, which is useful if a drawing contains scientific notation. You can add underlines, strikethrough lines, and overlines to text. You can change the thickness of these lines, as well as the distance between the lines and the text. You can also change the color of text.

You can change the case of text to lowercase or uppercase without deleting or replacing letters.

You can increase or decrease font size by a specified increment amount. By default, the unit of measure is points. You can change this setting for the active drawing and all subsequent drawings you create.

Greeking text lets you increase the redraw speed by representing text under a certain size with lines. This is useful when showing prototypes of documents or drawings. You can make text readable again by reducing the greeking value or by zooming in on the text.

## To change the default text style

- 1 Click a blank space in the drawing window using the **Pick** tool .
- 2 Click **Text** ▶ **Format text**.
- 3 Click the **Character** tab.
- 4 Specify the properties you want.

Following each property change you make, by default you must specify whether the changes are applied to artistic text, paragraph text, or both. You can override this default by disabling the **Auto apply** button next to the **Apply** button.



You can make the style of an existing text frame or object the default style by clicking **Tools** ▶ **Graphic and text styles**, and dragging the text frame or object over either the **Default artistic text** or the **Default paragraph text** icon on the **Graphic and text** Docker window/palette.


## To change character properties

- 1 Select the text.
- 2 Click **Text** ▶ **Format text**.
- 3 Click the **Character** tab.
- 4 Specify the character attributes you want.



You can also make selected text bold, italic or underlined by clicking the **Bold** button, **Italic** button, or **Underline** button on the property bar.

## To change the color of text

- 1 Select the text using the **Text** tool .
- 2 Click a color on the color palette.




You can change the color of an entire text object by deselecting any text and dragging a color swatch from the color palette to the text object.

## To change text case

- 1 Select the text.
- 2 Click **Text ▶ Change case**.
- 3 Enable one of the following options:
  - **Sentence case** — capitalizes the initial letter of the first word in each sentence
  - **Lowercase** — makes all text lowercase
  - **Uppercase** — makes all text uppercase
  - **Title case** — capitalizes the initial letter of each word
  - **Toggle case** — reverses the case; all uppercase letters become lowercase and all lowercase letters become uppercase

## To resize text

To	Do the following
Specify the amount by which to resize text	Click <b>Tools ▶ Options</b> (Windows) or click <b>CorelDRAW 11 ▶ Preferences</b> (Mac OS). In the list of categories, click <b>Text</b> , and type a value in the <b>Keyboard text increment</b> box.  If you want to change the default unit of measure, choose a unit from the <b>Default text units</b> list box.
Increase the size of text	Select the text using the <b>Text tool</b>  , hold down <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS), and press <b>8</b> on the number pad.
Decrease the size of text	Select the text using the <b>Text tool</b> , hold down <b>Ctrl</b> (Windows) or <b>Command</b> (Mac OS), and press <b>2</b> on the number pad.



(Windows) You must be in **Num lock** mode to increase or decrease the size of text.

## To greek text

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CoreIDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, click **Text**.
- 3 Type a value in the **Greek text below** box.

## Aligning and spacing text


You can align both paragraph and artistic text horizontally. Aligning paragraph text lines up text relative to the paragraph text frame. You can horizontally align all paragraphs or only selected paragraphs in a paragraph text frame. You can vertically align all paragraphs in a paragraph text frame.

Artistic text can be aligned horizontally, but not vertically. When you align artistic text, it is aligned with the entire text object. If characters have not been shifted horizontally, applying no alignment produces the same result as applying left alignment.


You can change character and word spacing in selected paragraphs, or in an entire paragraph text frame or artistic text object. Changing character and word spacing is also referred to as kerning. You can change the line spacing of text, which is also referred to as leading. Changing the line spacing for artistic text applies the spacing to lines of text separated by a carriage return. For paragraph text, line spacing applies only to lines of text within the same paragraph. You can also change the spacing before and after paragraphs in paragraph text.

You can also kern selected characters. Kerning balances the optical space between letters.

## To align text horizontally

- 1 Select the text object using the **Pick** tool  .
- 2 Click **Text** ▶ **Format text**.
- 3 Click the **Paragraph** tab.
- 4 Choose an item from the **Alignment** list box.



To align selected paragraphs in a paragraph text frame, select them using the **Text** tool  .

## To align paragraph text vertically

- 1 Select the paragraph text.
- 2 Click **Text** ► **Format text**.
- 3 Click the **Columns** tab.
- 4 Choose an alignment option from the **Vertical justification** list box.

## To change the spacing of text

- 1 Select the text.
- 2 Click **Text** ► **Format text**.
- 3 Click the **Paragraph** tab.
- 4 In the **Spacing** area, type values in any of the boxes.




Character and word spacing can only be applied to entire paragraphs, or to an entire paragraph text frame or artistic text object. For information about adjusting character and word spacing for selected characters, see “To apply range kerning to selected characters” on page 222.

Values represent a percentage of the space character. The **Character** values range from -100 to 2000 percent. All other values range from 0 to 2000 percent.



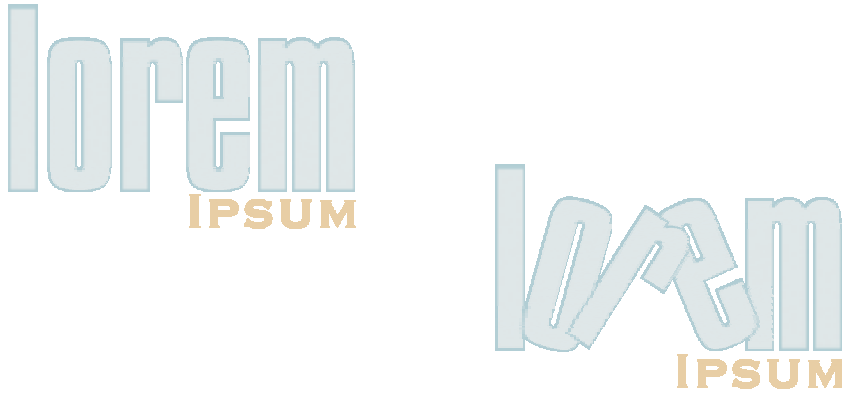
You can also change the spacing between words and characters proportionately by selecting the text object using the **Shape** tool and dragging the Interactive horizontal spacing arrow in the bottom-right corner of the text object. Drag the Interactive vertical spacing arrow in the bottom-left corner of the text object to change the line spacing proportionately.

## To apply range kerning to selected characters

- 1 Select two or more characters using the **Text** tool .
- 2 Click **Text** ► **Format text**.
- 3 Click the **Character** tab.
- 4 Type a value in the **Range kerning** box.




## Shifting and rotating text

Shifting artistic and paragraph text vertically and horizontally can create an interesting effect. You can also rotate characters. Straightening text pulls the text into its original position. You can return vertically shifted characters to the baseline without affecting their rotation angle.



*Rotated characters*

### To shift or rotate a character

- 1 Select the character or characters.
- 2 Click **Text** ► **Format text**.
- 3 Click the **Character** tab.
- 4 In the **Shift** area, type a value in one of the following boxes:
  - **Horizontal**  — a positive number moves characters to the right, and a negative number moves characters to the left
  - **Vertical**  — a positive number moves characters up, and a negative number moves characters down
  - **Rotate**  — a positive number rotates characters counter-clockwise, and a negative number rotates characters clockwise




You can also shift or rotate characters whose nodes you select using the **Shape** tool by typing values in the **Horizontal shift** box, **Vertical shift** box, or **Angle of rotation** box on the property bar.



## To straighten a shifted or rotated character

- 1 Select the text.
- 2 Click **Text** ▶ **Straighten text**.

## To return a vertically shifted character to the baseline

- 1 Open the **Shape** edit flyout, and click the **Shape** tool  .
- 2 Select the text object, and select the node to the left of the character.
- 3 Click **Text** ▶ **Align to baseline**.

## Finding, editing, and converting text

You can find text in a drawing and replace it automatically. You can edit text directly in the drawing window, or in a dialog box.

CorelDRAW lets you convert artistic text to paragraph text if you require more formatting options, and paragraph text to artistic text if you'd like to apply special effects.

You can also convert both paragraph and artistic text to curves. This transforms characters into single line and curve objects, letting you add, delete, or move the nodes of individual characters to alter their shape. For more information, see “Working with curve objects” on page 93. When you convert text to curves, the appearance of the text is preserved, including font, style, character position and rotation, spacing, and any other text settings and effects. Any linked text objects are also converted to curves. If you convert paragraph text in a fixed-sized frame to curves, any text that overflows the frame is deleted. For information about fitting text to a frame, see “Formatting paragraph text” on page 228.

### To find text

- 1 Click **Edit** ▶ **Find and replace** ▶ **Find text**.
- 2 Type the text you want to find in the **Find what** box.  
If you want to find the exact case of the text you specified, enable the **Match case** check box (Windows) or **Case sensitive** check box (Mac OS).
- 3 Click **Find next** (Windows) or **Find** (Mac OS).

## To find and replace text

- 1 Click **Edit** ▶ **Find and replace** ▶ **Replace text**.
- 2 Type the text you want to find in the **Find what** box.  
If you want to find the exact case of the text you specified, enable the **Match case** check box (Windows) or **Case sensitive** check box (Mac OS).
- 3 Type the replacement text in the **Replace with** box.
- 4 Click one of the following buttons:
  - **Find next** (Windows) / **Find** (Mac OS) — finds the next occurrence of the text specified in the **Find what** box
  - **Replace** — replaces the selected occurrence of the text specified in the **Find what** box. If no occurrence is selected, **Replace** finds the next occurrence.
  - **Replace all** — replaces every occurrence of the text specified in the **Find what** box


## To edit text

- 1 Select the text.
- 2 Click **Text** ▶ **Edit text**.
- 3 Make changes to the text in the **Edit text** dialog box.

### You can also

---

Edit text in the drawing window

Select the text using the **Text** tool , and edit it.

---



You cannot edit text that has been converted to curves.


## To convert text

### To convert

### Do the following

---

Paragraph text to artistic text

Select the text using the **Pick** tool , and click **Text** ▶ **Convert to artistic text**.

---

Artistic text to paragraph text

Select the text using the **Pick** tool, and click **Text** ▶ **Convert to paragraph text**.

---

## To convert

## Do the following

---

Artistic or paragraph text to curves

Select the text using the **Pick** tool, and click **Arrange** ► **Convert to curves**.

---



You cannot convert paragraph text to artistic text when the paragraph text is linked to another frame, has special effects applied to it, or overflows its frame.




You can also convert text to curves by right-clicking the text (Windows) or **Control** + clicking the text (Mac OS) using the **Pick** tool, and clicking **Convert to curves**.

## Moving text

CorelDRAW lets you move paragraph text between frames, and artistic text between artistic text objects. You can also move paragraph text to an artistic text object, and artistic text to a paragraph text frame.

### To move text

- 1 Select the text using the **Text** tool .
- 2 Drag the text to another paragraph text frame or artistic text object.

### You can also

---

Move text within the same frame or object

Select the text, and drag it to a new position.

---

Move or copy selected text to a new text object

Right-click (Windows) or hold down **Control** (Mac OS) and drag the text to a new position, and click **Copy here** or **Move here**.

---

(Mac OS) Move a copy of selected text

Hold down **Option**, and drag the text to a new position.

---

## Fitting text to a path


You can add artistic text along the path of an open object (for example, a line) or a closed object (for example, a square). You can also fit existing text to a path. Artistic

text can be fitted to an open or closed path. Paragraph text can be fitted to open paths only.

After you fit text to a path, you can adjust the text's position relative to that path. For example, you can place the text on the opposite side of the path, or you can adjust the distance between the text and the path.

CorelDRAW treats text fitted to a path as one object; however, you can separate the text from the object if you no longer want it to be part of the path. When you separate text from a curved or closed path, the text retains the shape of the object to which it was fitted. Straightening the text reverts it to its original appearance.


### To add text along a path

- 1 Select a path using the **Pick tool** .
- 2 Click **Text** ► **Fit text to path**.
- 3 Type along the path.




If the text is fitted to a closed path, the text is centered along the path. If the text is fitted to an open path, the text flows from the point of insertion. You can't fit text to the path of another text object.




You can also fit text to a path by clicking the **Text tool** , and pointing to a path. When the pointer changes to a **Fit to path** pointer, click where you want the text to begin, and type.

### To fit text to a path

- 1 Select a text object using the **Pick tool** .
- 2 Click **Text** ► **Fit text to path**.  
The pointer changes to a thick, black arrow.
- 3 Click a path.

### To adjust the position of text fitted to a path

- 1 Using the **Pick tool** , select the text fitted to a path.
- 2 Choose a setting from any of the following list boxes on the property bar:
  - **Distance from path** — the distance between the text and the path to which it is fit


- **Vertical placement** — the vertical alignment of the text relative to the path
- **Horizontal offset** — the horizontal position of the text along the path
- **Text orientation** — the angle at which the text sits on the path
- **Text placement** — the side of the path on which the text is fitted




You can also change the horizontal position of fitted text by selecting it with the **Shape** tool, and dragging the character nodes you want to reposition.

Using the **Pick** tool, you can move text along the path by dragging the small red node that displays beside the text.

### To separate text from a path

- 1 Select the fitted text using the **Pick** tool  .
- 2 Click **Arrange** ▶ **Break text apart**.

### To straighten text

- 1 Select the fitted text using the **Pick** tool  .
- 2 Separate the text from the path.
- 3 Click **Text** ▶ **Straighten text**.

### Formatting paragraph text

CorelDRAW offers various formatting options for paragraph text.

You can fit text to a paragraph text frame. Fitting text to a frame increases or decreases the point size of text so that it fits the text frame exactly.

You can use columns to lay out text-intensive projects such as newsletters, magazines, and newspapers. You can create columns of equal or varying widths and gutters.

Applying drop caps to paragraphs enlarges the initial letter and insets it into the body of text. You can customize a drop cap by changing its settings. For example, you can change the distance between the drop cap and the body of text, or specify the number of lines of text you want to appear beside the drop cap. You can remove the drop cap at any point, without deleting the letter.

You can use bulleted lists to format information. You can have text wrap around bullets, or you can offset a bullet from text to create a hanging indent. CorelDRAW lets you customize bullets by changing their size, position, and distance from text. After you add a bullet, you can remove it without deleting the text.

You can add tabs to indent paragraph text. You can also remove tabs and change tab alignment. Setting trailing leader tabs automatically creates dots that precede the tab.

Indenting changes the space between a paragraph text frame and the text that it contains. You can indent an entire paragraph, the first line of a paragraph, all but the first line of a paragraph (a hanging indent), or from the right side of the frame. You can also remove an indent without deleting or retyping text.

Hyphenating splits words between lines when the whole word does not fit on one line. You can have CorelDRAW hyphenate automatically. You can specify hyphenation settings such as the minimum number of letters before and after a hyphen, and the hot zone.

Paragraph text frame formatting can be applied to selected frames only, selected frames and frames they are currently linked to, or to all selected and subsequently linked frames. For information about setting these options, see “To choose paragraph text frame formatting options” in the **Help**.

## To fit text to a paragraph text frame

- 1 Select a paragraph text frame.
- 2 Click **Text** ► **Fit text to frame**.




If you fit text to linked paragraph text frames, CorelDRAW adjusts the size of text in all of the linked text frames. For more information about linking frames, see “Combining and linking paragraph text frames” on page 231.

## To add columns to paragraph text frames

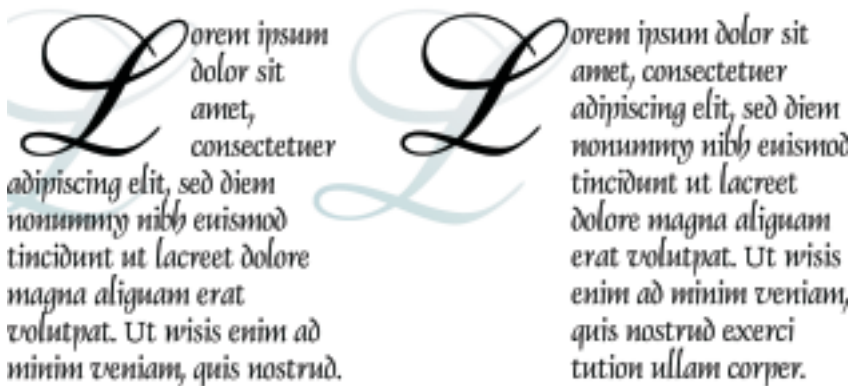
- 1 Select a paragraph text frame.
- 2 Click **Text** ► **Format text**.
- 3 Click the **Columns** tab.
- 4 Type a value in the **Number of columns** box.
- 5 Specify the settings and options you want.



You can change the size of columns and gutters by dragging a side selection handle in the drawing window with the **Text** tool  .

## To add a drop cap

- 1 Select the paragraph text.
- 2 Click **Text** ► **Format text**.
- 3 Click the **Effects** tab.
- 4 Choose **Drop cap** from the **Effect type** list box.
- 5 Click one of the following icons:
  - **Dropped** — wraps text around the drop cap
  - **Hanging indent** — offsets the drop cap from the body of text



*A drop cap can be dropped (left) or a hanging indent (right).*

### You can also

---

Specify the number of lines beside a drop cap

Type a value in the **Dropped lines** box.

---

Specify the distance between the drop cap and the body of text

Type a value in the **Distance from text** box.

---

Remove drop caps

Choose **None** from the **Effect type** list box.

---

## Combining and linking paragraph text frames

You can combine paragraph text frames. You can also break paragraph text frames apart into subcomponents — columns, paragraphs, bullets, lines, words, and characters. Every time you break apart a text frame, the subcomponents are placed into separate paragraph text frames.

Linking paragraph text frames directs the flow of text from one text frame to another if the amount of text exceeds the size of the first text frame. If you shrink or enlarge a linked paragraph text frame, or change the size of the text, the amount of text in the next text frame is automatically adjusted. You can link paragraph text frames before or after you type text.

You cannot link artistic text. However, you can link a paragraph text frame to an open or closed object. When you link a paragraph text frame to an open object (for example, a line), the text flows along the path of the line. Linking a text frame to a closed object (for example, a rectangle) inserts a paragraph text frame and directs the flow of text inside the object. If text exceeds the open or closed path, you can link the text to another text frame or object. You can also link to paragraph text frames and objects across pages.

After linking paragraph text frames, you can redirect the flow from one object or text frame to another. When you select the text frame or object, a blue arrow indicates the direction of the text flow. You can hide or display these arrows.



*You can make text flow between frames and objects in a newsletter by linking the text.*

You can remove links between multiple paragraph text frames, and between paragraph text frames and objects. When you have only two linked paragraph text




frames and you remove the link, the text flows into the remaining paragraph text frame. Removing a link between paragraph text frames with a series of links redirects the flow of text into the next paragraph text frame or object.

By default, CoreIDRAW applies paragraph formatting such as columns, drop caps, and bullets to only the selected paragraph text frames; however, you can change your settings so that formatting is applied to all linked frames, or all selected and subsequently linked frames. For example, if you apply columns to the text in one text frame, you can choose whether you want all of the linked frames to also be formatted in columns. For information about paragraph formatting, see “Formatting paragraph text” on page 228.

## To combine or break apart paragraph text frames

- 1 Select a text frame.

If you are combining text frames, hold down **Shift** and select subsequent text frames using the **Pick** tool .

- 2 Click **Arrange**, and click one of the following:



- **Combine**
- **Break paragraph text apart.**




Text frames with envelopes, text fitted to a path, and linked frames cannot be combined.

If you select a text frame with columns first, the combined text frame will have columns.

## To link paragraph text frames and objects


- 1 Select the starting text frame using the **Text** tool .
- 2 Click the **Text flow** tab  at the bottom of the text frame or object.

If the frame cannot hold all the text, the tab contains an arrow .

- 3 When the pointer changes to a **Link to** pointer , click the frame or object into which you want to continue the text flow.

If the frame or object is on a different page, first click the corresponding **Page** tab on the Document Navigator.





If a text frame is linked, the **Text flow** tab changes , and a blue arrow indicates the direction of text flow. If the linked text is on another page, the page number and a dashed blue line are displayed. To hide or display these

indicators, see “To choose paragraph text frame formatting options” in the Help.

To link paragraph text frames successfully, the text frames cannot be automatically sized. For information, see “Adding and selecting text” on page 215.

## To change text flow to a different text frame or object

- 1 Using the Pick tool , click the Text flow tab  at the bottom of the text frame or object from which you want to change the link.
- 2 Select the new text frame or object into which you want the text flow to continue.

## Wrapping paragraph text around objects and text

You can change the shape of text by wrapping paragraph text around an object, artistic text, or a paragraph text frame. You can wrap text using contour or square wrapping styles. The contour wrapping styles follow the curve of the object. The square wrapping styles follow the bounding box of the object. You can also adjust the amount of space between paragraph text and the object or text, as well as remove any wrapping style you apply.

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*Wrapping text around an object using the contour wrapping style (left), and the square wrapping style (right)*

## To wrap paragraph text around an object or text

- 1 Select the object or text around which you want to wrap text.
- 2 Click **Window** ▶ **Dockers / Palettes** ▶ **Properties**.
- 3 Do one of the following:  
(Windows) In the **Object properties** Docker window, click the **General** tab.  
(Mac OS) On the **Object properties** palette, choose **General** from the list box.
- 4 Choose a wrapping style from the **Wrap paragraph text** list box.  
If you want to change the amount of space between wrapped text and the object or text, type a value in the **Text wrap offset** box.
- 5 Click the **Text** tool , and drag to create a paragraph text frame over the object or text.
- 6 Type text in the paragraph text frame.



You can wrap existing paragraph text around a selected object by applying a wrapping style to the object and dragging the paragraph text frame over the object.

## To remove a wrapping style

- 1 Select the wrapped text or the object it wraps.
- 2 Click **Window** ▶ **Dockers / Palettes** ▶ **Properties**.
- 3 Do one of the following:  
(Windows) In the **Object properties** Docker window, click the **General** tab.  
(Mac OS) On the **Object properties** palette, choose **General** from the list box.
- 4 Choose **None** from the **Wrap paragraph text** list box.

## Embedding graphics and adding special characters


You can embed a graphic object or bitmap in text. The graphic object or bitmap is treated as a text character. As a result, you can apply formatting options according to the type of text in which you embed the graphic object. You can also remove an embedded object from text, after which the object returns to its original state.

You can add special characters to text as text objects or as graphic objects. When you add special characters as text, you can format the characters as you do the text. When you add special characters as graphic objects, the characters are curves. Consequently, you can edit them as you would other graphic objects.



If you are using Windows, you can also change objects, such as company logos or modified letters, into special characters, and then add them to a character set. This lets you add an object to text as a text or graphic object. The object is automatically resized to match the proportions of other characters in the set.

You can create patterns with special characters by tiling them across the page. Each character in the pattern is a separate object to which you can apply effects. You can change the spacing between the rows and columns in which the characters are arranged.

### To embed a graphic object in text

- 1 Select a graphic object.
- 2 Click **Edit**, and click one of the following:
  - **Cut**
  - **Copy**
- 3 Using the **Text** tool , click where you want to embed the graphic object.
- 4 Click **Edit** ▶ **Paste**.

### To remove an embedded object from text

- 1 Select an object using the **Text** tool .
- 2 Click **Edit** ▶ **Cut**.
- 3 Click the **Pick** tool , and click outside the text object.
- 4 Click **Edit** ▶ **Paste**.

### From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Adding bullets to paragraph text	bullets, adding to text
Adding tabs to paragraph text	tabs, adding to text
Indenting paragraph text	indenting, paragraph text
Hyphenating paragraph text	hyphenating, paragraph text
Removing and changing text links	linking, paragraph text

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

---

Choosing paragraph text frame formatting options

text frames, formatting options

---

Adding special characters to text

special characters, adding to text

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Displaying nonprinting characters

nonprinting characters

---

## Managing fonts

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CorelDRAW has several features that allow you to manage fonts.

In this section, you'll learn about

- substituting unavailable fonts
- embedding fonts
- using Bitstream® Font Navigator® (Windows)
- using Bitstream® Font Reserve™ (Mac OS)

### Substituting unavailable fonts

You can use PANOSE font matching to access a list of fonts that can be used as substitutes for fonts used in a drawing but not installed on your computer.

You can set font matching options. You can use font matching in text only, in both text and text styles, or you can turn off font matching.

With font matching, you can accept the default substitute font, or you can choose another font to substitute for the missing font. You can apply the substitution temporarily or permanently to the active drawing.

You can build a list of exceptions to font substitutions. Exceptions override default font substitutions. You can also specify font equivalents for the Windows and Macintosh® platforms. This is useful when sharing drawings across the two platforms, because sometimes the same font has a different spelling for its name on each platform.

### To set font matching options

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.

- 2 In the list of categories, double-click **Text**, and click **Fonts**.
- 3 Click **PANOSE font matching**.
- 4 In the **PANOSE font matching preferences** dialog box, enable one of the following options:
  - **Never use font matching** — applies default font substitutions for both text in the document and text styles
  - **Use font matching for text** — lets you select font substitutions for text in the document and applies default font substitutions for text styles
  - **Use font matching for text and styles** — lets you select font substitutions for both text in the document and text styles

### To substitute a missing font

- 1 Open a drawing.
- 2 In the **Font matching results** dialog box, choose a missing font.  
If you want to override the default substitution, choose a font from the bottom list box.
- 3 Enable one of the following options:
  - **Temporary** — replaces the missing font with the substitution, but only in the current session of the drawing.
  - **Permanent** — permanently makes the font substitution in the document. When you save the file and reopen it, the new font automatically displays.



In order for the **Font matching results** dialog box to display, the drawing that you open must contain fonts that aren't installed on your computer.

### To build a list of exceptions to font substitutions

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.

- 2 In the list of categories, click **Text**, and click **Fonts**.
- 3 Click **PANOSE font matching**.
- 4 In the **PANOSE font matching preferences** dialog box, click **Exceptions**.
- 5 In the **PANOSE font matching exceptions** dialog box, click **Add**.
- 6 In the **Add matching exception** dialog box, type the name of the font you want to replace in the **Missing font** box.
- 7 Choose a font that is installed on your computer from the **Substituted font** list.

### **To match Windows and Macintosh fonts**

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Text**, and click **Fonts**.
- 3 Click **PANOSE font matching**.
- 4 In the **PANOSE font matching preferences** dialog box, click **Spellings**.
- 5 Click **Add**.
- 6 Choose a Windows font name from the **Windows name** list box.
- 7 Type the Macintosh spelling for the font in the **Macintosh name** list box.

### **Embedding fonts**

You can choose to embed fonts in a drawing. Embedding fonts ensures that all fonts used in a drawing are available when the drawing is opened on another computer. When fonts are embedded, font substitution is not required, and a drawing displays and prints the same way on all computers. For more information about font substitution, see “Substituting unavailable fonts” on page 237.

### **To embed fonts in a file**

- 1 Click **File** ▶ **Save as**.
- 2 Enable the **Embed fonts using TrueDoc®** check box.
- 3 Click **Save**.



## **Using Font Navigator (Windows)**

Bitstream Font Navigator is a font management system included with your application. Font Navigator lets you store up to 2000 fonts in a database (or “catalog”). You can access fonts quickly, organize them, and preview them before using them.

See the Font Navigator documentation for information about installing and using Font Navigator.

## **Using Font Reserve (Mac OS)**

Bitstream Font Reserve is a font management system included with your application. Font Reserve lets you store up to 2000 fonts in a database (or “catalog”). You can access fonts quickly, organize them, and preview them before using them.

See the Font Reserve documentation for information about installing and using Font Reserve.

You can convert a vector graphic to a bitmap. Also, you can import and crop bitmaps in the CorelDRAW application.

You can also add color masks, watermarks, special effects, and change the color and tone of the images.

In this section, you'll learn about

- converting vector graphics to bitmaps
- adding bitmaps
- cropping and editing bitmaps
- applying special effects to bitmaps
- applying color and tone effects

### Converting vector graphics to bitmaps

When you convert a vector graphic to a bitmap, you can apply special effects in the CorelDRAW application that are unavailable to vector graphic or objects.

As you convert the vector, you can select the color mode of the bitmap. A color mode determines the number and kind of colors that make up the bitmap, so that file size is also affected.

You can also determine settings such as the aliasing, background transparency, and color profile of the image as you convert it from a vector graphic.

For more information about color modes, see “Changing color modes in bitmaps” on page 251.

## To convert a vector graphic to a bitmap

- 1 Select an object.
- 2 Click **Bitmaps** ▶ **Convert to bitmap**.
- 3 Choose a color mode from the **Color** list box.
- 4 Choose a resolution from the **Resolution** list box.
- 5 Enable any of the following check boxes:
  - **Anti-aliasing** — smooths the edges of the bitmap
  - **Transparent background** — makes the background of the bitmap transparent
  - **Apply ICC profile** — applies the International Color Consortium profiles to standardize colors across devices and color spaces



Making the background of a bitmap transparent lets you see images or a background otherwise obscured by the bitmap background.

## Adding bitmaps

You can import a bitmap into a drawing either directly or by linking it to an external file. When you link to an external file, edits to the original file are automatically updated in the imported file.

### To import a bitmap

- 1 Click **File** ▶ **Import**.
- 2 Choose the folder where the bitmap is stored.
- 3 Select the file.

If you want to link the image to the drawing, enable the **Link bitmap externally** check box.
- 4 Click **Import**.
- 5 Click where you want to place the bitmap.

If you want to center the image on the drawing page, press **Enter**.



Ensure that **All file formats** is chosen from the **Files of type** list box (Windows) or **Show** list box (Mac OS) when you import an image.

The status bar provides information about the bitmap, including color mode, size, and resolution after it has been placed on the page.



You can import a bitmap in its original size by pressing **Spacebar** when you click the **Import** button.

Linking to a bitmap results in a smaller file size than importing the bitmap directly.

## Cropping and editing bitmaps


After you add a bitmap to a drawing, you can crop, resample, resize, and inflate the image.

Cropping removes unwanted areas of a bitmap. When you resample a bitmap, you can change the image size, the resolution, or both by adding or removing pixels. For example, if you make an image larger without resampling, you can lose details because the image's pixels are spread over a greater area. By resampling, you can add pixels to preserve more detail from the original image. Resizing an image maintains the same number of pixels in a smaller or larger area. For example, you can lose details when you make an image larger without resampling, because the image's pixels are spread over a greater area. Upsampling adds pixels to maintain some of the original's details.



*With resampling, you can either increase the resolution of an image by adding pixels (upsampling) or decrease the resolution by subtracting pixels (downsampling).*

## To crop a bitmap

- 1 Open the **Shape** flyout, and click the **Shape** tool  .
- 2 Select a bitmap.
- 3 Drag the bitmap's corner nodes to the shape you want.  
If you want to add a node, double-click the node boundary by using the **Shape** tool where you want the node to display.
- 4 Click **Bitmaps** ▶ **Crop bitmap**.



You cannot crop a bitmap comprised of more than one object.



You can also crop a selected bitmap after you drag the bitmap's corner nodes by clicking the **Crop bitmap** button on the property bar.

## To resample a bitmap

- 1 Select a bitmap.
- 2 Click **Bitmaps** ▶ **Resample**.
- 3 In the **Resolution** area, type values in any of the following boxes:
  - **Horizontal**
  - **Vertical**

If you want to maintain the proportions of the bitmap, enable the **Maintain aspect ratio** check box.

If you want to maintain the file size, enable the **Maintain original size** check box.



You can also resample a selected bitmap by clicking the **Resample** button on the property bar.

Enable the **Anti-alias** check box to minimize the jagged appearance of curves.

## To resize a bitmap

- 1 Select a bitmap.
- 2 Click **Bitmaps** ▶ **Resample**.
- 3 Choose a unit of measure from the list box beside the **Width** and **Height** boxes.
- 4 Type values in any of the following boxes:
  - **Width**

- **Height**

If you want to minimize the jagged appearance of curves, enable the **Anti-alias** check box.



You can maintain the proportions of the bitmap by enabling the **Maintain aspect ratio** check box and typing a value in either the **Width** or **Height** box.

You can also resample the bitmap as a percentage of its original size by typing values in the % boxes.

## Applying special effects to bitmaps

You can apply a wide range of special effects to bitmaps, such as three-dimensional and artistic effects.

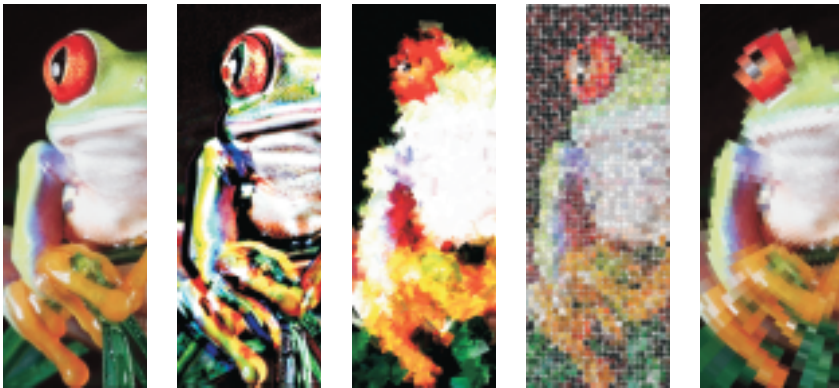
Adding plug-in filters to CorelDRAW provides additional features and effects that you can use to edit images. You can add plug-in filters and you can remove them when you no longer need them.

<b>Special effect type</b>	<b>Description</b>
3-D	Lets you create the illusion of three-dimensional depth. The 3-D effects include embossing, page curl, and perspective.
Art strokes	Lets you apply hand-painted techniques. The art stroke media and styles include crayon, impressionist, pastels, watercolor, and pen and ink.
Blur	Lets you blur an image to simulate gradual change, movement, or speckling. The blur effects include Gaussian blur, motion blur, and zoom.
Camera	Lets you simulate the effect produced by diffusion filters of a diffusion lens.
Color transform	Lets you create photographic illusions by using color reduction and replacements. The color transform effects include half-tones, psychedelic, and solarizing.

<b>Special effect type</b>	<b>Description</b>
Contour	Lets you highlight and enhance the edges of an image. The contour effects include edge tracing and highlighting.
Creative	Lets you apply a variety of textures and shapes to an image. The creative effects include fabric, glass block, crystal fragments, vortex, and stained glass.
Distort	Lets you distort image surfaces. The distort effects include ripples, blocks, swirl, and tile.
Noise	Lets you modify the graininess of an image. The noise effects include adding noise, applying dust and scratch, and diffusing to change an image's granularity.
Sharpen	Lets you create a sharpening effect to focus and enhance edges. The sharpen effects include accentuating edge detail and sharpening smooth areas.
Plug-ins	Lets you apply effects from a third-party filter to bitmaps in CoreIDRAW. An installed plug-in appears at the bottom of the Bitmaps menu.



*Left to right: Add noise effect, Zoom blur effect, Solarize color transform effect, Edge detect contour effect, Sharpen effect*



*Left to right: Original image, Emboss effect, Cubist artistic effect, Mosaic creative effect, Distort pixelate effect*

CorelDRAW automatically inflates a bitmap to make a special effect cover the entire image. You can disable the automatic inflate and manually specify how much you want to inflate the bitmap.



## To apply a special effect

- 1 Select a bitmap.
- 2 Click **Bitmaps**, choose a special effect type, and click an effect.
- 3 Adjust any special effect settings.

## To add a plug-in filter (Windows)

- 1 Click **Tools** ▶ **Options**.
- 2 In the list of categories, double-click **Workspace**, and click **Plug-ins**.
- 3 Click **Add**.
- 4 Choose a folder containing a plug-in.



To remove a plug-in filter, click a plug-in folder from the **Plug-in folders** list, and click **Remove**.

## To add a plug-in filter (Mac OS)

- Drag the plug-in filter to the **Plugins** folder in the application's folder.  
If you want to remove a plug-in filter, drag it from the **Plugins** folder.

## Applying color and tone effects

CorelDRAW lets you apply color and tone to a bitmap. For example, you can replace colors, shift them between different color modes and adjust the brightness, lightness, and darkness of colors.

By applying color and tone effects, you can restore detail lost in shadows or highlights, remove color casts, correct underexposure or overexposure, and generally improve the quality of the bitmaps.

You can apply the following color and tone effects.

<b>Effect</b>	<b>Description</b>
Hue-Saturation-Lightness	Lets you adjust the color channels in a bitmap and change the position of colors in the spectrum. This effect allows you to change colors and their richness, as well as the percentage of white in an image.

<b>Effect</b>	<b>Description</b>
Color balance	Lets you add cyan or red, magenta or green, and yellow or blue to selected tones in a bitmap
Selective color	Lets you change color by changing the percentage of spectrum CMY process colors from the red, yellow, green, cyan, blue, and magenta color spectrums in a bitmap. For example, decreasing the percentage of magenta in the reds spectrum results in a color shift toward yellow.
Sample/Target balance	Lets you adjust color values in a bitmap with sample colors taken from the image. You can choose sample colors from the dark, midtone, and light ranges of an image and apply target colors to each of the sample colors.
Desaturate	Lets you reduce the saturation of each color in a bitmap to zero, remove the hue component, and convert each color to its grayscale equivalent. This creates a grayscale image without changing the color mode.
Level equalization	Lets you increase contrast by setting input values to map the darkest pixels in the bitmap to black and the lightest to white. You can decrease contrast so that all tones in a bitmap are represented by a specific tonal range.
Local equalization	Lets you enhance contrast near edges to reveal detail in both light and dark regions. You can set the height and width around the region to accentuate contrast.
Brightness-contrast-intensity	Lets you adjust the brightness of all colors and the difference between light and dark areas.

<b>Effect</b>	<b>Description</b>
Gamma	Lets you accentuate detail in low contrast areas without affecting shadows or highlights.
Tone curve	Lets you perform color corrections precisely by controlling individual pixel values. By changing pixel brightness values, you can make changes to shadows, midtones, and highlights.

### To apply a color or tone effect

- 1 Select a bitmap.
- 2 Click **Effects ▶ Adjust**, and click a color or tone effect.
- 3 Specify any settings.

### From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Inflating bitmaps manually	bitmaps, inflating
Using Digimarc® watermarks to identify bitmaps	watermarks
Working with colors in bitmaps	colors, bitmaps
Transforming color and tone effects	tone, effects in bitmaps

Changing an image to another color mode, such as RGB, CMYK or Grayscale, changes a bitmap's color structure.

In this section, you'll learn about

- changing the color mode of bitmaps
- changing bitmaps to a black-and-white image
- changing bitmaps to the paletted color mode
- changing bitmaps to a duotone

### Changing the color mode of bitmaps

The colors of the images that you work with in CorelDRAW are based on color modes. Color modes define the color characteristics of images and are described by their component colors. The CMYK color mode is composed of cyan, magenta, yellow, and black values and the RGB color mode is composed of red, green, and blue values.

Although you may not be able to see the difference between an image in the CMYK color mode and an image in the RGB color mode on screen, the images are quite different. For the same image dimensions, an RGB image has a smaller file size than a CMYK image and the RGB color space, or gamut, can display more colors. Therefore, images intended for the Web or desktop printers that require accurate color fidelity, are generally in RGB mode. Where accurate print reproduction is needed, such as on a commercial printing press, images are generally created in CMYK mode. Paletted color images attempt to preserve color fidelity while reducing the small file size, making them ideal for on-screen uses.

Each time you convert an image, you may lose color information. For this reason, you should save an edited image before you change it to a different color mode.

For more information about color modes, see "Working with color" on page 147.

CorelDRAW supports the following color modes:

## Color

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Black-and-White (1-bit)	Grayscale (8-bit)
Duotone (8-bit)	Paletted (8-bit)
RGB Color (24-bit)	Lab Color (24-bit)
CMYK Color (32-bit)	

---

### To change the color mode of a bitmap

- 1 Click a bitmap.
- 2 Click **Bitmaps ▶ Mode**, and click one of the following:
  - **Black and White (1-bit)**
  - **Grayscale (8-bit)**
  - **RGB color (24-bit)**
  - **Lab color (24-bit)**
  - **CMYK color (32-bit)**



The mode which the selected bitmap is in will not be available in the menu.

### Changing bitmaps to a black-and-white image

You can change any image to a black-and-white image. In addition to conversion settings such as threshold, screen type, and intensity, there are seven conversion options that affect how the converted images will look.

#### Conversion

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Line art

Produces a high-contrast, black-and-white image. Colors with a grayscale value lower than the threshold value that you set change to black, while colors with a grayscale value higher than the threshold value change to white.

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## Conversion

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Ordered	Organizes the gray levels into repeating geometric patterns of black and white pixels. Solid colors are emphasized and image edges are hard. This option is best suited for uniform colors.
Halftone	Creates different shades of gray by varying the pattern of black and white pixels in an image. You can choose the screen type, angle for the halftone, lines per unit, and the unit of measure.
Cardinality-Distribution	Creates a textured look by applying a calculation and distributing the result to the screen.
Jarvis	Applies the Jarvis algorithm to the screen. This form of error diffusion is suitable for photographic images.
Stucki	Applies the Stucki algorithm to the screen. This form of error diffusion is suitable for photographic images.
Floyd-Steinberg	Applies the Floyd-Steinberg algorithm to the screen. This form of error diffusion is suitable for photographic images.

---

## To change a bitmap to a black-and-white image

- 1 Click a bitmap.
- 2 Click **Bitmaps ▶ Mode ▶ Black-and-white (1-bit)**.
- 3 Choose an option from the **Conversion** list box.
- 4 Move the slider.  
If you want to view different parts of the image, you can drag the image in the **Preview** window.

## Changing bitmaps to the paletted color mode

The paletted color mode, also called indexed color mode, is sometimes used for images on the World Wide Web. When you convert an image to the paletted color mode, a fixed color value is assigned to each pixel. These values are stored in a compact color table, or palette containing up to 256 colors. As a result, the paletted color mode image contains less data than a 24 bit color mode image, and it has a smaller file size. Conversion to paletted color mode works best on images that have a limited range of colors.

### Choosing, editing, and saving a color palette

When you change an image to the paletted color mode, you can use a predefined palette or you can customize a color palette by replacing individual colors.

### Saving conversion settings

After you choose a color palette and set the dithering and range sensitivity for changing an image to the paletted color mode, you can save the settings as a conversion preset that you can use with other images. You can add as many conversion presets as you want.

The color palette you use is called the processed color palette. It can be saved for use with other images.

For more information about the predefined color palettes available for the paletted color mode, see “Palette types” on page 255. For more information about creating and opening custom color palettes, see “Creating custom color palettes” on page 152.

### Dithering

Changing images to the paletted color mode lets you use dithering to enhance color information. Dithering places pixels with specific colors or values relative to other pixels of a specific color. The relationship of one colored pixel to another creates the appearance of additional colors that do not exist in the color palette.

You can use two types of dithering: ordered dithering and error diffusion. Ordered dithering approximates color blends using fixed dot patterns; as a result, solid colors are emphasized and edges appear harder. Error diffusion scatters pixels irregularly, making edges and colors softer. Jarvis, Stucki, and Floyd-Steinberg are conversion options that provide error diffusion.

The Ordered dithering option applies more quickly than the error diffusion options (Jarvis, Stucki, and Floyd-Steinberg) but is less accurate.

## Specifying a range sensitivity color

You can change an image to the paletted color mode and specify a focus color and a range sensitivity for the focus color, so that the focus color and colors that fall within the range settings are included in the processed color palette. You can also specify how much emphasis to place on the range sensitivity. Because the palette has a maximum of 256 colors, emphasizing a focus color reduces the number of colors that fall outside the range sensitivity.

## Palette types

Palette type	Description
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	Provides colors original to the image and preserves the individual colors (the entire color spectrum) in the image
Optimized	Creates a color palette based on the highest percentage of colors in the image. You can also specify a range sensitivity color for the color palette. This is the most common color palette for photographic images.
Black Body	Contains colors that are based on temperature. For example, black may represent cold temperatures, while red, orange, yellow, and white may represent hot temperatures
Grayscale	Provides 256 shades of gray, ranging from black to white
System	Provides the predefined palette of colors used by the operating system.



Palette type	Description
Web-safe	Provides a predefined palette of 216 non-dithered colors that will display the same on the Microsoft® Internet Explorer and Netscape Navigator® browsers. This palette is not recommended for use with photographs and only benefits users with older computers.
Custom	Lets you add colors to create a customized color palette

## To change an image to the paletted color mode

- 1 Click a bitmap.
- 2 Click **Bitmaps ▶ Mode ▶ Paletted (8-bit)**.
- 3 Click the **Options** tab.
- 4 Choose a color palette type from the **Palette** list box.
- 5 Choose an option from the **Dithering** list box.
- 6 Move the **Dithering** intensity slider.

If you want to save the conversion settings as a preset, click the **Add preset** button, and type a name in the **Save preset** box.



You can achieve better color fidelity by choosing the palette you want to use when you change an image to a paletted bitmap or when you export a GIF or JPEG. For example, the standard color palette provides more colors than necessary for an image with a limited range of colors, but you can choose an optimized palette to ensure that color representation is accurate.



You can choose a custom color palette by clicking **Open**, locating the color palette file you want, and double-clicking the filename.

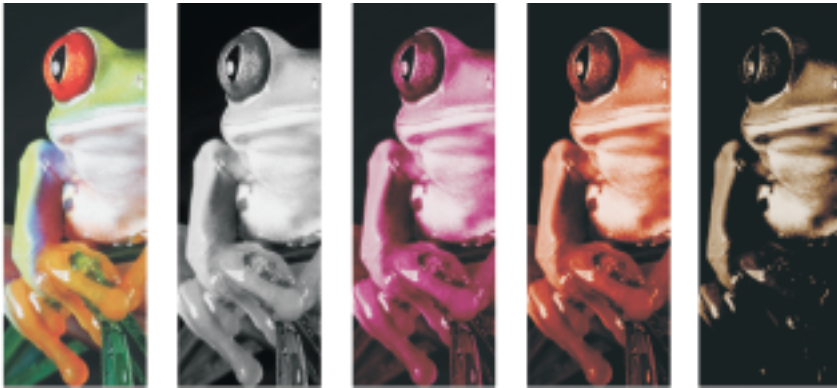
You can load preset conversion settings by choosing a preset from the **Preset** list box.

## Changing bitmaps to duotones

To convert an image to a duotone, you change a bitmap to the grayscale color mode and enhance it using one to four additional colors, giving the image greater tonal depth.

The following four variations of the color mode correspond to the number of additional inks:

- **Monotone** — a grayscale image colored with a single tone
- **Duotone** — a grayscale image colored with two tones. In most cases, one is black and the other is colored.
- **Tritone** — a grayscale image colored with three tones. In most cases, one is black and the other two are colored.
- **Quadtone** — a grayscale image colored with four tones. In most cases, one is black and the other three are colored.



*CorelDRAW supports four color mode variations. From left to right: the original image, monotone, duotone, tritone, and quadtone.*

### Adjusting tone curves

When you change an image to a duotone, a tone curve grid that represents the dynamic tone curves that are used throughout the conversion is displayed. The horizontal plane (x-axis) displays the 256 possible shades of gray in a grayscale image (0 is black; 255 is white). The vertical plane (y-axis) indicates the intensity of a color (from 0 to 100 percent) that is applied to the corresponding grayscale values. For example, a grayscale pixel with a color value of 25 is printed with a 25-percent tint of the color. By adjusting the tone curves, you can control the color and intensity of the tone that is added to an image.

## Saving and loading inks

You can save an adjusted duotone tone curve and ink settings and then load them for use with other bitmaps.

## Specifying how overprint colors display

When you change an image to a duotone, you can specify which colors will overprint when you print an image. Overprint colors are the colors that have too much ink when two or more colors overlap. When you display the image, each color is applied on the screen in sequence, creating a layered effect.

You can view all instances in which the colors you choose for the duotone conversion overlap. Associated with each instance is the color that is produced by the overlap. You can also choose new overprint colors to see how they overlap.

Duotones will hold their color ink information when saving to Encapsulated PostScript (EPS), Portable Document Format (PDF) and CoreIDRAW (CDR) file formats. Other file formats don't support duotone images.

## To change an image to a duotone

- 1 Click a bitmap.
- 2 Click **Bitmaps** ▶ **Mode** ▶ **Duotone (8-bit)**.
- 3 Click the **Curves** tab.
- 4 Choose a duotone type from the **Type** list box.
- 5 Double-click an ink color in the **Type** window.
- 6 In the **Select color** dialog box, choose a color, and click **OK**.

If you want to adjust the color's tone curve, click the ink tone curve on the grid to add a node and drag the node to adjust the percentage of color at that point on the curve.

- 7 Repeat steps 5 to 7 for each ink color you want to use.

### You can also

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Display all the ink tone curves on the grid.

Enable the **Show all** check box.

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Save the ink settings

Click **Save**. Choose the disk and folder where you want to save the file, and type a filename in the **Name** box.

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## You can also

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Specify how overprint colors display

Click the **Overprint** tab, and enable the **Use overprint** check box. Double-click the color you want to edit, and choose a new color.

---



You can load preset ink colors by clicking **Load**, locating the file in which the ink settings are stored, and double-clicking the filename.

## From here

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

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Creating color palettes

color palettes

---

Setting range sensitivity

range sensitivity

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CorelDRAW lets you create Web-enabled objects for optimum viewing in browsers. You can convert text to a Web-compatible format so that it can be edited in a browser, add Web form objects such as options and check boxes, and create interactive rollovers from CorelDRAW objects.

In this section, you'll learn about

- using preset Internet objects
- optimizing bitmaps for the World Wide Web
- creating rollovers
- creating Web-compatible text
- working with bookmarks and hyperlinks

## Using preset Internet objects

CorelDRAW provides you with a set of Internet objects, such as options, Java applets, text edit boxes, and check boxes to use when designing an HTML page. You can customize Internet objects by adjusting their parameters.

If a document contains form-related Internet objects such as check boxes, you need a CGI script address to enable these Internet objects to work once the document is published to the World Wide Web as an HTML file.

After you create a preset Internet object, you can save it as an HTML page. For information about optimizing, see "Optimizing bitmaps for the World Wide Web" on page 263.

## To add or customize an Internet object

To	Do the following
Add an Internet object	Click <b>Edit</b> ► <b>Insert Internet object</b> , and click the object you want. Click where you want to place the Internet object.


---

**To****Do the following**

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Customize an Internet object

Do one of the following:

- (Windows) Right-click an Internet object, and click **Properties**. In the **Object properties** Docker window, click the **Internet** tab , and specify the attributes you want to add.
  - (Mac OS) **Control** + click an Internet object, and click **Properties**. On the **Object properties** palette, choose **Internet** from the list box, and specify the attributes you want to add.
- 

Add a CGI Script address to an Internet object

Deselect any objects, and do one of the following:

- (Windows) Right-click, and click **Properties**. Click the **Form** tab, and type the CGI script address in the **URL of CGI script** box. Choose an HTML equivalent method from the **Method** list box and a frame type from the **Target** list box.
  - (Mac OS) **Control** + click, and click **Properties**. Click **Form** from the list box. Type the CGI script address in the **URL of CGI script** box. Choose an HTML equivalent method from the **Method** list box and a frame type from the **Target** list box.
- 



All Internet objects, except for Java applets and embedded files, require a CGI script address to function properly after you publish a drawing to the World Wide Web.

## To save objects to a Web-compatible format

- 1 Click File ▶ Publish to the Web ▶ HTML.
- 2 Choose the HTML layout from the HTML layout method list box.
- 3 Choose a destination folder.
- 4 Choose an image subfolder.
- 5 Choose an export range.



You can check to see whether there are any issues by clicking the Issues tab.





## Optimizing bitmaps for the World Wide Web

You can save objects and optimize them for the World Wide Web.

When you optimize an image for the Web, you can export to a GIF, JPEG, JPEG 2000, PNG 8-bit, and PNG 24-bit file type, choose a Web preset, and compare the previewed results. The Web presets are optimized for color, dithering, compression, and smoothing, depending on the file type you choose. You can compare up to four file types by viewing their download speed, image quality, file size, color range, and compression size as well as by panning and zooming in the image.

You can also add and delete Web presets of your own.




## To save and optimize a bitmap to Web-compatible format

- 1 Click File ▶ Publish to the Web ▶ Web image optimizer.
- 2 Choose a speed from the Connection speed list box.
- 3 Choose one of the following pane display options:
  - Single pane 
  - Double-vertical panes 
  - Double-horizontal panes 
  - Four panes 
- 4 Keep one pane as the original image. In one or more of the other panes, choose from the following list boxes below the preview window:
  - File type
  - Web preset



## You can also

---

Edit preset settings for a single preview area	Click <b>Advanced</b> . In the <b>Export</b> dialog box, customize the preset options. If you select GIF or PNG8 file formats, you can modify the color palette and settings in the <b>Convert to paletted</b> dialog box.
Save the current configuration of settings for a preview area.	Click the <b>Save settings</b>  button for each area where you want to save the settings.
Save a custom preset	Click <b>Add</b>  .
Delete a preset	Click <b>Delete</b>  .
Display file information below each preview window	Enable the <b>Preview</b> check box.
Pan to another section of the image	Drag in the preview window of the original image.
Zoom in the preview window	Choose a magnification from the <b>Zoom level</b> list box.

---



Some browsers require a plug-in to display JPEG 2000 files.



You can compare file types with the original image by choosing **Original** from the **File type** list box in one of the panes.

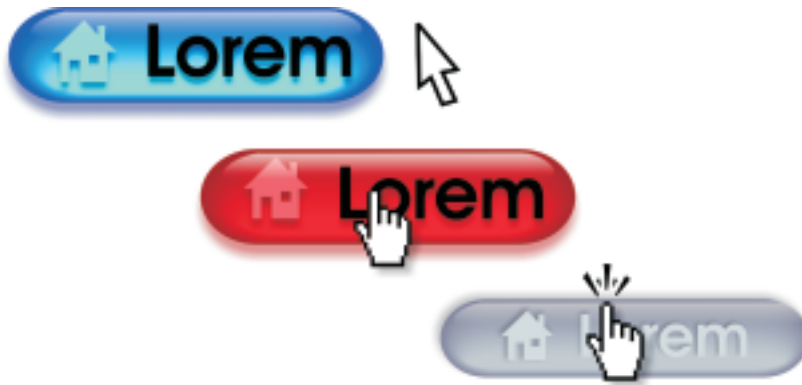
## Creating rollovers

Rollovers are interactive objects that change in appearance when you click or point to them. You can create rollovers using objects.

To create a rollover, you add the following rollover states:

- **Normal** — the default state of a button when no mouse activity is associated with the button
- **Over** — the state of a button when the pointer passes over it
- **Down** — the state of a clicked button

To edit the rollover states, you can view the rollover states and their properties.



*Rollovers showing Normal (top), Over (middle), and Down (bottom) states*

To publish a rollover to the Internet, you must save the rollover to a Web-compatible file format by publishing to HTML or to the Macromedia Flash™ (SWF) format. For information on publishing to the Web, see “Publishing to the Web” on page 271.

For more information about creating and editing objects such as rollovers, see “Working with objects” on page 73.

### **To create a rollover object**

- 1 Select an object.
- 2 Click **Effects** ▶ **Rollover** ▶ **Create rollover**.



You cannot create a rollover from a clone.

### **To edit a rollover object**

- 1 Select an object.
- 2 Click **Effects** ▶ **Rollover** ▶ **Edit rollover**.
- 3 Specify the attributes of each state.
- 4 Click **Effects** ▶ **Rollover** ▶ **Finish editing rollover**.



You cannot close a drawing in which you are editing a rollover. You must finish editing first.



You can also edit a rollover object by clicking the **Edit rollover** button on the Internet toolbar.

## To view the rollover states

- 1 Do one of the following:
  - (Windows) Click **Window** ▶ **Toolbars** ▶ **More toolbars**. In the **Workspace, Customization** list of categories, click **Command bars** and ensure the **Internet** check box is enabled. Click **OK**.
  - (Mac OS) Click **Window** ▶ **Toolbars** ▶ **Internet**.
- 2 On the **Internet** toolbar, choose between the **Normal**, **Over**, and **Down** states from the **Active rollover state** list box.



You can preview a rollover object's states in the drawing page by clicking **View** ▶ **Enable rollovers**. To quit previewing the rollover so that you can edit it, click **View** ▶ **Enable rollovers**.

## To view rollover properties

- 1 Click **Window** ▶ **Dockers / Palettes** ▶ **Object manager**.
- 2 Click the page and layer where the rollover resides.
- 3 Click the rollover name, and expand the **Normal**, **Over**, and **Down** states.

## Creating Web-compatible text

When you convert paragraph text to Web-compatible text, you can edit the text of the published document in an HTML editor. You can change text font characteristics, including the font type, size, and style. The Web-compatible text sizes, numbered 1 through 7, correspond to particular point sizes between the 10-point and 48-point range. For more information about formatting text, see “Formatting paragraph text” on page 228.

The default Web font style is used automatically, unless you override it with another font. If you choose to override it, the default font is used when visitors to your Web site don't have the same font installed on their computers. The bold, italic, and

underline text styles are also available. You can apply uniform fills, but not outlines, to Web-compatible text.

Any non-Web-compatible text in your drawing is converted to bitmaps when you publish your drawing to the World Wide Web as HTML.

## To make text Web-compatible

To	Do the following
Change paragraph text to Web-compatible text	Select the paragraph text. Click <b>Text ▶ Make text web compatible</b> .
Make new text Web-compatible	Do one of the following: <ul style="list-style-type: none"><li>• (Windows) Click <b>Tools ▶ Options</b>. In the list of categories, double-click <b>Workspace, Text</b>, and click <b>Paragraph</b>. Enable the <b>Make all new paragraph text frames web compatible</b> check box.</li><li>• (Mac OS) Click <b>CorelDRAW 11 ▶ Preferences</b>. In the list of categories, click <b>Workspace, Text</b>, and click <b>Paragraph</b>. Enable the <b>Make all new paragraph text frames Web compatible</b> check box.</li></ul>



Ensure that the Web-compatible text does not intersect or overlap other objects or extend beyond the boundaries of the drawing page; otherwise the text will be converted to a bitmap, and it will lose its Internet properties.

Artistic text cannot be converted to Web-compatible text and is always treated as a bitmap. However, you can convert it to paragraph text and then make it Web compatible. For information on converting text, see “Finding, editing, and converting text” on page 224.

## Working with bookmarks and hyperlinks

CorelDRAW lets you create bookmarks and hyperlinks in your Web document. You can apply these to rollovers, bitmaps, and other objects.

## Bookmarks

To create an internal link in an HTML file, you can assign a bookmark to text or to an object. You can then assign a Uniform Resource Locator (URL) to an object that links to the bookmark. The object containing a URL has a hotspot, an area that activates a hyperlink when clicked in a browser.

## Hyperlinks

Within a document, hyperlinks connect to any object that has been assigned a bookmark, or the hyperlink can connect to any document on the World Wide Web by using that document's URL. You can also set a hotspot that follows the outline of the object, or fills the object's bounding box.

CorelDRAW applies a crosshatch pattern to an object containing a hyperlink. You can change the color of the crosshatch pattern as well as its background fill.

After you create hyperlinks, you can display and verify them.

### To assign a bookmark


- 1 Right-click (Windows) or **Control** + click (Mac OS) an object, and click **Properties**.
- 2 Do one of the following:
  - (Windows) Click the **Internet** tab.
  - (Mac OS) Choose **Internet** from the list box.
- 3 Choose **Bookmark** from the **Behavior** list box.
- 4 Type the name of the bookmark.

### To assign a hyperlink to a bookmark or external Web site

- 1 Right-click (Windows) or **Control** + click (Mac OS) an object, and click **Properties**.
- 2 Do one of the following:
  - (Windows) Click the **Internet** tab.
  - (Mac OS) Choose **Internet** from the list box.
- 3 Choose **URL** from the **Behavior** list box.
- 4 Type a URL address.

## You can also

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Specify what frame will display when the rollover is clicked	Choose a target frame from the <b>Target</b>  list box.
Add a description of the object for text-only browsers	Type the text in the <b>Alt comments</b> text box.
Define the hotspot area	Choose <b>Object shape</b> or <b>Object's bounding box</b> from the <b>Define hotspot using</b> list box.

---





URLs to external Web sites must contain the **http://** prefix. Other supported protocols include **mailto:**, **ftp:**, and **file:**.



You can rename a bookmark and create a hyperlinked bookmarked object from a document object by using the **Internet bookmark manager** Docker window/palette.

## To assign crosshatch and background hotspot colors


- 1 Click **Window** ▶ **Dockers / Palettes** ▶ **Properties**.
- 2 Do one of the following:
  - (Windows) Click the **Internet** tab.
  - (Mac OS) Choose **Internet** from the list box.
- 3 Open the **Cross-hatch** color picker , and click a color.
- 4 Open the **Background** color picker , and click a color.




If you choose a hyperlinked object first and then change the crosshatch 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 drawing and for future sessions of CorelDRAW.

## To display hyperlinked objects

- 1 Do one of the following:
  - (Windows) Click **Window** ▶ **Toolbars** ▶ **More toolbars**. In the **Workspace, Customization** list of categories, click **Command bars** and ensure the **Internet** check box is enabled. Click **OK**.

- (Mac OS) Click **Window** ▶ **Toolbars** ▶ **Internet**.
- 2 On the **Internet** toolbar, enable the **Show hotspots** button  .  
All objects to which you've assigned URLs display in the crosshatch and background hotspot colors.

### **To verify links in a Web document**

- 1 Click **Window** ▶ **Dockers / Palettes** ▶ **Link manager**.
- 2 In the list, verify that all URL links display a green check mark.
- 3 Click the **Refresh** button  to verify any broken links.



If you want to test a link by opening a URL in a Web browser, right-click (Windows) or **Control** + click (Mac OS) the object, and click **Jump to hyperlink in browser**.

You can ensure that your CorelDRAW files and objects publish to HTML successfully by setting document elements to be Web-compatible, selecting the settings you want, and checking Preflight issues. You can then publish to HTML. The resulting HTML code and images can be used in HTML authoring software for creating a Web site or page.

In this section, you'll learn about

- preparing files and objects for Web publishing
- publishing to HTML

### Preparing files and objects for Web publishing

You can prepare your files and objects for the Web by setting preferences and verifying the objects before you export them.

The CorelDRAW application provides options for publishing your document to the World Wide Web. You can determine layout options, set link colors, and select HTML text preferences. Among the text export options, you can export Web-compatible text as plain text so that users can copy and reuse the text, or you can export all text as images so that the text will always display as you designed it.

You can export your graphics to preset JPEG, GIF, or PNG formats. You can also publish your document as a single image, from which CorelDRAW creates an image map. An image map is a hypergraphic whose hotspots link to different URLs — including pages, locations, and images — when you view the HTML document with a browser. Note that large image maps might cause slow downloads for those with a slow Internet connection.

You can check the download times of your Web page objects through a browser preview.

### To change text export preferences

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.



- (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Document**, **Publish to Web**, and click **Text**.
  - 3 Enable one of the following options:
    - **Export Web-compatible text as text** — exports the Web-compatible text as text
    - **Export all text as images** — exports the text as images and ensures compatibility for all browsers
    - **Export Web-compatible text as text using TrueDoc** — exports the text using TrueDoc for use in Netscape® Communicator



Exporting all text as images can increase download times because of the larger file sizes.

## To change link export preferences

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Document**, **Publish to the Web**, and click **Links**.
- 3 Enable the **Underline** check box.
- 4 Enable the following check boxes, and select a color for each:
  - **Normal link**
  - **Active link**
  - **Visited link**



The link colors set in the **Options** / **Preferences** dialog box are exported with the file, eliminating any conflict between link color and your document's page background color.

## To change image export preferences

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.

- 2 In the list of categories, double-click **Document**, **Publish to the Web**, and click **Image**.
- 3 In the **Export image using** area, enable one of the following image format options:
  - **JPEG**
  - **GIF**
  - **PNG**
- 4 Set any bitmap options.

#### **You can also**

Apply anti-aliasing	Enable the <b>Anti-alias</b> check box.
Create a Client-side image map	Enable the <b>Client</b> check box.
Create a Server-side image map	Enable the <b>Server</b> check box, and choose a format.

### **To change HTML layout export preferences**

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Document**, and click **Publish to the Web**.
- 3 Type values in the following boxes:
  - **Position tolerance** — lets you specify the number of pixels text can be automatically nudged to avoid introducing rows or columns that are only a few pixels in size
  - **Image white space** — lets you specify the number of pixels that can occur in an empty cell before it's merged with an adjacent cell. This lets you avoid splitting a single graphic that spans adjacent cells. Cells or tables are used to position Internet objects in your Web document when you choose the HTML Tables layout method
  - **Position white space** — lets you specify the amount of white space allowed in an image

## To preview a Web page

- 1 Click **File** ▶ **Publish to the Web** ▶ **HTML**.
- 2 Click the **General** tab.
- 3 Click the **Browser preview** button.

## To set Web preflight options

- 1 Click **File** ▶ **Publish to the Web** ▶ **HTML**.
- 2 Click the **Issues** tab.
- 3 Click **Settings**.
- 4 In the **Issues to check for** list, expand the **Web publishing** tree.
- 5 Deselect the issues you do not want to check.

## Publishing to HTML

CorelDRAW provides several options for publishing your document or selection for use on the World Wide Web. You can choose several options such as image format, HTML layout, export range, and file transfer protocol (FTP) site parameters for uploading your files.

## To publish to the Web

- 1 Click **File** ▶ **Publish to the Web** ▶ **HTML**.
- 2 Set the following options in the **Publish to the Web** dialog box:
  - **General** — contains options for HTML layout, folder for HTML file and images, and FTP site and export range. You can also select, add, and remove presets.
  - **Details** — contains details of HTML files produced, and allows you to change the page name and file name.
  - **Images** — lists all images for the current HTML export. You can set individual objects to JPEG, GIF, and PNG formats. Click **Options** to select presets for each image type.
  - **Advanced** — provides options for generating JavaScript™ and Cascading Style Sheets.
  - **Summary** — shows statistics for files according to various download speeds

- **Issues** — displays a list of potential issues, including explanations, suggestions, and tips



CoreDRAW assigns the extension **.htm** to documents you publish in the HTML format. By default, HTML files share the same name as the CoreDRAW (CDR) source file and are saved in the last folder you used to store exported Web documents.

## From here

**For more information about**

**(Windows) In the Help index, see  
(Mac OS) In the Help Viewer, type**

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File formats

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file formats

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CorelDRAW provides extensive options for printing your work.

In this section, you'll learn about

- printing your work
- laying out print jobs
- previewing print jobs
- printing to a PostScript printer

## Printing your work

In the CorelDRAW application, you can print one or more copies of the same drawing. You can specify what to print, as well as which parts of a drawing to print; for example, you can print selected vectors, bitmaps, text, or layers.

Before printing a drawing, you can specify printer properties, including paper size and device options.

### To set printer properties

- 1 Click **File** ▶ **Print**.
- 2 Click the **General** tab.
- 3 Click **Properties** (Windows) or **Printer** (Mac OS).
- 4 Set any properties in the dialog box.

## To print your work

- 1 Click **File** ▶ **Print**.
- 2 Click the **General** tab.
- 3 Choose a printer from the **Name** list box (Windows) or the **Printer** list box (Mac OS).
- 4 Type a value in the **Number of copies** box.  
If you want the copies collated, enable the **Collate** check box.
- 5 Enable one of the following options:
  - **Current document** — prints the active drawing
  - **Current page** — prints the active page
  - **Pages** — prints the pages that you specify
  - **Documents** — prints the documents that you specify
  - **Selection** — prints the objects that you have selected



You must select objects before printing a selection.

The **Collate** check box is only available for documents with more than one page.

## To print selected vectors, bitmaps, or text

- 1 Click **File** ▶ **Print**.
- 2 Click the **Misc** tab.
- 3 In the **Proofing options** area, enable any of the following check boxes:
  - **Print vectors**
  - **Print bitmaps**
  - **Print text**



You can print graphics in full color, monochrome, or grayscale, by enabling the corresponding check boxes in the **Bitmap downsampling** area.

You can print all text in black by enabling the **Print all text in black** check box.

## To print selected layers

- 1 Click **Tools** ▶ **Object manager**.
- 2 Click the printer icon that corresponds to a layer.  
If the icon appears grayed, the layer will not print.
- 3 Click **File** ▶ **Print**.

## Laying out print jobs

You can lay out a print job by specifying the size, position, and scale. Tiling a print job prints portions of each page on separate sheets of paper that you can assemble into one sheet. You would, for example, tile a print job that is larger than your printer paper.

If the orientation of a print job differs from the orientation specified in the printer properties, a message prompts you to adjust the paper orientation of the printing device. You can disable this prompt, so that the printer adjusts paper orientation automatically.

## To specify the size and position of a print job

- 1 Click **File** ▶ **Print**.
- 2 Click the **Layout** tab.
- 3 Enable one of the following options:
  - **As in document** — maintains the image size, as it is in the document.
  - **Fit to page** — sizes and positions the print job to fit to a printed page
  - **Reposition images to** — lets you reposition the print job by choosing a position from the list box



Enabling the **Reposition images to** option lets you specify size, position, and scale in the corresponding boxes.

## To tile a print job

- 1 Click **File** ▶ **Print**.
- 2 Click the **Layout** tab.
- 3 Enable the **Print tiled pages** check box.
- 4 Type values in the following boxes:
  - **Tile overlap** — lets you specify the number of inches by which to overlap tiles



- **% of page width** — lets you specify the percentage of the page width the tiles will occupy



Enable the **Tiling marks** check box to include tiling alignment marks.

## To change the page orientation prompt

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Global**, and click **Printing**.
- 3 Choose **Page orientation prompt** from the **Option** list.
- 4 Choose one of the following from the **Setting** list box:
  - **Off** — always match orientation
  - **On** — ask if orientations differ
  - **Off** — don't change orientation

## Previewing print jobs

You can preview your work to show how the position and size of the print job will appear on paper. For a detailed view, you can zoom in on an area. You can view how the individual color separations will appear when printed. You can also increase the speed of a print preview by hiding the graphics.


Before printing your work, you can view a summary of issues for a print job to find potential printing problems. For example, you can check the current print job for print errors, possible print problems, and suggestions for resolving issues.


## To preview a print job

- Click **File** ▶ **Print preview**.



You can quickly preview a print job in the **Print** dialog box by clicking **File** ▶ **Print**, and clicking one of the following:


(Windows) **Mini preview** button 

(Mac OS) **Mini preview** button 

## To magnify the preview page

- 1 Click **File** ▶ **Print preview**.
- 2 Click **View** ▶ **Zoom**.
- 3 Enable the **Percent** option, and type a value in the box.



You can also magnify the preview page by choosing a preset zoom level. You can also zoom in on a portion of the print preview by clicking the **Zoom tool**  in the toolbox and marquee selecting an area.

## To preview color separations

- 1 Click **File** ▶ **Print preview**.
- 2 On the property bar, click the **Enable color separations** button .



You can preview the composite by clicking **View** ▶ **Preview separations** ▶ **Composite**.

You can view individual color separations by clicking the tabs at the bottom of the application window.

## To hide or display graphics

- 1 Click **File** ▶ **Print preview**.
- 2 Click **View** ▶ **Show image**.  
A check mark beside the menu command name indicates that graphics are displayed.



When the **Show image** menu command is disabled, the print job is represented by a bounding box that you can use to position and size the job.

## To view a summary of issues for a print job

- 1 Click **File** ▶ **Print**.
- 2 Click the **Issues** tab.  
If you don't want Preflight to check for certain issues, click **Settings**, double-click **Printing**, and disable any check boxes that correspond to issues you want overlooked.



You can save settings by clicking the **Add preflight settings** button and typing a name in the **Save preflight style** box.

## Printing to a PostScript printer

PostScript is a page-description language that sends printing instructions to a PostScript device. 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. For improved compatibility you can choose a device independent PostScript device. You can also select a PostScript Printer Description (PPD) file. A PostScript Printer Description file describes the capabilities and features of your PostScript printer and is available from your printer's manufacturer.

You can print to a PostScript printing device. To ensure that a print job prints properly on a PostScript Level 1 device, you can test for potential issues such as complex graphics and banding in fountain fills. You can automatically increase the fountain steps in a fountain fill to decrease banding. To ensure that your print jobs print properly, you can reduce curve complexity by increasing flatness. Curve flatness determines how smooth a curve appears when printed.

A print job that contains too many fonts may not print properly, and a print job that contains too many spot colors increases file size. You can set the PostScript options to warn you when a print job contains more than a set number of fonts or spot colors.

By default, the printing device driver downloads Type 1 fonts to the printing device. You can disable the **Download Type 1 Fonts** option, so that fonts are printed as graphics (either curves or bitmaps). This may be useful when the file contains many fonts that would take an unacceptably long time to download or would fail to download because of their file size. Bitmap versions of TrueType® fonts look better in small print and print faster than regular fonts. You can choose the maximum number of bitmap fonts that a print job can contain.

### To select a PostScript Printer Description file

- 1 Click **File** ► **Print**.
- 2 Click the **General** tab.
- 3 Choose a PostScript printer from the **Name** list box (Windows) or the **Printer** list box (Mac OS).
- 4 Enable the **Use PPD** check box.
- 5 Choose the folder where the file is stored.
- 6 Double-click the filename.

## To print to a PostScript device

- 1 Click **File** ► **Print**.
- 2 Click the **General** tab.
- 3 Choose a PostScript printer from the **Name** list box (Windows) or the **Printer** list box (Mac OS).
- 4 Click the **PostScript** tab.
- 5 From the list box in the **Compatibility** area, choose the PostScript level that corresponds to the printer.  
If you want to compress bitmaps when printing, enable the **Use JPEG compression** check box in the **Bitmaps** area, and move the **Quality factor** slider.



Bitmap compression settings can be saved in PostScript Interpreted (PS or PRN) files when you print to a file. For information about printing to a file, see “To print to a file” on page 286.

## To test for complex graphics

- 1 Click **File** ► **Print**.
- 2 Click the **Issues** tab.
- 3 Click **Settings**.
- 4 Double-click **Printing**.
- 5 Enable any of the following check boxes:
  - **Text with texture fills (PS Level1 Only)**
  - **Bitmaps in complex clipping paths (PS Level1 only)**
  - **Texture fills in complex objects (PS Level1 only)**
  - **Complex clipping regions (PS Level1 only)**
  - **Objects with outline having many nodes (PS Level1 only)**
  - **Objects with outline and fill having many nodes (PS Level1 only)**

## From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Applying print styles	printing, print styles
Fine-tuning print jobs	printing, fine-tuning
Printing colors accurately	printing, colors accurately
Printing to a PostScript printer	printing, PostScript printer

With CorelDRAW, you can prepare a print job for commercial printing.

In this section, you'll learn about

- preparing a print job for a service bureau
- working with imposition layouts
- printing printer's marks
- maintaining OPI links
- printing color separations
- specifying In-RIP trapping settings
- printing to film
- understanding commercial printing
- using Preflight

### Preparing a print job for a service bureau

You can use the Prepare for service bureau wizard to guide you through the process of sending a file to a service bureau. The wizard simplifies processes such as creating PostScript and PDF files; gathering different pieces required for outputting an image; and copying the original image, embedded image files, and fonts to a user-defined location.

You can print a drawing to a file, which lets the service bureau send the file directly to an output device. If you are unsure about which settings to choose, consult the service bureau.

You can include a job information sheet with all the pre-press settings that you have specified.

For more information about commercial printing, see "Understanding commercial printing" in the **Help**.

## To use the Prepare for Service Bureau wizard

- 1 Click **File** ► **Prepare for service bureau**.
- 2 Enable one of the following options:
  - **Gather all files associated with this document**
  - **Choose a profile provided by your service bureau**



The PDF file settings for the service bureau and the **PDF for prepress** settings are identical. For information about the **PDF for prepress** style settings, see “Saving documents as PDF files” on page 301.

To create a service bureau profile, you need the Service Bureau Profiler utility, which you can custom install with CorelDRAW.

## To print to a file

- 1 Click **File** ► **Print**.
- 2 Click the **General** tab.
- 3 Enable the **Print to file** check box.  
(Mac OS) If the **Print to file** check box is grayed, choose **Device independent PostScript file** from the **Printer** list box. This enables the **Print to file** check box automatically.
- 4 Click the flyout arrow, and click one of the following commands:
  - (Windows) **For Mac** — saves the drawing to be readable on a Macintosh computer
  - **Single file** — prints pages to a single file
  - **Pages to separate files** — prints pages to separate files
  - **Plates to separate files** — prints plates to separate files
- 5 Click **Print**.
- 6 Choose one of the following from the **Save as type** list box (Windows) or **Format** list box (Mac OS):
  - **Print file** — saves the file as a PRN file
  - **PostScript XE file** — saves the file as a PS file
- 7 Choose the folder where you want to save the file.
- 8 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS).



If you prefer not to prepare PostScript 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.

## To include a job information sheet with the print job

- 1 Click **File** ► **Print**.
- 2 Click the **Misc** tab.
- 3 Enable the **Print job information sheet** check box.
- 4 Click **Info settings**.
- 5 In the **Information** area, disable any of the options.
- 6 In the **Destination** area, enable one of the following:
  - **Send to text file**
  - **Send to printer**

## Working with imposition layouts

Working with imposition layouts lets you print more than one page of a document on each sheet of paper. You can choose a preset imposition layout to create documents such as magazines and books to print on a commercial printing press; produce documents that involve cutting or folding, such as mailing labels, business cards, pamphlets, or greeting cards; or print multiple thumbnails of a document on one page. You can also edit a preset imposition layout to create your own layout.

You can select a binding method by choosing from three preset binding methods or you can customize a binding method. When you choose a preset binding method, all but the first signature are automatically arranged.

You can arrange pages on a signature manually or automatically. When you arrange the pages automatically, you can choose the angle of the image. If you have more than one page across or down, you can specify the size of gutters between pages; for example, you can choose the automatic gutter spacing option, which sizes gutters so that the document's pages fill the entire available space in the layout.

When printing on a desktop printer, you can adjust the margins to accommodate the non-printable area of a page. If the margin is smaller than the non-printable area, the edges of some pages or some printer's marks may be clipped by your printer.



## To choose a preset imposition layout

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 Choose an imposition layout from the **Imposition layout** list box.



The layout you choose does not affect the original document, only the way it is printed.



## To edit an imposition layout

- 1 Click **File** ► **Print**.
- 2 Click the **Layout** tab.
- 3 Choose an imposition layout from the **Imposition layout** list box.
- 4 Click **Edit**.
- 5 Edit any imposition layout settings.
- 6 Click **Save layout** on the property bar.
- 7 Type a name for the imposition layout in the **Save as** box.



When editing an imposition layout, you should save it with a new name; otherwise the settings for a preset imposition layout will be overwritten.

## To select a binding method

- 1 Click **File** ► **Print preview**.
- 2 Click the **Imposition layout** tool .
- 3 Choose **Edit basic settings** from the **What to edit** list box on the property bar.
- 4 Type values in the **Pages across/down** boxes.  
If you want the page to be double-sided, click the **Single/double sided** button .
- 5 Choose one of the following binding methods from the **Binding mode** list box:
  - **Perfect binding**
  - **Saddle stitch**
  - **Collate and cut**





- **Custom binding**

If you choose either **Perfect binding** or **Custom binding**, type a value in the corresponding box.



When you click the **Single/double sided layout** for double-sided printing, and you are printing on a non-duplex printing device, a wizard automatically provides instructions on how to insert the paper into the printer, so that you can print on both sides of the page.






## To arrange pages

- 1 Click **File** ► **Print preview**.
- 2 Click the **Imposition layout** tool  .
- 3 Choose **Edit page placements** from the **What to edit** list box on the property bar.
- 4 Click one of the following buttons:
  - **Intelligent auto-ordering** 
  - **Sequential auto-ordering** 
  - **Cloned auto-ordering** 

If you want to arrange the page numbering manually, click on the page and specify the page number in the **Page sequence number** box.

- 5 Choose an angle from the **Page rotation** list box.

## To edit gutters




- 1 Click **File** ► **Print preview**.
- 2 Click the **Imposition layout** tool  .
- 3 Choose **Edit gutters and finishing** from the **What to edit** list box on the property bar.
- 4 Click one of the following buttons:
  - **Auto gutter spacing** 
  - **Equal gutters** 
- 5 Click one of the following buttons:
  - **Cut location** 
  - **Fold location** 



If you click the **Equal gutters** button, you must specify a value in the **Gutter size** box.

You can edit the gutters only if you've selected an imposition layout with two or more pages across and down.

## To adjust margins

- 1 Click **File** ► **Print preview**.
- 2 Click the **Imposition layout** tool  .
- 3 Choose **Edit margins** from the **What to edit** list box on the property bar.
- 4 Click one of the following buttons:
  - **Auto margins** 
  - **Equal margins** 



If you click the **Equal margins** button, you must specify values in the **Top/left margin** boxes.

When preparing a job for a commercial press, the service bureau may request minimum margin sizes, such as for page grippers and printer's marks.

## Printing printer's marks

Printing printer's marks lets you display information on a page about how a work should be printed. You can specify the position of the printer's marks on the page.

The available printer's marks are as follows:

- **Crop/fold marks** — represent the size of the paper and print at the corners of the page. You can print crop/fold marks to use as guides to trim the paper. If you print multiple pages per sheet (for example, two rows by two columns) you can choose to print the crop/fold marks on the outside edge of the page so that all crop/fold marks are removed after the cropping process, or you can choose to add crop marks around each row and column. Composite crop/fold marks ensure that marks appear on each separation plate of an imported CMYK file.
- **Bleed limit** — determines how far an image can extend beyond the crop marks. When you use a bleed to extend the print job to the edge of the page, you must set a bleed limit. A bleed requires that the paper you are printing on is larger than the size of paper you ultimately want, and the print job must extend beyond the edge of the final paper size.
- **Registration marks** — are required to line up film for proofing or printing plates on a color press. They print on each sheet of a color separation.

- **Color calibration bars** — are color scales that print on each sheet of a color separation and ensure accurate color reproduction. To see calibration bars, the page size of the print job must be larger than the page size of the work you are printing.
- **Densitometer scale** — is a series of gray boxes ranging from light to dark. These boxes are required to test the density of halftone images. 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.
- **Page numbers** — helps you collate pages of an image that do not include any page numbers or do not contain page numbers that correspond to the actual number of pages.
- **File information** — prints file information, such as, the color profile; halftone settings; name, date, and time the image was created; plate number; and job name.

## To print crop and fold marks

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Crop/fold marks** check box.

If you want to print only the exterior crop/fold marks, enable the **Exterior only** check box.



To print crop and fold marks, the paper on which you print must be 0.5 inches larger on all sides than the page size of the image that you are printing.



To set crop and fold marks, see “To edit gutters” on page 289.

## To print composite crop/fold marks

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **CorelDRAW 11** ▶ **Preferences**.
- 2 In the list of categories, double-click **Global**, and click **Printing**.
- 3 Choose **Composite crop marks** from the **Option** list.
- 4 Choose **Output in CMYK** from the **Setting** list box.

## To set a bleed limit

- 1 Click **File** ▶ **Print**.
- 2 Click the **Layout** tab.
- 3 Enable the **Bleed limit** check box.
- 4 Type a value in the **Bleed limit** box.



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.

## To print registration marks

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Print registration marks** check box.
- 4 Choose a registration mark style from the **Style** list box.



To print registration marks, the paper on which you print must be 0.5 inches larger on all sides than the page size of the image that you are printing.

## To print color calibration bars and densitometer scales

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 In the **Calibration bars** area, enable any of the following check boxes:
  - **Color calibration bar**
  - **Densitometer scales**

If you want to customize the levels of gray in one of the densitometer scale squares, choose a number from the **Densities** list (lower values represent lighter squares) and type a new density for that square.

## To print page numbers

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Print page numbers** check box.


If you want to position the page number inside the page, enable the **Position within page** check box.

## To print file information

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Print file information** check box.
- 4 Type a job name in the **Job name/slug line** box.

If you want to position the file information inside the page, enable the **Position within page** check box.

## To position printer's marks

- 1 Click **File** ▶ **Print preview**.
- 2 Click the **Marks placement** tool  .
- 3 Click the **Auto-position marks rectangle** button on the property bar.
- 4 Type values in the **Marks alignment rectangle** boxes.



You can also change the position of printer's marks by clicking on a printer's mark icon in the print preview window and dragging the bounding box.

If you want to affix printer's marks to the object's bounding box instead of to the page bounding box, click the **Prepress** tab in the **Print** dialog box, and enable the **Marks to objects** check box.

## Printing color separations

When you send color work to a service bureau or printing shop, either you or the service bureau must create color separations. Color separations are necessary because a typical printing press applies only one color of ink at a time to a sheet of paper. You can specify the color separations to print, including the order in which they print.

Printing presses produce color using either process color or spot color, or both. You can convert the spot colors to process colors at printing time. For more information on spot and process colors, see “Choosing colors” on page 147.

Corel also supports PANTONE® Hexachrome®, a type of printing process that increases the range of printable colors. Talk to the service bureau about whether you should use PANTONE Hexachrome color.

When setting halftone screens to print color separations, we recommend that you use default settings; otherwise, screens can be improperly set and result in undesirable moiré patterns and poor color reproduction. However, if you are using an imagesetter, the screen technology should be set to match the type of imagesetter the service bureau uses. Before customizing a halftone screen, consult the service bureau to determine the correct setting.

## To print color separations

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **Print separations** check box.

If you want to print specific color separations, enable the corresponding check box in the list of color separations.



Although not recommended, you can print separations in color by enabling the **Print separations in color** check box in the **Options** area.

You can change the order in which color separations print, by enabling the **Use advanced settings** check box, clicking **Advanced**, and choosing an order from the **Order** list box.

## To convert spot colors to process colors

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **Print separations** check box.
- 4 Enable the **Convert spot colors to process** check box in the **Options** area.



Changing the spot colors to process colors when you print does not affect the document, only the way it is printed.

## To use PANTONE Hexachrome process color

- 1 Click File ▶ Print.
- 2 Click the Separations tab.
- 3 Enable the Print separations check box.
- 4 Enable the Hexachrome plates check box in the Options area.

## To customize a halftone screen

- 1 Click File ▶ Print.
- 2 Click the Separations tab.
- 3 Enable the Print separations check box.
- 4 Enable the Use advanced settings check box.
- 5 Click Advanced.
- 6 Change any of the following settings:
  - Screening technology
  - Resolution
  - Basic screen
  - Halftone type



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 set one to print at 45 degrees and the other at 90 degrees.

## Specifying In-RIP trapping settings

In-RIP trapping allows you to specify advanced trapping settings. Before selecting In-RIP trapping, ensure that your PostScript 3 printer has In-RIP options.

You can select a trap width — the amount that one color spreads into another. You can also specify image trap placement, which determines where the trap occurs. You can, for example, specify whether the trap is a choke or a spread, depending upon the neutral densities of adjacent colors. Neutral density indicates the lightness or darkness of a color and helps determine how adjacent colors spread into one another.

You can specify a threshold at which a trap will be created by specifying a step trap limit. If trap colors are of similar neutral densities, the trap placement will be adjusted accordingly. The step trap limit specifies a threshold at which a trap will adjust.



Before trapping, you can set the inks; for example, you can set an ink to opaque, as in the case of a metallic ink, so that nothing shows through it. To reduce the visibility of a trap, you can decrease the amount of ink color in a trap. This is especially helpful in the case of pastel colors, contrasting colors, and colors with similar neutral densities.

## To select a trap width

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **In-RIP trapping** check box.
- 4 Click **Settings**.
- 5 Type a value in the **Trap width** box.  
If you are trapping to black, type a value in the **Black trap width** box.



To select **In-RIP trapping** options, you must have selected **PostScript® 3™** from the **Compatibility list** box under the **PostScript** tab of the **Print** dialog box.

## To specify image trap placement

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **In-RIP trapping** check box.
- 4 Click **Settings**.
- 5 From the **Image trap placement** list box, choose one of the following placements:
  - **Neutral density** — used to determine the lighter object and thus, the direction and placement of the trap
  - **Choke** — used to trap a dark foreground object to a light background image
  - **Spread** — used to trap a light foreground object to a dark background image
  - **Centerline** — used when adjacent images and objects have similar neutral densities or when image density changes along an object's edgeIf you want to trap an object to an image, enable the **Trap objects to images** option.



To select **In-RIP trapping** options, you must have selected **PostScript 3** from the **Compatibility** list box under the **PostScript** tab of the **Print** dialog box.

## To specify a threshold

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **In-RIP trapping** check box.
- 4 Click **Settings**.
- 5 Type a value in one or any of the following boxes:
  - **Step limit** — specifies a threshold between color variations. The lower the threshold value, the more likely it is that a trap will be created
  - **Black limit** — specifies the threshold at which process black is considered pure black
  - **Black density limit** — specifies a neutral density value for the black ink
  - **Sliding trap limit** — specifies the difference between the neutral densities of adjacent colors at which a trap adjusts (slides) from the darker side of a color edge toward the centerline. The lower the sliding trap limit, the more gradual the transition



To select **In-RIP trapping** options, you must have selected **PostScript 3** from the **Compatibility** list box under the **PostScript** tab in the **Print** dialog box.

## To set inks for trapping

- 1 Click **File** ► **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **In-RIP trapping** check box.
- 4 Click **Settings**.
- 5 Click **Type**, and for each color separation, select one of the following:
  - **Transparent** — the selected ink doesn't get trapped, but anything beneath it does
  - **Neutral density** — the neutral density of the selected ink determines how it is treated

- **Opaque** — the selected ink is treated as opaque
- **Opaque ignore** — the selected ink doesn't get trapped nor does anything beneath it



To select **In-RIP trapping** options, you must have selected **PostScript 3** from the **Compatibility** list box under the **PostScript** tab in the **Print** dialog box.

## To select a trap color reduction

- 1 Click **File** ▶ **Print**.
- 2 Click the **Separations** tab.
- 3 Enable the **In-RIP trapping** check box.
- 4 Click **Settings**.
- 5 Type a value in the **Trap color reduction** box.



A reduction value of 100% indicates no reduction, while a lower value reduces the neutral density.

To select **In-RIP trapping** options, you must have selected **PostScript 3** from the **Compatibility** list box under the **PostScript** tab in the **Print** dialog box.

## Printing to film

You can set up a print job to produce negative images. An image-setter 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 specify to print with the emulsion down. Printing with the emulsion down produces a backward image on desktop printers.

## To print a negative

- 1 Click **File** ▶ **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Invert** check box.



Do not choose negative film if you are printing to a desktop printer.

## To specify film with the emulsion down

- 1 Click **File** ► **Print**.
- 2 Click the **Prepress** tab.
- 3 Enable the **Mirror** check box.

## From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Maintaining OPI links	OPI links, printing
Working with color trapping	printing, trapping
Understanding commercial printing	printing, commercial
Using Preflight	Preflight, printing issues



## Publishing to PDF

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PDF is a file format designed to preserve fonts, images, graphics, and formatting of an original application file.

In this section, you'll learn about

- saving documents as PDF files
- reducing PDF file size
- preparing PDF files for a service bureau
- optimizing PDF files

### Saving documents as PDF files

You can save a document as a PDF file. A PDF file can be viewed, shared, and printed on any platform provided that users have Adobe® Acrobat® or Adobe® Acrobat® Reader® installed on their computers. A PDF file can also be uploaded to an intranet or the World Wide Web. You can also export an individual selection or an entire document to a PDF file.

When you save a document as a PDF file, you can choose from five preset PDF styles, which apply settings that are specific to that particular PDF style. For example, with the **PDF for the Web** style, the resolution of the images in the PDF file will be optimized for the World Wide Web. You can also create a new PDF style or edit any preset style.

If you have used symbols in a document, they will be supported in the PDF file. For more information on symbols, see “Working with symbols” on page 127.

### To save a document as a PDF file

- 1 Click **File** ▶ **Publish to PDF**.
- 2 From the **PDF style** list box, choose one of the following:
  - **PDF for document distribution** — enables JPEG bitmap image compression, and is best used for general document delivery. These documents can include bookmarks and hyperlinks and can be printed on a laser or desktop printer.

- **PDF for prepress** — enables ZIP bitmap image compression, embeds fonts, and preserves spot color options best designed for high-end quality printing. Consult the service bureau for their preferred settings.
- **PDF for the Web** — enables JPEG bitmap image compression, embeds fonts, compresses text, and includes hyperlinks, bookmarks, and thumbnails for publishing the document to the World Wide Web.
- **PDF for editing** — enables LZW compression, embeds fonts, and includes hyperlinks, bookmarks, and thumbnails. It displays the PDF file with all the fonts, with all of the images at full resolution, and with hyperlinks, so that you can edit the file at a later date.
- **PDF/X-1** — enables ZIP bitmap image compression, embeds fonts, and preserves spot color options. This style contains the basic settings for prepress and is the standard format used for ad distribution.

3 Locate the folder where you want to save the file.

4 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS).




The embedded fonts, compressed text, and preserved spot color options are available only in CorelDRAW.

## To save multiple documents as a single PDF file

- 1 Click **File** ▶ **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **General** tab.
- 4 Enable the **Documents** option.
- 5 Enable the check box for each document you want to save.


## To create a PDF style

- 1 Click **File** ▶ **Publish to PDF**.
- 2 Click **Settings**.
- 3 In the **Publish to PDF** dialog box, specify any settings.
- 4 Click the **General** tab.
- 5 Click the **Add PDF style** button  .
- 6 Type a name for the style in the **Save PDF style as** list box.



If you want to delete a PDF style, select the style and click the **Delete PDF style** button.

### To edit a PDF style

- 1 Click **File** ► **Publish to PDF**.
- 2 Click **Settings**.
- 3 In the **Publish to PDF** dialog box, specify any settings.
- 4 Click the **General** tab.
- 5 Click the **Add PDF style** button .
- 6 Choose a style from the **Save PDF style as** list box.



If you save changes you make to preset style settings, the original settings will be overwritten. To avoid this, save any changes to preset style settings with a new name.

### Reducing PDF file size

You can compress bitmap images, text, and line art to reduce the size of a PDF file. Bitmap image compression options include JPEG, LZW, or ZIP. Bitmap images using JPEG compression have a quality scale ranging from 2 (high) to 255 (low). The higher the image quality, the larger the file size.

You can also reduce the size of a PDF file by downsampling color, grayscale, or monochrome bitmap images or converting complex fills to bitmaps.

### To set the bitmap compression in a PDF file

- 1 Click **File** ► **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Objects** tab.
- 4 Choose one of the following from the **Compression type** list box:
  - None
  - LZW
  - JPEG
  - ZIP





If you choose JPEG compression, you can specify the compression quality by moving the **Quality** factor slider.

### **To compress text and line art in a PDF file**

- 1 Click **File** ► **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Objects** tab.
- 4 Enable the **Compress text and line art** check box.

### **To downsample bitmap images in a PDF file**

- 1 Click **File** ► **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Objects** tab.
- 4 Enable any of the following check boxes, and type a value in the corresponding box:
  - **Color**
  - **Grayscale**
  - **Monochrome**



Downsampling color, grayscale, or monochrome bitmap images is effective only when the resolution of the bitmap image is higher than the resolution specified in the **Bitmap downsampling** area.

### **To render complex fills as bitmaps**

- 1 Click **File** ► **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Advanced** tab.
- 4 Enable the **Render complex fills as bitmaps** check box.

## Preparing PDF files for a service bureau

A job ticket is useful when you want to send a PDF file to a service bureau, where the file is converted to film or plates. You can include specifications for publishing PDF files, including information about the customer, delivery, and the finishing of a job.

Generating a job ticket lets you embed a job ticket file or save an external file. When you embed a job ticket file, you create a PDF file that contains a Portable Job Ticket object. When you create an external file, you create two separate files; a PDF file and a JTF file, which can be opened by a Job Ticket Editor. Consult the service bureau or print shop before sending a JTF file.

Open Prepress Interface (OPI) lets you use low-resolution images as placeholders for the high-resolution images that appear in your final work. When a service bureau receives your file, the OPI server substitutes the low-resolution images for the high-resolution images.

Document settings can be preserved to maintain how a PDF file looks. You can preserve document overprints, halftone screen information, and spot colors.

Printer's marks provide information to the service bureau. You can specify which printer's marks to include on the page. The available printer's marks are as follows:

- **Crop marks** — represent the size of the paper and appear at the corners of the page. You can add crop marks to use as guides to trim the paper. If you output multiple pages per sheet (for example, two rows by two columns) you can add the crop marks on the outside edge of the page so that all crop marks are removed after the cropping process, or you can choose to add crop marks around each row and column. A bleed determines how far an image can extend beyond the crop marks. A bleed requires that the paper you are printing on is larger than the size of paper you ultimately want, and the image area must extend beyond the edge of the final paper size.
- **Registration marks** — are required to line up the film, analog proofs, or print plates on a color press. Registration marks print on each sheet of a color separation.
- **Densitometer scale** — is a series of gray boxes ranging from light to dark. These boxes are required to test the density of halftone images. 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.
- **File information** — can be printed, including the color profile; name, date, and time the image was created; and page number.

## To set up a job ticket for a PDF file

- 1 Click **File** ▶ **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Prepress** tab.
- 3 Enable the **Include job ticket** check box.
- 4 Enable one of the following options:
  - **External file** — lets you create two separate files, a PDF file and a JTF file
  - **Embedded** — lets you create a PDF file that contains a portable job ticket object
- 5 Click **Settings**.
- 6 In the **Job ticket settings** dialog box, type job specifications on any of the following pages:
  - **Customer info**
  - **Delivery**
  - **Finishing**



If you enable the **External** option, you can save the JTF file by clicking **Browse** and typing a filename in the **File name** box (Windows) or **Save as** box (Mac OS).

## To preserve document settings in a PDF file

- 1 Choose **File** ▶ **Publish to PDF**.
- 2 Click **Settings**.
- 3 Click the **Advanced** tab.
- 4 Enable any of the following check boxes:
  - **Preserve document overprints** — lets you trap objects in a document
  - **Preserve halftone screen information** — useful for color separation screening
  - **Preserve spot colors** — instead of converting to RGB or CMYK

## To include printer's marks in a PDF file

- 1 Click File ► Publish to PDF.
- 2 Click Settings.
- 3 Click the **Prepress** tab.
- 4 Enable any of the following check boxes:
  - Crop marks
  - File information
  - Registration marks
  - Densitometer scales

If you want to include a bleed, enable the **Include bleed** check box, and type a bleed amount in the corresponding box.



The bleed option is only available for Acrobat 4.0, Acrobat 5.0, and PDF/X-1. A third party plug-in is required to view printer's marks in Adobe Acrobat.

Usually, a bleed amount 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.

## Optimizing PDF files

You can optimize PDF files for different versions of Adobe Acrobat or Acrobat Reader. You can select a compatibility depending upon what kind of viewer the recipients have. In CorelDRAW, you can select one of four compatibilities: Acrobat 3.0, Acrobat 4.0, Acrobat 5.0, or PDF/X-1. Different compatibilities have different options; for example, the bleed option is only available for Acrobat 4.0, Acrobat 5.0, and PDF/X-1.

To optimize viewing of a PDF document on the Web, you can linearize a PDF file. Linearizing a file speeds up processing time by loading one page at a time.

## To select a compatibility

- 1 Click File ► Publish to PDF.
- 2 Click Settings.
- 3 Click the **General** tab.
- 4 From the **Compatibility** list box, choose one of the following:
  - Acrobat 3.0

- Acrobat 4.0
- Acrobat 5.0
- PDF/X-1

## Importing and exporting files

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Your application provides filters that convert files from one format to another when you import or export files.

In this section, you will learn about

- importing files
- exporting files

### Importing files

Your application lets you import files created in other applications. For example, you can import a Portable Document Format (PDF), JPEG, or Adobe® Illustrator® (AI) file. You can import a file and place it in the active application window as an object. The imported file becomes part of the active file. While importing a bitmap, you can resample it to reduce the file size or crop it to eliminate unused areas of the photo. You can also crop a bitmap to select only the exact area and size of the image you want to import.

### To import a file into an active drawing

- 1 Click **File** ► **Import**.
- 2 Choose the folder where the file is stored.
- 3 Choose a file format from the **Files of type** list box (Windows) or **Show** list box (Mac OS).
- 4 Click the filename.
- 5 Enable any of the following active check boxes:
  - **Link bitmap externally** — lets you link a bitmap externally instead of embedding it in a file
  - **Combine multi-layer bitmap** — automatically merges the layers within a bitmap
  - **Extract embedded ICC profile** — lets you save the embedded International Color Consortium (ICC) profile to the color folder where the application is installed

- (Windows) **Check for watermark** — lets you check the image for a watermark and any information it contains, such as copyright
- **Do not show filter dialog** — lets you use the filter's default settings without opening its dialog box
- **Maintain layers and pages** — lets you maintain layers and pages when importing files; if you disable the check box, all layers are combined in a single layer
- (Mac OS) **Link to high resolution file for output using OPI** — lets you insert a low-resolution version of a bitmap into a document, used in combination with an OPI server where the high resolution image resides

6 Click **Import**.

7 Click the drawing page.



(Mac OS) Open Prepress Interface (OPI) is a method that positions high-resolution bitmaps on the printed page by using low-resolution replicas. A high-resolution version is kept on file and a low-resolution equivalent is created. The low-resolution image is imported into the current document and used for position only (FPO). Working with FPO images keeps file size smaller and reduces the time needed to redraw the screen. When you send the file to the service bureau for final imaging to film, the high-resolution bitmap is positioned in place of the FPO image.



Multi-layered bitmaps can be imported by default.

## To resample an image while importing

- 1 Click **File** ► **Import**.
- 2 Choose the folder where the image is stored.
- 3 Choose a file format from the **Files of type** list box (Windows) or **Show** list box (Mac OS).
- 4 Click the filename.
- 5 Enable any of the following check boxes:
  - **Link bitmap externally** — lets you link a bitmap externally instead of embedding it in a file
  - **Combine multi-layer bitmap** — automatically merges the layers within a bitmap

- **Extract embedded ICC profile** — lets you save the embedded International Color Consortium (ICC) profile to the color folder where the application is installed
- (Windows) **Check for watermark** — lets you check the image for a watermark and any information it contains such as copyright
- **Do not show filter dialog** — lets you use the filter's default settings without opening its dialog box
- **Maintain layers and pages** — lets you maintain layers and pages when importing files; if you disable the check box, all layers are combined in a single layer
- (Mac OS) **Link to high resolution file for output using OPI** — lets you insert a low-resolution version of a bitmap into a document, used in combination with an OPI server where the high resolution image resides

6 Choose **Resample** from the list box, and click **Import**.

7 In the **Resample image** dialog box, type values in any of the following boxes:

- **Width** — specifies the width of the graphic in a chosen unit of measurement or as a percentage of its original width
- **Height** — specifies the height of the graphic in a chosen unit of measurement or as a percentage of its original height

8 In the **Resolution** area, type values in the following boxes:

- **Horizontal** — lets you specify the horizontal resolution of the graphic in pixels or dots per inch (dpi)
- **Vertical** — lets you specify the vertical resolution of the graphic in pixels or dots per inch (dpi)

9 Click the drawing page.

<b>You can also</b>	<b>Do the following</b>
Maintain the width-to-height ratio of the image	Enable the <b>Maintain aspect ratio</b> check box.
Change the units of measurement	Choose a unit type from the <b>Units</b> list box.
Maintain equal horizontal and vertical resolution values automatically	Enable the <b>Identical values</b> check box.





If a dialog box for the import format opens, specify the options you want. For detailed information about file formats, see “File formats” in the **Help**.

You cannot increase the resolution of a file when importing.

(Mac OS) Open Prepress Interface (OPI) is a method that positions high-resolution bitmaps on the printed page by using low-resolution replicas. A high-resolution version is kept on file and a low-resolution equivalent is created. The low-resolution image is imported into the current document and used for position only (FPO). Working with FPO images keeps file size smaller and reduces the time needed to redraw the screen. When you send the file to the service bureau for final imaging to film, the high-resolution bitmap is positioned in place of the FPO image.

## To crop an image while importing

- 1 Click **File** ► **Import**.
- 2 Choose the folder where the image is stored.
- 3 Choose a file format from the **Files of type** list box (Windows) or **Show** list box (Mac OS).
- 4 Click the filename.
- 5 Enable any of the following active check boxes:
  - **Link bitmap externally** — lets you link a bitmap externally instead of embedding it in a file
  - **Combine multi-layer bitmap** — automatically merges the layers within a bitmap
  - **Extract embedded ICC profile** — lets you save the embedded International Color Consortium (ICC) profile to the color folder where the application is installed
  - (Windows) **Check for watermark** — lets you check the image for a watermark and any information it contains such as copyright
  - **Do not show filter dialog** — lets you use the filter’s default settings without opening its dialog box
  - **Maintain layers and pages** — lets you maintain layers and pages when importing files; if you disable the check box, all layers are combined in a single layer
  - (Mac OS) **Link to high resolution file for output using OPI** — lets you insert a low-resolution version of a bitmap into a document, used in combination with an OPI server where the high resolution image resides

- 6 Choose **Crop** from the list box, and click **Import**.
- 7 In the **Crop image** dialog box, type values in any of the following boxes:
  - **Top** — specifies the area to remove from the top of the graphic
  - **Left** — specifies the area to remove from the left edge of the graphic
  - **Width** — specifies the width of the graphic you want to keep
  - **Height** — specifies the height of the graphic you want to keep
- 8 Click the drawing page.



(Mac OS) Open Prepress Interface (OPI) is a method that positions high-resolution bitmaps on the printed page by using low-resolution replicas. A high-resolution version is kept on file and a low-resolution equivalent is created. The low-resolution image is imported into the current document and used for position only (FPO). Working with FPO images keeps file size smaller and reduces the time needed to redraw the screen. When you send the file to the service bureau for final imaging to film, the high-resolution bitmap is positioned in place of the FPO image.



You can also resize a graphic by dragging the selection box in the preview window.

You can change the units of measurement by choosing a unit type from the **Units** list box in the **Crop image** dialog box.

## Exporting files

You can export and save images to a variety of file formats that can be used in other applications. For example, you can export a file to the Adobe Illustrator (AI) or GIF format.

You can export a file to a selected file format. You can also export a file by saving the open file under a different name or to a different file format while leaving the open file in its existing format.

## To export a file

- 1 Click **File** ▶ **Export**.
- 2 Choose the folder where you want to save the file.
- 3 Choose a file format from the **Files of type** list box (Windows) or **Format** list box (Mac OS).
- 4 Type a filename in the **File name** list box (Windows) or **Save as** box (Mac OS).
- 5 Enable any of the following active check boxes:
  - (Mac OS) **Export this page only** — exports the current page
  - **Selected only** — saves only the objects selected in the active drawing
  - **Web\_safe\_filenames** — replaces the white space in a filename with an underscore. Special characters are replaced by characters suitable for Web-based filenames.
  - **Do not show filter dialog** — suppresses dialog boxes that provide other options when exporting
- 6 Click **Export**.

<b>You can also</b>	<b>Do the following</b>
Compress a file on export	Choose a compression type from the <b>Compression type</b> list box.
Specify information about a file	Type any comments you want in the <b>Notes</b> box.



Not all of the options or the compression types in the **Export** dialog are available for all file formats.

If a dialog box for the export format opens, specify the options you want. For detailed information about file formats, see “File formats” in the **Help** .

## To save a file to a different format

- 1 Click **File** ► **Save as**.
- 2 Choose the folder where you want to save the file.
- 3 Choose a file format from the **Save as type** list box (Windows) or **Format** list box (Mac OS).
- 4 Type a filename in the **File name** list box (Windows) or **Save as** box (Mac OS).
- 5 Enable any of the following active check boxes:
  - **Selected only** — saves only the objects selected in the active drawing
  - **Web\_safe\_filenames** — replaces the white space in a filename with an underscore. Special characters are replaced by characters suitable for Web-based filenames.
  - **Embed fonts using TrueDoc** — lets you save fonts to the file using TrueDoc
  - (Windows) **Save with embedded VBA project** — lets you save macros you have created in the VBA editor with the file
- 6 Click **Save**.

---

### You can also

Specify information about a file

### Do the following

Type any comments you want in the **Notes** box.

---



Not all of the options or the compression types in the **Save drawing** dialog are available for all file formats.

(Mac OS) The file extension for the file format you choose is appended to the filename automatically, but can be removed.



The CorelDRAW application has three types of styles you can create and apply in drawings: graphic, text, and color. After you create a style, you can edit it and apply it to any number of graphic and text objects. When you edit a style, all the unlocked objects using that style are automatically updated, letting you make design changes to many objects in one step.

In this section, you'll learn about

- creating, applying, and editing graphic or text styles
- creating and applying color styles

### **Creating, applying, and editing graphic or text styles**

A style is a set of formatting attributes. When you apply a style to an object, all the attributes of the style are applied to that object in one step. Styles can save you considerable time if you must apply the same formatting to several objects.

There are graphic styles and text styles. A graphic style consists of fill and outline settings that you can apply to graphic objects such as rectangles, ellipses, and curves. For example, if you have a group of objects in a drawing that use one graphic style, you can simultaneously change their fill by editing the graphic style. For more information on applying fills see “Filling objects” on page 135. For more information about changing the appearance of outlines, see “Formatting lines and outlines” on page 50.

A text style is a set of text settings such as font type and size. Text styles can also include fill and outline attributes. For example, you can create a style that applies a 72 point AvantGarde font with a texture fill. There are two types of text styles: artistic and paragraph. You can also change the properties of default artistic and paragraph text. For example, you can change the properties of default artistic text, so that every artistic text object you create has the same formatting. For information about default text, see “Changing the appearance of text” on page 218.

You can create a graphic or text style from the properties of an existing object or from scratch, at which time the style is saved. When you apply a style to an object,

CorelDRAW overrides the existing text or graphic properties with the properties of the current style. To use the style in another drawing, you can copy the style to the new drawing or save the style in a template. For more information about templates, see “Working with templates” on page 31. If you copy or import a style with the same name as an existing style, CorelDRAW renames the style by adding a number to the style name. At any point, you can rename a style, unless it is a default style. You can also change the properties of an object back to its previous style if you made a mistake or decide that the previous style was better suited to that object.

After you create a style, you can edit its properties and find any object using a given style. For example, you can find all objects that use the default graphic style. Finding objects assigned a specific style makes editing that style even more efficient.

## To create a graphic or text style from an object

- 1 Right-click (Windows) or **Control** + click (Mac OS) an object whose style properties you want to save.
- 2 Click **Styles** ▶ **Save style properties**.
- 3 Enable one or more of the following check boxes:
  - **Text**
  - **Fill**
  - **Outline**
- 4 Type a name for the style in the **Name** box.



When you create a style from an existing object, CorelDRAW does not automatically apply the style to an object. If you want an object to use the style, you must apply the style. For information about applying a style, see “To create or edit a graphic or text style” on page 318.





You can also create a graphic or text style from an object by dragging the object to the **Graphic and text styles** Docker window/palette.

## To create or edit a graphic or text style

- 1 Click **Tools** ▶ **Graphic and text styles**.
- 2 In the **Graphics and text styles** Docker window/palette, click the flyout button.
- 3 Click **New**, and click one of the following style types:
  - **Graphic style**

- Artistic text style
  - Paragraph text style
- 4 Choose a style from the list.
  - 5 Click the flyout button and click **Properties**.
  - 6 Click **Edit** beside a property.
  - 7 Modify any text, fill, or outline properties.

### You can also

Apply a style to an object	Select an object, and double-click a style.
Copy object properties	Choose a style, click the flyout button  , click <b>Copy properties from</b> , and click the object.
Delete a style	Right-click (Windows) or <b>Control</b> + click (Mac OS) a style, and click <b>Delete</b> .
Rename a style	Right-click (Windows) or <b>Control</b> + click (Mac OS) a style, click <b>Rename</b> , type a new name, and press Enter.
Revert to an object's style	Right-click (Windows) or <b>Control</b> + click (Mac OS) an object using the <b>Pick</b> tool  , and click <b>Styles</b> ▶ <b>Revert to style</b> .

## Creating and applying color styles

A color style is a color you save and apply to objects in a drawing. Since an infinite number of colors are available in CorelDRAW, color styles can make it easier to apply the exact color you want.

When you create a color style, the new style is saved to the active drawing. After you create a color style, you can apply it to objects in the drawing. You can also delete color styles if you no longer require them.

One powerful feature of color styles is that you can create a shade or series of shades based on a color style. The original color style is referred to as the “parent” color, and the shades are referred to as “child” colors. For most of the available color models and palettes, child colors share the same hue as the parent color but have different saturation and brightness levels. With the PANTONE MATCHING SYSTEM®,




PANTONE Hexachrome, and Custom spot color palettes, child and parents are linked to one another but have different tint levels.

CorelDRAW has an Auto-create feature for creating color styles from selected objects. For example, you can import a drawing and Auto-create color styles from an object in the drawing. When you create color styles from an object, the color style is automatically applied to that object so that if you decide to change a color style, the object's related color will also be updated. For more information on importing files, see "Importing files" on page 309.

When you use the Auto-create feature, you can choose to create few or many parent color styles. After you have converted all colors to color styles, you can, for example, use one parent color to control all red objects, or many parents, one for each shade of red in the drawing.

When creating child colors, colors added from a color-matching system are converted to the parent color's color model so that they can be grouped into appropriate parent-child groups automatically.

## To create a color style

- 1 Click **Tools** ▶ **Color styles**.
- 2 In the **Color styles** Docker window/palette, click the **New color style** button  .
- 3 Select a color from the **New color style** dialog box.

### You can also

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Apply a color style	Select an object, and double-click the name of the style you want to apply in the <b>Color styles</b> Docker window/palette.
Delete a color style	Right-click (Windows) or <b>Control</b> + click (Mac OS) the color style in the <b>Color styles</b> Docker window/palette, and click <b>Delete</b> .

---



You can also create a color style from an object or the color palette by dragging a color to the **Color styles** Docker window/palette.

You can also apply a color style to an object by dragging a color from the **Color styles** Docker window/palette.

## From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Finding objects assigned a specific graphic or text style	styles, finding objects with
Customizing the <b>Graphic and text styles</b> Docker window/palette	styles, displaying
Creating a child color	child colors, creating
Creating a series of child colors	child colors, creating
Creating parent colors from an object	parent colors, creating from objects
Creating child colors from an object	child colors, creating from objects
Editing color styles	color styles, editing
Sorting color styles	color styles, sorting
Moving color styles	color styles, moving
Copying color styles	color styles, copying



Adobe Illustrator and CorelDRAW have many similarities, which makes it easy to move from one graphics application to the other. Although they share the most basic drawing and design capabilities, Adobe Illustrator and CorelDRAW are distinguished by some differences in both terminology and tools. Understanding these differences lets you make a quick transition to CorelDRAW.

In this section you'll learn about

- comparing terminology
- comparing tools

## Comparing terminology












The terms and concepts in Adobe Illustrator and CorelDRAW differ for some features. Many terms have similar meanings but are referred to by different names. Adobe Illustrator terms are listed below with their CorelDRAW equivalents.

<b>Adobe Illustrator term</b>	<b>CorelDRAW term</b>
Anchor points	Nodes
Artwork	Drawing
Compound object	Curve object
Gradient fill	Fountain fill
Mask	PowerClip
Outline view	Wireframe view
Path	Curve
Placing images	Inserting images
Rasterizing	Converting to a bitmap
Stroke	Outline

<b>Adobe Illustrator term</b>	<b>CorelDRAW term</b>
Swatches palette	Color palette
Unite	Weld

## Comparing tools

The following table lists Adobe Illustrator tools and the corresponding CorelDRAW tools. Many of the tools create the same result but operate slightly differently.

<b>Adobe Illustrator tool</b>	<b>CorelDRAW tool</b>
Add anchor point tool	Shape tool  , see “To add or remove a node” on page 96
Area type tool	Text tool  , see “To add paragraph text” on page 217
Blend tool	Interactive blend tool  , see “To blend objects” on page 121
Convert anchor point tool	Shape tool  , see “To make a curve cusp, smooth, or symmetrical” on page 97
Delete anchor point tool	Shape tool  , see “To add or remove a node” on page 96
Direct selection tool	Shape tool  , see “To select a node” on page 95
Drop shadow tool	Interactive drop shadow tool  , see “To add a drop shadow” on page 179
Gradient tool	Interactive fill tool  , see “Applying fountain fills” on page 136
Line segment tool	Freehand tool  , see “To draw a straight line” on page 46 or Polyline tool  , see “Drawing lines” on page 43
Measure tool	Dimension tool 

**Adobe Illustrator tool****CorelDRAW tool**


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Mesh tool	<b>Interactive mesh fill tool</b>  , see “To apply a mesh fill to an object” on page 142
Paint bucket tool	<b>Interactive fill tool</b>  , see “To apply a uniform fill” on page 135
Paintbrush tool	<b>Artistic media tool</b>  , see “To draw a calligraphic line” on page 49 or <b>Brush tool</b>  , see “Applying brush strokes” on page 54
Path type tool	<b>Text tool</b>  , see “To fit text to a path” on page 227
Pencil tool	<b>Freehand tool</b>  , see “To draw a curved line” on page 48
Pucker tool	<b>Interactive envelope tool</b>  , see “To apply an envelope” on page 109
Rectangular grid tool	<b>Graph paper tool</b>  , see “To draw a grid” on page 70
Reflect tool	Mirror buttons, see “To mirror an object” on page 87
Reshape tool	<b>Shape tool</b>  , see “To stretch, scale, rotate, or skew nodes” on page 98
Rotate tool	<b>Pick tool</b>  , see “To rotate an object” on page 86
Rounded rectangle tool	<b>Rectangle tool</b>  , see “To round the corners of a rectangle or square” on page 64
Scissors tool	<b>Knife tool</b>  , see “To split an object” on page 112
Selection tool	<b>Pick tool</b>  , see “To select objects” on page 74
Size tool	<b>Pick tool</b>  , see “To size an object” on page 83



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**Adobe Illustrator tool****CorelDRAW tool**

Skew tool

**Pick tool**  , see “Skewing and stretching objects” on page 98


Star tool

**Polygon tool**  , see “To draw a polygon or a star” on page 67 or **Star shapes**  , see “To draw a pre-defined shape” on page 71


Symbol sprayer tool

**Object sprayer tool**  , see “To spray a line” on page 56


Twirl tool

**Interactive twister distortion tool**  , see “To distort an object” on page 107



Twist tool

**Interactive twister distortion tool**  , see “To distort an object” on page 107

Type tool

**Text tool**  , see “To add paragraph text” on page 217

Warp tool

**Smudge brush tool**  , see “To smudge an object” on page 102 or **Envelope tool**  , see “Shaping objects using envelopes” on page 109

Wrinkle tool

**Roughen brush tool**  , see “To roughen an object” on page 104

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Becoming familiar with the terminology and workspace of Corel R.A.V.E. will help you easily follow this user guide's concepts and procedures.

In this section, you'll learn about

- Corel R.A.V.E. terminology and concepts
- Corel R.A.V.E. application window
- Corel R.A.V.E. workspace tools

## Corel R.A.V.E. terminology and concepts

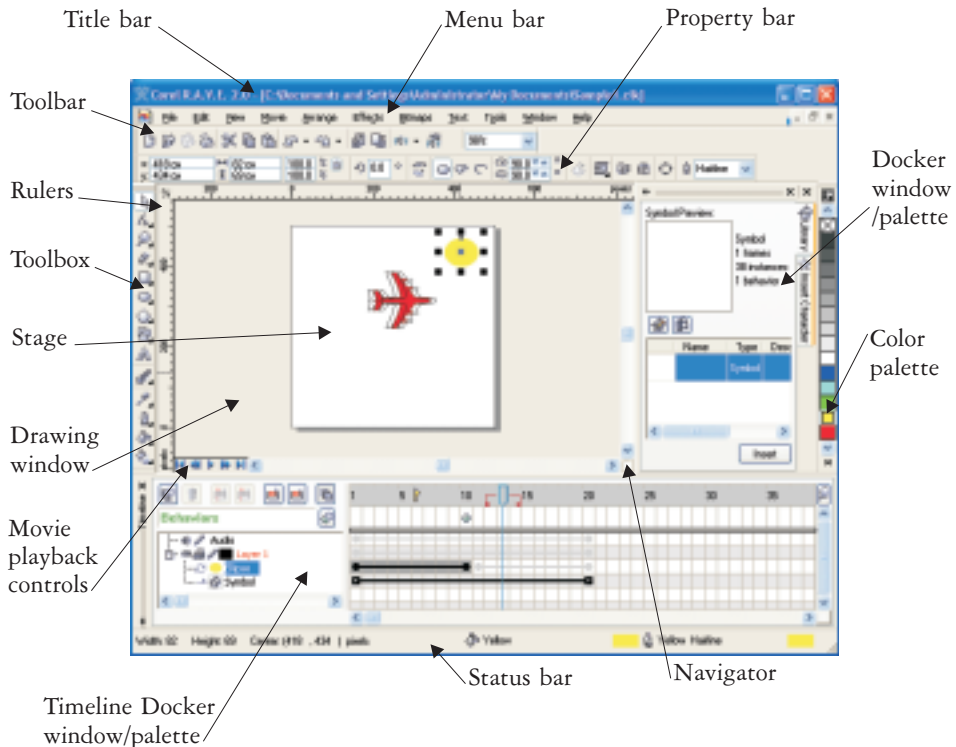
Before you get started with Corel R.A.V.E., you should be familiar with the following terms.

Term	Description
object	An element in a drawing such as an image, shape, line, curve, symbol, text, or layer.
movie	An animation project you create in Corel R.A.V.E. A movie consists of a succession of frames.
frame	One image in a series of images that make up a movie. A movie frame can contain one or more objects.
stage	The area in which you add objects to a movie, compose the contents of individual frames, and preview animation
Docker window/palette	A window containing available commands and settings relevant to a specific tool or task
flyout	A button that opens a group of related tools

Term	Description
thumbnail	A small, low resolution representation of an image
artistic text	A type of text to which you can apply special effects, such as shadows
paragraph text	A type of text to which you can apply formatting options, and which can be edited in large blocks.

## Corel R.A.V.E. application window

When you launch Corel R.A.V.E., the application window opens containing a drawing window. The rectangle in the center of the drawing window is the stage where you create your movie. Although more than one drawing window can be opened, you can apply commands to the active drawing window only.



The application window contains the following main parts:

<b>Part</b>	<b>Description</b>
Menu bar	The area containing pull-down menu options
Property bar	A detachable bar that changes depending on the tool or task. For example, when the text tool is active, the property bar displays commands that create and edit text.
Toolbar	A detachable bar that contains shortcuts to menu and other commands
Title bar	The area displaying the title of the currently open movie
Rulers	Horizontal and vertical borders that are used to determine the size and position of objects in a movie
Toolbox	A dockable bar with tools for creating, filling, and modifying objects in the movie
Drawing window	The area outside the stage bordered by the scroll bars and application controls
Stage	The rectangular area inside the drawing window in which you add objects to a movie, compose the contents of individual frames, and preview animation
Color palette	(Windows) A dockable bar that contains color swatches (Mac OS) A free floating bar that contains the current color mode
Docker window/palette	A window containing available commands and settings relevant to a specific tool or task

Part	Description
Status bar	An area at the bottom of the application window that contains information about object properties such as type, size, color, fill, and resolution. The status bar also shows the current mouse position.
Navigator	The small, square button at the bottom-right corner (Windows) or bottom-left corner (Mac OS) that opens a smaller display to help you move around in the drawing window
Movie playback controls	The area at the bottom left of the drawing window that contains controls for playing movies
Timeline Docker window/palette	The window displaying the timeline of all objects in a movie. This is where you animate, organize, and coordinate objects in a movie.



By default, the rulers are not displayed. To toggle between displaying and hiding the rulers, see “To hide or display the rulers” on page 357.

By default, the status bar is not displayed. To toggle between displaying and hiding the status bar, click **Window** ▶ **Toolbars** ▶ **Status bar**.

## Corel R.A.V.E. workspace tools

Application commands are accessible through the menu bar, toolbars, toolbox, property bar, Docker windows (Windows) and palettes (Mac OS). The property bar and Docker windows/palettes provide access to commands that relate to the active tool or current task. The property bar, Docker windows/palettes, toolbars, and toolbox can be opened, closed, and moved around your screen at any time.

You can customize many of these workspace tools to suit your needs. For more information, see “Customizing your application” in the **Help**.

## Toolbars

Corel R.A.V.E. has two toolbars that can remain displayed at all times. The standard toolbar contains buttons that are shortcuts to many of the menu commands. The **Internet** toolbar contains commands for Web-related tools such as those for creating rollovers and publishing to the Internet.

For information about customizing the position, contents, and appearance of toolbars, see “Customizing toolbars” in the **Help**.

### Standard toolbar

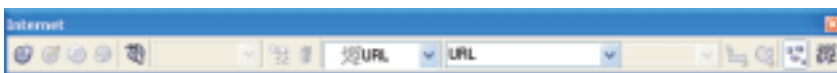
Click this button	To
	Start a new movie
	Open a movie
	Save a movie
	Print a movie
	Cut selected objects to the Clipboard
	Copy selected objects to the Clipboard
	Paste the Clipboard contents into a movie
	Undo an action
	Restore an action that was undone
	Import a file
	Export a movie
	Set a zoom level

**Click this button****To**

(Windows) Launch Corel applications



(Windows) Launch to Corel Graphics Community Web site

**Internet toolbar**

(Windows) By default, the **Internet** toolbar is not displayed. For information about displaying toolbars, see “To customize toolbar position and display” in the **Help**.

(Mac OS) By default, the toolbars are not displayed. To switch between displaying and hiding a toolbar, click **Window ▶ Toolbars**, and enable or disable the toolbar you want.








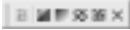
**Toolbox**

Flyouts open to display a set of related Corel R.A.V.E. tools. A small arrow in the bottom right corner of a toolbox button indicates a flyout: for example, the **Shape edit** flyout . Clicking a flyout arrow opens a set of related tools. Clicking the grab handles at the left end of the flyout and dragging the flyout away from the toolbox sets the flyout in its expanded form.

The following table provides descriptions of the flyouts and tools in the Corel R.A.V.E. toolbox.













**Flyouts**














Flyout	Description
Zoom	Lets you access the <b>Zoom</b> and <b>Hand</b> tools
Curve	Lets you access the <b>Freehand</b> , <b>Bézier</b> , <b>Artistic media</b> , <b>3-point curve</b> , <b>Polyline</b> , and <b>Pen</b> tools














Flyout	Description
Rectangle 	Lets you access the <b>Rectangle</b> and <b>3-point rectangle</b> tools
Ellipse 	Lets you access the <b>Ellipse</b> and <b>3-point ellipse</b> tools
Shape edit 	Lets you access the <b>Shape</b> , <b>Knife</b> , <b>Eraser</b> , <b>Smudge brush</b> , and <b>Roughen brush</b> tools
Object 	Lets you access the <b>Polygon</b> , <b>Spiral</b> , and <b>Graph paper</b> tools
Perfect Shapes 	Lets you access the <b>Basic shapes</b> , <b>Arrow shapes</b> , <b>Flowchart shapes</b> , <b>Star shapes</b> , and <b>Callout shapes</b> tools
Interactive tools 	Lets you access the <b>Interactive blend</b> , <b>Interactive contour</b> , <b>Interactive distortion</b> , <b>Interactive envelope</b> , <b>Interactive extrude</b> , <b>Interactive drop shadow</b> , and <b>Interactive transparency</b> tools
Interactive fill 	Lets you access the <b>Interactive fill</b> and <b>Interactive mesh fill</b> tools
Eyedropper 	Lets you access the <b>Eyedropper</b> and <b>Paintbucket</b> tools
Outline 	Lets you access the <b>Outline pen</b> and the <b>Outline color</b> dialog boxes, the <b>Color Docker</b> window/palette, and a selection of outlines of various widths
Fill 	Lets you access the <b>Color Docker</b> window/palette, the <b>Fill color</b> , <b>Fountain fill</b> , <b>Pattern fill</b> , and <b>Texture fill</b> dialog boxes, and the <b>No fill</b> button.



## Tools

Tool	Description
	The <b>Pick</b> tool lets you select and transform objects.
	The <b>Shape</b> tool lets you edit the shape of objects.
	The <b>Knife</b> tool lets you cut through objects.
	The <b>Eraser</b> tool lets you remove areas from objects.
	The <b>Smudge brush</b> tool lets you distort a vector object by dragging along its outline, and distort a bitmap by dragging outside its path.
	The <b>Roughen brush</b> tool lets you distort the outline of a vector object by dragging along the outline.
	The <b>Zoom</b> tool lets you change the magnification level in the drawing window.
	The <b>Hand</b> tool lets you control which part of the movie is visible in the drawing window.
	The <b>Pen</b> tool lets you draw lines between nodes by setting down one node at a time.
	The <b>Polyline</b> tool lets you draw lines and curves one segment at a time in Preview mode.
	The <b>Freehand</b> tool lets you draw lines and curves.
	The <b>Bézier</b> tool lets you draw curves one segment at a time.

Tool	Description
	The <b>3-point curve</b> tool lets you draw a curve by setting down three points on the stage.
	The <b>Artistic media</b> tool provides access to the <b>Brush</b> , <b>Sprayer</b> , <b>Calligraphic</b> , and <b>Pressure</b> tools.
	The <b>Rectangle</b> tool lets you draw rectangles and squares.
	The <b>3-point rectangle</b> tool lets you draw a rectangle by setting down three points on the stage.
	The <b>Ellipse</b> tool lets you draw ellipses and circles.
	The <b>3-point ellipse</b> tool lets you draw an ellipse by setting down three points on the stage.
	The <b>Polygon</b> tool lets you draw symmetrical polygons and stars.
	The <b>Spiral</b> tool lets you draw symmetrical and logarithmic spirals.
	The <b>Graph paper</b> tool lets you draw a grid of lines similar to that on graph paper.
	The <b>Basic shapes</b> tool lets you choose from a full set of shapes, including hexagram, a smiley face, and a right-angle triangle.
	The <b>Arrow shapes</b> tool lets you draw arrows of various shape, direction, and number of heads.
	The <b>Flowchart shapes</b> tool lets you draw flowchart symbols.
	The <b>Star shapes</b> tool lets you draw ribbon objects and explosion shapes.

Tool	Description
	The <b>Callout shapes</b> tool lets you draw callouts and labels.
	The <b>Text</b> tool lets you type words directly on the screen as artistic or paragraph text.
	The <b>Interactive blend</b> tool lets you blend two objects.
	The <b>Interactive contour</b> tool lets you apply a contour to an object.
	The <b>Interactive distortion</b> tool lets you apply a Push or Pull distortion, a Zipper distortion, or a Twister distortion to an object.
	The <b>Interactive envelope</b> tool lets you distort an object by dragging the nodes of the envelope.
	The <b>Interactive extrude</b> tool lets you apply the illusion of depth to objects.
	The <b>Interactive drop shadow</b> tool lets you apply a drop shadow to an object.
	The <b>Interactive transparency</b> tool lets you apply transparencies to objects.
	The <b>Interactive fill</b> tool lets you apply various fills.
	The <b>Interactive mesh</b> tool lets you apply a mesh grid to an object.
	The <b>Eyedropper</b> tool lets you select a fill from an object on the drawing window.
	The <b>Paintbucket</b> tool lets you fill an object on the drawing window after selecting a fill using the <b>Eyedropper</b> tool.

Tool	Description
	The <b>Fill</b> tool opens the <b>Fill</b> flyout.

## Property bar

The property bar displays the most commonly used options that are relevant to the active tool or the task you're performing. Although it looks like a toolbar, the property bar content changes depending on the tool or task.

For example, when you click the **Text** tool in the toolbox, the property bar displays only text-related commands. In the example below, the property bar displays text formatting, alignment, and editing tools.



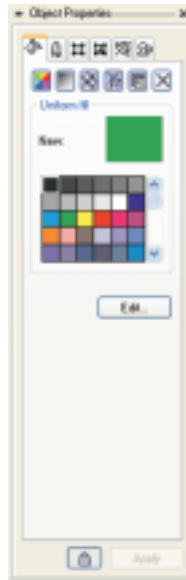
You can customize the contents and position of the property bar to suit your needs. For more information, see “Customizing the property bar” in the **Help**.

## Docker windows and palettes

Docker windows (Windows) and palettes (Mac OS) display the same type of controls as a dialog box, such as command buttons, options, and list boxes. Unlike most dialog boxes, you can keep Docker windows/palettes open while working on a document so you can readily access the commands to experiment with different effects.

In Windows, Docker windows can be either docked or floating. Docking a Docker window attaches it to the edge of the application window. Undocking a Docker window places it in a floating state where it can be easily moved around. You can also collapse Docker windows to save screen space.

*An example is the Object properties Docker window/palette. When it is open, you can click an object and view formatting, dimensions, and other properties of the object.*



## Status bar

The status bar displays information about selected objects (such as color, fill type, and outline), cursor position, and relevant commands. See “Customizing the status bar” in the **Help** for information about customizing the contents and appearance of the status bar.

The status bar is not displayed by default. To toggle between displaying and hiding the status bar, click **Window** ► **Toolbars** ► **Status bar**.

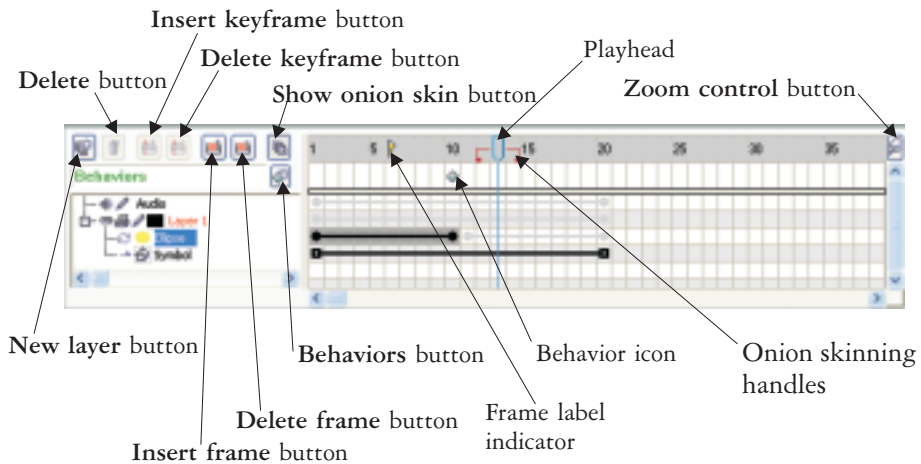
The graphic below shows some of the information displayed in the status bar.









## Timeline Docker window/palette






The **Timeline Docker** window/palette lets you create animation. As you add objects to the stage, Corel R.A.V.E. lists them in the left section of the **Timeline Docker** window/palette and adds them to the timeline. Initially, objects exist in one frame only. You can use the timeline to extend the life of individual objects and add

keyframes to change objects over time. For information about extending the life of objects and changing them over time, see “Animating objects” on page 365.



The following controls and elements of the **Timeline** Docker window/palette let you organize, animate, and coordinate the contents of a movie.

Control or element	Description
	The playhead shows which frame in a movie is displayed on the stage and lets you navigate through frames.
	The <b>New layer</b> button lets you add new layers to organize objects in a movie.
	The <b>Delete</b> button lets you delete unwanted layers.
	The <b>Insert keyframe</b> button lets you add keyframes.
	The <b>Delete keyframe</b> button lets you delete keyframes.
	The <b>Insert frame</b> button lets you insert frames before or after the current frame.







Control or element	Description
	The <b>Delete frame</b> button lets you delete frames before or after the current frame.
	The <b>Zoom control</b> button lets you scale the frame header to display more or fewer frames on the Timeline palette.
	The <b>Show Onion skin</b> button lets you display the contents of multiple frames on the stage.
	The onion skinning handles let you choose a range of frames to display on the stage.
	The <b>Behaviors</b> button opens the <b>Behaviors</b> dialog box.



The **Timeline Docker** window/palette is displayed by default but you can close it temporarily to get a better view of the stage. To close or open the **Timeline Docker** window/palette, click **Movie** ► **Timeline**.

## Movie playback controls

The movie playback controls that are located in the bottom left corner of the drawing window let you preview movies you've created in Corel R.A.V.E.

Playback control	Description
	Lets you play a movie
	Lets you stop a movie
	Lets you rewind to the beginning of a movie
	Lets you move back one frame
	Lets you fast forward to the last frame in a movie
	Lets you move forward one frame

In this section, you'll learn about

- how Corel R.A.V.E. works
- starting and opening movies
- setting the properties of movies
- importing files
- finding and inserting images
- undoing, redoing, and repeating actions
- saving movies
- backing up and recovering files
- closing movies and quitting Corel R.A.V.E.

## How Corel R.A.V.E. works

The Corel R.A.V.E. application lets you create movies by following these steps:

- 1 **Start a movie project** — See “Starting Corel R.A.V.E. and opening movies” on page 344 for information about starting a movie project, either from scratch or by opening a graphic. See “Setting the properties of movies” on page 345 for information about setting movie properties such as stage size, frame rate, and background.
- 2 **Create the movie contents** — Use the drawing and effects tools to create and modify lines, shapes, and text, or to import artwork created in other applications. For information about drawing lines and shapes, shaping and working with objects, filling and coloring objects, adding special effects, and working with bitmaps, see “Creating Objects for Animation” in the **Help**. For information about working with text, see “Working With Text” in the **Help**.
- 3 **Animate, preview, and edit the movie contents** — Use a timeline to extend the life of objects in a movie and change them over time. You can preview the movie, coordinate animated objects, and modify the way they change over time. For information about animating, see “Animating objects” on page 365 and “Animating text” on page 385. For information about editing and previewing movies, see “Editing and previewing animation” on page 391.



- 4 **Add sound and repetition** — Add sound to further enliven a movie, or repeat an animated object or group of objects for the duration of a movie. For information about working with sound, see “Using sound in movies” on page 395. For information about repeating an animation within a movie, see “Repeating animated objects” on page 377.
- 5 **Add interactivity** — Add interactive objects, or rollovers, that move or change when pointed to or clicked. Use behaviors to create more complex, interactive movies. For information about creating interactive movie elements, see “Creating interactive objects” on page 413. For information about using behaviors in movies, see “Using behaviors” on page 421.
- 6 **Export a movie** — When you complete a movie, prepare to share it with the world by exporting it to a standard animation format. For information about exporting movies, see “Exporting and publishing movies” on page 433.

## Starting Corel R.A.V.E. and opening movies

In Corel R.A.V.E., you can start a movie project from scratch, or by opening a graphic. You can open a movie saved to the Corel R.A.V.E. format (.clk) and edit it. You can also import a file saved to a different format. For information about importing files, see “Importing files” in the **Help**.

### To start Corel R.A.V.E. (Windows)

- Click Start ► All Programs ► Corel Graphics Suite 11 ► Corel R.A.V.E. 2.0.

### To start Corel R.A.V.E. (Mac OS)

- Double-click the Corel R.A.V.E. 2.0 icon in the application’s folder.



You can also start Corel R.A.V.E. from the Dock. To add the Corel R.A.V.E. icon to the Dock, drag the icon from the application folder or the desktop to the left of the line in the Dock.

### To start or open a movie

To	Do the following
Start a movie from scratch	Click <b>File</b> ► <b>New</b> .

To	Do the following
Open a graphic or a movie	Click <b>File</b> ► <b>Open</b> . Locate the folder where the file is stored and double-click the filename.



You can also open a movie by clicking the **Open** button  on the standard toolbar.

You can view a thumbnail of a graphic or the first frame of a movie by clicking **Show preview** in the **Open** dialog box.

## Setting the properties of movies

When you create a movie, you should begin by setting the stage size and frame rate and choosing a background.

In Corel R.A.V.E. the length of a movie is determined by the life span of objects within the movie. You cannot set the length of a Corel R.A.V.E. movie in advance, because it changes as you extend the life of objects within it. For more information about setting the life span of objects, see “Setting the life span of objects” in the **Help**.

### Setting the stage size and frame rate of a movie

A movie consists of a succession of frames that are displayed on the stage (500 x 500 pixels by default). You can customize the stage size of a movie by specifying its width and height.

The frame rate of a movie refers to the number of frames that are played per second. The frame rate affects the smoothness of the animation and the file size of a movie. Usually, higher frame rates result in smoother animation and larger files, while lower frame rates result in choppier animation and smaller files. The default frame rate in Corel R.A.V.E. is 12 frames per second, the optimal rate for the Web. The typical frame rate of motion pictures is 24 frames per second.

### Choosing a background

By default, all movies have a solid white background. You can choose another color, or you can use a bitmap such as a textured design or photograph to create a more intricate or dynamic background. You can also remove a background.

When you choose a bitmap as the background, it is embedded in the movie by default. This is the recommended option. However, you can also link the bitmap to the movie so that if you later edit the source image, the change is automatically

reflected in the movie. If you send a movie with a linked image to someone else, you must also send the linked image.

If the bitmap is larger than the stage, it is cropped. If the bitmap is smaller than the stage, it is tiled across the stage. You can change the size of the background bitmap to create smaller or larger tiles.



*You can enhance a movie by adding a background. Clockwise from top-left: solid color background, bitmap background, tiled bitmap background, cropped bitmap background.*

### **To set the stage size and frame rate of a movie**

- 1 Click **Movie** ► **Movie setup**.
- 2 Choose a unit of measurement from the list box.
- 3 Type values in the following boxes:
  - **Width**
  - **Height**
  - **Frame rate**

### **To choose a solid-color background**

- 1 Click **Movie** ► **Movie setup**.
- 2 In the **Document**, **Movie setup** list of categories, click **Background**.
- 3 Enable the **Solid** option.
- 4 Open the color picker, and click a color.

## To create a background from a bitmap

- 1 Click **Movie** ▶ **Movie setup**.
- 2 In the **Document, Movie setup** list of categories, click **Background**.
- 3 Enable the **Bitmap** option.
- 4 Click **Browse**.
- 5 Choose a file format from the **Files of type** list box (Windows) or **Show list box** (Mac OS).
- 6 Locate the folder where the file is stored.
- 7 Double-click the filename.
- 8 In the **Options** dialog box (Windows) or **Preferences** dialog box (Mac OS), enable one of the following options in the **Source** area:
  - **Linked**
  - **Embedded**
- 9 Enable one of the following options in the **Bitmap size** area:
  - **Default size** — lets you use the bitmap's current size
  - **Custom size** — lets you specify the dimensions of the bitmap. Type values in the **H** (horizontal) and **V** (vertical) boxes.

## To remove a movie background

- 1 Click **Movie** ▶ **Movie setup**.
- 2 In the **Document, Movie setup** list of categories, click **Background**.
- 3 Enable the **No background** option.

## Importing files

Corel R.A.V.E. lets you import files created in other applications to use in your movie projects. For example, you can import a file saved to the JPEG or GIF format. For information about supported file formats, see “File formats” in the **Help**.

When you import a file, it is placed into the active movie as an object. The imported file becomes part of the active movie file. You can also import a file by opening it in a new application window. For information on how to do this, see “To start or open a movie” on page 344.

You can resample or crop a bitmap when you import it.

## To import a file

- 1 Click **File** ▶ **Import**.
- 2 Choose the folder where the file is stored.
- 3 Choose a file format from the **Files of type** list box (Windows) or **Show list box** (Mac OS).
- 4 Click the filename.
- 5 Enable any of the following active check boxes:
  - **Link bitmap externally** — lets you link a bitmap externally instead of embedding it in a file
  - **Combine multi-layer bitmap** — automatically merges the layers within a bitmap
  - (Windows) **Check for watermark** — lets you check the image for a watermark and any information it contains, such as copyright
  - **Do not show filter dialog** — lets you use the filter's default settings without opening its dialog box
- 6 Click **Import**.
- 7 Click the stage.



Multi-layered bitmaps can be imported by default.

## Finding and inserting images

You can use clipart, photo images, and floating objects stored on the Corel content CDs or that are available online. The digital content manual contains pictures of the graphics available on the CD and their folder locations. Online images from Corel on the Web can be accessed from Corel R.A.V.E. and dragged directly to the drawing window.

Mac OS X has a content find-and-search tool, Sherlock. You can use Sherlock to browse for images using the thumbnail views or use keywords to search for content on the CDs.

## To browse for clipart, photos, and floating objects (Windows)

- 1 Click **Window** ▶ **Dockers** ▶ **Scrapbook** ▶ **Browse**.
- 2 Insert a Corel contents CD into the CD drive.
- 3 Double-click an icon in the CD list and navigate to a folder.

## You can also

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Browse for files on your computer or network

Double-click the **Desktop** icon, and navigate to a folder.

---

Browse for images online

Click the **Content on the Web** button.

---



To browse for images online, you must be connected to the Internet.



To change your browsing view in the **Scrapbook Docker** window, click the flyout arrow, click **View**, and choose a view type.

## To browse for clipart, photos, and floating objects (Mac OS)

- 1 Insert a Corel contents CD into the CD drive.
- 2 Double-click the **Sherlock** icon in the Dock.
- 3 Double-click the contents CD icon in the list of disks.
- 4 Choose the folder you want to browse.



When you insert a CD into the CD drive, the CD's icon displays on your desktop. You can double-click it to browse through the content folders inside.

For help on using Sherlock, click **Help** ▶ **Sherlock Help** from the Desktop.

## To search for clipart, photos, and floating objects (Windows)

- 1 Click **Window** ▶ **Dockers** ▶ **Scrapbook** ▶ **Search**.
- 2 Put a Corel contents CD in the CD drive.
- 3 Type a keyword in the **Search for text** box.

## To search for clipart, photos, and floating objects (Mac OS)

- 1 Put a Corel contents CD in the CD drive.
- 2 Double-click the **Sherlock** icon in the Dock.
- 3 Enable the CD icon check box in the list of disks.
- 4 Enable the **File names** option.
- 5 Type a keyword.
- 6 Click the magnifying glass button.



For help on using Sherlock, click **Help** ▶ **Sherlock Help**.

## To insert clipart, photos, and floating objects

- Drag the object to the drawing window.

## Undoing, redoing, and repeating actions

You can undo the actions you perform in a movie, starting with the most recent action. If you don't like the result of undoing an action, you can redo it.

Certain actions applied to objects, such as stretching, filling, moving and rotating, can be repeated to create a stronger visual effect.

Customizing the undo settings lets you increase or decrease the number of times you can undo or redo an action.

## To undo, redo, and repeat actions

<b>To</b>	<b>Do the following</b>
Undo an action	Click <b>Edit</b> ▶ <b>Undo</b> .
Redo an action	Click <b>Edit</b> ▶ <b>Redo</b> .
Undo or redo a series of actions	Click <b>Tools</b> ▶ <b>Undo Docker</b> window/palette. Choose the action that precedes all the actions you want to undo, or choose the last action you want to redo.
Repeat an action	Click <b>Edit</b> ▶ <b>Repeat</b> .





When you undo a series of actions, all actions listed below the action you choose are undone.

When you redo a series of actions, the action you choose and all actions listed between it and the last undone action are redone.



You can repeat an action on another object or group of objects by selecting the object or objects and then clicking **Edit ▸ Repeat**.

You can also undo or redo actions by clicking the **Undo** button  or the **Redo** button  on the toolbar.

## Saving movies

Corel R.A.V.E. lets you save a movie as you work. When you save a movie for the first time, you must specify a filename and folder. If you want to save changes made to a movie and keep the original, you can save the movie with a new filename.

By default, movies are saved to the Corel R.A.V.E. format (.clk) so that you can later open and edit them. You can also save a movie to a different format. Note that if you save a movie to a format that does not support animation, you will lose all animation effects. For example, if you save a tweened object in a Corel R.A.V.E. movie to the CorelDRAW format (.cdr), it is converted to a blend. For information about supported file formats, see “File formats” in the **Help**. For information about tweening, see “Tweening objects” on page 367.

To use a movie on the World Wide Web, you must export or publish it. For information on how to do this, see “Exporting and publishing movies” on page 433.

You can also specify advanced save options to reduce the file size of a movie, save textures with a movie, and make it easier to share a movie with other applications.

### To save a movie

- 1 Click **File ▸ Save as**.
- 2 Locate the drive and folder where you want to save the file.
- 3 Type a filename in the **File name** list box (Windows) or **Save as** box (Mac OS).  
If you want to save notes or keywords with the file, type them in the corresponding box.  
If you want to specify advanced settings, click **Advanced**, and specify the settings you want in the **Options** dialog box (Windows) or **Preferences** dialog box (Mac OS).
- 4 Enable any of the following check boxes:




- **Selected only** — saves only the objects selected in the active movie. This option is available only if at least one object is selected.
- **Web\_safe\_filenames** — replaces the white space in a filename with an underscore. Special characters are replaced by characters suitable for Web-based filenames.
- **Embed fonts using TrueDoc** — lets you embed fonts in the file

5 Click Save.



If you want to save changes made to a previously saved movie, click **File ▶ Save**. The **Save** dialog box will not open.

You can also save a movie by clicking the **Save** button  on the standard toolbar.

## To save a movie to a different format

- 1 Click **File ▶ Save as**.
- 2 Locate the folder where you want to save the file.
- 3 Type a filename in the or **File name** list box (Windows) or **Save as** box (Mac OS).
- 4 Choose a format from the **Save as type** list box (Windows) or **Format** list box (Mac OS).
- 5 Enable any of the following check boxes:
  - **Selected only** — saves only the objects selected in the active movie. This option is available only if at least one object is selected.
  - **Web\_safe\_filenames** — replaces the white space in a filename with an underscore. Special characters are replaced by characters suitable for Web-based filenames.
  - **Embed fonts using TrueDoc** — lets you embed fonts in the file
- 6 Click Save.

## Backing up and recovering files

Corel R.A.V.E. can automatically save backup copies of drawings and prompt you to recover them when you restart the program in the event of a system error.

The auto backup feature saves drawings that you have opened and modified. During any working session with Corel R.A.V.E., you can set the time interval for automatically backing up files and specify where you want the files to be saved: by default in your temporary folder or to a specified folder.

You can recover backed-up files from the temporary or specified folder when you restart Corel R.A.V.E. Backup files are stored in either the temporary or the user-specified folder. You can choose not to recover a file; however, that file is automatically erased when you shut down the program normally.

## To specify auto backup settings

- 1 Do one of the following:
  - (Windows) Click **Tools** ▶ **Options**.
  - (Mac OS) Click **Corel R.A.V.E. 2.0** ▶ **Preferences**.
- 2 In the **Workspace** list of categories, click **Save**.
- 3 Enable the **Auto-backup every** check box, and choose a value from the **Minutes** list box.
- 4 In the **Always back-up to** area, enable one of the following options:
  - **Temporary folder** — lets you save an auto backup file in the temporary folder
  - **Specific folder** — lets you specify the folder for an auto backup file

### You can also

---

Create a backup file every time you save	Enable the <b>Make backup on save</b> check box.
Disable auto backup	Choose <b>Never</b> from the <b>Minutes</b> list box.

---



Auto backup files are named **auto\_backup\_of\_filename** and can be saved in any folder you specify. Backup files created when you save a drawing are named **backup\_of\_filename** and are always stored in the same folder as the original drawing.

All files are backed up to the Corel R.A.V.E. file format (.clk).



You can cancel the creation of an auto backup file by pressing **Esc** while saving is in progress.

## To recover a backup file

- 1 Restart Corel R.A.V.E.
- 2 In the **File recovery** dialog box, click **OK** (Windows) or **Open** (Mac OS).
- 3 Save and rename the file in specified folder.



Recovered files are named **GraphicsX**, where **X** is the numbered increment. If you click **Cancel**, Corel R.A.V.E. ignores the backup file and deletes it when you exit the program normally.

## Closing movies and quitting Corel R.A.V.E.

You can close one or all open movies at any time before quitting Corel R.A.V.E.

### To close movies

To close	Do the following
one movie	Click <b>File</b> ▶ <b>Close</b> .
all open movies	Click <b>Window</b> ▶ <b>Close all</b> .

### To quit Corel R.A.V.E.

- Do one of the following:
  - (Windows) Click **File** ▶ **Exit**.
  - (Mac OS) Click **Corel R.A.V.E. 2.0** ▶ **Preferences** ▶ **Quit Corel R.A.V.E. 2.0**.



You can also quit Corel R.A.V.E. by pressing **Alt + F4** (Windows) or **Command + Q** (Mac OS).

## From here

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
Resampling bitmaps while importing	resampling bitmaps
Cropping bitmaps while importing	cropping bitmaps
Customizing undo settings	undoing commands, specifying levels



Corel R.A.V.E. has several tools which can help you draw, size, align, and work with objects in movies. You can also preview frames and use different views. In this section, you'll learn about

- setting up the rulers
- setting up the grid
- setting up guidelines
- zooming and panning

### Setting up the rulers

You can display rulers in the drawing window to help you draw, size, and align objects precisely. You can hide the rulers or move them to another position in the drawing window. You can also customize the ruler settings to suit your needs. For example, you can set the ruler origin, choose a unit of measure, and specify how many marks or ticks display between each full unit mark.

By default, Corel R.A.V.E. applies the same units used for the rulers to the duplicate and nudge distances. You can change the default so that you can specify different units for these and other settings. For information about nudging, see “Positioning objects” on page . For more information about duplicating, see “To duplicate an object” in the **Help**.

### To display or hide the rulers

- Click **View** ► **Rulers**.

A check mark beside the **Rulers** command indicates the rulers are displayed.

### To move a ruler

- Hold down **Shift**, and drag a ruler to a new position in the drawing window.

## Setting up the grid

The grid is a series of intersecting dashed lines or dots that you can display to help you precisely align and position objects in the drawing window. You can customize the grid settings. For example, you can specify whether the grid displays as lines or dots. You can set the distance between the grid lines or dots by specifying the frequency or spacing. Frequency refers to the number of lines or dots that display between each horizontal and vertical unit. Spacing refers to the exact distance between each line or dot. High frequency values or low spacing values can help you align and position objects more precisely.

You can have objects snap to the grid so that when you move them, they jump between grid lines or dots.

### To display or hide the grid

- Click **View** ► **Grid**.

A check mark beside the **Grid** command indicates the grid is displayed.

### To customize grid settings

- 1 Click **View** ► **Grid and ruler setup**.
- 2 In the **Document** list of categories, click **Grid**.
- 3 Enable one of the following options:
  - **Frequency** — specifies grid spacing as the number of lines per inch. This option is available only when the unit of measure is inches.
  - **Spacing** — specifies the distance between each grid line
- 4 Type values in the following boxes:
  - **Horizontal**
  - **Vertical**
- 5 Enable one of the following options:
  - **Show grid as lines**
  - **Show grid as dots**



The unit of measure used for the grid is the same as that used for rulers.



To enable the **Frequency** option, you must first set the unit of measure for **Rulers** to inches. For information about ruler settings, see “To customize ruler settings” in the **Help**.

## To have objects snap to the grid

- Click View ► Snap to grid.

## Setting up guidelines

Guidelines are lines that can be placed anywhere in the drawing window to aid in object placement. There are three types of guidelines: horizontal, vertical, and slanted. You can display guidelines or hide them. After you add a guideline, you can select it, move it, rotate it, lock it in place, or delete it.

You can have objects snap to the guidelines so that when an object is moved near a guideline, it can only be centered on the guideline or lined up on either side of the guideline.

Guidelines always use the unit of measurement specified for rulers. For information about ruler settings, see “To customize ruler settings” in the **Help**.

## To hide or display the guidelines

- Click View ► Guidelines.

A check mark beside the **Guidelines** command indicates the guidelines are displayed.

## To add a horizontal or vertical guideline

- 1 Click View ► Guidelines setup.
- 2 In the Document, Guidelines list of categories, click one of the following:
  - Horizontal
  - Vertical
- 3 Specify the guideline settings you want.
- 4 Click Add.




You can also add a guideline by dragging from the horizontal or vertical ruler in the drawing window.



## To add a slanted guideline

- 1 Click **View** ▶ **Guidelines** setup.
- 2 In the **Document**, **Guidelines** list of categories, click **Guides**.
- 3 Choose one of the following options from the **Specify** list box:
  - **2 points** — lets you specify two points to be joined to create a guideline
  - **Angle and 1 point** — lets you specify one point and an angle. The guideline crosses through the point at the angle specified.
- 4 Choose a unit of measurement from the list box.
- 5 Specify the x and y coordinates, and if applicable, the angle.
- 6 Click **Add**.

## To modify guidelines

To	Do the following
Select a single guideline	Click the guideline using the <b>Pick</b> tool  .
Select all guidelines	Click <b>Edit</b> ▶ <b>Select all</b> ▶ <b>Guidelines</b> .
Move a guideline	Drag a guideline to a new position in the drawing window.
Rotate a guideline	Click a guideline twice using the <b>Pick</b> tool, and drag a rotation handle
Lock a guideline	Click a guideline using the <b>Pick</b> tool, and click <b>Arrange</b> ▶ <b>Lock object</b> .
Unlock a guideline	Click a guideline using the <b>Pick</b> tool, and click <b>Arrange</b> ▶ <b>Unlock object</b> .
Delete a guideline	Click a guideline using the <b>Pick</b> tool, and press <b>Delete</b> .



You can also lock or unlock a guideline by right-clicking (Windows) or **Control** + clicking (Mac OS) the guideline, and then clicking **Lock object** or **Unlock object**.

You can access guideline setup directly by right-clicking (Windows) or **Control** + clicking (Mac OS) a ruler, and then clicking **Guidelines setup**.

## To have objects snap to the guidelines

- 1 Click **View** ▶ **Snap to guidelines**.
- 2 Drag objects to a guideline.

If you want to snap the center of an object to a guideline, select the object and move it over the guideline until its center of rotation snaps to the guideline.

## Zooming and panning







You can zoom in to get a closer look at objects on the stage, or you can zoom out to see more of the stage. You can experiment with a variety of zoom options to determine the amount of detail you want.


Another way in which you can view objects in a movie is by panning. When you work at high magnification levels, you may not be able to see the whole stage. Panning lets you view areas that aren't displayed by moving the stage around in the drawing window.

While you are panning, you can zoom in and out. While you are zooming, you can pan. This saves you from having to alternate between the two tools.

If you are using Windows, you can also specify what you want the **Zoom** and **Hand** tools to do when you right-click with them in the drawing window. For each tool, you can choose to zoom out by a factor of two, or to display a menu of commands for zooming to specific levels.

## To zoom

- 1 Open the **Zoom** flyout , and click the **Zoom** tool .
- 2 On the property bar, click one of the following buttons:
  - **Zoom in** 
  - **Zoom out** 
  - **Zoom to selected** 
  - **Zoom to all objects** 



- Zoom to stage 

You can also	Do the following
Use the zoom tool once, and return to the current tool	Press <b>F2</b> .
Zoom to selected objects using a shortcut	Press <b>Shift + F2</b> .
Zoom out using a shortcut	Press <b>F3</b> .
Zoom to all objects using a shortcut	Press <b>F4</b> .
Zoom to the stage using a shortcut	Press <b>Shift + F4</b> .





The **Zoom to selected** button is available only if you select one or more objects before you open the **Zoom** flyout.




You can also zoom in by clicking or dragging anywhere in the drawing window with the **Zoom** tool . To zoom out, right-click (Windows) or **Control + click** (Mac OS) with the **Zoom** tool or the **Hand** tool .

## To pan in the drawing window

- 1 Open the **Zoom** flyout , and click the **Hand** tool .
- 2 Drag in the drawing window until the area you want to view is displayed. If you want to zoom in, double-click; if you want to zoom out, right-click (Windows) or **Control + click** (Mac OS).



If you want to pan in the drawing window while zooming, click the **Navigator** button  in the bottom-right corner of the drawing window. Drag the cross-hair pointer in the Navigator pop-up window.

## From here

For more information about	(Windows) In the Help index, see (Mac OS) In the Help Viewer, type
Customizing ruler settings	rulers, customizing

<b>For more information about</b>	<b>(Windows) In the Help index, see (Mac OS) In the Help Viewer, type</b>
(Windows) Setting the right mouse button action for the <b>Z</b> oom and <b>H</b> and tools	mouse, setting right-button action
Previewing frames	previewing frames
Working with views	viewing, modes



## Animating objects

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The Corel R.A.V.E. application lets you create animation by extending the life of objects in a movie and changing them over time.

In this section, you'll learn about

- understanding animation methods and terms
- increasing the life span of objects
- tweening objects
- tweening groups of objects
- repeating animated objects
- animating blends
- creating animation sequences from groups
- animating objects frame-by-frame

For more information about tweening limitations, see “Reference: Animating objects” on page 381.

### Understanding animation methods and terms

Corel R.A.V.E. lets you animate vector objects and bitmaps by editing object properties and interactive effects applied to objects over time. For example, you can make an object roll across the stage, fade out, or change size, color, and shape.

#### Animation methods

Corel R.A.V.E. offers three animation methods: tweening objects, creating animation sequences from existing objects, and animating objects frame-by-frame.

Tweening lets you define changes in an object at specific frames during its life span, and then automatically applies the changes between these frames.

You can create an animation sequence from a blend, a group, or text. For information about creating animation sequences from blends, see “Animating blends” on page 378. For information about creating animation sequences from groups, see “Creating animation sequences from groups” on page 380. For information about creating animation sequences from text, see “To create a typing effect” on page 389.

Animating objects frame-by-frame lets you edit an object in each frame of its life span, giving you complete control over the way it changes over time.

## Animation terms

Before you start animating objects in a movie, you should be familiar with the following animation terms.

Term	Description
Frame	One image in a series of images that make up a movie. A movie frame can contain one or more objects.
Current frame	The frame that is displayed on the stage
Keyframe	A frame in which you define change in an object. When tweening, Corel R.A.V.E. fills in the frames between keyframes so that objects change gradually over time.
Object's life span	The frames in which an object exists in a movie
Object's timeline	A graphical representation of an object's life span in a movie
Static object	An object that does not change during its life span in a movie
Animated object	An object in a movie that changes over time
Symbol	An object or group of objects that is defined once and can be referenced many times in a movie
Sprite	An animated symbol

## Increasing the life span of objects

When you add an object to the stage, it has a life span of one frame and therefore its timeline consists of a single black dot. Before you can animate an object, you must increase its life span. You can increase the life span of a single object, or a group of objects.

Increasing the life span of a new object does not animate the object. It only produces a static object that exists in a number of successive frames. To animate a static object, you must tween it or animate it frame-by-frame. For information about tweening, see “Tweening objects” on page 367. For information about animating frame-by-frame, see “Animating objects frame-by-frame” on page 381.

### **To increase the life span of a new object**

- 1 Select a new object.
- 2 In the **Timeline** Docker window/palette, drag the black dot associated with the object to the frame you want.

### **To increase the life span of a new group of objects**

- 1 Select a new group of objects.
- 2 In the **Timeline** Docker window/palette, hold down **Ctrl** (Windows) or **Command** (Mac OS), and drag the black dot associated with the group to the frame you want.

The life span of each object in the group is increased.

## **Tweening objects**

Tweening lets you animate objects in a movie. You change their position and appearance at specific frames in their life spans, and Corel R.A.V.E. creates the frames in between.

Before you can tween an object, you must increase its life span so that it exists for more than one frame. For more information, see “Increasing the life span of objects” on page 366.

### **How tweening works**

To tween a static object, you can turn the end frame of the object’s timeline into a keyframe. The start frame of the object’s timeline automatically becomes another keyframe that stores information about the object’s original state. Modifying the object at the end keyframe produces an animated object that changes gradually from its original state to its modified state. The rate of change is determined by the number of intermediate frames, and by the frame rate of the movie. For more information about frame rate, see “Setting the properties of movies” in the **Help** .

You can also tween a static object by turning any intermediate frame in its timeline into a keyframe, and then modifying the object at that keyframe. The start and end



frames automatically become keyframes with the object in its original state. This produces an animated object that changes from its original state to its modified state and then back to its original state.



*Frames outlined in red indicate keyframes. Turning the end frame in an object's timeline into a keyframe and modifying the object at that keyframe produces an animated object that changes over time (top). Turning an intermediate frame in an object's timeline into a keyframe and modifying the object at that keyframe produces an animated object that changes over time and returns to its original state (bottom).*

### **What can be tweened**

Corel R.A.V.E. lets you tween object properties such as size, position, rotation angle, and outline, as well as interactive effects you've applied, such as contour, transparency, fill, envelope, distortion, and drop shadow. You can tween several object properties and effects at the same time.



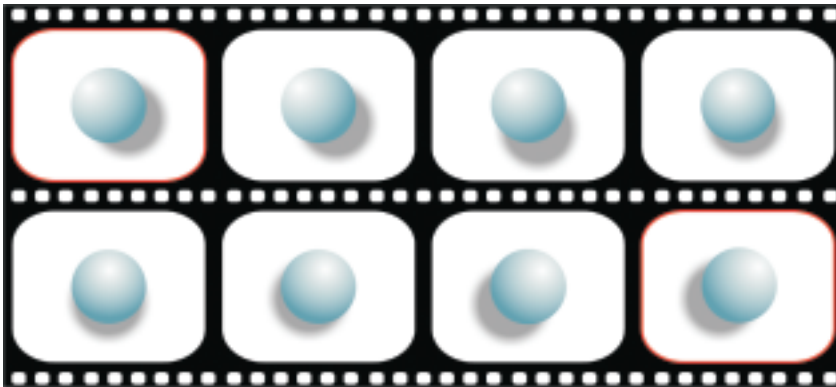
*You can tween the size, position, and rotation angle of an object simultaneously to make it roll across the stage as it recedes. Frames outlined in red indicate keyframes.*



*Changing the fill of a silhouette and its background at an end keyframe produces an image that gradually changes color. In this movie, the sun is also tweened to move along a path.*



*Tweening a distortion effect applied to an object produces an animated object that changes its shape. Frames outlined in red indicate keyframes.*



*Tweening the drop shadow of this object produces the effect of a light moving over it. Frames outlined in red indicate keyframes.*

Not all attributes of object properties and interactive effects can be tweened. For more information, see “Tweening limitations” on page 382.

### **Creating motion**

Corel R.A.V.E. lets you create interesting motion effects by tweening the position, size, skew, and rotation angle of an object.

Tweening the position of an object makes an object move across the stage. You can make an object move in a straight line or make it follow a path. For information about creating paths, see “Drawing lines” in the **Help**.

When you tween the size, or scale, of an object, the object appears to be moving closer or receding. When you tween the skew of an object, you add depth to the object over time, and the object appears to rotate. You can rotate an object or an extruded object over time by tweening the rotation angle. Tweening the rotation angle of an object makes the object move around its center of rotation. When you tween the rotation angle of an extruded object, you can rotate the object around its x, y, or z axis. For both objects and extruded objects, you can set the rotation direction and number of rotations.

For information about changing these object properties, see “Working with objects” in the **Help**.

## To tween an object

- 1 Select an object.  
If the object appears in one frame only, drag the black dot associated with the object to increase its life span.
- 2 In the **Timeline** Docker window/palette, click the end frame or an intermediate frame in the object’s timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Modify the object on the stage by editing any of its properties or by applying interactive effects.

<b>To</b>	<b>Tween the</b>
Fade an object in and out	Transparency
Change an object’s color and pattern	Color and fill
Change an object’s shape	Envelope effects, distortion effects, and extrusion
Move a light over an object	Drop shadow, transparency, and extrusion lighting
Make an object glow	Fill and drop shadow
Add a third dimension to an object	Extrusion



You can only tween objects that have a life span greater than one frame. For information about increasing the life span of objects, see “Increasing the life span of objects” on page 366.



You can also change a frame to a keyframe by double-clicking it.

## To move an object in a straight line

- 1 Select an object.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object’s timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Drag the object to a new position on the stage.



You can move an object in a perfectly horizontal or vertical line by holding down **Ctrl** (Windows) or **Shift** (Mac OS) and dragging the object. If you are using the Mac OS, you must first deselect the object.

## To move an object along a path

- 1 Select an object.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object’s timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Drag the object to a new position on the stage.
- 5 Draw a path.
- 6 In the **Timeline** Docker window/palette, drag the black dot associated with the path to the start frame of the object’s timeline.
- 7 Click the **Pick** tool, and select the object on the stage.
- 8 Click **Movie ▶ Tween ▶ Attach to path**.  
The pointer changes to a curved arrow.
- 9 Click the path.




You can also attach an object to a path by clicking the **Attach to path** button  on the property bar.


You can attach more than one object to the same path.

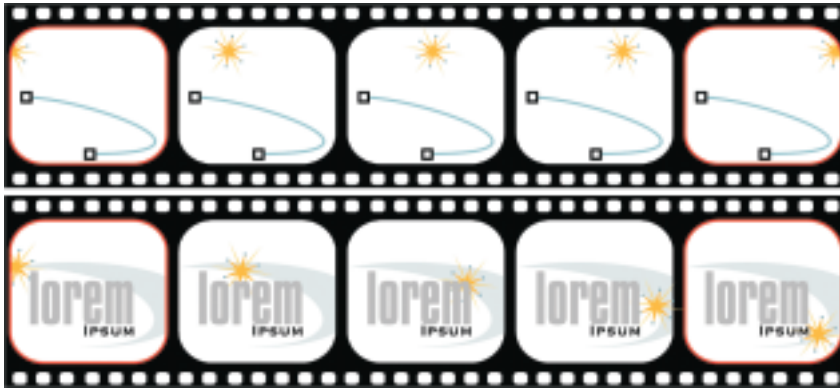
## You can also

Have an object move along the entire path

Click an intermediate frame in the object's timeline to display tween controls on the property bar, and click the **Sets the tween to occur along full path** button .

Have an object rotate along a path

Click an intermediate frame in the object's timeline to display tween controls on the property bar, and click the **Rotate all objects relative to the path** button .



*Tweening the object's position (top) and attaching the object to a path produces an animated object that moves along a specified path (bottom). Frames outlined in red indicate keyframes.*

## To scale an object over time

- 1 Select an object.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object's timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Type values in the **Scale** factor boxes on the property bar.



You can also scale an object by dragging any corner selection handle.

## To add depth to an object over time

- 1 Select an object using the **Pick** tool.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object's timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Click the object on the stage to display the skewing handles.  
The skewing handles are the straight, double-headed arrows located in the center of each side of the selection box.
- 5 Drag a skewing handle to a new position.

## To rotate an object over time

- 1 Select an object using the **Pick** tool.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object's timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Click the object on the stage to display the rotation handles.  
The rotation handles are the curved, double-headed arrows in the corners of the selection box.
- 5 Drag a rotation handle to a new position.

### You can also

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Set the rotation direction of the tween

Click an intermediate frame in the object's timeline to display tween controls on the property bar. From the **Rotation direction** list box, choose **Clockwise**, **Counter clockwise**, or **Auto**.

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Set the number of rotations

Click an intermediate frame in the object's timeline to display tween controls on the property bar, and type a value in the **Number of rotations** box.

The object rotates the number of rotations and continues rotating to the end position of the tween.

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If you choose the **Auto** option, the rotation direction is based on the difference in the angle of rotation (end angle minus start angle). If the angle difference is positive, the object rotates in a counterclockwise direction. If the angle difference is negative, the object rotates in a clockwise direction. The number of rotations does not affect the rotation direction.



You can constrain rotation to 15-degree increments by holding down **Ctrl** (Windows) or **Shift** (Mac OS) and dragging a rotation handle.

## To rotate an extruded object over time

- 1 Select an extruded object.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object's timeline.
- 3 Click **Movie** ▶ **Insert keyframe**.
- 4 On the property bar, click the **Extrude rotation** button .
- 5 Drag the extrusion in the direction you want.

### You can also

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Set the rotation direction of the tween

Click an intermediate frame in the object's timeline to display tween controls on the property bar. Click the **X-axis**, **Y-axis**, or **Z-axis** button, and choose **Positive rotation** or **Negative rotation** from the **Rotation direction** list box.

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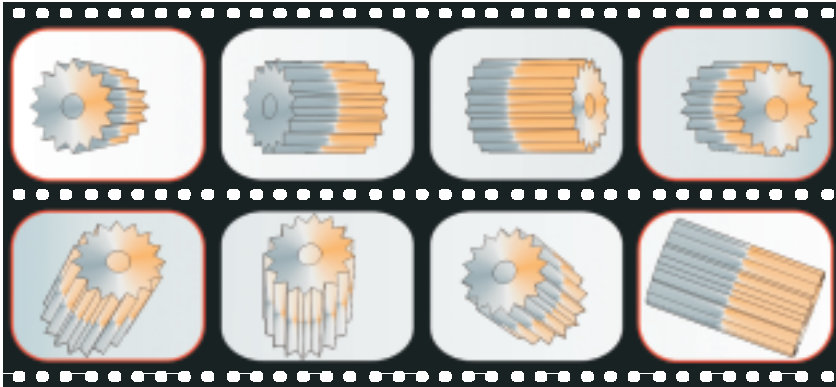
Set the number of rotations

Click an intermediate frame in the object's timeline to display tween controls on the property bar, and type a value in the **Number of rotations** box.

The object rotates the number of rotations and continues rotating to the end position of the tween.

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*You can rotate an extruded object around the y-axis (top), or around all three axes (bottom). Frames outlined in red indicate keyframes.*

## **Tweening groups of objects**

Tweening groups of objects lets you animate all objects within a group simultaneously. This feature is useful for animating imported clipart.

Before you can tween a group of objects, you must increase the group's life span so that it exists for more than one frame. For more information, see "Increasing the life span of objects" on page 366.

When tweening a group of objects, you add keyframes to the group's timeline and edit the group at the keyframes. As a result, all objects in the group appear in the same succession of frames and change simultaneously in the same way. For example, you can make all objects in a group simultaneously appear, become the same color, and disappear from a movie.

You can tween a group of objects in the same way you tween a single object. For information about moving, rotating, adding depth to, and scaling objects over time, see "Tweening objects" on page 367.

You can create nested animations by saving animated objects as sprites, grouping them with other objects, and then tweening the group. For information about using sprites, see "Working with symbols and sprites" on page 399.

You can also edit animated groups of objects by adding, moving, and deleting frames and keyframes; working with tweens; and adding sound. For information about editing animation, see "Editing and previewing animation" on page 391.

## To tween a group of objects

- 1 In the **Timeline Docker** window/palette, click the name of a group of objects.  
If the group of objects exists in one frame only, hold down **Ctrl** (Windows) or **Command** (Mac OS), and drag the black dot associated with the group to increase its life span.
- 2 Click a frame in the group's timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Modify the group of objects.



Animated objects in a group of objects lose their original animation effects after the group is tweened. For information about creating nested animations, see “Using sprites in movies” on page 405.



You can also add a keyframe to the group's timeline by double-clicking any intermediate frame in the group's timeline.

## Repeating animated objects

Animated objects exist in a succession of frames in a movie. You can repeat an animated object or a group of animated objects by looping it.


When you loop an animated object, its timeline is repeated for the duration of the movie. Repeating timelines are grayed and cannot be edited; however, they reflect all changes made to the object's original timeline.


Looping a group of objects lets you repeat the group as a whole. You can also repeat an individual animated object within a group, if its life span is shorter than that of the group. The life span of the group determines the number of times an individual object loops.

You can also loop rollovers and audio objects. For information about looping rollovers, see “Repeating animation in rollovers” on page 417. For information about looping audio objects, see “Using sound in movies” on page 395.

If you want to use the repeating animation in other movies, you can save it as an independent Corel R.A.V.E. file. For example, you can create a company logo that rotates continuously while text about the company displays, and then save the rotating logo to reuse in another movie. You can also save the repeated animation as a sprite and reuse it in the same movie or other movies. For information about sprites, see “Working with symbols and sprites” on page 399.

## To loop an animated object or group of objects

- 1 Select an animated object or a group of animated objects.
- 2 In the **Timeline** Docker window/palette, click the **Single play** icon  to the left of the object's or group's name.


The **Single play** icon changes to a **Looping arrow** icon  .




You can un-loop an object or group of objects by clicking the **Looping arrow** icon. It changes back to a **Single play** icon.

You can loop an object that exists in one frame only. This makes the object exist for the remainder of the movie.

## To loop an animated object within a group

- 1 In the **Timeline** Docker window/palette, select a group of objects.
- 2 Double-click the group's name to display its individual objects.
- 3 Select an object.
- 4 Click the **Single play** icon  to the left of the object's name.

The **Single play** icon changes to a **Looping arrow** icon  .



The object selected must have a life span shorter than that of the group.

## To save a repeating animated object or group of objects

- 1 In the **Timeline** Docker window/palette, select a looping animated object or a looping group of objects.
- 2 Click **File** ► **Save as**.
- 3 Locate the folder where you want to save the file.
- 4 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS).
- 5 Enable the **Selected only** check box.
- 6 Click **Save**.

## Animating blends

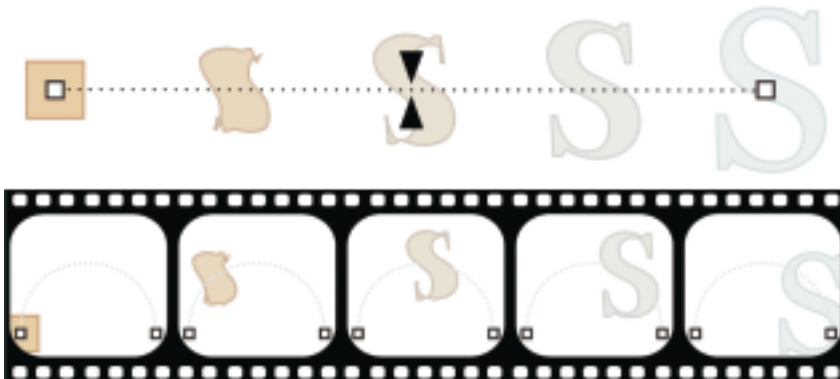
Animating blends lets you create a morphing effect by radically transforming the shape of an object over time. For example, you can transform an ellipse into a star, or the letter A into the letter Z. When you animate a blend, it appears as an animated object and is represented by a single timeline that extends over as many frames as

there are objects in the blend. The animation begins with the start object of the blend, which moves across the stage as it transforms into the end object. For information about creating blends, see “Blending objects” in the **Help**.



*Animating the blend in frame 1 spreads it across multiple frames and produces an animated object that transforms its shape.*

If you want the animation to follow a specific route, you can attach the blend to a path. For information about creating paths, see “Drawing lines” in the **Help**.



*Animating a blend along a path produces an animated object that changes shape as it moves along the path you've created.*

Animated blends increase the file size of a movie. If you want to modify the shape of an object over time without changing the object type, tweening is recommended. For more information about tweening, see “Tweening objects” on page 367.

### To animate a blend

- 1 Select a blend.
- 2 Click **Movie** ► **Create sequence from blend**.



In the **Timeline Docker** window/palette, the animated blend appears as an animated object and has a single timeline.

### To animate a blend along a path

- 1 Draw a path.
- 2 Select a blend.
- 3 Click **Movie** ► **Attach to path**.  
The pointer changes to a curved arrow.
- 4 Click the path.
- 5 Click **Movie** ► **Create sequence from blend**.

### Creating animation sequences from groups

You can create an animation from a static group of objects. This allows each object within the group to appear in a separate frame in the movie. When you play the movie, the objects appear and disappear, one at a time.

You can also stagger the objects’ appearance in a movie, but have each object remain in the movie for the life span of the group. This has the effect of creating a group of objects over time. For example, you can create a clipart object over time by starting with a simple object in frame 1 and adding one more object at each frame until the entire clipart object is displayed.

You can create frame-by-frame animations by arranging objects in one frame, grouping them, and then animating them by creating a sequence from the group. For more information about animating frame-by-frame, see “Animating objects frame-by-frame” on page 381.

## To create an animation sequence from a group

- 1 Select the group of objects.
- 2 Click **Movie** ► **Create sequence from group**.

If you want the objects to remain in the movie once they appear, in the **Timeline** Docker window/palette, drag the black dot associated with each object to the end frame of the group.


## Animating objects frame-by-frame

Animating objects frame-by-frame offers full control over the way an object changes in time and lets you animate object properties and effects that cannot be tweened. For information about tweening limitations, see “Reference: Animating objects” on page 381.

To animate objects frame-by-frame, you turn all frames in an object’s timeline into keyframes and then edit the object at each keyframe.

Animating objects frame-by-frame can substantially increase the file size of a movie. To minimize file size, use tweening or creating sequences wherever possible. For information about tweening, see “Tweening objects” on page 367. For information about creating sequences, see “Animating blends” on page 378 or “Creating animation sequences from groups” on page 380.

## To animate an object frame-by-frame

- 1 Select an object.
- 2 In the **Timeline** Docker window/palette, click a frame other than the start frame in the object’s timeline.  
If the object exists in one frame only, drag the black dot associated with the object to increase its life span.
- 3 Click the **Insert keyframe** button  in the **Timeline** Docker window/palette.
- 4 Modify the object on the stage.
- 5 Repeat steps 2 to 4 until the object is modified at every frame in its timeline.

## Reference: Animating objects

Some object properties and effect attributes cannot be animated by tweening.

## Tweening limitations

When you tween objects, Corel R.A.V.E. usually tweens the properties of the object between keyframes, creating smooth change. However, some attributes of the object's outline and fill, as well as some effect attributes, cannot be tweened; instead they abruptly change at a keyframe. To ensure smooth animation of an object in which such property and effect attributes change, you must animate the object frame-by-frame. For more information, see "Animating objects frame-by-frame" on page 381.

The following tables list the attributes of object properties and interactive effects that cannot be tweened.

<b>Object property</b>	<b>Attributes of the object property that cannot be tweened</b>
Outline of an object	Corner shape of objects; line caps and line-ending shapes of open paths; <b>Behind fill</b> option; <b>Scale with image</b> option
Uniform fill	Color model of the fill
Fountain fill	Fountain fill type
Pattern fill	Pattern fill type
Texture fill	Texture fill types; <b>Transform with object</b> option; <b>Mirror fill tiles</b> option
Text wrapping and offset	All text wrapping and offset

<b>Effect</b>	<b>Attributes of the effect that cannot be tweened</b>
Artistic media	Preset stroke type Brush type Object sprayer attributes: spacing between objects, order of objects, rotation angle, and offset of objects
Drop shadow	Drop shadow's feathering direction, and feathering edge

Effect	Attributes of the effect that cannot be tweened
Lens	Lens type
Extrusion	Extrusion type, vanishing point properties, vanishing point object or page, color types, adding or removing lights
Closing multiple line segments	This action cannot be tweened.





## Animating text

---

The Corel R.A.V.E. application lets you animate text in a movie by changing its position and appearance at specific frames in its life span.

In this section, you'll learn about

- Tweening text
- Creating animated text effects

### Tweening text

Corel R.A.V.E. lets you animate text by tweening it along a path. You can also tween the text's properties, such as vertical placement and distance from path.



You can only tween text that has a life span greater than one frame. For information about increasing the life span of objects, see "To increase the life span of a new object" on page 367.



*When you move text along a path, you can tween the text's properties.*

Corel R.A.V.E. also lets you animate text without tweening it to a path, by treating the text as an object. For information about tweening objects, see "Tweening objects" on page 367.


## To move text along a path

- 1 Draw a path.
- 2 Click the **Text** tool , and move the pointer over the path. When the pointer changes to a **Fit to path** pointer , click the object and type.
- 3 In the **Timeline** Docker window/palette, drag the black dot associated with the path to increase the life span of the path.
- 4 Click the end frame in the text's timeline.
- 5 Click **Movie ▶ Insert keyframe**.
- 6 Drag the glyph to change the position of the text on the path.

### You can also


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Have text move along the entire path

Click the text's name in the **Timeline** Docker window/palette, and click the **Sets the tween to occur along full path** button  on the property bar.

---

Have text rotate along a path

Click the text's name in the **Timeline** Docker window/palette, and click the **Rotate all objects relative to the path** button  on the property bar.

---



You can also change a frame to a keyframe by double-clicking it.

## To tween the properties of text on a path

- 1 In the **Timeline** Docker window/palette, drag the black dot associated with the path to increase the life span of the path.  
The life span of the text on the path also increases.
- 2 Click the end frame in the text's timeline.
- 3 Click **Movie ▶ Insert keyframe**.
- 4 Modify the text on the stage by editing any of its properties.

### To change



### Do the following

---

Vertical placement

Choose a setting from the **Vertical placement** list box on the property bar.

---

To change	Do the following
Text placement	Choose a setting from the <b>Text placement</b> list box on the property bar.
Distance from path	Choose a setting from the <b>Distance from path</b> list box on the property bar.
Horizontal offset	Choose a setting from the <b>Horizontal offset</b> list box on the property bar.
Kerning	Open the <b>Shape edit</b> flyout  , click the <b>Shape</b> tool  , and move the nodes to alter the distance between characters.



You cannot tween text orientation, nor can you tween text to the opposite side of a path.

You can tween the size, fill, outline fill, outline size, and interactive effects for text as you would for any other object.

## Creating animated text effects

Corel R.A.V.E. lets you create animated text effects.

You can blend artistic text, and then create an animated sequence from the blend.

You can also create a typing effect.





*You can blend two instances of text along a path.*

## To blend artistic text

### To

### Do the following


Blend text along a straight line

Open the **Interactive tools** flyout , and click the **Interactive blend tool** . Select the first text instance, and drag over the second text instance. If you want to reset the blend, press **Esc** as you drag.

Blend text along a freehand path

Open the **Interactive tools** flyout, and click the **Interactive blend tool**. Select the first text instance. Hold down **Alt** (Windows) or **Option** (Mac OS), and drag to draw a line to the second text instance.

Fit a blend to a path




Open the **Interactive tools** flyout, and click the **Interactive blend tool**. Click the blend. Click the **Path properties** button  on the property bar. Click **New path**. Using the curved arrow, click the path to which you want to fit the blend.

To	Do the following
Stretch the blend over an entire path	Select a blend that is already fitted on a path. Click the <b>Miscellaneous blend options</b> button on the property bar, and enable the <b>Blend along full path</b> check box.
Create a compound blend	Using the <b>Interactive blend</b> tool, drag from an object to the start or end text instance of another blend.
Create a sequence from a blend	Select a blend, and click <b>Movie ▶ Create sequence from blend</b> .



You can also blend text with an object. For more information about blending objects, see “Blending objects” in the **Help**.

## To create a typing effect

- 1 Type the text in the frame where you want the animation to begin.
- 2 Select the text, and click **Movie ▶ Create sequence from text**.
- 3 Select the group of objects, and click **Edit ▶ Copy**.
- 4 In the **Timeline** Docker window/palette, expand the group of objects, and drag the timeline dot for each character to the end of the group’s timeline.
- 5 In the **Timeline** Docker window/palette, click the third frame in the group’s timeline, and click **Edit ▶ Paste**.
- 6 Select the group of objects with the earlier timeline, and choose the **Interactive transparency** tool  from the **Interactive tools** flyout.
- 7 Select **Uniform** from the **Transparency type** list box in the property bar, and type **50** in the **Starting transparency** box.
- 8 Click the **Play** button  on the **Control** panel to play the movie.  
Click the **Stop** button  to stop the movie and make adjustments.



## Editing and previewing animation

---

The Corel R.A.V.E. application lets you make changes to movies and preview them.

In this section, you'll learn about

- working with timelines
- working with tweens
- using sound in movies
- displaying multiple frames on the stage
- previewing animation


### Working with timelines

You can modify the way an animated object changes over time by making changes to its timeline. You can insert and delete frames. You can also add, delete, and move keyframes. Adding keyframes gives you more control over the way an object changes between its start and end frames; deleting keyframes lets you remove unwanted changes to the object over time; and moving keyframes lets you control how quickly changes take place.

You can identify a frame or keyframe in a movie by giving it a label. Frame labels let you reference frames easily when working with behaviors. For more information about using behaviors, see “Using behaviors” on page 421.

You can also edit an animated object by changing its life span or shifting its timeline. You change an object's life span by moving the start frame, end frame, or both. Shifting an object's timeline lets you move the object to a different series of frames without affecting its life span. For example, you can shift the timeline of an object that appears in frames 5 to 20 so that it appears in frames 10 to 25.

### To insert a frame

- 1 In the **Timeline** Docker window/palette, click a frame.
- 2 Click the **Insert frame** button .
- 3 In the **Insert frame** dialog box, type a value in the **Number of frames** box.
- 4 Enable one of the following options:




- After current frame
- Before current frame



If the current frame is not part of at least one object's timeline, inserting frames has no effect.

## To delete a frame

- 1 In the **Timeline Docker** window/palette, click a frame.
- 2 Click the **Delete frame** button  .
- 3 In the **Delete frame** dialog box, type a value in the **Number of frames** box.
- 4 Enable one of the following options:
  - After current frame
  - Before current frame



If the current frame is not part of at least one object's timeline, deleting frames has no effect.

## To add, delete, and move keyframes

To	Do the following
Add a keyframe	Click a frame in an object's timeline, and click <b>Movie ▶ Insert keyframe</b> .
Delete a keyframe	Click a keyframe in an object's timeline, and click <b>Movie ▶ Delete keyframe</b> .
Move a keyframe	Click a keyframe in an object's timeline, and drag it to another frame.



You cannot move a keyframe beyond another keyframe in an object's timeline.



You can also add a keyframe by double-clicking a frame in the object's timeline.

You can also delete a keyframe by double-clicking it.

## To label a frame

- 1 In the **Timeline Docker** window/palette, click a frame.
- 2 Click **Movie ▶ Label frame**.
- 3 In the **Label frame** dialog box, type a name in the **Frame label name** box.



A yellow flag displays in the **Timeline Docker** window/palette for labeled frames.

## To change the life span of an object

- 1 Select an object.
- 2 In the **Timeline Docker** window/palette, drag from the start frame in the object's timeline to the frame you want.
- 3 Drag from the end frame in the object's timeline to the frame you want.



For a compound tween, changing the life span affects only the first or last timeline section.



You can change the life span of a group of objects by holding down **Ctrl** (Windows) or **Command** (Mac OS) and dragging the start and end frames.

## To shift an object's timeline

- 1 In the **Timeline Docker** window/palette, select an object.
- 2 Click an intermediate frame in the object's timeline, and drag to a new position.



The entire timeline is shifted.



To shift a timeline section of a compound tween, hold down **Ctrl** (Windows) or **Command** (Mac OS), and drag an intermediate frame in the timeline section. The timeline section is shifted, adding or removing surrounding frames as required, but only up to the next keyframe.

## Working with tweens


A tween is the animation created by tweening. For more information about tweening, see “Tweening objects” on page 367.

You can modify how quickly or slowly a tweened object changes by adjusting object and color acceleration. For example, you can make a ball rolling down a hill speed up as it approaches the bottom of the hill.

Corel R.A.V.E. lets you copy tween properties from one tween to another. Tween properties include object and color acceleration, rotation controls, color controls, and if applicable, path properties. You can also reverse a tween. For example, a tweened object that moves from left to right while changing from red to blue can be reversed so that it moves from right to left while changing from blue to red. When you reverse a tween, you reverse the entire timeline.

You can also remove a tween. When you do, Corel R.A.V.E. deletes all keyframes, and the object maintains the properties it had at the first keyframe.

## To adjust object and color acceleration

- 1 In the **Timeline Docker** window/palette, click an intermediate frame in the timeline of a tween.
- 2 On the property bar, click the **Object and color acceleration** button .  
If you want to set different acceleration rates for color and object properties, click the **Lock** button.
- 3 Move the **Object** and **Color** sliders.



Moving the **Object** slider to the left accelerates object changes at the end of the tween, while moving the **Object** slider to the right accelerates object changes at the beginning of the tween. Moving the **Color** slider to the left accelerates color change at the beginning of the tween, while moving the **Color** slider to the right accelerates color change at the end of the tween.



You can adjust a section of a compound tween by holding down **Ctrl** (Windows) or **Command** (Mac OS), and clicking an intermediate frame in the timeline section.

## To copy tween properties

- 1 In the **Timeline Docker** window/palette, click an intermediate frame in the timeline of the tween to which you want to copy properties.
- 2 Click **Effects ▶ Copy effect ▶ Tween from**.  
The pointer changes to a thick, black arrow.
- 3 Click an intermediate frame in the timeline of the tween whose properties you want to copy.



Copying tween properties does not attach a tween to a path; however, if both tweens are attached to a path, the path properties are copied.

## To reverse a tween

- 1 In the **Timeline Docker** window/palette, click an intermediate frame in the timeline of a tween.
- 2 Click **Movie ▶ Tween ▶ Reverse tween**.



You can also reverse a tween by right-clicking a frame (Windows) or **Control** + clicking a frame (Mac OS), and clicking **Reverse tween**.

## To remove a tween

- 1 In the **Timeline Docker** window/palette, click an intermediate frame in the timeline of a tween.
- 2 Click **Movie ▶ Tween ▶ Remove tween**.



You can also remove a tween by right-clicking a frame (Windows) or **Control** + clicking a frame (Mac OS), and clicking **Remove tween**.

## Using sound in movies

Corel R.A.V.E. lets you add sound to movies by importing audio files saved to the WAV format (Windows) or AIFF format (Mac OS).

When you import an audio file, it spans a succession of frames on the timeline. You can edit the audio object's timeline as you would any other object's timeline in a movie. For more information, see "Working with timelines" on page 391.

When you play a movie, the sound plays only in the frames it spans. You can loop the sound so that it plays repeatedly for the duration of the movie.

You can also stretch or shrink sound by changing the life span of a sound file. This affects the speed at which the sound is played. If you want to crop or edit sound in a movie, you need a sound-editing application.

You can make sound interactive by adding a sound behavior to a rollover. For more information, see “Adding sound to rollovers” on page 419.

### To add sound to a movie

- 1 Click **File** ► **Import**.
- 2 Locate the folder where the audio file is stored.
- 3 Double-click the filename.




The sound file begins in the current frame.



You can also add sound by dragging a sound file to the stage.

### To repeat sound in a movie

- 1 In the **Timeline** Docker window/palette, click an audio object.
- 2 Click the **Single play** icon  to the left of the audio object's name.

### To stretch or shrink sound in a movie

- 1 In the **Timeline** Docker window/palette, click an audio object.
- 2 Drag the start or end frame of the audio object's timeline to the frame you want.

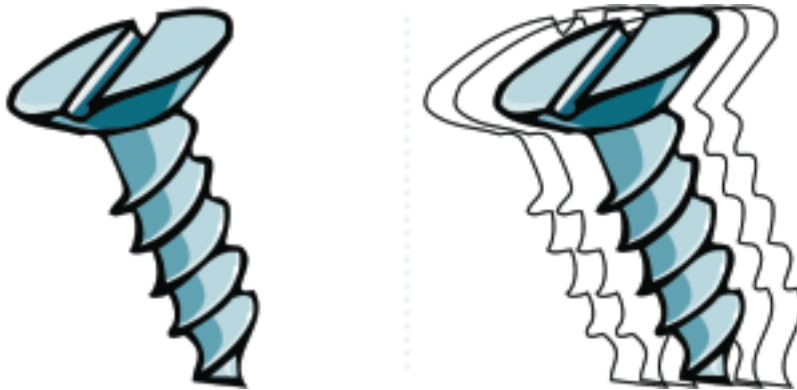
### Displaying multiple frames on the stage

To make it easier to edit and coordinate animated objects, Corel R.A.V.E. lets you display the contents of successive frames on the stage by using onion skinning. Onion skinning makes objects in the current frame appear in full color while objects in other frames display in wireframe view. You can set the range of frames to be displayed.

Displaying multiple frames on the stage lets you compare the contents of different frames. When animating frame-by-frame, you can select objects in different frames and align and distribute them. You can also move and transform different animated objects in a movie simultaneously.



For information about the different views available in Corel R.A.V.E., see “Working with views” in the **Help**. For information about frame-by-frame animation, see

“Animating objects frame-by-frame” on page 381. For information about selecting, editing, and arranging objects, see “Working with objects” in the **Help** .



*Onion skinning lets you see multiple frames simultaneously.*

## To display the contents of multiple frames

- 1 In the **Timeline Docker** window/palette, click **Show onion skin**  .
- 2 Drag the red onion skinning handles  to set the range of frames you want to display on the stage.



You can avoid a confusing clutter of outlines on the stage by hiding the layers you are not editing. For information about layers, see “Working with layers” in the **Help**.

## Previewing animation


You can preview animation in Corel R.A.V.E., or you can use the Macromedia Flash preview to view movies in your Web browser. If a movie contains **Stop**, **Play**, or **Go to** behaviors applied to frames, these will affect the flow of the movie when previewed in Corel R.A.V.E. For movies containing other behaviors, you must use the Macromedia Flash preview. Complex animations should also be viewed with the Macromedia Flash preview.

For more information about behaviors, see “Using behaviors” on page 421.

When you play a movie in Corel R.A.V.E., it plays in a continuous loop, automatically restarting from the first frame after reaching the last frame, unless a **Stop** behavior has been applied to a frame. You can stop a movie at any time and view specific frames.

When you scrub through a movie, you can control the speed and stop at any frame.

## To preview animation

To	Do the following
Play a movie	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Play movie</b> .
Stop a movie	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Stop movie</b> .
Rewind to the beginning of a movie	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Rewind to beginning</b> .
Fast forward to the end of a movie	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Fast forward to end</b> .
Move to the previous frame	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Step back one frame</b> .
Move to the next frame	Click <b>Movie</b> ▶ <b>Control</b> ▶ <b>Step forward one frame</b> .
Scrub through a movie	In the <b>Timeline Docker</b> window/palette, drag the playhead  back and forth along the timeline.



You can also control the playback of a movie using the playback controls located in the bottom left corner of the drawing window. For more information, see “Exploring the movie playback controls” in the **Help**.

You can also use keyboard shortcuts to preview a movie. In **Num lock** mode, on the number pad, press 4 to rewind, press 6 to fast forward, press 1 to step back one frame, and press 3 to step forward one frame. Press **Enter** to play or stop a movie.

## To preview a movie in Macromedia Flash

- Click **File** ▶ **Flash preview in browser**.



You must have the Macromedia Flash Player plug-in installed in your default Web browser.

## Working with symbols and sprites

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The Corel R.A.V.E. application lets you create objects and save them as symbols. You can also create animated symbols, or sprites. Symbols and sprites are defined once and can be referenced many times in a movie. Each time you insert a symbol or sprite into a movie, you create an instance of the symbol or sprite. Symbol and sprite definitions, as well as information about instances, are stored in the library, which is part of the Corel R.A.V.E. (CLK) file. Using symbols and sprites for objects and animations that appear many times in a movie helps to reduce file size.

In this section, you'll learn about

- creating, editing, and deleting symbols
- using symbols in movies
- creating, editing, and deleting sprites
- using sprites in movies
- sharing symbols and sprites between movies

For information about modifying symbol and sprite instances and about unsupported object types, see “Reference: Working with symbols and sprites” on page 408.

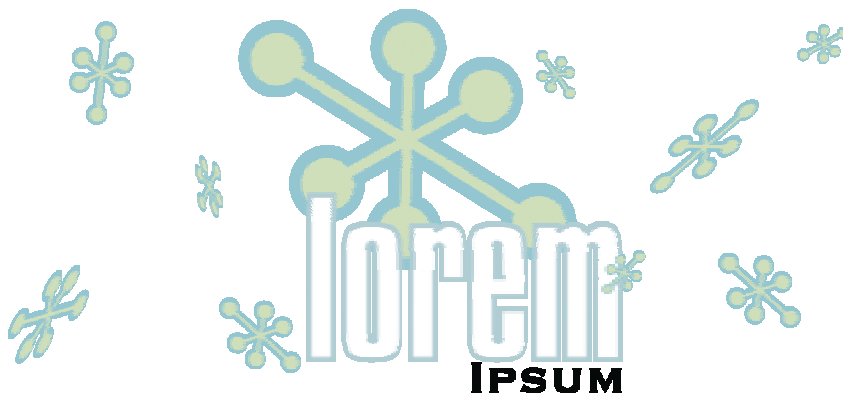
### Creating, editing, and deleting symbols

Symbols are objects that are defined once and can be referenced many times in a movie. You can have multiple instances of a symbol in a movie with little impact on file size. Symbols make editing a movie quicker and easier, as changes made to a symbol are automatically inherited by all instances.

Symbols are created from objects. When you convert an object to a symbol, the new symbol is added to the library, and the selected object becomes an instance. You can also create a symbol from multiple objects.



You can edit a symbol; any changes you make affect all instances in a movie. You can also delete a symbol from the library.



*Using symbols for objects that appear many times helps to reduce file size.*

## To convert an object to a symbol

- 1 Select an object or multiple objects.
- 2 Click **Edit** ▶ **Symbol** ▶ **New symbol**.




Symbols cannot span layers. If you convert objects on different layers to a symbol, the objects are combined on the topmost object's layer. For more information about layers, see “Working with layers” in the **Help**.



You can also convert an existing object or objects to a symbol by dragging the object or objects to the **Library** Docker window/palette.

## To edit a symbol


- 1 In the **Library** Docker window/palette, choose a symbol from the **Symbols** list.  
If you want to name or rename the symbol, double-click the symbol's name box, and type a name.
- 2 Click the **Edit symbol** button  .
- 3 Modify the objects on the stage.
- 4 Click the **Finish editing symbol** tab in the bottom-left corner of the drawing window.



Changes made to a symbol are automatically made to all instances in the active movie.


While working in symbol edit mode, you cannot add layers or save a movie.



You can also edit a symbol by selecting an instance in the drawing window, and clicking the **Edit symbol** button  on the property bar.

While editing a symbol, you can insert an instance of another symbol, which creates a nested symbol. You cannot, however, insert an instance of the same symbol.

## To delete a symbol

- 1 In the **Library Docker** window/palette, choose a symbol from the **Symbols** list.
- 2 Click the **Delete symbol** button .



When you delete a symbol, it is removed from the library, and all instances of the symbol are removed from the movie.

## Using symbols in movies

You can insert a symbol into a movie, which creates a symbol instance. You can modify certain properties of a symbol instance, such as size and position, without affecting the symbol definition stored in the library. You can revert a symbol instance to an object or objects while preserving its properties. You can also delete a symbol instance.

## To insert a symbol instance

- 1 Open the **Library Docker** window/palette by clicking **Edit** ▶ **Symbol** ▶ **Library**.
- 2 Choose a symbol from the **Symbols** list.
- 3 Click **Insert**.



You can also insert a symbol instance by dragging a symbol from the **Library Docker** window/palette to the drawing window.

## To modify a symbol instance

- 1 Select a symbol instance.
- 2 Make any changes.



If a symbol contains multiple objects, all objects in a symbol instance are treated as if they were a group. You cannot modify individual objects in a symbol instance.

Not all properties of a symbol instance can be modified. For a list of properties that can be modified, and therefore tweened, see “Modifying symbol instances” in the **Help**.



When a symbol instance is selected, you can modify many object properties on the property bar.

You can animate a symbol instance in the same way you animate other objects in a movie. For more information, see “Animating objects” on page 365.



*Symbol instances can be animated.*

## To revert a symbol instance to an object or objects

- 1 Select a symbol instance.
- 2 Click **Edit** ▶ **Symbol** ▶ **Revert to object(s)**.



The symbol remains in the library.

You cannot revert a symbol instance that has been animated.



You can also revert a symbol instance to an object by right-clicking the symbol instance (Windows) or **Control** + clicking the symbol instance (Mac OS) and clicking **Revert to object(s)**.

## To delete a symbol instance

- 1 Select a symbol instance.
- 2 Press **Delete**.



The symbol remains in the library.

## Creating, editing, and deleting sprites

You can create more complex movies by using sprites. Sprites are animated symbols which have their own timelines, independent of the main movie's timeline. You can use sprites to create nested animations. For example, you can create a bird that moves across the screen and simultaneously flaps its wings. With sprites, you can easily include multiple occurrences of an animation in a movie. For example, a sprite consisting of a snowflake falling could be referenced many times in a movie to create a snowy background. Sprites can also be used to break up a movie into modules which can be edited separately.

Since sprites are symbols, they are defined once and can be referenced many times. You can have multiple instances of a sprite in a movie with little impact on file size. Movie playback speed is increased, as the sprite is loaded only once. Sprites make editing a movie quicker and easier, as changes made to a sprite are automatically inherited by all instances.

Sprites are created from animated objects. When you convert an animated object to a sprite, the new sprite is added to the library, and the selected object becomes an instance. You can also create a sprite from multiple animated objects. For information about animating objects, see “Animating objects” on page 365.

You can edit a sprite; any changes you make affect all instances in a movie. You can also delete a sprite from the library.

For more information about symbols, see “Creating, editing, and deleting symbols” on page 399 and “Using symbols in movies” on page 401.

## To convert an animated object to a sprite

- 1 Select an animated object or objects.
- 2 Click **Edit** ▶ **Symbol** ▶ **New symbol**.




Sprites cannot span layers. If you convert objects on different layers to a sprite, the objects are combined on the topmost object's layer. For more information about layers, see “Working with layers” in the **Help**.

If an object has a life span of two or more frames, it is converted to a sprite whether or not it has been animated. If an object has a life span of only one frame, it is converted to a symbol.



You can also convert an existing animation to a sprite by dragging the animated object or objects to the **Library** Docker window/palette.

## To edit a sprite


- 1 In the **Library** Docker window/palette, choose a sprite from the **Symbols** list.  
If you want to name or rename the sprite, double-click the sprite's name box, and type a name.
- 2 Click the **Edit symbol** button  .
- 3 Make any changes.
- 4 Click the **Finish editing symbol** tab in the bottom-left corner of the drawing window.



Changes made to a sprite are automatically made to all instances of the sprite in the active movie.


While working in symbol edit mode, you cannot add layers or save a movie.



You can also edit a sprite by selecting an instance on the stage and clicking the **Edit symbol** button  on the property bar.

You can control the animation in a sprite by applying behaviors within its timeline. For more information, see “Using behaviors” on page 421.

## To delete a sprite

- 1 In the **Library** Docker window/palette, choose a sprite from the **Symbols** list.
- 2 Click the **Delete** symbol button  .

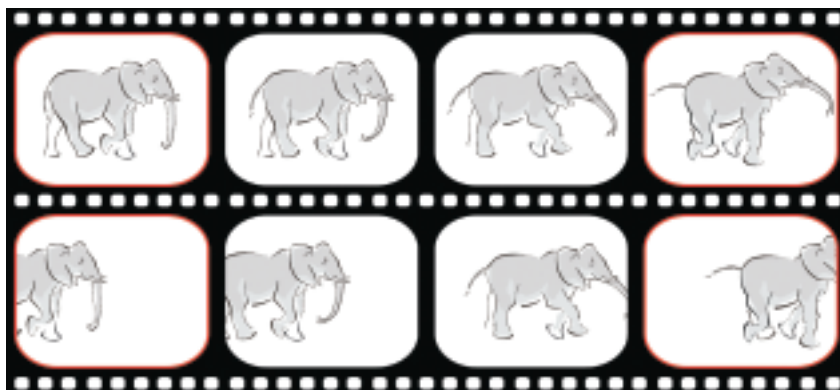


When you delete a sprite, it is removed from the library, and all instances of the sprite are removed from the movie.

## Using sprites in movies

You can insert a sprite into a movie, which creates a sprite instance. You can modify certain properties of the object or objects in a sprite instance, such as size and position, without affecting the sprite definition in the library. You can revert a sprite instance to an animated object or objects while preserving its properties. You can also delete a sprite instance.

When you insert a sprite instance into a movie, the life span of the instance is determined by the life span of the sprite. You can change the life span of a sprite instance in a movie. Extending its life span repeats the animation, while shortening its life span cuts off the animation. Changing the life span of a sprite instance in a movie does not affect the sprite definition in the library; the sprite's timeline is independent of the main movie's timeline. You can also tween a sprite instance, which allows you to create nested animations.



*Sprites are used to animate the tail, legs, and trunk (top). These animations are nested as the elephant moves across the stage (bottom).*

You can control how and when a sprite instance plays in a movie by using behaviors. Certain behaviors can be directed to sprite instances in a movie with the **Tell target** parameter. For a list of behaviors to which the **Tell target** parameter can be applied, see “Adding and removing behaviors” on page 426.

## To insert a sprite instance

- 1 Open the **Library Docker** window/palette by clicking **Edit ▶ Symbol ▶ Library**.
- 2 Choose a sprite from the **Symbols** list.
- 3 Click **Insert**.



You can also insert a sprite instance by dragging a sprite from the **Library Docker** window/palette to the stage.

## To modify a sprite instance

- 1 On the stage, select a sprite instance.
- 2 Make any changes.



If a sprite contains multiple objects, all objects in the sprite instance are treated as if they were a group. You cannot modify individual objects in a sprite instance.

Not all properties of objects in a sprite instance can be modified. For a list of object properties that can be modified, see “Modifying symbol instances” on in the **Help**.



When a sprite instance is selected, you can modify many object properties on the property bar.

## To revert a sprite instance to an animated object or objects

- 1 Select a sprite instance.
- 2 Click **Edit ▶ Symbol ▶ Revert to object(s)**.



The sprite remains in the library.

You cannot revert a sprite instance that has been tweened in the main timeline.



You can also revert a sprite instance to an animated object or objects by right-clicking the sprite instance (**Windows**) or **Control** + clicking the sprite instance (**Mac OS**) and clicking **Revert to object(s)**.

## To delete a sprite instance

- 1 Select a sprite instance.
- 2 Press **Delete**.



The sprite remains in the library.

## To change the life span of a sprite instance

- 1 In the **Timeline** Docker window/palette, click a sprite instance.
- 2 Drag the end frame of the timeline of the sprite instance to the frame you want.
- 3 Drag the start frame of the timeline of the sprite instance to the frame you want.

## To tween a sprite instance

- 1 In the **Timeline** Docker window/palette, click a sprite instance.
- 2 Increase the life span of the sprite instance by dragging the end frame of its timeline to the frame you want.  
The sprite's animation now repeats until the new end frame is reached.
- 3 Click the end frame or an intermediate frame in the timeline of the sprite instance.
- 4 Click **Movie ▶ Insert keyframe**.
- 5 On the stage, modify the object or objects in the sprite instance.



All objects in a sprite instance are treated as if they were a group. You cannot modify individual objects in a sprite instance.

Not all properties of objects in a sprite instance can be modified. For a list of object properties that can be modified, see “Modifying symbol instances” in the **Help**.



You can also group the sprite instance with other objects and then tween the group. For more information, see “Grouping objects” in the **Help** and “Tweening groups of objects” on page 376.

You can also change a frame to a keyframe by double-clicking it.

## Sharing symbols and sprites between movies

Each Corel R.A.V.E. movie has its own library of symbols and sprites, which is part of the Corel R.A.V.E. (CLK) file. You can share symbols and sprites between movies by



copying and pasting. Copying symbols and sprites to the Clipboard leaves the originals in the library.

You can also copy and paste instances of a symbol or sprite to and from the Clipboard. Pasting an instance places the symbol or sprite in the library and also places an instance of the symbol or sprite in the movie. Subsequent pasting will place another instance of the symbol or sprite in the movie without adding to the library. If a modified symbol or sprite instance is pasted into a movie, the new instance maintains the properties of the original instance, and the new symbol or sprite definition in the library maintains the properties of the original symbol or sprite. Symbol and sprite instances are copied and pasted in the same way other objects are. For more information, see “Copying, duplicating, and deleting objects” in the **Help**.

## To copy or paste symbols and sprites

To	Do the following
Copy symbols and sprites to the Clipboard	In the <b>Library</b> Docker window/palette, choose the symbols and sprites from the <b>Symbols</b> list, right-click (Windows) or <b>Control</b> + click (Mac OS), and click <b>Copy</b> .
Paste symbols and sprites from the Clipboard	In the <b>Library</b> Docker window/palette, right-click (Windows) or <b>Control</b> + click (Mac OS), and click <b>Paste</b> .



If a pasted symbol or sprite has the same name as an existing symbol or sprite, the new name is appended with an increment number. For example, a pasted symbol named “logo” would be renamed “logo1.”

## Reference: Working with symbols and sprites

This reference section contains information on the following:

- modifying symbol instances
- unsupported object types

## Modifying symbol instances

The following object and tween properties can be modified for symbol and sprite instances. If a symbol or sprite contains multiple objects, all objects in the instance are treated collectively as a single object, just as if they were grouped.

The table below lists the object properties you can modify in a symbol instance.

<b>Object property</b>	<b>Notes</b>
Position	Can be modified on the property bar. For more information, see “Positioning objects” in the <b>Help</b> .
Size	Can be modified on the property bar. For more information, see “Sizing and scaling objects” in the <b>Help</b> .
Scale	Percentage is relative to the symbol definition. Can be modified on the property bar. For more information, see “Sizing and scaling objects” in the <b>Help</b> .
Skew	See “Skewing and stretching objects” in the <b>Help</b> .
Rotation angle	Can be modified on the property bar. For more information, see “Rotating and mirroring objects” in the <b>Help</b> .
Transparency	Uniform transparency only.  (Windows) Click the <b>Symbol effects</b> tab in the <b>Object properties</b> Docker window.  (Mac OS) Choose <b>Symbol effects</b> from the list box on the <b>Object properties</b> palette.  For more information, see “Applying transparencies” in the <b>Help</b> .
Mirroring	Can be modified on the property bar. For more information, see “Rotating and mirroring objects” in the <b>Help</b> .

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**Object property****Notes**

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Wrap paragraph text

(Windows) Click the **General** tab in the **Object properties** Docker window.

(Mac OS) Choose **General** from the list box on the **Object properties** palette.

Can also be modified on the property bar.  
For more information, see “Wrapping paragraph text around objects and text” in the **Help**.

---

Order

Can be modified on the property bar. For more information, see “Changing the order of objects” in the **Help**.

---

Name

The name of an instance is displayed in the **Timeline** Docker window/palette. Click twice to change it.

Sprite instances must have unique names to be referenced with **Tell target** when using behaviors. For information about behaviors, see “Using behaviors” on page 421.

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**Tween property****Notes**

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Rotation direction

For more information, see “To rotate an object over time” on page 374.

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Number of rotations

For more information, see “To rotate an object over time” on page 374.

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Color direction

Can be modified on the property bar after clicking an intermediate frame in an object’s timeline

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Path properties

For more information, see “To move an object along a path” on page 372.

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## Unsupported object types

Most objects in Corel R.A.V.E. can be converted to symbols or sprites, with the following exceptions.

Unsupported object type	Notes
(Windows) Linked or embedded objects	Includes barcodes
Objects with lenses that are not frozen	Lenses must be frozen.
Control objects in link groups	All related objects in the link group must be included in the symbol.
Linked bitmaps	
Placed PDF or EPS files	
Locked object	Object must be unlocked.
Paragraph text	
Guidelines	
Rollovers	You cannot convert a rollover to a symbol; however, you can include a symbol instance in a rollover state.
Parts of a tween	The entire object tween needs to be converted to a sprite.



## Creating interactive objects

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The Corel R.A.V.E. application lets you create interactive objects known as rollovers, which are often used as navigation tools. Rollovers are sometimes referred to as buttons; however, they do not have to be round. They can be created from almost any shape or object.

In this section, you'll learn about

- creating rollovers
- editing rollovers
- repeating animation in rollovers
- adding sound to rollovers
- creating hyperlinks

### Creating rollovers

You can create a rollover from almost any object or group of objects. Rollovers are interactive objects that can change in appearance when you click or point to them.

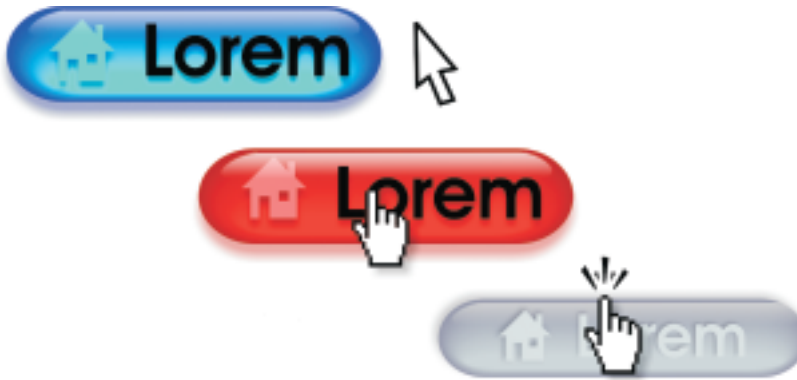
To create a rollover, you add and edit the following rollover states:

- Normal — the default state of the rollover when there is no mouse activity associated with it
- Over — triggered when the pointer is over the rollover
- Down — triggered when the rollover is clicked

For example, you can make a button change color when it is clicked, or display text when you point to it.

You can also animate the contents of different rollover states. For example, you can make a button fade in and out in its normal state, and display rotating text when you point to it. For more information about creating animation, see “Animating objects” on page 365 and “Animating text” on page 385.

After you create a rollover, you can preview it.



*A simple rollover in its normal, over, and down states.*



*An animated rollover. The text fades in and out and changes size in the over state, and the house rotates in the down state.*

### To create a rollover

- 1 In the Timeline Docker window/palette, select an object or group of objects.
- 2 Click Effects ▶ Rollover ▶ Create rollover.
- 3 Click Effects ▶ Rollover ▶ Edit rollover.  
The Internet toolbar displays.

- 4 On the **Internet** toolbar, choose a rollover state from the **Active rollover state** list box.
- 5 Edit the rollover state by adding, removing, or modifying objects.
- 6 Click **Effects ▶ Rollover ▶ Finish editing rollover**.



You can also finish editing the rollover by clicking the **Finish editing rollover** tab in the bottom-left corner of the drawing window.

**Create rollover**, **Edit rollover** and **Finish editing rollover** are also accessible from the **Internet** toolbar.

### To animate a rollover

- 1 In the **Timeline Docker** window/palette, click a rollover.
- 2 Click **Effects ▶ Rollover ▶ Edit rollover**.
- 3 Click one of the following tabs:
  - **Normal**
  - **Over**
  - **Down**
- 4 Using the **Pick** tool, select an object or objects on the stage.
- 5 Tween any of the object's properties or interactive effects.
- 6 Click **Effects ▶ Rollover ▶ Finish editing rollover**.




For information about tweening, see “Tweening objects” on page 367 or “Tweening text” on page 385.

All objects in all rollover states must exist for the entire life span of the rollover. Otherwise they may not display as you want. For information about determining the life span of objects, see “Increasing the life span of objects” on page 366.



## To preview a rollover

- 1 In the **Timeline** Docker window/palette, click a rollover.
- 2 On the **Internet** toolbar, click the **Live preview of rollovers** button  .  
If the rollover is animated, click **Movie ▶ Control ▶ Play movie** to preview the animation.  
If the rollover contains a sprite, click **File ▶ Flash preview in browser** to preview the animation.



To continue working, disable the **Live preview of rollovers** button when you finish testing the rollover.

## Editing rollovers

You can edit rollovers at any time by changing the contents of individual rollover states. You can modify any object in a rollover state.

When you no longer need a rollover state, you can remove it by deleting its contents. For example, deleting the down state of a rollover produces a rollover that doesn't change when you click it.

You can also duplicate a rollover state to populate an empty state. For example, duplicating the over rollover state populates the empty down state and produces a button that looks the same whether you click or point to it.

## To edit rollover states

- 1 In the **Timeline** Docker window/palette, click a rollover.
- 2 Click **Effects ▶ Rollover ▶ Edit rollover**.
- 3 On the **Internet** toolbar, choose a rollover state from the **Active rollover state** list box.
- 4 Edit the objects on the stage.
- 5 Click **Effects ▶ Rollover ▶ Finish editing rollover**.

### You can also

Delete a rollover state

### Do the following

While in **Edit rollover** mode, choose a rollover state from the **Active rollover state** list box, and click the **Delete rollover state** button.

## You can also

## Do the following

Duplicate a rollover state

While in **Edit rollover** mode, choose a rollover state from the **Active rollover state** list box, and click the **Duplicate state** button.



You can duplicate a rollover state only if a subsequent rollover state is empty. **Normal** will duplicate to **Over** or **Down**, and **Over** will duplicate to **Down**.

Deleting all objects in a rollover state has the same effect as deleting the state itself — nothing changes when the state is entered. The other states are not affected.



You can also edit a rollover by right-clicking the rollover (Windows) or **Control** + clicking the rollover (Mac OS) and clicking **Edit rollover**. To finish editing the rollover, right-click the rollover (Windows) or **Control** + click the rollover (Mac OS) and click **Finish editing rollover**.

## Repeating animation in rollovers

You can repeat animation effects in rollovers by looping them. For example, you can produce a rollover that pulsates continuously and flashes text when you point to it.


You can loop rollovers as a whole. Looping a rollover repeats the rollover so that it exists for the duration of a movie.

You can loop any of the individual rollover states. Looping a rollover state lets you repeat everything in the state for the duration of the rollover timeline. The number of times a rollover state loops is determined by the length of the rollover timeline.


You can loop objects within a rollover state. Looping an object in a rollover state lets you repeat the object's animation for the duration of the rollover state. The number of times an object loops within a rollover state is determined by the life span of the rollover state.

If a rollover contains a sprite, the sprite loops by default when exported to the Macromedia Flash (SWF) file format.


## To loop a rollover

- 1 In the **Timeline Docker** window/palette, click a rollover.
- 2 Click the **Single play** icon  to the left of the rollover's name.




After looping a rollover, the **Single play** icon changes to a **Looping arrow** icon .


## To loop a rollover state

- 1 In the **Timeline Docker** window/palette, click a rollover.
- 2 Click **Effects ▶ Rollover ▶ Edit rollover**.
- 3 On the **Internet** toolbar, choose a rollover state from the **Active rollover state** list box.
- 4 In the **Timeline Docker** window/palette, click the **Single play** icon  to the left of the rollover state's name.



A rollover state loops only if its timeline is shorter than the rollover timeline.  
After looping a rollover state, the **Single play** icon changes to a **Looping arrow** icon .

## To loop an object in a rollover state

- 1 In the **Timeline Docker** window/palette, click a rollover.
- 2 Click **Effects ▶ Rollover ▶ Edit rollover**.
- 3 On the **Internet** toolbar, choose a rollover state from the **Active rollover state** list box.
- 4 In the **Timeline Docker** window/palette, double-click the selected rollover state.
- 5 Click an object.
- 6 Click the **Single play** icon  to the left of the object you want to loop.



An object loops only if its timeline is shorter than the rollover state's timeline.

After looping an object, the **Single play** icon changes to a **Looping arrow** icon .




You can un-loop an object by clicking the **Looping arrow** icon. It will change back to a **Single play** icon.

## Adding sound to rollovers

When you add sound to a rollover, you associate a sound file with a rollover state that is activated by pointing or clicking. When that state becomes inactive, the sound stops. For example, pointing to a rollover may start a melody that stops when you click the rollover or point elsewhere. When you add sound to a rollover, you are adding a sound behavior. For more information about behaviors, see “Using behaviors” on page 421.

### To add sound to a rollover

- 1 In the **Timeline** Docker window/palette, click a rollover.
- 2 On the **Internet** toolbar, choose one of the following rollover states from the **Active rollover state** list box:
  - **Down**
  - **Over**
- 3 Choose **Sound** from the **Behavior** list box on the **Internet** toolbar.
- 4 Click the **Sound file** button  on the **Internet** toolbar.
- 5 In the **Open** dialog box, choose the folder where the sound file is stored.
- 6 Double-click the filename.



(Windows) Only the uncompressed WAV file format is supported.

(Mac OS) Only the AIFF file format is supported.

You cannot add sound to the normal rollover state.

## Creating hyperlinks

Corel R.A.V.E. lets you create hyperlinks from rollovers and other objects in a movie. Hyperlinks are text, drawings, or images that let you connect to any file published on the Internet.

To link to a document published on the Internet, you must assign that document's URL (for example, <http://www.corel.com/support/faq>) to the selected object. This automatically creates a clickable area called a hotspot that is linked to the URL. You can define the hotspot area using the object's shape or the bounding box around the object. You can also display the hotspot area and change the colors of its cross-hatch pattern and background for easier identification. This cross-hatching is a visual aid in Corel R.A.V.E. and is not included in the exported file.

Corel R.A.V.E. lets you choose how to display the linked document in a Web browser. For example, you can instruct the browser to open the document in a new window, or in the current frame.

You can add comments to a hyperlink. Comments are displayed on the Web browser's status bar when the pointer is moved over the hyperlink.

When you create a hyperlink from a rollover, you are adding a URL behavior. For more information about behaviors, see "Using behaviors" on page 421.

## To link an object to a URL

- 1 Select an object.
- 2 Choose **URL** from the **Behavior** list box on the **Internet** toolbar.  
If the Internet toolbar is not displayed, click **Window** ▶ **Toolbars** ▶ **Internet**.
- 3 In the **Internet address** list box, type the URL, including the prefix (http:// or ftp://).
- 4 Choose one of the following target options from the **Target frame** list box:
  - **Blank** — to open the URL in a new browser window
  - **Parent** — to open the URL in the parent frame of the frame containing the hyperlink
  - **Self** — to open the URL in the current frame
  - **Top** — to open the URL in the root frame of the browser

<b>You can also</b>	<b>Do the following</b>
Choose a hotspot's shape	Open the <b>Hotspot</b> flyout, and enable one of the two options in the <b>Define hotspot using:</b> section of the box.
Choose the cross-hatch color of a hotspot	Open the <b>Hotspot</b> flyout, and click a color on the <b>Cross-hatch</b> color picker.
Choose the background color of a hotspot	Open the <b>Hotspot</b> flyout, and click a color on the <b>Background</b> color picker.
Add comments	Open the <b>Alt comments</b> flyout, and type a comment in the <b>Alt comments</b> box.

## Using behaviors

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The Corel R.A.V.E. application lets you use behaviors to make movies interactive. Behaviors are commands applied to frames or objects in a movie. When applied to a frame, a behavior is executed at a specific point in time. When applied to an object, a behavior is executed when the user interacts with the object. You can use behaviors to create interactive diagrams, presentations, introduction sequences, and navigation systems, and then export them to Macromedia Flash format. For example, you can play a short animation while waiting for a main movie to load, or you can let the user navigate to different parts of a movie.

While creating an interactive movie, you can use the Macromedia Flash preview to view the movie in your Web browser. For more information, see “To preview a movie in Macromedia Flash” on page 398.

For information about exporting movies and publishing them to the World Wide Web, see “Exporting and publishing movies” on page 433.

In this section, you’ll learn about

- playing, stopping, and controlling movies
- controlling quality, visibility, and sound
- loading and unloading movies
- adding sound and hyperlinks
- adding and removing behaviors
- viewing and editing behaviors

### Playing, stopping, and controlling movies

You can control the flow of a movie by using the **Play**, **Stop**, **Go to**, and **Wait for load** behaviors. By default, a movie starts playing at frame 1 and plays each frame consecutively until it reaches the end of the timeline. The **Play** and **Stop** behaviors force the movie to start or stop at specific points. The **Go to** behavior can be used to jump to a frame other than the next consecutive one. The **Wait for load** behavior lets you preload content, which is useful for optimizing playback in Macromedia Flash Player. For example, you can use **Wait for load** to play a simple animation and display a “Loading...” message, while the rest of the movie is downloaded.

## Play and Stop

The **Play** and **Stop** behaviors can be applied to frames or rollover states. When applied to a frame, the movie starts or stops playing when it reaches that frame. If a **Play** or **Stop** behavior is applied to a rollover state, the movie starts or stops playing when that state becomes active. For example, you can create a rollover button that stops a movie when clicked. If a movie is already playing, the **Play** behavior has no effect. If a movie has been stopped, the **Stop** behavior has no effect.

For information about rollovers, see “Creating interactive objects” on page 413.

## Go to

The **Go to** behavior can be applied to frames or rollover states. When applied to a frame, it can be used to create a loop within a movie. When applied to a rollover state, it can be used to exit a loop or to navigate to another part of a movie. **Go to** moves the playhead to a specific frame. You specify the frame by providing a frame label, a frame number, or a relative frame. For example, you can force the playhead to move to the frame with label “Start,” move to frame 20, move ahead five frames, or move back eight frames.

For information about labeling frames, see “To label a frame” on page 393. You can also label a frame while adding a behavior. For more information, see “To add a behavior to a frame” on page 428.

## Wait for load

The **Wait for load** behavior can be applied to frames only. It makes a movie stop and wait until the movie or specific content is loaded before proceeding. The default parameter is frame 0, which means the movie pauses until the entire movie is loaded. You can wait for a specific frame to load by specifying a frame label or frame number, or you can wait for a specific sprite to load. The **Wait for load** behavior can be used in conjunction with a **Go to** behavior, moving play to the main portion of a movie once it has been loaded. You can also play an animation while a movie is loading by inserting a sprite instance at the frame that has the **Wait for load** behavior applied.

## Using the Tell target parameter

By default, the **Play**, **Stop**, and **Go to** behaviors apply to the main timeline of the active movie. You can use the **Tell target** parameter to direct these behaviors to a sprite instance. This lets you control how and when a sprite plays in a movie. For information about sprites, see “Working with symbols and sprites” on page 399.

## Adding, editing, and previewing behaviors

For information about adding the **Play**, **Stop**, **Go to**, and **Wait for load** behaviors, see “Adding and removing behaviors” on page 426. For information about viewing and editing these behaviors, see “Viewing and editing behaviors” on page 431.

You can see the effect of **Play**, **Stop**, and **Go to** behaviors when you play a movie in Corel R.A.V.E. If a movie contains a **Wait for load** behavior, you can use the Macromedia Flash preview to view the movie in your Web browser. For information about previewing movies in Corel R.A.V.E. and the Macromedia Flash Player, see “Previewing animation” on page 397.

## Controlling quality, visibility, and sound

You can toggle between high and low quality in the Flash player by using the **Toggle high quality** behavior. Turning off high quality turns off anti-aliasing, resulting in decreased image quality in a movie, but potentially speeding up the playback of movies containing complex images. Turning on high quality turns on anti-aliasing, which improves image quality but can slow down movies with complex images.

You can hide or show a symbol or sprite with the **Show/hide** behavior. When applied to a rollover state, the **Show/hide** behavior lets you give the user control over what part of a movie is displayed. For example, a map can display different information based on what a user selects.



*Applying the **Show/hide** behavior to rollover buttons gives the user control over what is displayed on the map.*

You can disable sound in a movie with the **Stop all sounds** behavior.



All three behaviors can be applied to frames or rollover states. When adding a **Show/hide** behavior, you must select a target symbol or sprite. There are no parameters for the **Stop all sounds** and **Toggle high quality** behaviors.

For information about adding these behaviors, see “Adding and removing behaviors” on page 426. For information about viewing and editing these behaviors, see “Viewing and editing behaviors” on page 431. To preview movies using these behaviors, you can use the Macromedia Flash preview in your Web browser. For more information, see “To preview a movie in Macromedia Flash” on page 398.

For information about symbols and sprites, see “Working with symbols and sprites” on page 399.

## Loading and unloading movies

You can use the **Load movie** behavior in a movie to load and play another movie that has been saved to the Macromedia Flash file format (SWF). For the **Load movie** behavior to function properly, the Macromedia Flash file must be in the same location as the main movie file.

You can apply a **Load movie** behavior to a frame or rollover state. If the behavior is applied to a frame, the movie is loaded when the playhead reaches the specified frame. If the behavior is applied to a rollover state, the user controls when a movie is loaded by pointing to or clicking a rollover.

You can load a movie at a specific level or, if you want to use a sprite as a placeholder, you can specify a uniquely named sprite instance.

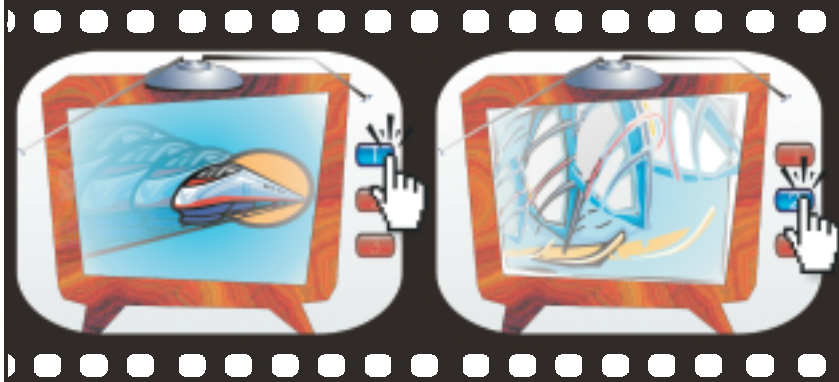
### Movie levels

A loaded Flash movie can replace another movie or play concurrently with all other loaded movies. When multiple movies are loaded, each movie is assigned a level. The movie loaded first is at level 0. This movie is the main movie and determines the stage size, background, and frame rate for all other loaded movies. By default, a movie is loaded at the next available level. You can override this default by specifying a level. If you specify a level that already contains a movie, the movie at that level is replaced. If you specify level 0, all movies are unloaded before the new movie is loaded at level 0.

### Using sprites as placeholders for movies

If you want more control over the size and position of a loaded movie on the stage, you can use a sprite as a placeholder. For example, you can create a rectangle with no fill or outline in a particular area of the stage, increase its life span, and convert it to a sprite. You can insert an instance of this sprite into a movie and give the sprite instance a unique name (for example, “Movie screen.”) You can then load a movie to

replace the sprite. The loaded movie plays in the space previously occupied by the “Movie screen” sprite instance, rather than taking over the entire stage. For more information about sprites, see “Working with symbols and sprites” on page 399.



*Applying **Load movie** and **Unload movie** behaviors to rollover buttons gives the user control over which movie plays. A sprite is used as a placeholder to ensure that the movies play on the television screen.*

You can add an **Unload movie** behavior to a frame or rollover state. When adding the **Unload movie** behavior, you must specify the level of the movie to be unloaded, or the name of the sprite instance that the movie replaced.

For information about adding these behaviors, see “Adding and removing behaviors” on page 426. For information about viewing and editing them, see “Viewing and editing behaviors” on page 431. You cannot preview the **Load movie** or **Unload movies** behaviors; instead, you must publish them. For more information about publishing movies, see “Publishing movies to the World Wide Web” on page 435.

## Adding sound and hyperlinks

You can add a **Sound** behavior to the over or down rollover state. The sound file begins to play when the rollover is pointed to (the over state) or clicked (the down state). When you add a **Sound** behavior, the sound file is embedded in the Corel R.A.V.E. file. For more information about adding sound to rollovers, see “Adding sound to rollovers” on page 419.

You can add a **URL** behavior to a frame, rollover state, or object. When a **URL** behavior is applied to a frame, the URL is loaded in the Web browser when the playhead reaches the specified frame. When a **URL** behavior is applied to a rollover state, the URL is loaded in the Web browser when the specified state is activated. An

object with a **URL** behavior applied to it is treated like a rollover with two states — normal and down. The behavior is applied to the down state so that the URL is loaded in the Web browser when the object is clicked. For more information about the options available with the **URL** behavior, see “Creating hyperlinks” on page 419.

For more information about rollovers, see “Creating interactive objects” on page 413.

For information about adding these behaviors, see “Adding and removing behaviors” on page 426. For information about viewing and editing these behaviors, see “Viewing and editing behaviors” on page 431. To preview movies using these behaviors, you can use the Macromedia Flash preview in your Web browser. For more information, see “To preview a movie in Macromedia Flash” on page 398.

## Adding and removing behaviors

You can add behaviors to one or more of the following:

- frame — behavior is triggered when the playhead reaches the specified frame
- rollover state — behavior is triggered when the specified rollover state becomes active
- object — behavior is triggered when the object is clicked

When you add more than one behavior to a particular frame, rollover state, or object, the behaviors are executed in the order they are applied; however, you can change the order. Behavior order is important, as one behavior can affect the execution of another. For example, if one frame has **Wait for load**, **Go to**, and **Stop** behaviors applied to it in that order, the **Stop** behavior is never executed because the preceding **Go to** behavior moves the playhead to another frame. Similarly, if a **Stop all sounds** behavior is executed before a **Sound** behavior, the **Sound** behavior has no effect, because sound is disabled.

You can also choose to remove behaviors.

The table below lists each behavior, what it can be applied to, its parameters, and where to look for more information.

<b>Behavior</b>	<b>Can be applied to</b>	<b>Parameters</b>	<b>For more information</b>
Play	frame, rollover state	Tell target (optional)	“Playing, stopping, and controlling movies” on page 421


<b>Behavior</b>	<b>Can be applied to</b>	<b>Parameters</b>	<b>For more information</b>
Stop	frame, rollover state	Tell target (optional)	“Playing, stopping, and controlling movies” on page 421
Go to	frame, rollover state	Frame label, frame number, or relative frame Tell target (optional)	“Playing, stopping, and controlling movies” on page 421
Wait for load	frame	Frame label, frame number, or sprite (defaults to entire active movie)	“Playing, stopping, and controlling movies” on page 421
Stop all sounds	frame, rollover state	None	“Controlling quality, visibility, and sound” on page 423
Toggle high quality	frame, rollover state	None	“Controlling quality, visibility, and sound” on page 423
Show/hide	frame, rollover state	Target (symbol or sprite)	“Controlling quality, visibility, and sound” on page 423
Load movie	frame, rollover state	URL or local path to SWF file Level number or sprite (optional)	“Loading and unloading movies” on page 424
Unload movie	frame, rollover state	Level number or sprite	“Loading and unloading movies” on page 424

Behavior	Can be applied to	Parameters	For more information
Sound	rollover state (over or down)	Path to sound file	“Adding sound and hyperlinks” on page 425
URL	frame, rollover state, object	URL, target (browser window and frame options), comments, and hotspot options	“Adding sound and hyperlinks” on page 425

## To add a behavior to a frame



- 1 In the **Timeline** Docker window/palette, click a frame.
- 2 Click **Movie** ► **Behaviors**.
- 3 In the **Behaviors** dialog box, choose a behavior from the **Behavior** list box.
- 4 Specify the settings you want.  
If you want to assign a label to the frame, type a label name in the **Frame label name** box.
- 5 Click **Apply**.



In the **Timeline** Docker window/palette, the green **Behavior** icon  displays in the **Behaviors** timeline for the current frame.

If more than one behavior is applied to a frame, the behaviors are performed in the order they are applied. The box on the right side of the **Behaviors** dialog box lists the behaviors from top to bottom in the order they’re applied.




You can change the order of behaviors by choosing a behavior from the list and clicking the **Move up one** button  or the **Move down one** button .

## To add a behavior to a rollover state



- 1 Click a rollover.  
If the **Internet** toolbar is not displayed, click **Window ▶ Toolbars ▶ Internet** to display it.
- 2 On the **Internet** toolbar, choose a state from the **Active rollover state** list box.
- 3 Click **Movie ▶ Behaviors**.
- 4 In the **Behaviors** dialog box, choose a behavior from the **Behavior** list box.
- 5 Specify the settings you want.
- 6 Click **Apply**.



In the **Timeline** Docker window/palette, the green **Behavior** icon  next to a rollover name indicates that a behavior has been applied to the current rollover state.

If more than one behavior is applied to a rollover state, the behaviors are performed in the order they are applied. The box on the right side of the **Behaviors** dialog box lists the behaviors from top to bottom in the order they're applied.




You can change the order of behaviors by choosing a behavior from the list and clicking the **Move up one** button  or the **Move down one** button  .

## To add a URL behavior to an object


- 1 Click an object.
- 2 Click **Movie ▶ Behaviors**.
- 3 In the **Behaviors** dialog box, choose **URL** from the **Behavior** list box.
- 4 Specify the settings you want.
- 5 Click **Apply**.



The object cannot be a symbol instance.

In the **Timeline** Docker window/palette, the green **Behavior** icon  next to the object's name indicates that a behavior has been applied to the object.


## To remove a behavior from a frame

- 1 In the **Timeline Docker** window/palette, click a frame.
- 2 Click **Movie ▶ Behaviors**.
- 3 In the **Behaviors** dialog box, choose a behavior from the list on the right side.
- 4 Click the **Delete** button  .




You can also open the **Behaviors** dialog box by right-clicking a frame (Windows) or **Control** + clicking a frame (Mac OS) and clicking **Behaviors**.


## To remove a behavior from a rollover state

- 1 Click a rollover.  
If the **Internet** toolbar is not displayed, click **Window ▶ Toolbars ▶ Internet** to display it.
- 2 On the **Internet** toolbar, choose a state from the **Active rollover state** list box.
- 3 Click **Movie ▶ Behaviors**.
- 4 In the **Behaviors** dialog box, choose a behavior from the list on the right side.
- 5 Click the **Delete** button  .




You can also open the **Behaviors** dialog box by clicking the **Behaviors** button  in the **Timeline Docker** window/palette.

## To remove a URL behavior from an object

- 1 Click an object.
- 2 Click **Movie ▶ Behaviors**.
- 3 In the **Behaviors** dialog box, choose the **URL** behavior from the list on the right side.
- 4 Click the **Delete** button  .



You can also open the **Behaviors** dialog box by clicking the **Behaviors** button  in the **Timeline Docker** window/palette.


## Viewing and editing behaviors

Once a behavior is applied, you can view or change its settings. For example, you can see which frame a **Go** to behavior will jump to, change the sound file for a **Sound** behavior, or change a **Show/hide** behavior to show or hide a different symbol.

### To view or edit a behavior applied to a frame

- 1 In the **Timeline Docker** window/palette, click a frame.
- 2 Click **Movie ▶ Behaviors**.
- 3 In the **Behaviors** dialog box, choose a behavior from the list on the right side.  
If you want to edit the behavior, change the settings you want, and click **Apply**.




You can also view or edit the behaviors applied to a frame by double-clicking the green **Behavior** icon  in the frame's **Behaviors** timeline.

### To view or edit a behavior applied to a rollover state

- 1 Click a rollover.  
If the **Internet** toolbar is not displayed, click **Window ▶ Toolbars ▶ Internet** to display it.
- 2 On the **Internet** toolbar, choose a state from the **Active rollover state** list box.
- 3 Click **Movie ▶ Behaviors**.
- 4 In the **Behaviors** dialog box, choose a behavior from the list on the right side.  
If you want to edit the behavior, change the settings you want, and click **Apply**.




You can also view or edit the behaviors applied to the current rollover state by double-clicking the green **Behavior** icon  next to the rollover name in the **Timeline Docker** window/palette.

### To view or edit a URL behavior applied to an object

- 1 Click an object.
- 2 Click **Movie ▶ Behaviors**.
- 3 In the **Behaviors** dialog box, choose the **URL** behavior from the list on the right side.  
If you want to edit the behavior, change the settings you want, and click **Apply**.





You can also view or edit a **URL** behavior applied to an object by double-clicking the green **Behavior** icon  next to the object's name in the **Timeline Docker** window/palette.

The Corel R.A.V.E. application lets you export movies and publish them to the World Wide Web.

In this section, you'll learn about

- exporting movies
- publishing movies to the World Wide Web

### Exporting movies

Corel R.A.V.E. lets you export a movie to the following file formats:

- Macromedia Flash (SWF) — the primary format for maintaining animation, interactivity, sound, and behaviors in a movie
- GIF Animation — lets you export movies to the bitmap-based Graphics Interchange Format. The GIF format is useful for simple animations. Interactivity, sound, and behaviors are not supported.
- Video for Windows (AVI) (Windows only) — lets you export movies that can be opened in video-editing applications. Interactivity, sound, and behaviors are not supported.
- QuickTime™ (MOV) — lets you export a movie to the QuickTime format. The QuickTime format preserves animation. Interactivity, sound, and behaviors are not supported.

For information about these file formats, see “File formats” in the **Help**.

When exporting a movie to the Macromedia Flash format, you can control the quality and file size of the exported file by adjusting filter settings. You can determine bitmap settings, optimize objects in a movie to reduce file size, and set the frame size of the exported movie. If you have added sound to rollovers or an audio layer to the movie, you can ensure that it is exported with the movie. Also, you can protect the exported Macromedia Flash file from importing.

If you are satisfied with the export settings, you can save them as a preset for later use.

## To export a movie to the Macromedia Flash file format

- 1 Click **File** ► **Export**.
- 2 Choose the folder where you want to save the file.
- 3 Choose **Macromedia Flash** from the **Files of type** list box (Windows) or **Format** list box (Mac OS).
- 4 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS), and click **Export**.
- 5 In the **Flash export** dialog box, specify the export settings you want.  
If you want to save the settings as a preset, click the **Add preset** button, and type a name in the **Setting name** box.



Before exporting, you can preview the Macromedia Flash movie in your Web browser by clicking **Preview** in the **Flash export** dialog box. This requires the Macromedia Flash Player plug-in to be installed, which is available on **Disc 1** of the application.

## To export a movie to the GIF, Video for Windows, or QuickTime file format

- 1 Click **File** ► **Export**.
- 2 Choose the folder where you want to save the file.
- 3 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS).
- 4 Choose a file format from the **Files of type** list box (Windows) or **Format** list box (Mac OS).
- 5 Enable any of the following check boxes:
  - **Selected only** — saves only the selected objects. This option is available only if at least one object is selected.
  - **Crop to stage** — crops objects to the stage
  - **Web\_safe\_filenames** — replaces blank spaces in a filename with underscores. Special characters are replaced with characters suitable for Web-based filenames.
  - **Do not show filter dialog** — lets you use the default settings for the selected file format (or filter) without opening its dialog box
- 6 Click **Export**.  
If a dialog box opens for the selected file format, specify the export settings you want.



The Video for Windows format is available only on Windows.

## Publishing movies to the World Wide Web

Corel R.A.V.E. lets you publish a movie to the Web by exporting it to the Macromedia Flash format and referencing it in an HTML file that is automatically generated based on templates. For information about Macromedia Flash settings, see “Exporting movies” on page 433.

By default, Corel R.A.V.E. uses the movie dimensions to set the size of the image in the HTML file. You can override this default by specifying values for width and height.

When you publish a movie to the Web, you can set various options. You can choose to loop the movie continuously, display the Macromedia Flash Player plug-in control menu, or control the quality of the animation playback. If you don’t want the movie to start as soon as the HTML document opens, you can pause the movie at the start. You can also set the position of the exported movie in the HTML document by aligning it to the left, right, top, or bottom of the document.

You can use the preflight feature to identify potential export problems. Preflight checks the Macromedia Flash file and displays a summary of issues and suggested solutions. You can also preview a movie in your Internet browser before exporting it.

The resulting HTML code can be edited in an HTML authoring application. For information about inserting Flash files in HTML documents, see your HTML authoring program’s documentation.

### To publish a movie to the Web

- 1 Click **File** ► **Publish to the Web**.
- 2 Choose the folder where you want to store the file.
- 3 Type a filename in the **File name** box (Windows) or **Save as** box (Mac OS), and click **Export**.
- 4 In the **Flash export** dialog box, click the **General** tab and specify the options you want.
- 5 Click the **HTML** tab and specify the options you want.

#### You can also

---

Match the dimensions of the image with the movie dimensions

Enable the **Match movie** check box under the **HTML** tab.

---

## You can also

---

Set the dimensions of the image	Disable the <b>Match movie</b> check box, and type values in the <b>Width</b> and <b>Height</b> boxes.
Examine potential export problems	Click the <b>Issues</b> tab, and click an error or a warning.
Preview a movie in your Internet browser before exporting it	Click <b>Preview</b> on the <b>General</b> page. To play or stop the movie in your browser, right-click the image (Windows) or <b>Control</b> + click the image (Mac OS) and click <b>Play</b> . To enable or disable looping, right-click the image (Windows) or <b>Control</b> + click the image (Mac OS), and then click <b>Loop</b> .

---



Publishing to the Web produces two files — an HTML document and a Flash (SWF) file. Open the HTML document to view the Flash movie. You should have the latest Macromedia Flash Player plug-in installed on your computer to preview a Flash file in a browser.



You can choose a Flash HTML template by clicking the **Open** button under the HTML tab. You can also create your own template following the syntax in the default file, which is listed in the **Flash HTML template** box. If the **Paused at start** option is selected, the HTML file will display the first frame of the movie in your browser. To play or stop the movie in your browser, right-click the image (Windows) or **Control** + click the image (Mac OS) and click **Play**. To enable or disable looping, right-click the image (Windows) or **Control** + click the image (Mac OS), and then click **Loop**.



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